

Cities leading the way to 1.5°C

C40's contribution to the Talanoa Dialogue

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Where are we?

There is overwhelming scientific evidence showing that a world where global atmospheric temperatures rise above 1.5°C is going to have large-scale impacts on human life, our infrastructure and the world's ecosystems¹. Anything above 2°C is without a doubt undesirable, unsafe and unequivocally detrimental to humanity as we know it. However, the current pledges made by the Parties of the UNFCCC through their Nationally Determined Contributions (NDC) and the policies in place to implement those NDC set us on a dangerous path of more than +3°C².

At the city level, 70% of the C40 members report that they are already experiencing the effects of climate change³ and socio-economic or health repercussions. In 2017 alone, 75% of C40 cities experienced extreme weather or climate related events, 45% experienced heavy flooding, including four cities, which experienced 1/100 year floods and one 1/500 year flood.

To set us on a 1.5°C pathway, cities need to peak GHG emissions by 2020, which will require enormous efforts across all areas of urban life, but above all in energy, transport, buildings, and waste management, where we find the biggest opportunities for emissions reduction⁴. Moreover, if we take into account the consumption-based emissions⁵ generated in cities, we find that carbon emissions in cities are about 60% higher than previously measured through sector-based methodology⁶. This explains why global emissions keep growing despite emissions reductions in many areas, and makes our challenge to peak emissions by 2020 even more complex and urgent.

In response to this challenge, some of the biggest cities in the world are committed to doing their fair share of the work. Indeed, we found that to stay on the 1.5°C trajectory, C40 cities have to significantly bend the curve of their emissions or else they will use up the entire world's carbon budget by 2060⁷. To this end, our Deadline 2020 programme provides the first ever roadmap for cities outlining the pace, scale and prioritization of actions needed to achieve the more ambitious objective of the Paris Agreement.

At the time of writing, 32 global cities have pledged to become carbon neutral by 2050 and it is our goal that **by the end of 2020, every C40 member city will have a comprehensive, measurable climate action plan in place to deliver low-carbon resilient development that is consistent with the 1.5°C target of the Paris Agreement.** The aim of these plans is that cities do their part to keep global

¹ Intergovernmental Panel on Climate Change. Summary for Policymakers in "[Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change](#)" [Online] [Accessed on March 23rd 2018]

² [Climate Action Tracker](#) [Online] [Accessed on March 23rd 2018]

³ C40 and Arup. "[Climate Action in Megacities 3.0](#)" [Online] [Accessed on March 28th 2018]

⁴ C40 and McKinsey Center for Business and Environment. "[Focused acceleration: a strategic approach to climate action in cities to 2030](#)" [Online] [Accessed on March 28th 2018]

⁵ The consumption by residents of a city of goods and services imported from outside the city boundary, including food, clothing, electronic equipment, air travel, delivery trucks and construction industries.

⁶ C40. "[Consumption-based GHG emissions of C40 cities](#)" [Online] [Accessed on March 22nd 2018]

⁷ C40. "[Deadline 2020: how cities will get the job done](#)" [Online] [Accessed on March 22nd 2018]

temperatures from rising above 1.5°C, to enhance the adaptive capacity and resilience to adverse climate impacts of all stakeholders and that all citizens have access and share the benefits of these transformative actions, for a just transition to a low-carbon and resilient world. We are working to spread this ambition among the more than 7000 cities around the world who have committed to the Global Covenant of Mayors for Climate and Energy, a global initiative that drives ambitious climate action and access to energy.

Where do we want to go?

We want to ensure a climate-safe future for all, and in order to do this, the global climate community must pursue the highest ambition of the Paris Agreement: to keep global atmospheric temperatures from rising above **1.5°C**, to increase our **capacity to adapt** to the inevitable effects of climate change locked-in by current levels of GHG emissions in our atmosphere and to enhance **climate resilience** globally.

Global GHG emissions need to peak in 2020 and then begin declining, by following ambitious **long-term decarbonisation pathways** aligned with the goals of the Paris Agreement. By 2050, the long-term objective of **carbon neutrality** must be reached, the recommendations and milestones of the **Sendai Framework for Disaster Risk Reduction** must be implemented and the objectives of the **New Urban Agenda** and **Sustainable Development Goals** must be achieved.

Achieving these goals at the urban level means that the cities of the future will be **compact, connected, low-carbon** and **climate resilient**, offering **healthy, prosperous, safe, and equitable** communities for their residents. These cities will have multi-purpose green infrastructure, energy efficient buildings, sustainable waste management systems, fossil-fuel free streets and offer accessible decarbonized mobility through clean public transportation such as electric buses, cycling and walking. Through the inclusive design and implementation of these actions, mayors can ensure that the benefits they bring can be shared with and accessed by all residents, including: better **air quality**, improved **public health, job opportunities, economic growth**, and many others.

We are confident that this vision can be realised with **cities and national governments working together**. Opportunities for national governments to support building thriving, climate resilient and low-carbon cities have never been clearer, including through direct national policy interventions, enabling measures or the removal of barriers⁸. Meanwhile, much evidence is available to make the case for climate action and reassure national governments of the socio-economic and health benefits of climate action⁹ for cities and countries alike. Indeed, our research demonstrates that thriving cities make for more prosperous countries¹⁰.

How do we get there?

Reaching carbon neutrality by 2050 is a colossal challenge that must mobilize all hands on deck now and in the years to come. Everyone has a role to play in achieving this collective goal.

⁸ Coalition for Urban Transitions and Stockholm Environment Institute. "[Building Thriving, Low-Carbon Cities: An Overview of Policy Options for National Governments](#)" [Online] [Accessed on March 22nd 2018]

⁹ C40 and the New Climate Institute. "[Opportunity 2030: benefits of climate action in cities](#)" [Online] [Accessed on March 22nd 2018]

¹⁰ Coalition for Urban Transitions and Stockholm Environment Institute. "[Building Thriving, Low-Carbon Cities: An Overview of Policy Options for National Governments](#)" [Online] [Accessed on March 22nd 2018]

Cities have begun doing their fair share to deliver the 1.5°C objective following the Deadline 2020 roadmap: emissions must peak by 2020 and decline until cities reach net-zero emissions by 2050. The report *Focused acceleration: A strategic approach to climate action in cities to 2030*¹¹ provides further guidance on the actions that represent the biggest emission reduction opportunities in cities which should therefore be prioritised. These can be clustered into four priority sectors:

1. The decarbonization of the electricity grid;
2. The optimization of energy efficiency in buildings;
3. Next-generation mobility; and
4. Improved waste management.

In parallel to these actions, cities need to adapt to the impacts of climate change, which are already being felt by cities worldwide. This requires efficient and integrated climate action planning – ensuring that all aspects of the urban ecosystem, all interdependencies are considered in the adaptation process, including risk and vulnerabilities assessment; adaptation planning; implementation; monitoring and evaluation. All stakeholders, including the private sector and utility providers must be involved to collaborate and coordinate in sharing risk and vulnerabilities data for more successful and inclusive results¹². Further, building resilience must translate into mainstreaming and embedding climate risk in all infrastructure, budget and urban planning decisions.

To accomplish this, collaboration between cities, national governments and other stakeholders will be essential, particularly to achieve **progress in research and evidence-based decision-making, access to finance, and the removal of barriers** hindering the implementation of ambitious city-level climate action through enabling national policy frameworks. The Coalition for Urban Transition has identified that **national policies** in the same four above sectors (energy, buildings, mobility and waste management) can support cities to unlock the biggest emission reduction opportunities. These recommendations pertain specifically to:

1. energy use and local clean energy supply
2. efficient buildings and compact urban planning,
3. low-carbon urban transportation,
4. efficient waste management, as well as a number of cross-cutting direct interventions¹³.

Parties particularly, must:

- accelerate pre-2020 action; increase the ambition of their NDC in 2020 and every five years thereafter (in accordance with the ambition mechanism of the Paris Agreement);
- formulate and begin to implement long-term decarbonization strategies (including but not limited to removing fossil-fuel subsidies, phasing out the use of coal and transitioning to 100% renewable energy);
- facilitate access to the financing needed to scale-up climate action and support/encourage the shifting of trillions from fossil fuel-intensive industries to clean ones in the real economy; and
- translate global climate leadership into effective domestic policies to create low-carbon and climate-resilient societies.

Finally, we also **encourage the UNFCCC, Parties and non-Party stakeholders to consider the need to reduce consumption-based emissions in order to bend the curve of global emissions by 2020**. The

¹¹ C40 and McKinsey Center for Business and Environment. "[Focused acceleration: a strategic approach to climate action in cities to 2030](#)" [Online] [Accessed on March 28th 2018]

¹² C40. "Infrastructure Interdependencies and Climate Risks in Cities" [Online] [Accessed on March 22nd 2018]

¹³ Coalition for Urban Transitions and Stockholm Environment Institute. "[Building Thriving, Low-Carbon Cities: An Overview of Policy Options for National Governments](#)" [Online] [Accessed on March 22nd 2018]

potential for emissions reduction from consumption should convince local and national policy-makers that cities present an even greater opportunity to deliver the climate-safe future we need. C40 will explore how these findings affect the emission reduction trajectories of our cities and the type of actions necessary to curb carbon emissions through behavioural and lifestyle changes particularly with regards to food, clothing, electronic equipment, air travel, delivery trucks and construction industries. We urge the Parties and our partners to explore it too.

We strongly believe that coordinated and collaborative action by and between the Parties and non-Party stakeholders will not only allow us to meet the goals of the Paris Agreement, it will also help us to create more prosperous, liveable and equitable societies for all. Where we want to go is within our reach. **We just have to go.**