



GLOBAL COVENANT  
of MAYORS for  
CLIMATE & ENERGY

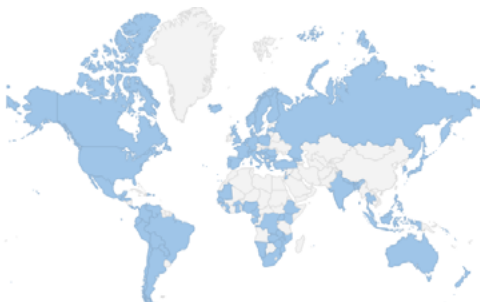
## FROM COMMITMENTS TO ACTION: THE IMPORTANCE OF AN INTEGRATED APPROACH TO CITY CLIMATE FINANCE

The United Nations Framework Convention on Climate Change reached an historic agreement in Paris in 2015 as nations of the world came together to create binding commitments to address climate change.

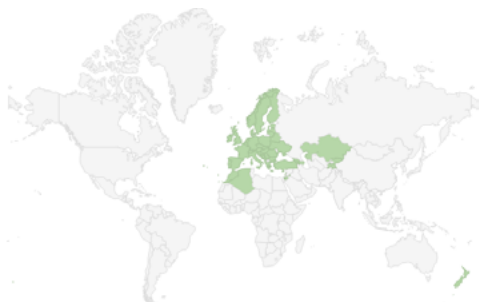
Cities have long been willing partners in advancing the mission embodied by the Paris Agreement, and have organized their efforts through a multitude of global and regional city networks and initiatives, local action, and collective response.

The recent launch of the **Global Covenant of Mayors for Climate & Energy (GCoM)** solidifies a framework to bring the contributions of cities and local governments under the umbrella of the UNFCCC. The aim is to assess the impact of city and local government efforts to advance the Paris Agreement, while also identifying areas where they could do more through collaboration and with support from other levels of government and the private sector.

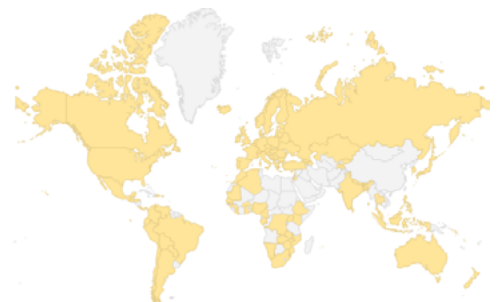
The Global Covenant of Mayors brings together the **Compact of Mayors** and the **EU Covenant of Mayors** – the world’s two primary initiatives for cities – and will play an instrumental role in creating a new paradigm for city climate leadership and climate finance. The GCoM is comprised of more than 7,100 cities across 6 continents and 119 countries and will enlarge city participation while streamlining the process for more cities to showcase their action – helping to further quantify the impact cities are having on curbing global GHG emissions, and establishing an accountability and reporting framework to measure progress over time. It will also convene stakeholders, especially in climate finance, to develop and pilot real solutions for cities.



Countries where the Compact has a presence



Countries where the Covenant has a presence



Countries where the Compact and the Covenant have a presence



The Paris Agreement is an historic milestone. It irreversibly paves the way for a global transition to low-emission, climate-resilient and green economies. Cities and local governments are critical partners in the implementation of the Paris Agreement, which calls on cities and sub-national authorities to scale up their efforts to reduce emissions, build resilience and promote regional and international cooperation.

A critical element of the successful outcome in Paris was establishing mechanisms and national commitments for greater climate-friendly investment – particularly in the world’s developing regions. Coupled with these commitments, recent analysis highlights the need to mobilize more than **\$90 trillion to build climate-friendly, sustainable infrastructure.**<sup>1</sup>

**Cities will be at the forefront of this investment;** over 54% of the world’s population live in cities today, with that figure rising to 66% (nearly 6.4 billion individuals) by 2050.<sup>2</sup> Cities now account for more than 70% of global energy-related GHG emissions and projections rise as global populations further concentrate in urban centers. New infrastructure will not only play a critical role in improving the quality of life in cities, it will be instrumental in solving the climate crisis and achieving a carbon neutral world.

Improving city-level financial access will increase investment flows into cities and other urban areas, and will be a critical lever to unlocking the potential of cities. It will re-shape the economics of development and reinforce sustainable infrastructure as a stronger investment over high-carbon polluting options.

Cities are already more climate friendly, per person and per dollar of wealth created than the world as a whole. According to some studies, “the average carbon footprint of households living in the center of large, population-dense urban cities is about 50% below average, while households in distant suburbs are up to twice the average.”<sup>3</sup>

**An integrated approach for sustainable, climate-resilient and vibrant cities** for both climate change mitigation and adaptation has the potential to multiply the benefits and, therefore, make more efficient use of available financing. In particular, advantages of climate and energy measures often extend beyond the environment to include social, health and economic benefits (including the creation of jobs and growth in local economies) making cities more attractive for investment.



Bogotá’s **TransMilenio** bus rapid transit (BRT) system shows how capital providers and city planners were able to finance and implement a low-carbon project at an unprecedented scale. Since 2000, TransMilenio has **grown from 14km to 112km of dedicated bus lanes** that now carry 2 million passengers per day. By successfully aligning all stakeholders early, TransMilenio adopted a business model that drew investment from local sources and established a public-private partnership to manage operations. With integrated, collaborative planning and all sectors taking part in financing and implementing the BRT project, Bogotá has become healthier and more sustainable in the long-term. The Colombian capital is proof that potentially game-changing solutions exist. However, cities need the mechanisms to explore flexible business models that take into account their unique needs.

PHOTO: CARLOS FELIPE PARDO/UNEP

<sup>1</sup> World Bank – Current projections (<http://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>)

<sup>2</sup> The New Climate Economy: The Sustainable Infrastructure Imperative – [http://newclimateeconomy.report/2016/wp-content/uploads/sites/4/2014/08/NCE\\_2016Report.pdf](http://newclimateeconomy.report/2016/wp-content/uploads/sites/4/2014/08/NCE_2016Report.pdf)

<sup>3</sup> <http://news.berkeley.edu/2014/01/06/suburban-sprawl-cancels-carbon-footprint-savings-of-dense-urban-cores/>

**Unlocking a sustainable path for cities will allow them to accelerate their impact.** By 2050, implementing sustainable urban infrastructure choices in buildings, transit, energy and waste could save \$17 trillion on energy costs alone.<sup>4</sup> Through initiatives like the GCoM, cities are showing their potential and making real progress to greatly accelerate the world's achievements towards the legally binding global commitment to create a carbon neutral world this century.



In June 2014, Johannesburg successfully issued a green bond. The bond, with a value of US\$143 million, was 1.5 times oversubscribed and will finance a wide range of green infrastructure projects across the energy, water, waste and transport sectors, including:

- **42,000 smart meters**
- **22.5GW of solar water geysers**
- **Biogas to energy**
- **Energy efficiency**
- **Upgrading the water network**
- **Landfill gas to energy**
- **Separation at source recycling**
- **150 new dual fuel buses**
- **30 buses converted to biogas/diesel**

Many of the projects to be financed by the green bond will help the city to reduce its emissions. As part of the process of labeling the bond 'green', the city will report to investors on the emissions reduced as a result of the projects financed.

According to The New Climate Economy, a **76% increase in annual infrastructure spending over the next 15 years is necessary** to replace aging infrastructure in developing economies and to accommodate higher growth and structural changes in emerging market and developing countries.

Cities are finding unique ways to achieve their climate commitments. Innovative multi-level governance structures are instrumental in delivering climate and energy policies. Some cities are working in close collaboration with their regional partners, as well as with bottom-up civil society institutions, financing institutions, cooperatives and businesses, small and large – to create a broad spectrum coalition of the ambitious.

The **Unione dei comuni dell'entroterra Idruntino** in Italy, comprised of the towns of Bagnolo del Salento, Cannole, Cursi and Palmariggi, has set a joint target of achieving a 35% reduction in emissions by 2020 through the EU Covenant of Mayors. As a collective, they have built a common vision, prepared a joint emissions inventory and developed a comprehensive climate action plan that includes a number of highlights, including:

- 1. Common Land-use planning**, especially the deployment of renewables
- 2. Harmonized building codes**
- 3. Common procedures** for green public procurement
- 4. Establishment of a joint energy agency** to promote building energy efficiency measures across jurisdictions.

These solutions alone are not enough to meet the climate challenges the world faces. Nations must find new ways to empower the world's cities. Empowerment – combining appropriate legal autonomy with adequate finance and institutional capacity – will lead the global movement towards steadily and rapidly accelerating climate ambition. Meeting these aims will require access to local data and capacity to assess how best to transition to a sustainable future. For some cities, institutional frameworks and access to capital are already in place to achieve these ambitious aims.



**The city of Zagreb, Croatia**, an EU Covenant of Mayors signatory has replaced the city's bus fleet with 160 clean fuel and energy-efficient buses, including 100 low-floor biodiesel and 60 compressed natural gas (CNG) vehicles. Equipped with air conditioning, CCTV, and emergency buttons, the new fleet is safer and more comfortable, without consuming more energy. **This project has improved overall tram performance, shifted the city's modal split, and improved the city's air quality.** Sulfur dioxide and harmful particulate emissions have reduced by 27.47 and 22.28 percent, respectively since 2010.

<sup>4</sup> The New Climate Economy: Seizing the Global Opportunity – [http://newclimateeconomy.report/2015/wp-content/uploads/sites/3/2014/08/NCE-2015\\_Seizing-the-Global-Opportunity\\_web.pdf](http://newclimateeconomy.report/2015/wp-content/uploads/sites/3/2014/08/NCE-2015_Seizing-the-Global-Opportunity_web.pdf)

Most of the world's urban growth from 2015 to 2050, however, will occur in urban areas which are either constrained by inadequate autonomy, or, even more commonly, by a lack of basic fiscal and implementation capacity.

Increasing access to finance in the world's cities and urban areas may mean improving local capacity, bolstering local financial systems, solidifying partnerships between different sectors and levels of government and, in some cases, providing municipalities with the appropriate level of autonomy to maximize their contributions towards the global goal of a carbon neutral economy. Successfully implementing these items is a necessity to meeting our 2050 goals. It will take time to identify the policy frameworks and financial mechanisms that will catalyze action. National governments, as partners, will have a significant role to play in helping cities meet this challenge. **Filling in the largest gaps in the financial and implementation capacity of cities to use their current authority to maximize climate progress can be achieved much faster if the global community leverages events like COP22 for serious dialogue.**

# RESULTS FROM THE COVENANT OF MAYORS



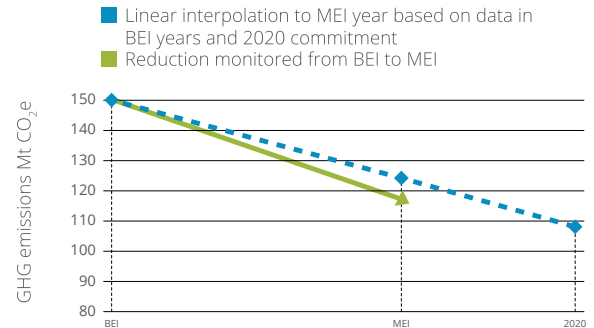
Recently released results from the Covenant of Mayors: Greenhouse Gas Achievements and Projections Report highlight the initiative's momentum. Based on the last monitoring report, cities affiliated with the Covenant of Mayors **have achieved an overall reduction of 23% between the baseline year and this study.** The drop in emissions is significant especially in the Buildings sector, where the Covenant observes a **27% decline in emissions.** Current achievements can be traced to the implementation of effective national and local policies focused on:

- Improving energy efficiency in buildings
- Increasing the share of renewable energy in local production
- Integrating district energy systems
- Gradual transformation towards more sustainable transportation

Cities that are part of the Covenant have committed to an overall estimated reduction of 254 Mt CO<sub>2</sub>e by 2020, making them on pace to achieve a 27% reduction. This is seven percentage points higher than the initiative's minimum requirement. Emissions reduction from European Union Covenant signatories (98% of the total Covenant signatories and 31% of EU population) may represent approximately **31% of the EU28 GHG emission reduction target by 2020 compared to 2005.**

The Covenant also enhances the role of **subnational regional authorities** as key to implement climate change policies in a multilevel governance approach. The involvement of these actors is empowering – besides larger cities – also small and medium-sized cities and towns to develop and implement sustainable energy and climate action plans. Cities and towns of all sizes are in a privileged position to meet the climate change challenge by fostering the participation of citizens and building partnerships with local stakeholders.

	Baseline Emission Inventory (BEI)	Monitoring Emissions Inventory (MEI)	Absolute reduction of GHG emissions compared to BEI
<b>GHG emissions inventories</b> [t CO <sub>2</sub> e/y]	149,824, 616	116,060,439	23%
<b>Per capita GHG emissions</b> [t CO <sub>2</sub> e/cap*y]	6.13	4.55	26%



<b>EU-28 2005 GHG emissions</b> [Mt CO <sub>2</sub> e]	5,199
<b>EU-28 2020 GHG emission reduction target</b> [Mt CO <sub>2</sub> e]	778
<b>CoM EU-28 2020 estimated GHG emission reduction</b> [Mt CO <sub>2</sub> e]	239
<b>CoM potential contribution to EU-28 2020 GHG emission reduction target</b> [%]	31%

# RESULTS FROM THE COMPACT OF MAYORS



COMPACT of MAYORS

**Projections released today for cities committed to the Compact of Mayors reveal that they are on track to reduce their emissions to an average of 2.63 tons per capita, for a cumulative reduction of 34.2 Gt CO<sub>2</sub>e, by 2050.<sup>5</sup>**

These cities have, through the Compact of Mayors, and its founding networks, committed themselves to measure, plan, and be accountable to meeting the targets they set. Through the commitments they have already made voluntarily, Compact of Mayors cities are delivering on the goals of the Paris Agreement. The potential of existing commitments made by Compact of Mayors cities are equivalent to **reductions of nearly 1 billion tons of CO<sub>2</sub>e emissions annually by 2030 (or 11.6 billion tons cumulatively between 2010 and 2030).<sup>6</sup>**

This represents **26% of what is possible globally** through direct city action – and even more would be possible if cities partner with other levels of government and the private sector.<sup>7</sup>

**596 cities are now committed to the Compact of Mayors<sup>8</sup>** and, with these commitments, cities are pledging to measure and track their climate risk and GHG emissions, set ambitious targets to reduce them, and establish data-based plans to meet those targets.

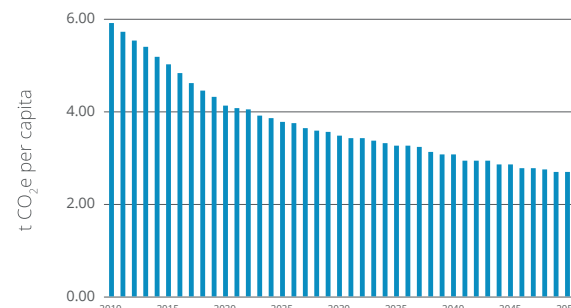
While many of these targets “match” those that national governments will make through their Nationally Determined Contributions or NDCs, others are setting much more ambitious targets now. Seventy-nine committed cities have set long-term climate targets beyond 2030.



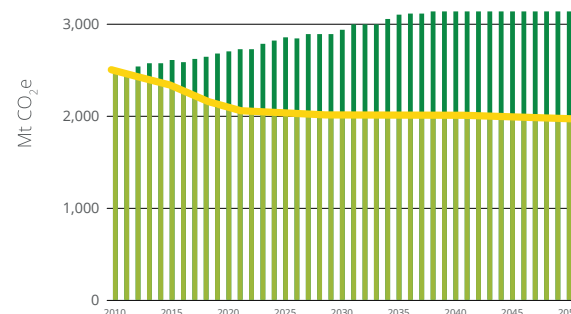
**Sønderborg, Denmark** is even more ambitious, setting a 50% reduction target by 2020 through a re-imagining of its role as city and a catalyst for action. It seeks to position itself as a strong leader in demonstrating new energy and climate solutions through development of technology, deployment of new financing mechanisms and implementation of learning platforms. In fact cities – big and small – are joining forces to meet the challenge. **Johannesburg, South Africa seeks to achieve a 65% reduction by 2040. Port Phillip, Australia has a 50% target by 2020.**



t CO<sub>2</sub>e per capita



Aggregate City Emissions



<sup>5</sup> Global Impact of the Compact of Mayors - <http://impact.compactofmayors.org/>

<sup>6</sup> Global Impact of the Compact of Mayors - <http://impact.compactofmayors.org/>

<sup>7</sup> Stockholm Environment Institute: Advancing Climate Ambition: Cities as Partners in Global Climate Action - <https://www.sei-international.org/mediamanager/documents/Publications/Climate/C40-Bloomberg-SEI-2014-Cities-Climate.pdf>

<sup>8</sup> 596 cities were committed at the time of this analysis (6 November 2016). Since then cities continue to commit and current count is over 600.

2015 will go down in history as the year in which, at Paris, the world committed to solve the climate crisis. This year, 2016, must become the year in which the world provided its cities with the financial tools to contribute to a climate safe future. This is a significant opportunity to achieve the world's mid-century challenge.

## A CALL TO ACTION ON MUNICIPAL INFRASTRUCTURE

At Habitat III, 85 of the world's cities with more than 650 million residents – 10% of the world's population – called for cities to be given appropriate, equitable and direct access to climate finance through institutions like the World Bank. The reality is that many cities have larger populations, greater climate emissions and climate risk, and stronger administrative and financial capacities than many nations which belong to the UN.

The world community must establish mechanisms by which cities willing to meet appropriate standards for credit-worthiness, transparency and administrative integrity should be eligible for finance on the same basis as nations or provinces with equal capacity. Climate finance should be provided on the basis of need and merit, not on the basis of administrative hierarchy. The evidence is clear. Most of the responsibility for meeting the needs for sustainable infrastructure – 70% at least – falls on cities. With responsibility must come authority. **The Global Covenant of Mayors for Climate & Energy will actively engage with regional and national partners to ensure that cities are empowered to implement plans and take actions to reduce CO2 emissions, secure access to adequate financial mechanisms to meet this challenge, and that they model principles of transparency, measurement and accountability.**



Created in 2008 to implement the EU's 2020 climate and energy targets, the **Covenant of Mayors** has firm commitments of over 6800 cities in 58 countries resulting in Action Plans with an investment of over €110 billion. In 2015, Commissioner Miguel Arias Cañete has launched the integrated Covenant of Mayors incorporating also adaptation to climate change and extending it to the 2030 timeframe. Covenant signatories voluntarily pledge action to support implementation of the European Union 40% greenhouse gas-reduction target by 2030 and the adoption of a joint approach to tackling mitigation and adaptation to climate change. The EU Covenant of Mayors offices worldwide are funded by the European Commission and currently operated by the Council of European Municipalities and Regions (CEMR), Climate Alliance, Energy Cities, EUROCITIES and the European Federation of Agencies and Regions for Energy. A target-oriented reporting and monitoring framework accompanies signatories towards their climate goals.



The **Compact of Mayors** is a global coalition of mayors and city officials pledging to reduce local greenhouse gas emissions, enhance resilience to climate change, and to track their progress transparently. The Compact was launched in September of 2014 by UN Secretary-General Ban Ki-moon and his Special Envoy for Cities and Climate Change, Michael R. Bloomberg. The Compact was activated under the leadership of the global city networks – C40 Cities Climate Leadership Group (C40), ICLEI-Local Governments for Sustainability (ICLEI) and the United Cities and Local Governments (UCLG) – and with support from UN-Habitat, the UN's lead agency on urban issues.

