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Emissions Gap Report 2018

Unless NDC ambitions are increased before 2030, exceeding the 1.5°C goal is unavoidable. Now more than ever, unprecedented and urgent action is required by all nations

IPCC Side Event ♦ COP 24 ♦ 5 December 2018

UN Environment Emissions Gap Reports

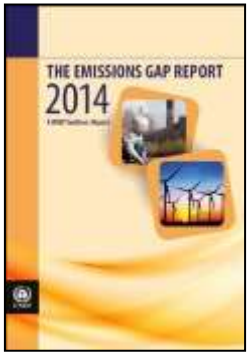
COP16 CMP6 México2010

COP17/CMP7 UNITED NATIONS DURBAN, SOUTH AFRICA

DOHA 2012 UN CLIMATE CHANGE CONFERENCE COP18·CMP8

COP19/CMP9 UNITED NATIONS WARSAW 2013

LIMA COP20·CMP10

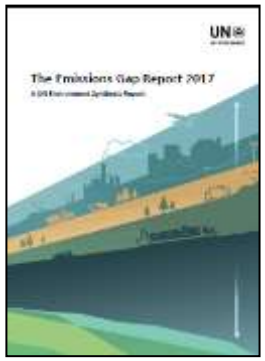


PARIS 2015

MARRAKECH COP22|2016|CMP12

COP23 FIJI UN CLIMATE CHANGE CONFERENCE BONN 2017

COP24·KATOWICE 2018 UNITED NATIONS CLIMATE CHANGE CONFERENCE



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Political context of the 2018 report

- 2018: Talanoa Dialogue
- Sept 2018: Global Climate Action Summit
- Oct 2018: IPCC Special Report on Global Warming of 1.5°C
- **Nov 2018: Emissions Gap Report**
- Dec 2018: UN Climate Conference Katowice
- Sept 2019: UN Climate Summit New York
- By 2020: Communication of new or updated Nationally Determined Contributions (NDCs)

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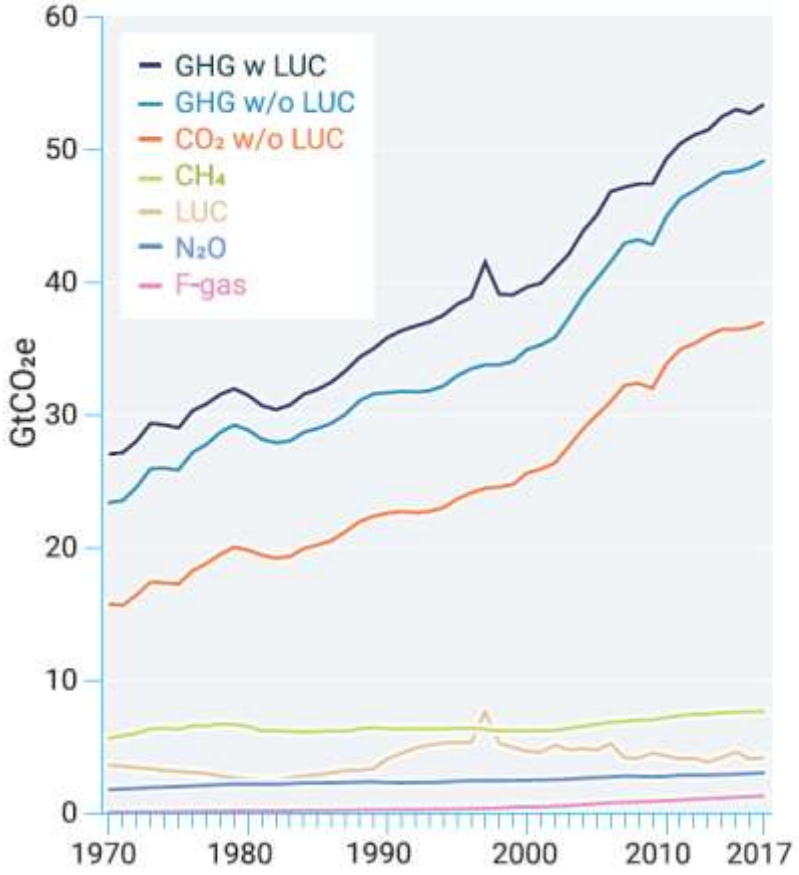
Emissions Gap Report 2018 - Key questions

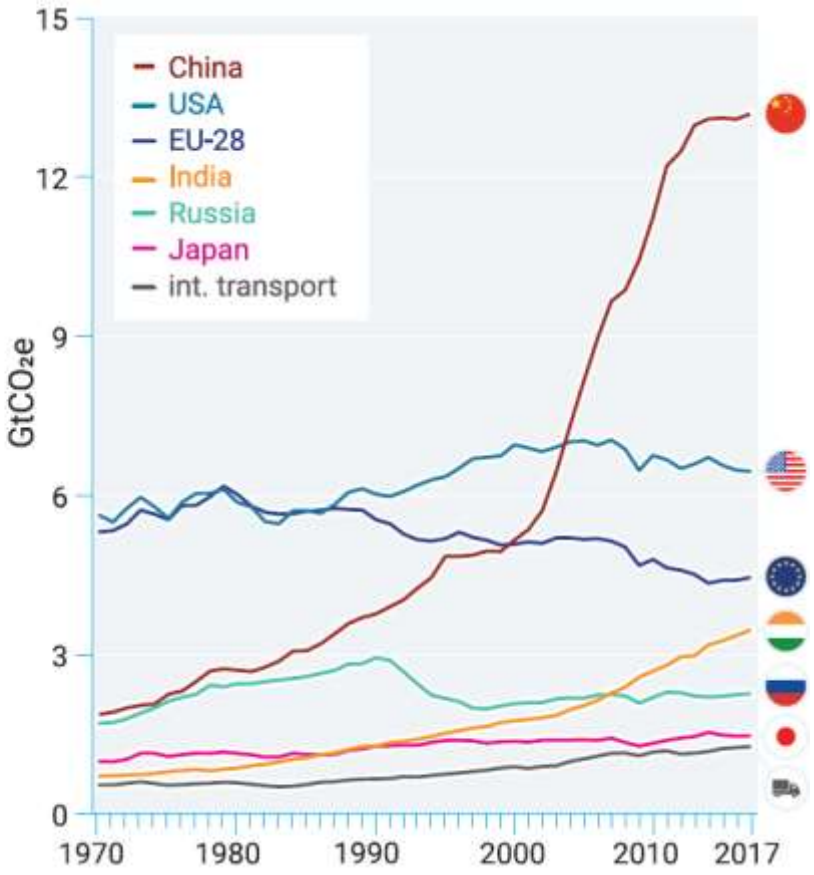
- Where are we and what is the pre-2020 contribution?
- What will the NDCs contribute?
- Will this be sufficient to stay well below 2°C and pursue 1.5°C?
- Can the 2030 Gap be bridged - and how?

Trends in global GHG emissions

- Global greenhouse gas emissions show no signs of peaking.
- Global CO_2 emissions from energy and industry increased in 2017, following a three-year period of stabilization.
- Total annual greenhouse gases emissions, including from land-use change, reached a record high of 53.5 $GtCO_2e$ in 2017, an increase of 0.7 $GtCO_2e$ compared with 2016.
- In contrast, global GHG emissions in 2030 need to be approximately 25 percent and 55 percent lower than in 2017 to put the world on a least-cost pathway to limiting global warming to 2^oC and 1.5^oC respectively.

Global greenhouse gas emission levels for majors emitters and per type of gas





Progress towards achieving the Cancun and NDC pledges for G20 members

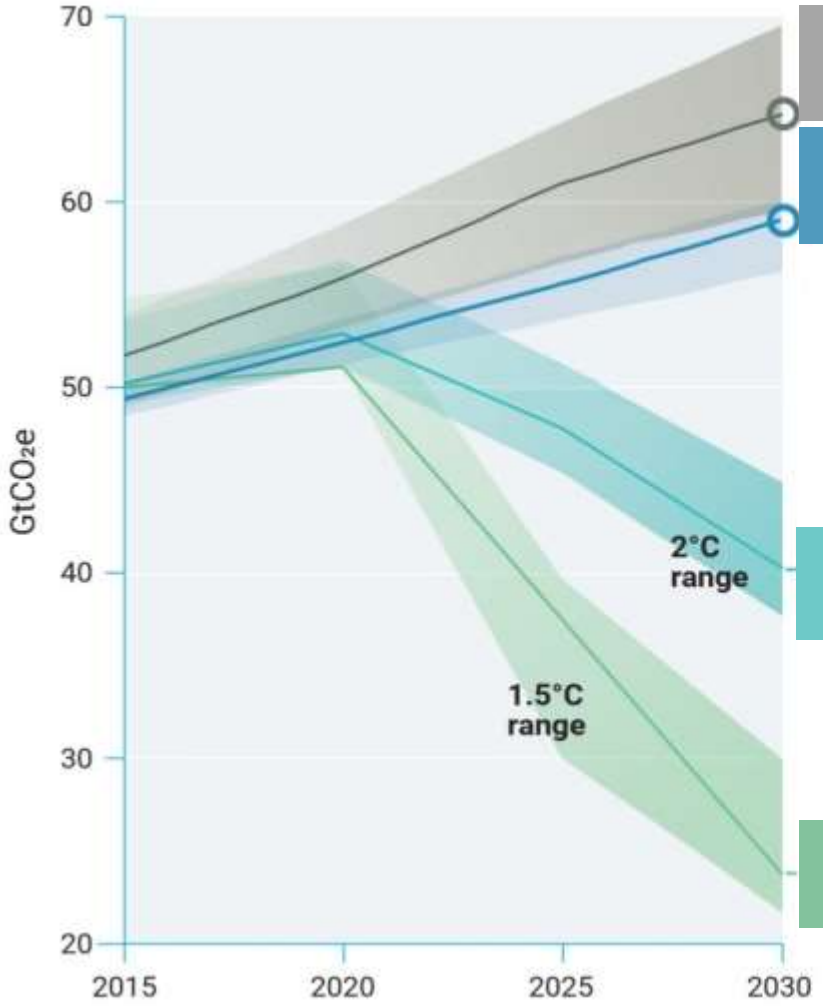
Collectively, G20 will achieve Cancun pledges by 2020…
although some countries are either not on track or pledge achievement is unclear: Canada, Indonesia, Mexico, Republic of Korea, South Africa, USA

…but will not realize their unconditional Nationally Determined Contribution (NDC) targets for 2030 based on current policies

- Not on track: Argentina, Australia, Canada, EU28, Republic of Korea, Saudi Arabia, South Africa, USA
- On track: Brazil, China, Japan
- More than on track: India, Russia, Turkey - estimated 2030 emissions >10% below their targets
- Unclear: Indonesia, Mexico

NDC contributions and the emissions gap

Annual global total greenhouse gas emissions ($GtCO_2e$)



No policy baseline
Global total emissions **65 $GtCO_2e$** (range: 60-70)

Current policy scenario
Global total emissions **59 $GtCO_2e$** (range: 56-60)

2°C pathways
Global total emissions **40 $GtCO_2e$** (range: 38-45)

1.5°C pathways
Global total emissions **24 $GtCO_2e$** (range: 22-30)

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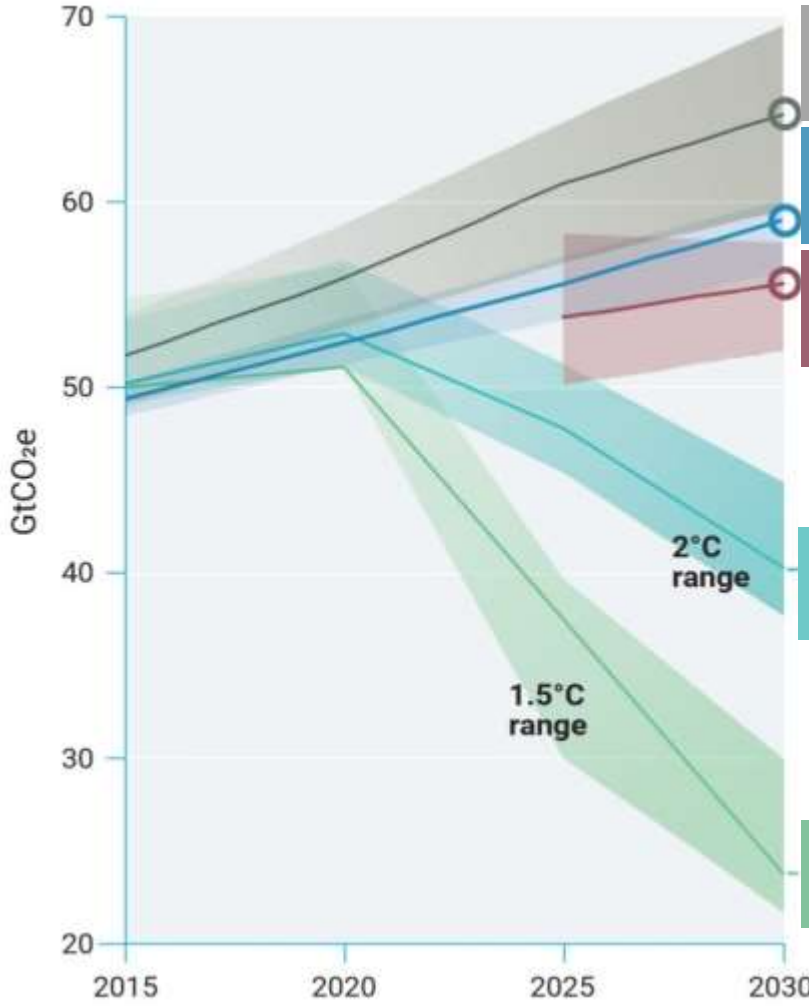

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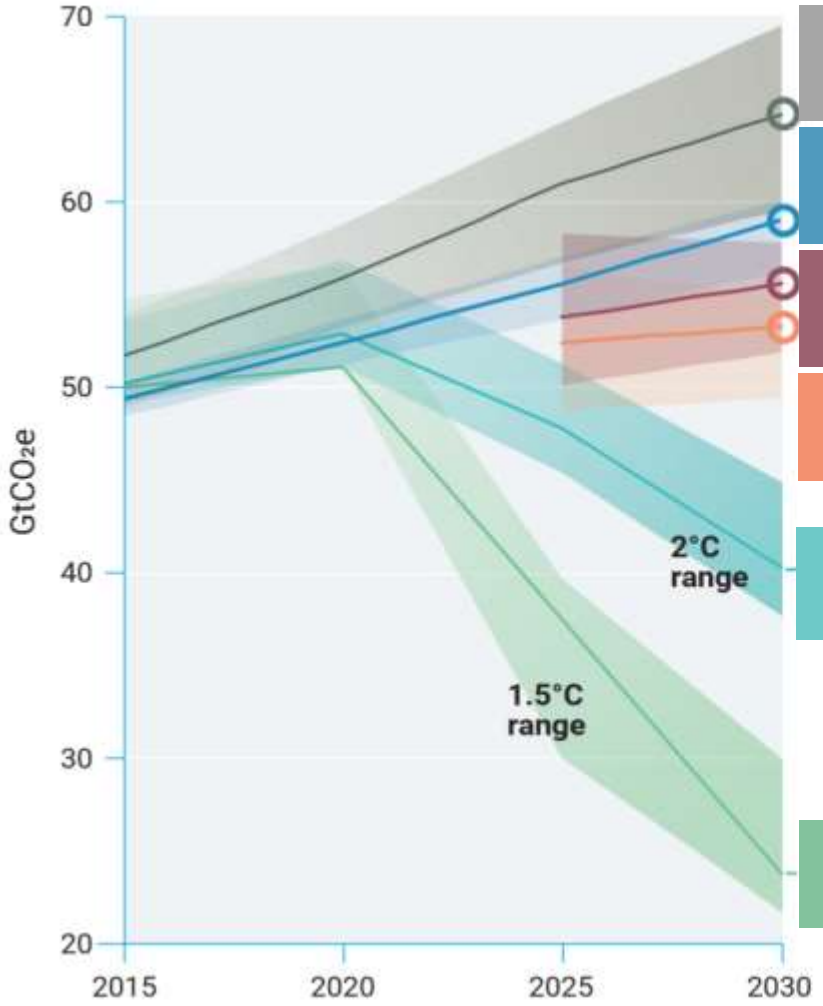

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Conditional NDC scenario
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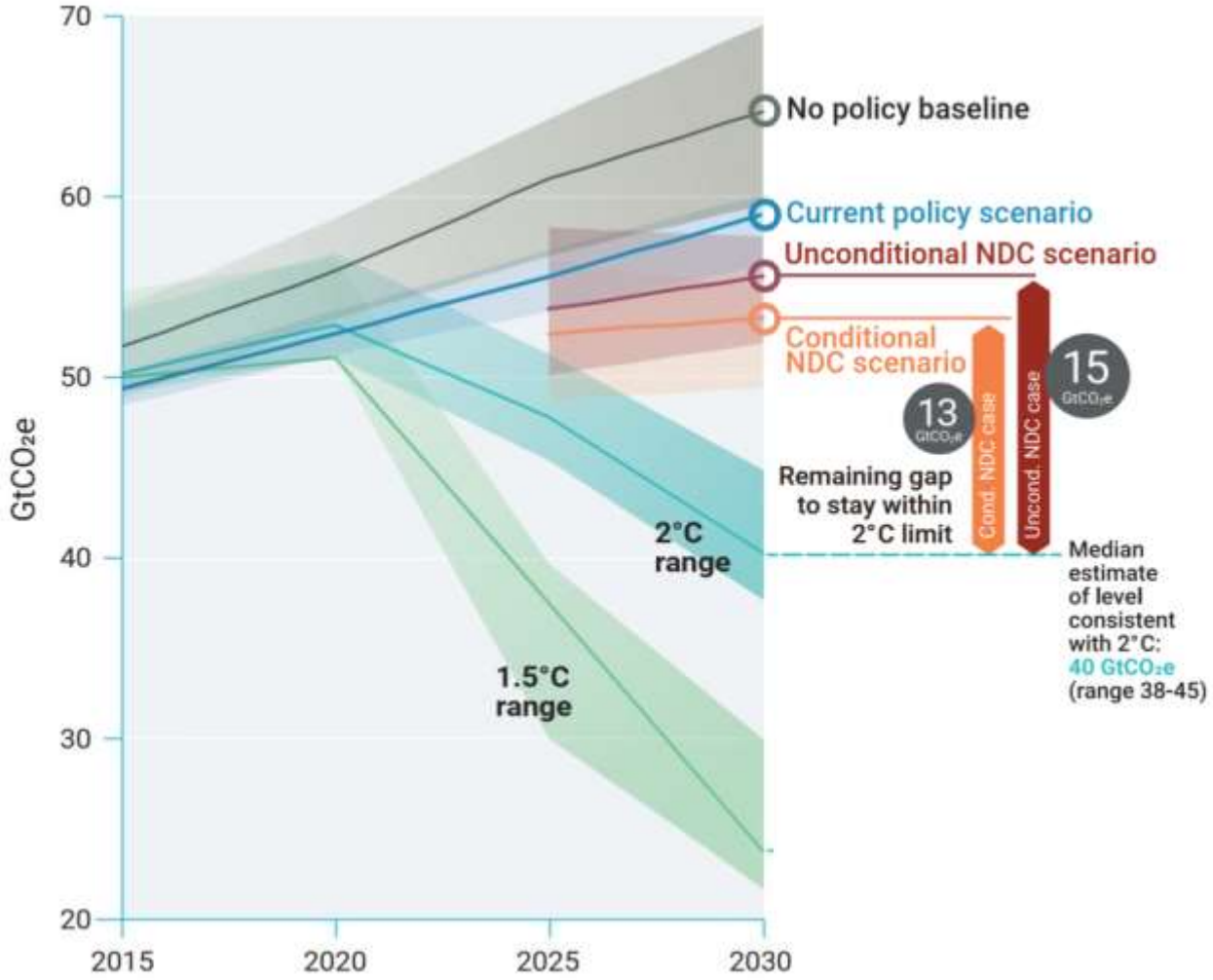

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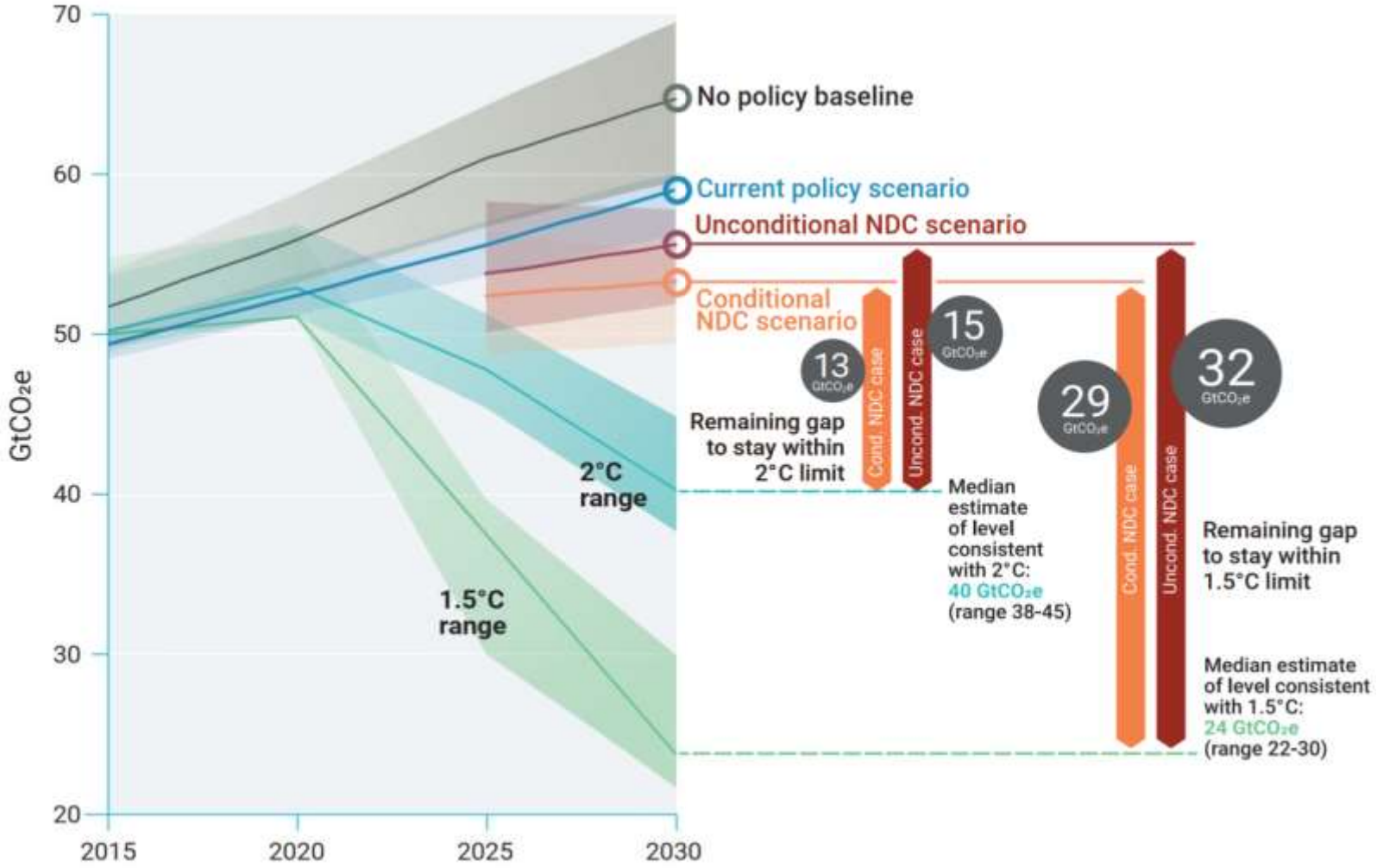

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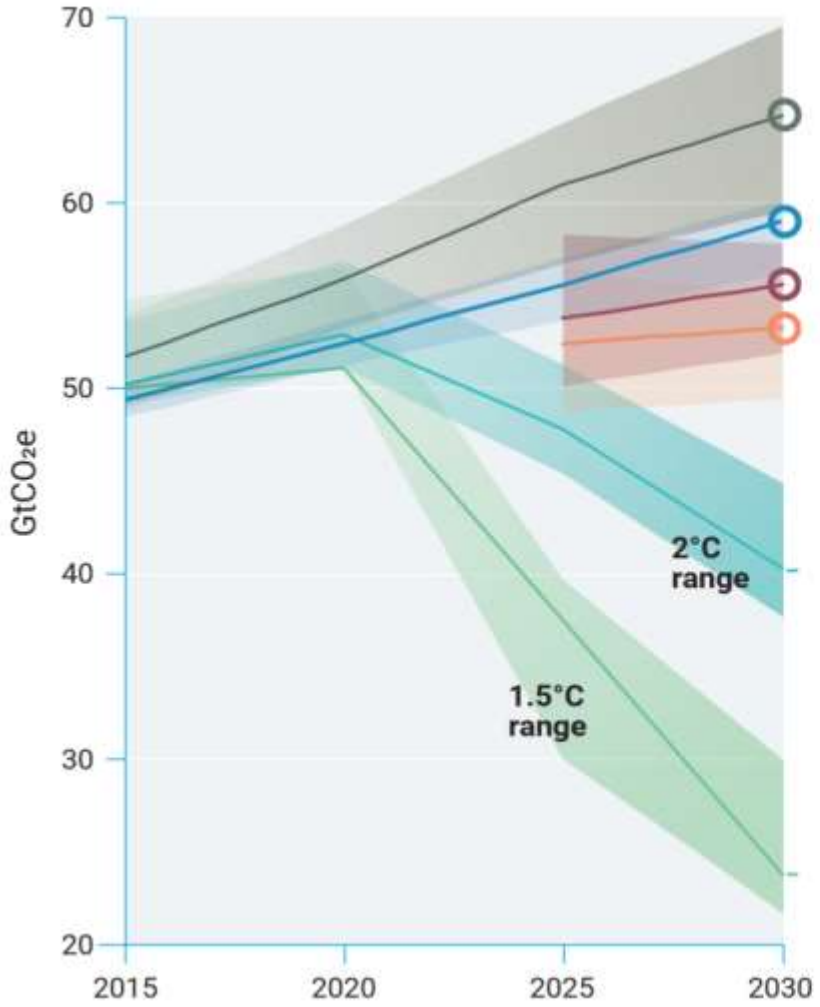

NDCs represent a first start to initiate the required transition, but are far from consistent with the well below 2°C / 1.5°C temperature goals.

Full implementation of unconditional NDCs is consistent with staying below a 3.2°C temperature increase by 2100. Additional implementation of conditional NDCs lowers this by about 0.2°C.

Unless NDC ambitions are increased before 2030, exceeding the 1.5 °C goal is unavoidable. Now more than ever, unprecedented and urgent action is required by all nations.

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Strengthening mitigation ambition of NDCs

There is a range of opportunities for increasing the coverage and stringency of GHG emission reduction targets, policies and actions.

Bringing all options into play could significantly reduce global GHG emissions by 2030.

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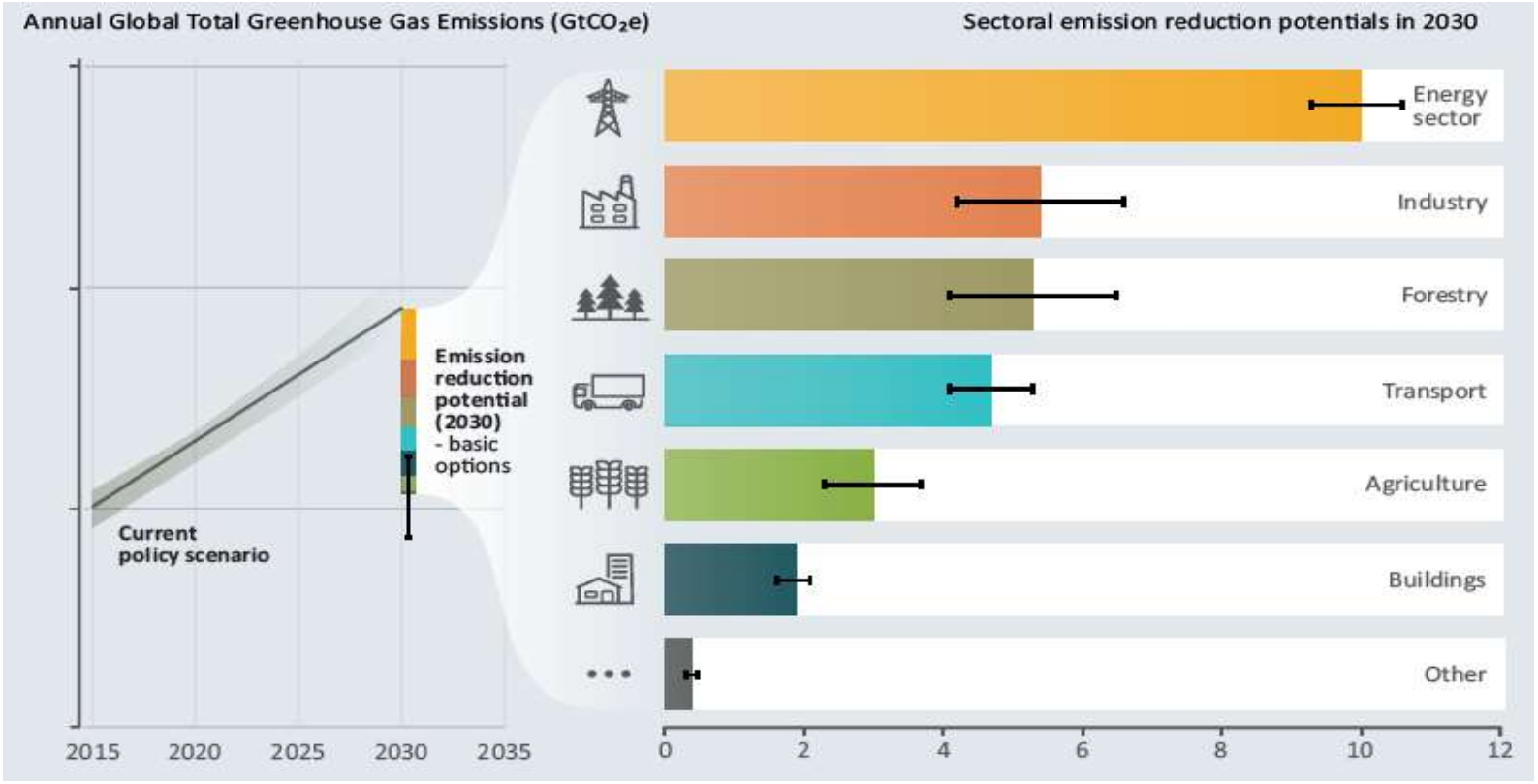
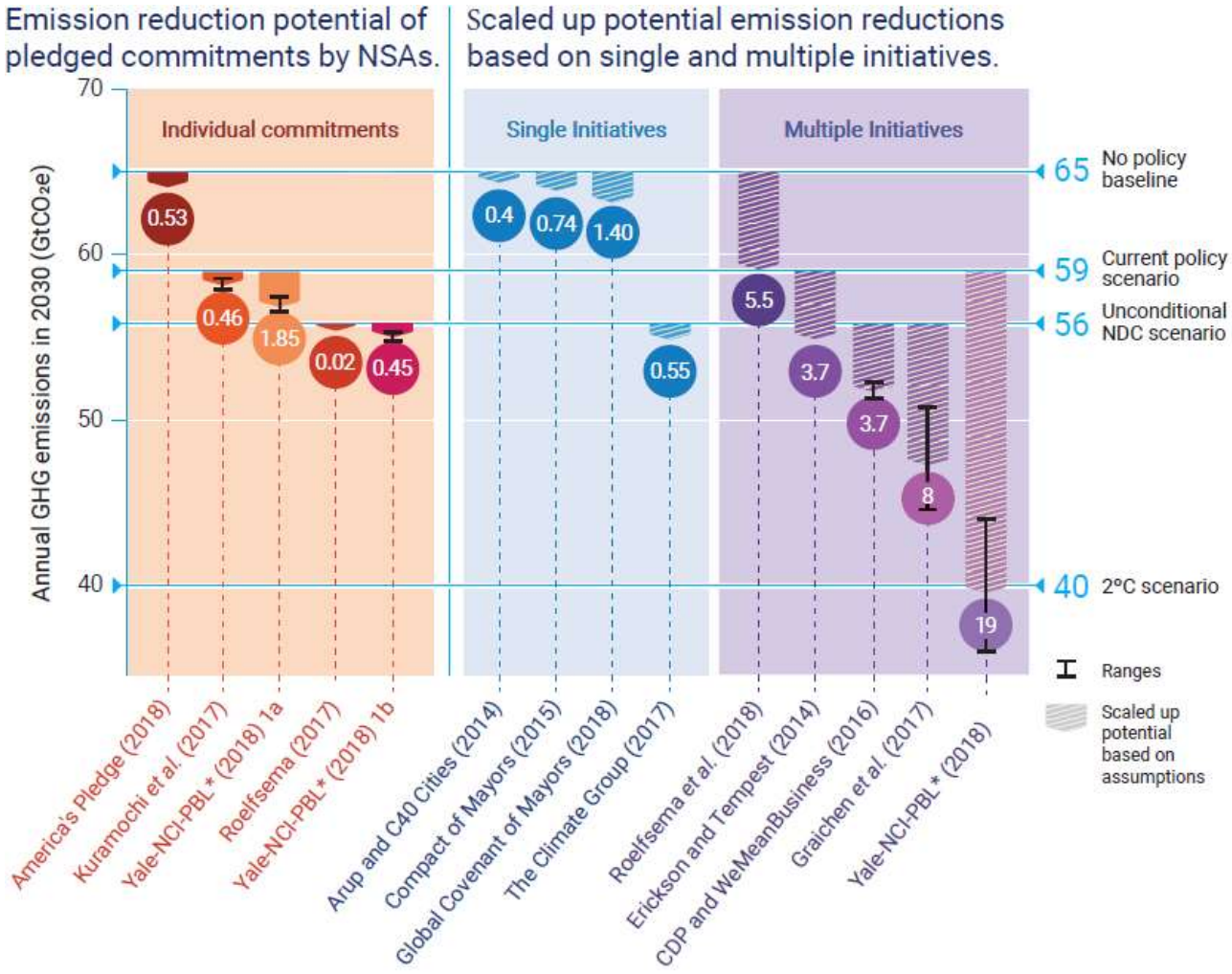
Sectoral emission reduction potentials in 2030

The emissions reduction potential in six key sectors, at cost <US$100/tCO$_2$e, is sufficient to close the emissions gap in 2030 - if implemented immediately and at scale. Most actions would have other environmental, social and economic benefits.



The role of non-state and subnational actors



Non-state and subnational actors play an important role in delivering national pledges.

Emission reduction potential from non-state and subnational action could be significant, allowing countries to raise ambition, but the impact of pledged commitments are limited and poorly documented.

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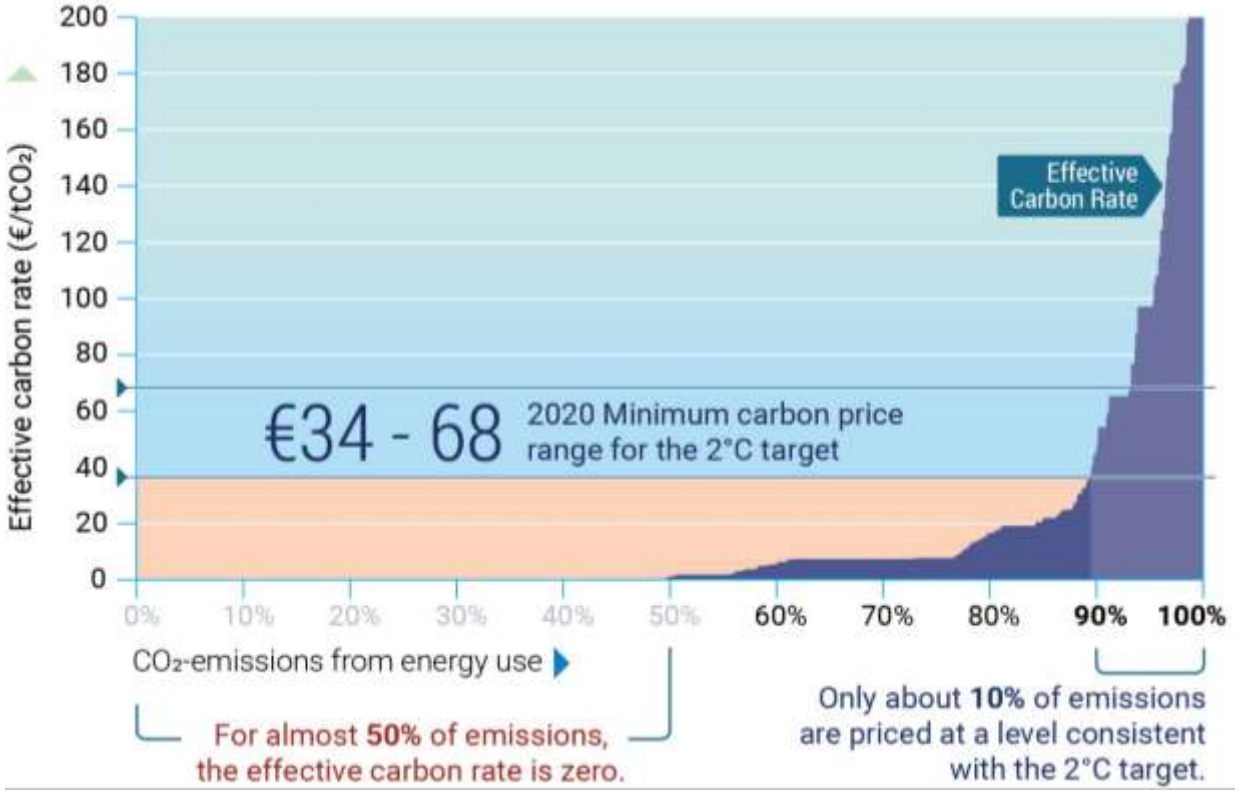
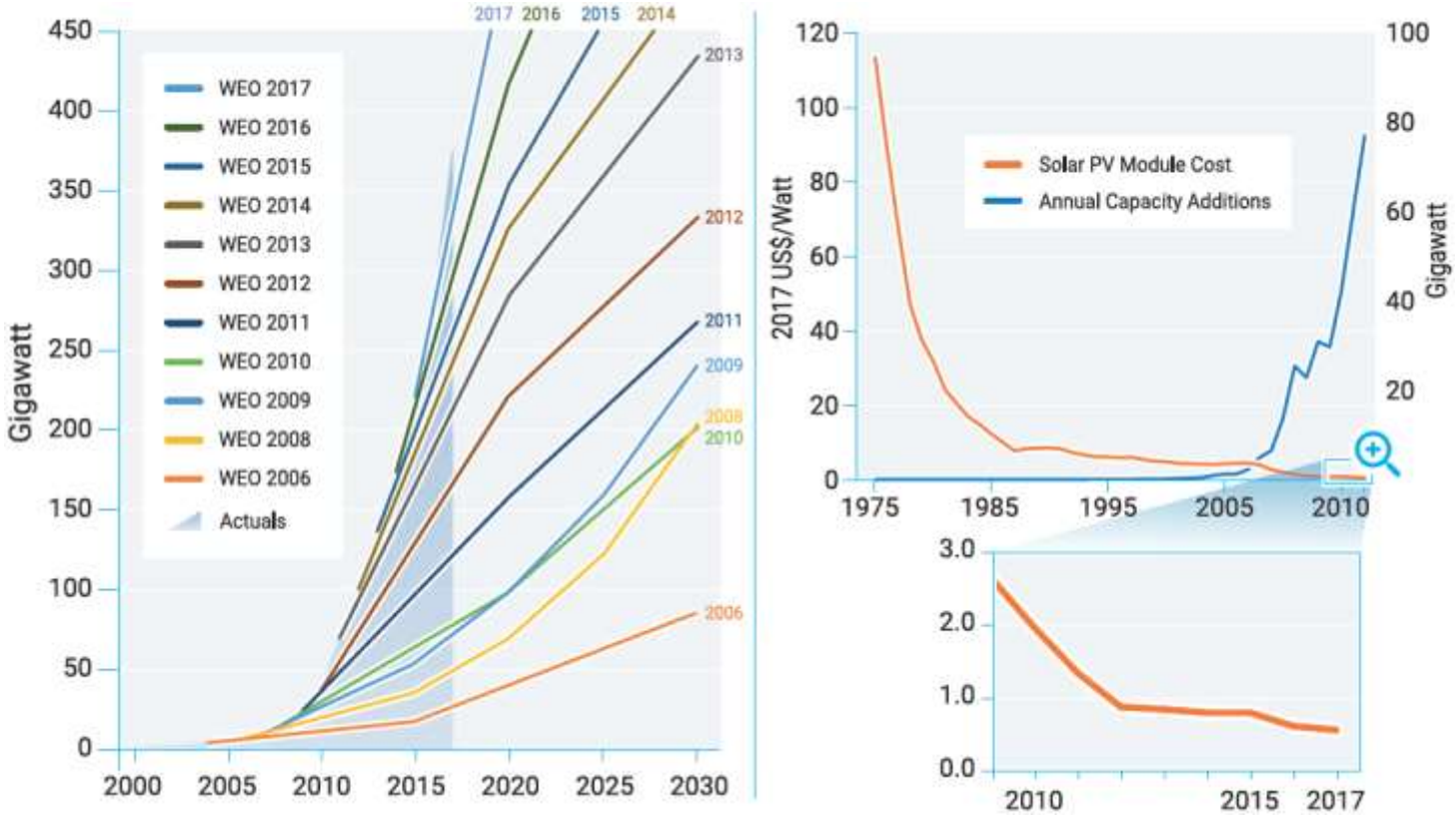
Fiscal policy and carbon pricing

Fiscal policy reform can create strong incentives for low-carbon investments and reducing GHG emissions. The use of carbon pricing is only emerging in many countries and generally not applied at a sufficient level to facilitate a shift towards low-carbon societies.



Accelerating innovation is a key component in bridging the gap

Combining innovation in the use of existing technologies and in behaviour with the promotion of investment in new technologies and market creation has the potential to transform societies and reduce their GHG emissions.



More ambitious NDCs necessary by 2020

The political part of the **Talanoa Dialogue** at the 24th session of the Conference of the Parties (COP 24) provides an opportunity for governments to discuss status of NDC implementation and options for enhanced ambition and action by 2020

The UN 2019 Climate Summit led by the Secretary General will provide a crucial opportunity to continue this dialogue. The Summit will convene on the theme of '**A Race We Can Win. A Race We Must Win**'. The Secretary-General will seek to challenge states, regions, cities, companies, investors and citizens to step up action in six key areas: energy transition, climate finance and carbon pricing, industry transition, nature-based solutions, cities and local action, and resilience.

The key messages from the 2018 Emissions Gap Report, along with the findings of the recent IPCC Special Report, provide a key scientific foundation for these dialogues.

Thank you

Emissions Gap Report 2018
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www.unenvironment.org