

An aerial photograph of Earth from space, showing a vast expanse of white and light blue clouds. A dark, irregular landmass is visible in the lower center of the frame. The sky above the clouds is a clear, deep blue.

CLIMATE URGENCY AND CITIES: MADRID – LONDON 2020

CORP 2020 Judith Ryser & Teresa Franchini

Global Climate Change Targets

- **international agreements**
(Stockholm, Rio, Kyoto, Copenhagen, Paris)
- = political trigger for national and city action
- = awareness raising of general public

ZERO GHG emissions by 2050

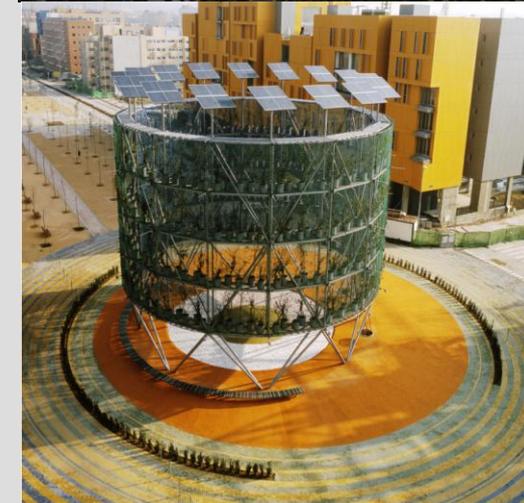
COP 25 Madrid 2019

COP 26 Glasgow 2021?



Action - Reaction

- **dream:** sustainable human settlement
 - *eco- city, low carbon city, smart city*
- **problems:**
 - *global warming*
 - *urban energy consumption & pollution*
- **science (IPCC):** *tipping points?*
 - *x3 GHG reduction to reach $-2C^{\circ}$*
 - *x5 GHG reduction to reach $-1.5 C^{\circ}$*
- **Criteria for solutions:**
 - *zero carbon emission by 2050*
 - *city greening*
 - *circular economy*
 - *high-tech & design innovation*



CO2 emissions & targets

CO2 emissions

overall CO2 emissions	Spain	UK
	332,8 (2018)	435,200 (2019 ONS est.)
mt CO2 equivalent / year	Madrid	Greater London
	10,789 (2017)	38,0 (2014) 30,32 (2017 GLA est.)

CO2 reduction targets

National targets	Spain (base 1990)	UK (base 1990)
	- 70 % by 2030 - 100% GHG by 2050	- 50% by 2030 - 100 % GHG by 2050
City targets	Madrid (base 2004)	Greater London (base 2004)
	- 100% by 2040, preferably by 2035	- 60% by 2025 (for city overall) - 100% by 2050

GHG reduction in city plans

Key strategies

Madrid	London
<ul style="list-style-type: none">▪ Plan A (2015) for sustainable mobility, urban regeneration, adaptation to climate change and citizen awareness-raising<ul style="list-style-type: none">• <i>Central Zero Emissions Area</i>• <i>Gran Via reform for traffic reduction</i>▪ Madrid 360 (2020)<ul style="list-style-type: none">• <i>Puerta del Sol square pedestrianisation</i>• <i>Zero Lines buses: zero emissions + zero cost to move across the Central district.</i>	<p data-bbox="981 454 1676 562">London Environment Strategy (2017)</p> <p data-bbox="981 625 1591 676">Climate Action Plan (2018)</p> <p data-bbox="981 739 1431 791">London Plan (2019)</p> <ul style="list-style-type: none">• <i>“Good Growth”; energy efficiency and resilience</i>• <i>ULEZ (Ultra Low Emission Zone) air pollution reduction</i>• <i>80% of all trips on foot, cycle, public transport by 2041</i>

Conclusions

Recent commitments:

- **Spain and UK signed up to Paris Agreement zero carbon emission by 2050**
- **National strategies for practical implementation**

BUT:

- **Implementation rests on:**
 - **lower tiers of government - cities - regions**
 - **private sector - development industry**
 - **citizens – activist groups**

Conclusions

Change of attitudes?

- **Lower tier government level:**
Madrid and London adopted 0-carbon by 2050
- **Private sector:**
some corporations adopted ‘greening’
- **Citizens:**
XR (Extinction Rebellion)
peer pressure, individual adaptation

BUT: climate sceptics

Conclusions

Political consensus?

- **At national level:**
divergence between political parties
 - **UK: divergence between four nations**
 - **Spain: divergence between autonomous regions**
- **At city level:**
frequent (opposite) party swings, U-turns
- **Citizens:**
circular economy vs technological fix
very young may lead sustainable change

THE UNEXPECTED: covid-19

- **At national-political level: new imperatives**
 - **health and economic crisis**
 - **implementation of the 'new normal' discipline**
- **At city level: new trends**
 - **transport: return to private car**
 - **housing: suitable for teleworking and individual confinement**
 - **production spaces: reduction of office, increase of storage spaces for online commerce**
 - **public space: invaded by private outdoor activities**

BUT: new urgencies

- **Impact on urban fabric and climate change?**
- **the challenge of the climate emergency is still there**
- **repositioning climate change efforts in the global agenda despite unexpected and far-reaching alternative imperatives is crucial**
- ✓ ***“For the climatic change there is no vaccine: we have to act”***

David Waskow, World Resources Institute

A close-up photograph of water droplets falling onto a blue surface, creating concentric ripples. The background is a solid, deep blue color. The droplets are in various stages of impact, with some showing a small crown-like shape as they hit. The ripples are clearly visible, spreading outwards from the point of impact. The lighting is bright, highlighting the texture of the water and the reflections on the surface.

DROPS IN THE OCEAN?...

BUT EVERY DROP COUNTS