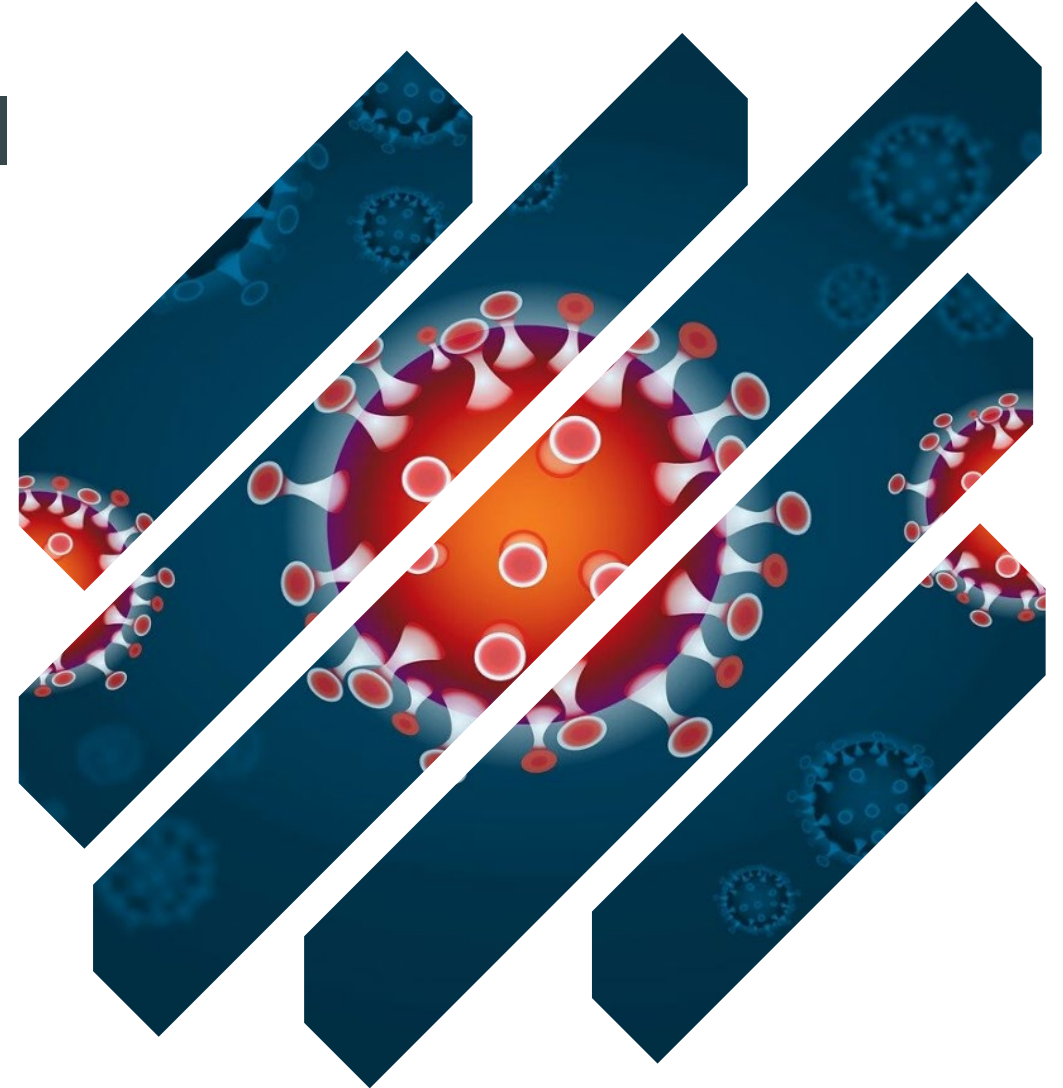


Exploring the impact of the COVID-19 pandemic on global emission projections

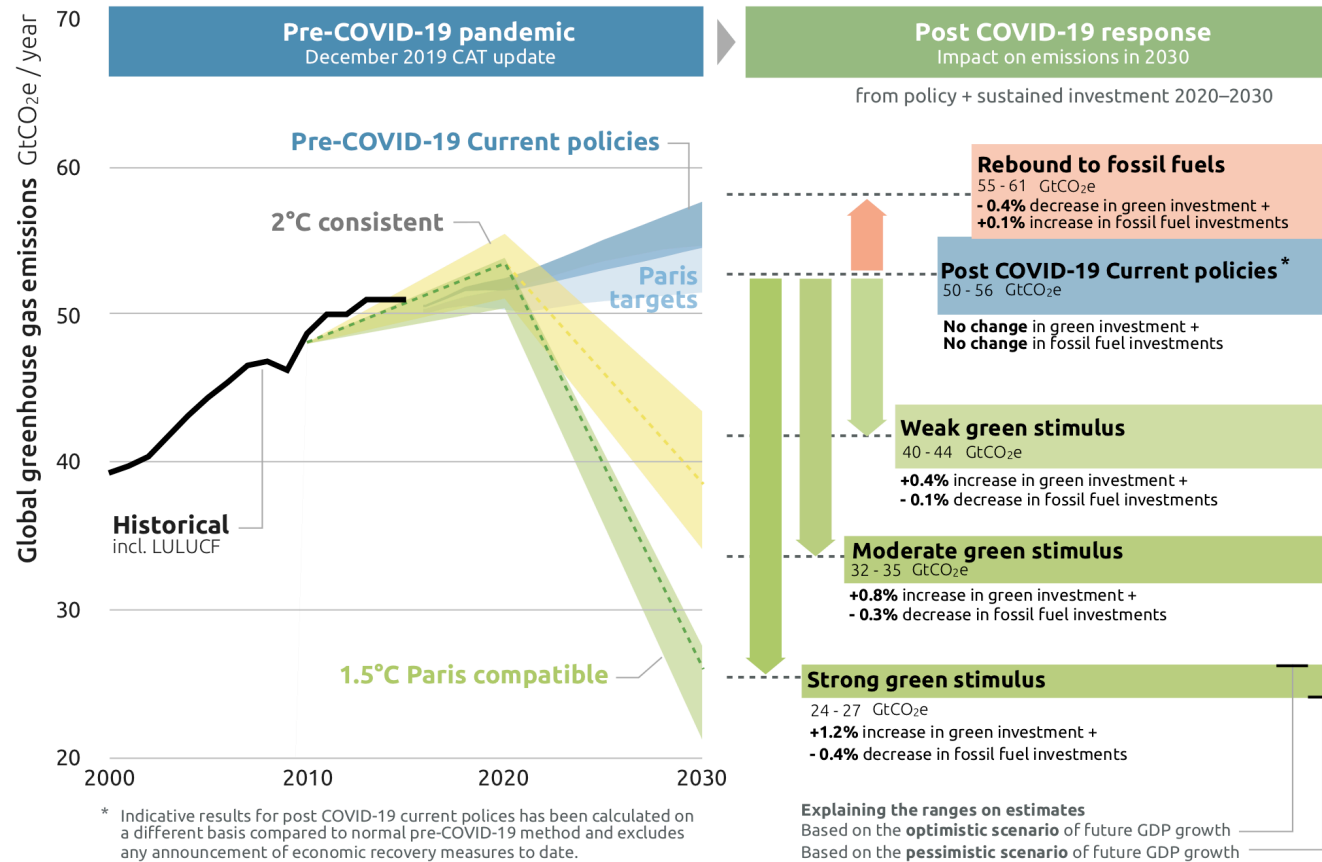
24 November 2020
Prof. Dr. Niklas Höhne
n.hoehne@newclimate.org



The potential for a green recovery

Green stimulus to fight the COVID-19 economic crisis and the climate crisis

Strong climate policies plus sustained investment can provide valuable jobs, revitalise economies and get the world on track to meeting the 1.5°C Paris Agreement goal



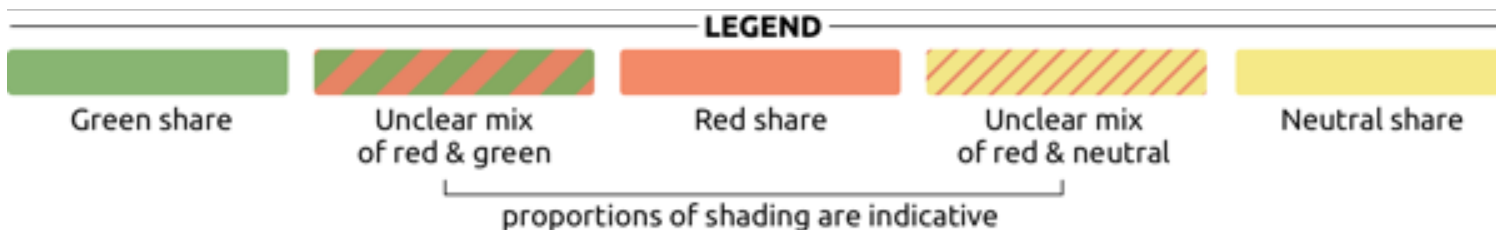
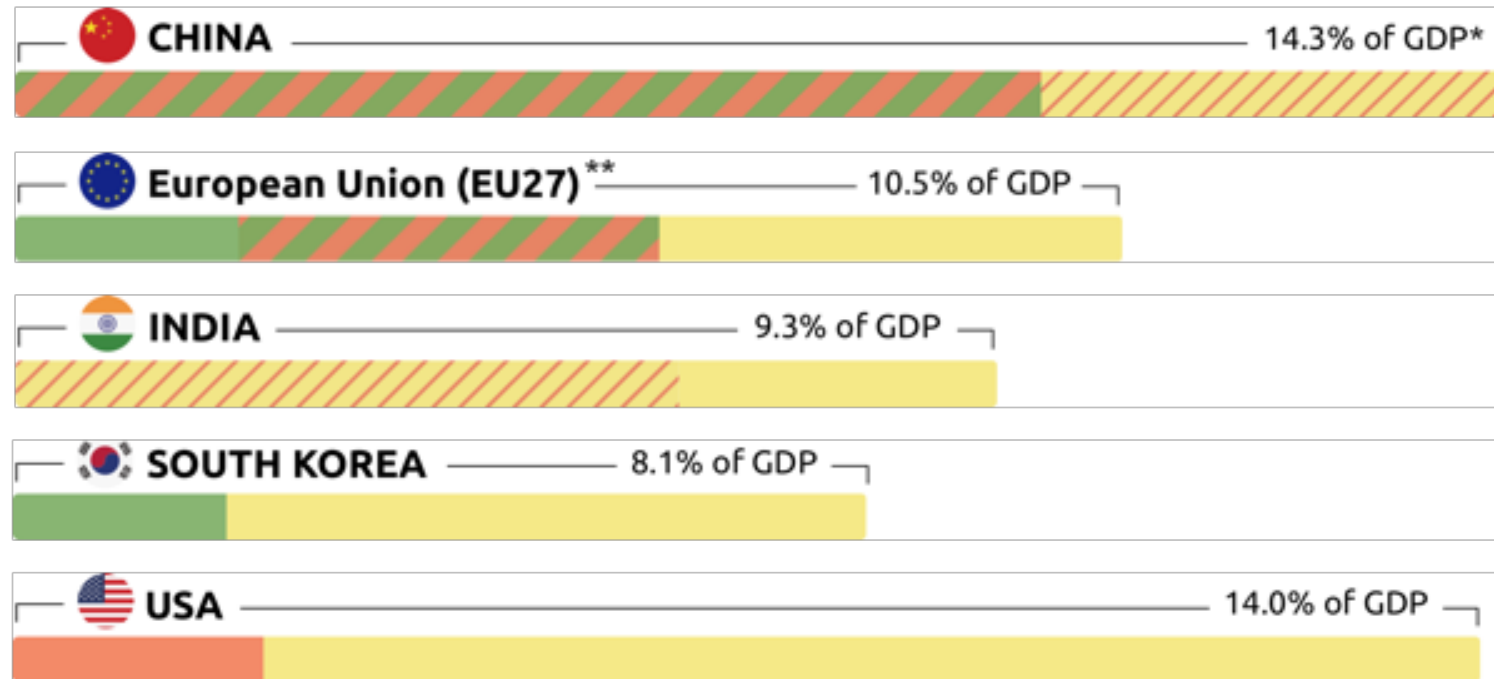
Additional 1.2% of GDP annually globally needed reaching the Paris Agreement goal.

[https:// climateactiontracker.org /publications/addressing -the-climate -and-post-covid-19- economic-crises/](https://climateactiontracker.org/publications/addressing-the-climate-and-post-covid-19-economic-crises/)

Understanding the magnitude: overarching packages





SCALE OF GOVERNMENT SUPPORT PACKAGES

Volume of COVID-19 related financial support as *overarching packages* of total spending as of August 2020









<https://climateactiontracker.org/publications/global-update-pandemic-recovery-with-just-a-hint-of-green/>

Example rescue and recovery measures

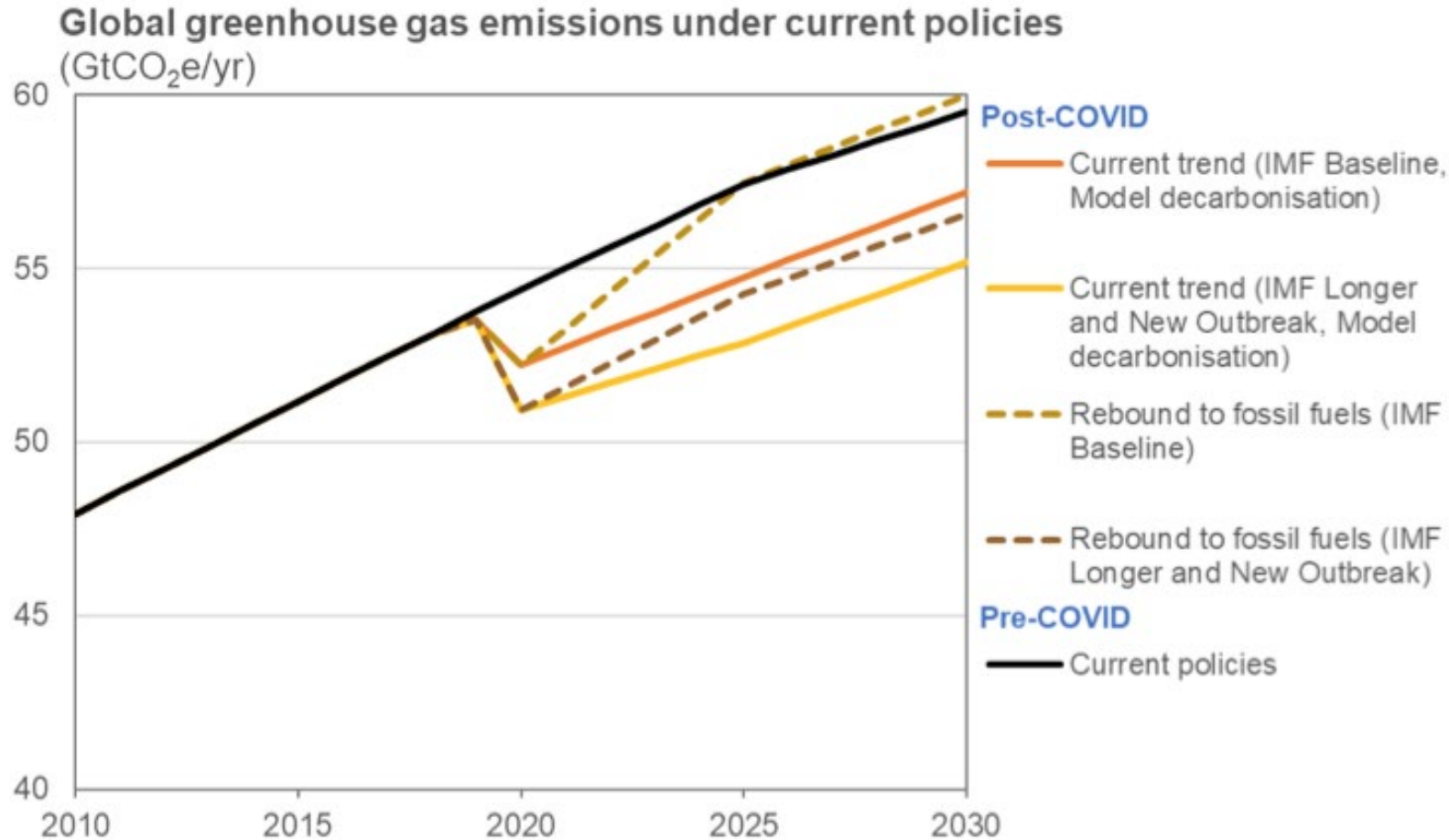
| | |
|---|---|
|  General | ✓ <ul style="list-style-type: none">• Dedicated budget for green spending in recovery or rescue package• Fiscal reform reducing fossil fuel subsidies |
| | ✗ <ul style="list-style-type: none">• Corporate bailouts without conditions for a low-carbon transition• Roll back economy-wide environmental and climate regulations |
|  Energy supply | ✓ <ul style="list-style-type: none">• Support for zero-emissions technologies and infrastructure in energy supply |
| | ✗ <ul style="list-style-type: none">• Revive plans for 'shovel-ready' fossil fuel power plants• Waive environmental regulations related to fossil fuel exploration• Bail out fossil fuel energy utilities without conditions for a low-carbon transition |
|  Energy use | ✓ <ul style="list-style-type: none">• Direct investment or support for green mobility or urbanisation projects• Fiscal or financial incentives for zero-emission vehicles• Support for the uptake of efficient technologies in industry and buildings |
| | ✗ <ul style="list-style-type: none">• Stimulus programmes for new buildings without energy efficiency criteria• Support for industry without conditions for a low-carbon transition• Support to automobile companies without conditions for a low-carbon transition |
|  Non-energy sectors | ✓ <ul style="list-style-type: none">• Large-scale landscape restoration and reforestation |
| | ✗ <ul style="list-style-type: none">• Dismantling the enforcement of state protection for natural habitats |

Examples of green economic recovery

| | | | |
|--|---|---|--|
|  Energy and electricity supply | <ul style="list-style-type: none"> ✓ China: Increase in solar and wind energy targets to 240 GW each for 2020 (Hove, 2020) ✓ South Korea: Increased support for solar and wind capacity deployment from 2020 onwards with special focus on large-scale offshore wind parks (Government of Republic of Korea, 2020) ✗ India: Accelerated commercial coal mining by removing the coal end-use restriction on private parties with a first auction announced for 41 new coal mines in 2020 (Government of India, 2020b; Sarkar, 2020) ✗ USA: Waiver of reporting requirements for fossil fuel electricity generators under the Cross-State Air Pollution Rule, Acid Rain Program, and NO_x state implementation plan (SIP) (EPA, 2020) |  Land-based transport and mobility | <ul style="list-style-type: none"> ✓ China: Expansion of electric vehicle charging network by 50% in 2020 with an additional 600,000 charging stations to be installed in 2020 (Shen, 2020) ✓ India: Temporary tax increase on petrol and diesel in context of slumping international oil prices (Parashar, 2020) ✗ China: VAT reduction for second-hand cars by 1.5 %-points without any conditions to priorities more efficient cars (Garcia, 2020) and several <i>cash-for-clunker schemes</i> for conventional vehicles in Chinese provinces (Shepherd, 2020) ✗ South Korea: 30% tax deduction for car manufacturers and the reduction of car sales tax for new cars (from 5% to 1.5%) without preferential measures for electric or hydrogen vehicles (Deok-hyun, 2020) |
|  Aviation | <ul style="list-style-type: none"> ✓ Austria & France: Bailout of national airlines linked to several climate conditions such as reduction from domestic flight emissions, fleet efficiency improvements, etc. (Bannon, 2020a) ✗ South Korea & USA: Bailouts for national airlines without any green conditions attached (Hyun-su, 2020; Aratani, 2020) |  Industry | <ul style="list-style-type: none"> ✓ India: Proposal to for setting up designated manufacturing hubs for renewable energy in India (Mohanty, 2020) ✗ USA: Environmental Protection Agency suspends payment of penalties in environmental regulations (Friedman, 2020) |
|  Land-use & environmental protection | <ul style="list-style-type: none"> ✓ South Korea: Component in <i>Green New Deal</i> to restore the terrestrial, marine and urban ecosystems (Government of Republic of Korea, 2020) ✗ Brazil: Deregulation of land use in the Amazon to stimulate economic activity in the region, such as relaxation of restrictions on logging, mining and other development permits for industrial actors (Vivid Economics, 2020) |  Buildings | <ul style="list-style-type: none"> ✓ Germany: Extra funding for a CO₂-focused building renovation programme, with an additional EUR 1 billion in 2020 and 2021 taking the annual totals to €2.5 billion (Government of Germany, 2020) ✓ South Korea: Retrofitting of old public facilities such as day-care centres, public health centres, public housing with a total investment of around USD 5.2 billion between 2020-2025 (Government of Republic of Korea, 2020) ✗ <i>No example of harmful actions identified in economic recovery activities as of August 2020</i> |

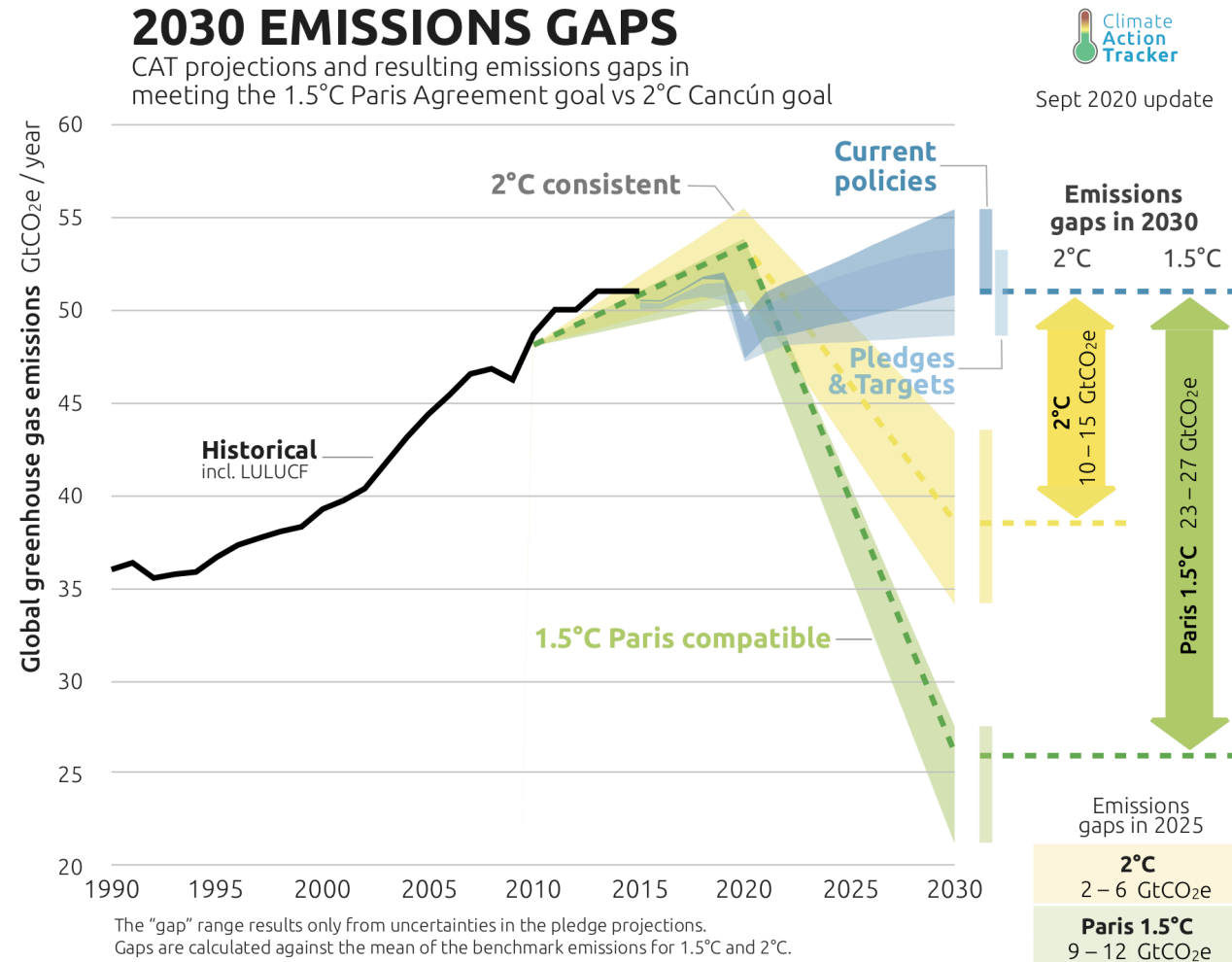
<https://climateactiontracker.org/publications/global-update-pandemic-recovery-with-just-a-hint-of-green/>

Impact on global greenhouse gas emissions



<https://newclimate.org/2020/09/04/exploring-the-impact-of-the-covid-19-pandemic-on-global-emission-projections/>

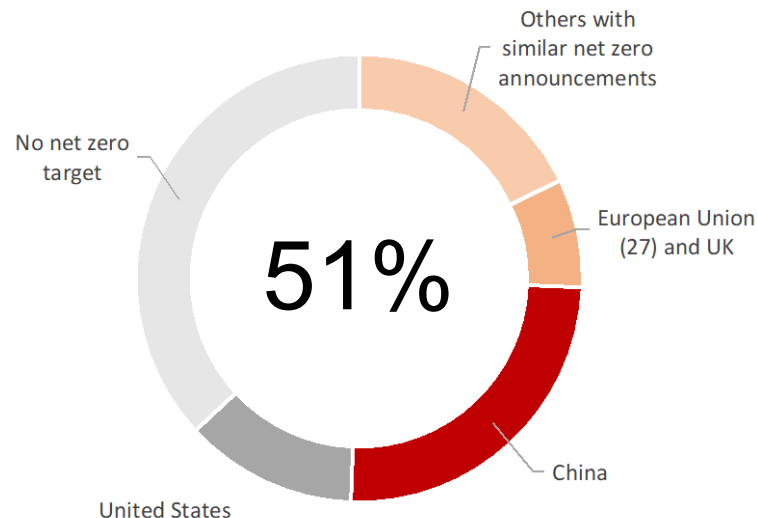
The emissions gap remains



China's carbon neutrality announcement is a game changer

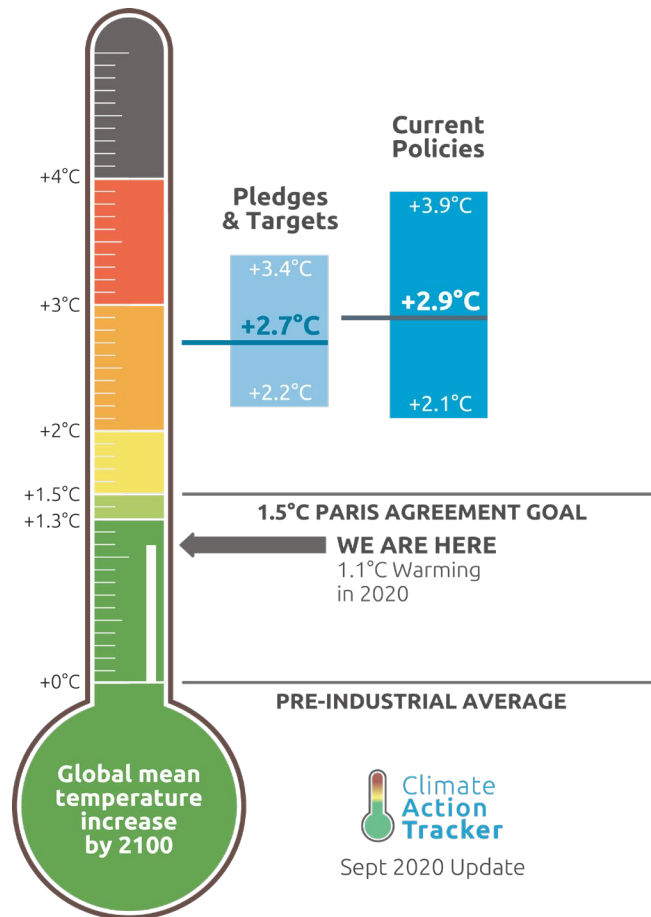


Share of global greenhouse gas emissions of countries with similar net zero announcements



- » Announcement by EU: Update 2030 NDC to 55/60/65% from 40% and climate neutrality by 2050
- » Announcement by China: “Aim to achieve carbon neutrality before 2060”
- » EU and China together can create the urgently needed momentum of a race to the top
 - Japan, South Korea, Canada followed
 - USA may follow (climate neutrality by 2050 is part of Bidens election campaign)
 - 24 top Indian companies followed

Warming in 2100



» Current policies: around 2.9°C

- Emissions in 2030 are likely to be lower compared to pre-COVID levels
 - not a result of a shift towards decarbonisation
 - will not be sustained in the long run

» Pledges and targets: around 2.7°C

» With new net zero targets: around 2.3 to 2.4°C

- 0.2 to 0.3°C reduction China is carbon neutral by 2060
- 0.1°C reduction if USA is carbon neutral by 2050

Key messages

- **A mixed picture on green recovery**
 - Many negative interventions and few positive ones
 - Using the pandemic to initially move backwards: USA, Brazil, Mexico, Australia, South Africa, Indonesia, Russia, Saudi Arabia, Argentina, Turkey
 - Steps in the right direction: EU and South Korea
 - Not yet a clear signal on greenhouse gas emissions
 - Many low-carbon policies under discussion, it can still be shaped
- **Net-zero targets are a game changer**
 - Announcements by China and EU for carbon neutrality can flip the situation
 - Net-zero emissions targets of China and USA could lead to 2.3 to 2.4°C by 2100

