Global Cement and Concrete Association

CONCRETE FUTURE

GCCA and its member companies are building a sustainable concrete future

Thomas Guillot
GCCA

Our members operate in almost country of the world

The GCCA is a CEO led organisation, grouping industry sustainability leaders from around the world. Our members are committed to and report against a comprehensive sustainability charter.

Our Members

- Asia Cement Corporation
- Breedon Group
- Buzzi Unicem
- Cementir Holding
- Cementos Argos
- Cementos Moctezuma
- Cementos Molins
- Cementos Progresso
- Cementos Pacasmayo
- CEMEX
- China National Building Materials
- CIMSA CIMENTO
- CRH Group Services Ltd
- Dangote Group
- Dalmia Cement
- Grupo Cementos de Chihuahua
- Golden Bay
- Heidelberg Materials
- Holcim Group
- JK Cement Ltd
- JSW Cement
- Medcem Madencilik
- Nesher Israel Cement
- Norm Cement
- Orient Cement
- PT Solusi Bangun
- Schwenk Zement
- SECIL
- Shree Cement
- Siam Cement Group (SCG)
- Siam City Cement
- Taiheiyo Cement
- Taiwan Cement Corporation
- Titan Cement Group
- Ultratech Cement
- Unión Andina de Cementos (UNACEM)
- Vassiliko
- Vicat
- Votorantim Cimentos
- West China Cement
- YTL Cement

Our Affiliates - partner national and regional industry associations

- Asociación de Fabricantes de Cemento Portland (AFCP) - Argentina
- Asociación de Productores de Cemento (ASOCEM) - Peru
- Associção Brasiliera de Cimento Portland (ABC/ SNIC) - Brazil
- Betonhuis - Netherlands
- Federation of the European Precast Concrete industry (BIBM) - Europe
- Cámara Nacional del Cemento (CANACEM) - Mexico
- European Cement Association (CEMBUREAU) - Europe
- Cement Concrete & Aggregates (CCA) - Australia
- Cement Association of Canada (CAC) - Canada
- Cement Industry Federation (CIF) - Australia
- Cement Manufacturers Association (CMA) - India
- Cement Manufacturers Ireland (CMI/ IBEC) - Ireland
- Concrete NZ – New Zealand
- European Ready Mixed Concrete Organisation (ERMCO) - Europe
- European Federation Concrete Admixtures (EFCA) - Europe
- Federacion Interamericana del Cemento (FICEM) - Colombia
- Federacion Iberoamericana del Hormigon Premezclado (FIHP) - Colombia
- Japan Cement Association (JCA) - Japan
- Korea Cement Association (KCA) - Korea
- Mineral Products Association (MPA) – United Kingdom
- National Ready Mixed Concrete Association (NRMCA) - USA
- Portland Cement Association (PCA) - USA
- The Spanish Cement Association (Oficemen) – Spain
- Thai Cement Manfacturers Association (TCMA) - Thailand
- Thai Concrete Association (TCA) - Thailand
- Turkish Cement Manufacturers Association (Turkcimento) - Turkey
- Association of German Cement Manufacturers (VDZ) – Germany

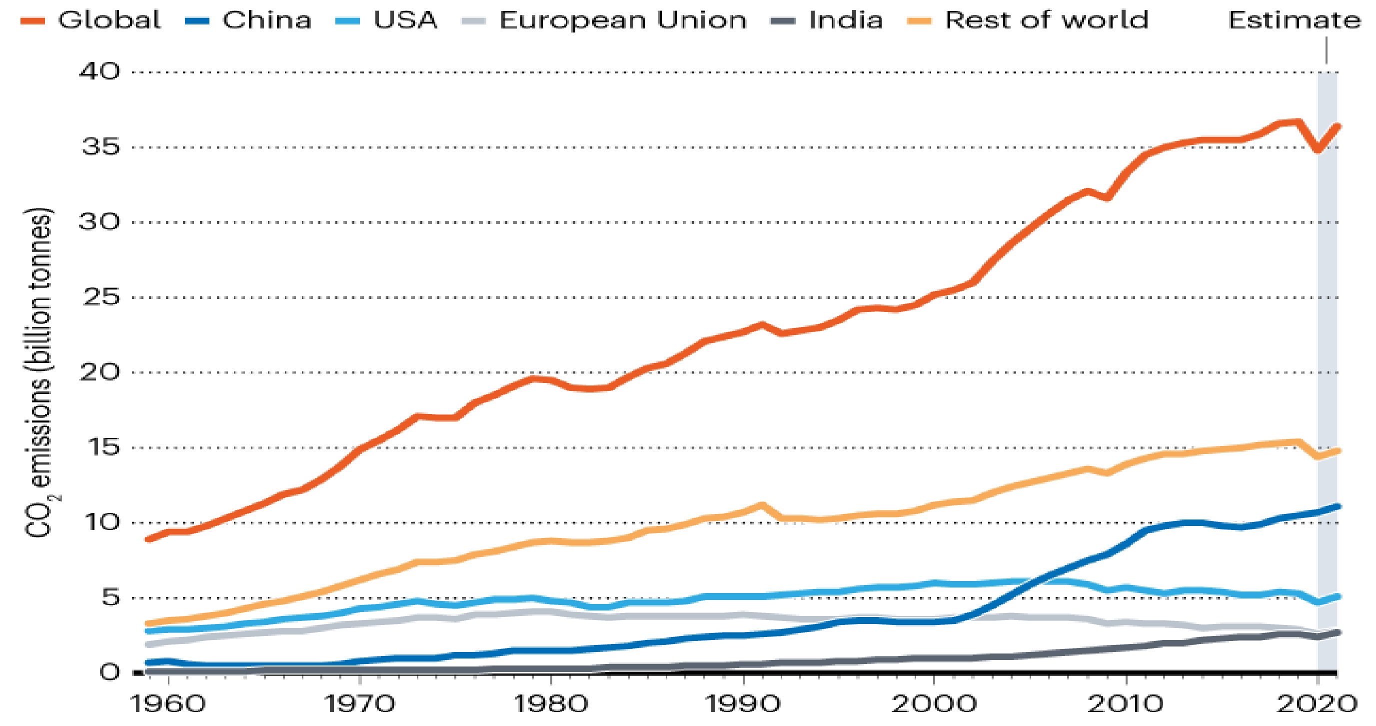
CONCRETE FUTURE

OUR MISSION

Concrete Future
Building a Net Zero World

Together, we are committed to building a bright, resilient and sustainable concrete future for our industry and for the world.

The global challenge
CO_2 emissions : Evolution over the years

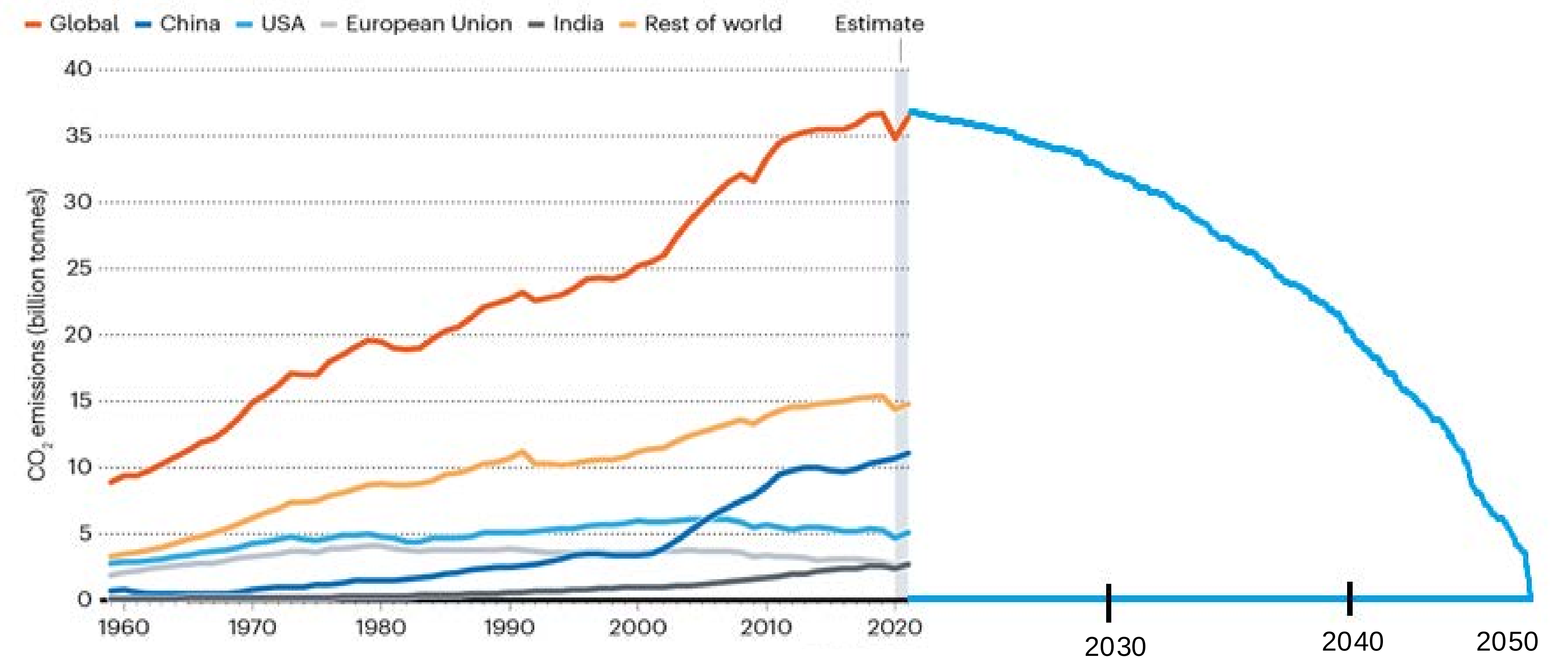


Source: Global Carbon Project

Global Cement and Concrete Association

CO_2 emission : Global challenge

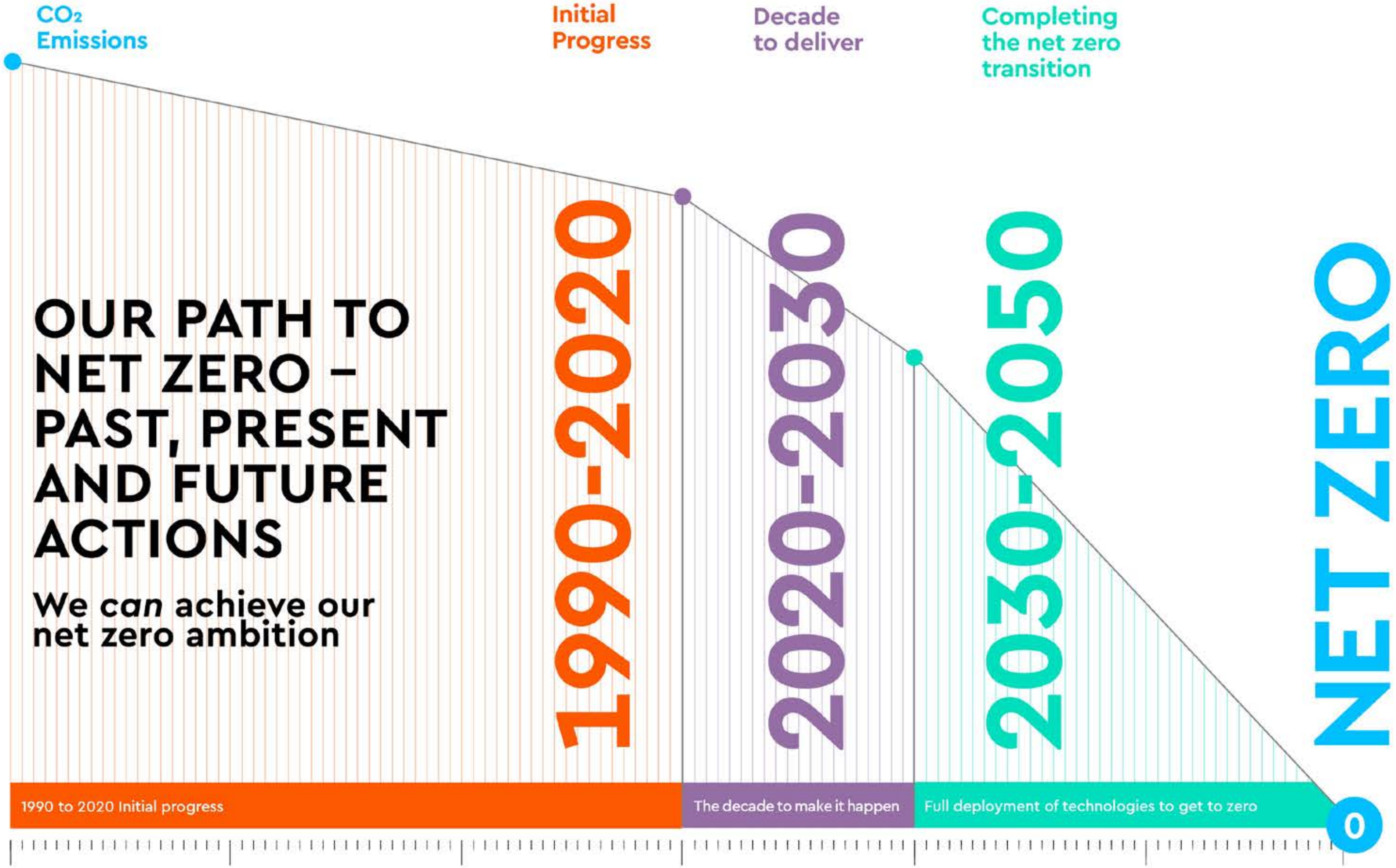
CONCRETE FUTURE



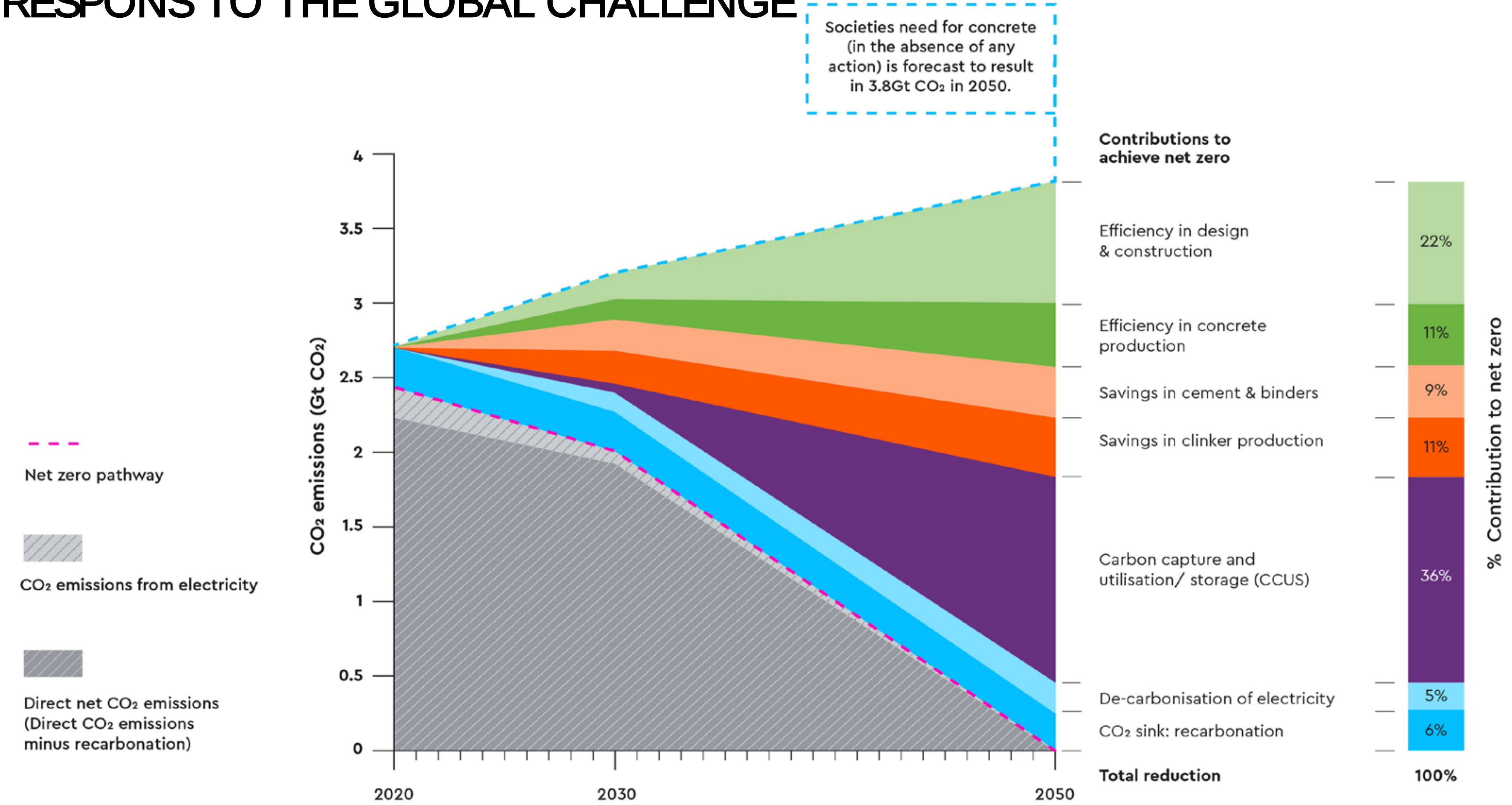
Source: Global Carbon Project

OUR PATH TO NET ZERO – PAST, PRESENT AND FUTURE ACTIONS

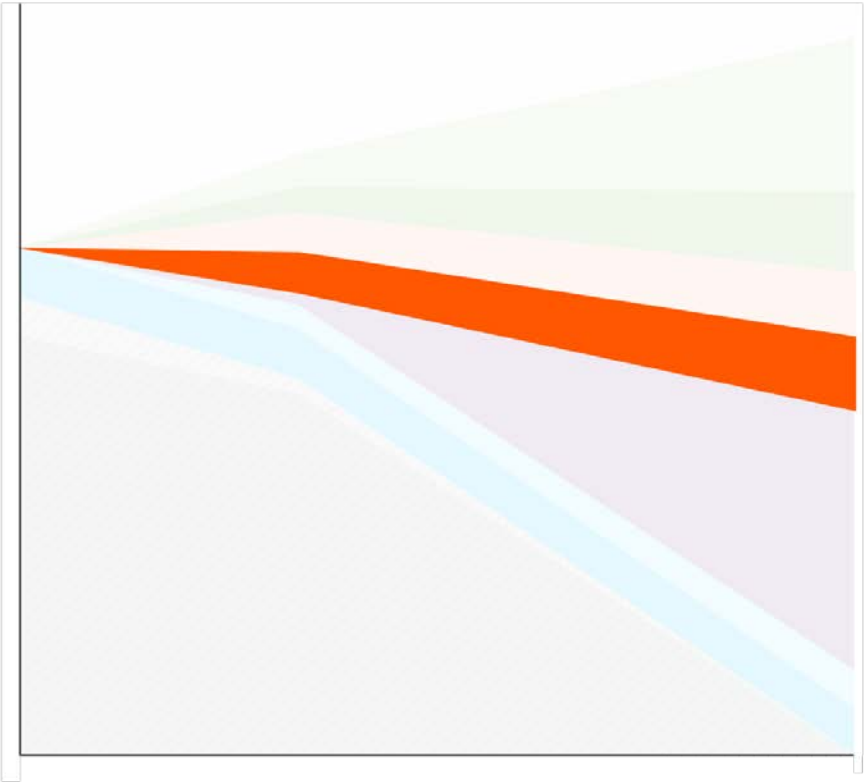
We *can* achieve our net zero ambition



GCCA 2050 NET ZERO CEMENT & CONCRETE ROADMAP: OUR SECTOR RESPONS TO THE GLOBAL CHALLENGE



Co-processing in the GCCA Roadmap



11%

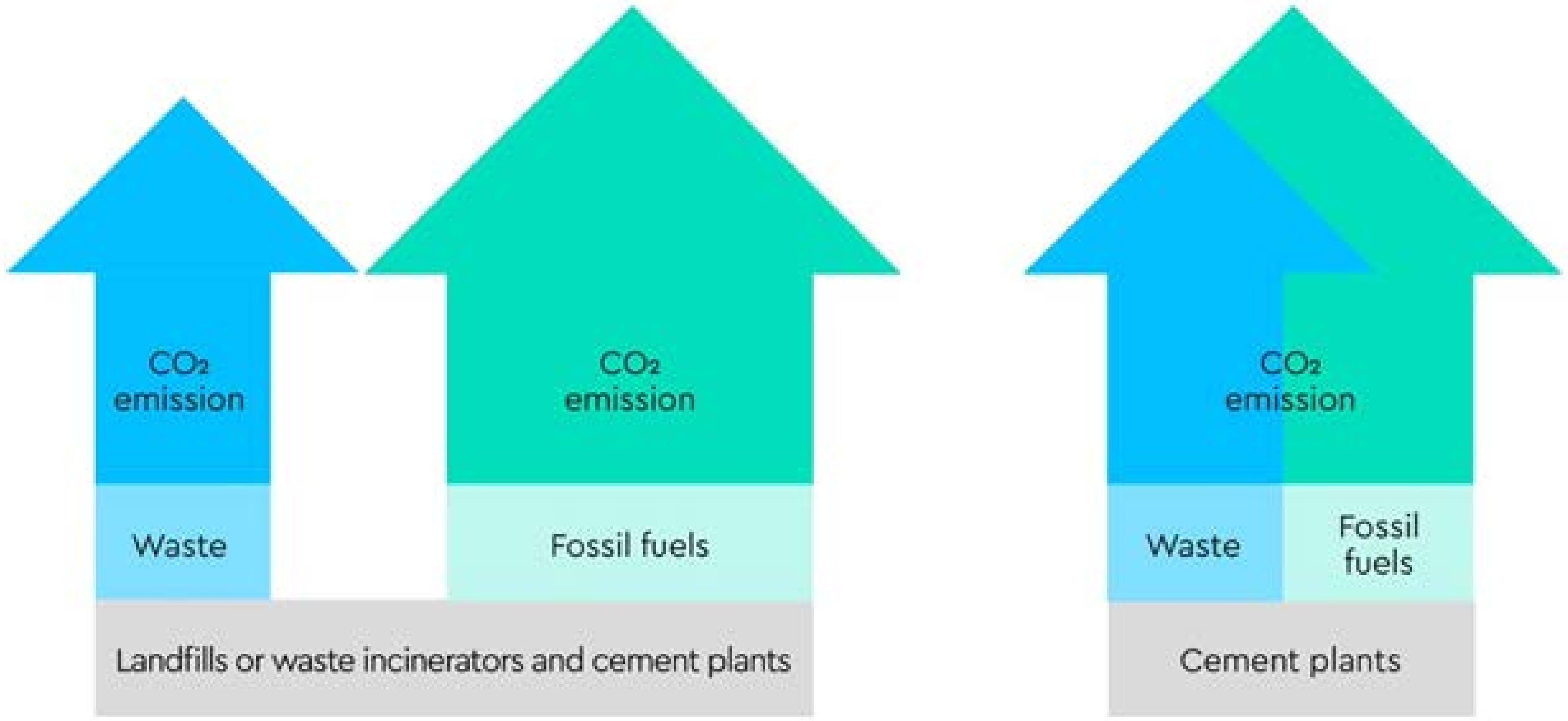
Key measures:

- decarbonated raw materials,
- energy efficiency measures,
- use of sustainable waste materials - **alternative fuels** - to replace fossil fuels
- innovations such as use of hydrogen and kiln electrification.

- Globally, alternative fuel use to increase from the current 6% to 22% and 43% by 2030 and 2050 respectively.

- Examples of cement kilns operating with 100% alternative fuels which demonstrates the potential of this lever.

Why is AF reducing CO2 ?



CO2 removal vs CO2 avoidance

CO2 vs methane

Include Waste treatment in CO2 protocol

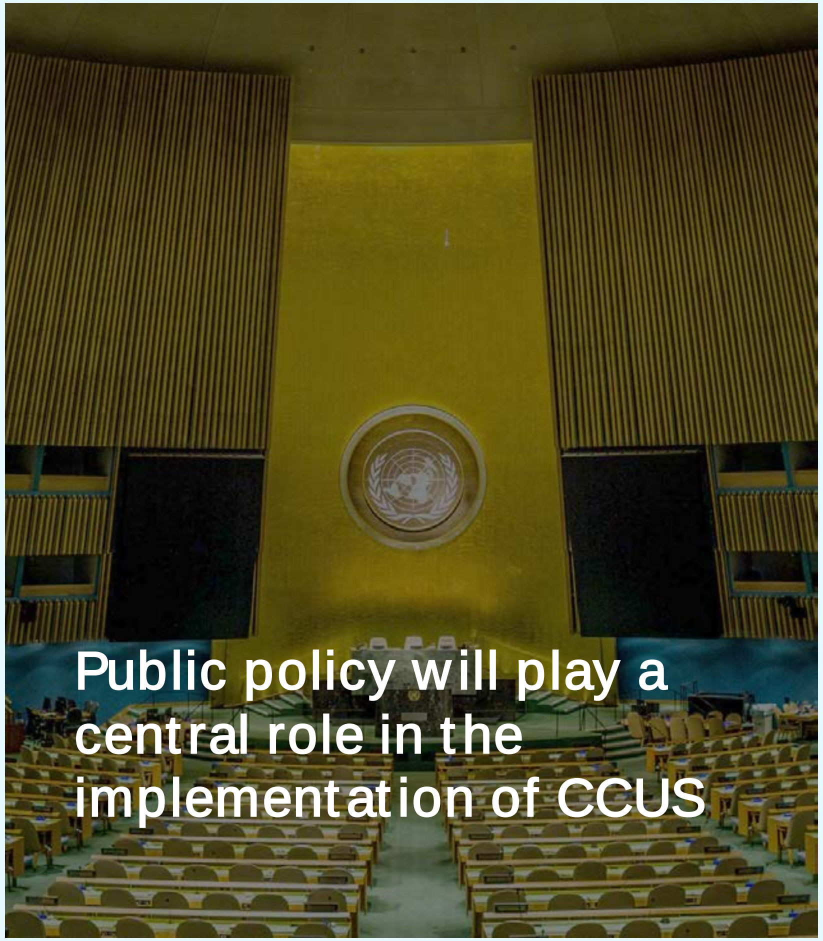
Co-processing recognition in SBTi

UNLOCKING CO PROCESSING THE ROLE OF PUBLIC POLICY

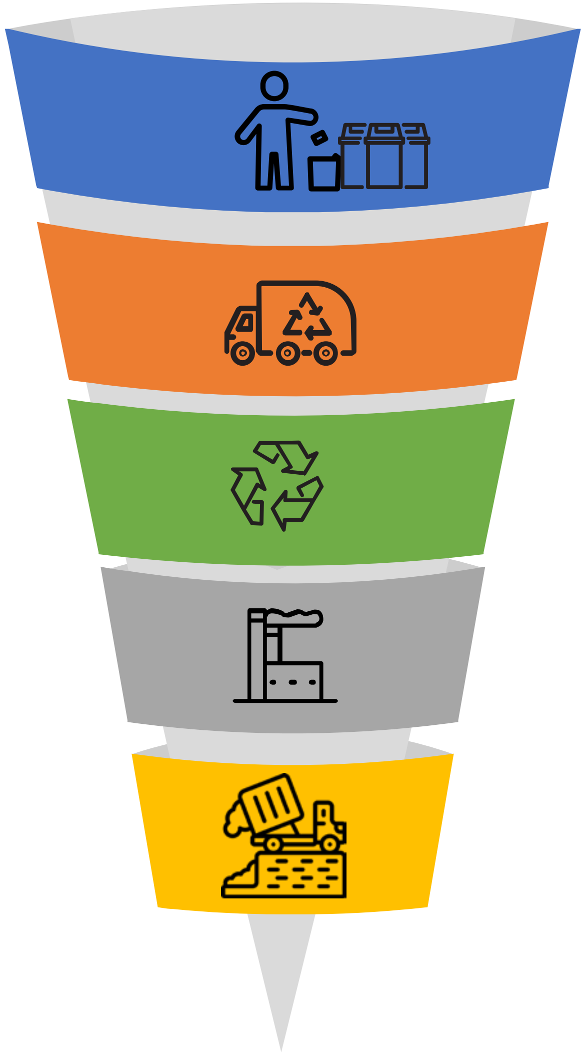
Key aspects of policy asks for co-processing

- ensure a level playing field for the use of biomass waste by removing subsidies that favour particular industries,
- Proper carbon accounting of waste materials consistent across sectors
- launch and support innovation and R&D initiatives to promote increased recovery
- prioritise co-processing in the waste treatment hierarchy
- ensure waste legislation avoids landfill of residual waste

- Assign a dedicated R-15 code "co-processing" in the Basel Convention



Supply chain and policy asks



The Supply Chain	Policy Ask
Individuals, companies and institutions	• Polluters pay principle • Waste hierarchy
Collection and cleaning	• Clear collection & cleaning contracts • Recyclables & proper sorting .
Waste Treatment plant or MRF	• Level playing field between waste treatment solutions
Cement Plants	• Co-processing is recognized in the national waste laws • R15 / recycling recognition • Stakeholder acceptance
Landfills	• Landfills ban • Landfills tax • Quota on landfills • Enforcement

Latest data

The headline findings of the 2020 GNR Data are as follows:

- The 2020 Cement Industry GNR data show a **22%** reduction in CO_2 per tonne of cementitious has been achieved since 1990
- The proportion of alternative fuels used is **10 times** greater than in 1990
- Energy efficiency has improved by **19%**

22 %

Reduction in Net CO_2 emissions per tonne cementitious (1990 baseline)

17 %

Reduction in fossil fuel consumption (1990 baseline)

19 %

energy efficiency improvement (1990 baseline)


Global Cement and Concrete Association
CONCRETE FUTURE
We are fully committed to working together, and with partners, to achieving our net zero destination.
www.gccassociation.org/concretefuture