How cities will get the job done

ARUP

C40

DEADLINE



1 Nov 2017

ABOUT C40 CITIES CLIMATE LEADERSHIP GROUP

Over 90 of the world's largest cities working together to tackle climate change







First and foremost C40 helps city leaders help each other

"As mayors, we all face similar challenges and have to innovate to solve them, often in the same ways. The C40 network connects us all, enabling us to share ideas and collaborate, working together towards a greener, healthier future."

Mayor of Paris, Anne Hidalgo





C40 IS WORKING TO TURN THE PARIS AGREEMENT FROM ASPIRATION TO ACTION



The Paris Agreement





- Agreement reached in Dec 2015 at COP21 and entered into force in Nov 2016
- Brings nations together to combat climate change and adapt to its effects
- Aim: keep global temperature rise to well below 2 degrees Celsius above preindustrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.
- All nations must put forward their ambition via a "nationally determined contribution" (NDC) and commit to strengthening it in the future

What role can cities play? How can they contribute to successful implementation of the Paris Agreement?

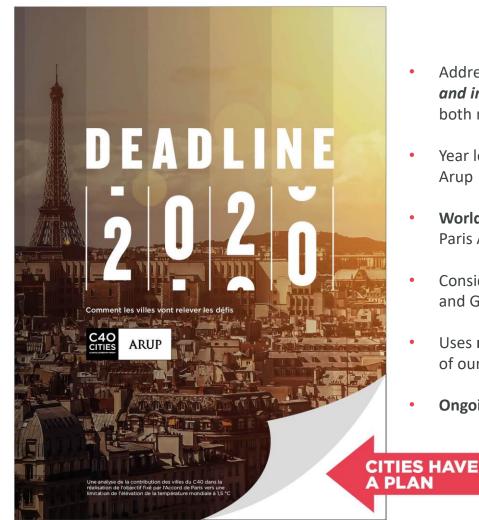
Cities are in control of climate action

- Cities are responsible for 70 % of global energy emissions – meaning they are the actors best positioned to reduce them
- Cities hold power over key drivers of emissions – buildings, land use planning, transport, waste management
- Nations have adopted the Paris Agreement but face increasing challenges in delivering climate action
- Many cities are taking a bold stance and are already acting to drive down emissions down strengthen resilience





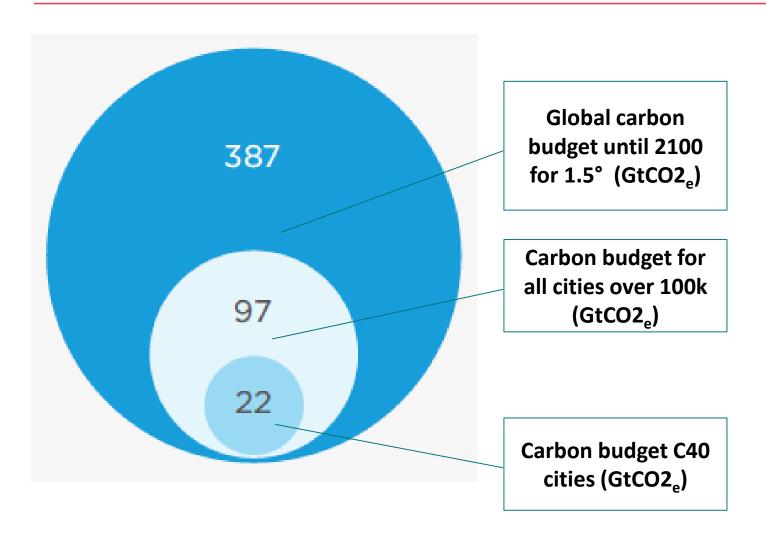
Deadline 2020: How cities will get the job done



- Addresses what would it take for C40 cities to collectively, and individually, deliver the Paris Agreement in terms of both mitigation and adaptation
- Year long **research project** between C40 and the consultancy Arup
- World's first analysis of the role of cities in delivering the **Paris Agreement**
- Considers "fair share" contribution by cities given their GDP and GHG emissions levels
- Uses real GHG inventory data from C40 cities and covers 84 of our members, half of which are global south
- **Ongoing** work

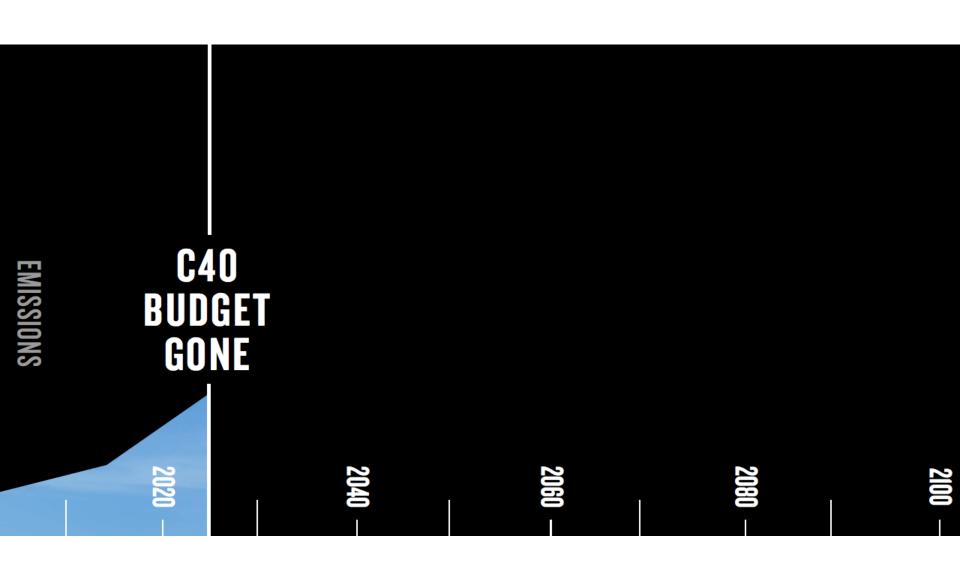


C40 cities carbon budget = 22 gigatonnes



Carbon budget consumed by C40 cities by 2025





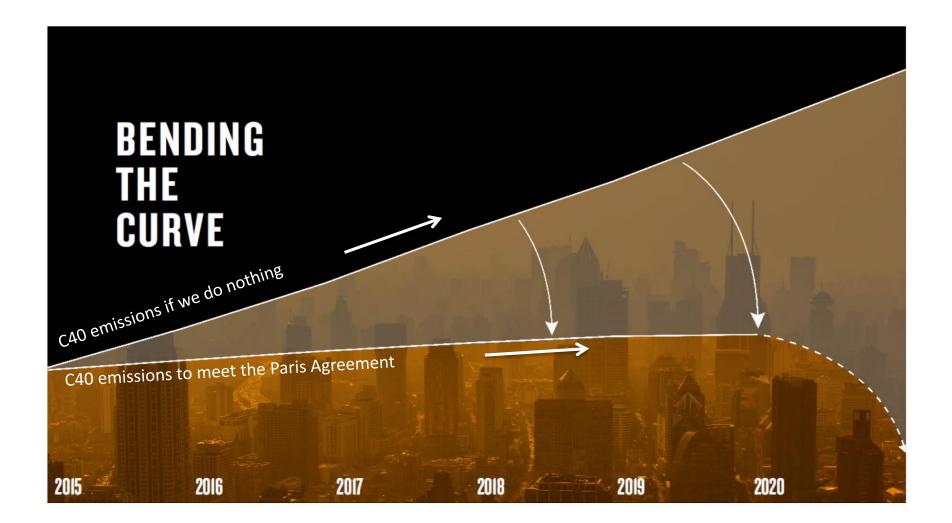
By 2060, world carbon budget consumed





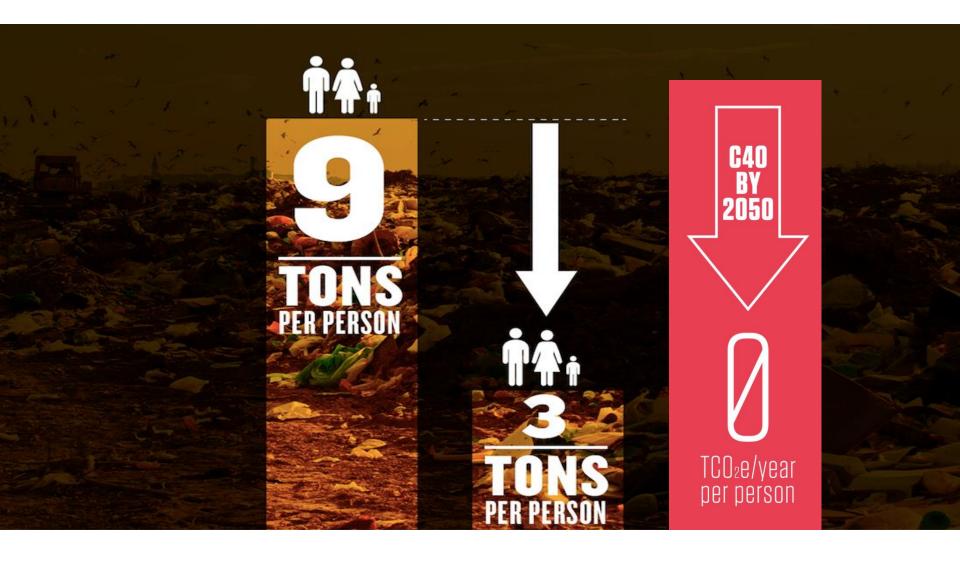
Strong action is needed for a climate-safe future

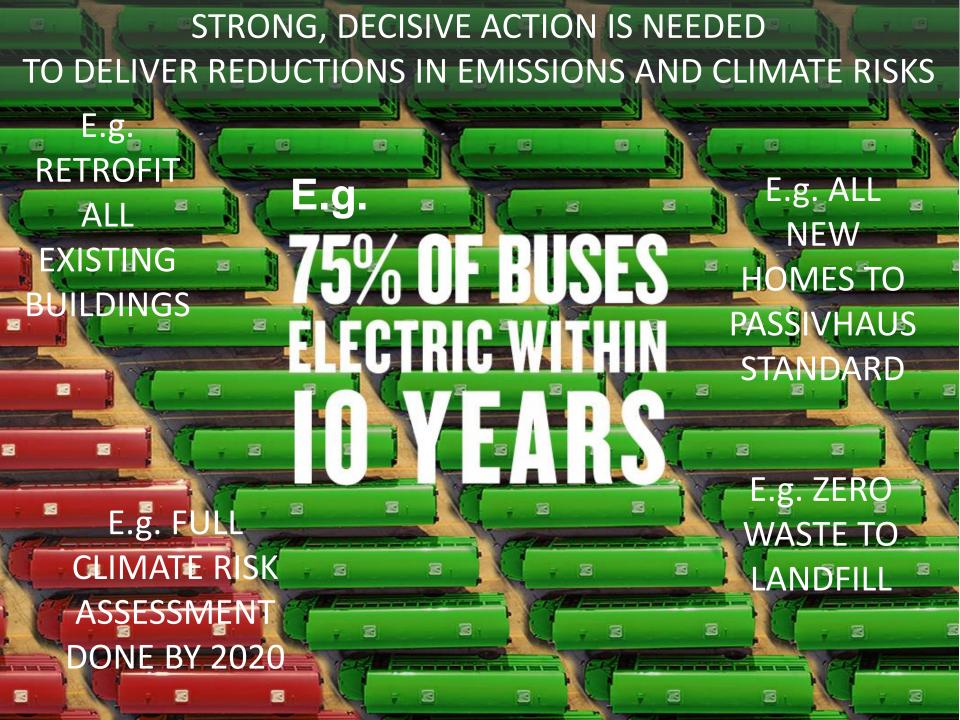




Must reach net zero emissions by 2050







Cities can lead a global transformation





For cities, doing nothing is not an option



Climate disasters could put **1.3 billion people at risk** by 2050. More than **70% of C40 cities** already feel the negative impacts of climate change

In the case of inaction, cities will bare much of the burden

- Hundreds of millions displaced as climate refugees
- Urban water shortages
- Urban food systems collapsing
- Flooding due to sea level rise and intense storms
- Extreme heat stress

= Massive social + economic impact





Not all cities decarbonise on the same path



- Large reductions in high emitting cities (mostly global north) are required until 2020 to stay on the 1.5°C budget
- Over 70% of the required climate action by 2020 should be taken by higher emitting cities



However...

 To remain within a 1.5°C budget, lower emitting cities need to ensure that their *per capita* emission levels do not increase to avoiding locking-in high carbon, unsustainable patterns of development.

How important is mitigation in the global south?









Now is the time for cities in the global south to jump on a **low carbon develop pathway** and develop plans for how to grow using a model of:

- Compact development
- Integrated land use and transportation planning
- High standards for energy efficiency in new buildings
- Zero carbon new districts

ATLANTA



Population: **2.5 million** Rapid Transit: **74 km** Urban area: **4,280 km**² Per capita transport CO₂: **7.5 t** BARCELONA



Population: **2.8 million** Rapid Transit: **153 km** Urban area: **162 km²** Per cap ann. transport CO₂: **0.7 t**

Success is impossible without a plan to...



mitigate...

Work to keep global warming within **safe levels** – 1.5°C future

adapt...

Prepare for climate change's worst impacts in order to provide a meaningful **reduction of climate risk**

and **deliver for all**

Ensuring all citizens share and access the **benefits** of climate safety – inclusivity is paramount

C40 has created the **Deadline 2020 Program** to support all our members to develop "Paris Compatible" Climate Action Plans by 2020

Sharing the **knowledge and tools** from this experience will be a major focus of the programme and out work as part of the **GPSC Resource Team**



Climate action improves health and increases prosperity in cities



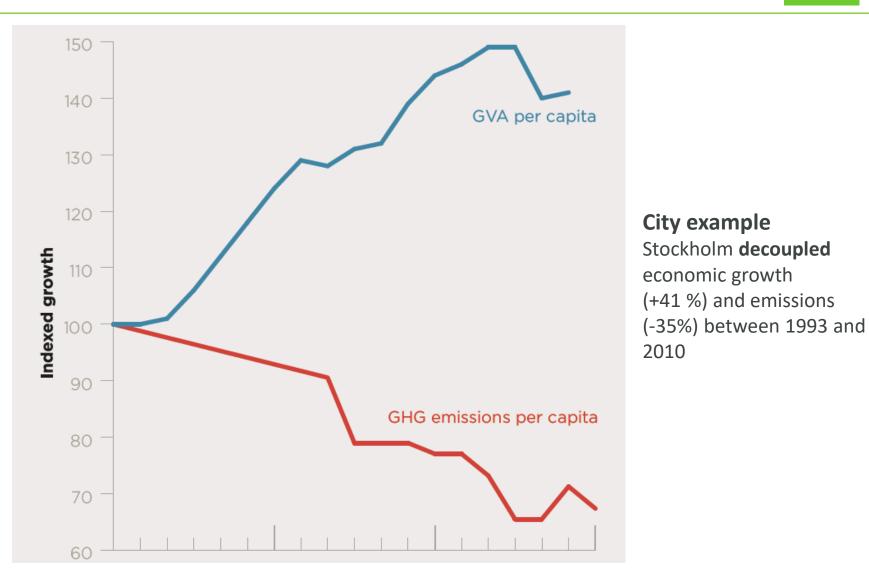








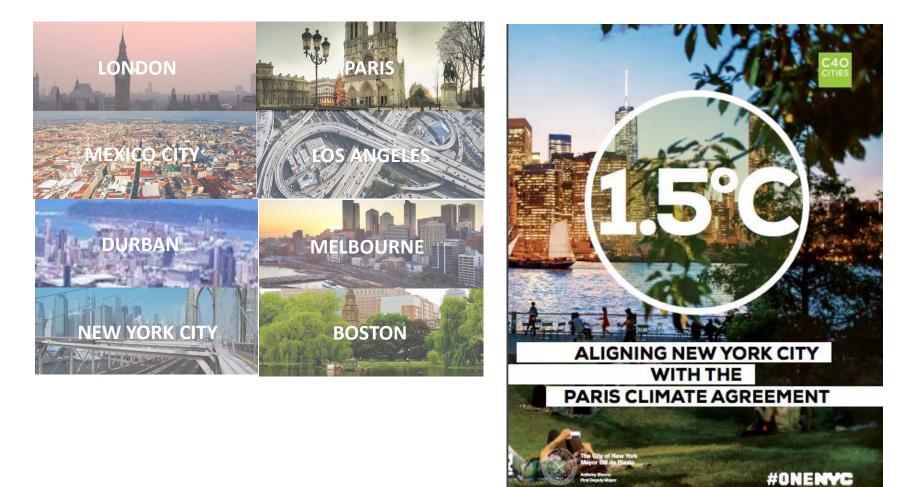
Climate action does not come at the cost of growth



C40 CITIES

DEADLINE 2020 Eight pilot cities have started the work and are happy to share their experience





Thank you!