

2035 NDCs on the path to net-zero

A status report on 2035 NDCs

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Acronyms:

AR6 - Assessment Report 6

CO₂ - Carbon dioxide

CO₂eq - Carbon dioxide equivalent

COP - Conference of the Parties

GCAM - Global Change Analysis Model

GDP - Gross Domestic Product

GHG - Greenhouse gas

IPCC - Intergovernmental Panel on Climate Change

LT-LEDS - Long-Term Low-Emission Development Strategies

LULUCF - Land Use, Land Use Change, and Forestry

NDC - Nationally Determined Contribution

NGFS - Network for Greening the Financial System

UAE - United Arab Emirates

UK - United Kingdom

US - United States

Summary

This briefing evaluates the climate implications of 2035 national emissions targets. To limit peak warming to near 1.5°C, global focus must be on raising ambition post-2030 and minimising 1.5°C overshoot. We use a straight-line pathway from countries' 2030 NDCs to their long-term climate targets to define the level of emissions. We find that this pathway tracks to global warming that is 'just below 2°C'. We then compare submitted 2035 NDCs against this straight line and find that only half of the current 2035 NDCs align with the straight-line trajectory; the other half would lead to higher emissions.

We explore plausible scenarios with 2035 targets for two key countries - China and the US - to test whether these scenarios bring the world closer to a 1.5°C pathway. We find that a target from China of -35% on 2023 levels has a material impact on global emissions and the world's ability to limit warming, when compared to a low-ambition target of -15%. However, much of this gain is eroded if the US fails to honour its 2035 NDC by exiting the Paris Agreement. Even so, these scenarios do not result in emissions tracking on a pathway that keeps us to 1.5°C, even with overshoot; a step change towards stronger commitments is needed. This is particularly relevant for those countries that are currently large emitters, and those that risk joining the group of large emitters in future years without stronger policies and targets. This year's round of NDCs is critical to whether overshoot can be limited. Major emitters must submit strong 2035 targets to close the gap to 1.5°C.

1. Introduction

With Australia and the Pacific confirmed as the host of COP31 in 2026, the region stands at the centre of a pivotal moment in global climate diplomacy. The successful bid comes at a time when the world has recorded its first full calendar year with average temperatures exceeding 1.5°C above the 1850-1900 average.¹ Warming above 1.5°C in a single year does not mean the Paris Agreement temperature goal has been exceeded: it is a goal for long-term average warming levels at the end of the century. However, global emissions would have needed to peak by 2020 for a reasonable chance of staying within 1.5°C. It is now likely that, as a global community, we have missed the chance to cap warming to 1.5°C without some temporary overshoot.

We may still bring warming back to 1.5°C in the long term (after some overshoot). For this, we would need temperatures to peak no higher than 1.7°C to 1.8°C and then for warming to reduce towards 1.5°C as we near the end of the century.² Achieving the net-zero greenhouse gas emissions commitment that all Parties agreed to in the Paris Agreement, will lead to a slight temperature drop.³ The critical end-of-century target for long-term average temperature rise remains at 1.5°C.

The next round of country targets, those for 2035, is critical; and there is reason for optimism. There has been a decoupling of emissions and growth in countries with the highest historical responsibility.⁴ Global emissions are flattening off. We may have reached peak emissions.

Most countries have already put forward long-term targets as part of the long-term low-emission development strategies (LT-LEDS) process, many of these aim for net-zero by 2050.⁵ Each country's Nationally Determined Contributions (NDCs) are stepping stones on a path towards our long-term net-zero emissions future. To move us along this path, each new and subsequent NDC put forward by a nation must represent an increase in ambition towards net-zero relative to that country's last NDC.

To date, only a few countries have submitted 2035 NDCs, most have not. We expect most NDCs to be submitted in September 2025 when the United Nations General Assembly meets or COP30 in November 2025. This briefing examines the contribution of submitted 2035 NDCs against a baseline defined as the 'pre-2035 NDC' context. The briefing then explores the role of high emitting countries in moving the world closer to a pathway aligned with limiting warming to 1.5°C.

¹ World Meteorological Organization. WMO confirms 2024 as warmest year on record at about 1.55°C above pre-industrial level. World Meteorological Organization. (2025) <https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level>

² See C2 scenarios in the IPCC AR6 WG3, available at: <https://www.ipcc.ch/report/ar6/wg3/>

³ Intergovernmental Panel on Climate Change (IPCC). Technical Summary. In V. Masson-Delmotte, P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, & B. Zhou (Eds.), Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press. (2021) https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_TS.pdf

⁴ Intergovernmental Panel on Climate Change (IPCC). Technical Summary. In P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, & J. Malley (Eds.), Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press. (2022) <https://doi.org/10.1017/9781009157926.002.52>

⁵ UNFCCC. LT-LEDS Synthesis Report. United Nations Framework Convention on Climate Change. (2023) from <https://unfccc.int/lt-leds-synthesis-report>

2. Tracking global emissions pre-2035 NDCs

NDCs are how countries announce to the world their contributions to reducing global emissions within set timeframes. LT-LEDS are where countries detail the long-term vision (by or around mid-century) for emission reductions in the context of their development goals. Together, these tell the story of our global emissions pathway forward.

Emissions reduction targets for 2030 expressed in 2030 NDCs were well off what is required to limit warming to 1.5°C with no or limited overshoot.⁶ The 2035 NDCs can strengthen or weaken the ambition assumed in the extension of 2030 NDCs to LT-LEDS.⁷ Assuming that all 2030 NDCs are fully implemented on time, and that they transition linearly into the long-term targets, a best-case outcome is warming of just below 2°C but well above 1.5°C (Figure 1).⁸

There are limitations to this straight-line assumption. Energy economic models generally suggest that more mitigation is justified earlier, especially for industrialised countries, suggesting a steeper curve initially so as to achieve the warming goals in a cost efficient way. The United Kingdom (UK), for example, has followed this suggestion. For other countries, such as India, where per-capita emissions are and have been historically low, a short-term increase in post-2030 emissions is consistent with the Paris Agreement, suggesting a more rounded curve.⁹ Notwithstanding this, for this analysis the straight-line assumption is reasonable and useful.

Assessments of global emissions projections from NDCs must also account for ‘hot air’ (Figure 2). ‘Hot air’ is the term usually applied to the gap between the reference emissions scenario (which is an approximate projection of a country's emissions under ‘current policy’) and the country's official target; but only if the latter is higher (and therefore allows more emissions). Where hot air exists, a country's 2035 emissions are, without any additional climate or energy policies, projected to be lower than its ‘aspirational’ official targets.

In the next sections, we compare submitted 2035 NDCs against the straight-line assumption. We also investigate illustrative scenarios of 2035 NDCs for the largest emitters. Hot air is excluded so as to represent best-estimate projections of emissions.

⁶ Burdon, R., Meinshausen, M., Self, A., Lewis, J., Gütschow, J., Pflueger, M., Nicholls, Z., & Lai, Y. . Entering a 1.5°C world: It's time for a fossil fuel exit. Climate Resource. (2023) https://www.climate-resource.com/reports/ndcs/20231211-briefing/20231212_Briefing_WarmingImplications_NDCs_ClimateResource.pdf

⁷ Climate Resource's detailed country-by-country assessments of these 2030 NDCs and LT-LEDS can be explored online at <https://www.climate-resource.com/tools/ndcs>

⁸ Meinshausen, M., Lewis, J., McGlade, C. et al. Realization of Paris Agreement pledges may limit warming just below 2 °C. Nature 604, 304–309 (2022). <https://doi.org/10.1038/s41586-022-04553-z>

⁹ Ideally, however, the development of zero-emission technologies would allow more energy services at lower costs, in which case a high development pathway for India would justify lower emissions.

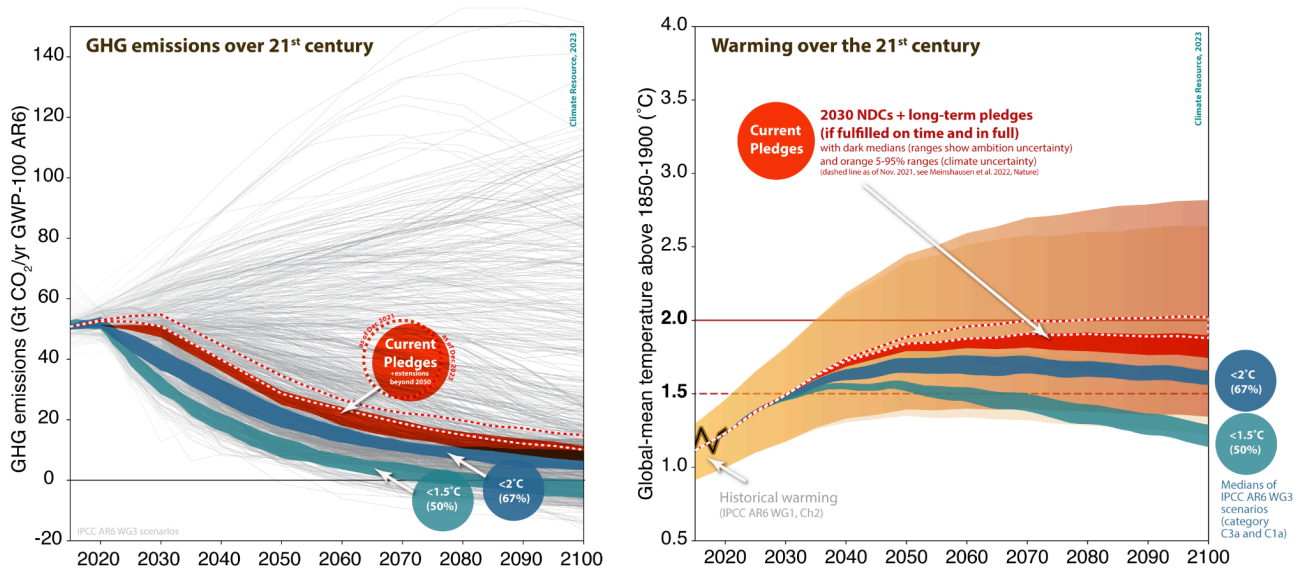


Figure 1: Projected GHG emissions and warming over the 21st century. Best estimate projections from 2030 NDCs and long-term pledges, assuming all are implemented (red) with climate system uncertainty (orange); and best-estimates of warming for IPCC-assessed scenarios that would likely limit warming to below 2°C (dark blue) and to below 1.5°C (50%) (teal) by 2100. Estimated GHG emission trajectories and temperature projections at the time of COP26 in dashed lines.

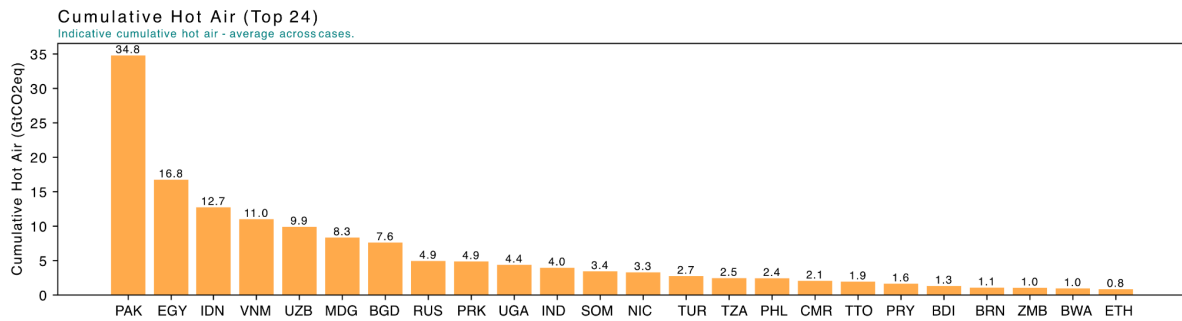


Figure 2 - Cumulative hot air over 2020 to 2060 from the top 24 countries with NDC pledges. NB - we assume the GCAM NGFS5 scenarios as an approximation of 'current policy' reference case projections for the countries. Depending on their LULUCF inventories, additional countries may also have substantial hot air (e.g. Venezuela). Countries are (from left to right): Pakistan, Egypt, Indonesia, Vietnam, Uzbekistan, Madagascar, Bangladesh, Russia, People's Republic of Korea, Uganda, India, Somalia, Nicaragua, Turkey, Tanzania, Philippines, Cameroon, Trinidad and Tobago, Paraguay, Burundi, Brunei, Zimbabwe, Botswana, and Ethiopia

3. Tracking 2035 NDCs

In 2025, countries are expected to submit their third round of NDCs, outlining their climate action and targets through 2035. At the time of this analysis (on 10 June 2025), 23 Parties had submitted their 2035 NDCs. These new NDCs are required to increase ambition compared to previous ones. This analysis evaluates whether each 2035 NDC is at least consistent with a straight-line pathway to the country's long-term climate targets. If an NDC is considered 'on track', it aligns with a pathway that would limit global warming to 'just below 2°C'¹⁰. It does not imply the 2035 NDC is sufficient in terms of the Paris Agreement temperature goal. Currently, about half of the submitted 2035 NDCs appear to be on track or more ambitious. The rest do not.

Table 1 and Figures A1 and A2 in the Appendix show the emissions projections for countries that have submitted 2035 NDCs, with comparisons against the relevant 2030 NDC and long-term target. This method does not assess whether a country's 2035 NDC is fair or ambitious. Instead, it compares each country's new NDC to its own previously announced commitments—specifically, its long-term climate targets and current progress toward them. Based on this comparison, countries are placed into four categories:

- 'Faster than linear' 2035 NDCs are those that are more ambitious than the straight line from their 2030 NDC to their long-term target;
- 'On target' 2035 NDCs are tracking in line with the straight line assumption and show no increase in ambition (but also no weakening);
- 'Falling behind' 2035 NDCs are those that are less ambitious than the straight line assumption; and
- 'Unclear' 2035 NDCs are those that lack sufficient clarity to deduce the level of relative ambition, or have an NDC range that straddles a straight line from 2030 to long-term target.¹¹

The United Arab Emirates (UAE), UK, Andorra, and St Lucia are listed as 'faster than linear' (Table 1), and this can be clearly visualised in Figures A1 and A2, where the teal line is below the grey straight-line assumption. For Andorra and some others, the grey line is shown as a range (Figures A1 and A2). This is to capture conditionality and uncertainty characterised in the NDC or in our quantification and analysis.

The United States (US), Uruguay, Marshall Islands, Switzerland, and Japan have announced 2035 NDCs that do not increase, but also do not weaken the ambition defined by the straight-line assumption. For the US, the analysis will change as we (and others) determine how to quantify the implications of the US leaving the Paris Agreement. Here, the analysis relates to the 2035 NDC as currently accepted.

Zimbabwe, Canada, Montenegro, Maldives, New Zealand and Kenya have all announced 2035 NDCs that could result in higher emissions than projected in the straight line from their 2030 NDC to long-term target. Brazil is a special case as its 2035 NDC spans such a range that emissions could increase or decrease compared to the straight-line assumption; and Singapore could be deemed 'on track' or 'falling behind' depending on which end of the range is considered.

¹⁰ Meinshausen, M., Lewis, J., McGlade, C. et al. Realization of Paris Agreement pledges may limit warming just below 2 °C. *Nature* 604, 304–309 (2022). <https://doi.org/10.1038/s41586-022-04553-z>

¹¹ In categorising countries within these groups a cutoff criterion has been applied at the 2035 year point with a 3.5% tolerance threshold. Only countries within +/- 3.5% by 2035 (relative to 2019 emissions) as compared to the previous straight line assumption are categorised 'on target'. Countries with ranges above or below this are either 'falling behind' or 'faster than linear'.

Table 1 - Countries that have submitted a 2035 NDC compared to a linear target trajectory between their 2030 NDC¹² and their long-term target.

Country	Date of 2035 NDC submission	2035 'straight-line' emissions (between 2030 NDCs and long-term targets)		Latest 2035 NDC		Difference		
		MtCO ₂ eq	% w.r.t 2019	MtCO ₂ eq	% w.r.t 2019	2035 Delta Emissions - MtCO ₂ eq	2035 Delta Emissions - % w.r.t 2019	Cumulative 2019-2050 Delta Emissions (MtCO ₂ eq)
Group "Faster than linear"								
United Arab Emirates	6-Nov-24	161 to 164	-29% to -27%	105	-53%	-59 to -56	-26% to -25%	-682 to -650
United Kingdom	30-Jan-25	203	-55%	155	-66%	-48	-11%	-484
Andorra	5-Feb-25	0.19 to 0.24	-51% to -38%	0.17	-57%	-0.08 to -0.02	-19% to -6.43%	-1.35 to -0.30
Saint Lucia	6-Feb-25	0.42	-11%	0.35 to 0.38	-26% to -18%	-0.07 to -0.03	-15% to -6.78%	-1.27 to -0.57
Group "On track"								
United States	19-Dec-24	2294 to 2394	-60% to -59%	2243 to 2573	-61% to -55%	-51 to 179	-0.88% to +3.10%	-510 to 1792
Uruguay	30-Dec-24	26 to 29	+11% to +25%	26 to 29	+8.48% to +22%	-0.65 to -0.63	-2.77% to -2.69%	-35 to -33
Switzerland	29-Jan-25	20	-56%	20	-58%	-0.77	-1.67%	-13
Marshall Islands	10-Feb-25	0.08	-60%	0.08 to 0.08	-64% to -61%	-0.01 to -0.00	-3.25% to -0.71%	-0.07 to -0.01
Japan	18-Feb-25	533 to 576	-54% to -50%	566	-51%	-10 to 32	-0.88% to +2.79%	25 to 450
Group "Falling behind"								
Brazil	13-Nov-24	899	-48%	841 to 1045	-51% to -39%	-58 to 146	-3.37% to +8.45%	-581 to 1458
New Zealand	31-Jan-25	19 to 21	-70% to -67%	38 to 42	-39% to -33%	19 to 21	+31% to +34%	195 to 210
Ecuador	6-Feb-25	80 to 90	-2.77% to +8.93%	110 to 121	+33% to +46%	30 to 31	+36% to +37%	728 to 742
Singapore	10-Feb-25	46	-17%	46 to 51	-17% to -8.25%	-0.04 to 5.04	-0.07% to +9.11%	-0.36 to 50
Zimbabwe	10-Feb-25	57 to 83	+45% to +110%	76 to 125	+91% to +216%	18 to 43	+45% to +108%	179 to 426
Canada	12-Feb-25	325 to 352	-58% to -54%	405 to 443	-47% to -42%	80 to 90	+10% to +12%	801 to 904
Montenegro	21-Feb-25	1.40	5.09%	1.65	24%	0.25	19%	7.24
Maldives	27-Feb-25	0 to 3.28	-100% to +49%	3.28 to 4.51	+49% to +105%	-0.00 to 4.51	-0.00% to +205%	0 to 81
Kenya	30-Apr-25	96 to 136	-4.17% to +35%	138 to 198	+38% to +97%	42 to 75	+42% to +74%	761 to 1345
Group "Unclear"								
Moldova, Republic of	6-May-25	5.20 to 13	-63% to -6.74%	11	-21%	-2.04 to 5.76	-15% to +41%	-38 to 149
Nepal	19-May-25	40 to 55	+44% to +101%	45 to 61	+63% to +121%	-7.49 to 21	-27% to +77%	-71 to 390
Total		4806 to 5086	-52% to -55%	4831 to 5552	-47% to -54%	-48 to 548	-0.45% to +5.19%	279 to 6823

Note: Table 1 does not include NDCs from Belize and Somalia, which submitted just before this brief was finalised, or Cuba due to issues with quantifying the implied emissions

In total, these 21 NDCs account for less than a quarter of global emissions and less than 13% of projected 2035 emissions (Figure 3). Collectively, these countries decrease their emissions more than the world average, so their share of global emissions are projected to decline from 23% in 2019 to 16% in 2030 and 14% in 2035.

Some large emitters are included in this group, such as the US, Brazil, Japan, the UAE, the UK and Canada. However, China, India, or the European Union are not, given they have not yet submitted

¹² 2030 NDCs are taken from 1 November 2024.

2035 NDCs. Each could have a material impact on the global trajectory. The next section explores the scale of this potential impact.

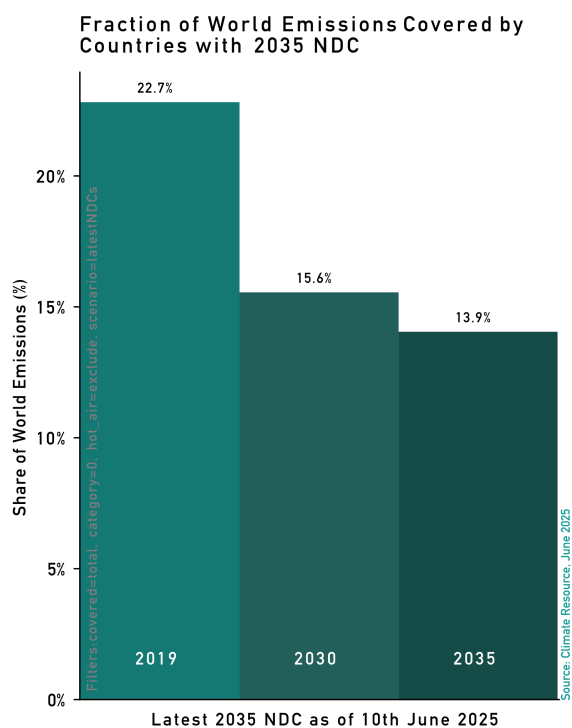


Figure 3: Global emissions captured by countries that have submitted a 2035 NDC. NB - total emissions here do not include military emissions. LULUCF emissions are as detailed in national greenhouse gas inventories; derived using PRIMAP-HIST (country reported version).

4. An opportunity for Chinese leadership

The IPCC AR6 found that only major cuts in emissions by 2030 could have kept alive the chance of limiting warming to 1.5°C with only a small temporary overshoot of around 1.6°C. As the 2030 NDCs did not espouse such action (instead tracking to ‘just below 2°C’) that goal is now out of reach. Warming to 1.5°C by the end of the century is still within reach, but with a higher overshoot of 1.7°C to 1.8°C. The Paris Agreement aspiration of net-zero GHG emissions would lead to a slight cooling trend after a peak in warming.

To keep a 1.5°C target in sight, the largest emitters - China, the US, India, the EU, Indonesia, Brazil and Japan - need to demonstrate leadership and real emissions reductions by announcing and delivering more ambitious 2035 NDCs. In this section, we explore global emissions implications of more or less ambitious 2035 NDCs for some large emitters, specifically we consider targets for China, US, EU and India.

Across three scenarios (Table 2) we observe how leadership and strong ambition from China can help to start to close the emissions gap to a 1.5°C aligned future. We also see the importance of the US delivering emissions reductions in line with its current NDC - whether through state or federal action.

Table 2 - Key assumptions underlying the scenarios

Scenario	China	USA	EU	India	Rest of the world
Scenario 1 - ‘China -15% by 2035’	15% GHG reduction below 2023 levels by 2035	-66% below 2005 by 2035 (according to submitted NDC)	72.5% below 1990 by 2035	Approx. current policy resulting in a range of 3.5 to 4.1 GtCO ₂ eq in 2035	2035 NDC or linear transition between 2030 and long-term target
Scenario 2 - ‘China -35% by 2035’	35% GHG reduction below 2023 levels by 2035				
Scenario 3 - ‘China -35% by 2035 and USA roughly constant from 2030’		‘current policy’ after 2030, i.e. roughly flat emissions			

In all three scenarios, the EU’s 2035 target is 72.5% below 1990 and India maintains current policy resulting in an estimated 3.5 GtCO₂eq to 4.1 GtCO₂eq in 2035. For other nations, the 2035 target is its 2035 NDC or, where there is none, a straight line to its long-term target. Where neither exists, constant emissions are assumed beyond a country’s 2030 NDC.

In Scenario #1, China announces a 2035 NDC of -15% on 2023 levels, whereas in Scenarios #2 and #3, China takes up the leadership baton committing to -35% on 2023 levels. In Scenario #3, the US decision to exit the Paris Agreement comes into effect and is not compensated by stronger state-level action, bringing the US back to ‘current policy’ settings assumed to be roughly flat emissions post-2030.

Analysis of these scenarios provides insights for countries as they sharpen the design of 2035 NDCs.

US and Chinese per-capita emissions could converge in 2035

In December 2024, under President Biden, the US submitted its 2035 NDC committing to reduce emissions by 61-66% below 2005 levels by 2035. This aligned with the US strategy implemented through its Inflation Reduction Act and Bipartisan Infrastructure Law.¹³ In January 2025, US President Executive Trump signed Executive Order 14162 - 'Putting America First In International Environmental Agreements' - withdrawing the US from international climate commitments.¹⁴ According to the Paris Agreement, this takes effect one year after the notification, in January 2026.

In Scenario #1, with the US 2035 NDC in effect, there is almost no strengthening in ambition from the US or China compared to a linear trajectory, with only a little from the EU. This scenario reveals a modest per-capita emissions difference between the US and China by 2035 (Figure A3 in the Appendix).

Scenario #3 shows a substantial increase in Chinese ambition, relative to a straight line to its long term targets (Figure A4). In Scenario #3, the US's withdrawal has taken effect, and not been offset by sub-national action. . This scenario shows a clear weakening in US ambition, where the US 2035 NDC is abandoned and we assume a 'current policy' reference emissions trajectory. Whereas in Scenario #1, US and Chinese per-capita emissions are broadly similar in 2035, in Scenario #3 per-capita emissions in the US are double China's.

Scenario #2 is not shown as it simply depicts the Scenario #3 with the US vignette from Scenario #1.

Chinese leadership could more than offset US inaction

Analysis of the 21 submitted 2035 NDCs shows a slight widening of the emissions gap relative to pathways in AR6, and using the straight-line assumption (Figure 5). A Chinese 2035 target of -15% on 2023 levels is broadly in line with this trend, tightening the emissions gap only marginally (Figure 7).

The Chinese potential to show climate leadership is depicted in a stronger 2035 target of -35% on 2023 levels, which reduces global emissions by more than five percentage points (Figure 4). However, global emissions remain well off-track for a 1.5°C future under the cost-optimal scenarios assessed by the IPCC AR6, which assume an onset of global decisive mitigation in or before 2020.

The US decision to exit the Paris Agreement increases the gap between projected global emissions and what is needed to limit warming. However, a strong Chinese 2035 NDC of -35% more than offsets the effect of the US becoming a global laggard. If other nations were to heed such a Chinese example the overall outcome could move the world closer to 1.5°C.

¹³ United States of America. Reducing greenhouse gases in the United States: A 2035 emissions target. United Nations Framework Convention on Climate Change. (2024)

<https://unfccc.int/sites/default/files/2024-12/United%20States%202035%20NDC.pdf>

¹⁴ Trump, D. J. Executive Order 14162—Putting America First in International Environmental Agreements. The White House. (2025)

<https://www.whitehouse.gov/presidential-actions/2025/01/putting-america-first-in-international-environmental-agreements/>

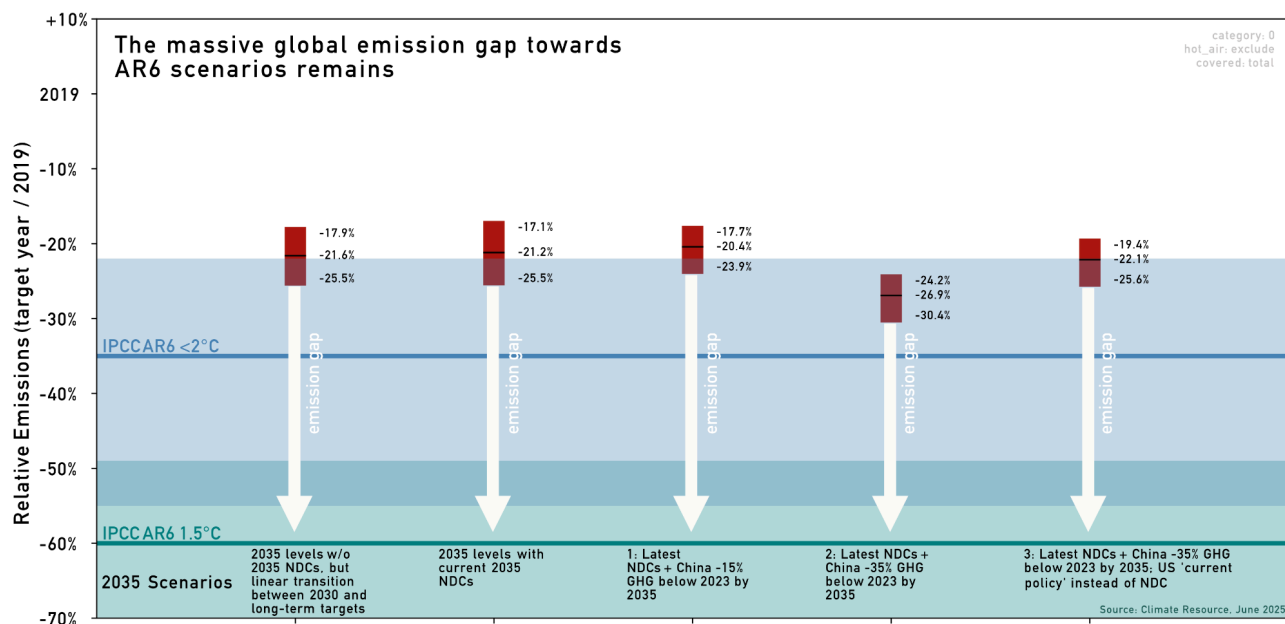


Figure 4 - Global 2035 emissions in 2035 scenarios, relative to 2019 - excluding 'hot air' from NDCs. As baselines, the left-most bar shows global emissions using a straight line interpolation between 2030 NDCs and long-term targets (or constant emissions for countries without long-term targets); and the second bar from the left shows those emissions after accounting for 2035 NDCs submitted (as of 12 June 2025). The next three bars show each of the scenarios in Table 2.

The climate equity landscape is changing

Ethical fundamentals on how to share the burden of emissions reduction between nations have always been at the heart of UNFCCC negotiations. There are manifold views of what is a fair share and how that should be determined.¹⁵ Many of these centre on conceptions and assumptions around responsibility, capability and equity. Two key metrics in this debate are per-capita emissions and historical responsibility.

This analysis reveals that, assuming a EU target of -72.5% below 1990 levels, EU per-capita emissions in 2035 would be similar to those of India and well below Chinese per-capita emissions. Even if China adopts a -35% target, per-capita emissions in China are likely to be at least double those of the EU (Figure 5). We also already noted the potential closing of the per-capita emissions gap between the US and China if the US were to meet its 2035 NDC, for example through subnational climate action.

¹⁵ Robiou du Pont, Y., & Meinshausen, M. . Warming assessment of the bottom-up Paris Agreement emissions pledges. Nature Communications, 9, 4810. (2018) <https://doi.org/10.1038/s41467-018-07223-9>

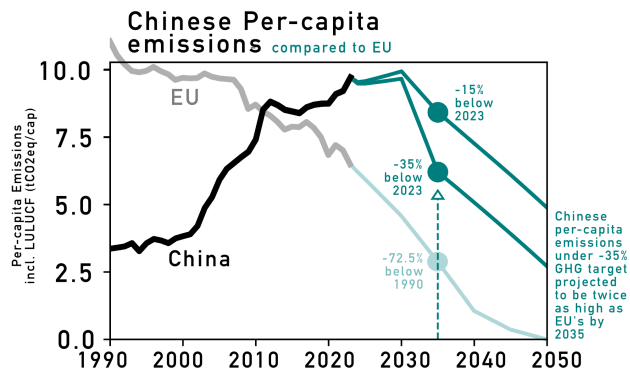


Figure 5- Per capita emissions for the EU and China in the three scenarios (Table 2

Together, the EU, the US and China are responsible for more than 40% of global emissions since 1990. Under Scenario #1, the least ambitious scenario for China, that country’s share of historical emissions from 1990 to 2050 would be around 25% (Figure 6), although lower when measured relative to pre-industrial times.

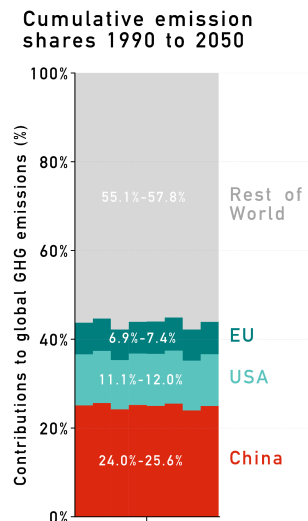


Figure 6 - Contributions from China, the US and the EU to global emissions from 1990 to 2050 in Scenario #1 derived using PRIMAP-HIST (country reported version).

The level of fluidity in both per-capita and absolute historical emissions as we project emissions forward to 2050, suggest a changing ethical landscape that could set the scene for Chinese leadership in climate negotiations.

China's emissions account for around a third of global greenhouse gas emissions. China submitted an NDC in October 2021 committing to at least 65% reduction in carbon intensity by 2030 on 2005 levels, and has not yet submitted a 2035 NDC. An intensity target is not unambiguously converted into an absolute target because of uncertainty around GDP. A Chinese 2035 NDC caged in absolute relative terms rather than emissions intensity would increase certainty and show Chinese leadership. In those terms, a target of around -18 on 2023 levels would put China on a straight trajectory from its 2030 target to a 2060 all GHG long-term target.¹⁶

¹⁶ There is some uncertainty regarding the 2035 target consistent with a straight line from China's emissions intensity target in 2030 to its long term target, in part due to variations in GDP projections in 2030.

However, in the context of a changing ethical landscape and of Chinese emissions potentially having already peaked,¹⁷ China could decide to step up with a strong 2035 NDC and challenge other countries to follow suit. The economic opportunities for China, as the world's leading exporter of renewable energy technologies and supply chain, are likely substantial. According to China analysts at the Centre for Research on Energy and Clean Air, in 2024 clean energy sectors contributed just over 10% of total Chinese GDP, but more than a quarter of GDP growth that year.¹⁸ Overall, the clean energy sector in China grew three times faster than the Chinese economy.

¹⁷ Carbon Brief. Analysis: Clean energy just put China's CO₂ emissions into reverse for first time. (2025, May 26) <https://www.carbonbrief.org/analysis-clean-energy-just-put-chinas-co2-emissions-into-reverse-for-first-time/>

¹⁸ Carbon Brief. Analysis: Clean energy contributed a record 10% of China's GDP in 2024. (2025, February 19) <https://www.carbonbrief.org/analysis-clean-energy-contributed-a-record-10-of-chinas-gdp-in-2024/>

5. Conclusions

Limiting warming to 1.5°C with no or limited overshoot is now out of reach. The global focus must shift to minimising that overshoot—and that means raising ambition. The 2030 NDCs fall short. These could be strengthened and the 2035 NDCs must also deliver a clear step up.

This briefing examines the global emissions impact of the 2035 NDCs submitted so far and what they imply for major emitters still to submit. To gauge ambition, we draw a straight line from 2030 targets to long-term strategies—our ‘straight-line assumption’. Delivering 2035 NDCs on this straight line to long-term targets, would be significant progress, but still be insufficient to deliver 1.5°C, even with high overshoot.

So far, only half the submitted 2035 NDCs align with this straight-line path. The rest either fall short or lack clarity. However, together these pledges cover less than a quarter of global emissions. We model three scenarios based on plausible 2035 targets for some of the biggest emitters: China, the US, the EU, and India. Our analysis shows that in none of these scenarios do global emissions converge with the emissions of cost-optimal 2°C and 1.5°C scenarios assessed in the IPCC AR6 (and for which IPCC AR6 provided 2035 emission milestones). However, a strong target of -35% from 2023 levels from China could shift that trajectory.

The impact of the US walking back its own 2035 commitment is a material risk to the world’s capacity to achieve the Paris Agreement goal. There is opportunity here for subnational US jurisdictions to ensure that momentum in US climate action can continue to build.

With a deeper Chinese cut of 35%, EU per-capita emissions in 2035 would be less than half of China’s, and less than a third if China chose a 15% target. If the US sticks to its pledge and China targets just a 15% cut, their per-capita emissions would nearly converge by 2035. By 2035, India and the EU would have roughly similar per-capita emissions. We also found that even under a modest 2035 target, China is set to account for 25% of cumulative emissions from 1990 to 2050, compared to 12% for the US and just 7% for the EU.

Looking ahead to 2050, shifting per-capita and absolute historical emissions point to a changing ethical landscape; one that positions China to lead on climate. As a top clean energy exporter, China also stands to benefit if the world ramps up its climate ambitions. This creates a strategic incentive for China to push for stronger international targets across all nations and regions, not just as a responsibility, but as an opportunity.

Appendix

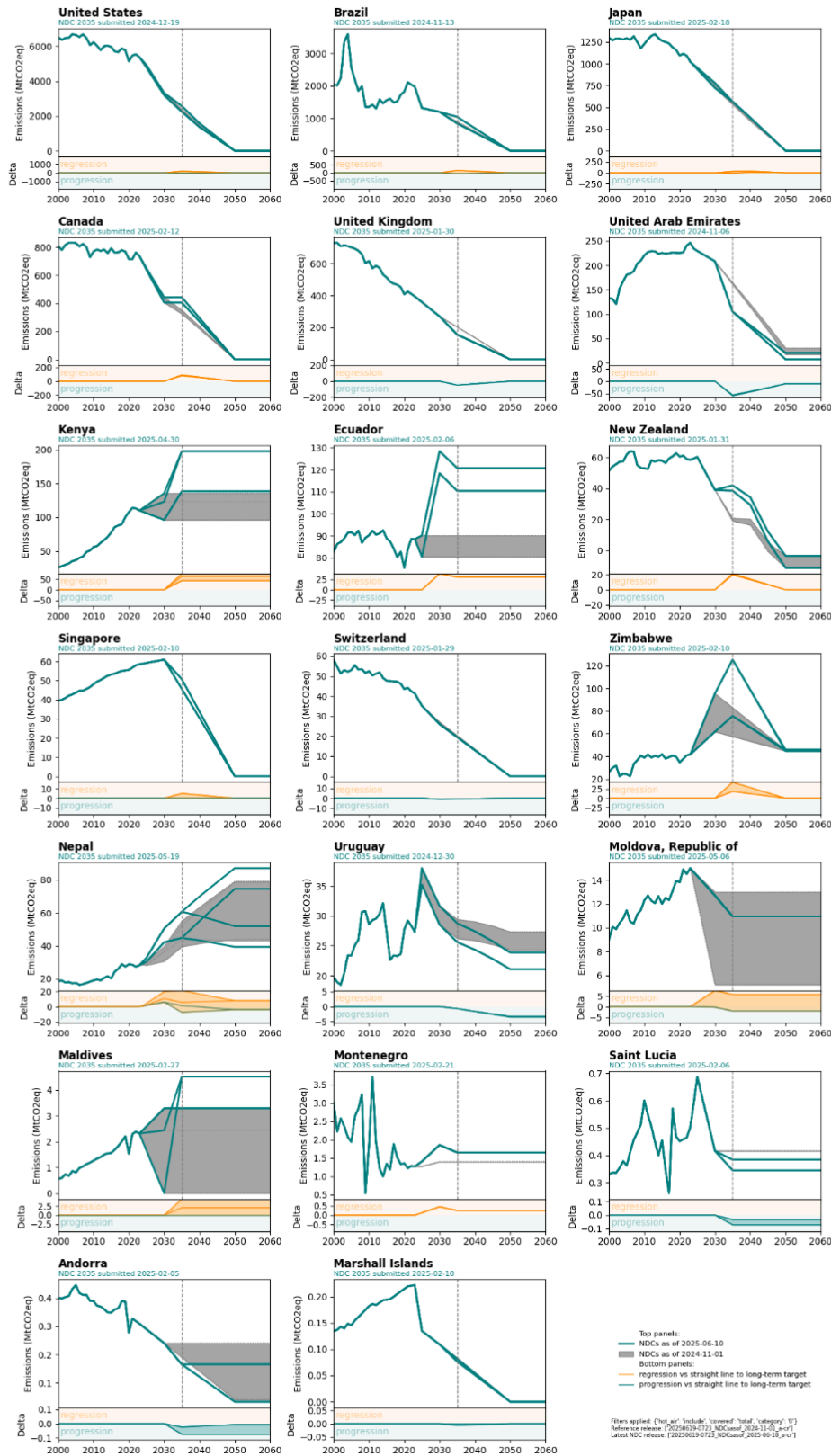


Figure A1 - Country emissions (with LULUCF) for those that have submitted 2035 NDCs (teal line) as of 1 June 2025, compared to previous NDCs and long-term targets (grey lines). The delta, at the bottom of each, illustrates in teal strengthening of ambition (progression) or in orange a weakening of ambition (regression).

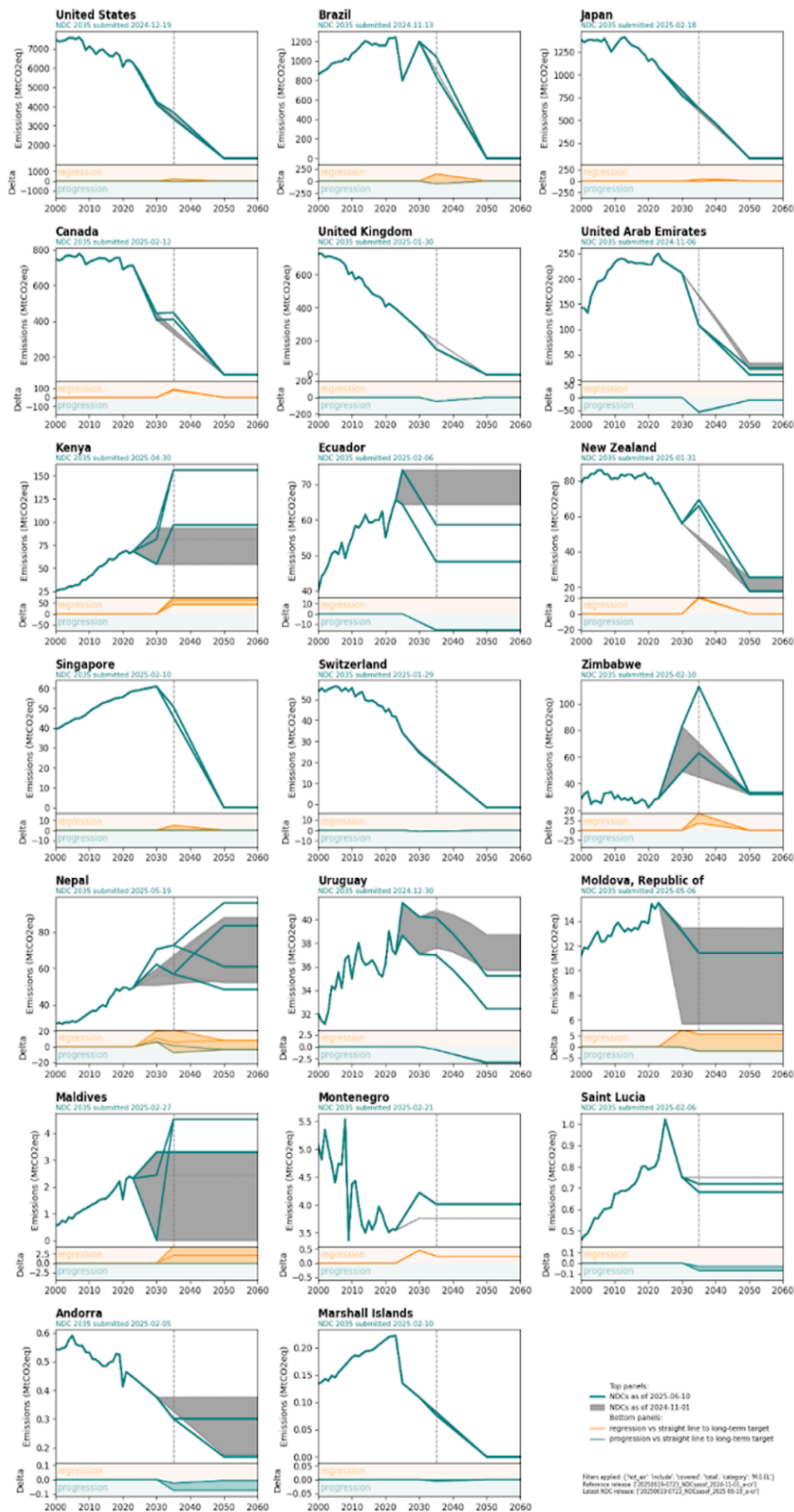


Figure A2 - Country emissions (without LULUCF) for those that have submitted 2035 NDCs (teal line) as of 1 June 2025, compared to previous NDCs and long-term targets (grey lines).

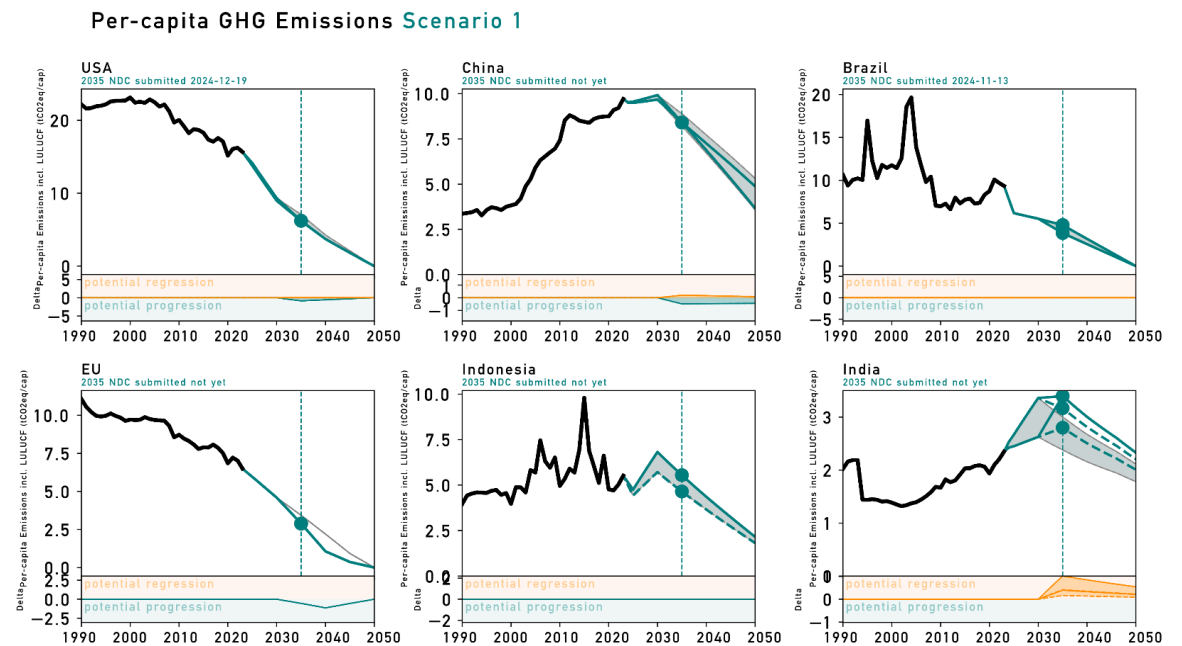
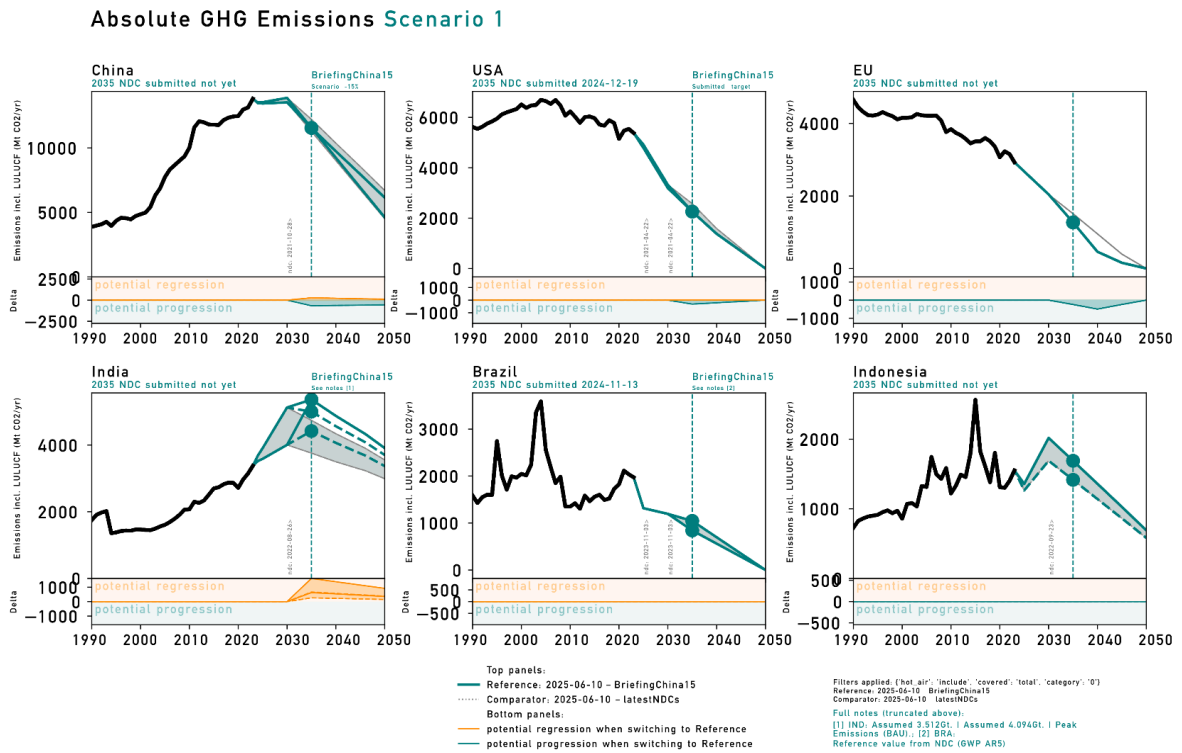
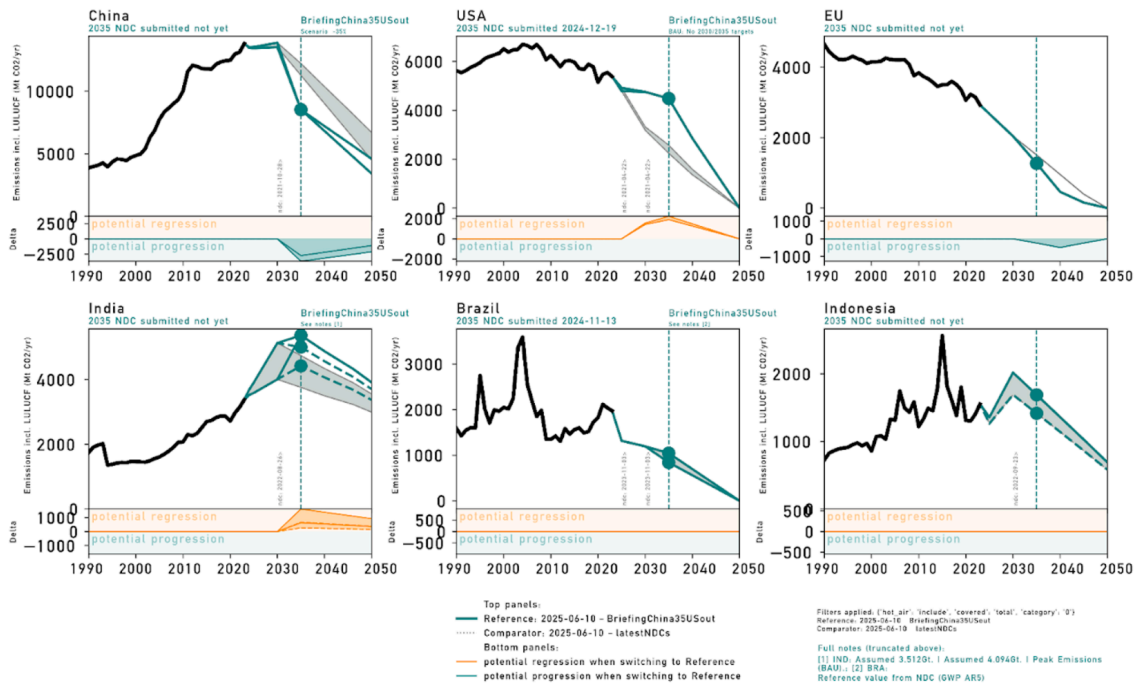


Figure A3 - Absolute (top) and per-capita emissions (below) emissions for Scenario #1 from Table 2.

Absolute GHG Emissions Scenario 3



Per-capita GHG Emissions Scenario 3

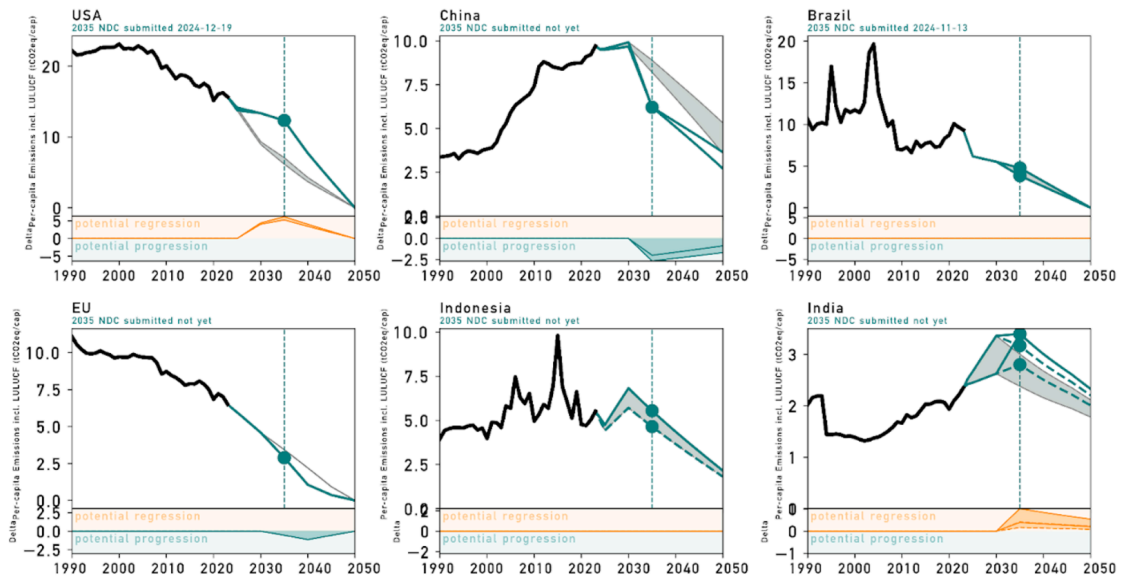


Figure A4 - Absolute (top) and per-capita emissions (below) emissions for Scenario #3 from Table 2.