

### **Tracking local progress on the post-2015** frameworks: Making cities inclusive, sustainable, and resilient

Preliminary baseline review of adaptation actions reported to the carbon*n* Climate Registry (cCR) in relation to Sustainable Development Goal 11b, the Sendai Framework for Disaster Risk Reduction, and the Paris Agreement

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#### SUMMARY

On the occasion of the 8th Global Forum on Urban Resilience and Adaptation, the Resilient Cities team at the ICLEI World Secretariat has completed a preliminary review of the local adaptation actions reported to the carbonn<sup>®</sup> Climate Registry from 2011 - 2016. A high-level assessment was conducted to determine the general alignment of the actions with the 2020 target of SDG 11b, which calls for *"integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, [and] resilience to disasters*", and *"holistic disaster risk management at all levels*" that is *"in line with the Sendai Framework for Disaster Risk Reduction 2015-2030.,* A total of 330 "Climate Actions" and 25 "Action Plans" submitted by 132 local and subnational governments were reviewed and a substantial number were found to contain language and principles consistent with the broad aims of the Paris Agreement, Sendai Framework, and the 2020 target of SDG 11.

This review is intended to inform discussions related to tracking local progress on the 2020 target of SDG 11. It will also guide a more detailed analysis of the adaptation data to be included in the next carbon*n* Climate Registry Digest.

#### I. INTRODUCTION AND CONTEXT

#### Post-2015 Frameworks

In 2015, national governments adopted a series of global frameworks which collectively set out a vision to pursue more sustainable and resilient development pathways with goals and targets for 2020, 2030, and beyond.

Notably, after decades of ambitious action at the local level, all have recognized subnational governments as key stakeholders and contributors:

- The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR) adopted in March 2015 shifted the focus from managing loss to reducing risk, with seven targets aimed at decreasing the number of people killed or affected by disasters and total direct economic losses.
- ➤ The 2030 Agenda Sustainable for Development and 17 Sustainable Development Goals (SDGs) adopted in September 2015 aim to mobilize countries to tackle all forms of poverty, inequality, and climate change, with SDG 11 focusing specifically on making cities inclusive, safe, resilient and sustainable.
- The Paris Agreement, adopted in December 2015 by the parties to the UN

Framework Convention on Climate Change sets a clear goal to limit the global temperature increase to 1.5 degrees Celsius above pre-industrial levels and to increase the ability to adapt and prepare for the adverse impacts of climate change.

With these frameworks, all levels of government are now united to decrease disaster risk and losses, to reduce the impacts of climate change, and to pursue inclusive, sustainable and resilient development.

By design, there is a significant degree of coherence between the 2015 frameworks, as well as subsequent global agreements, including the **New Urban Agenda** adopted in October 2016.

The present challenge is monitoring and implementation. Each framework follows a distinct process, with separate targets, indicators, and reporting mechanisms. For governments, the burden is only somewhat lightened by the general coherence of the overarching goals. Defining mechanisms for integrated, multi-level governance is likely to be a key success factor for tracking and delivering on the commitments set out in the post-2015 frameworks. To complicate matters, while many governments may be long on ambition, they are short on time. The first targets are due in less than five years, and will pave the way for subsequent targets due in 2030:

- The UNFCCC estimates that to avoid the worst impacts of climate change, global greenhouse gas emissions must peak and reverse around 2020. By this time, cities and states should also have concrete plans to decarbonize infrastructure and mobilize resources for a post-carbon economy (Harris, 2017).
- With target (e), the Sendai Framework aims to "Substantially increase the number of countries with national and local disaster risk reduction strategies by 2020."
- Finally, SDG 11 sets out a cross-cutting 2020 target to "substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Risk Reduction Disaster 2015-2030, holistic disaster risk management at all levels."

A common theme of the 2020 targets is developing relevant policies and plans at the local level. In order to assess their progress, national governments need to track the number of these policies and plans and potentially support local governments with their development and implementation.

There are several resources already available for developing, reporting, and/or monitoring local actions. These include the UNFCCC Non-State Actor Zone for Climate Action (NAZCA) and Adaptation Knowledge Portal, the UNISDR Making Cities Resilient Campaign, and the Global Covenant of Mayors for Climate and Energy.

However, there is no centralized system for

reporting the type of integrated plans referred to in SDG 11. Furthermore, many of the corresponding indicators and support tools for the 2020 targets are still under development. This presents a challenge for assessing (a) the quality and quantity of existing policies and plans and (b) how to direct resources in order to "substantially increase" such plans over the next four years.

### Adaptation reporting to the carbonn Climate Registry

As the leading global network of cities, towns, and regions committed to building a sustainable future, ICLEI understands the importance of measuring and reporting local action. In 2010, ICLEI launched the carbonn<sup>®</sup> Climate Registry (cCR), the world's leading reporting platform to enhance transparency, accountability and credibility of climate action by local and subnational governments. It is an official reporting platform for the Durban Adaptation Charter and the Compact of Mayors (now part of the Global Covenant of Mayors for Climate and Energy). The cCR has 726 total reporting entities and is open to any local or subnational government.

Developed for local governments by local governments, the cCR enables them to publicly and regularly report their climate action developments including:

- greenhouse gas (GHG) reduction commitments;
- emissions inventories;
- adaptation and mitigation actions (since 2011); and
- progress toward assessing climate risks and developing and implementing adaptation plans (since 2016).

The platform allows for tracking of emissions' reduction commitments and progress in aggregate and for individual reporting entities. Since 2015, the cCR includes emissions' inventories guided by the Global Protocol for Community-scale GHG Emissions Inventories (GPC). The GPC standard enables peer-to-peer comparisons, as well as

calculations that can inform monitoring of national and global climate goals.

Local and subnational governments are also able to submit their climate plans and qualitative data on climate actions. This is particularly relevant for adaptation and risk data, which are more qualitative by nature and vary significantly across regions. In 2016, a new adaptation reporting section "the Climate Risk and Adaptation Framework and Taxonomy questionnaire (CRAFT)" was added. This standardized questionnaire was developed for the Compact of Mayors initiative. Within one year, all cities who have committed to the Compact of Mayors are required to report their climate risk and adaptation information via this form (C40 Cities, 2017). Other entities reporting to the cCR are also welcome to report using the CRAFT questionnaire.

The cCR has been a key advocacy and reporting tool for local governments in the global climate negotiations. The Annual Reports have been effectively presented at the UNFCCC COPs and data is shared with the NAZCA portal.

Going forward, the data captured in the cCR also presents an opportunity to track local progress on the SDGs and Sendai Framework.

As a first step and on the occasion of the 8<sup>th</sup> Global Forum on Urban Resilience and Adaptation, the Resilient Cities team at the ICLEI World Secretariat has completed a preliminary review of the local adaptation actions reported to the cCR between 2011 -2016. The results, summarized below are intended to inform discussions related to the 2020 target of SDG 11.

They will also guide a more detailed analysis of the adaptation data to be included in the next carbonn Climate Registry Digest. The report will be presented first at the UNFCCC COP23 in Bonn in order to inform the official discussions including at the 2017 Bonn Climate Summit of Local and Regional Leaders and the Nairobi Work Programme Focal Point Forum on Adaptation and Human Settlements.

#### II. METHODOLOGY

Since 2011, local and subnational governments have been able to voluntarily report their adaptation efforts to the cCR in two general ways.

In one section, they can upload an **Action Plan**, including the name, year, and summary description, and indicate which "adaptation and resilience sectors" were covered by the plan.

In a second section, they can describe and categorize a **Climate Action**. Required fields in this section include:

- Title and Description including intended outcomes
- Type of action (policy, research, stakeholder engagement, etc.)
- Climate focus (mitigation/adaptation)
- Community or Government scope
- Phase
- Year approved
- Delivery year
- Levels of government to which the action legally applies
- Financial details (budget, costs, funding source, job creation)

Local governments can also indicate which adaptation and/or mitigation sectors are covered by the action, as well as expected cobenefits (e.g. improved public health, increased green space etc).

The specific categories in these two sections have undergone some revisions in the past seven years, but the general format of the fields and questions has been maintained. The data captured are highly qualitative and allow for a wide range of plans and actions to be reported in multiple languages. Such flexibility can reduce the burden of reporting, but presents a challenge for analysis.

Since late 2016, local governments have also been able to report to a newly expanded and improved adaptation section of the cCR which is based on the CRAFT questionnaire. Given that the CRAFT uses a large and unique set of data fields and represents a relatively small sample set, it was decided not to include the data from the CRAFT in this first assessment.

Excluding partial entries, as of February 2017 local and subnational governments have reported a total of 50 action plans with an adaptation element to the cCR using the "Action Plan" section. In addition, a total of 404 climate actions, including plans and strategies, have been reported to the cCR as having a primary or secondary adaptation focus using the "Climate Action" reporting form.

As part of the present exercise, ICLEI reviewed a sample of adaptation data reported to the cCR. Of the Action Plans, 25 were reported in English and included in the review. From the Climate Actions, 330 were included in the review (reported in English, Spanish, Portuguese, or Korean). Of these, 88 were determined to be incomplete or incorrectly categorized and removed from the sample, leaving a total of 242 adaptation Climate Actions for analysis.

Based on their contents as reported to the cCR, a high-level assessment of these actions and plans was conducted to determine their general alignment with the 2020 target of SDG 11b, which calls for "integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, [and] resilience to disasters", as well as "holistic disaster risk management at all levels" that is "in line with the Sendai Framework for Disaster Risk Reduction 2015-2030." General alignment with the Sendai Framework as well as the Paris Agreement was also assessed.

An overview of the questions applied during the assessment is provided in Table 1.

#### IV. LIMITATIONS

The present assessment is not intended to be an exhaustive or empirical review. Rather is it meant to provide a first look at the qualitative data on local adaptation plans and actions that have been reported to the cCR and how they might align with relevant global goals and targets. This process will inform a more in-depth analysis at a later stage. Questions and considerations raised by this review process will also inform discussions on tracking local level progress on the post-2015 frameworks.

The sample of data reviewed is limited to adaptation "Action Plans" in English and adaptation "Climate Actions" in English, Spanish, Portuguese, or Korean voluntarily reported to the cCR by local and subnational governments between 2011 and March 2017. This does not constitute a representative sample of all local and subnational governments or all local adaptation plans and actions. Given the focus of the cCR on climate action, plans and actions with a non-climate focus are less likely to be reported. The review also excludes any other plans and actions undertaken by the same governments which were not reported to the cCR.

Disclaimer: The Resilient Cities Team has tried to ensure that the data we release in this first assessment is complete, accurate and relevant. However, due to the complexity of the data and of the analysis process, we cannot guarantee complete lack of errors, omissions or inaccuracies.

#### Table 1. Guiding questions for the review of adaptation actions & plans reported to the cCR

The following questions were used to guide the review of adaptation actions and plans reported to the carbon*n* Climate Registry. Note that clear definitions and guidelines for the terminology contained in the global targets being considered are not (yet) available. Please see the references section for the list of sources that were considered for the purposes of this analysis

Sub	-questions	
A	Is it inclusive?	designed or implemented collaboratively with the active engagement of multiple stakeholders (private, public, academia, etc.) and/or marginalized communities, such as those living in informal settlements or working in the informal economy
В	Does it promote resource efficiency?	uses natural resources (water, air, soil, nutrients, minerals, materials, flora and fauna, ecosystem services) efficiently, minimizing the required inputs and waste
С	Does it use an integrated mitigation/adaptation approach?	simultaneously employs adaptation and mitigation actions in an integrated manner that capitalizes on the synergies between the two areas and/or bridges barriers between them
D	(Alternatively) <b>Does it focus</b> only on climate adaptation?	addresses climate risks and adaptation only, without linking to climate mitigation efforts (emissions reductions etc.)
E	Does it address resilience to disaster? For climate- related risks? For non- climate risks?	contributes to disaster risk reduction or disaster risk management. Actions and plans were further categorized according to whether they address climate and/or non-climate risks.
F	Does it connect to national level goals?	The local action or plan is designed in a way that contributes to related goals at the national level (e.g. Nationally Determined Contributions to the UNFCCC, National Adaptation Plans).
Ove	r-arching questions	
1	Is it "integrated" in line with the 2020 target of SDG 11?	SDG 11b calls for "integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters" Actions and plans were marked as partially or fully integrated based on whether they fulfilled some or all of the criteria of sub-questions A, B, C, and E.
2	Is it in line with the Sendai Framework for DRR?	The core objective of the Sendai Framework is "Preventing new and reducing existing disaster risk through the implementation of
		integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience." For the purposes of this review, actions and plans that were A)
		integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience." For the purposes of this review, actions and plans that were A) inclusive and E) addressed resilience to disaster were considered broadly in line with the SFDRR

#### IV. DATA AND RESULTS

# Adaptation "Climate Actions" reported to the cCR

A total of 330 out of 404 reported Climate Actions were included in the review (81.6%). After incomplete or miscategorized entries were removed, 242 adaptation Climate Actions remained and were included in the analysis. The sample of "Climate Actions" assessed included data from 117 unique entities (cities, towns, and regions) from 33 countries in 9 global regions.<sup>1</sup> The breakdown of Action types is shown in Table 2. Actions which covered all adaptation sectors and cobenefits listed in the form were reported (see Annex for more information).

Each action was assessed and categorized based on the questions described in Table 1. Around half were found to be inclusive or to use an integrated adaptation and mitigation approach while more than two-thirds promoted resource efficiency or addressed disaster resilience. Taken together, about 26% of actions clearly addressed all four areas and could potentially be considered as "integrated actions" under SDG 11b (see Figure 1). Another 62% fulfilled two or three conditions and could be considered partially integrated. With regards to the Sendai Framework, ninety-four actions (38%) were both inclusive and addressed disaster risk and were therefore considered as broadly aligned with the SFDRR.<sup>2</sup>

Furthermore, a full 76% of actions exhibited a connection to national-level goals.<sup>3</sup> A similarly high number, 74%, were broadly aligned with article 7 of the Paris Agreement, only 12 were not.<sup>4</sup>

The same assessment was conducted on a sub-sample of the 81 actions reported as either plans/strategies or policies/regulations. From this sample, a clear majority of policies and plans fulfilled each of the four criteria (inclusive, resource efficiency, mitigation and adaptation, disaster resilience). Forty-three (53%) were partially integrated, fulfilling two or three of the criteria simultaneously. Twenty-three (28%) clearly addressed all four areas and could potentially be considered as "integrated policies and plans" in line with SDG 11b. In addition, thirty-eight (47%) were both inclusive and addressed disaster risk reduction so were scored as being broadly aligned with the Sendai Framework.<sup>5</sup> Most also linked to nationallevel goals (81%).

Number	Туре	Description
113	Action	includes projects and programs; actions may be one-time or recurring
57	Strategy / Plan	local strategy or plan*
31	Assessment / Research	includes studies, assessments and scientific papers conducted in support of local adaptation/resilience actions
24	Policy / Regulation	Includes laws, by-laws, and any policy-relevant action made by the local government in support of local adaptation/resilience actions
17	Other	Includes summits, workshops, courses, and other capacity building activities

Table 2.	Types of a	laptation	"Climate	Actions"	assessed
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\*Local governments were able to report adaptation plans either to the "Climate Action" section described here or the "Action Plan" section of the cCR reporting sheet

inconclusive for this question

<sup>&</sup>lt;sup>1</sup> Africa, Europe, Middle East /North Africa/West Asia, East Asia, South Asia, Southeast Asia, Oceania, North America, Latin American & Caribbean

<sup>&</sup>lt;sup>2</sup> 94 yes, 39 no, 109 inconclusive

<sup>&</sup>lt;sup>3</sup> 184 yes, 2 no, 56 inconclusive

<sup>&</sup>lt;sup>4</sup> The analysis of the remaining 49 was

<sup>&</sup>lt;sup>5</sup> 38 yes, 14 no, 29 inconclusive







Figure 2. SDG 11b Classification of adaptation plans and policies reported as "Climate Actions"

A key finding from this first assessment is that in many cases, the information provided by the local/regional government did not explicitly answer the questions being considered in this assessment. This is not surprising as they were not requested to report their actions according to these criteria in the cCR. In such cases, when it was unclear

whether the action fulfilled the assessment criteria, it was marked as "inconclusive." In addition, since the "Overarching questions" (see page 6) were designed to fulfill multiple criteria to qualify for a positive answer, several of the Adaptation "Climate Actions" ended up qualifying as "partially integrated plans" or as "partially in line with the SFDRR". The noteworthy proportion of the inconclusive results in the sample reflects the strict criteria of the questions, rather than the "non-applicability" or "non-relevance" of the data exported from cCR.

## Adaptation "Action Plans" reported to the cCR

Local and subnational governments can also upload their climate plans via the "Action Plans" section of the cCR. A total of 50 adaptation "Action Plans" have been reported to the cCR. The twenty-five English language plans were included in this review.

These plans were reported by 25 unique cities and municipalities from thirteen countries in Africa (3), East Asia (4), Europe (4), North America (9), and Oceania (5). Included were six plans self-reported as an "integrated climate plan" and nineteen self-reported as a "climate adaptation /resilience plan."

Nearly 100% of the plans scored a "Yes" in every category. All twenty-five were inclusive, promoted resource efficiency, and addressed resilience to disaster. Twenty-three used integrated climate adaptation and mitigation approaches. <sup>6</sup> In addition, all except one demonstrated a clear connection to national-level goals.

For the overarching questions, the results were naturally the same: 25 of the "Action Plans" were broadly in line with the Paris Agreement and the Sendai Framework. A total of 23 could potentially be considered fully "integrated plans" in line with SDG 11b; the remaining two were partially integrated.

It is perhaps no surprise that most of the local governments in the small sample analyzed are global leaders in the field of sustainable, resilient urban development.

Comparing the two datasets, ten of the cities that reported "Actions Plans" also reported "Climate Actions" assessed in the previous section.

#### IV. DISCUSSION AND NEXT STEPS

A preliminary analysis of 242 adaptation "Climate Actions" and 25 adaptation "Action Plans" reported to the carbonn Climate Registry by 132 unique cities, regions, and towns shows that a substantial number contain language and principles consistent with the broad aims of the Paris Agreement, Sendai Framework, and the 2020 target of SDG 11.

Of the 106 *policies and plans* assessed in both sections, forty-six (43%) appeared to promote inclusion, resource efficiency, integrated climate mitigation and adaptation, and resilience to disasters in potential alignment with the "integrated policies and plans" envisioned in SDG 11b. Another forty-five (42%) addressed at least two of these criteria and could be considered "partially integrated." In addition, sixty-three (59%) promoted inclusion and disaster risk reduction, suggesting a high-level alignment with the core objectives of the Sendai Framework. Finally, a full 84% linked local actions to national-level goals, in support of multi-level collaboration.

The results suggest that the 132 cities, towns, and regions reporting adaptation actions and plans to the cCR have made a good start toward the 2020 SDG 11 target. Paradoxically, this could pose a challenge for "substantially increasing" the number of integrated policies and plans, though the reporting entities represent a small sample of the world's local governments. A promising observation for scaling up action is that these entities are spread out across thirty-five different countries and have indicated their support for multi-level cooperation.

Crucially, the review does not assess the progress and impacts of the reported plans and actions. Going forward, data collected through the CRAFT questionnaire seeks to provide more information in this area.

For next steps, ICLEI will use the results presented in this preliminary review to inform discussions with local governments and key partners at relevant global events in May

<sup>&</sup>lt;sup>6</sup> 23 Yes, 1 No, 1 inconclusive

2017 including Resilient Cities, the intersessional UNFCCC Climate Talks, and the UNISDR Global Platform for Disaster Risk Reduction.

Further analysis of the adaptation data reported to the cCR will be conducted, included data captured through the CRAFT questionnaire, and the results incorporated into the annual carbon*n* Climate Registry Digest. The Digest will be presented at the UNFCCC COP23 in Bonn, Germany in order to inform the official discussions including at the 2017 Bonn Climate Summit of Local and Regional Leaders and the Focal Point Forum on Adaptation and Human Settlements (Nairobi Work Program).

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Table 3. Data reported by the following 132 reporting cities, towns, states, and regions was considered in this assessment

AFRICA	
Country	Reporting entity
Nigeria	Amuwo-Odofin Local Government Area
Nigeria	Delta State Government
South Africa	Cape Town Metropolitan Municipality
South Africa	City of Johannesburg Metropolitan Municipality
South Africa	City of Tshwane Metropolitan Municipality
South Africa	eThekwini Metropolitan Municipality
South Africa	KwaDukuza Local Municipality
South Africa	Mogale City Local Municipality
South Africa	Msunduzi Local Municipality
South Africa	Nelson Mandela Bay Metropolitan Municipality (Port Elizabeth)
Tanzania	Arusha City Council
Tanzania	Dar es Salaam Local Government Authorities
EAST ASIA	
Country	Reporting entity
Chinese Taipei	Chiayi City Government
Chinese Taipei	New Taipei City Government
Chinese Taipei	Taipei City Government
Japan	Kawaguchi City
Japan	Yokohama City
Republic of Korea	Changwon City
Republic of Korea	Gangdong District
Republic of Korea	Gangneung City
Republic of Korea	Osan City
Republic of Korea	Seongbuk District
Republic of Korea	Seoul Metropolitan Government
Republic of Korea	Wonju City
Republic of Korea	Yeosu City
EUROPE	
Country	Reporting entity
Belgium	Brussels Capital Region
Belgium	City of Antwerp
Belgium	City of Ghent
Denmark	City of Copenhagen
Finland	City of Lahti
Finland	City of Lappeenranta
France	City of Orléans
France	City of Paris
France	Metropolis of Lyon
France	Nantes Métropole

France	Toulouse Métropole
Germany	City of Freiburg im Breisgau
Norway	Kristiansand Municipality
Norway	Lørenskog Municipality
Norway	Oslo Municipality
Norway	Sandnes Municipality
Portugal	Municipality of Almada
Spain	Municipality of Areatza
Spain	Municipality of Granada
Spain	Municipality of Legazpi
Spain	Municipality of Málaga
Spain	Municipality of Murcia
Spain	Municipality of Tolosa
Spain	Municipality of Vitoria-Gasteiz
Spain	Provincial Government of Barcelona
Sweden	City of Göteborg
Sweden	City of Stockholm
Sweden	Huddinge Municipality
Sweden	Karlstad Municipality
Sweden	Sollentuna Municipality
Sweden	Umeå Municipality
Sweden	Uppsala Municipality
Sweden	
Sweuell	vasteras municipality
United Kingdom	Bristol City Council
United Kingdom	Bristol City Council AN
United Kingdom LATIN AMERICA & CARIBBE Country	Vasteras Municipality       Bristol City Council       AN       Reporting entity
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United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil	Vasteras MunicipalityBristol City CouncilANReporting entityAutonomous City of Buenos AiresMunicipality of RosarioAutonomous Municipality of La PazMunicipality of BetimMunicipality of CampinasMunicipality of Maceió
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United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Rio de Janeiro
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Brazil	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Campinas Municipality of Recife Municipality of Rio de Janeiro Municipality of Sorocaba
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Colombia	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Rio de Janeiro Municipality of Sorocaba Municipality of Bogotá
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Colombia Colombia	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Rio de Janeiro Municipality of Sorocaba Municipality of Bogotá Municipality of Bucaramanga
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Colombia Colombia Colombia	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Campinas Municipality of Recife Municipality of Recife Municipality of Rio de Janeiro Municipality of Sorocaba Municipality of Bogotá Municipality of Bucaramanga Municipality of San Jerónimo de Montería
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Colombia Colombia Colombia Guatemala	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Rio de Janeiro Municipality of Rio de Janeiro Municipality of Sorocaba Municipality of Bogotá Municipality of Bucaramanga Municipality of San Jerónimo de Montería
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Colombia Colombia Colombia Guatemala Mexico	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Recife Municipality of Rio de Janeiro Municipality of Sorocaba Municipality of Sorocaba Municipality of Bucaramanga Municipality of Bucaramanga Municipality of Guatemala Municipality of Hermosillo
SwedenUnited KingdomLATIN AMERICA & CARIBBECountryArgentinaArgentinaBoliviaBrazilBrazilBrazilBrazilBrazilColombiaColombiaColombiaGuatemalaMexicoMexico	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Recife Municipality of Rio de Janeiro Municipality of Sorocaba Municipality of Sorocaba Municipality of Bucaramanga Municipality of Bucaramanga Municipality of Guatemala Municipality of Hermosillo Municipality of Naucalpan de Juárez
United Kingdom LATIN AMERICA & CARIBBE Country Argentina Argentina Bolivia Brazil Brazil Brazil Brazil Brazil Brazil Colombia Colombia Colombia Guatemala Mexico Mexico	Vasteras Municipality Bristol City Council AN Reporting entity Autonomous City of Buenos Aires Municipality of Rosario Autonomous Municipality of La Paz Municipality of Betim Municipality of Betim Municipality of Campinas Municipality of Campinas Municipality of Maceió Municipality of Recife Municipality of Recife Municipality of Roocaba Municipality of Sorocaba Municipality of Sorocaba Municipality of Sorocaba Municipality of Sorocaba Municipality of Bucaramanga Municipality of Guatemala Municipality of Guatemala Municipality of Hermosillo Municipality of Salamanca

Mexico	Municipality of Tlacotepec de Benito Juarez
Mexico	Municipality of Villa de Zaachila
Mexico	Municipality of Yurécuaro
Peru	Municipality of Chaclacayo
Uruguay	Municipality of San Carlos
Venezuela	Chacao Municipality
Venezuela	Metropolitan District of Caracas
NORTH AFRICA, MIDDLE EA	ST, WEST ASIA
Country	Reporting entity
Turkey	Istanbul Metropolitan Municipality
NORTH AMERICA	
Country	Reporting entity
Canada	City of Greater Sudbury
Canada	City of North Vancouver
Canada	City of Richmond
Canada	City of Surrey
Canada	City of Vancouver
Canada	Corporation of Delta
Canada	District of Saanich
United States	Broward County
United States	City & County of San Francisco
United States	City of Austin
United States	City of Boston
United States	City of Boulder
United States	City of Chicago
United States	City of Flagstaff
United States	City of Houston
United States	City of Keene
United States	City of Los Angeles
United States	City of Martinez
United States	City of New York
United States	City of North Little Rock
United States	City of Oakland
United States	City of Philadelphia
United States	City of Portland
United States	City of Seattle
United States	City of Tucson
OCEANIA	
Country	Reporting entity
Australia	City of Joondalup
Australia	City of Lake Macquarie Council
Australia	City of Sydney
Australia	Melbourne City Council

Australia	Mornington Peninsula Shire Council
Australia	Port Phillip City Council
SOUTH ASIA	
Country	Reporting entity
Bhutan	City of Thimphu
India	Pune Municipal Corporation
India	Rajkot Municipal Corporation
India	Shimla Municipal Corporation
SOUTHEAST ASIA	
Country	Reporting entity
Indonesia	City of Bandung
Indonesia	City of Semarang
Malaysia	Melaka Historic City Council
Philippines	City of Makati
Philippines	City of Parañaque
Thailand	Bangkok Metropolitan Administration
Thailand	Chiangrai Municipality
Thailand	Hat Yai City Municipality
Thailand	Khon Kaen Municipality
Thailand	Lampang City Municipality
Thailand	Mae Raeng Municipality
Thailand	Na Kaeo Municipality
Thailand	Sikhio Town Municipality

More information on data reported by these cities, towns, states, and regions is available on the Carbonn Climate Registry (cCR) website at http://carbonn.org/data/

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