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CONGRESSIONAL BRIEFING

**Ambition and Opportunity in America's
New Climate Commitments**

**U.S. Pledges to Reduce Emissions More Than
50% by 2030**

Wednesday, May 12, 2021

About EESI...



NON-PROFIT

Founded in 1984 by a bipartisan Congressional caucus as an independent (i.e., not federally-funded) non-profit organization



NON-PARTISAN

Source of non-partisan information on environmental, energy, and climate policies



DIRECT ASSISTANCE

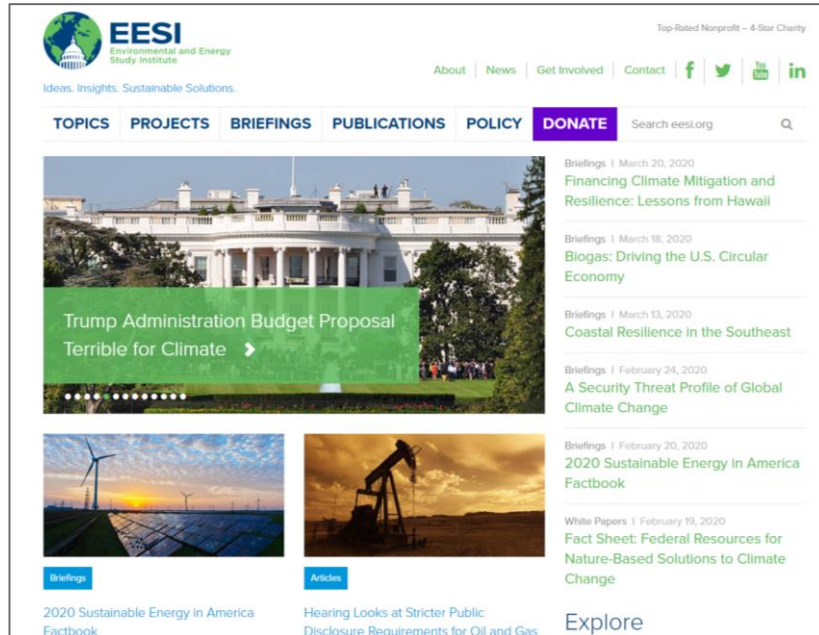
In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop “on-bill financing” programs



SUSTAINABLE SOCIETIES

Focused on win-win solutions to make our energy, buildings, and transportation sectors sustainable, resilient, and more equitable

...About EESI



HILL BRIEFINGS

Video recordings and written summaries of Congressional briefings



CLIMATE CHANGE SOLUTIONS

Bi-weekly newsletter with all you need to know including a legislation tracker



SOCIAL MEDIA (@EESIONLINE)

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FACT SHEETS

Timely, science-based coverage of climate and clean energy topics

Ambition and Opportunity in America's New Climate Commitments

Rachel Cleetus
Union of Concerned Scientists

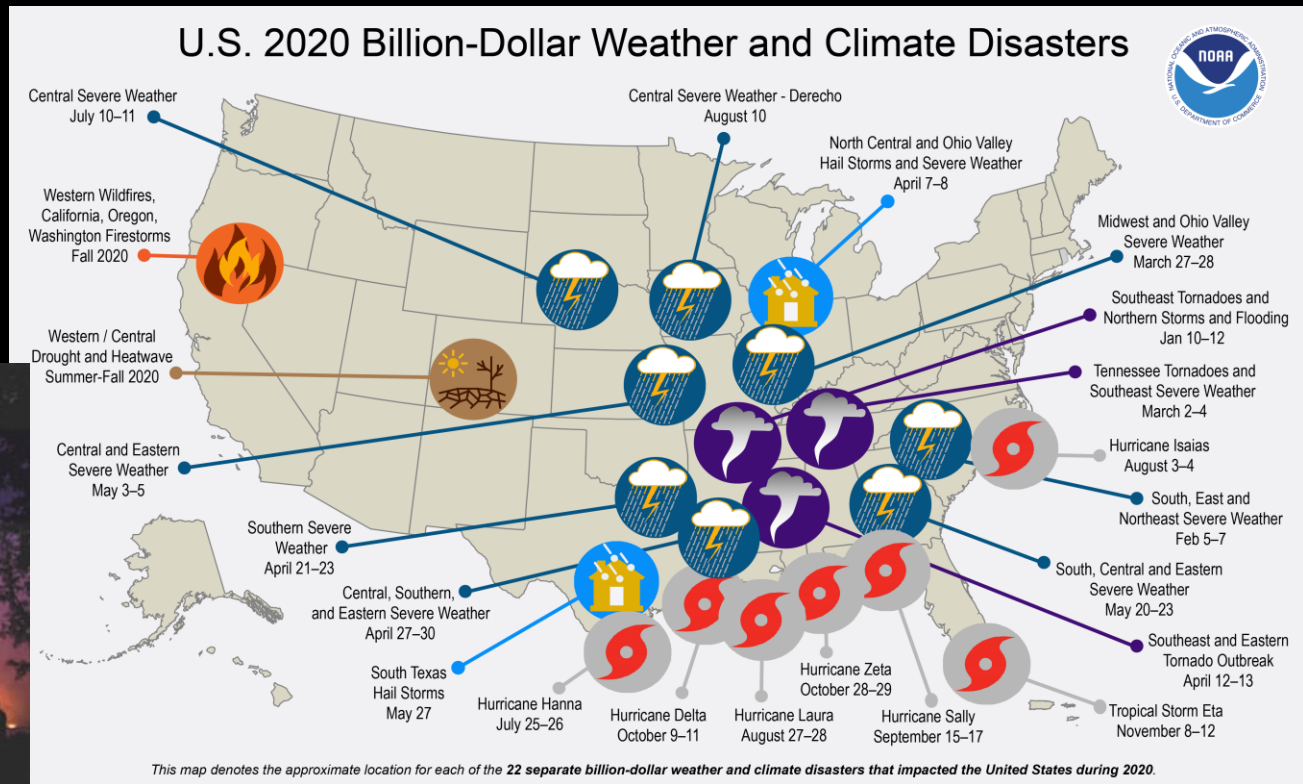
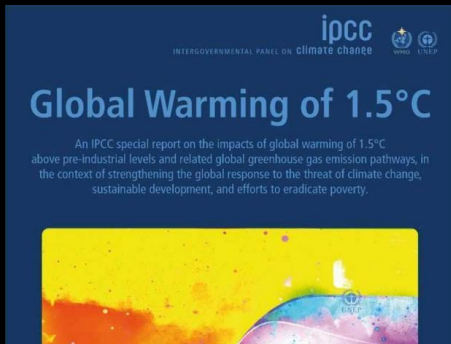
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[Union of
Concerned Scientists]

Science for a
healthy planet
and safer world.

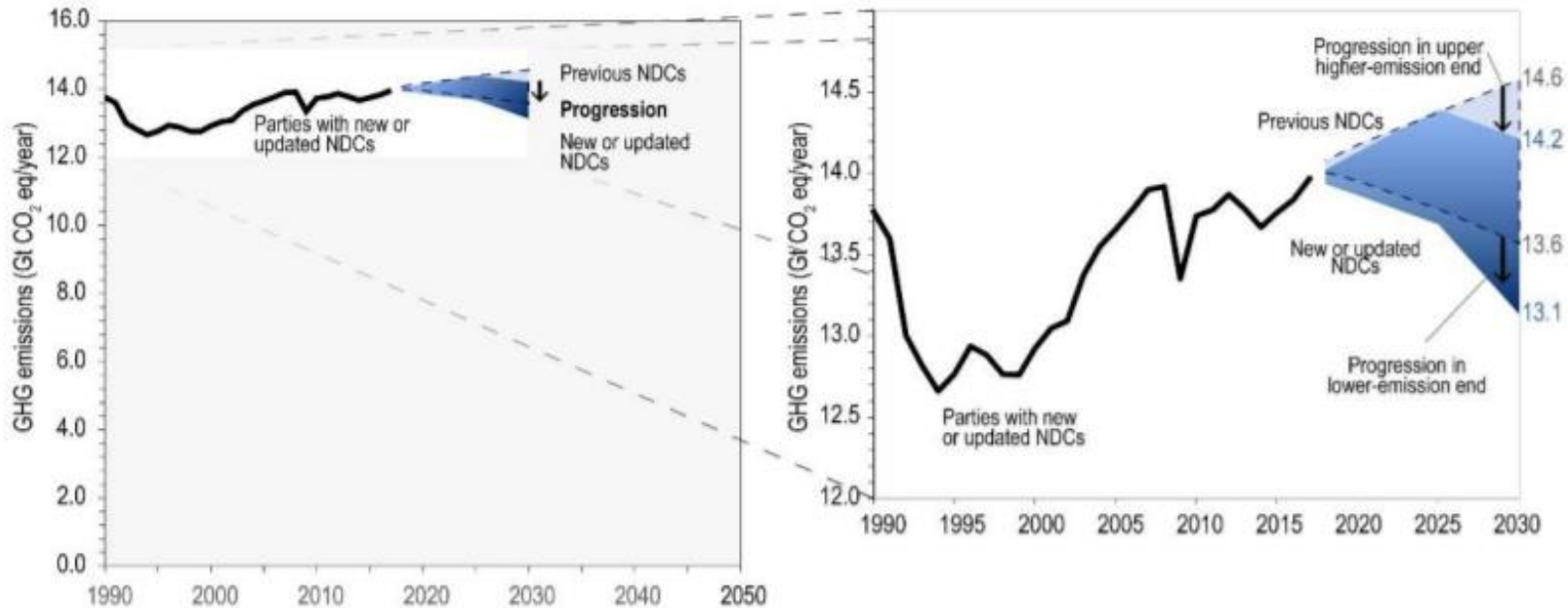


[Latest science underscores urgency to act



[A “red alert for the planet”: The 2021 Initial NDC Synthesis Report

Projected range of greenhouse gas emission levels according to nationally determined contributions



[Scientists' Letter to the Biden Administration

**WE NEED BOLD
CLIMATE
ACTION NOW**

More than 1000 experts urge Biden
to cut emissions in half by 2030.
#AllInFor50

[Union of
Concerned

**CLIMATE ACTION
CAN'T WAIT**

More than 1000 scientists and experts
call on the White House to strengthen
clean car standards now.

[Union of
Concerned Scientists

Signed by 1500+ scientists and
experts, delivered on April 14

*"The United States, as one of the
world's biggest contributors to global
heat-trapping emissions, must take
responsibility and commit to cutting
its emissions by at least 50 percent
below 2005 levels by 2030 and
transitioning to a net-zero emissions
economy no later than 2050."*



Local leaders across
the country are calling
for the US to cut
emissions by at least
50% by 2030.

#AllInFor50



310

Companies &
Investors*



75

Colleges &
Universities



1508

Scientists &
Experts



388

Business
Leaders

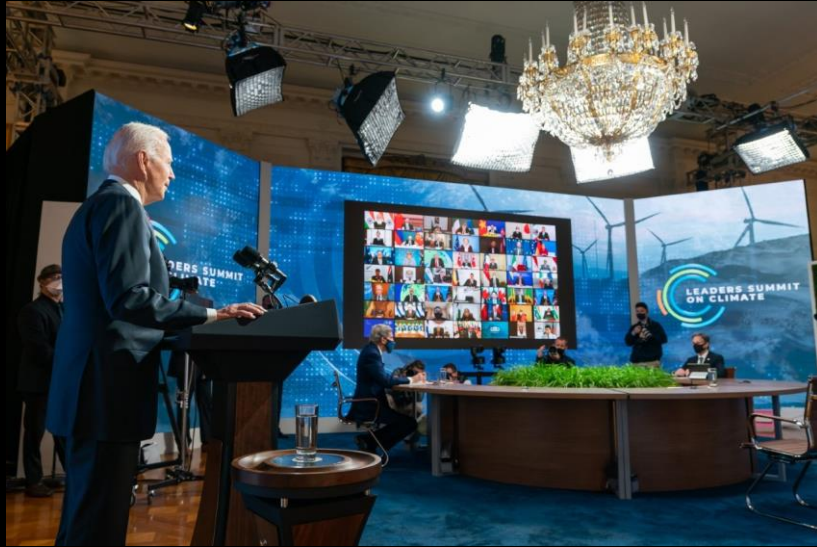


24

Cultural
Institutions

*\$3 trillion in annual
revenue, \$1 trillion in
assets under
management

[Earth Day Summit Outcomes



Centerpiece: US NDC

Commitment to cut net GHGs
50-52% below 2005 levels by
2030

- Bold commitment and a necessary threshold for action
- More will be needed to align with science and global equity.

[Additional outcomes from Earth Day Summit



- New commitments from Japan and Canada, potential signs of progress from China, India, South Korea, continued commitment from EU, UK
- US climate finance pledge
- Climate vulnerable nations' participation
- Whole-of-government participation
- Major Economies Forum relaunched
- Climate adaptation and resilience
- Youth climate activist, Xiye Bastida
- Private sector participation

[Elements of a Robust U.S. International Contribution

Net GHG reductions of at least 50% below
2005 levels by 2030

+

At least \$8 B in climate finance over 4 years

+

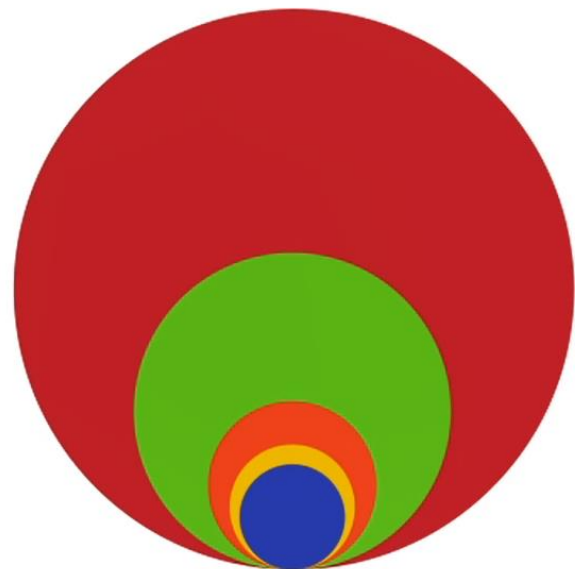
National adaptation strategy

+

Loss and Damage



Top 5 Cumulative CO₂ Emitters, 1850-2019



**Emissions from fossil fuels
(thousands of metric tons)**

415,025 ● United States

230,314 ● China

115,513 ● Soviet Union/Russia

92,626 ● Germany

78,171 ● United Kingdom

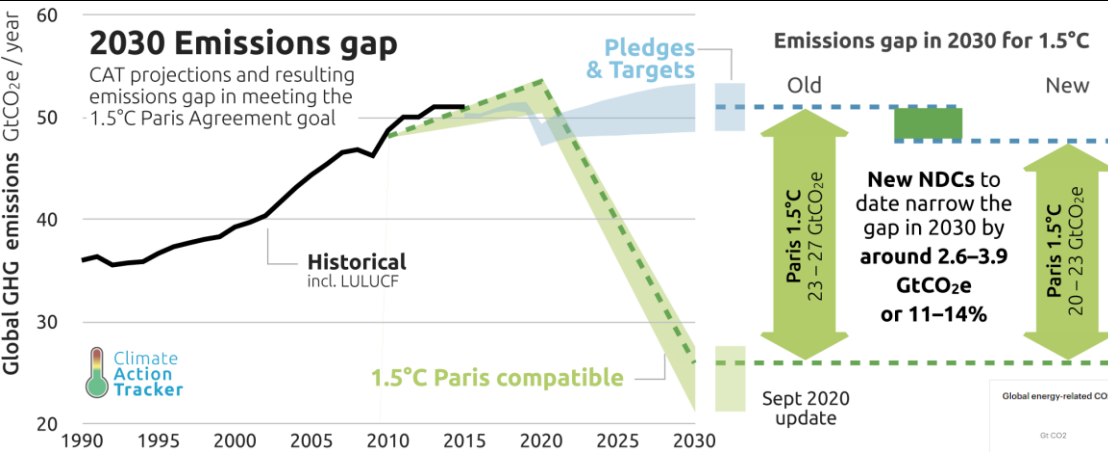
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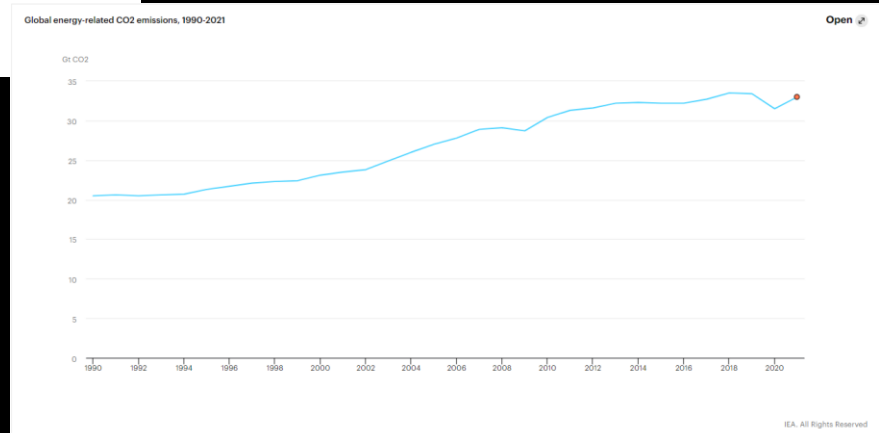


Data source: CDIAC via Our World in
Data, Carbon Brief and Carbon Monitor
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[Much more to do...



IEA: Global carbon dioxide emissions are set for their second-biggest increase in history (in 2021)



[Deep 2030 emission cuts are feasible

- Energy Innovation. *A 1.5C Pathway to Climate Leadership for the United States*
- Princeton University. *Net-Zero America by 2050: Potential pathways, deployments and impacts*
- U of Berkeley, GridLab. *The 2035 Report*
- NAS. *Accelerating Decarbonization in the United States: Technology, Policy and Societal Dimensions*
- University of Maryland. *Charting an ambitious U.S. NDC of 51% Reductions by 2030*
- MIT. *Meeting Potential New U.S. Climate Goals*
- NRDC. *The Biden Administration Must Swiftly Commit to Cutting Climate Pollution at Least 50 Percent by 2030*
- EDF. *Recapturing U.S. Leadership on Climate: Setting an Ambitious and Credible Nationally Determined Contribution*

[Common Themes for 2030 emissions reductions



- Ramp up energy efficiency and renewable electricity
- Phase out coal and limit the rush to natural gas
- Advance electrification of energy end-uses economywide (Transportation, Buildings, Industry) where possible
- Invest in low-carbon, climate-resilient infrastructure e.g. a modernized electricity system, transmission, energy storage, electrification infrastructure, public transit
- Safeguard + enhance carbon stores in soils, forests, wetlands
- Make deep cuts in methane emissions and HFCs
- Invest in clean energy R&D
- **Systemic, just and equitable changes, not just techno changes**

[Necessary and Achievable Goals

- **Multiple techno-economic studies** show that cutting emissions at least 50% below 2005 levels by 2030 is possible, and affordable, for the US.
- Beyond what the models can capture, there are **important transformative opportunities** through societal changes, shifts in market rules, incentives and structures, and changes in governance.
- **How we get there matters.** Done right, there are **multiple benefits** including significant public health gains, millions of good-paying jobs, addressing environmental injustices, a fair transition for coal workers & communities, fair and sustainable food systems.
- **U.S. ambition can unlock ambition** from other major emitters
- **Inadequate/incremental action** in this consequential decade greatly increases the risks of breaching the Paris Agreement temperature goals, leading to even **more harmful and costly climate impacts.**

[Domestic climate agenda



- American Jobs Plan: A down payment on climate action
- Clean, climate-resilient infrastructure investments
- Justice40 Initiative
- Jobs, domestic manufacturing base/supply chains, high-road labor standards
- A fair transition for coal workers and coal-dependent communities
- Just and equitable economic recovery
- Climate risk disclosure
- Holding fossil fuel companies accountable

[What's next on the road to COP26 in Glasgow?



- Bilateral and multilateral meetings
- An emerging high ambition coalition
- Ramping up climate finance
- Connecting economic recovery to climate ambition
- A just, equitable climate agenda
- Containing the global COVID-19 pandemic
- Worsening climate impacts



Thank you. Any questions? rcleetus@ucsusa.org

Union of
Concerned Scientists

Ambition and Opportunity in America's New Climate Commitments

Tracy Bach,
Washington University
& RINGO

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Wednesday, May 12, 2021



UNFCCC

1. Establishes basic governance system, like objectives and principles, data collection and sharing commitments, institutional arrangements
2. Non binding emission targets

Kyoto Protocol

1. Operates under UNFCCC governance system
2. Establishes legally binding GHG limits on Annex 1/developed countries
3. Creates market-based mechanisms

Paris Agreement

1. Operates under UNFCCC governance system
2. Sets global temperature goal, adaptation goal, and nationally determined contributions (NDCs) of all Parties to reach it
3. Creates enhanced transparency framework and global stock take

UNFCCC

1992/1994

197 Parties

COP

Kyoto Protocol

1997/2005

192 Parties

CMP

Paris Agreement

2015/2016

191 Parties

CMA

NATIONALLY DETERMINED CONTRIBUTIONS

**SELF DETERMINED
CLIMATE PLANS**
from each country participating
in the Paris Agreement (PA)

PARIS AGREEMENT OBJECTIVES

01 TEMPERATURE GOAL

Keep a global temperature rise this century well below 1.5 to 2 degrees Celsius (above pre-industrial levels).

02 RESILIENCE

Increase the ability to adapt to the adverse impacts of climate change.

03 FINANCIAL FLOW

Work towards making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.

WHAT DO NDCs ENTAIL?

Each member country from the PA determines their contributions in the context of their national priorities, circumstances and capabilities.

CD, ↓ MITIGATION

NDCs allow countries to outline actions parties can take to reduce GHG emissions.

MITIGATION SECTORS AND ACTIONS

Parties can choose different sectors, such as transportation, waste management, energy efficiency, or forestry, for their climate actions.

TARGETS

In most cases mitigation actions are expressed as targets that define the measurement goal a country has chosen to track the effectiveness of their climate actions.

ADAPTATION

A key component in sustainable development, in many cases NDCs dovetail the mitigation strategies with resiliency measures to ensure we are equipped for the shifting climate.

ADAPTATION SECTORS AND ACTIONS

Policies, frameworks, investments and technology that is needed to minimize the impact of potential floods, changes in precipitation, droughts, rising temperatures, rising sea levels, etc.

FINANCE/SUPPORT

This can include financial plans or requests for funding, technology transfer, etc. necessary for either Mitigation or Adaptation actions outlined in each country's NDC.

SUBMISSIONS Process

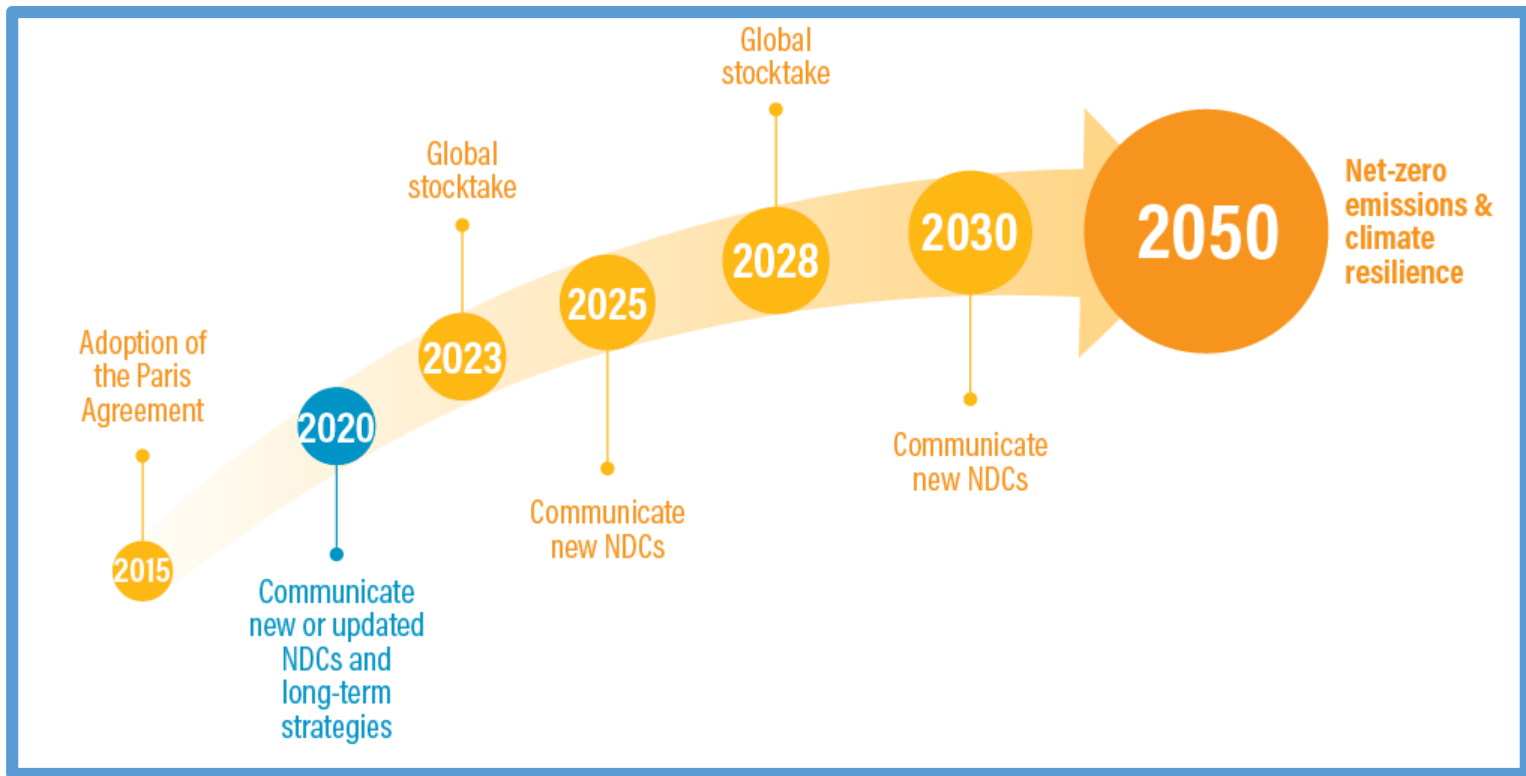
Most countries have submitted their first NDC and will either submit a new one or update their NDC by 2020. As of 2020, NDCs will be reviewed and updated continuously in an ongoing 5-year process.

Global AMBITION

Each successive NDC must represent a progression beyond the Party's then current NDC and reflect its highest possible ambition. Hence, participation in NDCs sets the course for continuous expansion of climate mitigation and adaptation efforts at a global scale.



United Nations
Framework Convention on
Climate Change

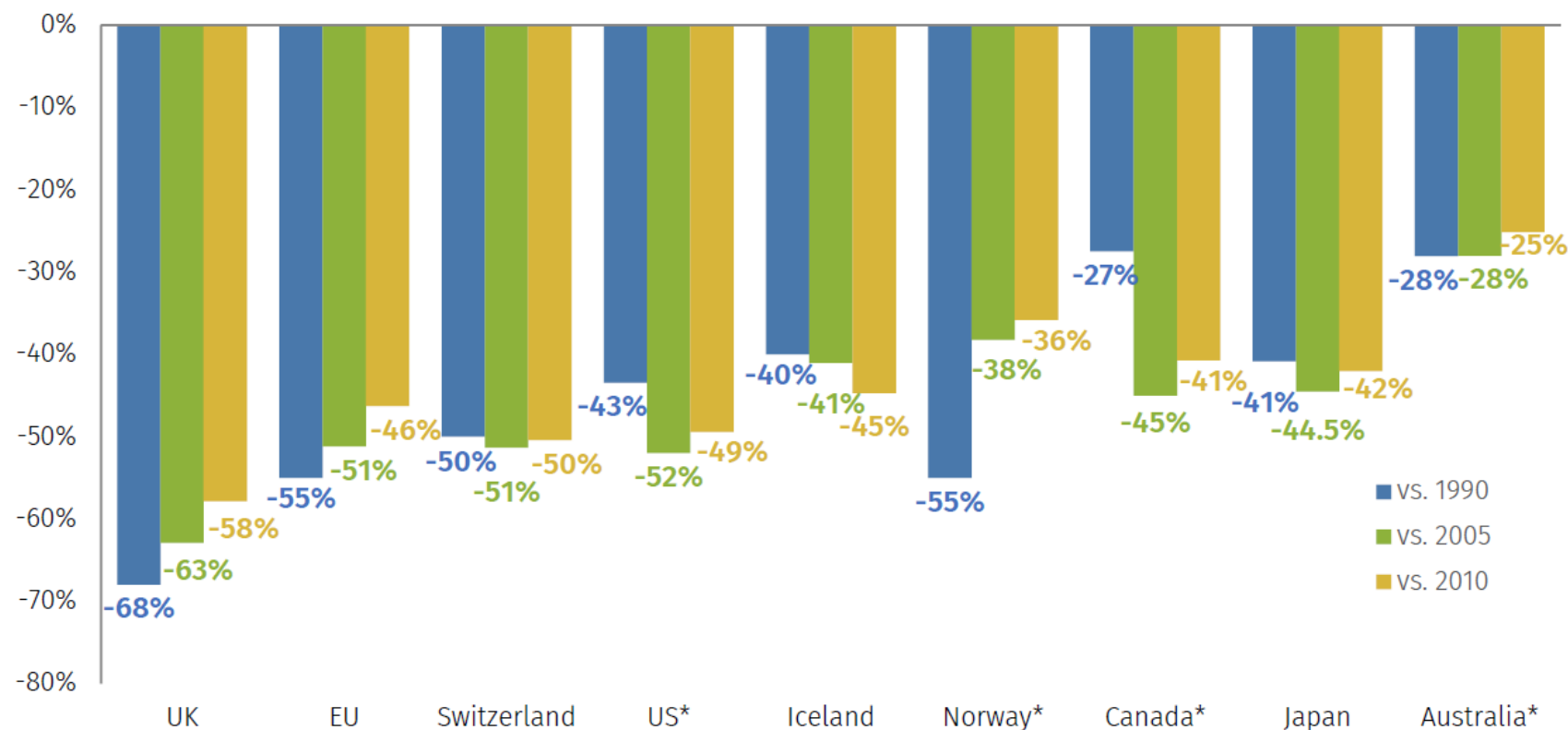


| | | 2016 NDC | 2021 NDC | Change |
|------------------------------|---|---|--|--------|
| 2030 unconditional target(s) | Country's formulation of the target | 26-28% below 2005 by 2025 (incl. LULUCF) | 50-52% below 2005 by 2030 (incl. LULUCF) | + |
| | Absolute emissions level [excl. LULUCF] | 5,269 – 5,744 MtCO ₂ e in 2025 | 3,675 – 4,178 MtCO ₂ e in 2030 | |
| | Emissions compared to 1990 and 2010 [excl. LULUCF] | 11-18% below 1990 levels by 2025 18-25% below 2010 levels by 2025 | 35-43% below 1990 levels by 2030 40-47% below 2010 levels by 2030 | + |
| | CAT rating | Critically insufficient | TBD | + |
| | Net zero-emissions target | No | The US announced in January 2021 its aim towards net-zero emissions by 2050, no official target has been submitted to the UNFCCC | + |
| | Alignment of NDC to net zero-emissions target | | Unclear | |
| | Sector coverage | Economy-wide | Economy-wide | |
| | Separate target for LULUCF | No | No | |
| | Gas coverage | All greenhouse (GHG) gases | All greenhouse (GHG) gases | |
| | Target type | Absolute emissions reduction below a base year | Absolute emissions reduction below a base year | |
| | Clarity of implementation plan | On 4 November 2019, the Trump Administration formally notified the United Nations that the US would withdraw from the Paris Agreement, nullifying the target. | TBD | |
| | Explanation why the target is a fair contribution towards the global goal | Yes. The US references policy action taken to reduce its emissions to achieve the 2020 target of reducing emissions in the range of 17% below 2005 levels. The NDC highlights the higher ambition needed to achieve the 2025 target beyond the 2020 target. | TBD | |
| | Followed guidance on information to facilitate clarity, transparency and understanding of NDCs in Decision 4/CMA.1 | N/A | TBD | |

FIGURE 1

New US target compared to updated NDCs from other advanced economies

NDC reductions from a 1990, 2005, and 2010 base year for selected economies

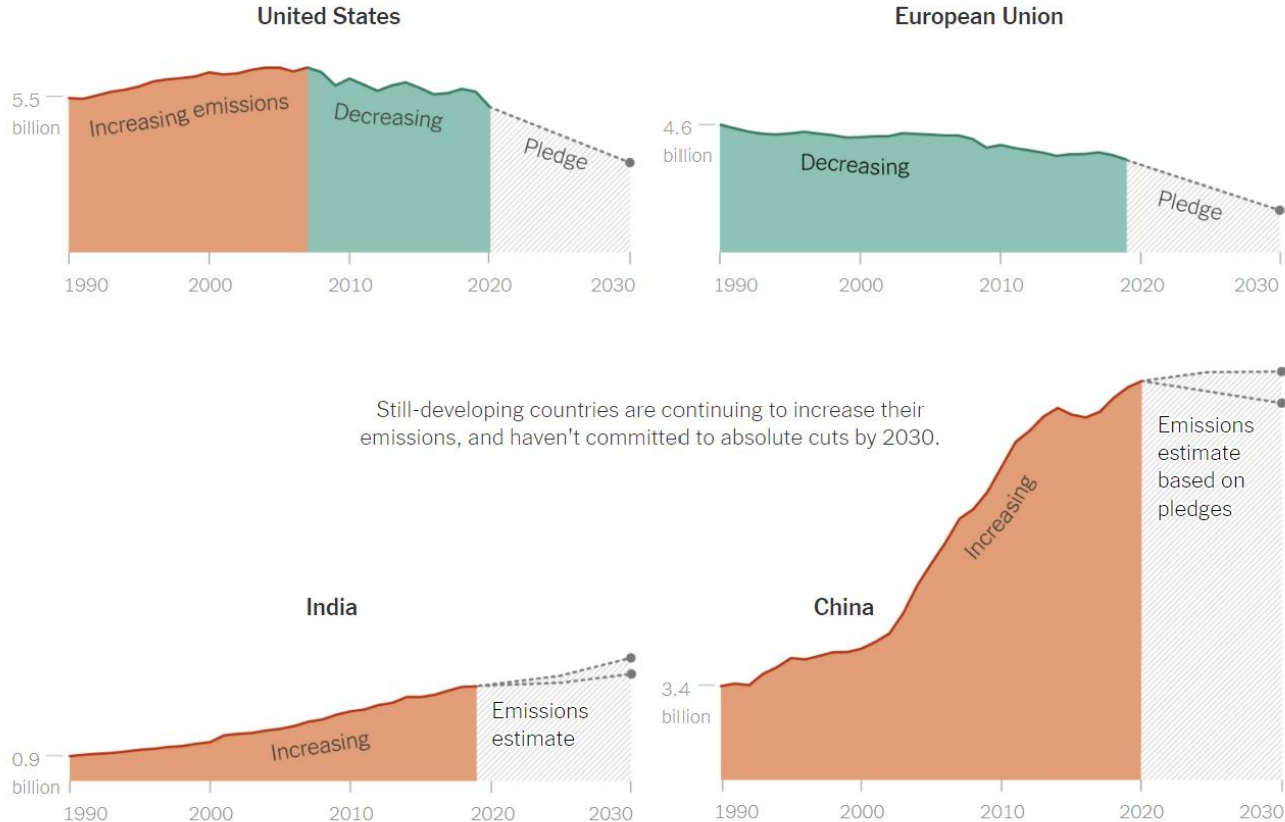


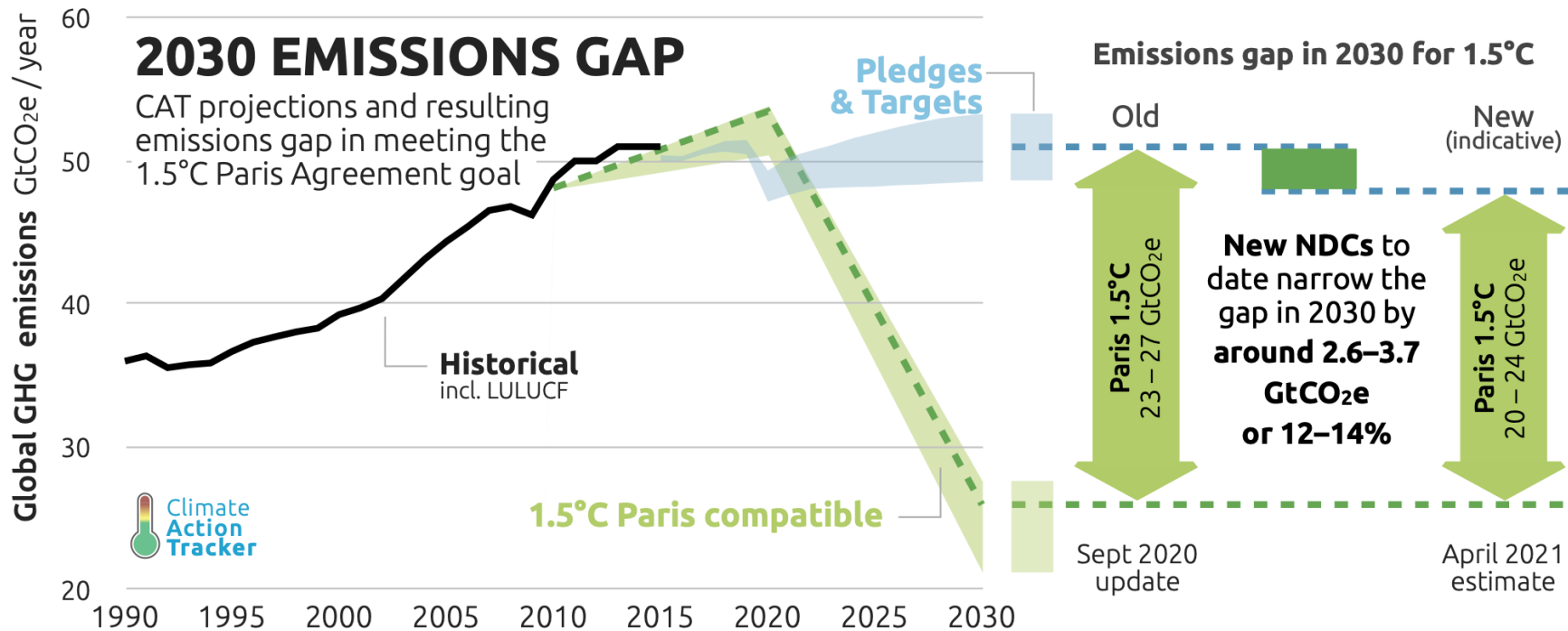
Source: Rhodium Group, UNFCCC. Assumes LULUCF included in all base years. *Upper end of NDC presented as a range.

Trajectories for the World's Largest Emitters

The United States was still increasing emissions until the mid-2000s, while Europe took earlier action.

In metric tons CO₂





Status of 2030 Paris Agreement targets for G20 countries

April 2021

| | | |
|--|-----------------------------|---|
| » SUBMITTED A STRONGER TARGET | ARGENTINA UNITED KINGDOM | EU-27 (FRANCE, ITALY, GERMANY) UNITED STATES |
| » PROPOSED A STRONGER TARGET | CANADA CHINA | JAPAN SOUTH AFRICA |
| » NEW 2030 TARGETS PROMISED IN 2021 | SOUTH KOREA | |
| « SUBMITTED IDENTICAL OR WEAKER TARGET | AUSTRALIA BRAZIL | MEXICO RUSSIAN FED. |
| « WILL NOT PROPOSE A MORE AMBITIOUS TARGET | INDONESIA | |
| HAVE NOT MADE AN ANNOUNCEMENT | INDIA SAUDI ARABIA | TURKEY |

5/31-
6/17

SBs

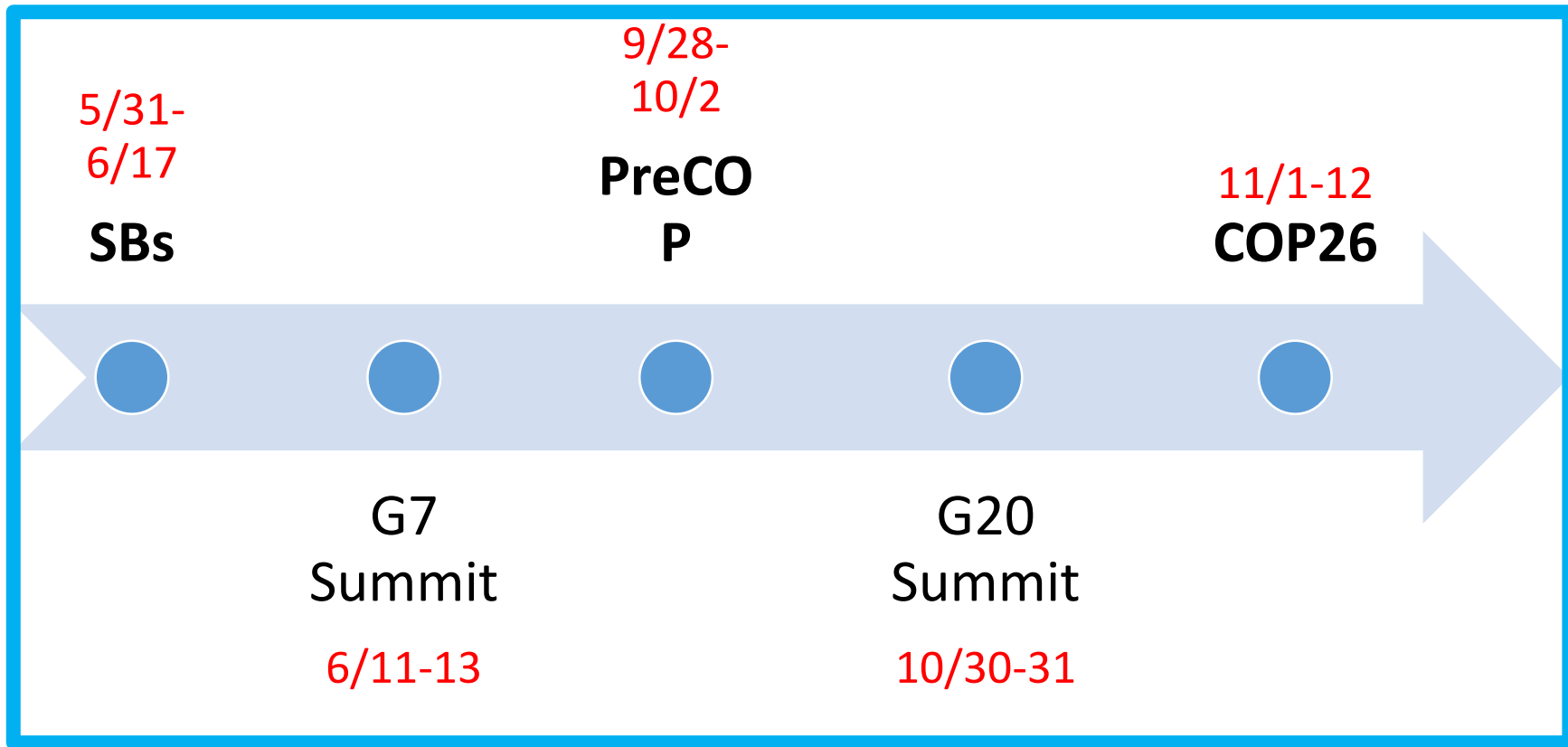
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10/2

**PreCO
P**

11/1-12
COP26

G7
Summit
6/11-13

G20
Summit
10/30-31





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