Alimusina Arailym
Machynia Wojciech
Motykova Maria

Mitigation of climate change

governance, policy, collaboration

But to focus solely on whether it is possible misses one crucial point: the transformation to net-zero economies must happen, and the sooner this global transformation begins the better. Every fraction of a degree avoided counts in terms of lives saved, economies protected, damages avoided, biodiversity conserved and the ability to rapidly bring down any temperature overshoot.

Inger Andersen
Executive Director
United Nations Environment Programme

Contents

WG III contribution to AR6 of IPCC

To achieve a better synthesis

between higher-level whole system and grounded bottom-up insights into technologies and other approaches for reducing emissions;

To make wider use of social science disciplines

especially for gaining insight into issues related to lifestyle, behaviour, consumption and socio-technical transitions;

To link climate change mitigation

better to other agreed policy goals both nationally and internationally.

Climate change mitigation

human intervention to reduce the sources or enhance the sinks of GHGs; goal is to preserve a biosphere which can sustain human civilisation

Climate change adaptation

process of adjustment to actual or expected climate and its effects in order to moderate harm or exploit beneficial opportunities

Just transition

set of principles, processes and practices aimed at ensuring that no one is left behind in the move from a high-carbon to a low-carbon economy

Global Context, Progress and Challenges

The transition to a low-carbon economy depends on a wide range of **closely intertwined drivers and constraints**.

economic and technological factors

the emissions intensity of traded products, finance and investment

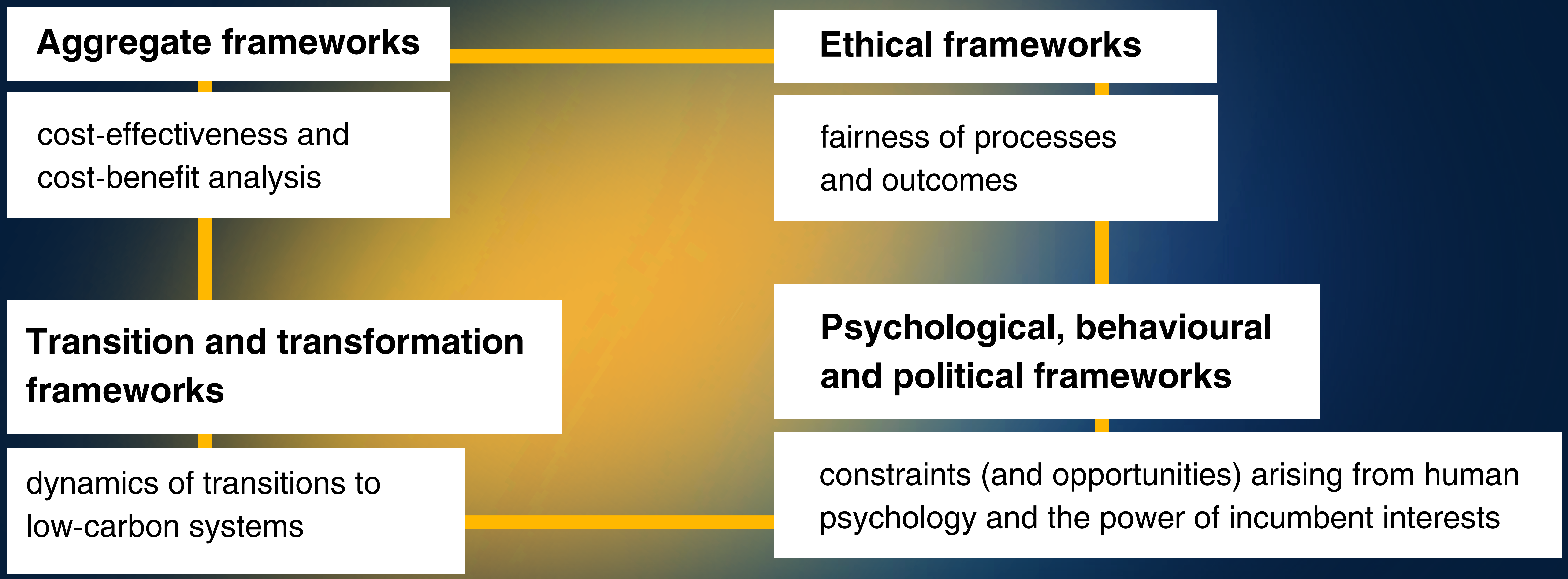
socio-political issues

political economy, equity and fairness, social innovation and behaviour change

institutional factors

legal framework and institutions, and the quality of international cooperation

A comprehensive understanding of climate mitigation must combine these multiple framework.

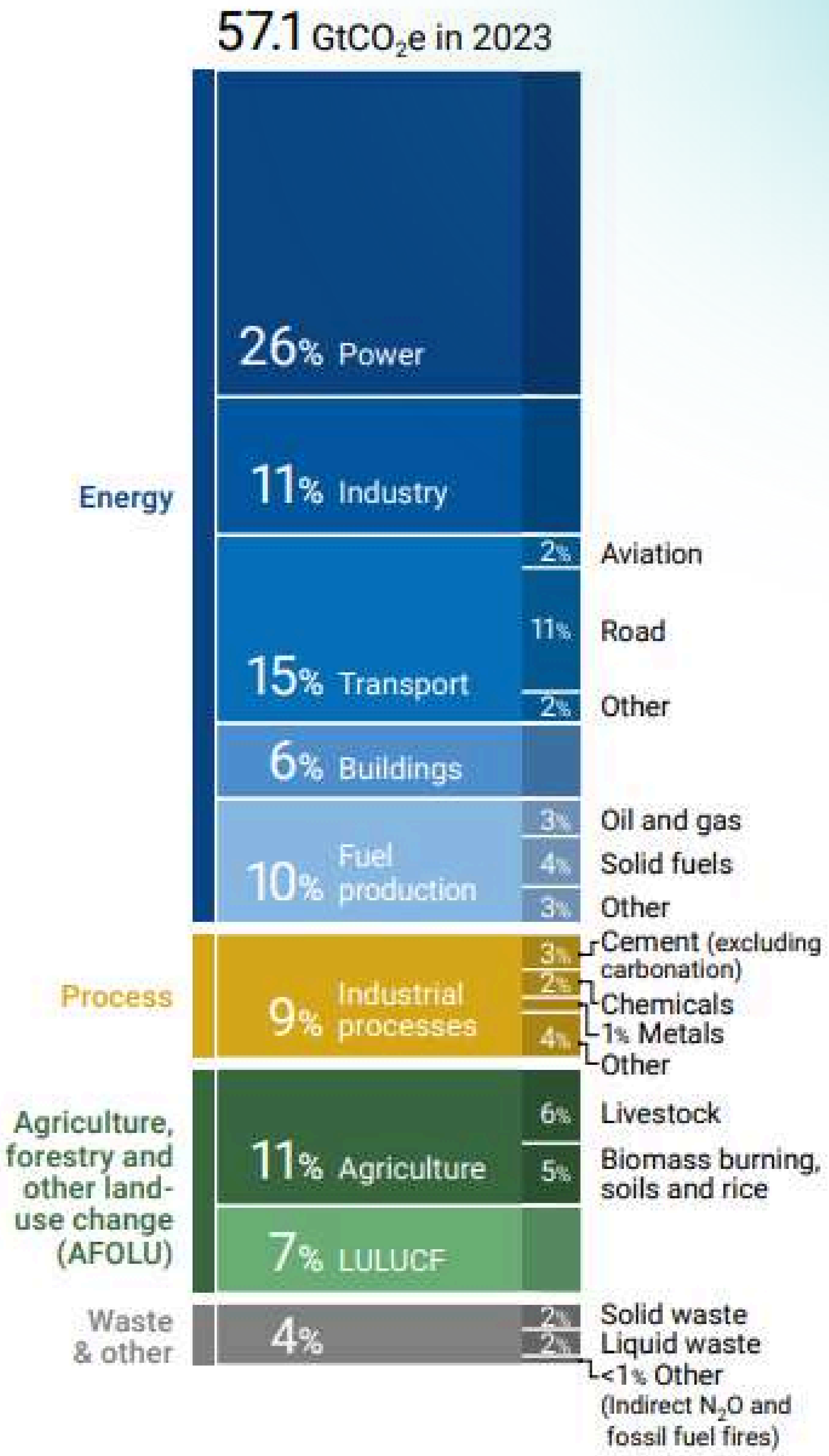


The interaction between politics, economics and power relationships is central to explaining why broad commitments do not always translate to urgent action.

Table ES.1 **Total, per capita and historical emissions of selected countries and regions**

	Total GHG emissions in 2023	Change in total GHG emissions, 2022–2023	Per capita GHG emissions in 2023	Historical CO_2 emissions, 1850–2022
	$MtCO_2e$ (% of total)	%	tCO_2e/capita	$GtCO_2$ (% of total)
China	16,000 (30)	+5.2	11	300 (12)
United States of America	5,970 (11)	-1.4	18	527 (20)
India	4,140 (8)	+6.1	2.9	83 (3)
European Union (27 members)	3,230 (6)	-7.5	7.3	301 (12)
Russian Federation	2,660 (5)	+2	19	180 (7)
Brazil	1,300 (2)	+0.1	6.0	119 (5)
African Union (55 members)	3,190 (6)	+0.7	2.2	174 (7)
Least developed countries (45 countries)	1,720 (3)	+1.2	1.5	114 (4)
G20 (excl. African Union)	40,900 (77)	+1.8	8.3	1,990 (77)

Note: Emissions are calculated on a territorial basis. LULUCF CO_2 emissions are excluded from current and per capita GHG emissions but are included in historical CO_2 emissions based on the bookkeeping approach. Some members of the African Union are also least developed countries.



Emission Trends and Drivers

- Global net anthropogenic GHG emissions during the decade 2010–2019 were **higher than any previous time in human history.**

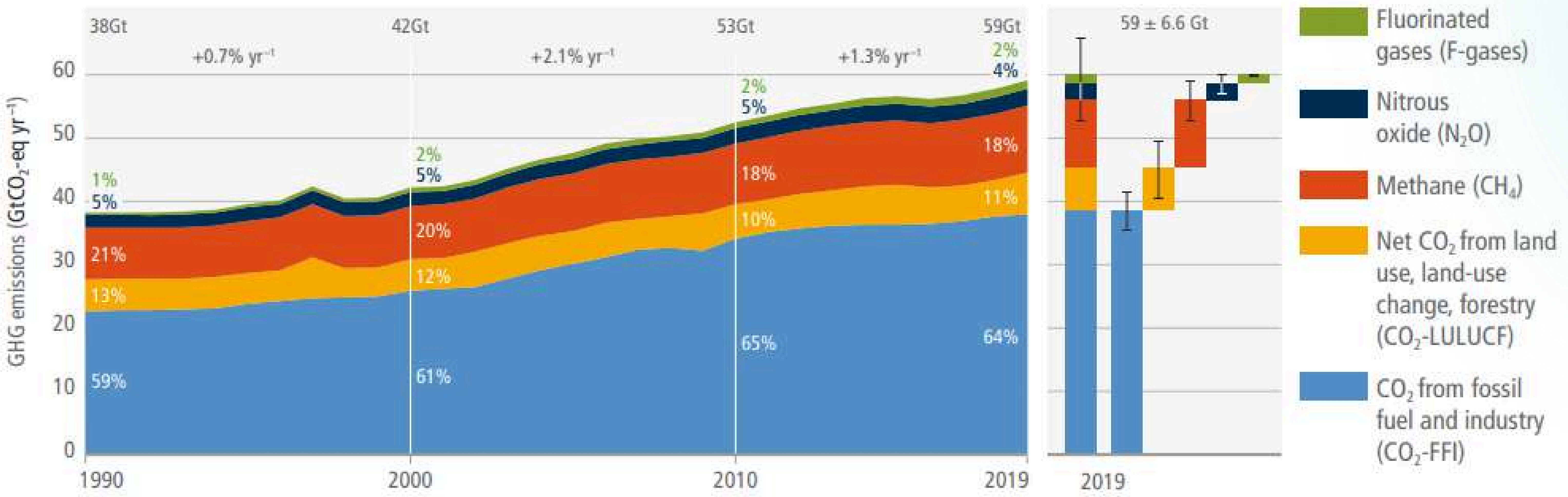
- Globally, households with income **in the top 10% contribute about 36–45% of global GHG** emissions. About two thirds of the top 10% live in Developed Countries and one third in other economies.

- Between 2004 and 2011, **CO2 emissions embodied in trade between developing countries have more than doubled** (from 0.47 to 1.1 Gt) with the centre of trade activities shifting from Europe to Asia.

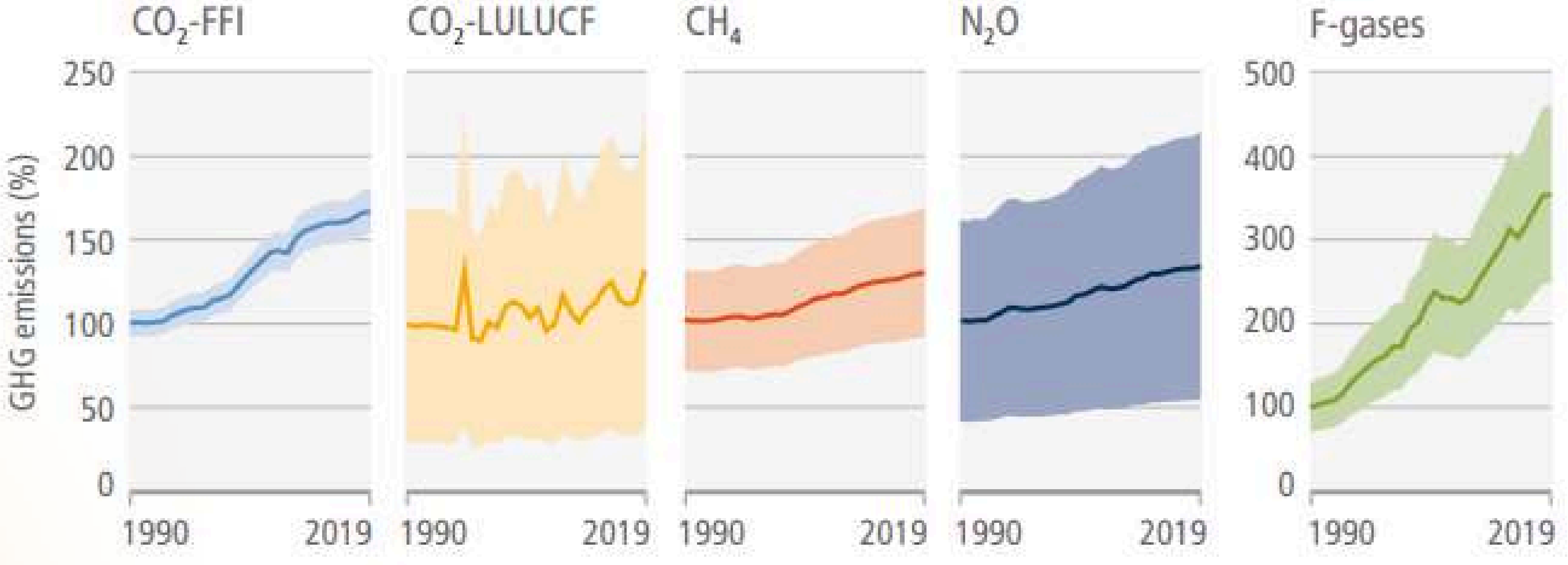
- Globally, gross domestic product (GDP) per capita and population growth remained the strongest drivers of CO2 emissions from fossil fuel combustion in the last decade.

- Cumulative net CO2 emissions over the last decade (2010–2019) are about the same size as the remaining carbon budget to limit warming to 1.5°C (>67%).

a. Global net anthropogenic GHG emissions 1990–2019 [5]

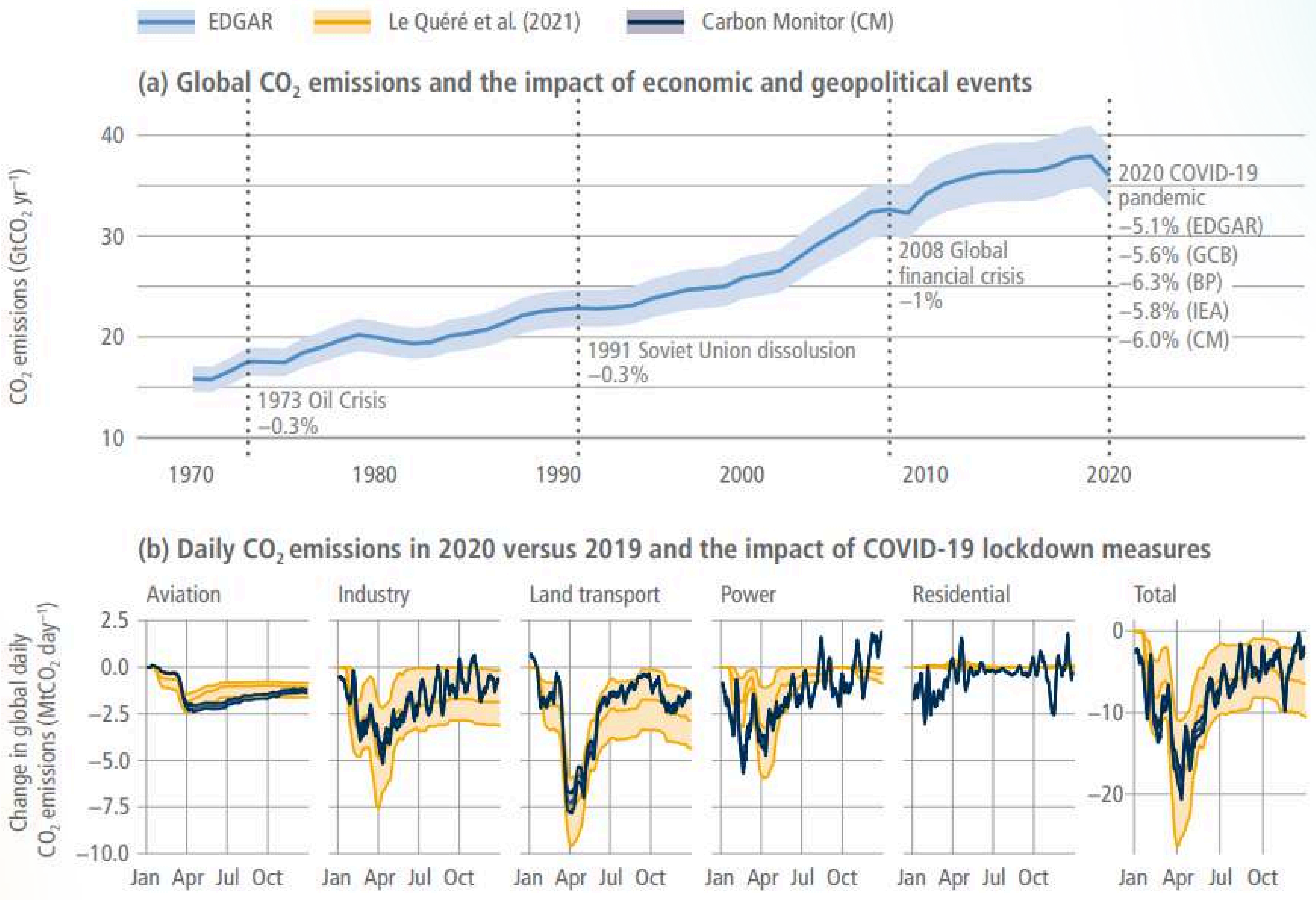


b. Global anthropogenic GHG emissions and uncertainties by gas – relative to 1990



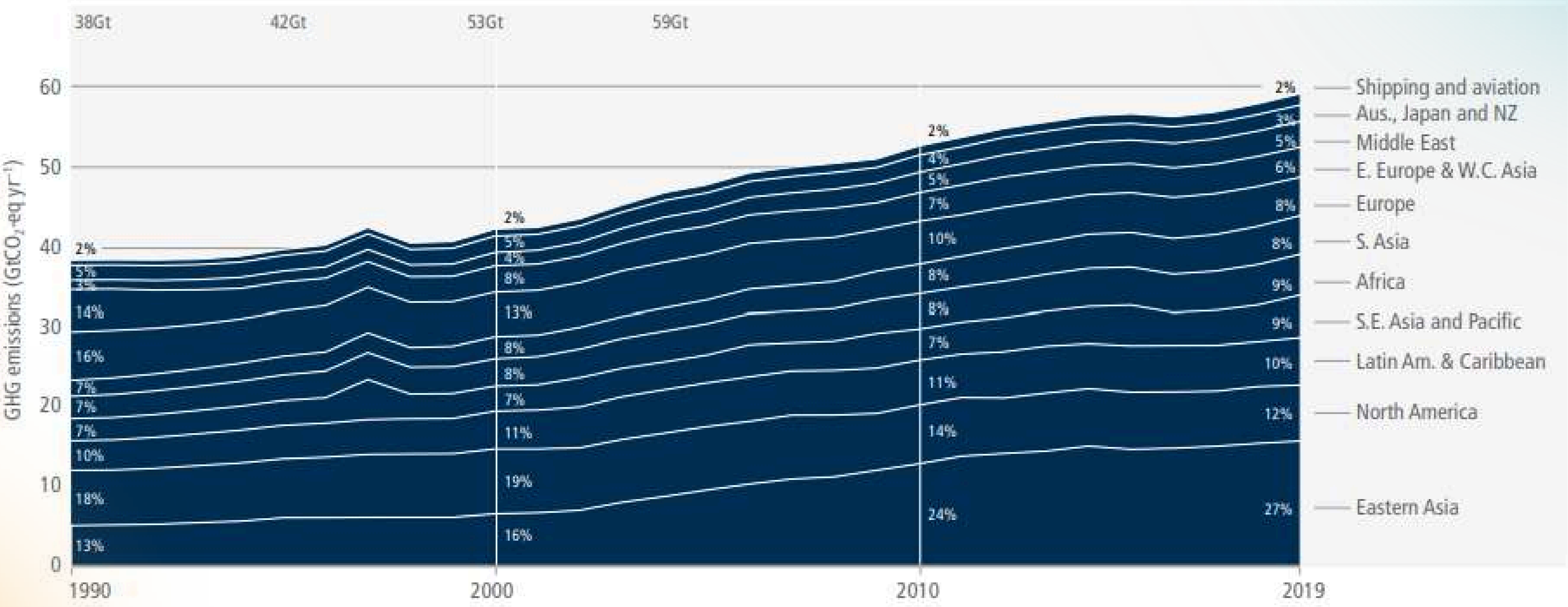
	2019 emissions ($GtCO_2$-eq)	**1990–2019 increase** ($GtCO_2$-eq)	**Emissions in 2019, relative to 1990** (%)
CO_2-FFI	38 ± 3	15	167
CO_2-LULUCF	6.6 ± 4.6	1.6	133
CH_4	11 ± 3.2	2.4	129
N_2O	2.7 ± 1.6	0.65	133
F-gases	1.4 ± 0.41	0.97	354
Total	59 ± 6.6	21	154

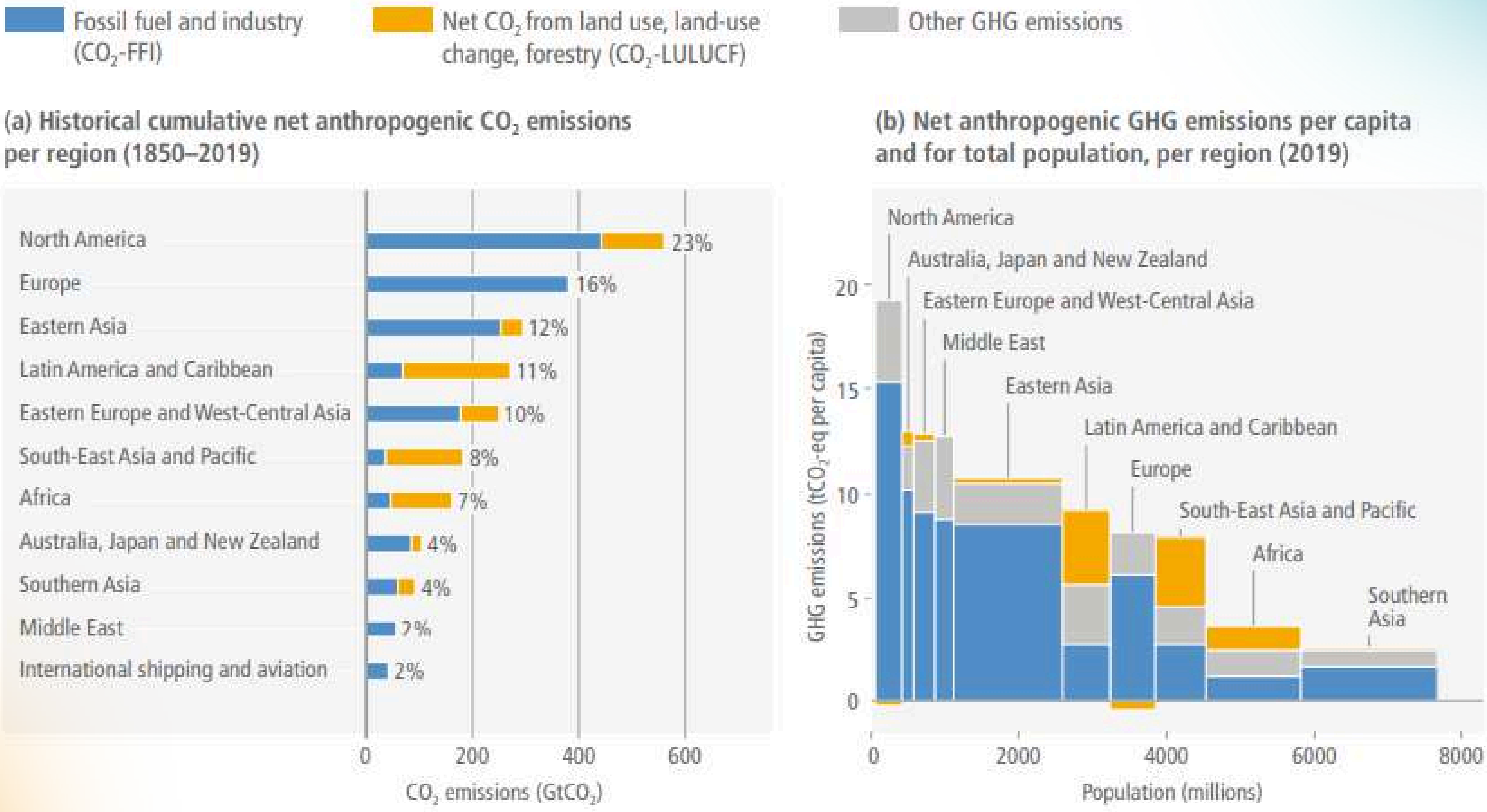
The solid line indicates central estimate of emissions trends. The shaded area indicates the uncertainty range.



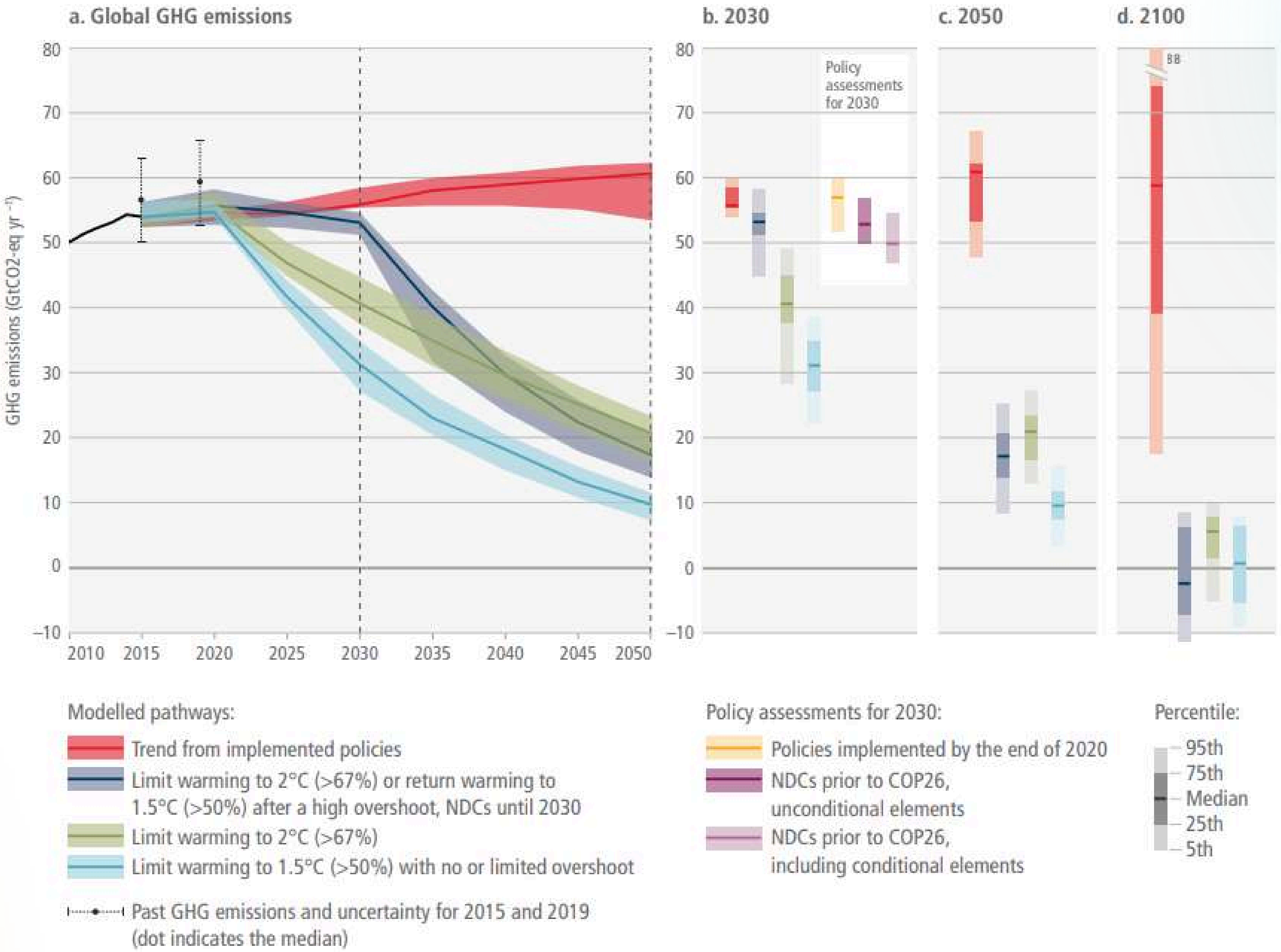
EDGAR
Le Quéré et al. (2021)
Carbon Monitor (CM)
(a) Global CO_2 emissions and the impact of economic and geopolitical events
CO_2 emissions ($GtCO_2$ yr^{-1})
40
30
20
10
1970
1980
1990
2000
2010
2020
1973 Oil Crisis
–0.3%
1991 Soviet Union dissolusion
–0.3%
2008 Global
financial crisis
–1%
2020 COVID-19
pandemic
–5.1% (EDGAR)
–5.6% (GCB)
–6.3% (BP)
–5.8% (IEA)
–6.0% (CM)
(b) Daily CO_2 emissions in 2020 versus 2019 and the impact of COVID-19 lockdown measures
Change in global daily
CO_2 emissions ($MtCO_2$ day^{-1})
Aviation
Industry
Land transport
Power
Residential
Total
2.5
0.0
–2.5
–5.0
–7.5
–10.0
0
–10
–20
Jan
Apr
Jul
Oct

(a) Global net anthropogenic GHG emissions by region (1990–2019)




Fossil fuel and industry (CO_2-FFI)
Net CO_2 from land use, land-use change, forestry (CO_2-LULUCF)
Other GHG emissions
(a) Historical cumulative net anthropogenic CO_2 emissions per region (1850–2019)
North America
23%
Europe
16%
Eastern Asia
12%
Latin America and Caribbean
11%
Eastern Europe and West-Central Asia
10%
South-East Asia and Pacific
8%
Africa
7%
Australia, Japan and New Zealand
4%
Southern Asia
4%
Middle East
2%
International shipping and aviation
2%
0
200
400
600
CO_2 emissions ($GtCO_2$)
(b) Net anthropogenic GHG emissions per capita and for total population, per region (2019)
North America
Australia, Japan and New Zealand
Eastern Europe and West-Central Asia
Middle East
Eastern Asia
Latin America and Caribbean
Europe
South-East Asia and Pacific
Africa
Southern Asia
GHG emissions (tCO_2-eq per capita)
0
5
10
15
20
0
2000
4000
6000
8000
Population (millions)

Mitigation pathways



Sustainability Strategy for North Rhine-Westphalia

Ministry for Climate Protection, Environment, Agriculture, Nature and Consumer Protection of the State of North Rhine-Westphalia

– Collaboratively develop innovative strategies towards a net zero GHG industrial sector, while securing competitiveness	– Build platform to bring together industry, scientists and government in self-organised innovation teams – Intensive cross-branch cooperation to articulate policy/infrastructure needs
– NRW is Germany's industrial heartland, with an export-oriented industrial base – Established government-industry ties – Active discourse between industry and public	– Compliance rules preventing in-depth co-operation

MITIGATION RESPONSES IN SECTORS AND SYSTEMS

Sectors and Systems

1. Energy
2. Urban Systems and other settlements
3. Transport
4. Buildings
5. Industry
6. Agriculture, Forestry, Other land uses, and food systems

1) Energy

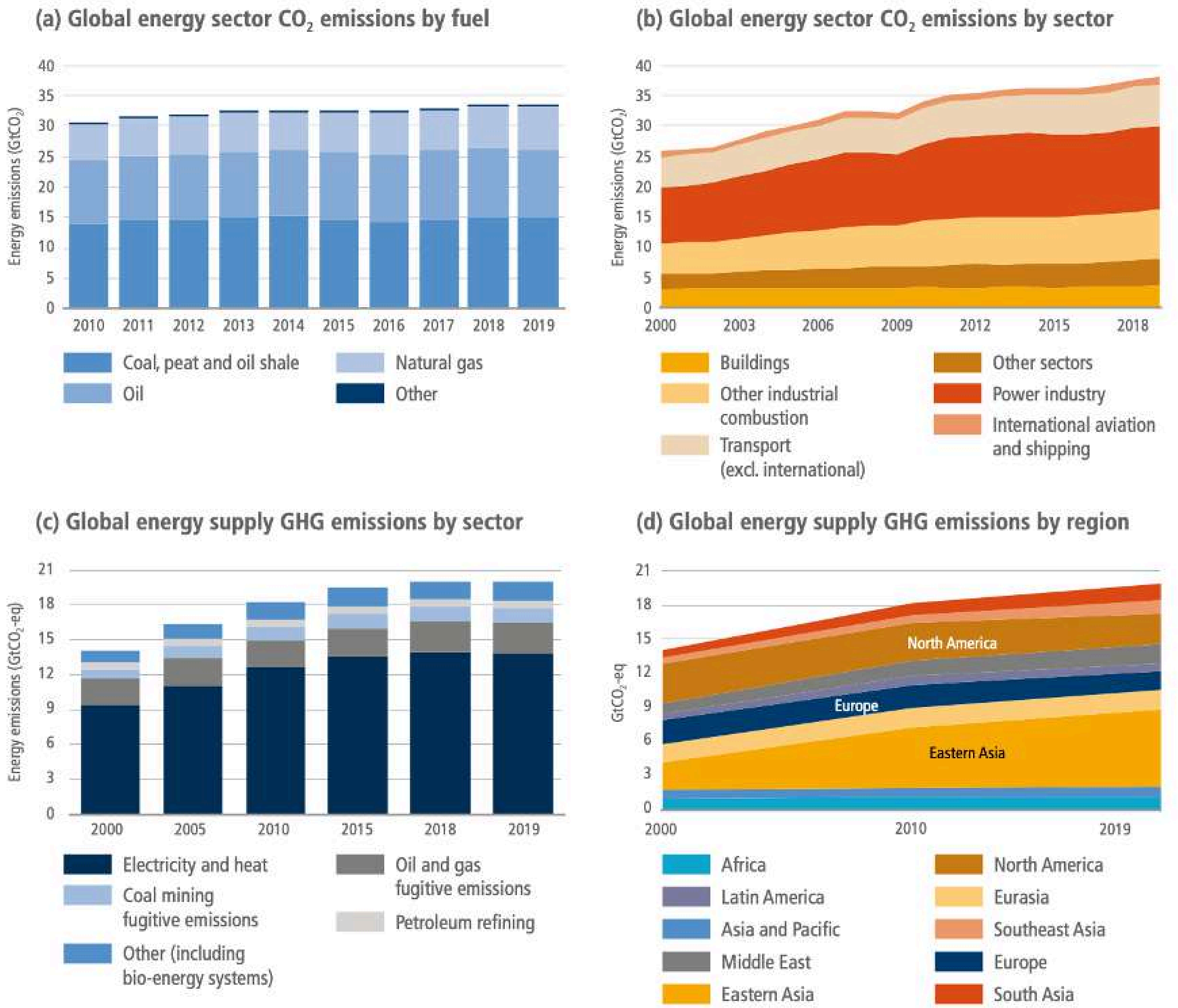


Figure 6.3 | Global energy sector CO_2 emissions and global energy supply GHG emission. Source: Panel (a): data from IEA (2020a); other panels: data from Crippa et al. (2021).

Coal: Largest CO_2 source in the energy sector (44% of emissions in 2019).

Power Industry: Top emitter at 36%, followed by industry (22%) and transport (18%).

Electricity and Heat: Made up 69% of total energy GHG emissions in 2019, especially in Asia and developed regions.

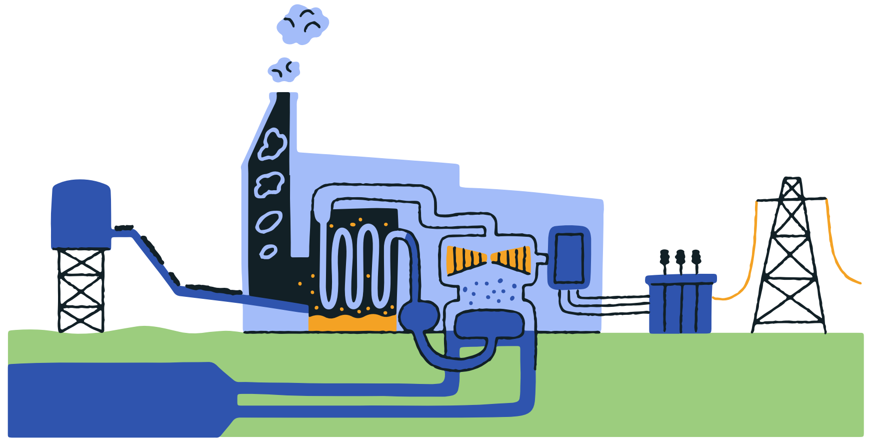
Emission Trends: Electricity emissions are rising despite wind and solar growth; transport emissions also increasing, with petroleum as the main fuel.

Energy: Mitigation

Achieving net-zero emissions will require a large-scale transformation of the energy system, with a shift towards renewable energy and sustainable technologies.

Emission Reduction Goal

- Reduce CO_2 emissions by 87-97% by 2050
- Low-carbon energy sources to provide up to 97% of electricity



Key Actions

- **Reduce Fossil Fuel Use:** Coal consumption must drop 67-82% by 2030, especially without CCS
- **Increase Renewables:** Solar, wind, and batteries are now cheaper and more accessible than fossil fuels
- **Electrification:** Focus on transport, heating, and cooking sectors
- **Investment needs:** Avoid new fossil fuel investments and Invest in renewables; anticipate "stranded assets" as fossil fuel infrastructure becomes obsolete.

Challenges

- Technical, regulatory, and cross-sector collaboration required
- Need to address geophysical, economic, and socio-cultural barriers to deployment

2) Urban Systems and other settlements

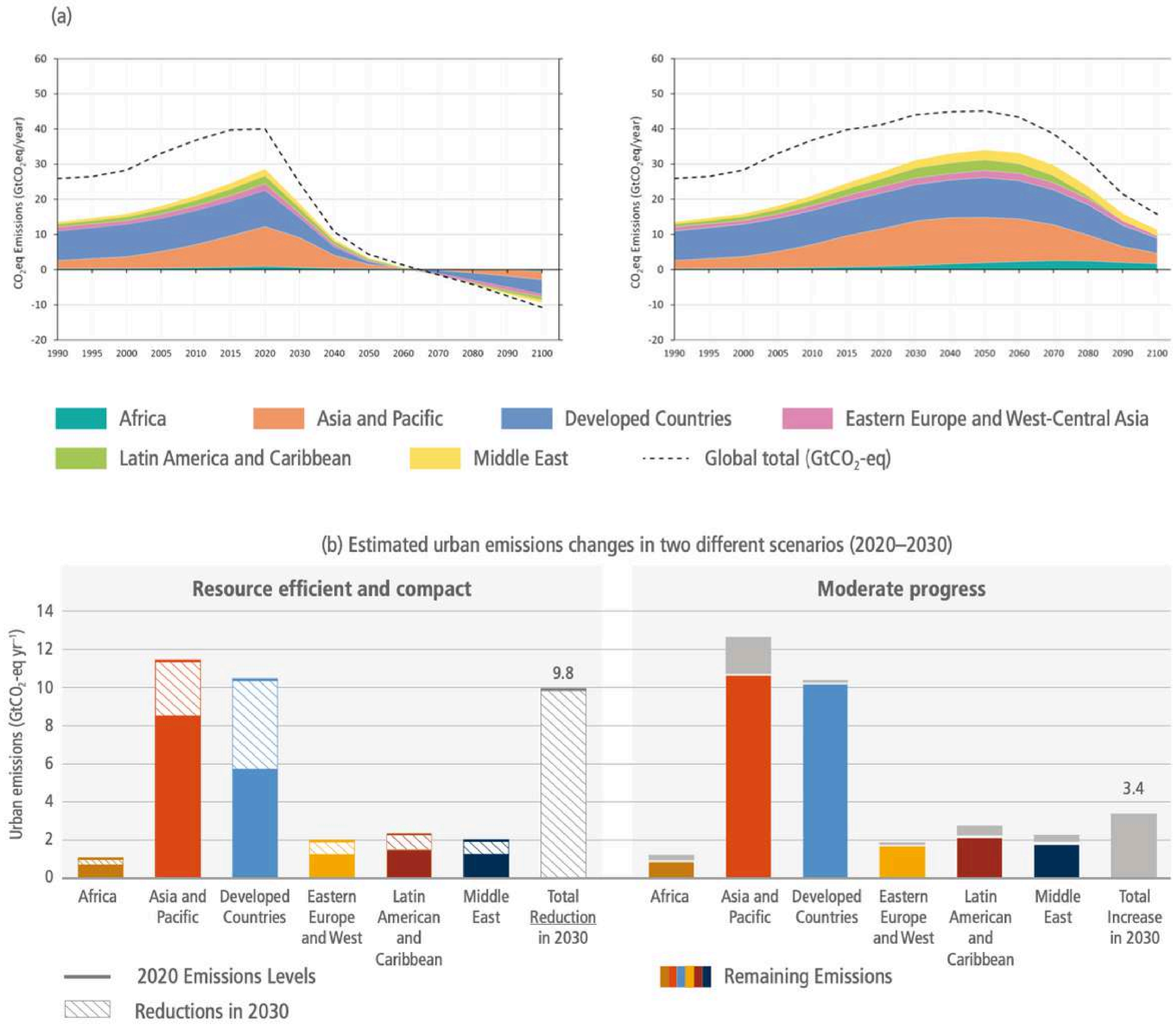


Figure TS.13 | Panel (a): carbon dioxide-equivalent emissions from global urban areas from 1990 to 2100. Urban areas are aggregated to six regional domains; Panel (b): comparison of urban emissions under different urbanisation scenarios (GtCO$_2$-eq yr^{-1}) for different regions.[21] {Figures 8.13 and 8.14}

As of 2018, 55% of the world population reside in urban settlements while 45% reside in rural settlemenets

Urban areas contribute a major portion of global emissions, with notable increases from 2000 to 2020.

Developed regions showing slower growth or slight declines.

Projected Urban Emissions Growth: Without aggressive mitigation, urban emissions could rise significantly by 2050. With strong efforts (net-zero targets, electrification, renewable energy), cities can lower emissions drastically.

Mitigation Strategies:

- compact design, electrification, and green spaces, which also improve air quality and health;
- sustainable planning for rapidly growing cities, and upgrading informal settlements;
- governance collaboration and international climate finance for large-scale low-carbon projects.

3) Transport

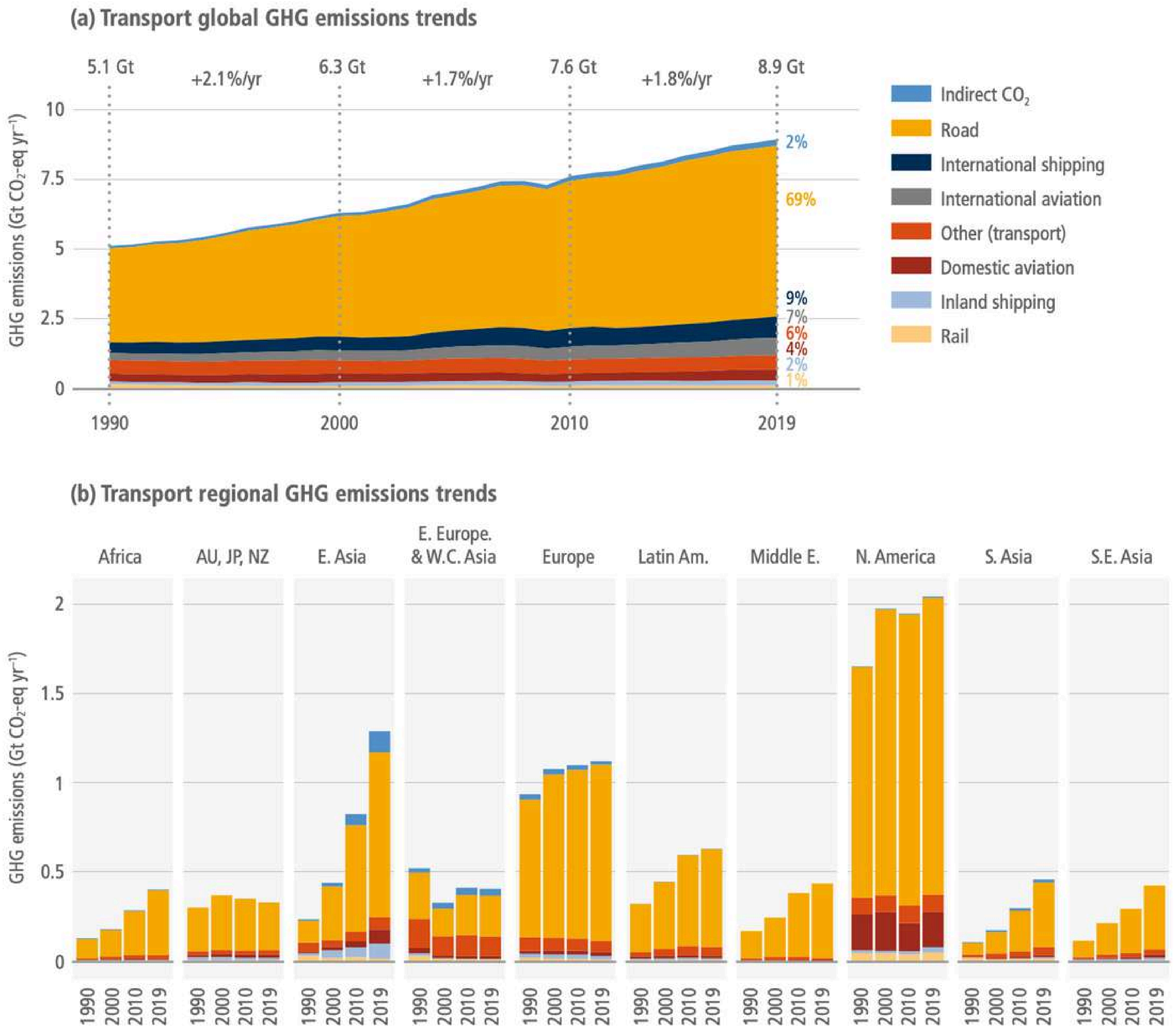


Figure 10.1 | Global and regional transport greenhouse gas emissions trends. Indirect emissions from electricity and heat consumed in transport are shown in panel **(a)** and are primarily linked to the electrification of rail systems. These indirect emissions do not include the full lifecycle emissions of transportation systems (e.g., vehicle manufacturing and infrastructure), which are assessed in Section 10.4. International aviation and shipping are included in panel (a) but excluded from panel (b). Indirect emissions from fuel production, vehicle manufacturing and infrastructure construction are not included in the sector total. Source: adapted from Lamb et al. (2021) using data from Minx et al. (2021).

- In 2019, transport contributed 8.7 $GtCO_2$-eq in direct emissions (up from 5.0 $GtCO_2$-eq in 1990).
- Road vehicles were responsible for 70% of these emissions, with aviation and shipping emissions rising rapidly.
- Emissions growth is faster in developing regions compared to Europe and North America.
- Without mitigation, transport emissions could increase by 65% by 2050.
- Effective strategies could cut emissions by 68%, aligning with the 1.5°C climate target.

3) Transport: Mitigation

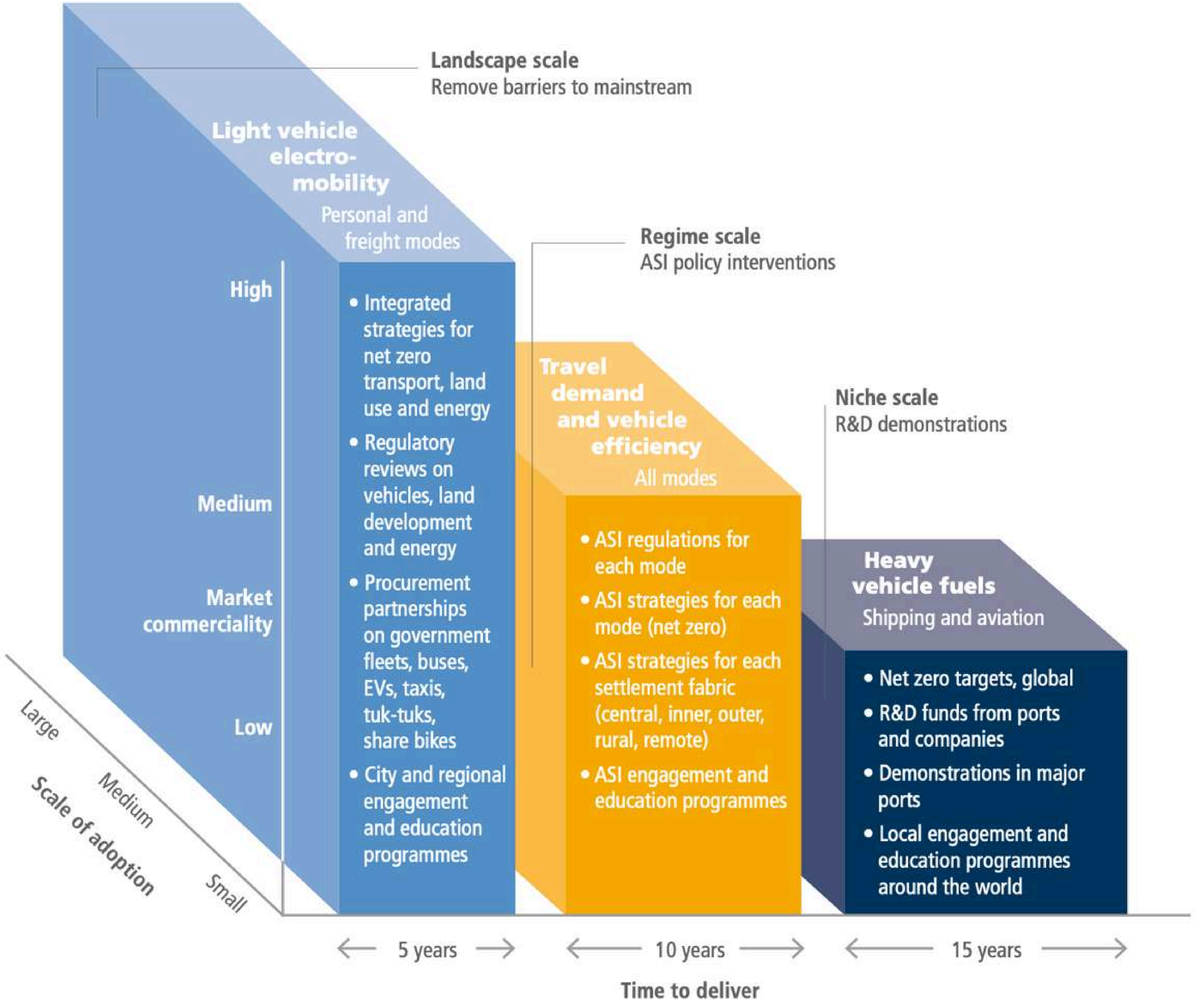


Figure 10.22 | Mitigation options and enabling conditions for transport. Niche scale includes strategies that still require innovation.

Reducing emissions requires both demand management and new technologies

- **Landscape Scale** involves creating conditions to make EVs mainstream.
- **Regime Scale** encompasses policy interventions to support demand reduction and efficiency.
- **Niche Scale** focuses on demonstrating advanced technologies, especially in sectors that are harder to decarbonize.

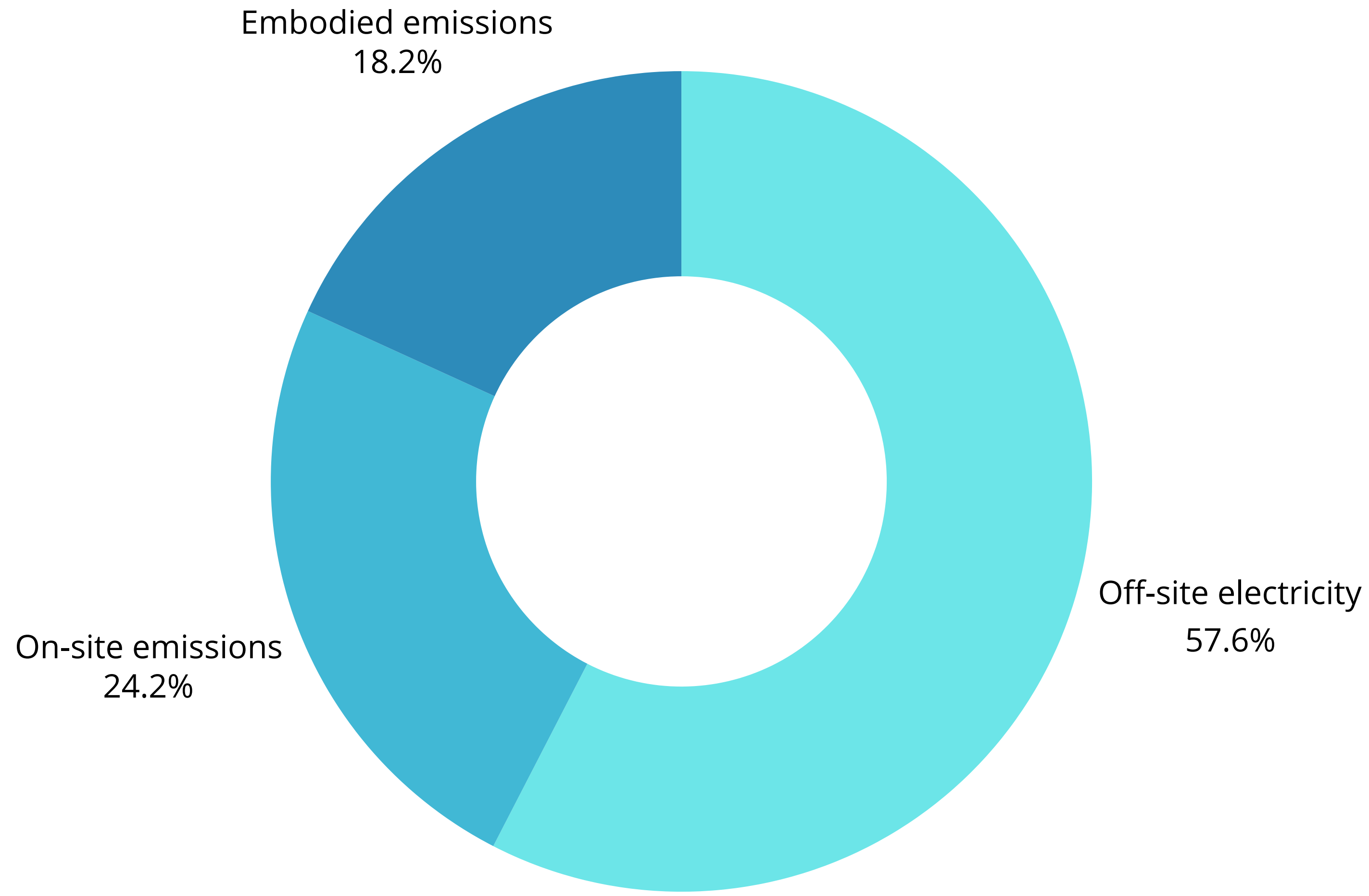
Governance and Infrastructure

Resource Concerns

Legislative and Community Action

4) Buildings

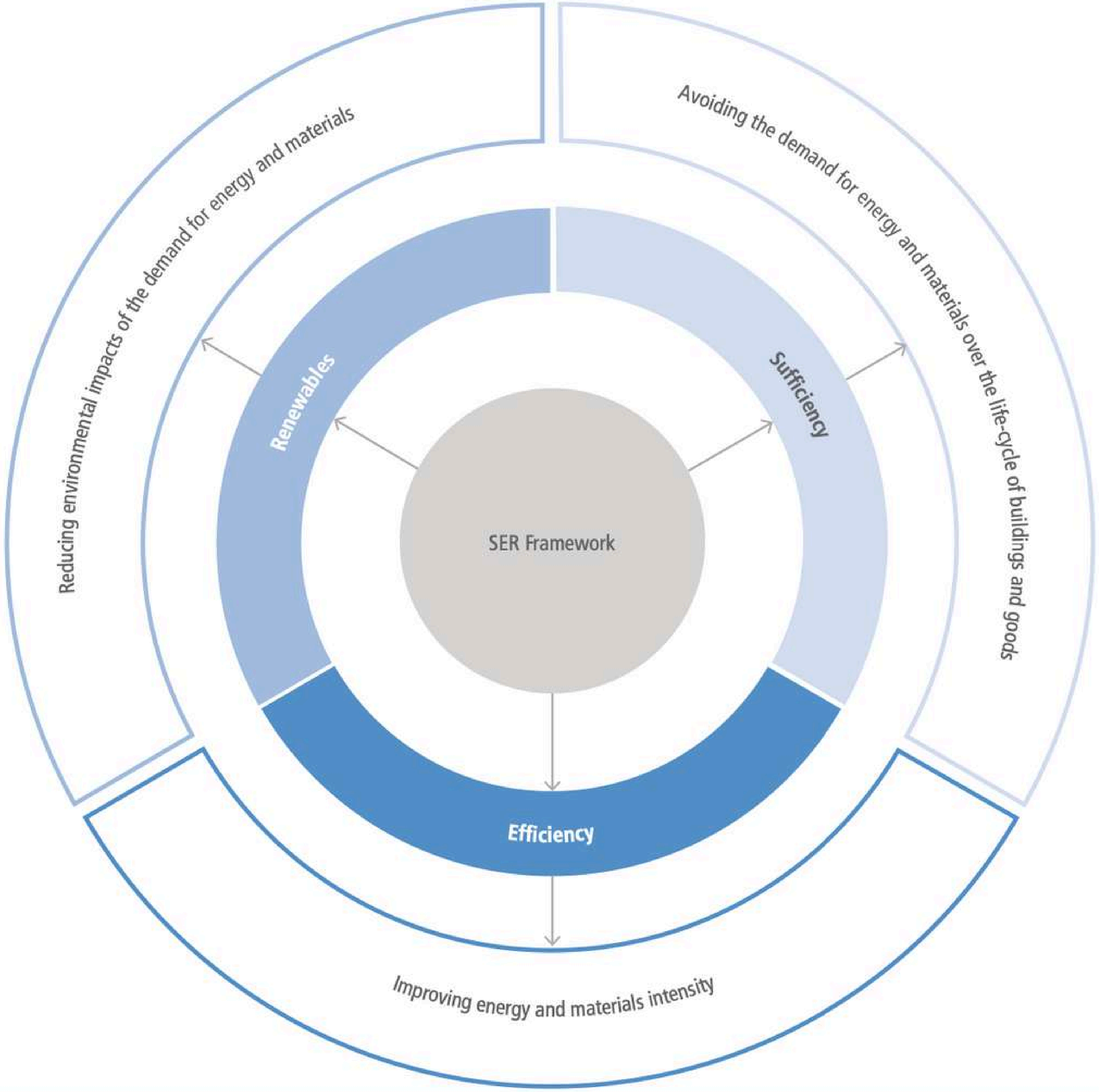
In 2019, buildings emitted 21% of global GHG emissions, mainly from:



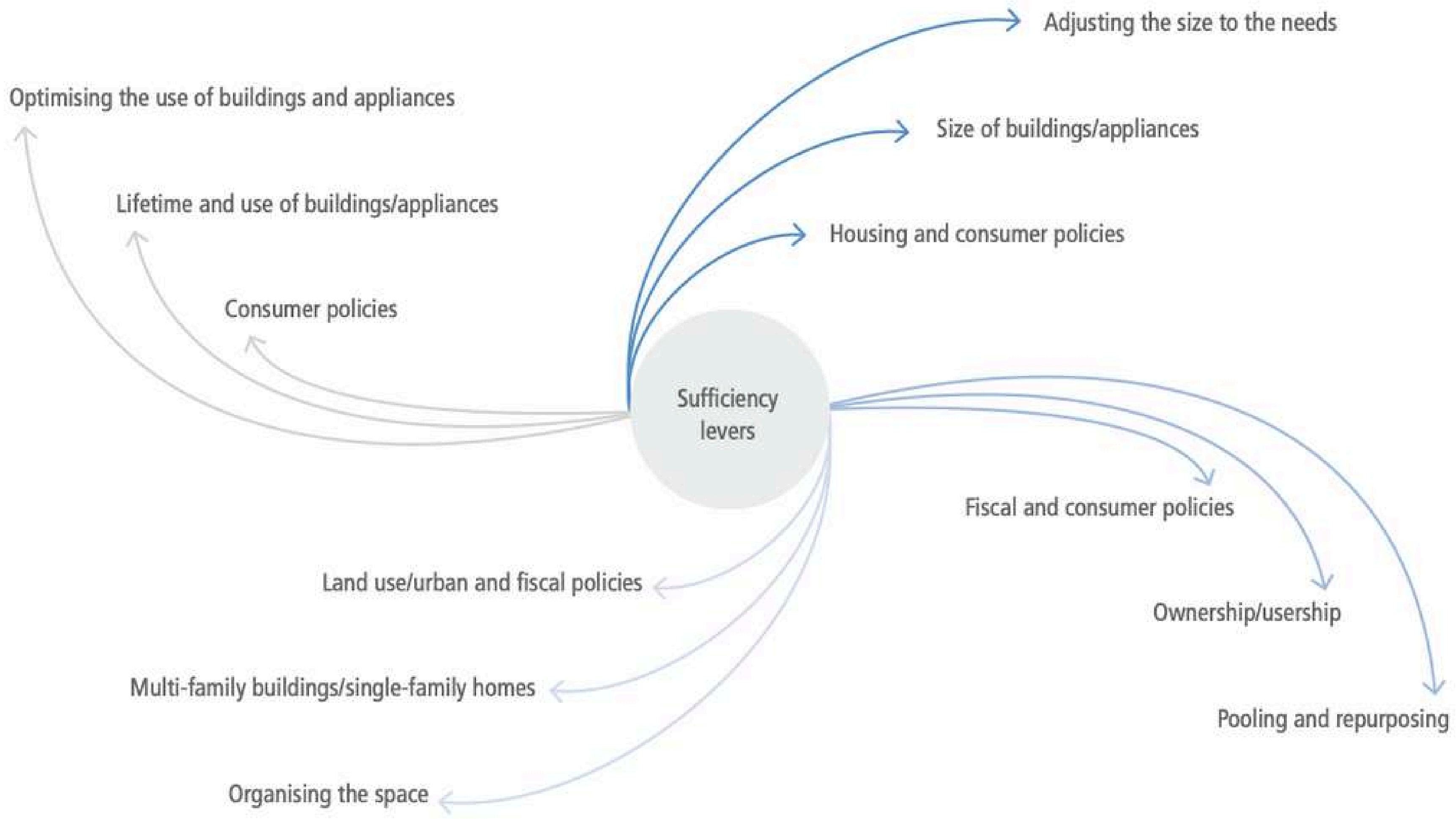
Key drivers:

- Population Growth
- Increased Floor Area per Person
- Inefficient New Buildings
- More Appliances
- Reliance on Carbon-Intensive Energy

4) Buildings: SER Framework



Box 9.1, Figure 1 | SER framework applied to the building sector. Source: Saheb (2021).



Up to 17% emission reduction by 2050 with:

- Compact building design
- Multi-functional spaces
- Circular material use

Low-cost options:

- Replacing inefficient appliances
- Deep retrofits for existing buildings

High-performance construction expected to be mainstream by 2050

4) Buildings: Key Strategies

Key point: Achieving SDG targets requires implementation of ambitious climate mitigation policies which include sufficiency measures to align building design, size and use with SDGs, efficiency measures to ensure high penetration of best available technologies and supplying the remaining energy needs with renewable energy sources.

Figure TS.16 | Contribution of building-sector mitigation policies to meeting Sustainable Development Goals. {Figure 9.18}

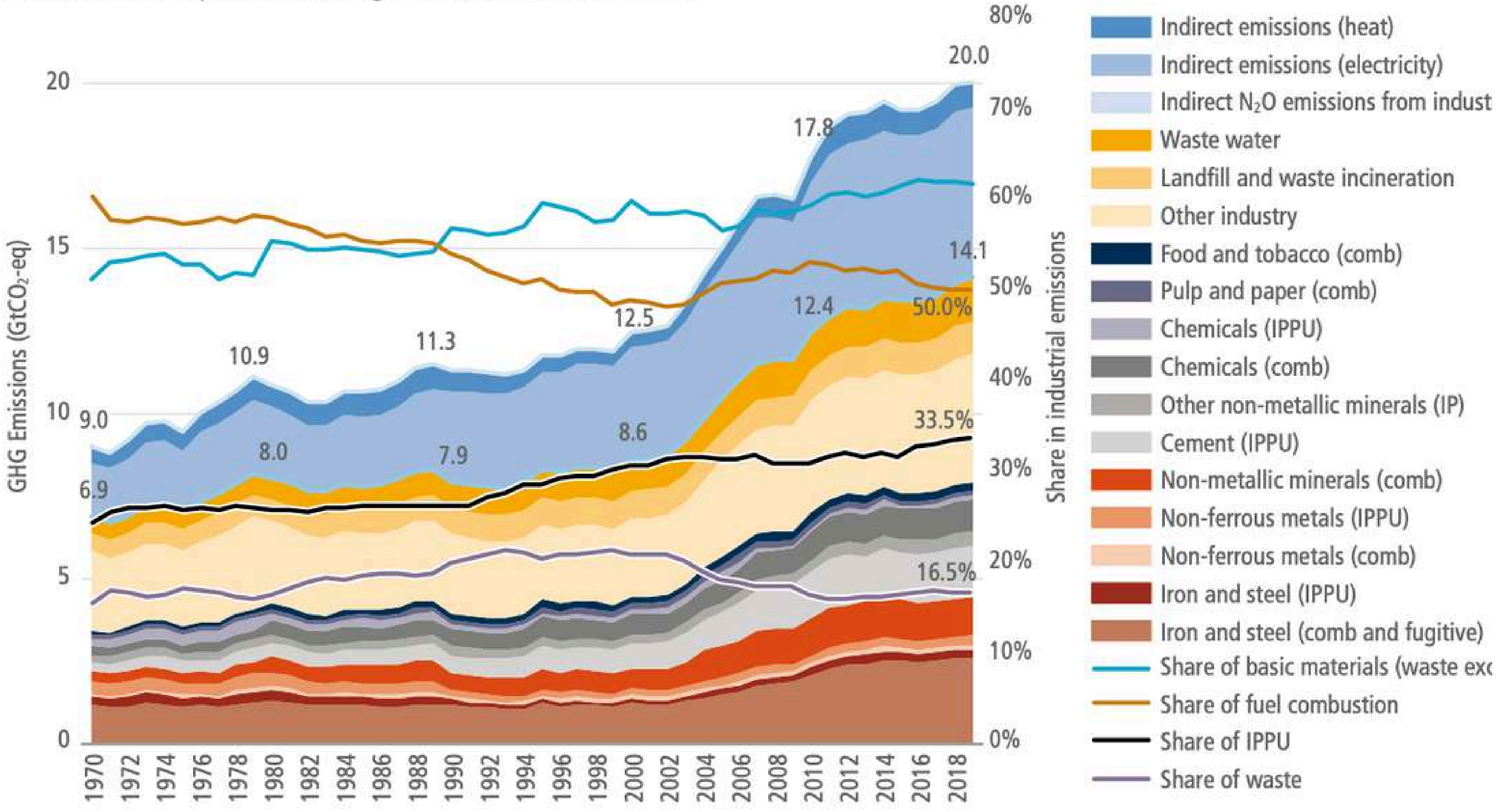
Building Codes and Policy:
Mandatory energy codes, carbon taxes, and performance standards for new and existing buildings.

Adaptation and Health:
Climate resilience strategies, like natural ventilation and green roofs, reduce cooling needs and improve health.

COVID-19 Impact:
Highlighted the need for healthy buildings and created opportunities to repurpose unused spaces due to teleworking.

5) Industry

(a) **Industrial emissions by source (left scale) and emissions structure (right scale).** Comb – indicates direct emissions from fuel combustion. IPPU – indicates emissions from industrial processes and product use. Indirect emissions from electricity and heat generation are shown on the top. Shares on the right are shown for direct emissions



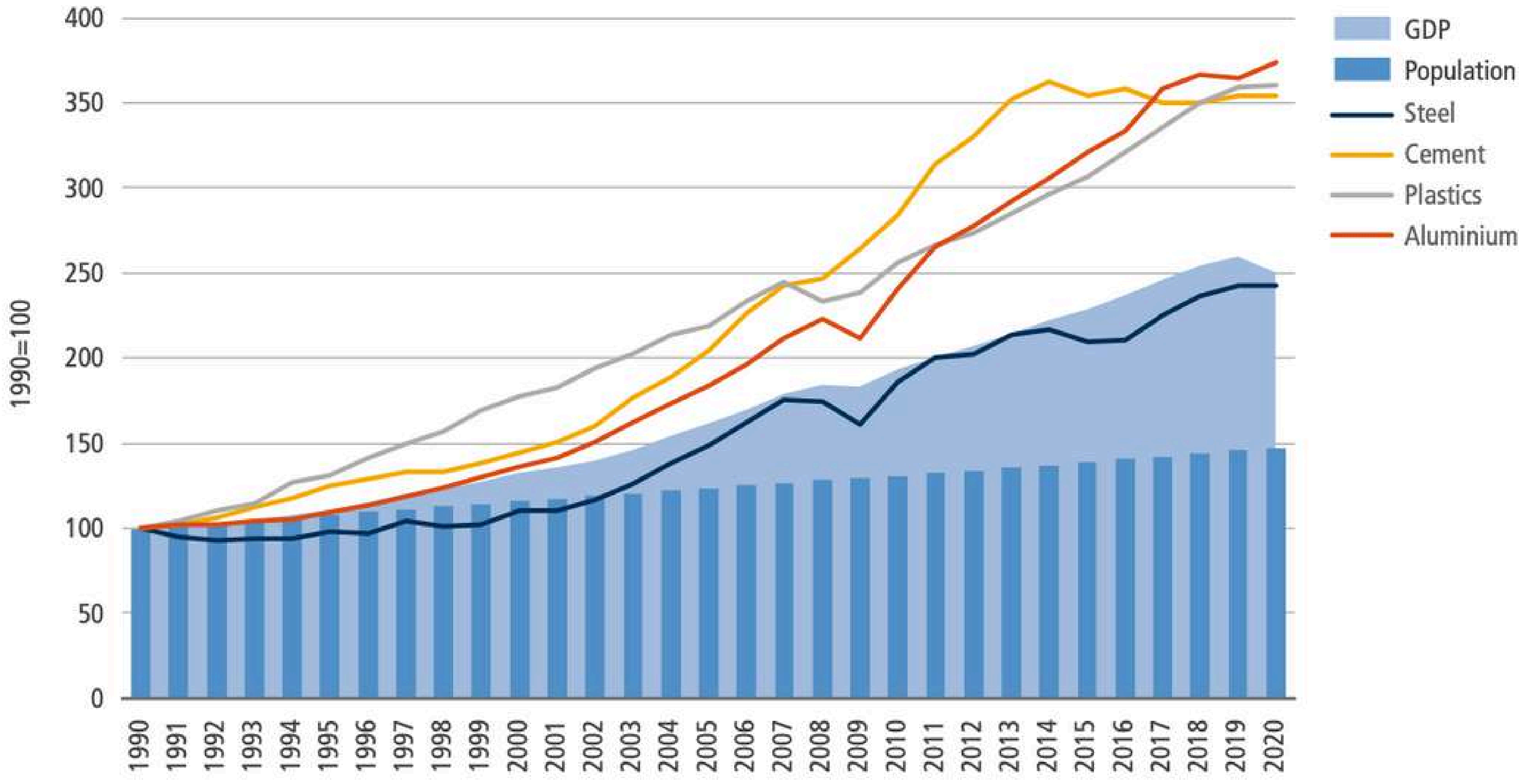


Figure 11.6 | Growth in global demand for selected key materials and global population, 1990–2019. Notes: based on global values, shown indexed to 1990 levels (=100). Steel refers to crude steel production. Aluminium refers to primary aluminium production. Plastic refers to the production of a subset of key thermoplastic resins. Cement and concrete follow similar demand patterns. Sources: 1990–2018: IEA (2020b). 2019–2020: GCCA (2021a); International Aluminium Institute (2021a); Statista (2021b); U.S. Geological Survey (2021); World Bank (2021); World Steel Association (2021).

- 24% of global emissions (34% including indirect emissions)
- Fastest-growing source of GHGs

- Rising demand for materials, especially plastics
- Plastics rely on fossil fuels, complicating decarbonization

5) Industry: Mitigation

Key strategies:
- energy efficiency
- reduced material demand
- circular economy
- carbon capture
- electrification and closed-loop carbon use

Sector-Specific Solutions:
- Steel and Cement: Require recycling, efficient material use, and CCS.
- Chemicals and Pulp: Shifting to bio-based and recycled feedstocks.

Policy Needs:
Effective decarbonization needs clear policies, international cooperation, and incentives for new technologies.

Costs:
- Decarbonizing cement and steel raises production costs but has minimal consumer impact.
- Efficiency and circular flows can offset costs.

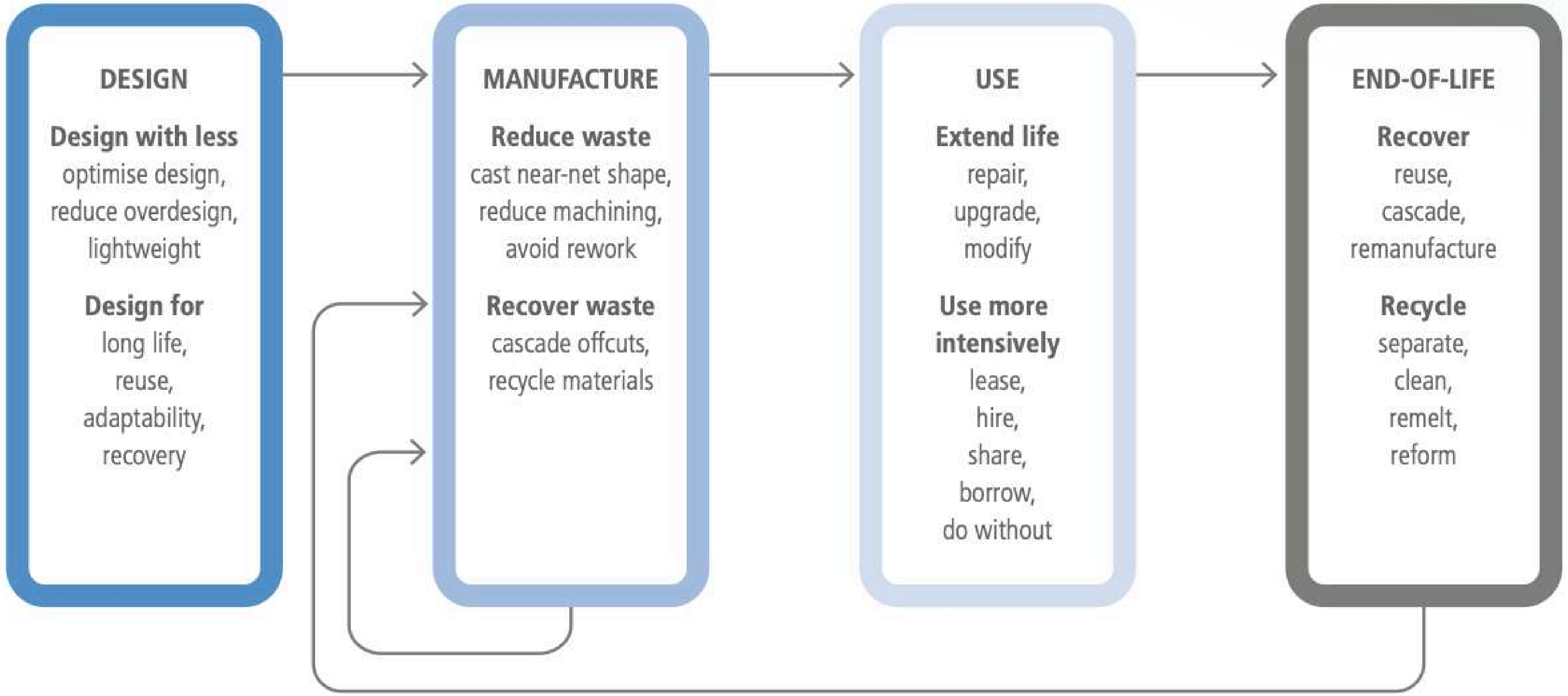


Figure 11.7 | Material efficiency (*ME*) strategies across the value chain. Source: derived from strategies in Allwood et al. (2012).

6) Agriculture, Forestry and Other Land Use (AFOLU)

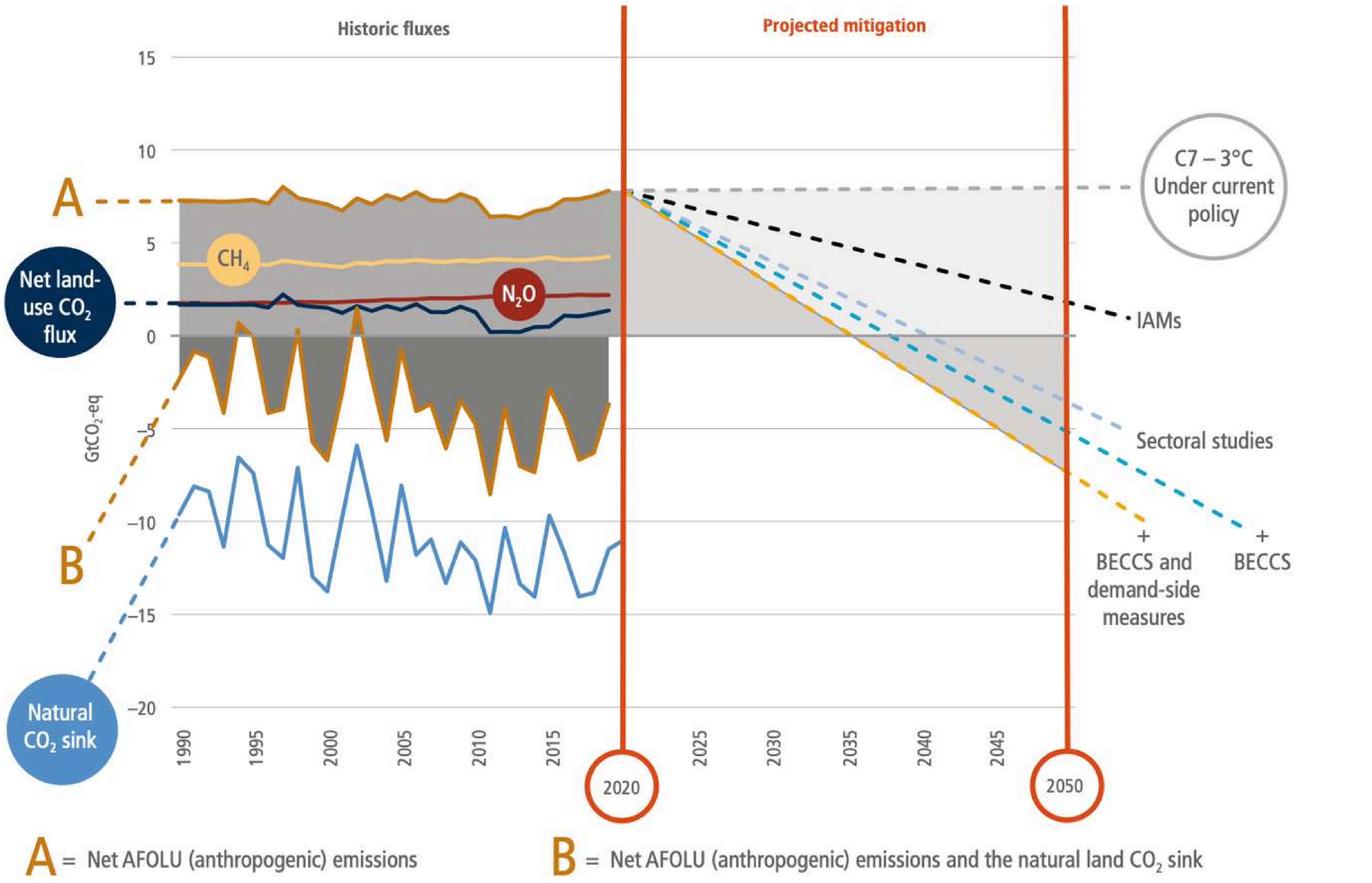


Figure 7.12 | Historic land sector GHG flux estimates and illustrative AFOLU mitigation pathways to 2050, based on data presented in Sections 7.2, 7.4 and 7.5. Historic trends consider both **A** anthropogenic (AFOLU) GHG fluxes ($GtCO_2$-eq yr^{-1}) according to FAOSTAT (FAO 2021a; 2021b) and **B** the estimated natural land CO_2

The AFOLU sector:

- 13-21% of global GHG emissions from 2010-2019
- crucial for reducing GHGs, providing carbon sinks, and supporting biodiversity

Key Measures could meet 20-30% of 2050's emissions targets :

- Reforestation,
- forest management,
- improved agricultural practices.

Challenges:
financial, governance, and social issues, with a lack of institutional support limiting AFOLU's potential

Need for institutional support

General Mitigation Strategies

Clean Energy Transition

Energy Efficiency

Decarbonize Sectors

Behavioral Changes

Nature-Based Solutions

Finance & Equity

Collaboration

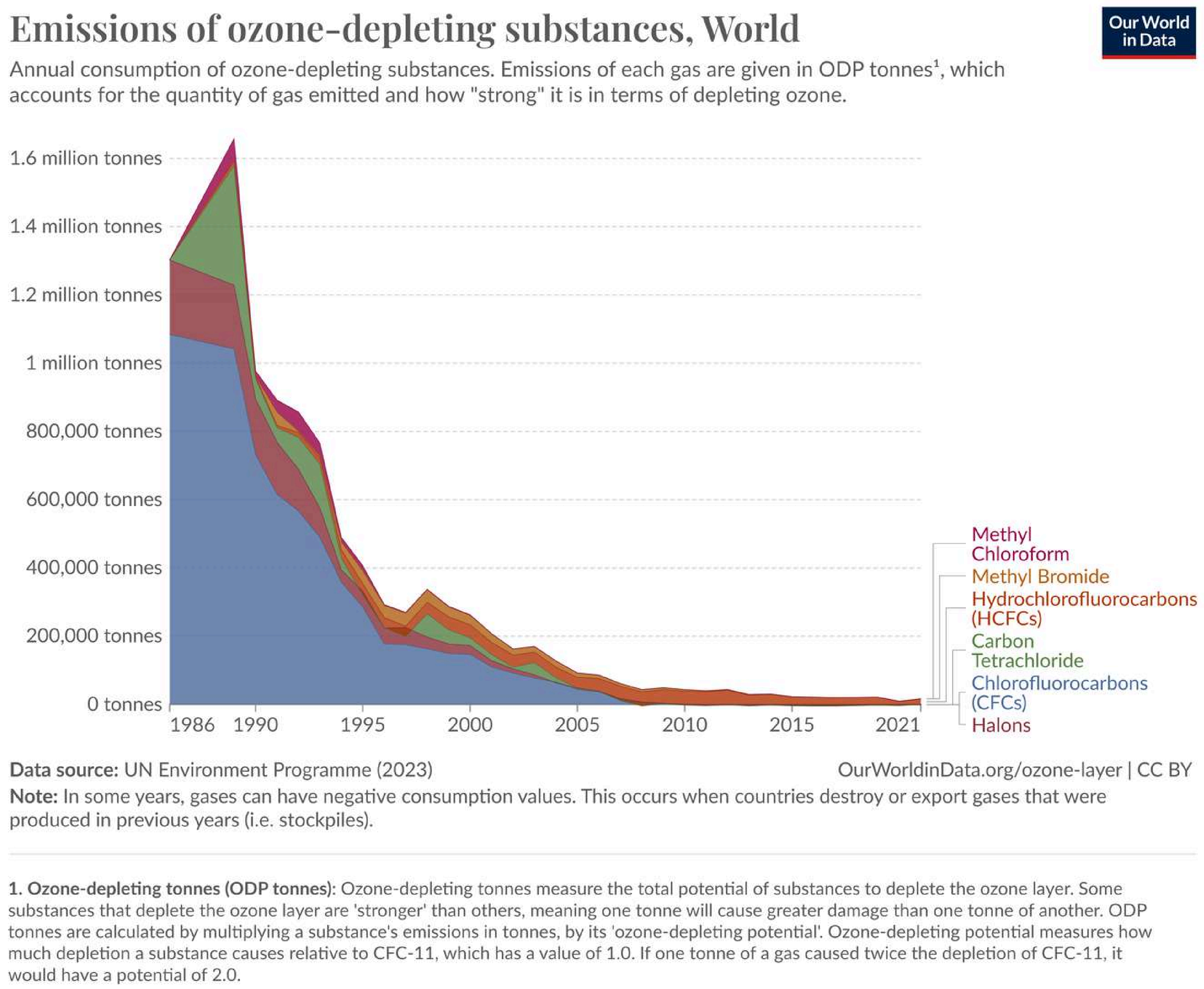
Innovation

Carbon Pricing

Circular Economy

KEY CONCEPTS AND EXAMPLES

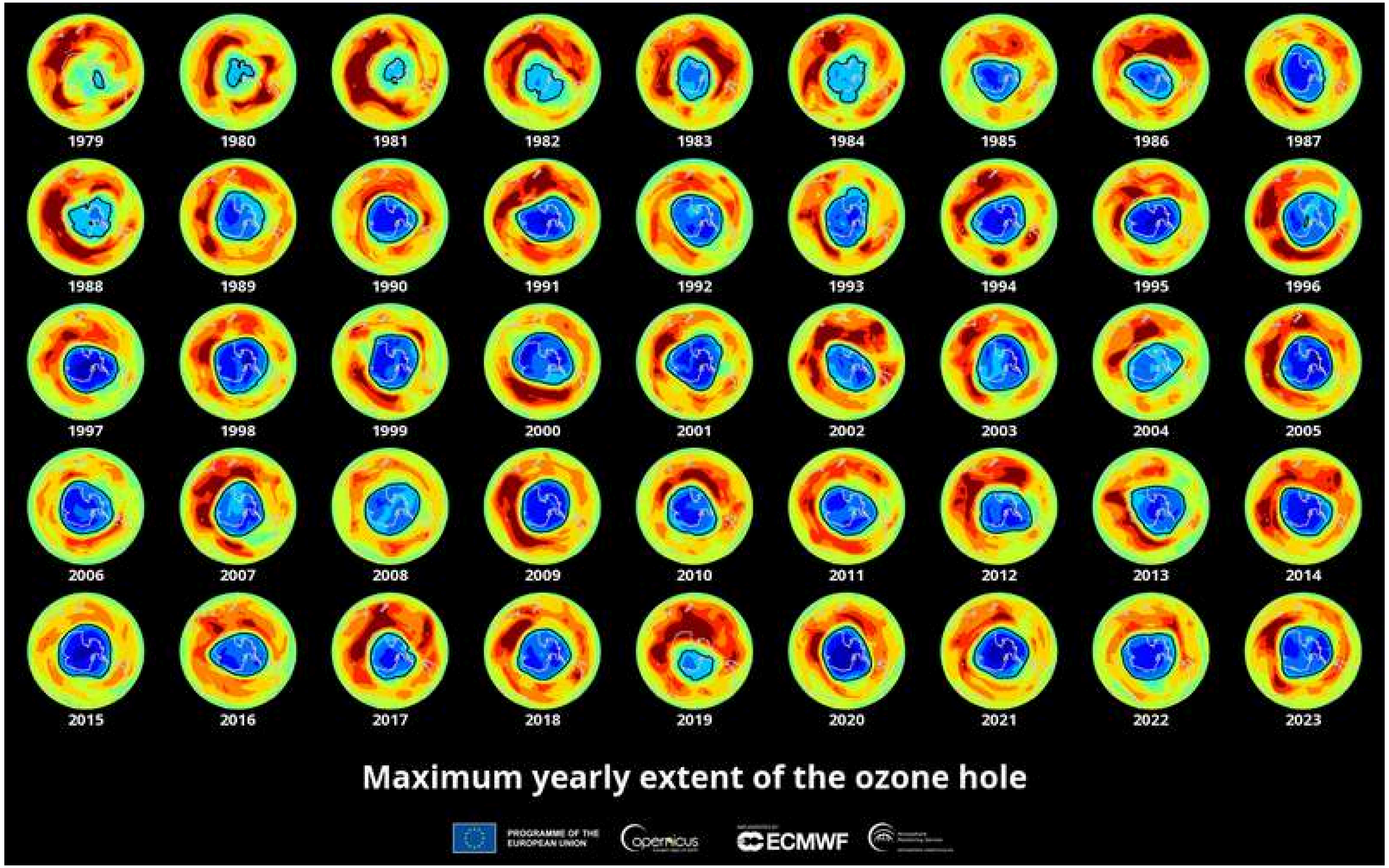
Why climat policies are important?- Montreal Protocol 1987



1985- The Vienna Convention for the Protection of the Ozone Layer
1987- The Montreal Protocol

Thanks to these conventions, it has been possible to significantly reduce emissions of ozone-depleting substances, for example freons (chlorofluorocarbons, CFCs).

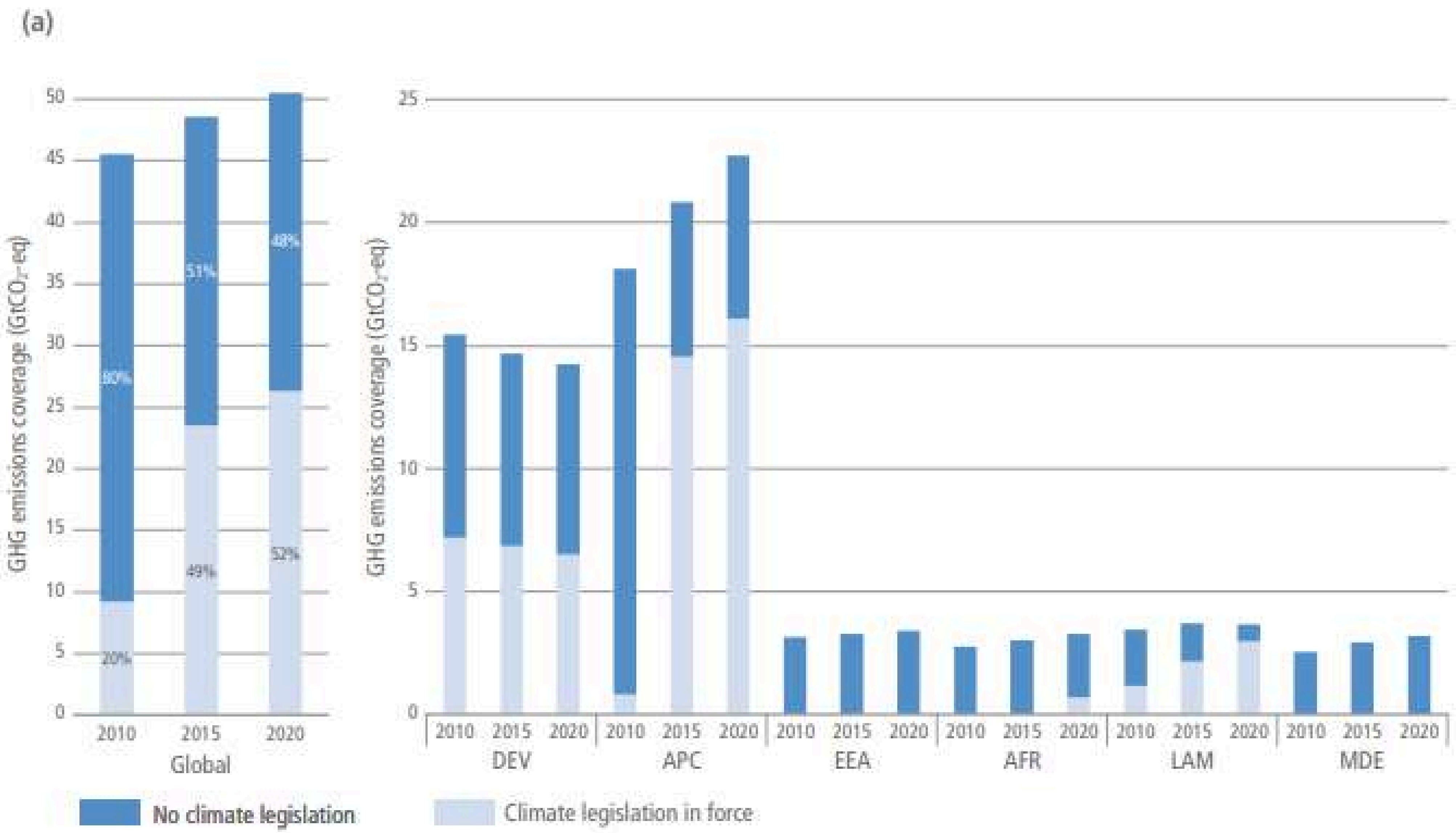
Effective mitigation policy case study- Montreal Protocool 1987



According to Scientific Assessment of the Ozone Depletion: 2022 total column ozone (TCO) is expected to return to 1980 values:

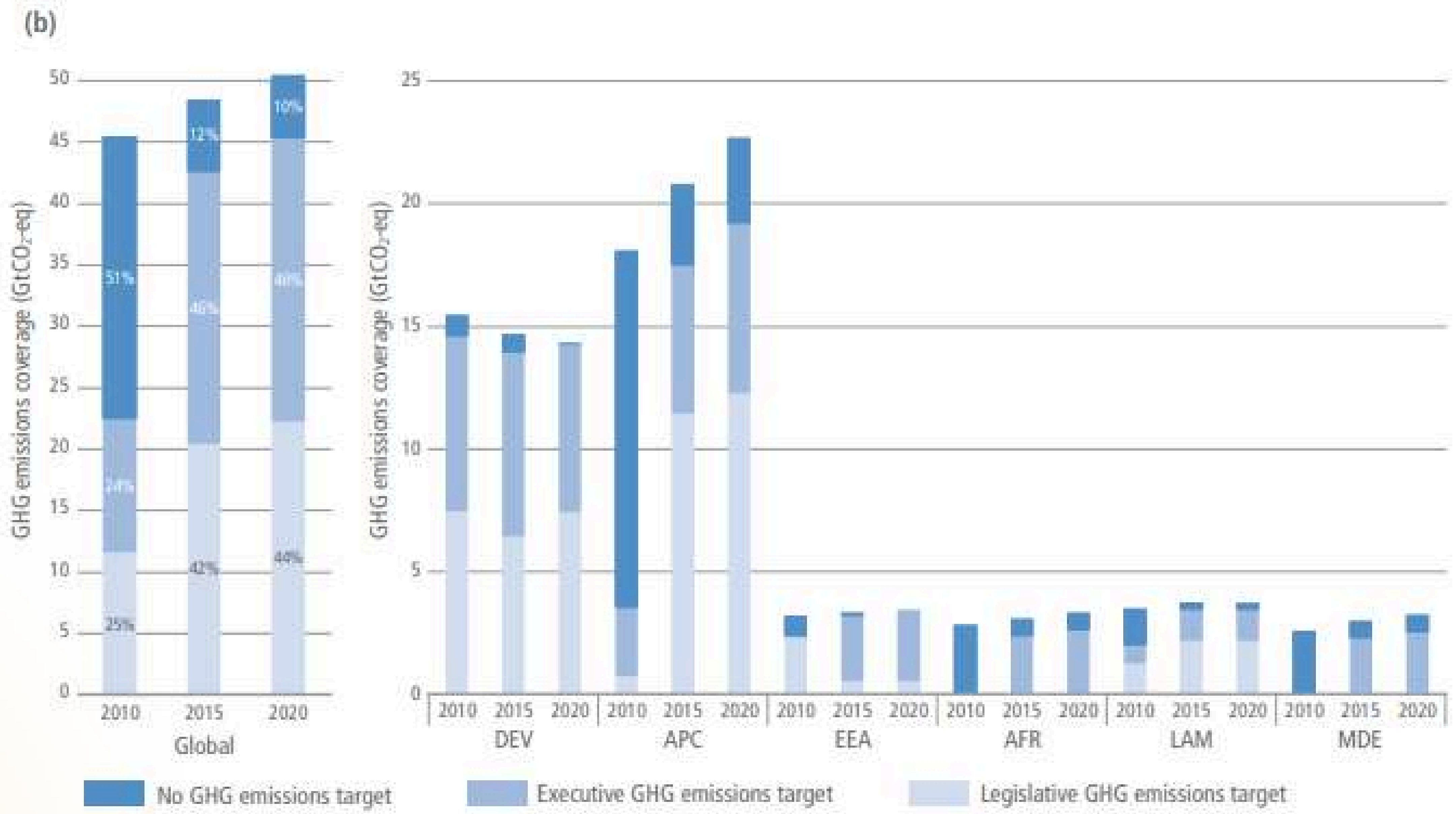
- around 2066 in the Antarctic
- around 2045 in the Arctic
- around 2040 for the near-global average

Climate legislation trends



Panel (a): shares of global GHG emissions under national climate change legislations – in 2010, 2015 and 2020. Climate legislation is defined as an act passed by a parliament that includes the reduction of GHGs in its title or objectives

Emission targets trends



Panel (b): shares of global GHG emissions under national climate emission targets – in 2010, 2015 and 2020. Emissions reductions targets were taken into account as a legislative target when they were defined in a law or as part of a country’s submission under the Kyoto Protocol, or as an executive target when they were included in a national policy or official submissions under the UNFCCC. Targets were included if they were economy-wide or included at least the energy sector. The proportion of national emissions covered are scaled to reflect coverage and whether targets are in GHG or CO2 terms

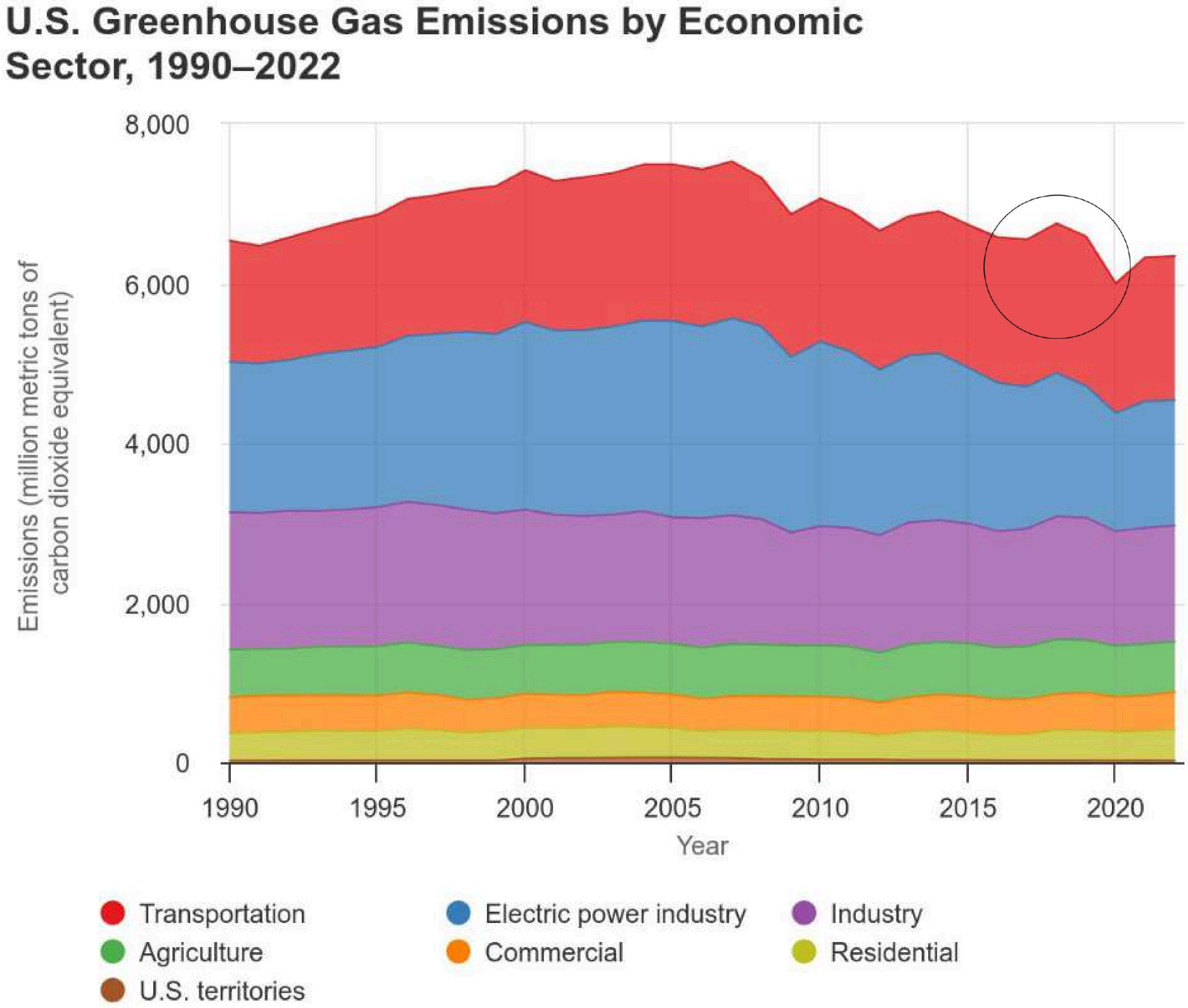
AR6 regions: DEV = Developed countries; APC = Asia and Pacific; EEA = Eastern Europe and West Central Asia; AFR = Africa; LAM = Latin America and the Caribbean; ME = Middle Eas

Case study- Trump's policy on climate

Donald Trump's skeptical approach to climate change has resulted in his withdrawal from the Paris Agreement as well as climate and energy rollbacks, which have hindered efforts to achieve sustainable development and reducing GHG emissions.

Few examples of those rollbacks:

- Repealed requirement for states to track tailpipe emissions from vehicles on federal highways
- Reverted to a weaker 2009 pollution permitting programme for new power plants
- Rolled back the environmental review process for federal infrastructure projects
- Repealed Obama-era calculation of the 'social cost of carbon' that rulemakers used to estimate economic benefits of reducing carbon emissions



One of the results of those actions was increase of Carbon Dioxide emission by United States, which we can clearly see on the marked field. Emission only dropped after the COVID-19 pandemic erupted which resulted in the freezing of the industry

Implementation and Enabling Conditions

Institutions and governance

International Cooperation

Economics

Social aspects

Innovation, Technology Development and Transfer

Institutions and governance

Regulatory instruments

Climate law

National mitigation policies

Sub-national institutions

International cooperation is having positive and measurable results

Participation in international agreements and transboundary

International Cooperation

sharing of knowledge and experiences between developed and developing countries

International cooperation outside the UNFCCC processes and agreements

Better and more comprehensive data on innovation indicators

climate mitigation technologies

International technology cooperation

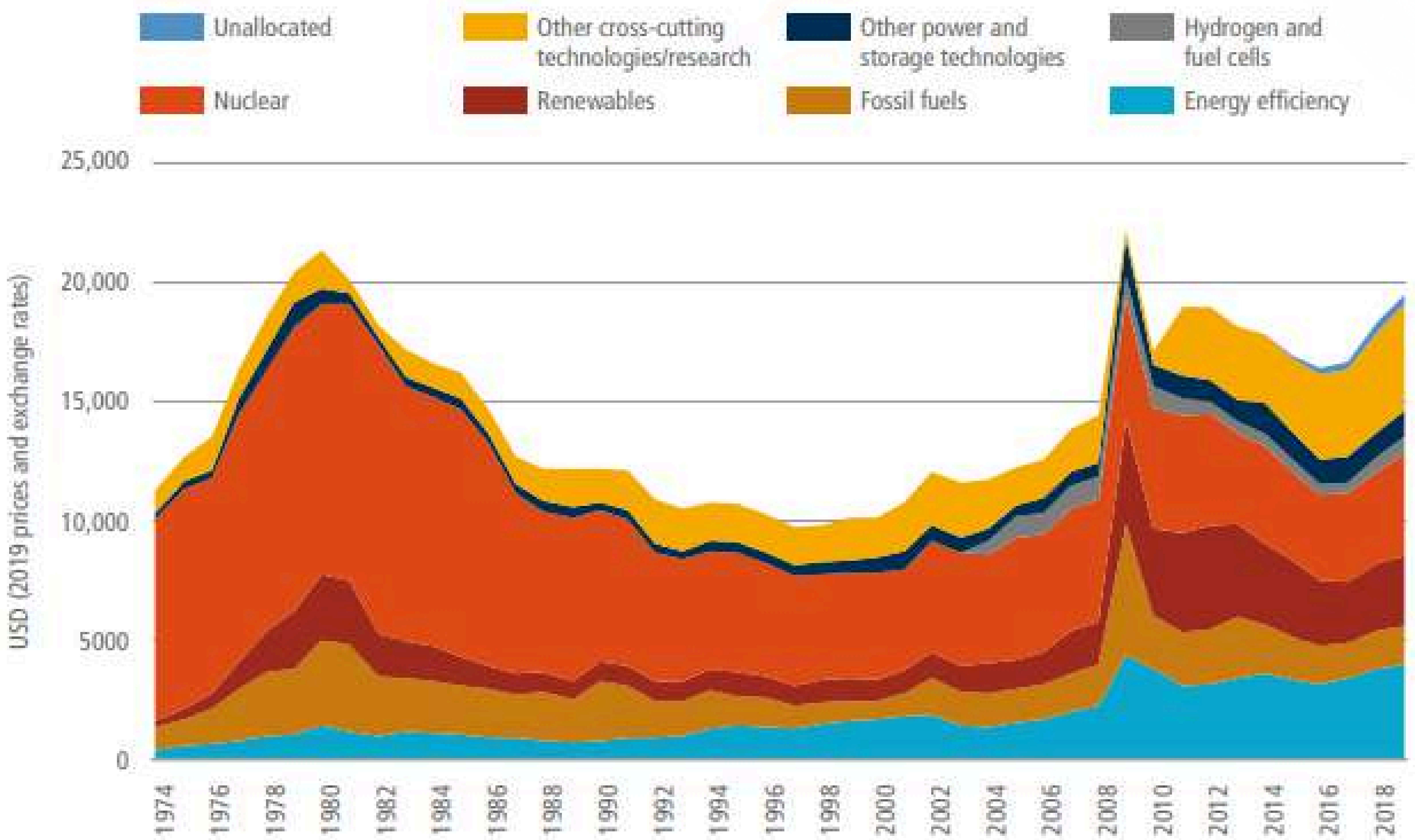
Innovation, Technology Development and Transfer

innovation to direct and organise the processes

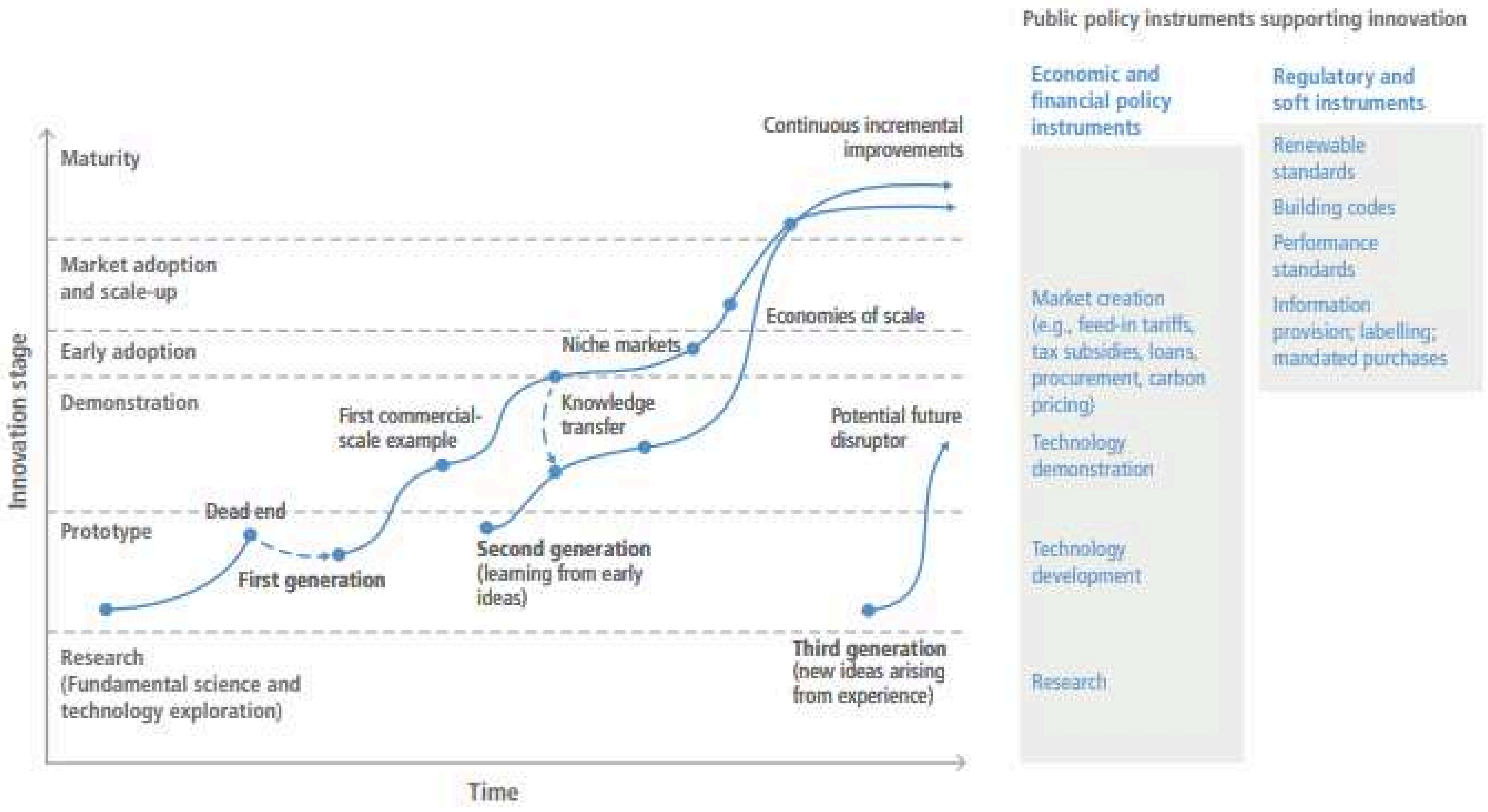
A systemic perspective on technological change

Synergy of actions

Fraction of public energy research, development and demonstration (RD&D) spending by technology over time for IEA (largely OECD) countries between 1974 and 2018



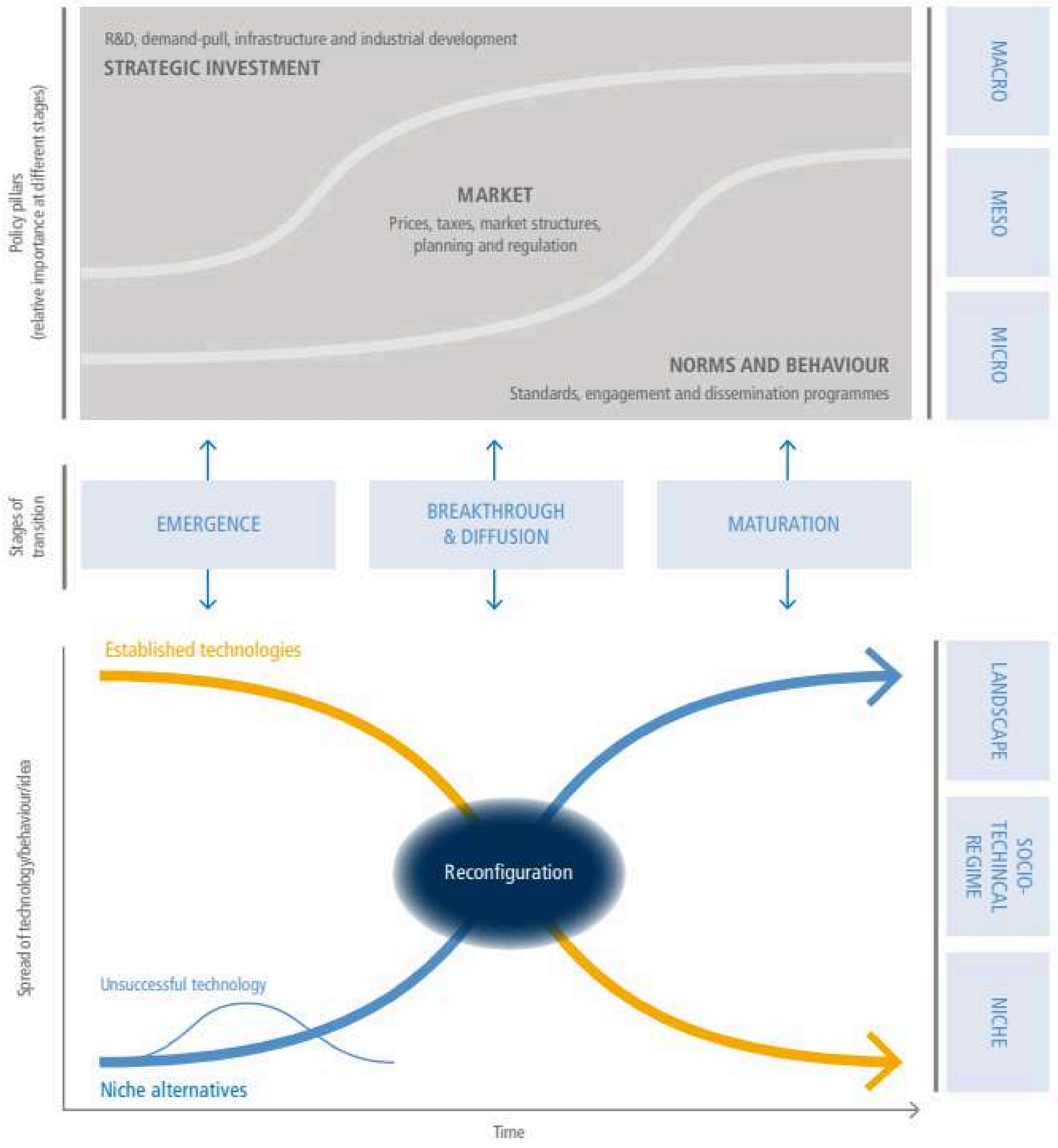
Technology innovation process and the roles of different public policy instruments



Demand-pull instruments in the regulatory instrument category, for instance, can also shape the early stages of the innovation process for several key reasons:

- Creating markets for new technologies
- Reducing risk for innovators and investors
- creating market trends
- creating scale effect
- shaping social norms

Transition dynamics: levels, policies and processes



The relative importance of different 'pillars of policy' differs according to the stage of the transition. The lower panel illustrates growth of innovations which if successful, emerge from niches into an S-shaped dynamic of exponential growth. The diffusion stage often involves new infrastructure and reconfiguration of existing market and regulatory structures. During the phase of more widespread diffusion, growth levels off to linear, then slows as the industry and market matures. The processes displace incumbent technologies/practices which decline, initially slowly, but then at an accelerating pace.

Economics

public climate financing

international cooperation on finance

Innovative financing approaches

awareness of climate risk

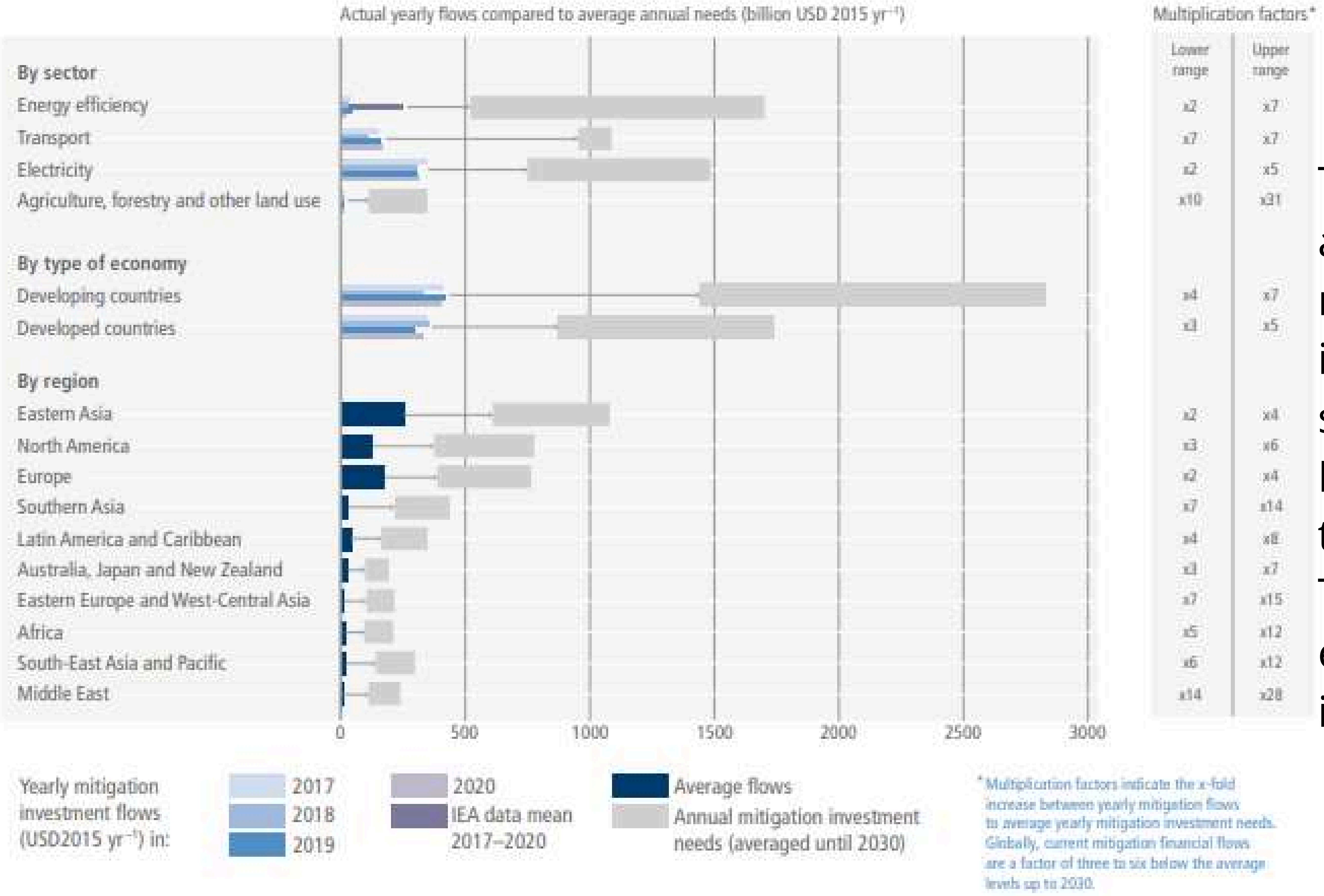
international climate finance access for vulnerable and poor countries

Carbon pricing

Removing fossil fuel subsidies

New business models (e.g., pay-as-you-go)

Breakdown of recent average (downstream) mitigation investments and model-based investment requirements for 2020–2030 (USD billion) in scenarios that likely limit warming to 2°C or lower



The chart illustrates the gap between actual investment in mitigation measures (2017-2020 average) and investment needs (2020-2030) for scenarios limiting warming to 2°C. Investments globally are currently 3-6 times too small to meet requirements. The chart indicates priorities for cost-effective investments, but does not identify sources of funding.

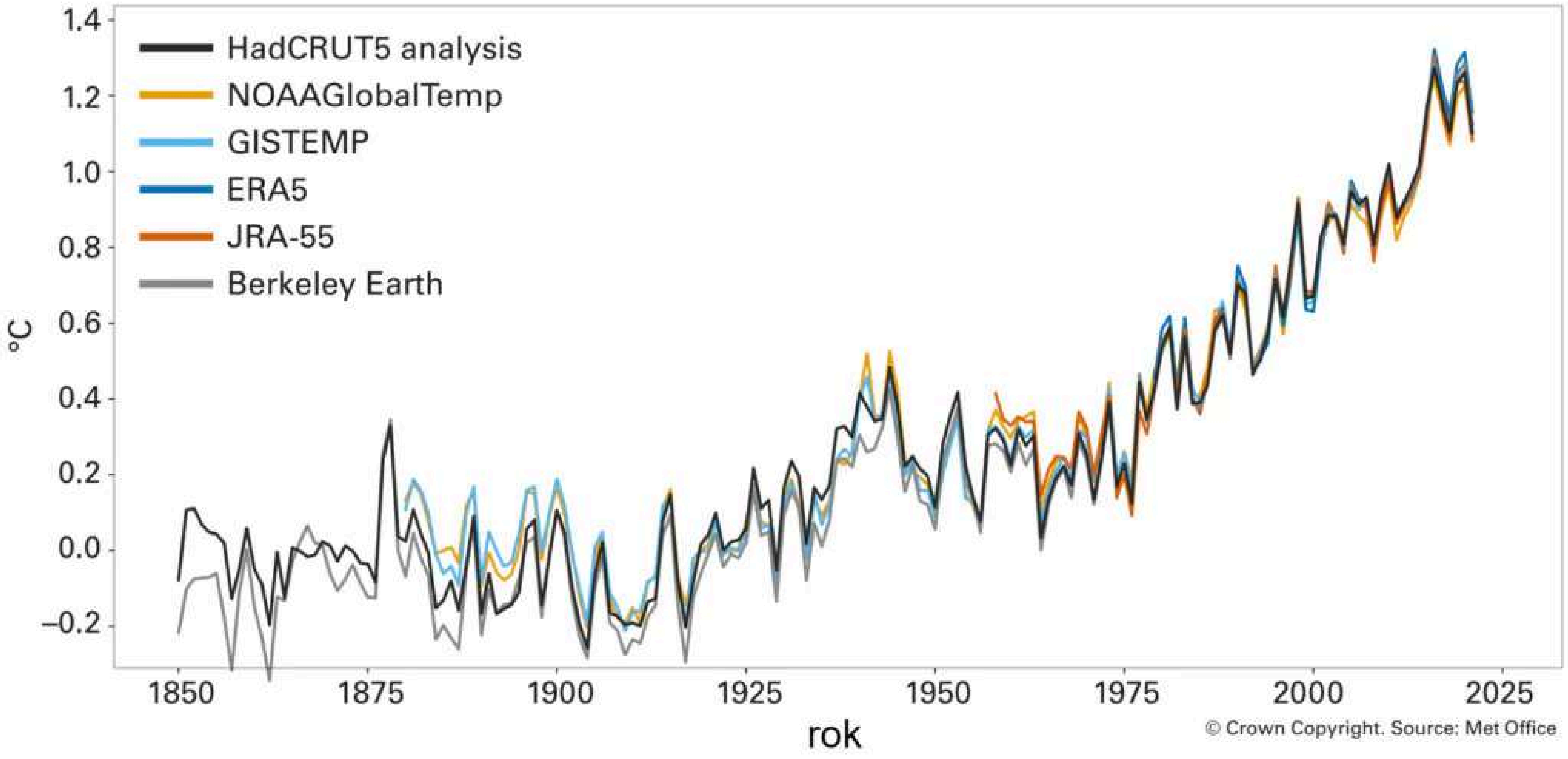
Social aspects

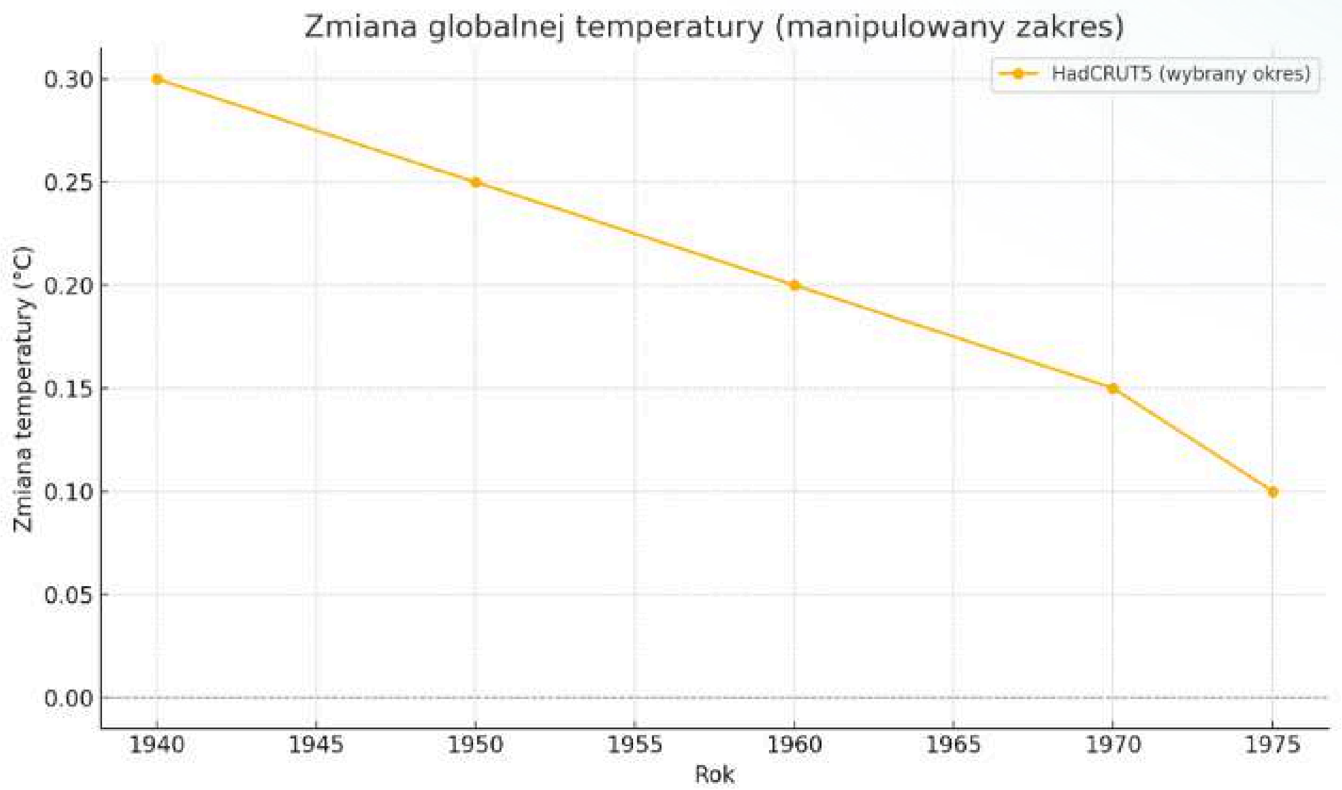
- social acceptance
- media
- demand-side
- socio-technical transitions
- Changes in consumption choices
- public support
- Social equity and justice

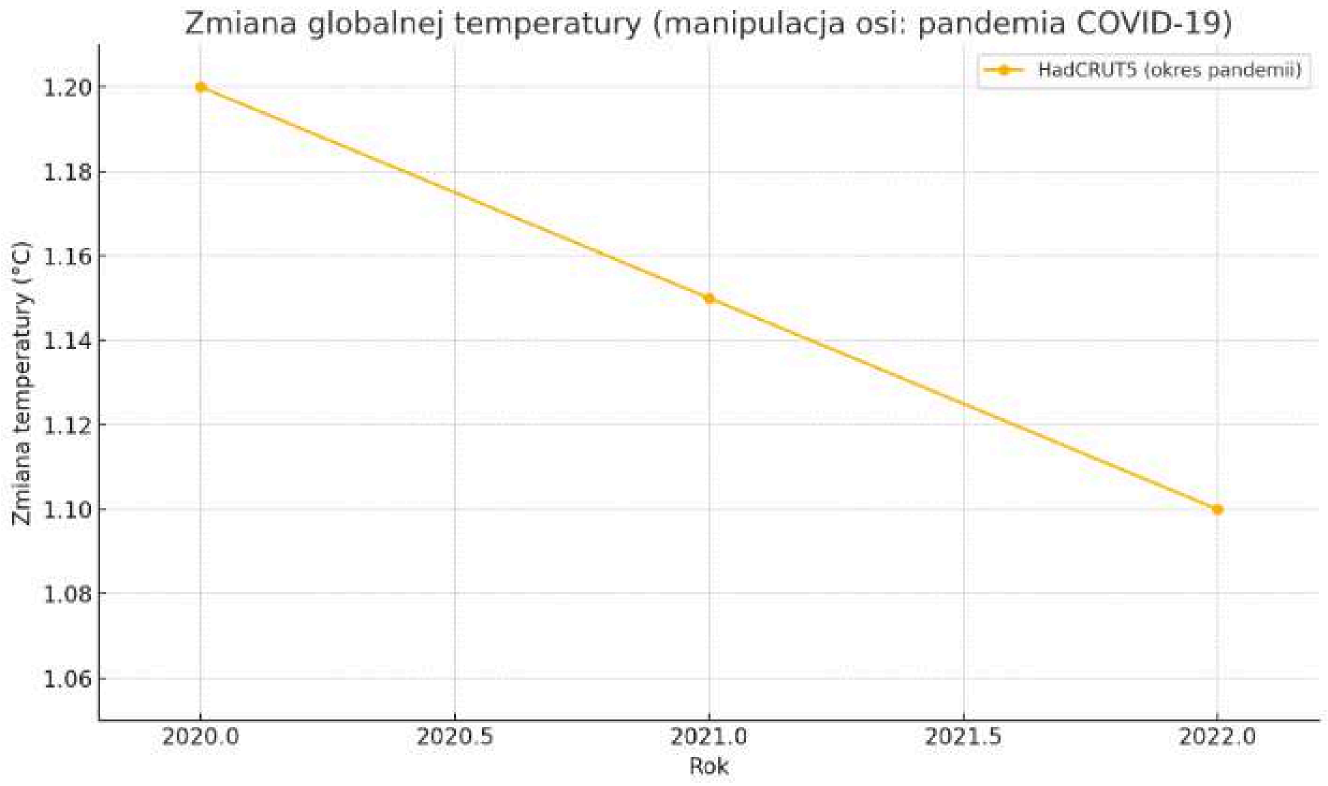
Greater contextualisation and granularity in policy approaches (understanding in wide context by society)

Media- double-edged weapon?

- **Example of climate manipualtion**







Effects of policy on GHG emissions and technology deployment

Box TS.13, Table 1 | The effects of policy on GHG emissions, drivers of emissions, and technology deployment.

Sector	Effects on emissions	Effects on immediate drivers	Effects on low-carbon technology
Energy supply (Chapter 6)	Carbon pricing, emissions standards, and technology support have led to declining emissions associated with the supply of energy.	Carbon pricing and technology support have led to improvements in the efficiency of energy conversion.	A variety of market-based instruments, especially technology-support policies have led to high diffusion rates and cost reductions for renewable energy technologies.
AFOLU (Chapter 7)	Regulation of land-use rights and practices have led to falling aggregate AFOLU-sector emissions.	Regulation of land-use rights and practices, payments for ecosystem service, and offsets, have led to decreasing rates of deforestation (*medium confidence*).	
Buildings (Chapter 9)	Regulatory standards have led to reduced emissions from new buildings.	Regulatory standards, financial support for building renovation and market-based instruments have led to improvements in building and building-system efficiencies.	Technology support and regulatory standards have led to adoption of low-carbon heating systems and high-efficiency appliances.
Transport (Chapter 10)	Vehicle standards, land-use planning, and carbon pricing have led to avoided emissions in ground transportation.	Vehicle standard, carbon pricing, and support for electrification have led to automobile efficiency improvements.	Technology support and emissions standards have increased diffusion rates and cost reductions for electric vehicles.
Industry (Chapter 11)		Carbon pricing has led to efficiency improvements in industrial facilities.	

Note: statements describe the effects of policies across those countries where policies are in place. Unless otherwise noted, all findings are of *high confidence*.

Impact of policies

Policies

Increase in **number** of mitigation policies implemented worldwide

- e.g., RD&D funding, technology support instruments → **Technologies**
- e.g., regulation, carbon pricing, voluntary agreements → **Proximate emission drivers**
- e.g., policy mixes including regulation, technology support, carbon pricing → **GHG emissions**

Technologies → Proximate emission drivers → GHG emissions

Technologies

Increased **investments in and diffusion** of low-carbon technologies, especially for wind and solar energy, electric vehicles, energy-efficient appliances and low-carbon heating.

Decline in **costs** of low-carbon technologies, e.g., solar PV, battery technology.

Proximate emission drivers

Reductions in **energy intensity** globally and in all but one world region.

Reductions in **carbon intensity** in Europe, Eurasia, the Middle East, North America; and globally.

Reductions in the **rate of deforestation** in several countries, especially developing countries.

GHG emissions

Reductions in average **annual GHG emissions growth** (2.3% in 2000–10; 1.3% in 2010–18). Sustained **emissions reductions** in 24 countries, relative decoupling in 58 countries by 2015.

Estimates of avoided CO_2-eq emissions attributable to policies, compared to no-policy		
5.9 Gt yr^{-1}	in 2016; 38 $GtCO_2$-eq cumulatively since 1999	Eskander and Fankhauser (2020)
1.3 Gt yr^{-1}	in Annex B country as a result of the Kyoto Protocol (or −7% yr^{-1} on average over 2005–12)	Maamoun (2019)
1.8–3 Gt yr^{-1}	as the result of various policy instruments with demonstrable impact. Includes at least 500 $MtCO_2$-eq yr^{-1} from energy efficiency programmes; and 1.3 $GtCO_2$-eq yr^{-1} from renewables diffusion	Aggregation of multiple sources

Contextual analyses and comparative indications		
4–5 Gt yr^{-1}	Cumulative impact of policies on 2019 emissions, from emission trends reported in Chapter 2, assuming incremental policy-related avoided emissions of 0.1 $GtCO_2$-eq, annually from 2010	Chapter 1, Section 1.4.8
3.81 Gt yr^{-1}	Projected by Annex I countries for 2020 in their BR4s, from 2811 Policies and Measures, impacts reported for 38% of them	UNFCCC (2020)

Quiz

1. What is the largest CO_2 source in energy sector?
2. Which country emitted the most GHG in 2023?
3. Where was signed the Just Transition Declaration?
4. How large is finacial gap for scenarios limiting warming to 2°C?
5. How policies can shape the early stages of the innovation process?
6. How policy implementation can affect immediate drivers
7. list three Implementation and enabling conditions

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