

2nd International Forum on Low Carbon Cities

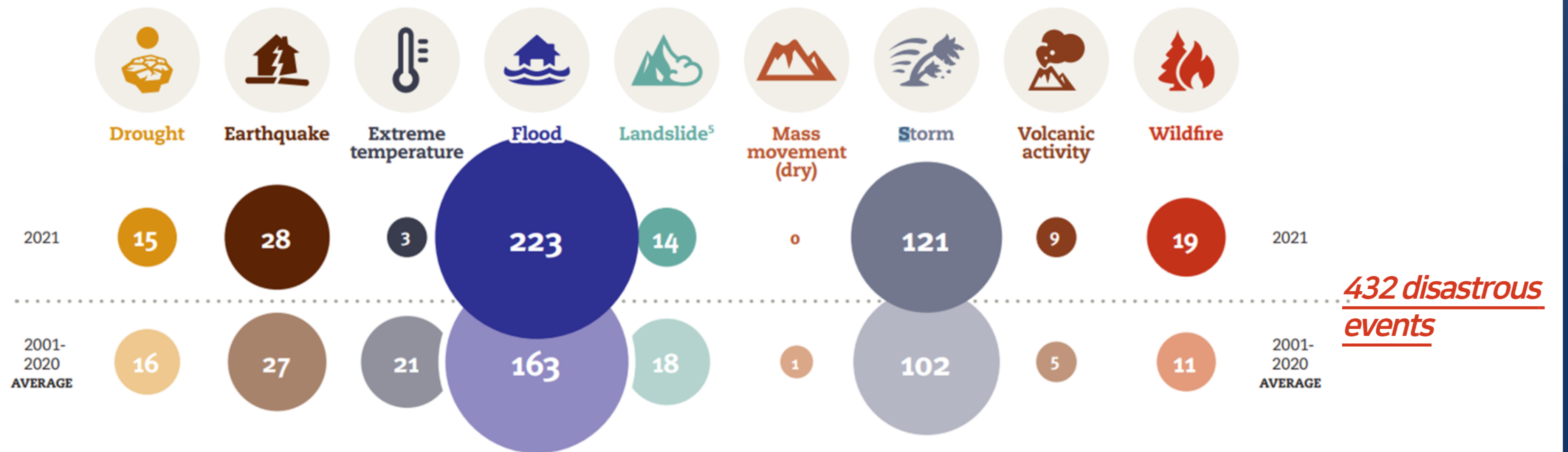
Making Cities Green in a Changing Climate

06 December 2022

Dr. Yoo, Young Sook
Chairperson of the Board, Climate Change Center
(Former Minister of the Environment, Republic of Korea)

Accelerating the Urban Resilience in Response to Potential Climate-Related Disasters

Overall, the disastrous event accounted for **10,492 deaths**, affected **101.8 million people**, and caused approximately **252.1 billion US\$ of economic losses** in 2021.

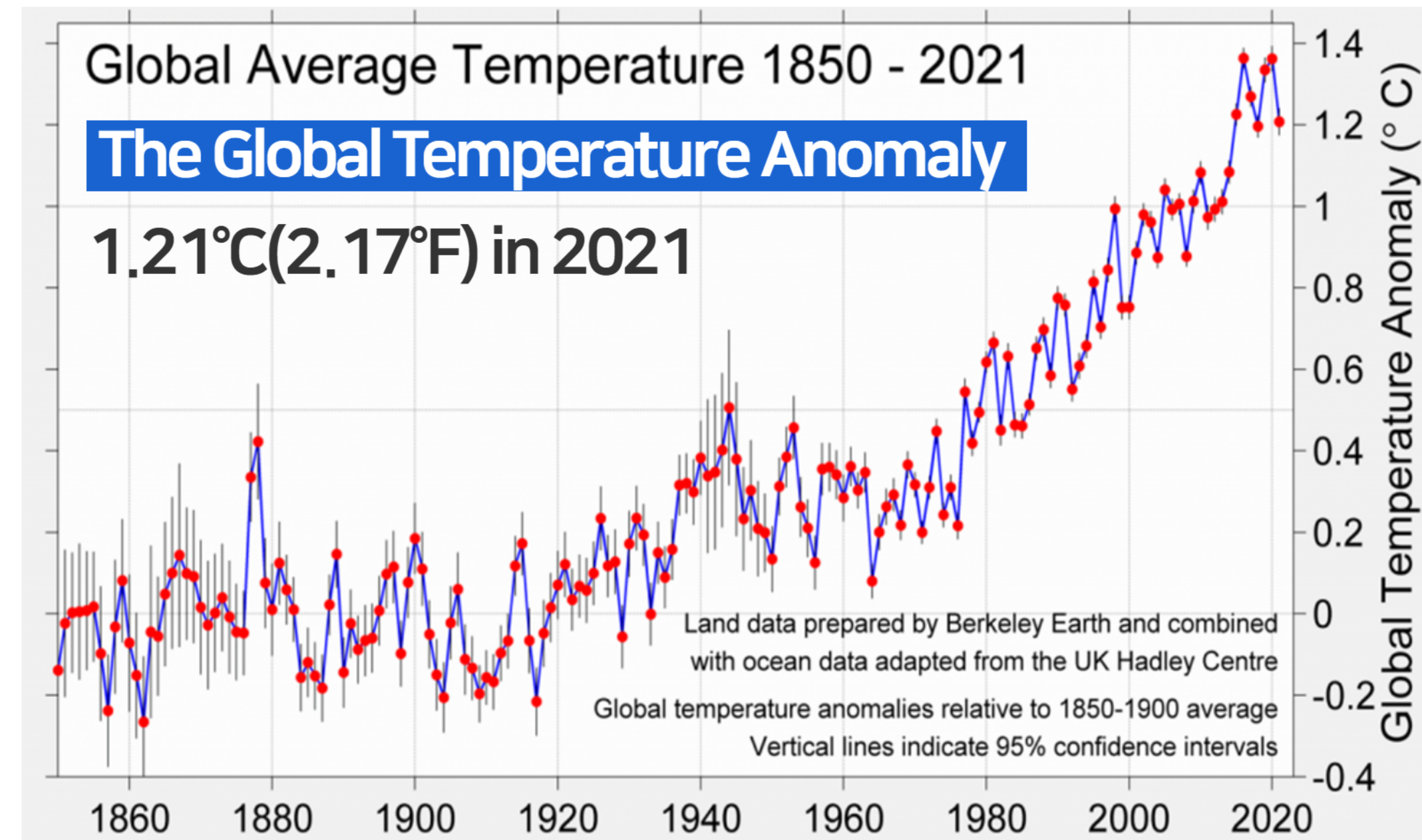
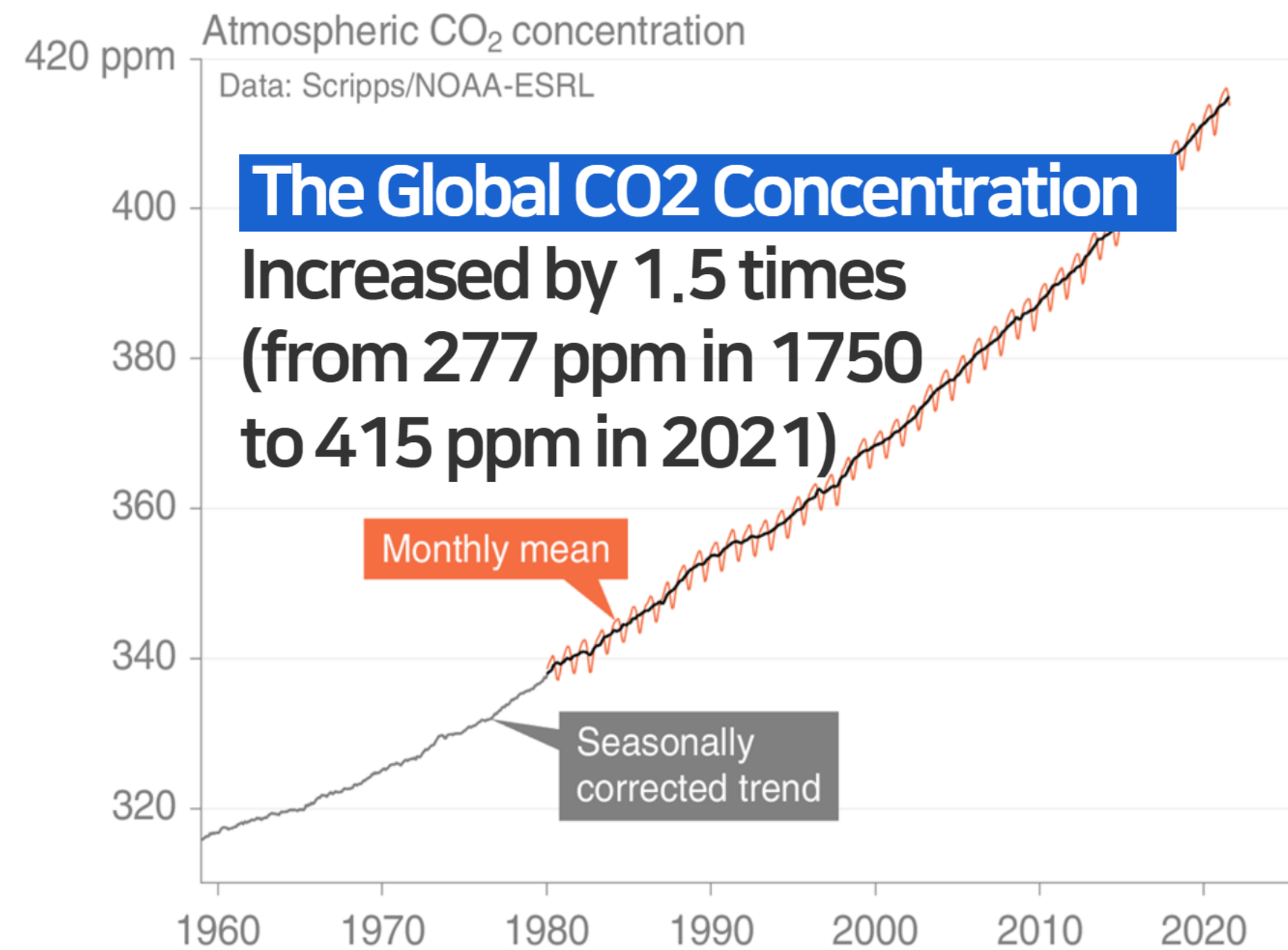


By 2050, 68% of humanity will live in cities, resulting in higher energy consumption, more infrastructure needs, and increased carbon emissions.

To limit global warming to 1.5°C, Cities must achieve net-zero.

*Sources: Disasters in numbers 2021, EM-DA(The Emergency Event Database)

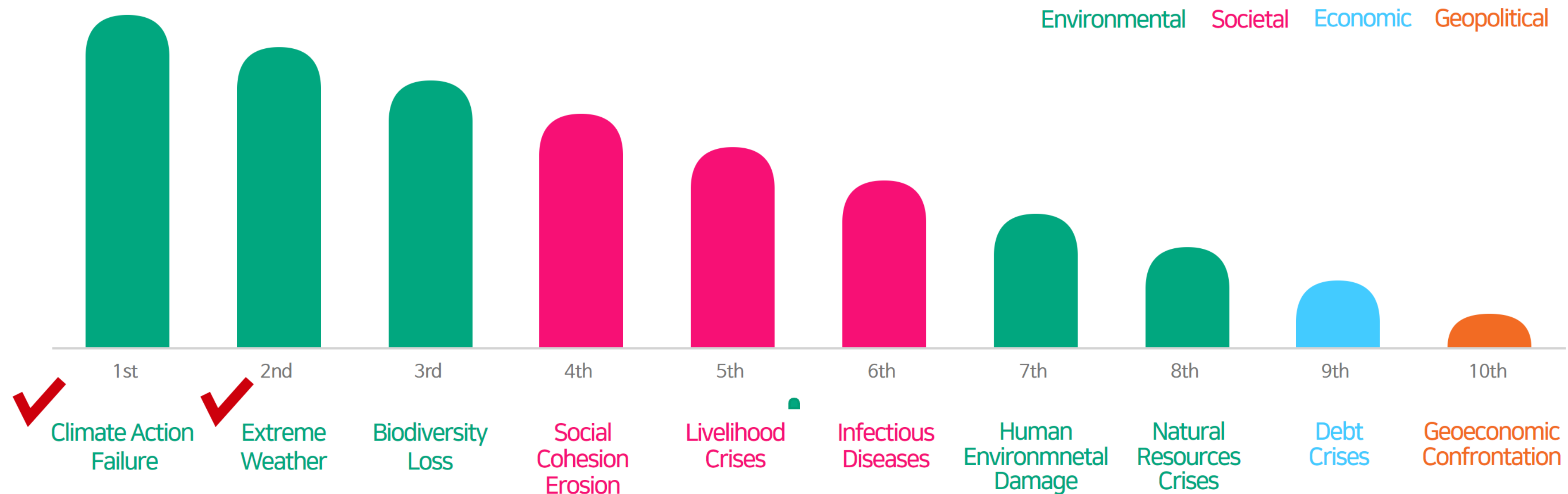
Global CO2 Emissions Return Near Pre-COVID Levels



Multiple cities around the world experienced **extreme temperatures** and **numerous extreme weather event not seen for years.**

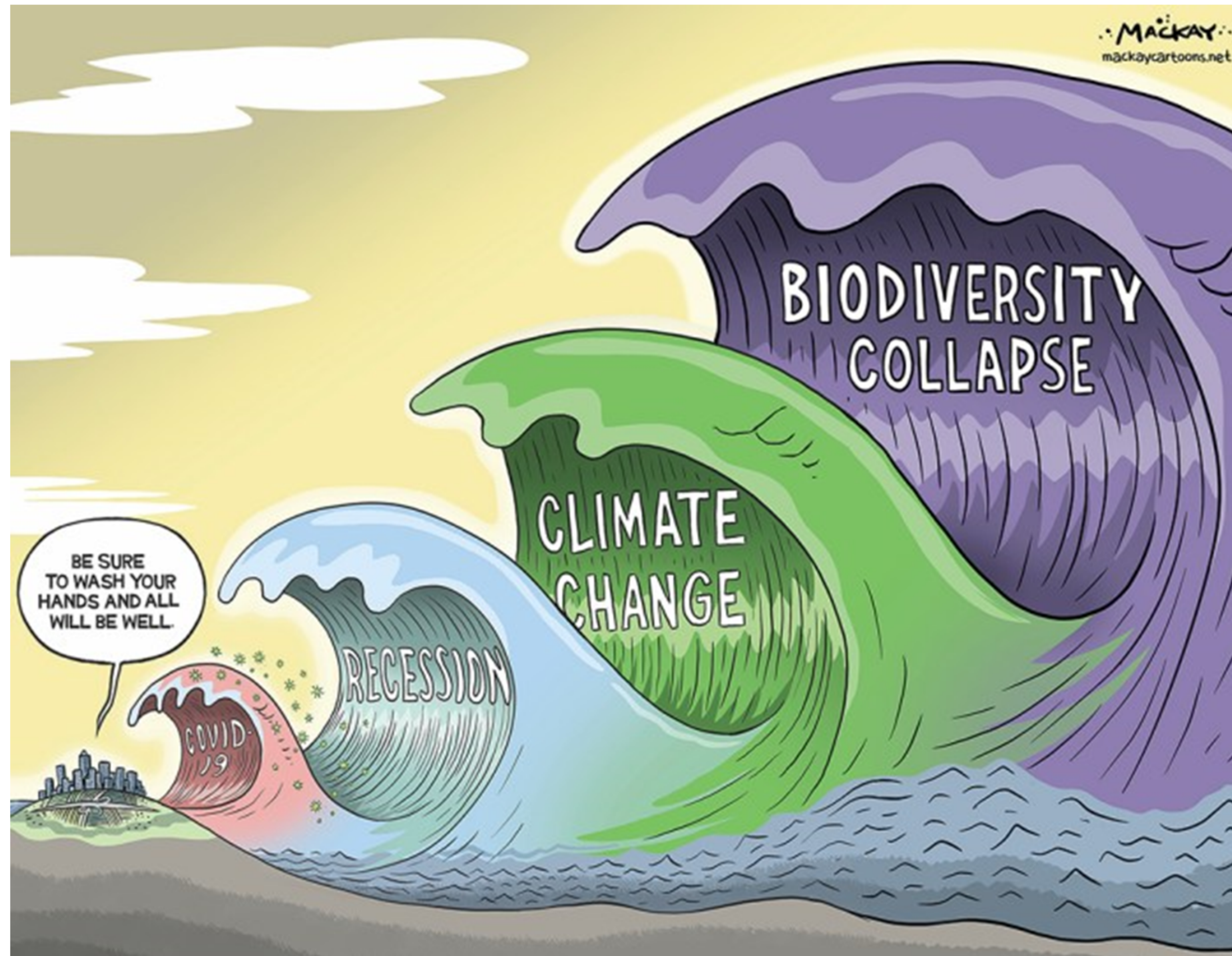
Climate-related are the Top Threats Facing the World

“Global Risks Perception Survey 2021-2022 (World Economic Forum)”



A disorderly climate transition will exacerbate inequalities.
Governments, businesses and societies face
increasing pressure to thwart the worst consequences.

Cities Facing Extremes: How Do We Adapt?



The 1.5°C target is so fundamental that societies need sufficient preparation for predicting handling negative political consequences by enhancing resilience and cooperation.

Global Net-Zero Commitment to Achieve Paris Agreement Goals

1988
IPCC established
by UNEP/WMO



1997
COP3
Kyoto Protocol



2015
COP21
The Paris Agreement



2018
COP24
IPCC Special Report
on 1.5°C

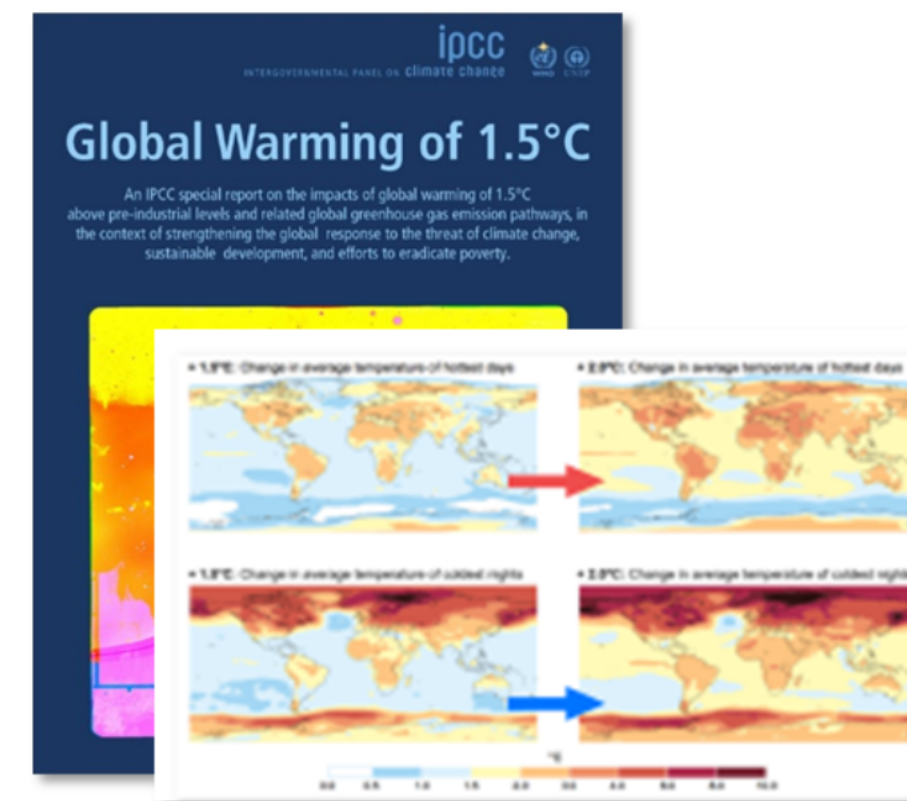


2021 / COP26
Paris Rulebook
2022 / COP27
Loss and Damage



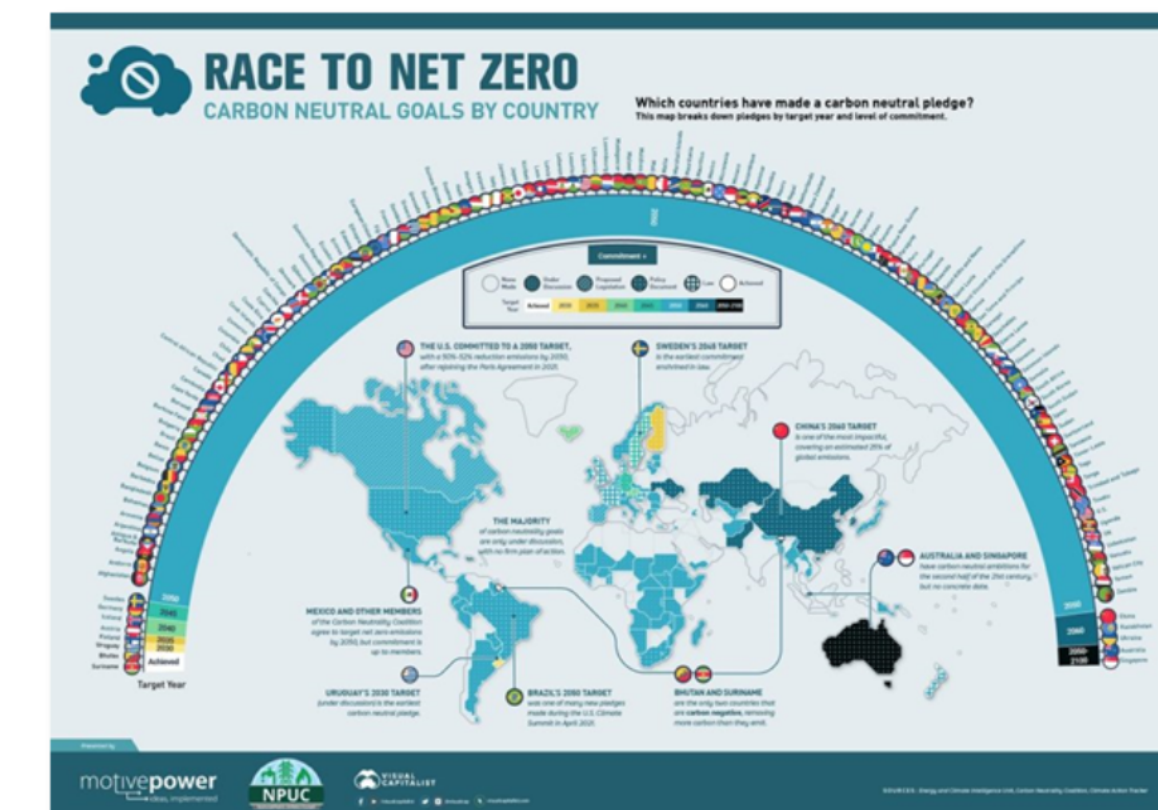
The Paris Agreement

“Recognizing the importance of the engagements of all levels of government and various actors.”
(Dec. 2015)



An IPCC special report

the impacts of global warming of 1.5°C above pre-industrial levels in relation to global GHG emission pathways. (Oct. 2018)

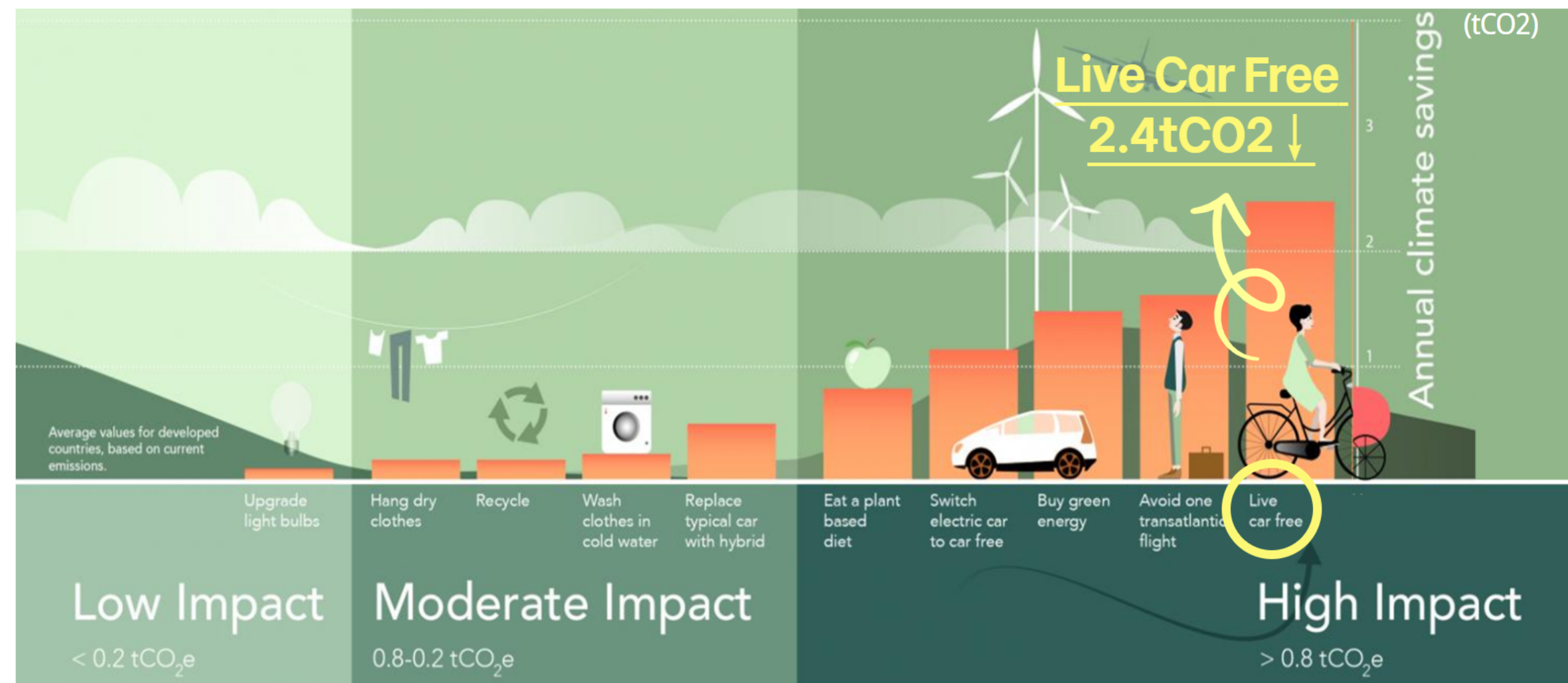


Race to Net Zero

136 countries, 240 cities,
and 725 companies.
(July. 2022)

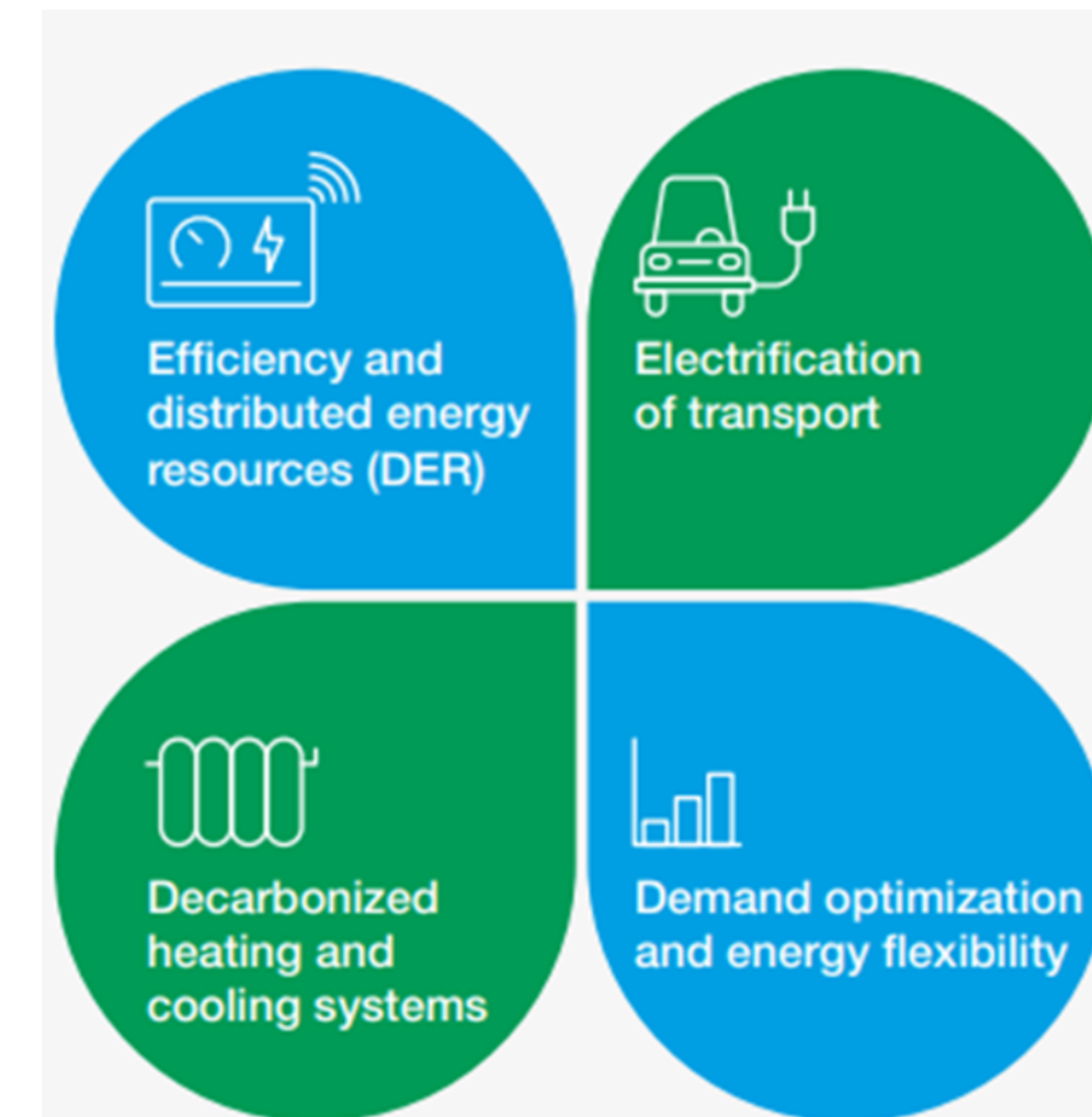
Shifting Away from the Carbon-intensive Societies

The Most Effective Ways to Reduce Individual's Carbon Footprints Annually



Globally, the average carbon footprint per person amounts to nearly 4.5 tons in 2019, however, the average global carbon footprint per year **needs to drop to below 2 tons by 2050.**

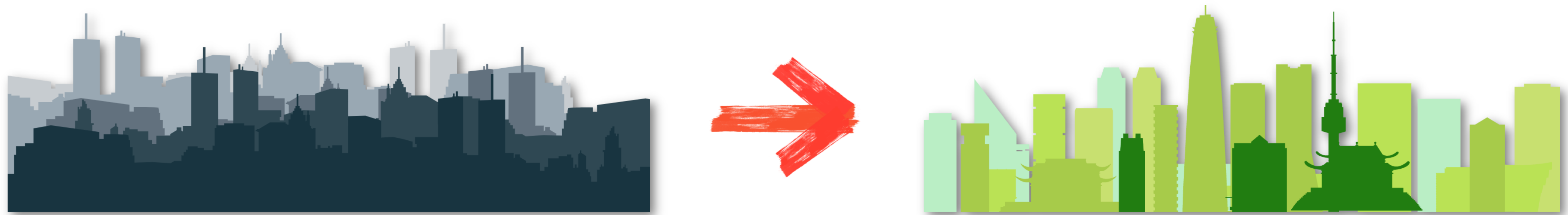
Systemic Efficiency (WEF)



A solution to the current environmental, economic, health and social crises.

- Clean electrification, smart digital technology, and energy-efficient buildings and infrastructure, accompanied by a circular economy.

Our Cities is a Key to Adapting for Greater Low Carbon Transition



Cities can take full advantage of their potential and recognize that **investments in greener, more efficient cities ameliorate** not only the environment, but also the jobs market, public health, the well-being of communities, and **the overall livability and sustainability in an urban area.**

Collaboration throughout the City Value Chain

The **Climate Change Center** drives public-private cooperation to accelerate urban transitions to a net-zero future



Big Challenge 2050, Bigger Action 2022
*with **P**rofessionalism, **P**artnership, **P**articipation*

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Thank You.