

# Mitigation and adaptation progress and gaps in the context of the LTGG

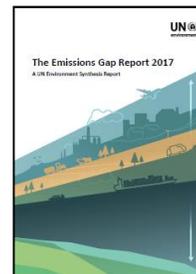
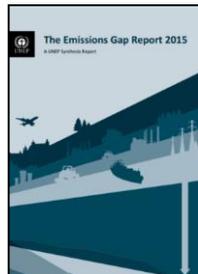
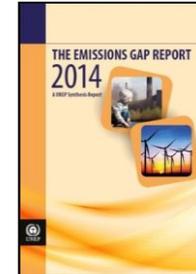
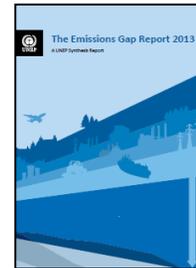
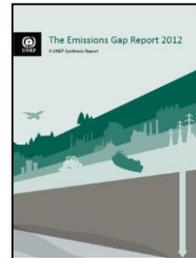
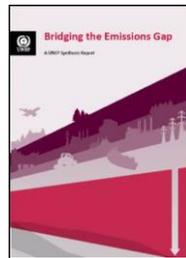
Findings from the UNEP Emissions and Adaptation Gap Reports 2020

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environment  
programme



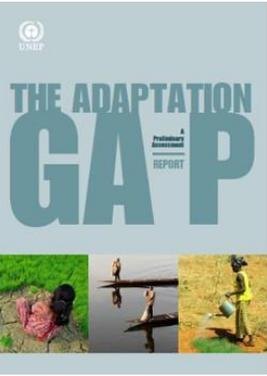
# Emissions Gap Reports

Annual science-based assessment reports since 2010

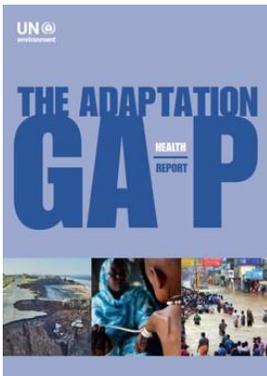
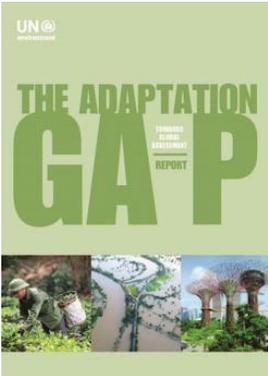
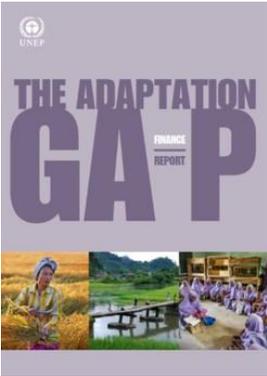


# Adaptation Gap Reports

Science-based assessment reports since 2014



LIMA COP20 CMP10



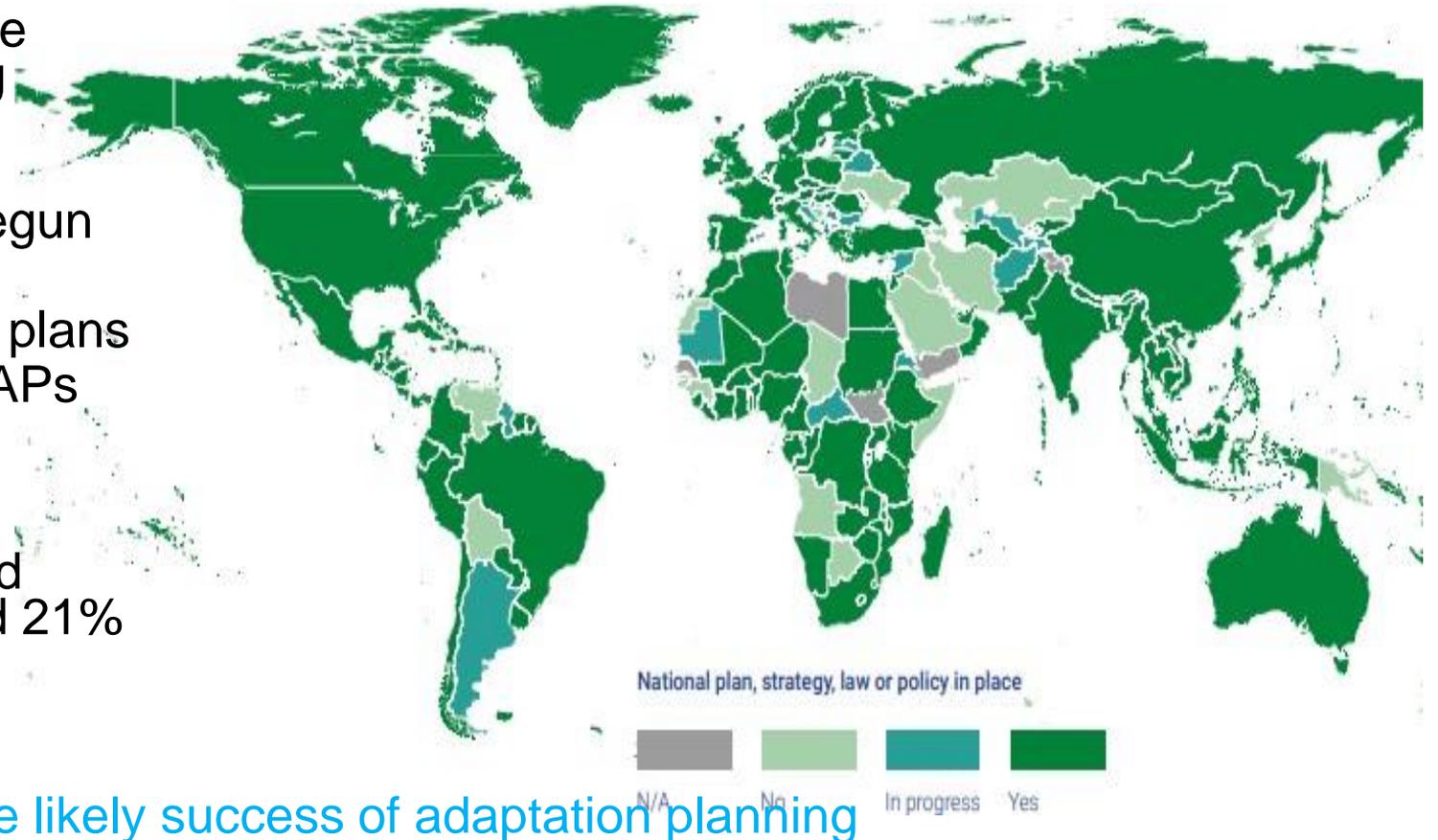
COP24 - KATOWICE 2018 KONFERENCJA NARODÓW ZJEDNOCZONYCH W SPRAWIE ZMIAN KLIMATU

CLIMATE AMBITION SUMMIT 2020



# Significant progress in adaptation planning since 2000

- 72% of countries have at least one national-level adaptation planning instrument in place
- 125 developing countries have begun the process of formulating and implementing national adaptation plans (NAPs), of which 20 have their NAPs completed
- 58% of countries have established sectoral planning instruments and 21% subnational planning instruments

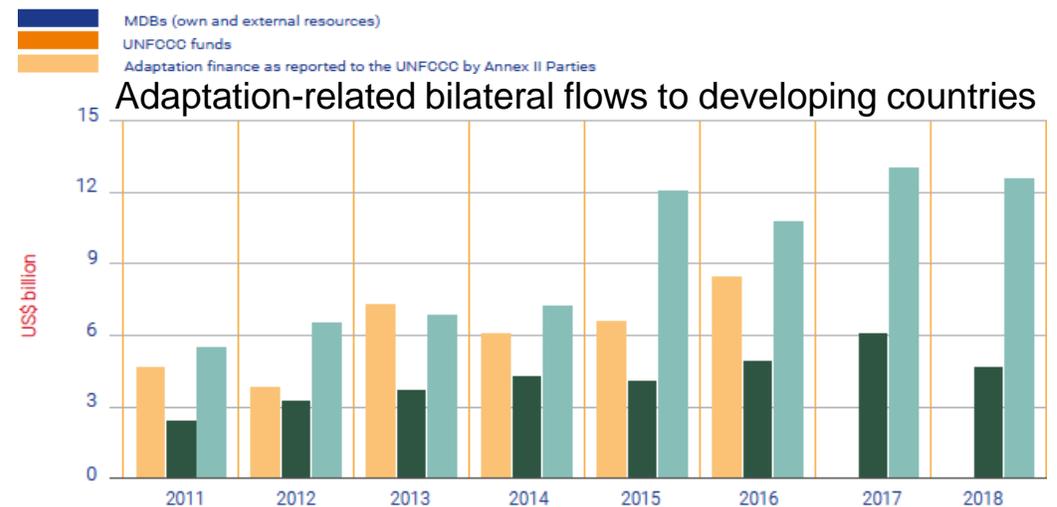
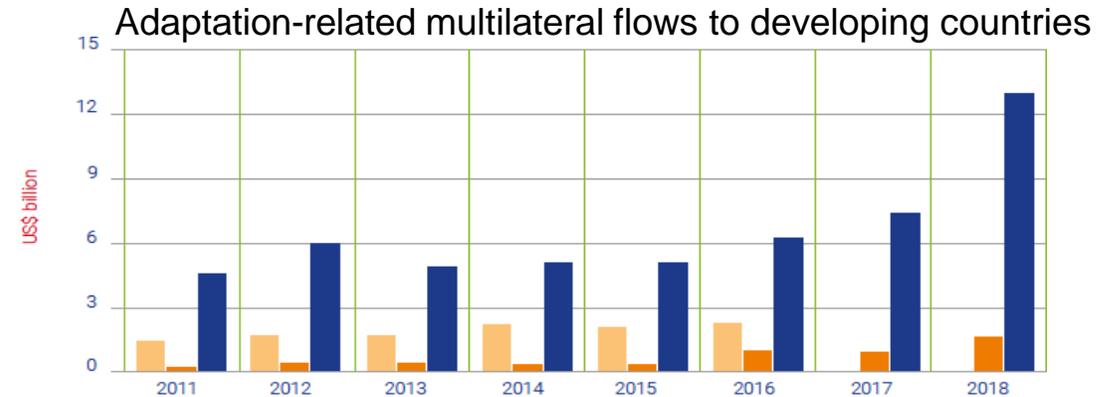


However, mixed quality and hence likely success of adaptation planning

# Adaptation finance is growing, but the gap is not closing

- Current annual adaptation costs in developing countries are estimated at **US\$70 billion** and are expected to rise to **US\$140-300 billion** by 2030 and to **US\$280-500 billion** by 2050
- Total tracked adaptation finance is currently **US\$30 billion** - and has remained around 5% of total climate finance since 2015

But the adaptation finance gap does not seem to be closing



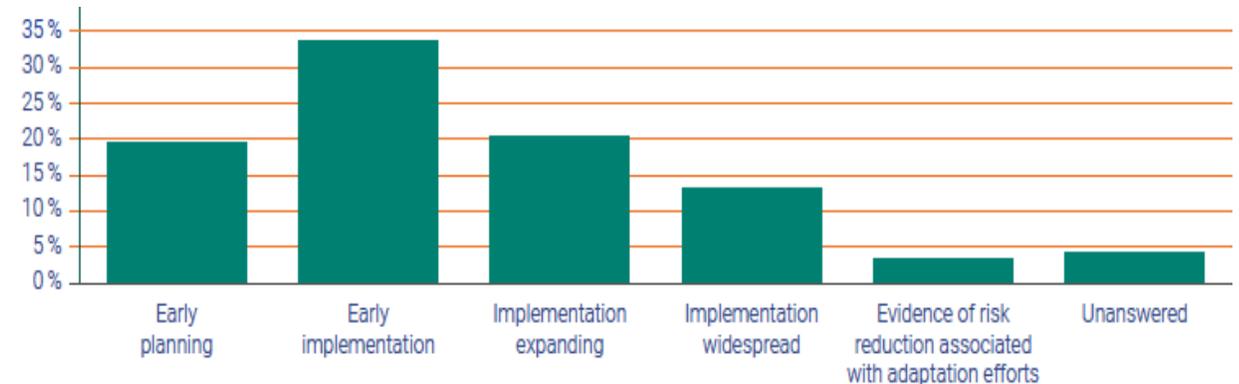
# Implementation of adaptation actions is growing, but there is limited evidence of climate risk reduction

- Since 2006, UNFCCC climate funds have financed close to 400 adaptation projects, 50% of which are being implemented in LDCs and 15% in SIDS
- Projects are getting bigger, suggesting that adaptation actions are becoming more comprehensive and potentially more transformative
- However, most projects are in early implementation stages with only 3% of projects having reached stages of climate risk reduction
- Evidence of adaptation outcomes, such as reduced vulnerability, is still rare to find

Number and volume of primary adaptation projects from UNFCCC climate funds



Stage of implementation of adaptation actions documented in scientific articles



# In summary

- There is robust evidence that progress has been made on greater engagement in national-level adaptation worldwide over the last decade, but further ambition is needed
- Despite encouraging trends, the scale of adaptation progress is insufficient and tracking progress remains a challenge:
  - Real risk that adaptation costs will increase faster than adaptation finance
  - Limited indications of current and future levels of risk reduction in connection with trends in adaptation planning, finance and implementation

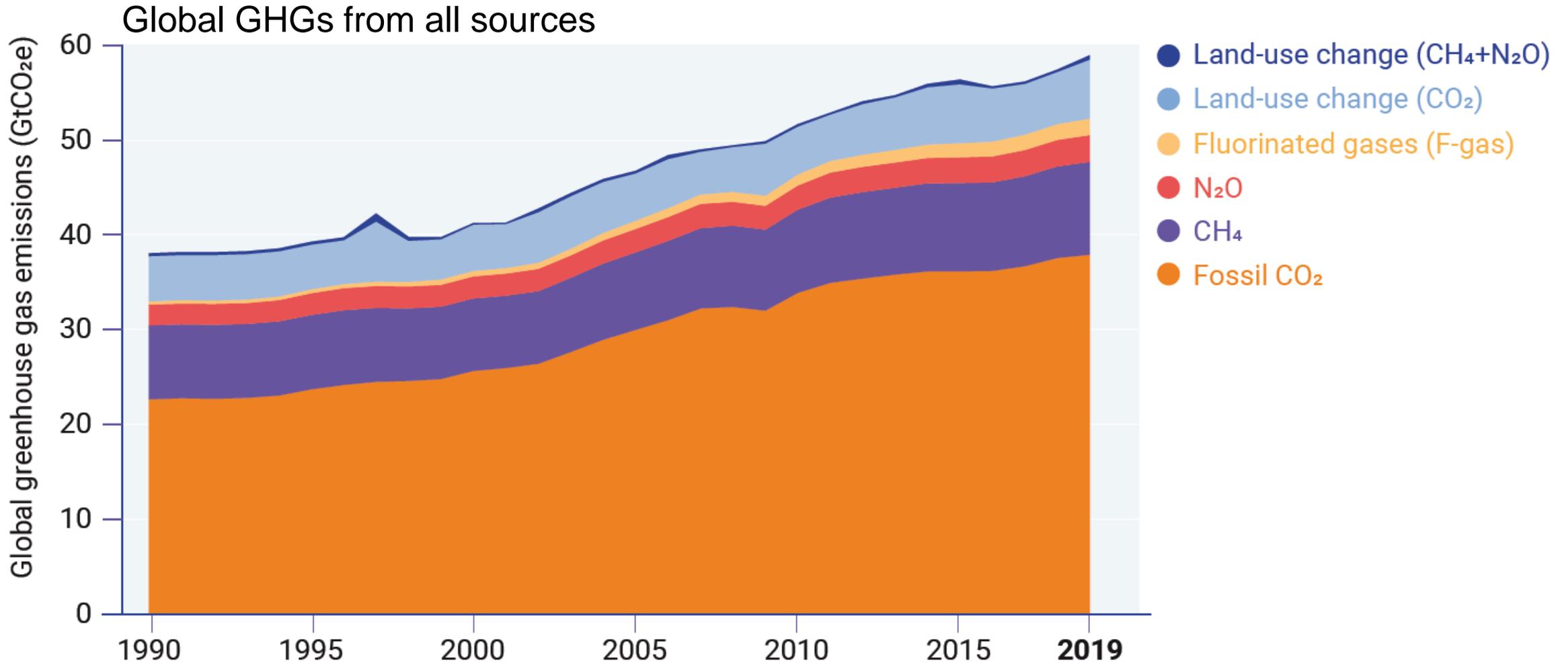


# Emissions Gap Report 2020: main questions

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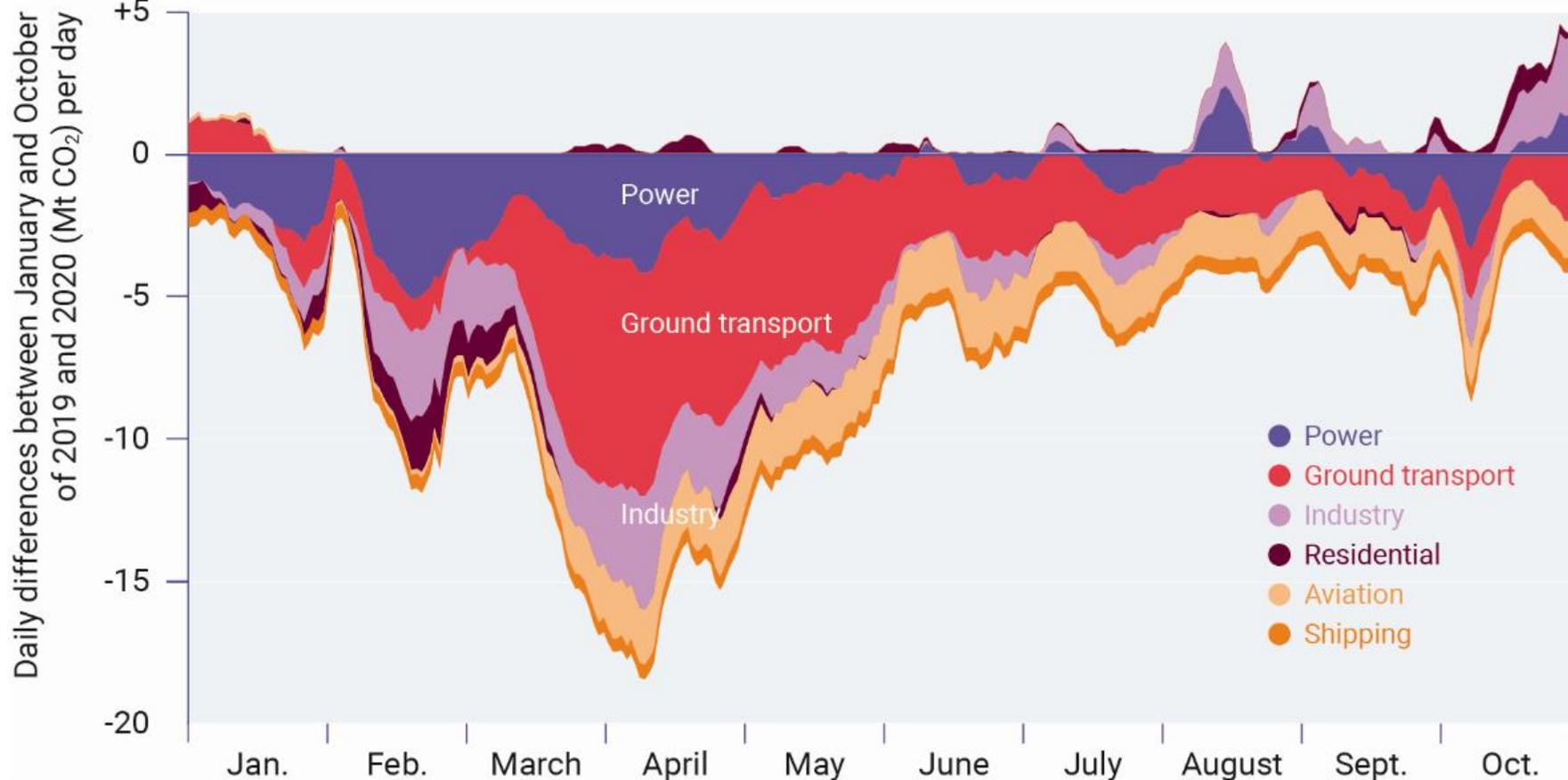
- What is the trend in global GHG emissions?
- Are countries on track to meet their Cancun Pledges and NDC targets?
- Will this be sufficient to stay well below 2°C and pursue 1.5°C?
- What do preliminary studies tell us about the implications of the COVID-19 pandemic and emerging responses?
- Can the 2030 Gap be bridged - and how?

# Global greenhouse gas emissions have risen 1.4 per cent per year in the last decade, reaching a record high of 59.1 GtCO<sub>2</sub>e in 2019



# CO<sub>2</sub> emissions decreased about 7 per cent in 2020 due to COVID-19 lockdowns, but atmospheric concentrations of GHGs continued to rise

Reduction in 2020 emissions relative to 2019 levels due to COVID-19 lockdowns



- The biggest changes have occurred in transport
- Power, industry and residential emissions comparable with pre-COVID-19 levels since August

# Progress of G20 members toward their 2020 Cancun Pledges and their NDC commitments

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- Collectively, the G20 members are projected to **overachieve** their 2020 Cancun Pledges, but these are not sufficiently ambitious to establish a path that will get the world to 2030 emission levels consistent with the well below 2°C and 1.5°C goal of the Paris Agreement
- Collectively, G20 members are **not** projected to achieve their nationally determined contributions for 2030 based on current policies\*

\* Based on pre-COVID-19 studies

# There is encouragement in the growing number of countries that are committing to net-zero emissions goals by around mid-century

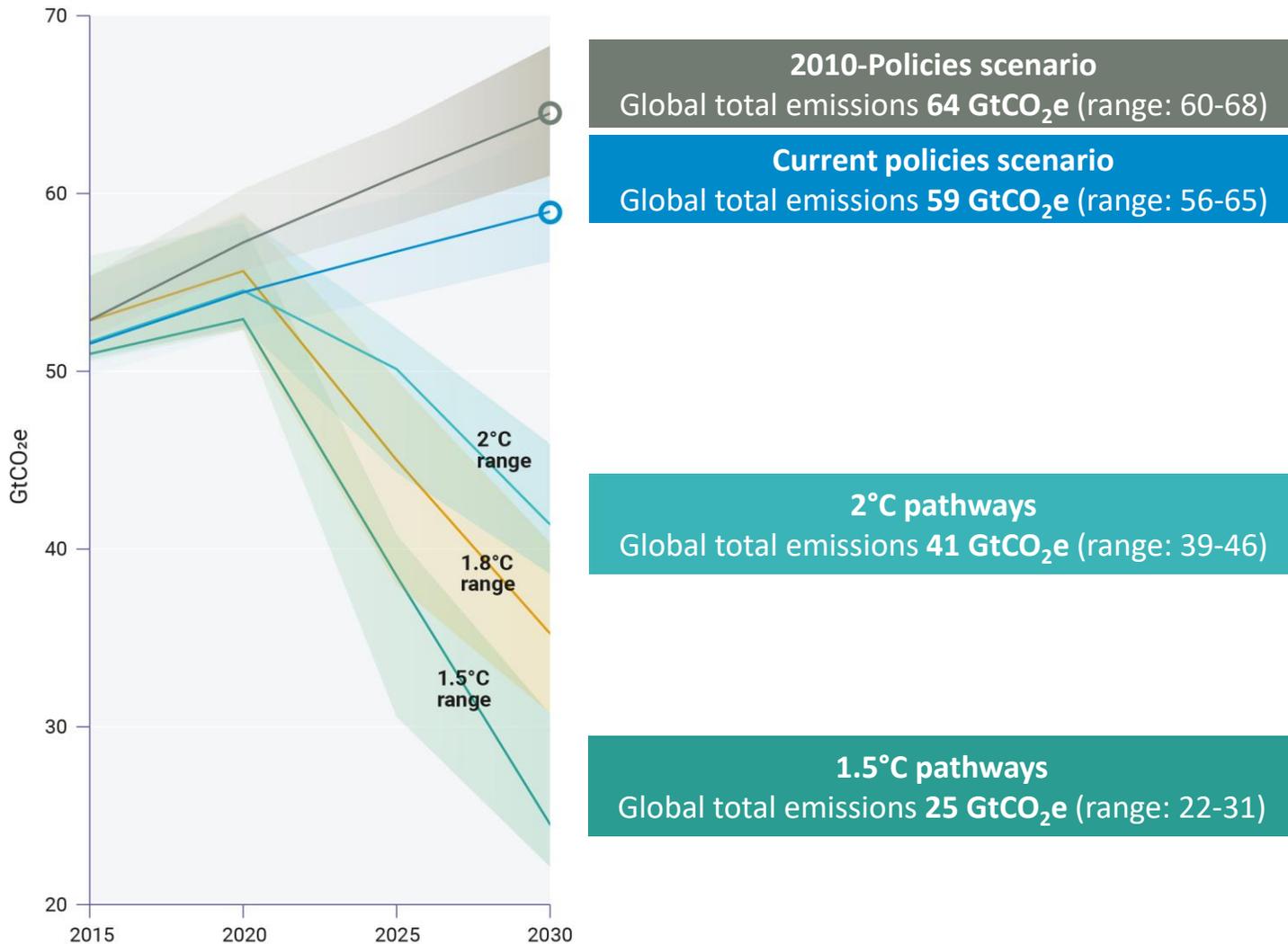
- 127 countries covering around 63% of global GHG emissions and including more than half the G20 members have net-zero goals that are formally adopted, announced or under consideration

## However:

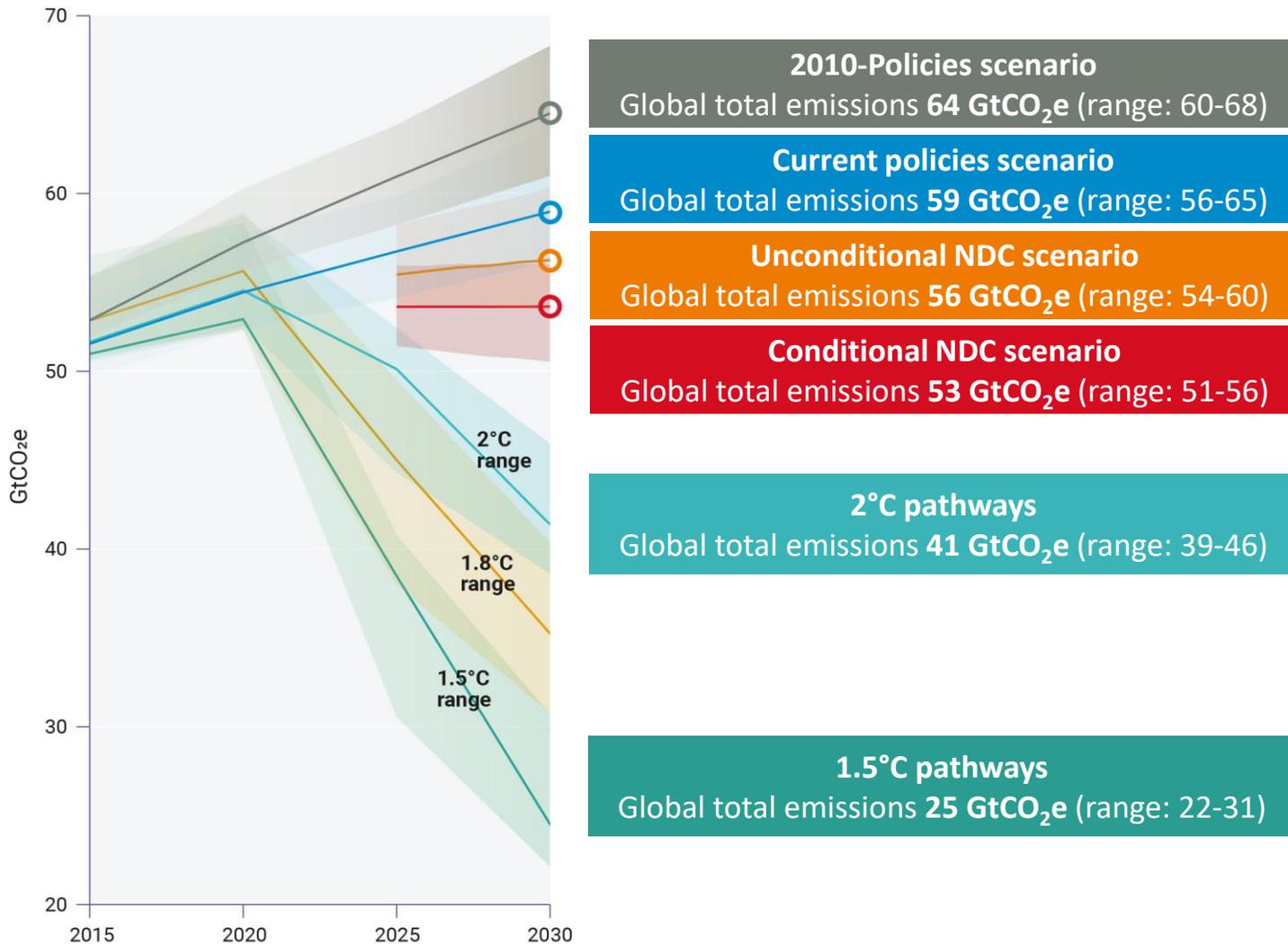
- There is a vast discrepancy between the ambitiousness of these goals, current emission trends and the inadequate level of ambition in the NDCs for 2030
- To remain feasible and credible, it is imperative that the net-zero goals are urgently translated into strong near-term policies and action, and are reflected in the NDCs

Will be a focus of the Emissions Gap Report 2021

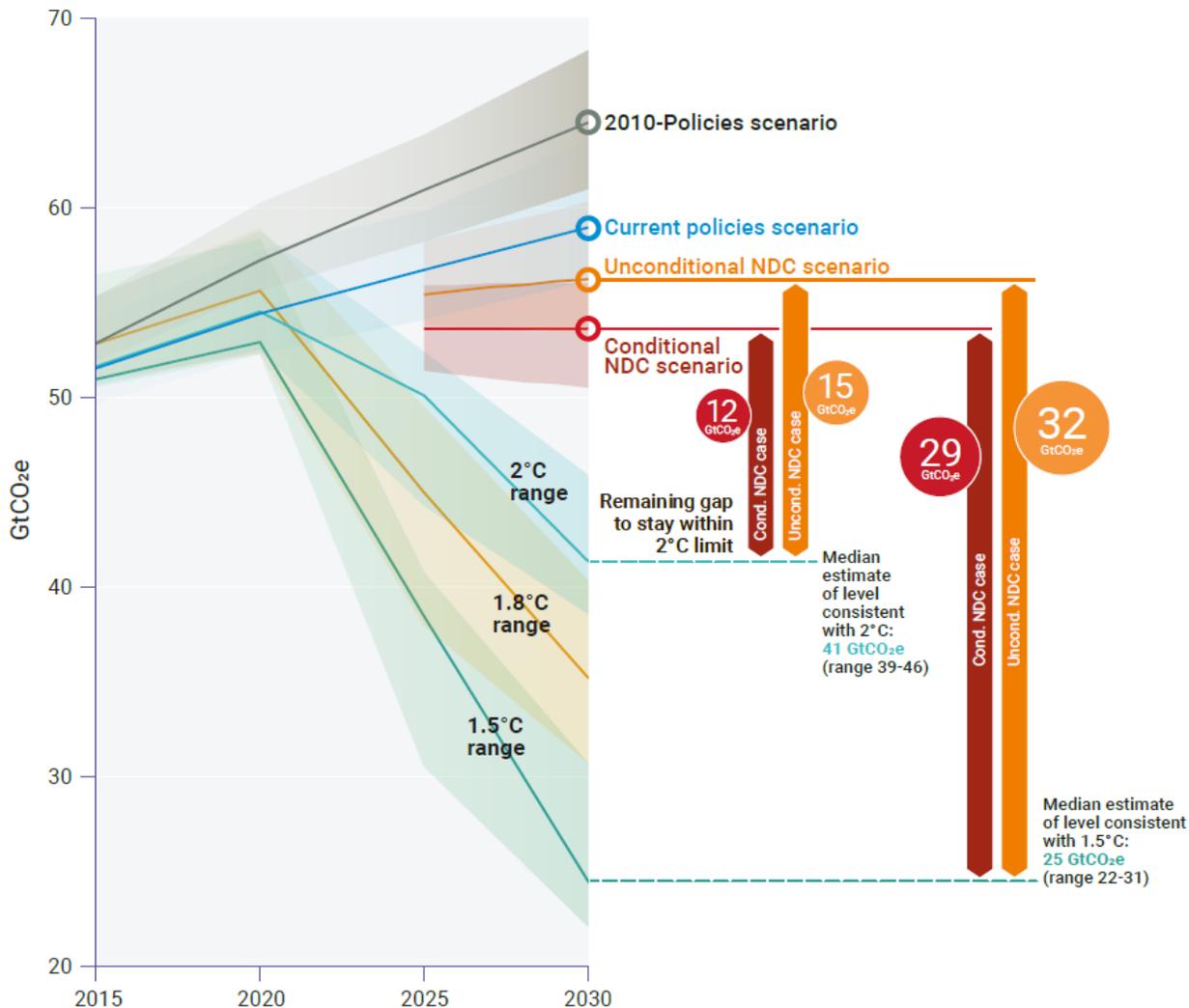
# NDC contributions and the emissions gap in 2030



# NDC contributions and the emissions gap in 2030



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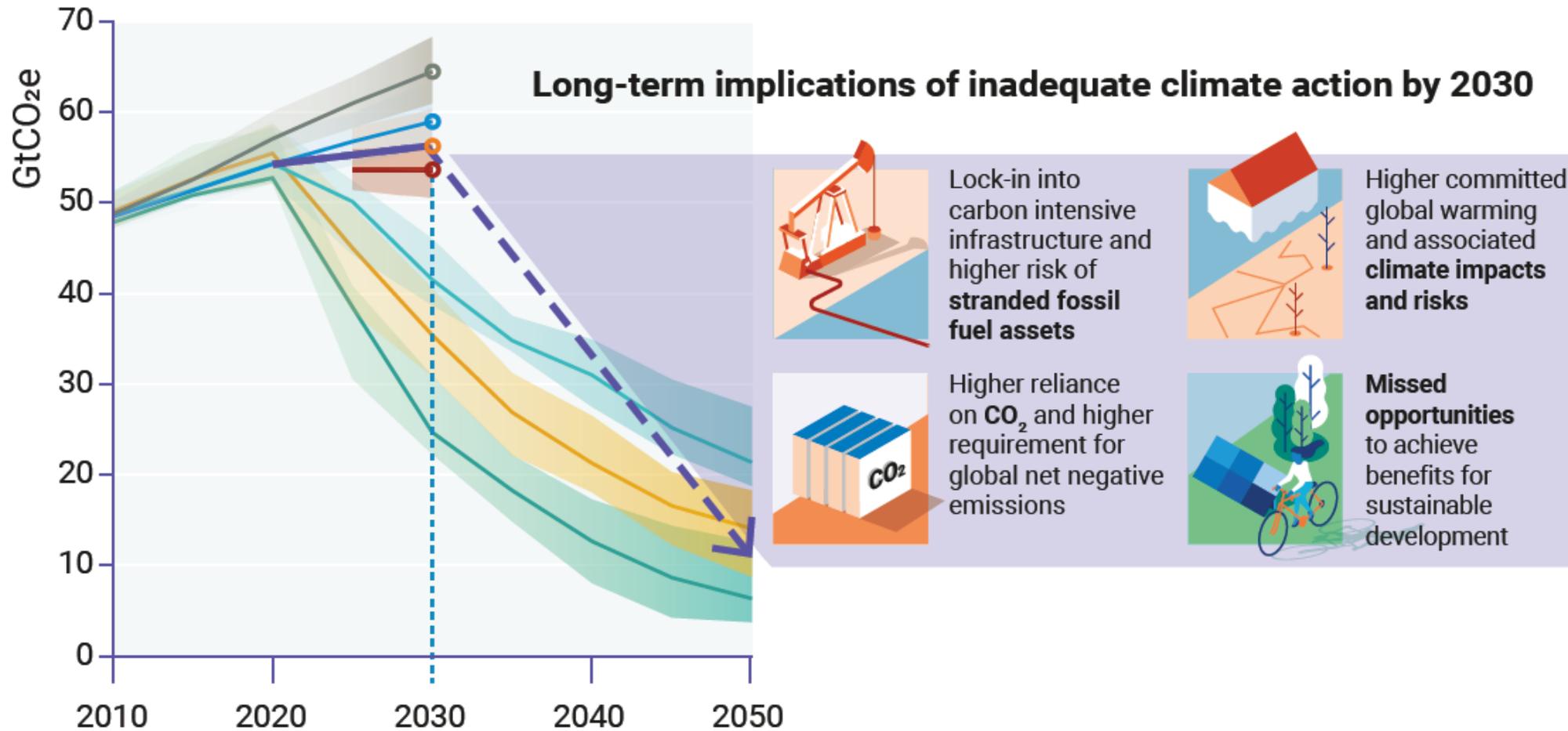
Emissions under current policies need to be reduced by more than 25% and 55% respectively to be consistent with the well below 2°C and 1.5°C goal

Full implementation of unconditional NDCs reduces emissions by 4-5%

If conditional NDCs are also fully implemented, emissions are reduced by around 9%

Bridging the emissions gap requires that countries increase their NDC ambitions threefold to limit warming to 2°C and more than fivefold for the 1.5°C goal

# Postponing ambitious climate action will make it impossible to limit global warming to 1.5°C



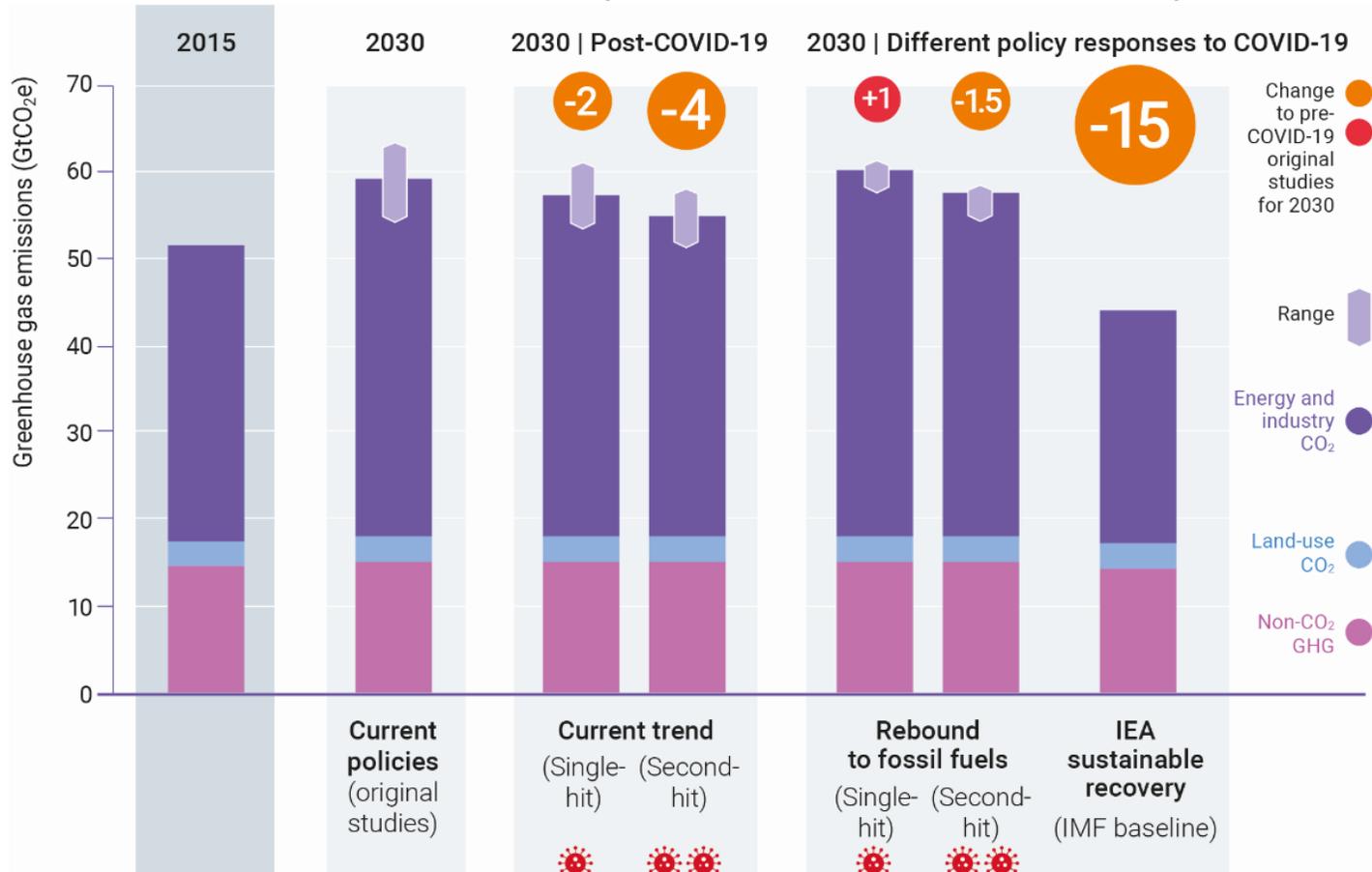
# Current NDCs lead to a temperature increase of at least 3°C by 2100

## Announced net-zero emissions goals could reduce this by about 0.5°C

- **Current policies** are consistent with limiting global warming to **3.5°C** by 2100 (range: 3.4–3.9°C, 66% probability)
- Full implementation of **unconditional NDCs** is consistent with staying below **3.2°C** (range: 3.0–3.5°C, 66% probability)
- Additional implementation of **conditional NDCs lowers this by about 0.2°C**
- Preliminary estimates suggest that the full implementation of all announced **net-zero emission goals** could limit global warming to **2.5–2.6°C** (66% probability), which is 0.6–0.7°C lower than the global warming estimate for current unconditional NDCs.

# The COVID-19 crisis will only contribute significantly to 2030 emissions reductions if the economic recovery incorporates strong decarbonisation

Global total GHG emissions by 2030 under various 'what if' post-COVID-19 scenarios



- Future global GHG emissions depend critically on the extent to which recovery measures are low carbon
- Effects on global GHG emissions in 2030 under explorative scenarios range from +1 GtCO<sub>2</sub>e to -15 GtCO<sub>2</sub>e
- A low carbon recovery can surpass NDC commitments and bring 2030 emissions within the range consistent limiting global warming to below 2°C

# So far, the opening for using fiscal rescue and recovery measures to accelerate a low carbon transition has largely been missed



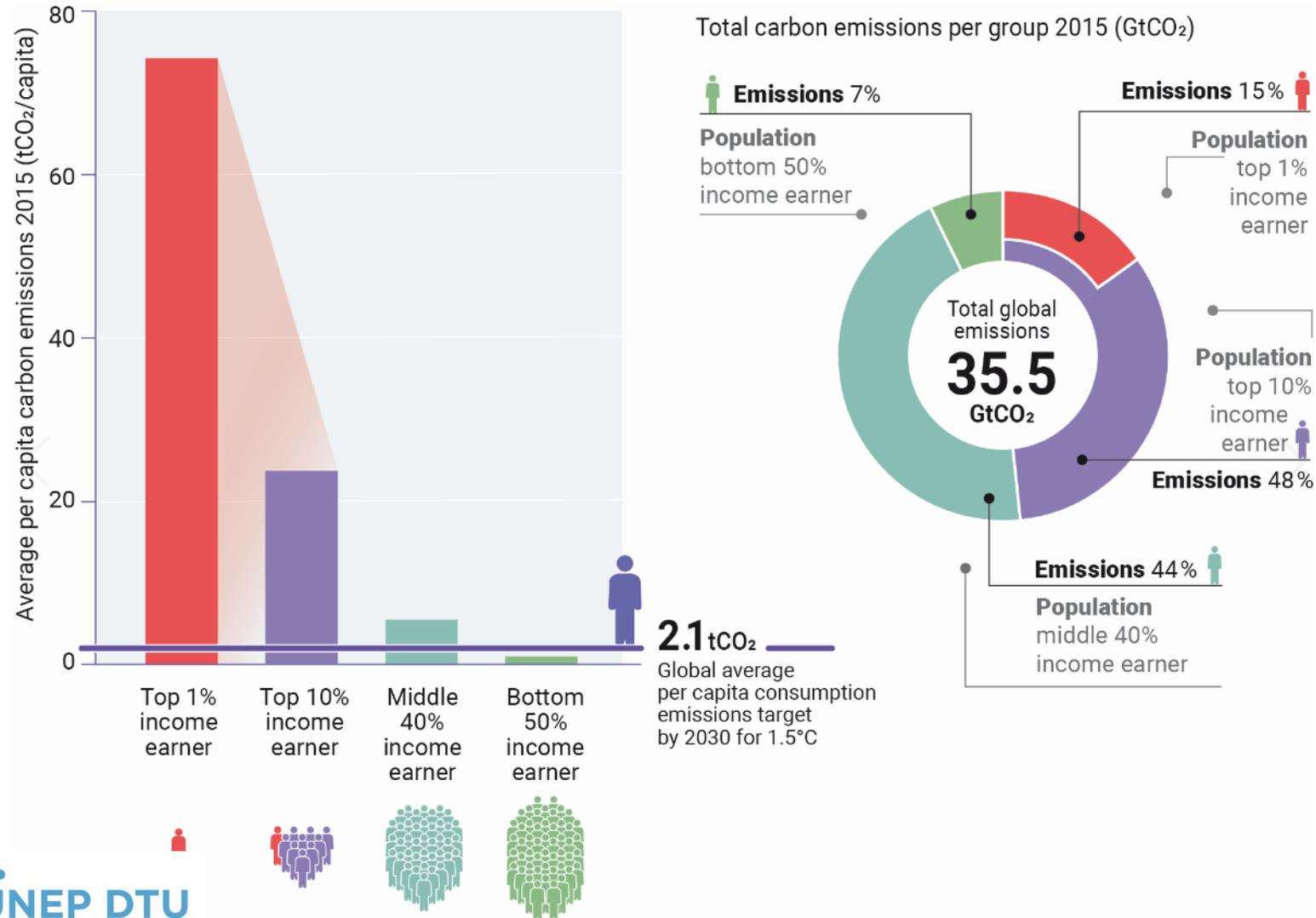
- Fiscal responses to the COVID-19 pandemic are unprecedented in scale, amounting to around **US\$12 trillion**, or 12% of global GDP, by September 2020
- Most countries bring forward measures and packages **supporting a high-carbon status quo of their economies** – or even fostering new high-carbon investments
- Few G20 members dedicate larger shares of their packages explicitly to low-carbon measures
- It is not too late to seize future opportunities, without which achieving the Paris Agreement goals is likely to slip further out of reach

# Lifestyle changes are an essential to bridge the gap: around two thirds of global emissions are linked private household consumption

- Governments, citizens and civil society all play major - and interdependent - roles in bringing about lifestyle changes
- Mobility, residential and food are the most important areas of lifestyle emissions: each contributes close to 20% to lifestyle emissions
- Examples of personal emission reductions include:
  - ✓ foregoing one long-haul return flight reduces annual personal emissions by 1.9 tCO<sub>2</sub>e per capita
  - ✓ use of renewable electricity by households could reduce emissions by about 1.5 tCO<sub>2</sub>e per capita per year for those on higher incomes
  - ✓ moving to a vegetarian diet could reduce emissions by an average of 0.5 tCO<sub>2</sub>e per year



# The emissions of the richest 1% of the global population account for more than twice the combined share of the poorest 50%



# Emissions Gap Report 2020: answers to the main questions

- What is the trend in global GHG emissions?
  - Global emissions continue to rise and show no signs of peaking
- Are countries on track to meet their Cancun Pledges and NDC targets?
  - Collectively countries are on track to meet their Cancun pledges, but these are not sufficiently ambitious to establish a path that will get the world to 2030 emission levels consistent with the well below 2°C and 1.5°C goal
  - Collectively, G20 members are **not** on track to meet their 2030 NDC commitments
- What will the current NDCs contribute?
  - Emission levels resulting from NDCs are 3 to 6 GtCO<sub>2</sub>e/yr lower than the current policy trajectory in 2030, but the remaining Gap is in the order of 12 to 15 GtCO<sub>2</sub>e/yr compared with 2°C scenarios and 29 to 32 GtCO<sub>2</sub>e/yr compared with 1.5°C
- Will this be sufficient to stay well below 2°C and pursue 1.5°C?
  - **No** - without enhanced ambition the likely global average temperature increase will be at least 3.0°C by the end of the century
  - Postponing ambitious climate action will make it impossible to limit global warming to 1.5°C

# Emissions Gap Report 2020: answers to the main questions

- What do preliminary studies tell us about the implications of the COVID-19 pandemic and emerging responses? And can the gap be bridged?
  - CO<sub>2</sub> emissions could decrease by 7 per cent in 2020 due to COVID-19 lockdowns. However, this only translates into a 0.01°C reduction of global warming by 2050, and atmospheric concentrations of GHGs continue to rise
  - Global emissions are only projected to be significantly reduced if fiscal rescue and recovery measures are used as an opening to accelerate a low carbon transition. So far, this opening has largely been missed
  - There is still time to change this with the many outstanding decisions around the COVID-19 economic recovery
  - For international shipping and aviation, progress on policies, efficiency and fuels will be important
  - Sustained emission reductions require lifestyle changes. There are many options for reducing personal emissions but the feasibility of these will depend critically on the incentives provided through government policies, legislation and investments

# Thank you



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