



PROGRESS OF MAJOR EMITTERS TOWARDS CLIMATE TARGETS

2025 update



PROGRESS OF MAJOR EMITTERS TOWARDS CLIMATE TARGETS

2025 update

Authors

PBL Netherlands Environmental Assessment Agency

Ioannis Dafnomilis, Elena Hooijschuur, Michel den Elzen, Astrid Bos

NewClimate Institute

Jan-Luka Scheewel, Takeshi Kuramochi, Gustavo De Vivero, Maria Jose de Villafranca Casas, Rory Geary, Chetna Hareesh Kumar, Judit Hecke, Finn Hossfeld, Ana Missirliu, Mia Moisis, Natalie Pelekh, Nabila Putri Salsabila, Santiago Woollands, Jamie Wong, Norah Zhang

International Institute for Applied Systems Analysis

Zuelclady MF Araujo Gutiérrez, Mykola Gusti, Dejana Golic

Disclaimer

The views and assumptions expressed in this report represent the views of the authors and not necessarily those of the client.

This report has been prepared under contract to the European Commission, DG CLIMA (EC service contract CLIMA/2023/OP/0027 Analytical capacity for international climate action. Contract number: 090203/2023/SER/917231/CLIMA.A.2). This project is funded by the European Union.

Recommended citation

Dafnomilis, I., Scheewel, J-L., den Elzen, M., Gutiérrez, Z.A., Hooijschuur, E., Kuramochi, T., Missirliu, A., Woollands, S., Zhang, N., Wong, J., Salsabila, N.P., Geary, R., Hareesh Kumar, C., Hecke, J., Hossfeld, F., Moisis, M., de Vivero, G., Pelekh, N., de Villafranca Casas, M. J., Bos, A., Gusti, M., Golic, D. "Progress of major emitters towards climate targets: 2025 Update". PBL Netherlands Environmental Assessment Agency, The Hague, Netherlands & NewClimate Institute, Cologne, Germany. 2025. Available at: <https://newclimate.org/resources/publications/progress-of-major-emitters-towards-climate-targets-2025-update>.



PBL Netherlands Environmental
Assessment Agency

**NEW
CLIMATE**
INSTITUTE



International Institute for
Applied Systems Analysis

© NewClimate Institute, PBL
Netherlands Environmental
Assessment Agency and
International Institute for
Applied Systems Analysis 2025

Acknowledgements

This report was financed by the European Commission's Directorate-General for Climate Action (DG CLIMA). We thank Andreas Fazekas, Johannes Schuler, Vicky Pollard, and the DG CLIMA bilateral desks as well as EU Delegations for their comments.

We thank NewClimate Institute colleagues Victoria Fischdick and Polina Korneeva for their support on the communications and design of this report, and PBL colleague Marte Stinis for the editing. We also thank PBL colleagues and IMAGE model team members Detlef van Vuuren, Isabela Schmidt Tagomori, Harmen-Sytze de Boer, and Vassilis Daioglou for their contributions.

The project team would especially like to thank the following list of international experts for the valuable comments and feedback concerning key national policies for their specific countries: Dr. Luiz Bernardo Baptista and Dr. Taísa Nogueira Morais (COPPE Institute, Federal University of Rio de Janeiro), Dr. Shu Zhang (Tsinghua University), Saswata Chaudhury, Dr. Sanchit Agarwal and Saika Anjum (TERI - The Energy and Resources Institute), Dr. Saritha Vishwanathan and Dr. Jyoti Maheshwari (Indian Institute of Management-Ahmedabad), Dr. Zulfikar Yurnaidi and Dr. Ambiyah Abdullah (ASEAN Centre for energy), Dr. Haewon McJeon, Dr. Cholho Song, Yujeong Jeong and Prof. Woo-Kyun Lee (Korea Advanced Institute of Science & Technology (KAIST)), Dr. Jordi Tovilla and Thalia Hernandez (Tempus Analítica), Dr. Bijay Bahadur Pradhan and Dr. Bundit Limmeechokchai (Thammasat University), Yael Taranto (SHURA Energy Transition Centre) and Tran Thanh Tu (Ho Chi Minh City International University).

This report builds on analyses conducted under the Climate Action Tracker project, led by NewClimate Institute and Climate Analytics, and the Horizon 2020 ELEVATE project (grant no. 101056873).

Download the report



<https://newclimate.org/resources/publications/progress-of-major-emitters-towards-climate-targets-2025-update>

TABLE OF CONTENTS

01	INTRODUCTION	1
02	OVERVIEW OF METHODS	4
03	KEY FINDINGS	7
	3.1 Emission projections under current policies	8
	3.2 Status of the 2035 NDCs	12
	3.3 Progress towards the 2030 and 2035 NDC targets	13
04	EMISSION PROJECTIONS PER COUNTRY	20
	4.1 Argentina	22
	4.2 Australia	24
	4.3 Brazil	26
	4.4 Canada	28
	4.5 China	30
	4.6 Colombia	32
	4.7 Egypt	34
	4.8 Ethiopia	36
	4.9 European Union (EU)	38
	4.10 India	40
	4.11 Indonesia	42
	4.12 Iran	44
	4.13 Japan	46
	4.14 Mexico	48
	4.15 Morocco	50

LIST OF FIGURES

Fig. 1	Countries analysed in the 2025 update report	3
Fig. 2	Overview of emissions projections (including land use) under current policies	10
Fig. 3	Comparison of economy-wide emissions projections under current policies and unconditional NDC targets in 2030 and 2035 for all 25 countries, except Egypt which only has a conditional target	14
Fig. 4	Comparison of economy-wide emissions projections under current policies and conditional NDC targets in 2030 and 2035	16
Fig. 5	Emissions intensity per capita and GDP in 2030	19

LIST OF TABLES

Tab. 1	Key metrics of our 2025 report update	9
Tab. 2	Summary of new 2035 mitigation pledges of the major emitters that are presented in this report	12

LIST OF BOXES

Box 1	Comparing intensity indicators across scenarios	18
--------------	---	----

/^ 01

INTRODUCTION

The Paris Agreement is the primary mechanism for international cooperation and coordination in tackling climate change, providing a durable framework to guide the global effort on climate change mitigation and adaptation (UNFCCC, 2015; United Nations, 2025). The Agreement requires each signing Party to prepare, communicate, and maintain successive Nationally Determined Contributions (NDCs) that they intend to achieve by means of domestic mitigation measures.

The year of publication of this report, 2025, is an important year for climate action, with Parties needing to submit their new NDCs which should contain more ambitious targets and measures for 2035. It is imperative that these targets mark an increase in ambition, and that this ambition is supported by forming and implementing the necessary respective climate policies. As of 15 October 2025, 62 Parties have submitted new NDCs (conditional and unconditional), covering approximately 31% of global emissions (World Resources Institute, 2025). However, many countries either lack the necessary policies to support their 2030 and 2035 NDC targets or fail to implement existing policies to meet them. This results in a global implementation gap, suggesting that emissions may exceed those projected by the NDC targets under current policies (den Elzen et al., 2022; UNEP, 2023).



To guide efforts in ensuring that countries remain on track to achieve the climate goal of the Paris Agreement, PBL Netherlands Environmental Assessment Agency, NewClimate Institute and the International Institute for Applied Systems Analysis (IIASA) have annually evaluated the progress of 25 major emitters (→ **Figure 1**) towards their climate change mitigation targets since 2014. As in previous reports, we create two main scenarios: the current policies scenario, which reflects countries' policies and measures as of July 2025, and the NDC scenario, which assesses countries' NDC targets as of mid-October 2025.

The **25 countries*** analysed are **Argentina, Australia, Brazil, Canada, China, Colombia, Egypt, Ethiopia, the European Union, India, Indonesia, Iran, Japan, Mexico, Morocco, the Republic of Korea, the Russian Federation, South Africa, Saudi Arabia, Thailand, Türkiye, the United Arab Emirates, the United Kingdom, the United States of America and Viet Nam**. Together, these countries accounted for approximately 80% of global greenhouse gas emissions in 2023.

In the following chapters, we first provide an overview of the methods used to assess NDC targets and existing policies. This is followed by our key findings, which summarise the main results and insights of our earlier analysis. In the final section, we present detailed projections and analyses for each respective country.

Fig. 1
Countries analysed in
the 2025 update report



*
We use the term 'country' to refer to both the EU and the remaining 24 economies.

This map is for illustration purposes only. The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the authors.

/ ^ 02

OVERVIEW OF METHODS

For this annual report, we estimate the effect of current policies on future greenhouse gas emissions (GHGs) and assess select countries' progress towards their climate targets as established in their NDCs, consistent with our previous updates (Nascimento et al., 2024). Our current policies scenario assumes no further mitigation beyond currently adopted climate policies per country (Nascimento et al., 2022; Roelfsema et al., 2022). Our definition of policies includes legislative decisions, as well as executive orders or their equivalent but excludes publicly announced plans or strategies, that are not supported by additional policy instruments. We estimate absolute emissions associated with countries' NDC targets based on the information presented in the official documents.

We subsequently compare the projected emissions under the current policies scenario with the respective 2030 and 2035 emissions targets of the NDC scenario. In this report, we do not evaluate the ambition of the NDC targets themselves. Instead, we compare countries' policies to their self-determined NDC targets hence providing evidence of progress towards them. Emissions resulting from the new NDCs by 2035 are only included in the analysis if the NDC in question was submitted before October 15, 2025. All current policies emission level projections, as well as NDC targets in this report are reported in Global Warming Potential (GWP) consistent with the Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC) (IPCC, 2021).

The NewClimate Institute current policies scenario for energy and industry sectors is informed by the Climate Action Tracker (Climate Action Tracker, 2022; Nascimento and Höhne, 2023). The calculations use existing scenarios from national and international studies, such as IEA's World Energy Outlook 2024 (IEA, 2024) and APEC Energy Demand and Supply Outlook (APEREC, 2022). In addition, the projections include calculations of the effect of individual policies in different subsectors (Kuramochi et al., 2021) and the implications of policy cancellations, such as those recently enacted in the United States of America under the One Big Beautiful Bill.

PBL's current policies scenario is prepared using the IMAGE integrated assessment modelling framework (Stehfest et al., 2014), including a global climate policy model (FAIR), a detailed energy-system model (TIMER), and a land-use model (IMAGE land). The calculations use an SSP2 pathway as a baseline (no additional climate policy), as implemented in IMAGE (van Vuuren et al., 2021). Current climate and energy policies are identified in the service contract for DG CLIMA and the ELEVATE project (2025) and subtracted from the baseline (Roelfsema et al., 2022; Dafnomilis et al., 2023). For countries included as part of a larger IMAGE region (Australia, the Republic of Korea, the Russian Federation), we downscaled emission projections using the country's share of regional emissions in 2023 as a constant scaling factor. Policies until 2035 or beyond were considered per country, as identified in the Methodological Annex. In the case of a country not yet having adopted climate policies to 2035, the method used to extend projections followed two key assumptions: a) the policy remains in place post-2030, for example, a carbon price established to meet targets by 2030 is

maintained at the same level until 2035; and b) specific targets, such as a renewable energy mix by 2030, are treated as a minimum threshold in the IMAGE model. This means that the target cannot fall below those levels in the future, although future development is determined based on existing model dynamics such as technology cost and learning rate developments. Changes in policy projections in the absence of new policy adoption can also be attributed to a significant overhaul of the IMAGE model's internal assumptions and dynamics: historical energy data, renewable energy potentials, technology costs and learning rates were updated in preparation for IMAGE's scenario submission to the IPCC Seventh Assessment Report, thereby affecting regional emission projections as well. Finally, our USA projections take into account the rollback of climate policies under the One Big Beautiful Bill.

IIASA quantified land-use current policies scenario projections using the GLOBIOM-G4M modelling framework that includes the global land-use model GLOBIOM (Havlík et al., 2014) and global forest model G4M for all 25 economies analysed in this report (Gusti and Kindermann, 2011). IMAGE, GLOBIOM, and G4M use the SSP2 baseline (no additional climate policy) as a starting point for the projections (Fricko et al., 2017). However, bioenergy demand is based on the World Energy Outlook 2023 as published by IEA (IEA, 2023). The effect of individual policies is calculated by GLOBIOM and G4M using a country-specific carbon price, which is set at a level to ensure that the policies are successfully implemented by the target date (Kuramochi et al., 2021). The impact of climate change and natural disturbances is not accounted for in the land use projections.

We include a detailed description of models, methods, and assumptions in the Methodological Annex accompanying this report. It provides more information about historical emissions data sources and the harmonisation of emissions projections to the historical data (**→ Annex A2**), quantification of NDC emissions levels (**→ Annex A3**), general descriptions of calculation methods used by NewClimate Institute, PBL, and IIASA to quantify emissions projections under current policies (**→ Annexes A4 to A6**), countries' emissions per capita and per GDP (**→ Annex A7**) and a list of the main policies quantified in the projections (**→ Annex A8**).

/ ^ 03

KEY FINDINGS

3.1 EMISSION PROJECTIONS UNDER CURRENT POLICIES

In this section, we provide aggregate emissions values and discuss general emissions trends for the 25 countries analysed in this report. Greenhouse gas emission trajectories serve as a useful, though as of yet incomplete, indicator of overall progress towards the global climate goal. This annual appraisal can therefore inform multilateral processes that aim to support global ambition-raising efforts.

GREENHOUSE GAS EMISSIONS MAY PEAK BEFORE 2030—IF COUNTRIES FULLY IMPLEMENT POLICIES CURRENTLY IN FORCE

Together, the group of 25 countries analysed in this report emitted approximately 38.6 GtCO₂e in 2019. Although emissions dropped in 2020 due to the COVID-19 pandemic, they rebounded and surpassed the 2019 levels by 2021. However, the rate of increase has since then slowed down, largely due to projections that China will peak its GHG emissions before 2030. This suggests that, for the first time in recent years, the emissions trajectory of this group of countries might be starting to reverse.

Our analysis shows that total emissions under current policies could peak by 2026 at around 39.5 GtCO₂e (average of our projections range). We project that by 2030, aggregated emissions for the 25 countries will reach 36.3 to 40.1 GtCO₂e. While the upper range of our projections remains at the same level as our last year's report, the lower end is approximately 1.5 GtCO₂e higher. The revision in policies and methodological approaches **(see also → Section 2)**, and, mostly, the rollback of policies and regulations in the USA are responsible for this upwards shift in the short term. By 2035 however, while the upper range sees only a modest decline in emissions, our lower end of projections declines at a much higher rate: emissions under current policies are projected to reach 32.8 to 39.1 GtCO₂e. This downward trend in our emission projections occurs despite the current policy rollbacks in the USA, where most of the Inflation Reduction Act (IRA) climate funding as well as Environmental Protection Agency (EPA) regulations were repealed – due to the Trump administration's signing of the 'One Big Beautiful Bill' and other executive orders. If the situation reverses (and holds) this trend could imply a further reduction in our range of projections. According to our assessment, the difference in projected emission levels in the USA between the current situation and one where the rollbacks did not materialize is approximately an increase of 1 GtCO₂e by 2030 and 1.5 GtCO₂e by 2035.

EMISSION PROJECTIONS REMAIN ON A DOWNWARDS TREND, DESPITE A DECREASE IN THE USA EMISSION REDUCTION RATE

Tab. 1
Key metrics of our 2025 report update

Data refers to aggregated emissions and considers the 25 countries analysed

Comparison metric	2024 report	2025 report
2025 aggregated emissions	37.9 to 41.4 GtCO ₂ e*	38.8 to 40.2 GtCO ₂ e
2030 aggregated emissions	34.7 to 40.4 GtCO ₂ e*	36.3 to 40.1 GtCO ₂ e
2035 aggregated emissions	-	32.8 to 39.1 GtCO ₂ e
Change between 2015 and 2035	-	-14% to +3%
Change between 2019 and 2035	-	-15% to +1%

*

Corrected for GWP AR6.

Assuming full implementation of existing policies, our current policies scenario projects a reduction in emissions by 2035 in its lower projection, whereas it results in a 'plateauing' of the emission trajectory in its higher projection. The upper end of the projected emissions range shows a growth of 0.1% per year between 2021 and 2035, while the lower end projects a decrease of 1% per year.

→ **Figure 2** shows emission projections under current policies for the main emitting countries. Emissions are projected to decrease or stabilise in 15 out of the 25 countries analysed. In nine of these, emissions are projected to decrease between 2021 and 2035. In the European Union (EU), emissions under current policies are projected to fall by almost 45% in this period. Projected emissions for Japan, the Republic of Korea and Australia show a decline between 35-40% in this period, while Brazil, Canada and the United Kingdom (UK) show emission reductions of 15-20%. The projected annual rates of emissions for certain countries in this category like the EU, Japan and the Republic of Korea (→ **Sections 4.9, → 4.13 and → 4.16, respectively**), are similar to our previous report however the same does not hold for China, the United States of America (USA) or Australia. For China, emissions are projected to decrease by 10 to 20% between 2021 and 2035, following a peak around 2025 and a period of stabilizing emissions up to 2030. China surpassed its 2030 target of 1,200 GW of installed wind and solar capacity by 2025, and according to our projection will achieve the 3,600 GW and the over 30% share of non-fossil fuels in total energy consumption targets by 2035. These achievements, along with revised forecasts of renewable energy costs, has led to declining emissions projections through 2035 (→ **Section 4.5**). In the USA, rollbacks on almost all IRA programs and several EPA regulations have led to higher emissions projections compared to last year, reducing the projected decline between 2021 and 2030 to 3%, compared to 12% in our previous report (→ **Section 4.24**). For Australia, a significant decrease in Land Use, Land-Use Change, and Forestry (LULUCF) projections contributes to a decline in emission levels compared to our previous report, with the lower end of the range reflecting an optimistic scenario in which the government's 82% renewable electricity target for 2030 is achieved (→ **Section 4.2 for details**).

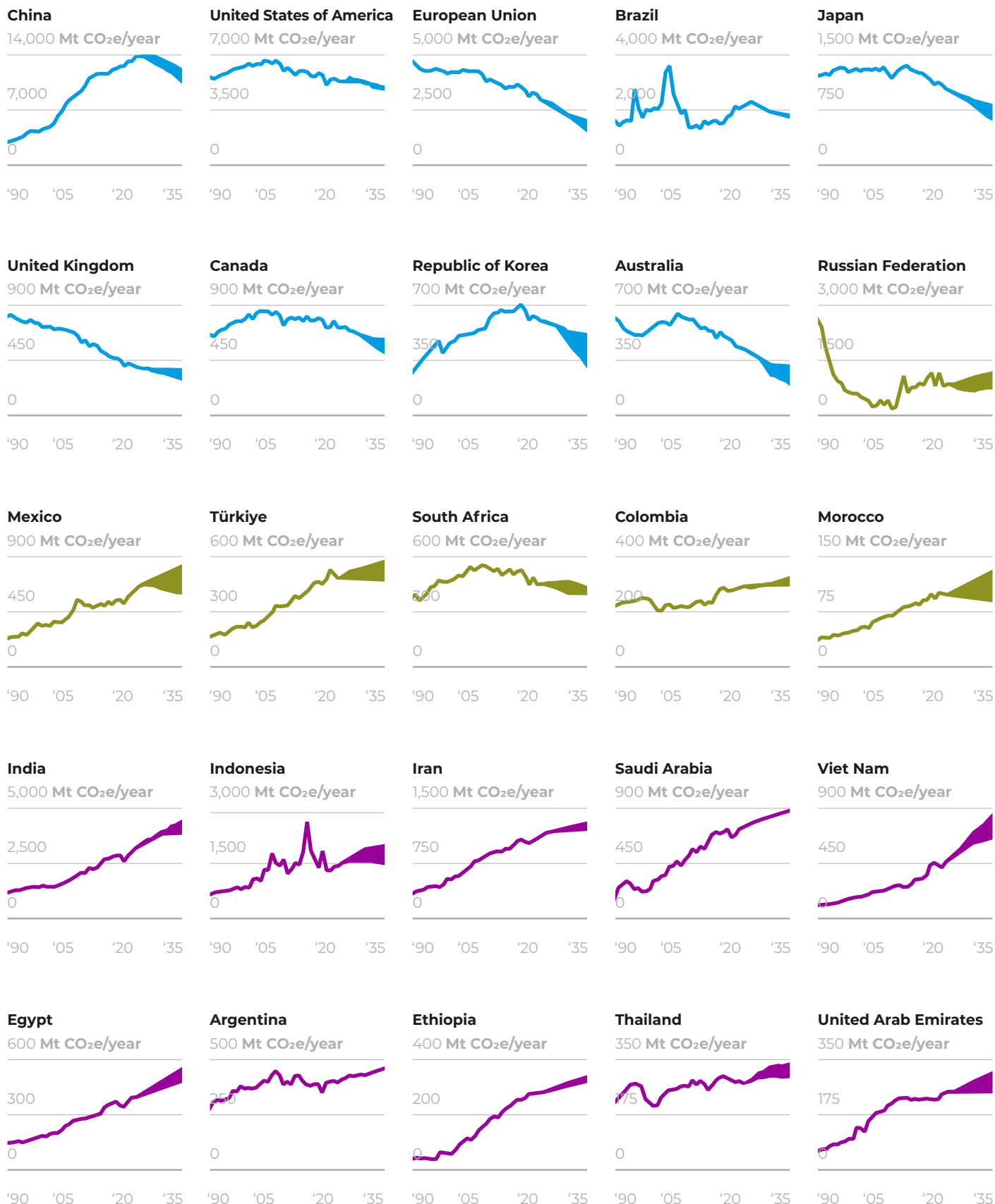
Fig. 2

Overview of emissions projections (including land use) under current policies

Colours indicate the emissions trend between 2021 and 2035

- Countries projected to **decrease** emissions towards 2035
- Countries projected to **stabilise*** emissions towards 2035
- Countries projected to **increase** emissions towards 2035

* We consider that emissions stabilise when the percentage change based on the middle of the range falls within 10%.



In six of the twenty-five countries researched for this report, current policies are insufficient to curb emissions growth. These are Colombia, Mexico, Morocco, the Russian Federation, South Africa and Türkiye. These countries are, however, expected to result in a rough stabilization of emissions in the coming decade. Countries with stabilizing emissions can be economies that are projected to slow down or stall in the coming years (Russia, Mexico, South Africa) (IMF, 2025), or countries that despite projected economic growth have policies in places to counteract the projected emissions increase – even if these policies have not yet materialized (**Colombia, Morocco and Türkiye – → Sections 4.6, → 4.15 and → 4.21 in this report**).

Emissions are projected to increase in the remaining ten countries. In Argentina, Ethiopia, Iran, Thailand and the United Arab Emirates (UAE), emissions are projected to rise by 10 to 25% between 2021 and 2035. In Saudi Arabia and Indonesia emissions are projected to increase by approximately 30% during this period, while in Egypt and India the projected emissions increase is 40% and 47%, respectively, in the same timeframe. India, with revised policies regarding lower renewable deployment than previously assumed, is projected to remain on a continuously increasing emissions path until 2035 (**→ Section 4.10**). Finally, in Viet Nam, emissions are expected to grow by approximately 75% between 2021 and 2035. Therefore, since these ten countries are unlikely to effectively decrease emissions in the coming decade, supporting emissions reductions is key to keeping the global climate goal within reach.

Our findings show that, aggregated, these twenty-five countries we analysed, result in emission levels of -6 to +4% relative to 2019 levels by 2030. This indicates that they remain off track to meet the collective goal of the Paris Agreement, which requires global emissions to be 28% or 43% below 2019 levels by 2030 in order to limit global warming to well below 2°C or 1.5°C respectively (IPCC, 2023b). While aggregated emissions are on a downwards trend, policy revisions and rollbacks threaten to stall this reduction rate. To realise the emissions peak and decline we project for this group of twenty-five countries in the coming years, it is fundamental to ensure that adopted policies are also fully implemented.

It is important to note that methodological revisions in our models and underlying technological assumptions do affect our projections. Significant changes in the IMAGE model's internal assumptions for example, as discussed in **→ Section 2**, have led to changes in South Africa's policy projections, even though no new policies have been identified and implemented for this country. Such changes have impacts on all countries' projections, although the update of policies is the main driving factor for projection changes in the majority of the emitters discussed in this report.

3.2 STATUS OF THE 2035 NDCs

2025 is a pivotal moment in climate action, as it signifies the year where the 3rd round update of NDCs takes place. These 2035 NDCs not only reveal how much further global ambition has moved toward limiting global temperature rise and avoiding the worst climate impacts, but they are also expected to reflect the outcomes of the 2023 Global Stocktake, the first comprehensive assessment of global climate progress under the Paris Agreement (Srouji, 2025). The first Global Stocktake outcome recognized that progress has been made towards the Paris Agreement goals, reaching near-universal climate action. However, it also stated clearly that these efforts are insufficient and that the world is not on track to meet the long-term goals of the Paris Agreement, with the window of opportunity to get back on track narrowing rapidly (UNFCCC, 2025b).

As of 15 October 2025, 62 Parties have submitted new NDCs, covering approximately 31% of global emissions (World Resources Institute, 2025). → **Table 2** below presents the mitigation pledges of the major emitters discussed in this report, including the announcements made from countries during the Climate Summit 2025.

Tab. 2
Summary of new 2035 mitigation pledges of the major emitters that are presented in this report

Country	2030 NDC	2035 NDC
Australia	Reduce emissions by 43% below 2005 by 2030	Reduce emissions by 62–70% below 2005 by 2035
Brazil	Reduce emissions to 1.32 GtCO₂e by 2025 and 1.23 GtCO₂e by 2030	Reduce emissions by 59–67% below 2005 by 2035
Canada	Reduce emissions by 40–45% below 2005 by 2030	Reduce emissions by 45–50% below 2005 by 2035
China	Peak carbon dioxide emissions before 2030; lower carbon intensity by over 65% in 2030 from 2005 ; reduce the share of non-fossil fuels in primary energy consumption to around 25% in 2030; increase forest stock volume by around 6 billion m ³ in 2030 from 2005; and increase the installed capacity of wind and solar power to over 1,200 GW by 2030	Reduce economy-wide net greenhouse gas emissions by 7% to 10% in 2035 from peak levels ; increase share of non-fossil fuels in total energy consumption to over 30%; expand installed capacity of wind and solar power to over six times 2020 levels, striving to bring the total to 3,600 GW; and scale up total forest stock volume to over 24 billion m ³ (announcement only)
Colombia	Limit emissions to 169 MtCO₂e in 2030 and to peak emissions by 2027	Limit emissions to 160–165 MtCO₂e in 2035 (declarative version)
Ethiopia	Reduce emissions by 14% (unconditional) and by 68.8% (conditional) below a Business-as-Usual (BAU) scenario by 2030	Reduce emissions by 40.7% (unconditional) and by 70.3% (conditional) below a revised BAU by 2035
European Union (EU)	Reduce emissions by at least 55% below 1990 by 2030	Reduce emissions by 66.25–72.5% below 1990 by 2035 (announcement only)
Japan	Reduce emissions by 46% below 2013 by 2030	Reduce emissions by 60% below 2013 by 2035
Morocco	Reduce emissions by 45.5% below BAU by 2030, of which 18.3% unconditional and 27.2% conditional reductions	Reduce emissions by 53% below BAU by 2035, of which 21.6% unconditional and 31.4% conditional reductions

Country	2030 NDC	2035 NDC
Russian Federation	Reduce emissions to 70% of 1990 levels by 2030	Reduce emissions to 65–67% of 1990 levels by 2035 (announcement only)
Türkiye	Reduce emissions by 41% below BAU by 2030	Reduce emissions by 465 MtCO₂e compared to BAU , to 640 MtCO₂e by 2035 (announcement only)
United Arab Emirates	Limit emissions to 182 MtCO₂e by 2030	Reduce emissions by 47% below 2019 baseline by 2035 (105 MtCO₂e in 2035)
United Kingdom	Reduce emissions by 68% below 1990 by 2030	Reduce emissions by 81% below 1990 by 2035
United States of America	Reduce emissions by 50–52% below 2005 levels by 2030	Reduce emissions by 61–66% below 2005 levels by 2035

*

On January 20th, 2025, President Trump signed an executive order mandating the USA's withdrawal from the Paris Agreement, to take effect one year later. The NDC targets have been removed from the official USA government site but are still accessible in the UNFCCC database.

3.3 PROGRESS TOWARDS THE 2030 AND 2035 NDC TARGETS

The outcome of the first Global Stocktake—the mechanism aimed at assessing collective progress towards the Paris Agreement—in Dubai COP28, recognized that progress has been made towards the Paris Agreement goals, reaching near-universal climate action. However, it also restated that these efforts remain insufficient and that the world is not on track to meet the long-term goals of the Paris Agreement (UNFCCC, 2025a). It therefore called for countries that did not yet do so to strengthen their NDC 2030 targets before the end of 2024 to align with the climate goal of the Paris Agreement and provided direction for the next round of NDCs due in 2025 (UNFCCC, 2023). Before COP30 in 2025, all Parties to the Paris Agreement are expected to submit more ambitious NDCs with targets for 2035. Ideally, these NDCs should also include more ambitious targets for 2030, as these targets remain insufficient to align with the long-term climate goal of the Paris Agreement. Despite that, not all countries have submitted a 2035 NDC target, and, since our latest 2024 report, none of the 25 countries analyzed have updated their NDCs to include more ambitious targets for 2030.

However, adopting ambitious targets alone is insufficient to reduce emissions. Achieving the climate goal of the Paris Agreement requires not only setting higher targets but also implementing sufficient policies to support them (Nascimento et al., 2023). In this report, report, as stated in the introduction, we assess whether signing countries are making adequate progress towards their current NDC targets. Specifically, we compare countries' emissions projections based on current policies with their NDC targets for 2030 and 2035.

Due to uncertainty in the formulation of targets and the quantification of current policies, we cannot always state with certainty whether a country is on track to meet their targets (den Elzen et al., 2023). In some cases, this uncertainty is driven by a lack of transparency regarding the NDC target—for example, when a country does not specify the reference used in the formulation of its target. In other cases, this uncertainty is explained by different interpretations of the impact of a policy

Fig. 3

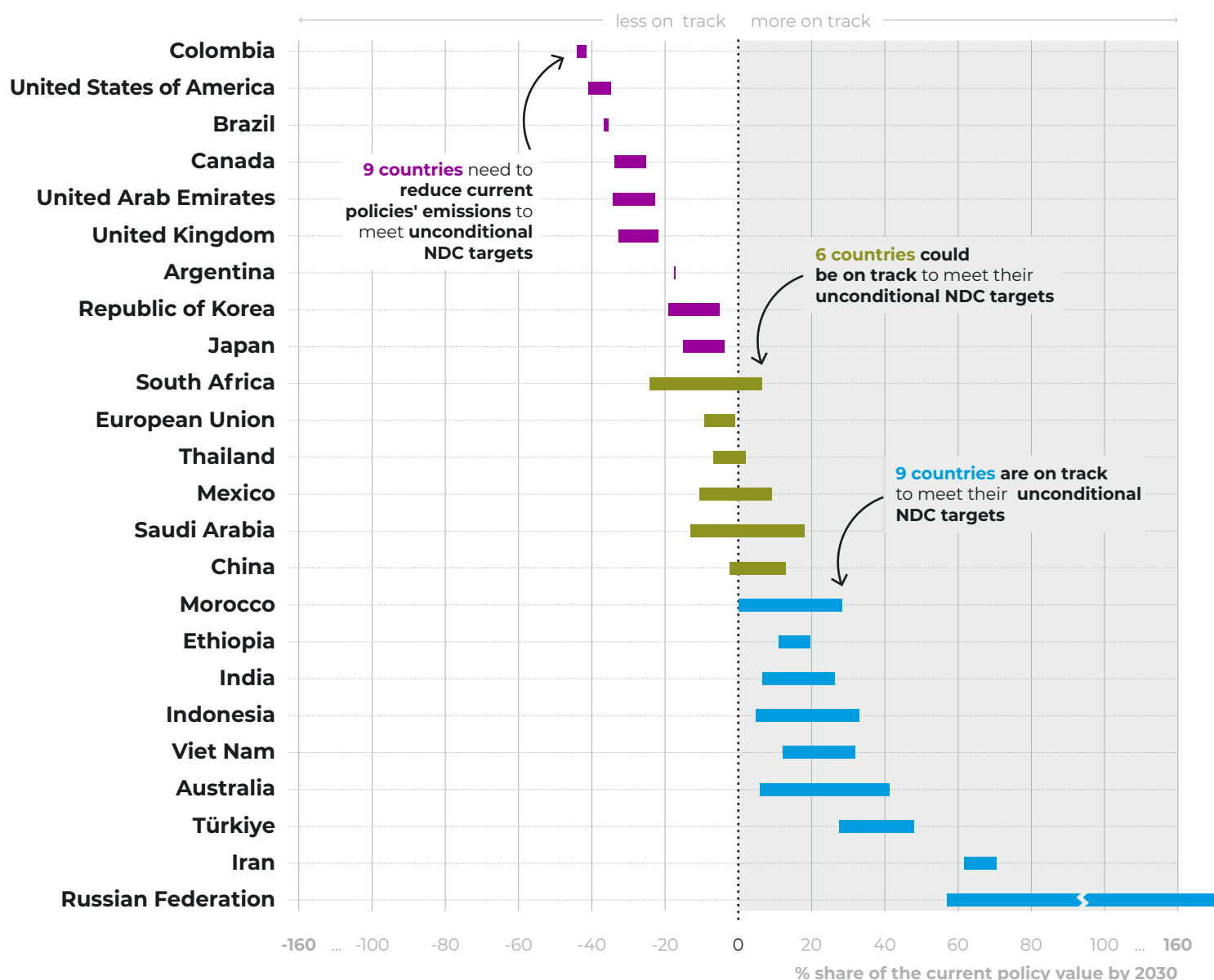
Comparison of economy-wide emissions projections under current policies and unconditional NDC targets in 2030 and 2035 for all 25 countries, except Egypt which only has a conditional target

The percentages are calculated by comparing the full range of the NDC target and current policies scenarios and presented as a share of the current policy value in 2030 and 2035

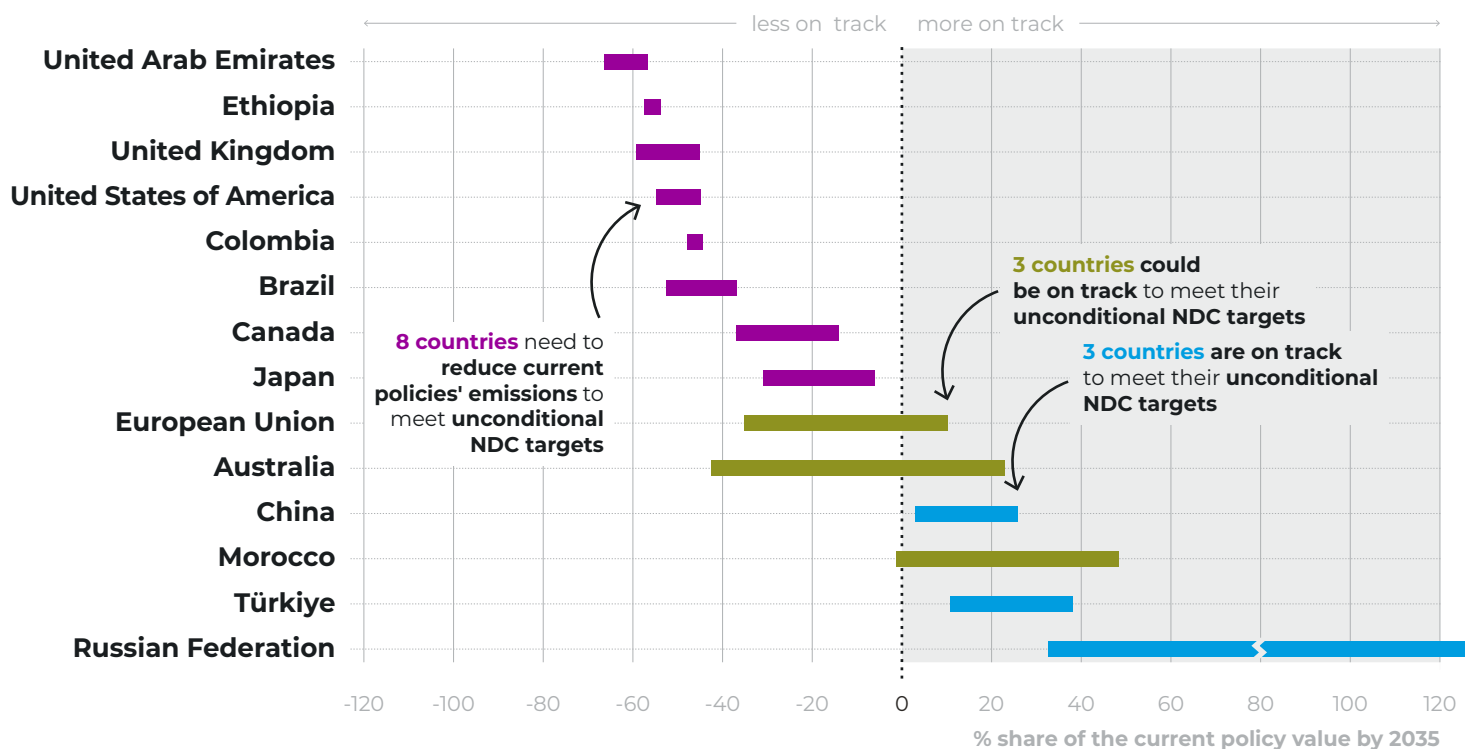
or varied assumptions regarding macroeconomic drivers. To account for some of this uncertainty, we estimate the effect of policies using different modelling approaches (→ **Section 2**).

We consider that a country is on track to meet its NDC target when the entire range of its current policies scenario falls below the NDC target (**in blue in → Figure 3**). A country could be on track if part of its current policies scenario range is below the target (**in yellow in → Figure 3**). In certain cases, when only a small share of the policy scenario is below the NDC target, we state that the country could be on track but is likely off track to meet its target. In this latter case, the country would only meet its targets if the implementation of its policies aligned with the most ambitious interpretation of their impact. The other countries are considered as being projected to miss their targets (**in purple in → Figure 3**).

a) Countries that submitted 2030 NDC targets



b) Countries that submitted 2035 NDC targets



FIFTEEN COUNTRIES COULD BE ON TRACK TO MEET THEIR UNCONDITIONAL 2030 NDCs WITH EXISTING POLICIES

Based on our latest projections, fifteen countries are likely on track to meet their unconditional NDC targets (→ **Figure 3a**). Nine of these countries are clearly on track since they have the full range of the current policy scenario below the unconditional NDC targets (**in blue in → Figure 3a**). This is true for Iran, Viet Nam, the Russian Federation, India, Indonesia, Türkiye, Morocco, Ethiopia and Australia. These countries are projected to meet their unconditional targets without adopting additional policies—although they still need to implement the ones already in place. These countries are well-positioned to substantially enhance their unconditional NDC targets and help close the global ambition gap. Morocco is classified in this category as its current policy projections falls within 2% of its declared NDC target.

Six additional countries could be on track as they have part of their current policies scenario range fall below their 2030 unconditional NDC targets (**in yellow in → Figure 3a**)—China, South Africa, the EU, Mexico, Thailand and Saudi Arabia. They are well-positioned to increase the ambition of their unconditional NDC targets but need to ensure that their current policies are fully implemented according to their most ambitious interpretation. For the EU, the range in our projections is explained by policies adopted at different governance levels (EU level for our lower limit of projections vs Member State level for our upper limit). The EU is classified in this

category as their current policy projections based on the EU-level falls within 2% of its declared NDC target. The range indicates that further action is necessary in member states to ensure the implementation of EU-level policies.

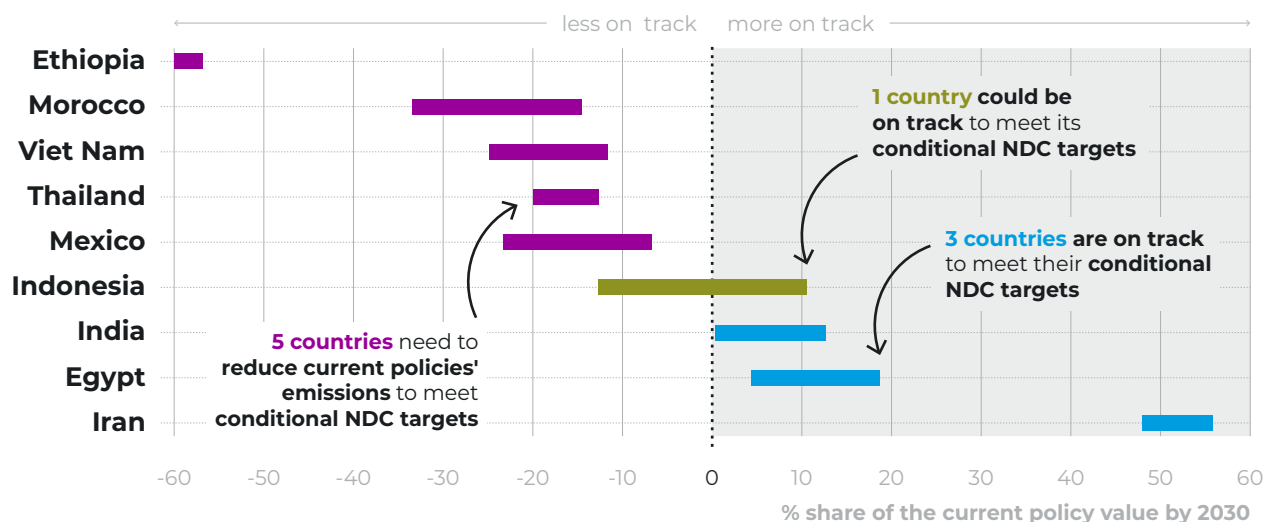
NINE COUNTRIES NEED TO EXPAND POLICY ADOPTION TO MEET THEIR UNCONDITIONAL NDCs

Fig. 4
Comparison of economy-wide emissions projections under current policies and conditional NDC targets in 2030 and 2035

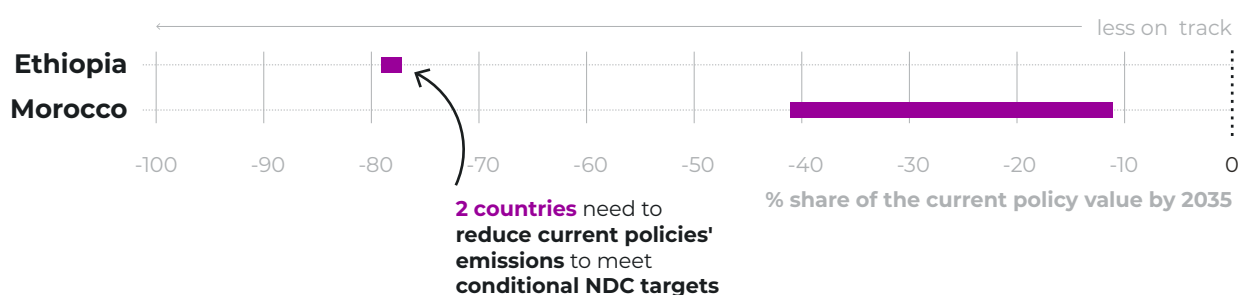
The percentages are calculated by comparing the full range of the NDC target and current policies scenarios and presented as a share of the current policy value in 2030 and 2035

Based on our latest current policies projections, nine countries are off track to meet their unconditional NDC targets (**in purple in → Figure 3a**). In these countries, the full range of emissions projected in the current policies scenario is higher than their unconditional NDC targets. This is the case in Colombia, Brazil, the UK, Canada, the Republic of Korea, Argentina, Japan, the UAE and the USA. These countries face a national implementation gap and need to adopt additional policies or substantially strengthen existing ones to meet their unconditional NDC targets for 2030. In Brazil and Colombia, the land use sector contributes significantly to emissions. Swift adoption and enforcement of policies in this sector will be crucial for closing the implementation gap.

a) Countries that submitted 2030 NDC targets



b) Countries that submitted 2035 NDC targets



CERTAIN COUNTRIES ARE ALSO ON TRACK TO MEET THEIR CONDITIONAL NDC TARGETS

Nine of the countries analysed have conditional NDC targets, with Egypt being the only country that has committed solely to a conditional target (**→ Figure 4a**). In all cases, the conditional NDC targets are more ambitious than the unconditional ones and are tied to specific requests for international support.

Among these countries, three are on track to meet their most ambitious conditional NDC targets, while five are projected to miss theirs. India, Iran, and Egypt are on track to meet their conditional NDC targets without adopting any additional measures. These countries could use the next ambition-raising cycle to reconsider the conditionality of their pledges or to substantially increase the ambition of their targets.

Indonesia could be on track to meet its 2030 conditional NDC target as almost 50% of its current policy projection range is below that target. In contrast, Ethiopia, Morocco, Mexico, Thailand, and Viet Nam are off track and need to adopt additional policies to meet their conditional targets. In these cases, international support will play an important role in supporting the adoption of more ambitious national climate policies. These countries could use the next NDC ambition-raising cycle to concretise the support needed to close the gap between their current policies and the conditional targets (Nascimento et al., 2023).

EIGHT COUNTRIES OFF TRACK TO MEET THEIR 2035 NDCs—BUT SIX COULD BE ON TRACK

Among the fourteen countries that have submitted or announced a 2035 NDC target, our projections indicate that eight are off track to meet said targets based on our projections (**in purple in → Figure 3b**). This is the case for Canada, Brazil, Colombia, Ethiopia, Japan, the USA, the UAE and the UK, as the full range of their emissions projections under current policies is higher than their 2035 unconditional NDC targets.

Australia, the EU and Morocco could be on track to meet their unconditional NDC targets, if emissions follow the lower end of our current policies scenario (**in yellow in → Figure 3b**). For Australia, any uncertainties in the current policies scenario are partly driven by policies adopted at different governance levels, particularly those adopted by different subnational territories. As explained above, for the EU, projections under current policies adopted at the EU level reach the higher end of the 2035 NDC target, but those based on Member State policies do not, highlighting the need to ensure effective implementation at the national level. It should be noted as well that the post-2030 policy framework for the EU will follow an amendment of the European Climate Law, so current policies are not reflecting fully what the EU will do to reach its post-2030 targets.

Finally, three countries, China, the Russian Federation and Türkiye are on track to meet their 2035 unconditional NDC targets, since they have the full range of the current policy scenario below their unconditional NDC targets **(in blue in → Figure 3b)**.

Of the 25 countries analysed in this report, two countries, Ethiopia and Morocco, have published 2035 conditional NDC targets. In both cases, the conditional targets are more ambitious than the unconditional ones and depend on international support. Both countries are off track to meet their conditional targets **(in purple in → Figure 4b)**. Achieving these targets will require the adoption of additional policies, with international support playing a key role in enabling more ambitious national climate action.

Box 1

Comparing intensity indicators across scenarios

Absolute emissions vary substantially among scenarios and countries (→ **Figure 2**). As countries have vastly different populations and economies, making direct comparisons of absolute emissions – such as between China and Egypt – is less insightful. Therefore, we present an overview of emissions per capita and per gross domestic product (GDP) for the 25 countries analysed across different scenarios (→ **Figure 5**). In general, trends in per capita emissions and emissions intensity remain similar to our previous report of 2024.

The disparities in per capita emissions among countries are estimated to remain substantial by 2030 (→ **Figure 5**). The average per capita emissions in 2030 (calculated as the average of the per capita value for each country) are projected to reach 8.3 tCO₂e (range: 2.0 to 22.5 tCO₂e).

NDC targets do not necessarily translate into reductions in emissions per capita compared to historical values. In Iran and the Russian Federation, for example, emissions per capita based on their NDC targets are projected to almost double compared to 2019 levels. Alternatively, the NDC targets of many other countries, such as Colombia, Canada and the United Kingdom, result in emissions per capita that approximately halve between 2019 and 2030. Although this is positive, it is important to note that most of these countries depart from much higher per capita levels.

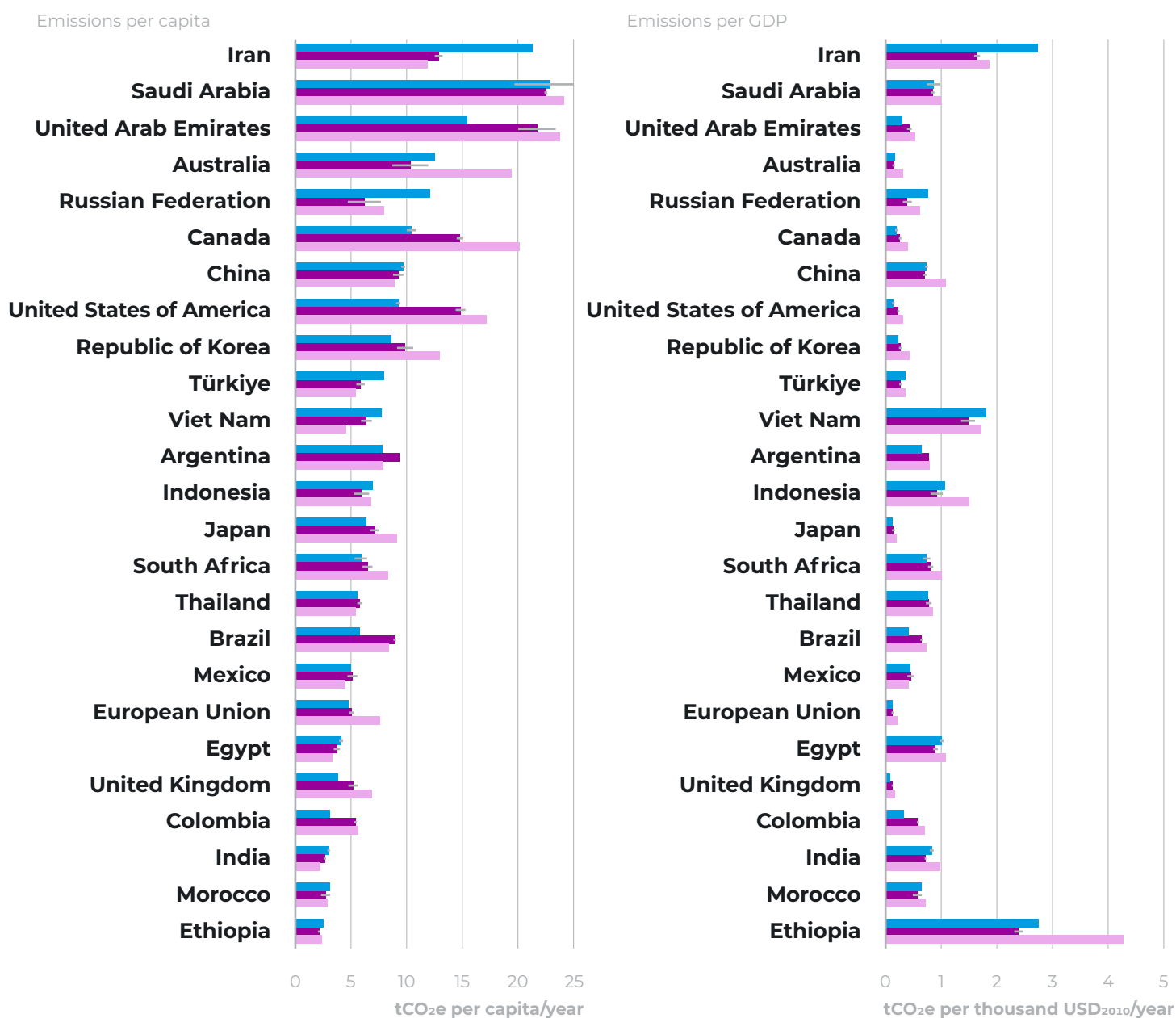
In both NDC and current policies scenarios, we project that the emissions intensity of the economy will almost halve in many countries: Australia, Canada, the EU, the Republic of Korea and the UK. In several cases, NDC targets imply that emissions intensity will be substantially lower than historical levels, as seen in Brazil, Colombia and Ethiopia.

Fig. 5

Emissions intensity per capita and GDP in 2030

Comparison between current policies, NDC targets and historical 2019 levels

■ NDC target* ■ Current policies ■ Historical emissions | 2019 — Uncertainty



* The NDC target figures refer to unconditional targets, except for Egypt.

/ ^ 04

EMISSION PROJECTIONS PER COUNTRY

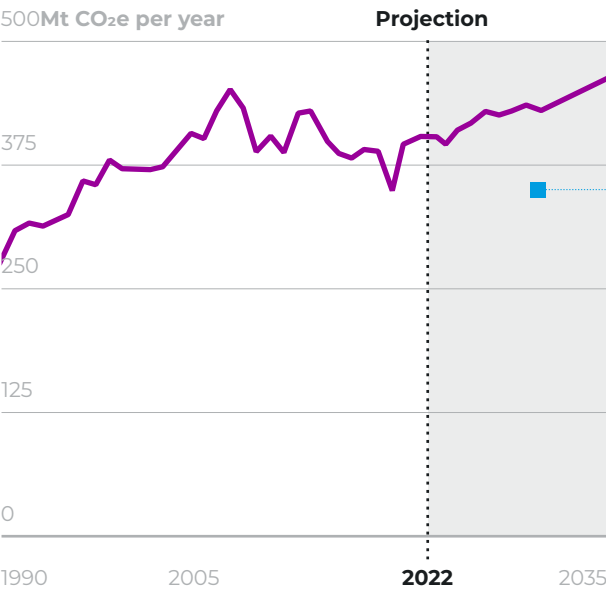
4.1 ARGENTINA

Argentina's NDC and net zero targets

Pledge	Key targets
NDC	Limit emissions to 355 MtCO₂e by 2030
Net zero	Net zero by 2050 (GHG; LTS submitted)

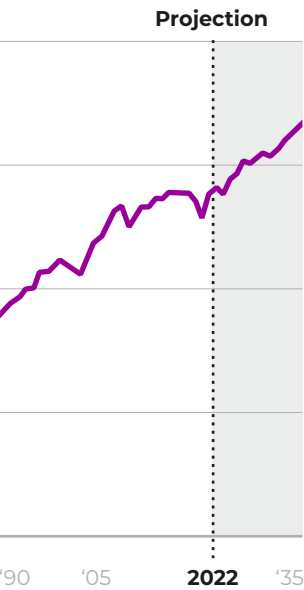
Impact of climate policies on emissions in Argentina

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/ G4M model (2025).

Excluding land use



Argentina is **projected to miss its 2030 NDC target under current policies**. Overall emissions under current policies are projected to keep rising steadily to 2035 due to the significant growth in energy and industry-related emissions. Although land-use emissions are projected to decline slightly by 2035, revised historical emissions imply that the sector will not act as a net sink before then.

2030 NDC | unconditional
355 Mt CO₂e

TARGETS

Argentina's NDC includes an absolute, economy-wide and unconditional goal of limiting emissions to 355 MtCO₂e by 2030 (Government of Argentina, 2021). As of October 2025, Argentina has not yet submitted its 2035 NDC to the UNFCCC.

In 2020, the government announced a long-term strategy (LTS) which stated their aim for greenhouse gas neutrality by 2050. Argentina's target covers all emissions and economic sectors but does not provide details on the expected contribution per sector nor the land use removals (Government of Argentina, 2022).

RECENT DEVELOPMENTS

Under Javier Milei, in power since December 2023, there has been little progress on developing and implementing more ambitious climate policies. After Argentina's delegation's sudden exit from the COP29 in Baku, reports indicated that Milei's administration was actively considering withdrawing from the Paris Agreement altogether. For now, however, Argentina still remains in the Paris Agreement, but it is unclear whether it will submit a new NDC around the COP30 in Belém, Brazil (Nugent and Mooney, 2025).

There are several recent developments that are likely to affect greenhouse gas emissions in Argentina. A law adopted in 2024 introduced a new regime to incentivise large investments, particularly in the energy sector (KPMG, 2024). In that same year, Argentina recorded a substantial energy trade surplus of approximately USD 5.7 billion, marking its strongest balance since 2006. This surplus is expected to grow to USD 8 billion by 2025 (Reuters, 2025). Alongside its focus on exploiting its fossil fuel resources, in December 2024, President Milei launched the Argentine Nuclear Plan, creating a Nuclear Council. This plan aims to support modern nuclear power development and refers to the growing energy demands of artificial intelligence (AI) technologies. It prioritises the construction of four ACR-300 small modular reactors (SMRs) at the Atucha site near Buenos Aires (total 1.2 GW). The plan is backed by US private investment, with the first unit targeted for 2030 and with significant future export potential (Nugent, 2024).

Finally, Argentina is still considering the design and implementation of market mechanisms to trade emissions either internally (through an ETS) or internationally (for example through Article 6), but has not yet made any definitive announcements (ICAP, 2025; Mesa Argentina de Carbono, 2025).

2019 historical data and 2030 projections of key emissions indicators for Argentina

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	350 -13% vs 2010	430 +24% vs 2019	355 +2% vs 2019
Emissions per capita (tCO ₂ e/cap)	7.8 -20% vs 2010	9.3 +19% vs 2019	7.7 -1% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.79 -16% vs 2010	0.77 -3% vs 2019	0.64 -20% vs 2019

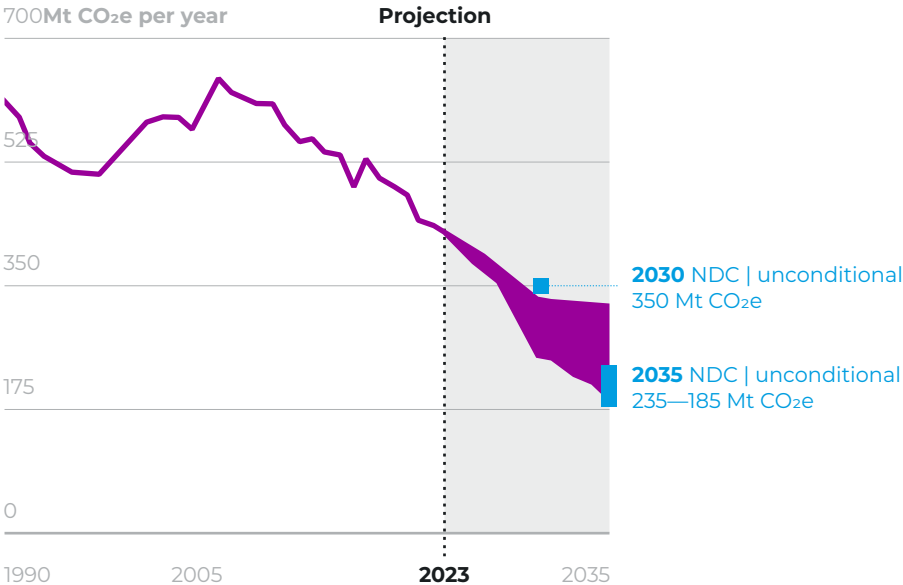
4.2 AUSTRALIA

Australia's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 43% below 2005 by 2030	Reduce emissions by 62-70% below 2005 by 2035
Net zero	Net zero by 2050 (GHG; LTS submitted)	

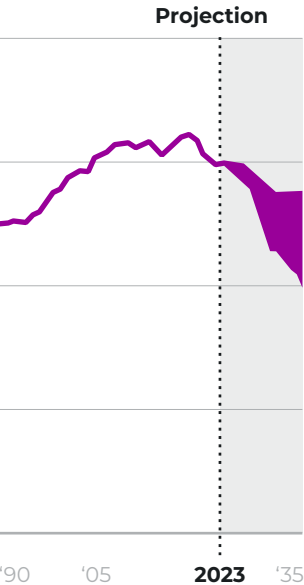
Impact of climate policies on emissions in Australia

Including land use



Source: PBL IMAGE model (upper end); NewClimate Institute calculations (lower end); IIASA GLOBIOM/G4M model (2025).

Excluding land use



Australia is **well on track to meet its 2030 NDC target and could be on track to meet the upper end of its 2035 NDC target, although the lower end is likely to be missed** under current policies. Emissions decline through 2030, but this trend slows down towards 2035 at the upper end of our projections. The upper end is based on national policies, while the lower end reflects more ambitious state-level measures and assumes the Australian government achieves its 82% renewable electricity target by 2030. Land-use emissions are expected to decline, with the sink projected to increase steadily towards 2035, largely driven by afforestation. The sinks are projected to increase due to forest growth and building soil carbon in croplands and grasslands. This increase in sinks contributes to the significant differences in projections compared to our 2024 report.

TARGETS

Australia's first updated NDC commits to an unconditional target of reducing emissions by 43% below 2005 levels by 2030, alongside a long-term goal of net zero emissions by 2050. These targets were legislated in 2022 (Parliament of Australia, 2022). Australia's second NDC strives for a 62 to 70% reduction below 2005 levels by 2035 (Government of Australia, 2025).

Australia's Long Term Emissions Reduction Plan outlines the net zero roadmap for 2050, including the Technology Investment Roadmap Paper and the Low Emissions Technology Statements (DISER, 2020; Australian Government, 2021; Government

of Australia, 2021). The plan relies on future technologies for 15% of reductions and a further 10% on international or domestic offsets.

RECENT DEVELOPMENTS

In electricity, the government expanded the existing Capacity Investment Scheme (CIS), its main tool to reach 82% renewable electricity by 2030. The CIS aims to deliver 32 GW of new clean capacity—23 GW from variable renewables (wind, solar) and 9 GW from dispatchable sources including batteries (DCCEEW, 2024; OpenElectricity, 2025a, 2025b). However, the Climate Change Authority warns that the target will be missed without at least 8 GW of additional renewables (Climate Change Authority, 2024).

In 2024, the Australian government launched the “Future Made in Australia” plan, a ten-year, AUD 23 billion package to attract investment in strategic industries and establish Australia as a “renewable energy superpower.” It targets renewable hydrogen, green metals, low-carbon fuels, critical minerals processing, and clean energy manufacturing such as batteries and solar panels. However, over half of the funding should only start in 2027 (Australian Treasury, 2025). To complement this, the government updated its National Hydrogen Strategy, now focusing on renewable-based hydrogen only (Department of Climate Change, Energy, the Environment and Water, 2024).

In transport, Australia introduced the long-awaited New Vehicle Efficiency Standard (NVES) in 2024, which, from 2025 onwards, applies to all new cars sold in the country. The standard also sets annual fleet-wide emissions intensity targets for vehicle suppliers. The NVES allows higher limits for heavier vehicles and requires emissions-intensive sales to be offset by more efficient vehicles or credits, with declining targets projected to reduce transport emissions (Office of Impact Analysis, Department of the Prime Minister and Cabinet, 2024).

Alongside this, the NVES also seeks to accelerate EV uptake by lowering production costs, improving affordability, and supporting charging infrastructure across regional areas (DCCEEW, 2023). However, both the NVES and the EV strategy stop short of setting strategies or targets for public transport, freight, and modal shift.

2019 historical data and 2035 projections of key emissions indicators for Australia

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	490 -19% vs 2010	190 to 325 -61% to -34% vs 2019	235 to 185 -52% to -62% vs 2019
Emissions per capita (tCO ₂ e/cap)	19.4 -30% vs 2010	6.6 to 11.1 -66% to -43% vs 2019	8.0 to 6.3 -59% to -67% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.31 -36% vs 2010	0.09 to 0.15 -72% to -53% vs 2019	0.11 to 0.08 -66% to -73% vs 2019

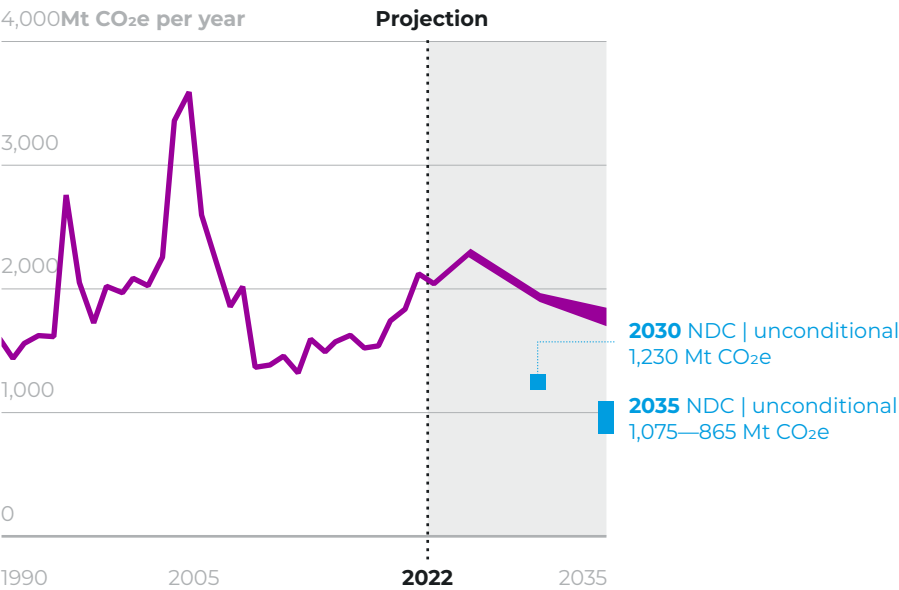
4.3 BRAZIL

Brazil's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Reduce emissions to 1.32 GtCO₂e by 2025 and 1.23 GtCO₂e by 2030	Reduce emissions by 59-67% below 2005 levels by 2035
Net zero	Net zero by 2050 (GHG; no LTS submitted)	

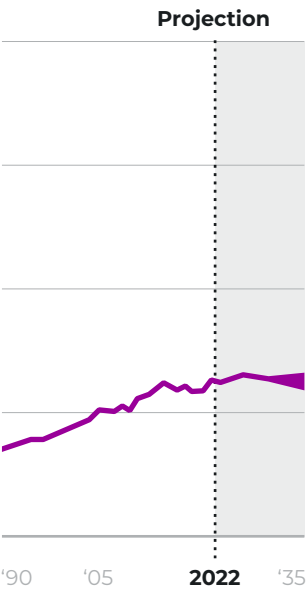
Impact of climate policies on emissions in Brazil

Including land use



Source: PBL IMAGE model (higher end); NewClimate Institute calculations (lower end); IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

In its 2030 NDC, Brazil sets an unconditional target to limit emissions to 1.32 GtCO₂e in 2025 and 1.23 GtCO₂e in 2030 (Government of Brazil, 2023). These targets are consistent with emission reductions of 48.4% below 2005 levels by 2025, and 53.1% below 2005 levels by 2030. The 2035 NDC targets a 59-67% reduction below 2005 levels across all sectors and gases, with a 59% domestic component and a 67% internationally supported component (the latter potentially involves carbon offsets under Article 6). Brazil also aims to end deforestation in the Amazon by 2030 and reaffirms in its NDC document to achieve national climate neutrality by 2050, although a long-term strategy has not yet been submitted (Government of Brazil, 2024).

RECENT DEVELOPMENTS

Brazil has taken numerous steps to improve its climate action since the beginning of the Lula administration and ahead of COP30, as the country prepares to host it in Belém in November 2025. In 2023, nearly 90% of electricity production in Brazil came from renewables (Rangelova, 2024). Indeed, renewables are highly competitive there, with recent auctions primarily focused on awarding contracts to renewable projects (de Oliveira Bredariol, 2024). Brazil's Novo PAC, a USD 350 billion economic growth programme, targets 80% of new electricity capacity from renewables. The government is encouraging domestic industry growth, raising solar panel import taxes to 25%, despite imports currently covering 95% of the market (Instituto Talanoa, 2024).

Fossil fuel expansion, however, remains a significant challenge. Over 60% of the Novo PAC's "energy transition and security" budget is allocated to oil and gas (Casa Civil, 2023). The Decenal Energy Plan (PDE) projects continue to grow in oil and gas output through 2031, including new exploration in the Amazon Basin, with auctions for drilling rights held in June 2025 (Empresa de Pesquisa Energética (EPE), 2024; Magnani, 2025).

The recent Senate approval of Bill 2159/202, the "Devastation Bill", threatened environmental safeguards by planning to allow projects of 'national interest' to bypass full licensing procedures. This would potentially accelerate oil and gas expansion in sensitive areas (WWF-Brasil, 2025). Following pressure by environmental organisations, President Lula vetoed many provisions of the bill, including the key 'self-licensing' component (Al Jazeera, 2025a). While widely seen as a win for environmental protection, the law still streamlines processes favoured by agribusiness. It also remains up for debate whether Brazil's Congress will override any of the vetoes.

Deforestation in the Amazon has surged in the first half of 2025, mostly attributed to criminal activities including arson and illegal land clearing (Berti, 2025). In 2024, the Amazon experienced its largest recorded burned area since data collection began in 1985, impacting 15.6 million hectares (MapBiomas Brasil, 2025). Although deforestation rates considerably decreased in recent years under the Lula administration, this sharp rise underscores persistent challenges and enforcement gaps. In response, President Lula announced a USD 165 million allocation from the Amazon Fund to support the federal environmental agency's projects targeting illegal deforestation.

2019 historical data and 2035 projections of key emissions indicators for Brazil

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	1,735 +27% vs 2010	1,715 to 1,830 -1% to +5% vs 2019	1,075 to 865 -38% to -50% vs 2019
Emissions per capita (tCO ₂ e/cap)	8.4 +19% vs 2010	7.9 to 8.4 -6% to -0% vs 2019	4.9 to 4.0 -41% to -53% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.74 +19% vs 2010	0.52 to 0.55 -30% to -25% vs 2019	0.32 to 0.26 -56% to -65% vs 2019

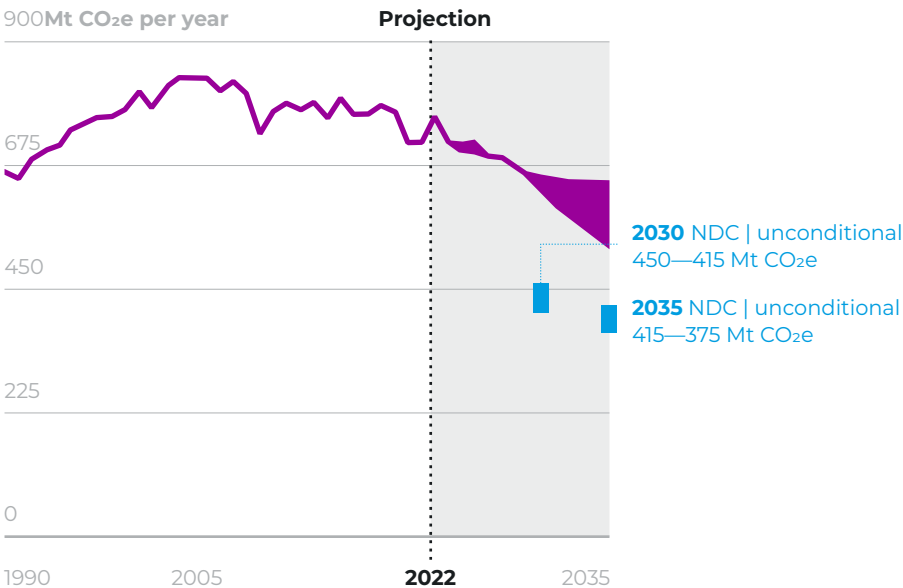
4.4 CANADA

Canada's NDC and net zero targets

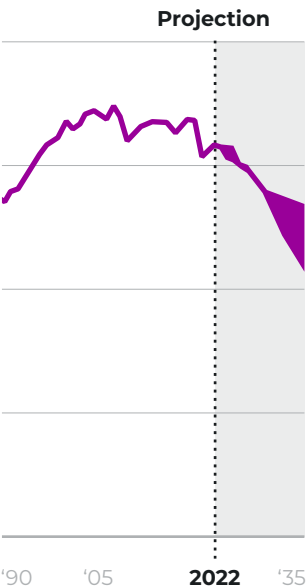
Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 40-45% below 2005 by 2030	Reduce emissions by 45-50% below 2005 by 2035
Net zero	Net zero by 2050 (GHG; LTS submitted)	

Impact of climate policies on emissions in Canada

Including land use



Excluding land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIO/G4M model (2025).

TARGETS

In its 2030 NDC, Canada commits to reducing its emissions by 40 to 45% below 2005 levels by 2030 (Government of Canada, 2021). Canada has submitted a new NDC for 2035, which aims to reduce emissions by 45 to 50% below 2005 levels (Government of Canada, 2025a). Canada's accounting uses a net-net approach, calculated as the difference between net emissions in the reporting year and net emissions in 2005 (→ Annex A3).

In 2022, Canada submitted an updated long-term strategy (LTS) including a net zero by 2050 target (Government of Canada, 2022). Canada has set out a series of exploratory scenarios towards net zero, most of which envision a substantial role

for land use sinks (up to -100 MtCO₂e) and technological Carbon Dioxide Removal (CDR) (up to -150 MtCO₂e).

RECENT DEVELOPMENTS

Over the past year, Canada's progress on climate and energy policies has been somewhat uneven. The federal government has continued to implement elements of the 2030 Emissions Reduction Plan, including the national zero-emission vehicle (ZEV) sales mandate and the Clean Electricity Regulations. The ZEV mandate targets 60% of new passenger cars and light trucks to be zero-emissions by 2030 and 100% by 2035, signalling a step toward electrifying the transportation sector (ECCC, 2023). In a policy shift in September 2025, however, the government announced a 60-day review of the ZEV mandate, pausing its enforcement for 2026 models while leaving the 2030 target in place, creating uncertainty about the near-term trajectory of electric vehicle adoption (CBC News, 2025).

In electricity, the Clean Electricity Regulations and complementary programmes are promoting low-carbon power. These regulations set limits on emissions from fossil fuel electricity generation, encouraging the deployment of cleaner technologies. Nevertheless, exemptions for certain fossil gas generation units and ongoing investment in natural gas infrastructure mean Canada has pushed back its original target of a fully decarbonised electricity grid from 2035 to 2050 (Reuters, 2024a). Industrial carbon pricing provides incentives for emission reductions, though design flaws and political resistance limit its impact.

The consumer carbon price was removed in 2025, which represents a major setback, weakening one of Canada's most effective emission reduction tools (Government of Canada, 2025b). Prime Minister Carney has signalled support for new oil and gas infrastructure alongside carbon capture and storage (CCS) prioritisation, raising doubts about the government's willingness to phase out fossil fuels (Cognitud, 2025).

With a minority government in place and a pending update to the 2030 Emissions Reduction Plan in Autumn of 2025, crucial measures like strengthened methane regulations and the oil and gas emissions cap are still outstanding, leaving uncertainties about Canada's ability to meet its 2030 targets. Overall, Canada shows progress in electrification and low-carbon power but faces delays, rollbacks, and policy uncertainty that may undermine its climate commitments.

2019 historical data and 2035 projections of key emissions indicators for Canada

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	755 +3% vs 2010	485 to 595 -36% to -21% vs 2019	415 to 375 -45% to -50% vs 2019
Emissions per capita (tCO ₂ e/cap)	20.2 -6% vs 2010	11.3 to 13.9 -44% to -31% vs 2019	9.6 to 8.8 -52% to -57% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.39 -15% vs 2010	0.19 to 0.24 -50% to -38% vs 2019	0.16 to 0.15 -57% to -61% vs 2019

4.5 CHINA

China's NDC and net zero targets

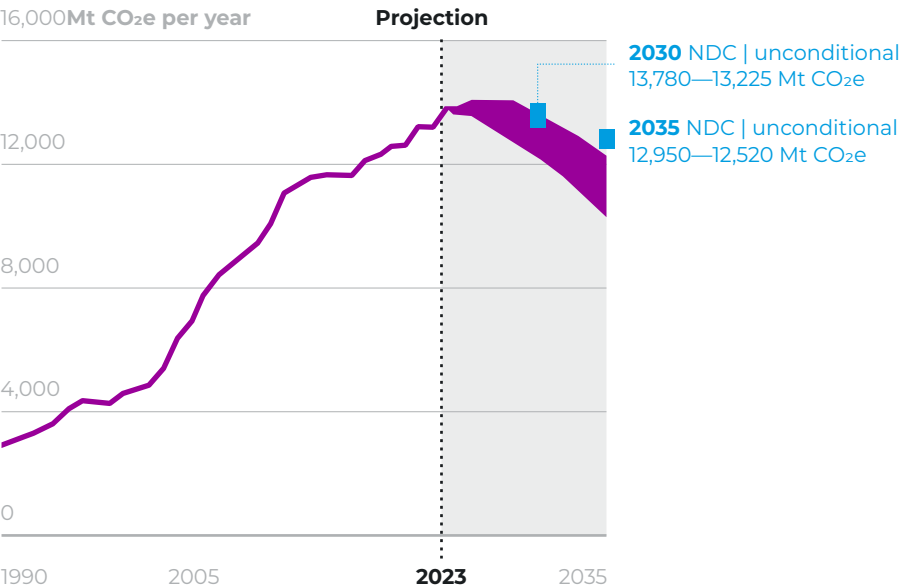
Pledge	Key targets	
	2030	2035
NDC	Peak carbon dioxide emissions before 2030; lower carbon intensity by over 65% in 2030 from 2005; reduce share of non-fossil fuels in primary energy consumption to around 25% in 2030; increase forest stock volume by around 6 billion m3 in 2030 from 2005; and increase the installed capacity of wind and solar power to over 1,200 GW by 2030	Reduce economy-wide net greenhouse gas emissions by 7% to 10% in 2035 from peak levels; increase share of non-fossil fuels in total energy consumption to over 30%; expand installed capacity of wind and solar power to over six times 2020 levels, striving to bring the total to 3,600 GW; and scale up total forest stock volume to over 24 billion m3 (announcement only)
	Net zero before 2060 (CO ₂ ; LTS submitted)	

China is **on track to meet the upper end of its 2030 NDC target, while the lower end could possibly be missed** under current policies. China is **also on track to meet its announced 2035 NDC targets**. However, all the announced 2035 NDC targets are already met in our current policies projections and thus do not drive any additional emission reductions. China is well positioned to ‘strive to do better’, as indicated in their Climate Summit 2025 announcement. The calculation of the NDC target range is based on several assumptions about socio-economic and energy developments in China. These assumptions are consistent between the NDC and the current policies scenario of each organisation.

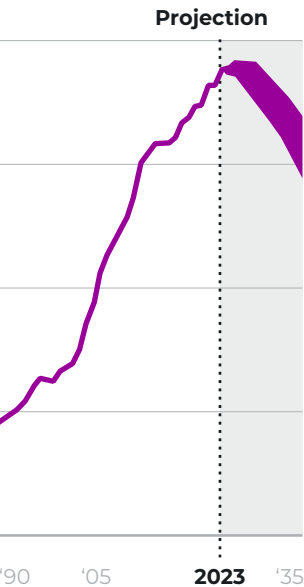
At its lower end, our 2025 current policies scenario shows a reduction in emissions right after peaking, reflecting positive developments on updates in energy policies, including a recent rapid expansion of renewables and policies to reduce the emissions intensity of coal-fired power plants before 2027, as well as new building standards. The upper end of our projections accounts for a continuation of fossil fuel use driven by strong growth in tech-intensive manufacturing, resulting in emissions peaking around 2025, stabilising around 2030 and starting a decline towards 2035.

Impact of climate policies on emissions in China

Including land use



Excluding land use



Source: PBL IMAGE model (middle of the projected range); NewClimate Institute calculations (lower and upper end); IIASA GLOBIOM/G4M model (2025).

TARGETS

China's NDC does not include an economy-wide absolute emissions target but does include an economy-wide intensity and several sectoral targets (→ **Table 2**). China also has a target to become carbon-neutral before 2060 (Government of China, 2021b, 2021a). Both NDC and net zero targets do not clarify the role of non-CO₂ gases. China also does not specify the contribution of each sector to its carbon neutrality target.

During the Climate Summit in September 2025, President Jinping announced China's new NDC: China will, by 2035, reduce economy-wide net GHG emissions by 7% to 10% from peak levels, striving to improve; increase the share of non-fossil fuels in total energy consumption to over 30%; expand the installed capacity of wind and solar power to over six times the 2020 levels, striving for 3,600 GW; and scale up the total forest stock volume to over 24 billion cubic metres.

RECENT DEVELOPMENTS

China's domestic climate policy follows the "1+N" Policy Framework, which links long-term goals with near-term actions across governance levels. The "1" represents the Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality outlining the overall strategy (NDRC, 2022). The "N" comprises specific policies and programs developed by ministries and local governments, led by the Action Plan for Carbon Dioxide Peaking Before 2030 (NDRC, 2021).

China is very much off track in meeting its emission intensity reduction targets under both its 14th Five-Year Plan for 2025 and its 2030 NDC. While the impacts of COVID-19 and slower economic growth have contributed to this, the main challenge lies in rapidly growing energy demand, with renewables not being integrated quickly enough to displace fossil fuels (Myllyvirta, 2025). In 2024, China continued to dominate global coal trends, with 94 GW of new construction, more than the rest of the world combined, alongside leading numbers of project commissioning (GEM et al., 2025).

Meanwhile, China remained a global leader in energy transition investment in 2024, accounting for 39% of the global total and two-thirds of the global increase (BloombergNEF, 2025). China overachieved its 2030 renewable energy capacity target of 1,200 GW ahead of schedule, reaching over 1,673 GW in June 2025 (NEA, 2025). China produces 70% of all EVs sold globally, with over 12 million new energy vehicles sold in the country, accounting for a 40.9% market share (Xinhua News Agency, 2025).

2019 historical data and 2035 projections of key emissions indicators for China

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	12,535 +24% vs 2010	10,330 to 12,175 -18% to -3% vs 2019	12,950 to 12,520 +3% to -0% vs 2019
Emissions per capita (tCO ₂ e/cap)	8.8 +18% vs 2010	7.5 to 8.8 -15% to +0% vs 2019	9.4 to 9.1 +7% to +3% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	1.08 -34% vs 2010	0.47 to 0.56 -56% to -48% vs 2019	0.60 to 0.58 -45% to -47% vs 2019

4.6 COLOMBIA

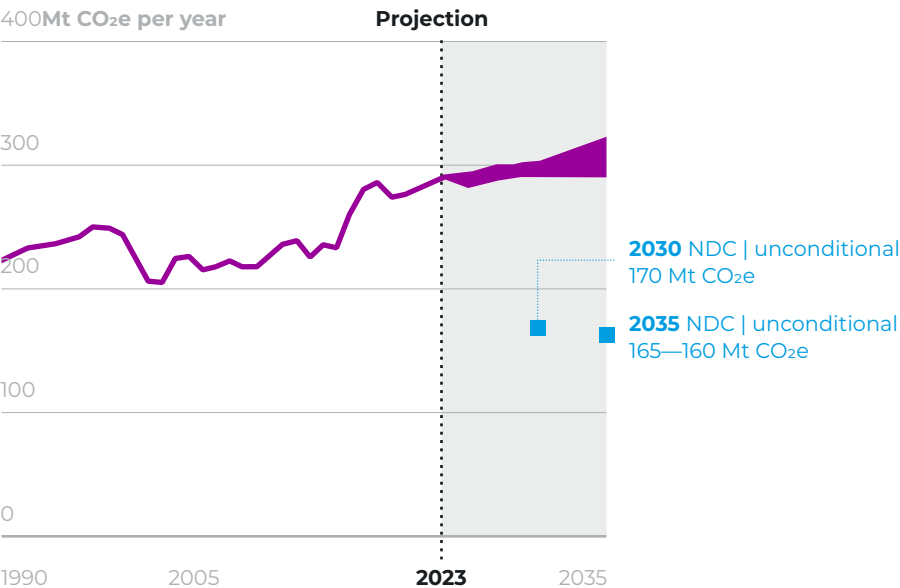
Colombia's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Limit emissions to 169 MtCO₂e in 2030 and to peak emissions by 2027	Limit emissions to 160–165 MtCO₂e in 2035
Net zero	Net zero by 2050 (GHG; LTS submitted)	

Colombia is **projected to miss its 2030 and 2035 NDC targets** under current policies. Emissions in industry and transport sectors are projected to increase towards 2035 and show no signs of peaking before 2027. The land use sector substantially affects Colombia's emission projections as it currently accounts for nearly half of the country's emissions and is expected to remain a net source up until 2035. Under current policy projections, emissions trend upward at the high end, whereas the low end suggests a plateau by 2035.

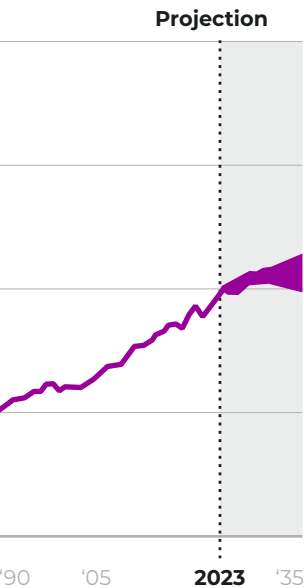
Impact of climate policies on emissions in Colombia

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Colombia's NDC sets an absolute emissions limit of 169 MtCO₂e (Government of Colombia, 2020). The target also indicates the intention to peak emissions by 2027 and to achieve a national deforestation rate of 50,000 hectares per year by 2030. This includes a complementary target – using Article 6.2 and other international mechanisms – to achieve zero deforestation in natural forests by 2030. In September 2025, Colombia submitted its declarative version of NDC 3.0, which sets a target to limit national greenhouse gas emissions to 160–165 MtCO₂e by 2035, while noting that the coverage of sectors, gases, and carbon sinks will only be specified in the final version (Government of Colombia, 2025).

In 2021, Colombia submitted an LTS including a net zero emissions target, later enshrined in domestic law. The target covers all sectors and emissions, with 90% expected to be reduced through sectoral mitigation measures and the remaining 10% removed via land-use sinks or technological carbon dioxide removal (Ministerio de Ambiente y Desarrollo Sostenible Colombia, 2021).

RECENT DEVELOPMENTS

Since taking office in August 2022, the Petro administration elevated climate change to the forefront of its political agenda. The government has committed to reducing deforestation, halting new oil and gas exploration, ending fossil gas fracking, and accelerating the energy transition. Over the past three years, efforts have focused on aligning national strategies, institutional frameworks, and sectoral plans with climate objectives. President Petro became the first leader of a large fossil-fuel-producing country to endorse the Fossil Fuel Non-Proliferation Treaty (Rodríguez, 2023; Worland, 2023). In September 2023, Colombia joined the Powering Past Coal Alliance, committing to halting the development of new unabated coal power plants and phasing out existing plants (Powering Past Coal Alliance, 2023).

The country has made remarkable progress, with record sales of electric vehicles in 2024, increasing solar capacity to 2 GW (10% of total installed capacity) and reducing the deforestation rate to its lowest level in 2023 since 2000. Domestically, implementation is, however, slowed down by political instability, cabinet reshuffles, and the pursuit of multiple reforms at the same time. Social licensing issues have delayed renewable energy projects, notably in La Guajira, where world-class wind and solar resources co-exist with deep social inequalities.

Despite this progress, the Colombian economy remains dependent on fossil fuels for tax revenue, exports, royalties, foreign investment, and GDP. This dependence makes phasing out fossil fuels a difficult process that requires economic diversification and fiscal stability in a context where fiscal space is constrained by high debt burdens and rising interest rates. After Colombia announced its commitment to halt new oil and gas exploration projects, credit rating agencies downgraded its score, increasing financing costs and reducing fiscal space for transition investments, illustrating how current international financial architecture hinders the implementation of climate policies in developing economies.

2019 historical data and 2035 projections of key emissions indicators for Colombia

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	275 +21% vs 2010	290 to 320 +6% to +17% vs 2019	165 to 160 -39% to -42% vs 2019
Emissions per capita (tCO ₂ e/cap)	5.5 +9% vs 2010	5.1 to 5.6 -8% to +1% vs 2019	2.9 to 2.8 -48% to -50% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.69 -12% vs 2010	0.49 to 0.54 -29% to -22% vs 2019	0.28 to 0.27 -59% to -61% vs 2019

4.7 EGYPT

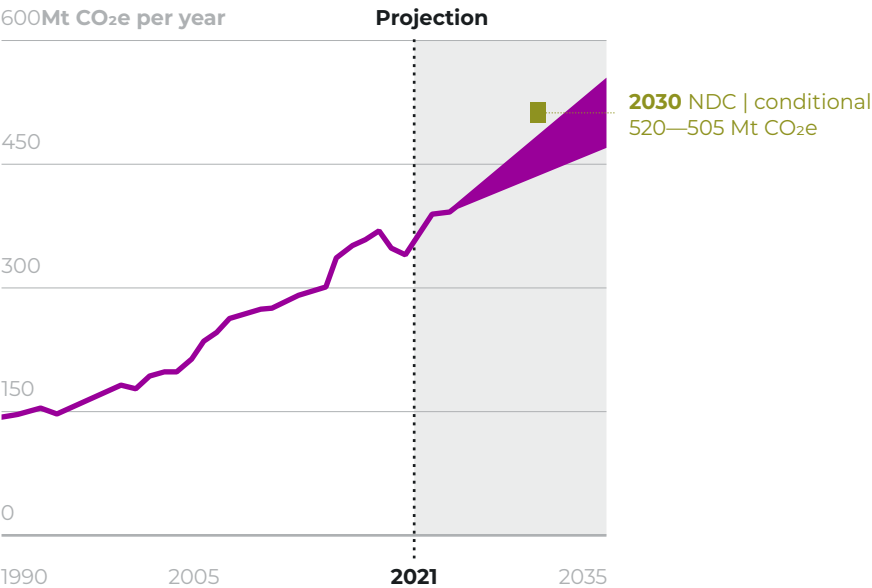
Egypt's NDC and net zero targets

Pledge	Key targets
NDC	Sectoral targets to reduce emissions compared to BAU in 2030 : Electricity (-37%), Transport (-7%) and Oil & Gas (-65%) (BAU differs per sector)
Net zero	Net zero by 2050 (GHG; LTS submitted)

Egypt is **on track to meet its 2030 NDC targets** with existing policies. This suggests that the country is well-positioned to increase the ambition of its targets in the 2025 NDC ambition-raising cycle. Egypt is the only country of those we analysed that presents only conditional targets in its 2030 NDC. The NDC targets are fully conditional on international support, do not cover all sectors and result in emissions above our estimates under current policies. Emissions under current policies are projected to increase steadily until 2035, with no sign of peaking.

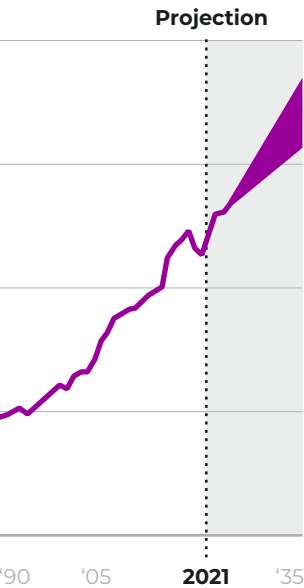
Impact of climate policies on emissions in Egypt

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Egypt's NDC includes emissions reduction targets for the electricity, transport, and oil and gas sectors. The NDC also includes non-quantified measures for the industry, tourism, buildings and waste sectors. Therefore, the quantifiable targets do not cover all sectors of the economy. They are also presented as reductions below BAU (Government of Egypt, 2022, 2023). As of October 2025, Egypt has not yet submitted its 2035 NDC, has no net-zero target, and has not submitted a long-term strategy to the UNFCCC.

RECENT DEVELOPMENTS

As of 2024, renewables comprised only around 11% of Egypt's electricity mix, a negligible increase in the past five years (Ember, 2025b). Natural gas still accounted for about 80% of electricity generation, with oil covering the remaining 20%. Despite reaffirming its 2030 target of 42% renewables at COP29, five years earlier than planned in its latest NDC, Prime Minister Madbouly warned that the target is at risk without greater international support (Reuters, 2024b). Through a performance-based grant backed by the European Bank for Reconstruction and Development (EBRD) and other donors, Egypt aims to retire 5 GW of fossil power to enable 10 GW of renewables under the Nexus Water-Food-Energy (NWFE) Programme (Reconstruction and Development (EBRD), 2025). Investments in grid upgrades and the 3 GW Saudi-Egypt electricity interconnection project, expected to be operational by early 2026, are key for improving grid flexibility but are insufficient on their own to enable a renewable transition without stronger policy alignment (Daily News Egypt, 2024).

Fossil fuel extraction remains a key pillar of Egypt's economy, and development continues to expand to reverse the production decline. Following power shortages in mid-2024 triggered by falling gas output and halted LNG exports, the government committed USD 7.2 billion to boost oil and gas exploration and plans to drill nearly 600 new wells by 2030 (Offshore Energy, 2024; S&P Global, 2024). Egypt continues to frame natural gas as a "bridge fuel" and positions it at the centre of its energy strategy, both as a domestic energy source and a key export commodity. These moves risk locking in high-carbon infrastructure, creating stranded assets, and undermining Egypt's climate targets.

In parallel, Egypt launched its National Strategy for Low-Carbon Hydrogen in 2024 to capture 5-8% of the global hydrogen market by 2040, supported by Law No. 2/2024 on Green Hydrogen Investment Incentives, which offers tax exemptions and streamlined permitting (Baker McKenzie, 2024). Over USD 33 billion in investment commitments for green hydrogen and ammonia facilities have been announced since (State Information Service (SIS), 2024). However, there remain significant credibility concerns due to the lack of a rapid scale-up of domestic renewable capacity, the inclusion of "blue" hydrogen produced from fossil gas, and the national strategy's strong orientation towards export, which could divert the (already limited) renewable electricity away from Egypt's own decarbonisation needs.

2019 historical data and 2030 projections of key emissions indicators for Egypt

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections	
		Current policies	NDC conditional
Absolute emissions (tCO ₂ e/cap)	350 +26% vs 2010	440 to 480 +26% to +39% vs 2019	520 to 505 +50% to +45% vs 2019
Emissions per capita (tCO ₂ e/cap)	3.3 +4% vs 2010	3.5 to 3.8 +7% to +17% vs 2019	4.1 to 4.0 +26% to +22% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	1.08 -10% vs 2010	0.85 to 0.94 -21% to -14% vs 2019	1.01 to 0.98 -7% to -10% vs 2019

4.8 ETHIOPIA

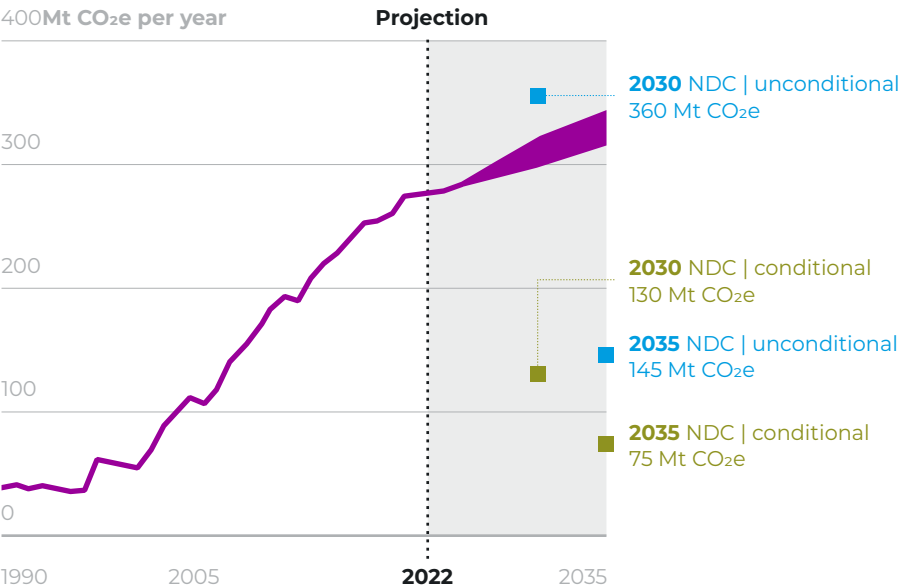
Ethiopia's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 14% (unconditional) and by 68.8% (conditional) below BAU by 2030	Reduce emissions by 40.7% (unconditional) and by 70.3% (conditional) below BAU by 2035
Net zero	Net zero by 2050 at the latest (GHG; LTS submitted)	

Ethiopia is **projected to miss its conditional 2030 and both its 2035 NDC targets, but is on track to meet its unconditional 2030 NDC target** with existing policies. The 2030 NDC relies heavily on the land sector for emissions reductions, yet our projections show only modest declines in land-use emissions by 2035, which are insufficient to offset rising energy- and industry-related emissions. Economy-wide emissions under current policies are projected to steadily increase through 2035, with no indication of peaking beforehand. The significant change in the emission levels between the 2030 and 2035 unconditional targets can be partly attributed to a revision of Ethiopia’s BAU scenario.

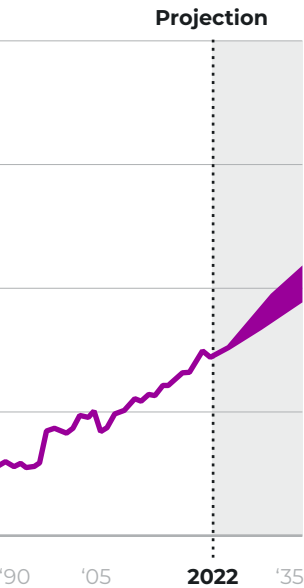
Impact of climate policies on emissions in Ethiopia

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Ethiopia’s NDC includes an unconditional target to reduce emissions by 14% below BAU and a conditional target of 68.8% by 2030, mostly through land-use emission reductions (Government of Ethiopia, 2021). In 2024, the government announced a 2030 NDC implementation plan with sector-specific strategies (NDC Partnership, 2024). In September 2025, Ethiopia submitted its 2035 NDC, with an unconditional target of 40.7% and a conditional target of 70.3% below BAU (Government of Ethiopia, 2025).

In 2015, Ethiopia announced its intention to become carbon-neutral (Government of Ethiopia, 2016). In July 2023, it submitted a long-term strategy targeting net-zero emissions by 2050. It covers all gases, yet it does not specify offsets or carbon dioxide removal, nor does it include aviation and shipping emissions. It emphasizes reforestation and land-based carbon sinks by 2050. Ethiopia's net-zero target is not yet enshrined in law (Government of Ethiopia, 2023).

RECENT DEVELOPMENTS

The 'Climate Resilient Green Economy' (CRGE) strategy, launched in 2011 to support Ethiopia's goal of middle-income status by 2025, is the basis of the country's climate action approach. An implementation review in 2020 found no evidence of emission reductions since its introduction, with challenges linked to a lack of representative national data (Ministry of Planning and Development, 2020). As of September 2025, the CRGE remains under revision and no updated version has been published. The 2021–2030 Ten-Year Development Plan aims to sustain high growth while supporting a climate-resilient green economy and includes targets to enhance emissions reduction capacity (Government of Ethiopia, 2020).

Ethiopia has advanced major hydropower projects, with hydropower accounting for 96.5% of electricity in 2023 (Ember, 2025d). The Grand Ethiopian Renaissance Dam (5GW), completed in July 2025, will double renewable capacity (Al Jazeera, 2025b). The country also aims to electrify transport and banned all internal combustion engine (ICE) imports in 2024. As part of this transition, a 2022 tax reform incentivized electric vehicles and discouraged ICE vehicles ahead of the 2024 import ban (Fana Media Corporation, 2022; CNN, 2024). EV registrations tripled between early 2023 and mid-2025 (FurtherAfrica, 2025). In 2023, Ethiopia and Kenya agreed to construct the 3,000 km Lamu–Addis Ababa electrified Standard Gauge Railway (SGR) for sustainable transport (Preston, 2023).

Agriculture and LULUCF are Ethiopia's largest emission sources. To address this, the government introduced the 2024 Climate Smart Agriculture Investment Plan (CSAIP) to enhance sustainability, resilience, and productivity (Tesfaye et al., 2024), and launched a reforestation project restoring 12,000 ha of native forest, expected to sequester 7.26 MtCO₂ over 30 years. However, the project is registered for carbon credits and does not directly contribute to Ethiopia's NDC (Green Earth, 2024; Wambua, 2024).

2019 historical data and 2035 projections of key emissions indicators for Ethiopia

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	260 +42% vs 2010	315 to 345 +22% to +31% vs 2019	145 -44% vs 2019	75 -72% vs 2019
Emissions per capita (tCO ₂ e/cap)	2.3 +11% vs 2010	1.9 to 2.0 -18% to -11% vs 2019	0.9 -62% vs 2019	0.4 -81% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	4.28 -37% vs 2010	1.84 to 1.99 -57% to -53% vs 2019	0.84 -80% vs 2019	0.42 -90% vs 2019

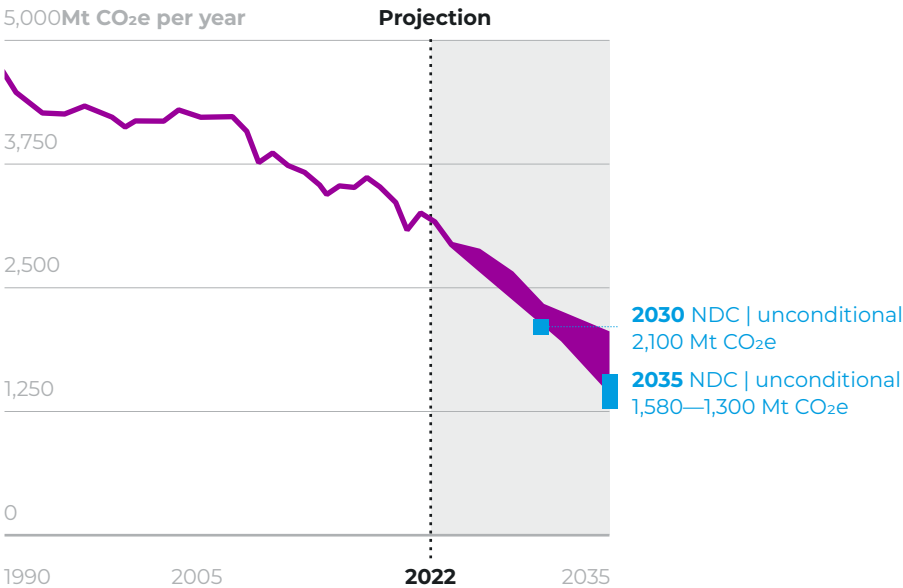
4.9 EUROPEAN UNION (EU)

EU's NDC and net zero targets

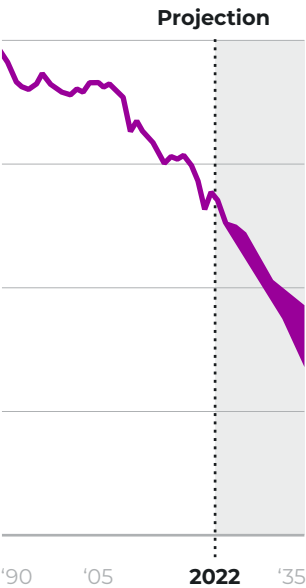
Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by at least 55% below 1990 by 2030	Reduce emissions by 66.25-72.5% below 1990 by 2035 (announcement only)
Net zero	Net zero by 2050 at the latest (GHG; LTS submitted)	

Impact of climate policies on emissions in the EU*

Including land use



Excluding land use



Source: PBL IMAGE model (lower end EU-level); NewClimate Institute calculations (upper end, Member State policies); IIASA GLOBIO/G4M model (2025).

*The Emissions Trading Scheme target of reducing emissions from electricity and industry to 62% below 2005 levels by 2030 is unable to be met in the lower end of our model projections, which shows only an almost 50% reductions by 2030. The -62% target is instead projected to be achieved by 2033.

TARGETS

In 2023, the EU submitted an updated NDC, reaffirming the goal of reducing domestic emissions by at least 55% by 2030 compared to 1990 levels, but increased its land sector target to -310 MtCO₂e.

In 2024, the European Commission presented a communication on a 2040 climate target, which included the recommendation of a 90% net GHG emissions reduction below 1990 levels. The European Climate Law will be amended to include a 2040 climate target, which will be the guide for the formulation of the next EU NDC.

In September 2025 the Council adopted a non-binding “statement of intent”, suggesting a 2035 reduction range between 66.25% and 72.5%. By the time of writing, no formal 2035 or 2040 targets has been adopted yet. At the Climate Summit 2025, President von der Leyen confirmed this range and announced that the EU will formally submit their NDC ahead of COP30.

The EU has set a legal objective to become climate neutral by 2050 under the 2021 European Climate Law (Regulation (EU) 2021/1119). The EU’s 2050 climate neutrality target includes all economic sectors and covers all emissions.

RECENT DEVELOPMENTS

The EU launched the Clean Industrial Deal (CID) in February 2025, a new policy framework with the aim to boost Europe’s industrial competitiveness while transitioning to net-zero emissions (European Commission, 2025e). Some of the headline objectives of the CID include lowering energy prices through investments in clean energy and electrification, boosting the demand for “clean products” through public procurement and mobilising 100 billion Euros to support EU-based clean tech manufacturing.

As part of the CID, the European Commission also adopted its new Clean Industrial State Aid Framework (CISAF), which should make it easier for Member States to financially support renewable energy rollout, clean tech manufacturing, and additional measures to further decarbonise industry (European Commission, 2025b).

In July 2025, the European Commission put forward proposals for the EU’s 2040 emissions reduction target (amending the European Climate Law) and its next long-term budget for the period 2028-2034 (European Commission, 2025d, 2025a). The Commission recommends setting a 90% net emissions reduction target below 1990 levels by 2040. The proposal is in line with the lower end of the European Scientific Advisory Board on Climate Change’s (ESABCC) recommendation for a 90-95% net reduction (European Scientific Advisory Board on Climate Change, 2025).

2019 historical data and 2035 projections of key emissions indicators for the EU

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies*	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	3,355	1,440 to 2,010	1,580 to 1,300
	-12% vs 2010	-57% to -40% vs 2019	-53% to -61% vs 2019
	-28% vs 1990	-69% to -57% vs 1990	-66% to -72% vs 1990
Emissions per capita (tCO ₂ e/cap)	7.5	3.3 to 4.6	3.6 to 3.0
	-14% vs 2010	-56% to -39% vs 2019	-52% to -61% vs 2019
	-32% vs 1990	-71% to -59% vs 1990	-68% to -73% vs 1990
Emissions per GDP (tCO ₂ e/thousand USD)	0.20	0.07 to 0.10	0.08 to 0.06
	-24% vs 2010	-65% to -51% vs 2019	-61% to -68% vs 2019
	-57% vs 1990	-85% to -79% vs 1990	-83% to -86% vs 1990

*Although some EU-level policies are not yet translated into national law, resulting in the higher end of our current policies scenario, their rollout is mandatory.

4.10 INDIA

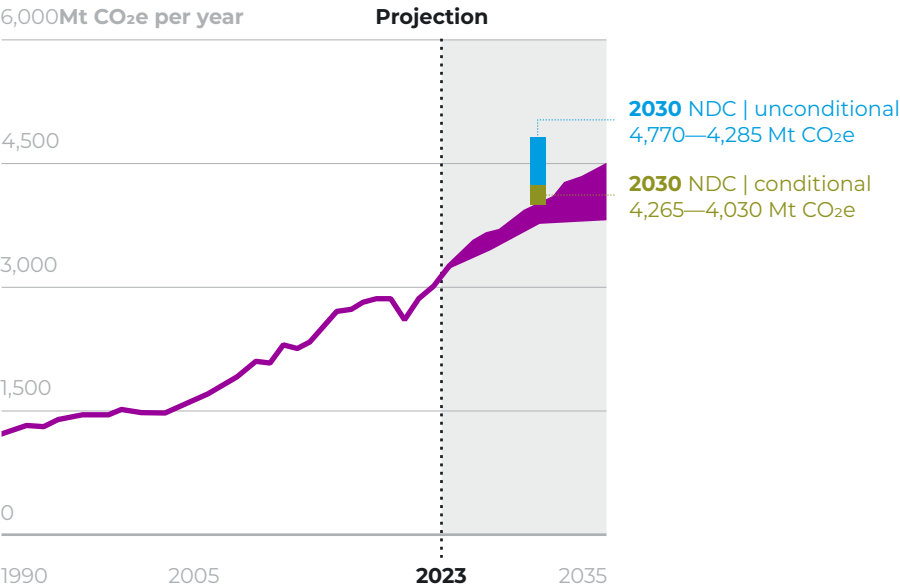
India's NDC and net zero targets

Pledge	Key targets
NDC	Reduce emissions intensity by 45% below 2005 by 2030; increase the share of non-fossil fuel in primary electricity production to 50% (conditional); and create additional (cumulative) carbon sink of 2.5–3 GtCO ₂ e by 2030
Net zero	Net zero by 2070 (gas coverage unclear; LTS submitted)

India is well **on track to meet its unconditional 2030 NDC target and likely on track to meet its conditional 2030 NDC target** with existing policies. This suggests that India is well positioned to increase the ambition of its targets in the 2025 NDC ambition-raising cycle. However, although India is projected to meet its targets, emissions under current policies are expected to increase until 2035 roughly at the same rate as in the last decade. Emissions in India show no signs of peaking before 2035.

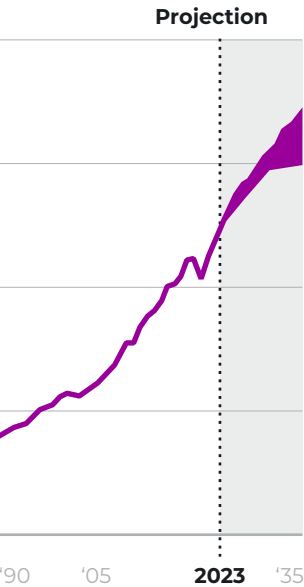
Impact of climate policies on emissions in India

Including land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

India's NDC aims to decrease emissions intensity by 45% below 2005 levels and increase the share of non-fossil energy capacity in the power sector to 50%, both by 2030 (Government of India, 2022b). Targets related to land-use aim to create an additional (cumulative) carbon sink of 2.5–3 GtCO₂e by 2030. As of October 2025, India has not yet submitted its 2035 NDC to the UNFCCC.

In 2021, India announced its net zero by 2070 target, which was confirmed in its 2022 LTS submission. India has not clarified which gases are covered in its LTS, or to what extent the target is expected to be achieved through land-use sinks (Government of India, 2022a).

RECENT DEVELOPMENTS

In the power sector, India's recently launched scheme PM Surya Ghar Yojana provides subsidies and collateral-free loans for rooftop solar PV installations. It achieved over 1 million installations in its first year, with the eventual goal of connecting 10 million households by March 2027 (Government of India, 2024). In addition to renewables, the country is pursuing nuclear energy as part of its long-term strategy, with a target of 100 GW of nuclear capacity by 2047 and a total budgetary allocation of INR 200 billion (USD 2.3 billion) in the latest Union Budget (Department of Atomic Energy, 2025). In the first half of 2025, India's coal-fired electricity generation fell by 22 TWh (3.1%), coinciding with a 24.4% increase in renewable power output, the fastest growth since 2022 (The Economic Times, 2025).

In terms of industry, India has launched a Carbon Credit Trading System (CCTS) , featuring a compliance market for the highest-emitting sectors and a voluntary offset mechanism for broader industries, replacing the earlier Perform, Achieve, Trade (PAT) scheme for industries (Press Information Bureau, Government of India, 2025), yet it remains based on emissions intensity, rather than an absolute cap. For medium, small, and micro enterprises, the government launched the ADEETIE Scheme to provide financial and technical assistance for the adoption of clean and energy efficient technologies (Anand, 2025).

In addition, the Indian government announced new policies under the National Green Hydrogen Mission, namely the Green Hydrogen Certification Scheme for hydrogen made from renewable energy and the Green Steel Taxonomy for low-carbon steel produced using green hydrogen or other clean technologies, ensuring both are verifiably produced with greenhouse gas emissions under specified thresholds (ETEnergyWorld, 2024).

In the transport sector, the PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) scheme has replaced the erstwhile FAME scheme to promote electric vehicle (EV) adoption in India. PM E-DRIVE allocates a total of INR 109 billion (USD 1.29 billion) to promote battery-powered two-wheelers, three-wheelers, ambulances, trucks, and other advanced EVs, by providing incentives for electrifying public transport, building charging infrastructure, and promoting EV manufacturing (Rao, 2024).

2019 historical data and 2030 projections of key emissions indicators for India

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	2,860 +38% vs 2010	3,790 to 4,015 +33% to +40% vs 2019	4,770 to 4,285 +67% to +50% vs 2019	4,265 to 4,030 +49% to +41% vs 2019
Emissions per capita (tCO ₂ e/cap)	2.1 +23% vs 2010	2.5 to 2.6 +21% to +28% vs 2019	3.1 to 2.8 +52% to +36% vs 2019	2.8 to 2.7 +36% to +28% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.98 -21% vs 2010	0.69 to 0.73 -29% to -25% vs 2019	0.87 to 0.78 -11% to -20% vs 2019	0.77 to 0.73 -21% to -25% vs 2019

4.11 INDONESIA

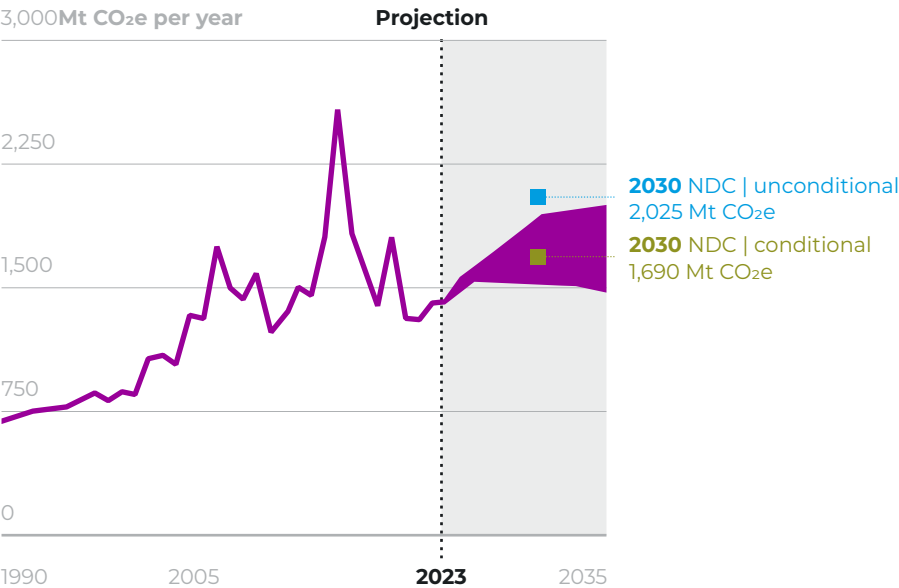
Indonesia's NDC and net zero targets

Pledge	Key targets
NDC	Reduce emissions by 32% (unconditional) and by 43% (conditional) below BAU by 2030
Net zero	Indicative net zero by 2060 (gas coverage unclear; LTS submitted)

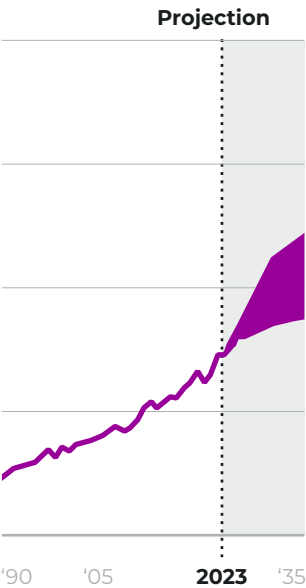
Indonesia is **well on track to meet its unconditional 2030 NDC target under current policies, but is likely to miss its conditional target**, especially when considering the upper end of the current policy range. Achieving the unconditional target would require the full implementation of existing policies in their most ambitious form. Emissions are projected to rise until 2030 and then slow in growth until 2035 at the upper end of the range. At the lower end, emissions are expected to peak around 2025, plateau to 2030, and then decline slightly towards 2035. This trajectory is largely driven by decreasing emissions from LULUCF, whereas emissions excluding LULUCF are projected to continue increasing until 2030 before stabilising modestly thereafter. This stabilization is mainly due to a reduction in deforestation, a decline in forest and land fires, and an expansion of planted forest cover.

Impact of climate policies on emissions in Indonesia*

Including land use



Excluding land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

*Land use emission projections do not account for the impact of natural disturbances and peat fires.

TARGETS

Indonesia's NDC sets an unconditional target to reduce emissions by 32% below BAU and a conditional target to reduce emissions by 43% below BAU by 2030 (Government of Indonesia, 2022). In 2024, Indonesia released a draft updated NDC, including updated 2030 and new 2035 climate targets (Salsabila and Wong, 2024). While more ambitious than the current NDC, they still imply rising emissions, with peaks only in 2050 (unconditional) or 2035 (conditional). The government plans to submit the final version before COP30.

Indonesia submitted a long-term strategy (LTS) to the UNFCCC, including a scenario that reaches net zero emissions by 2060 (Government of Indonesia, 2021). Indonesia has not communicated an explicit net zero target but is exploring scenarios that could lead to net zero by 2060 or sooner in its upcoming updated NDC.

RECENT DEVELOPMENTS

Indonesia's power sector is dominated by coal and gas, which supplied over 80% of the country's electricity in 2023 (Ember, 2025f). The Electricity Supply Business Plan (RUPTL 2025–2034), frontloads fossil expansion by adding 3.4 GW of coal and 9.3 GW of gas by 2029, plus another 3.9 GW by 2034. In contrast, 70% of the planned 42.6 GW in renewables and 10.3 GW storage are delayed until after 2030 (Ministry of Energy and Mineral Resources (ESDM), 2025b, 2025a). This pathway risks emissions lock-in, prolongs fossil dependence, and exacerbates oversupply, given the Prabowo administration's 8% annual GDP growth assumption (Karyza, 2025). The plan also envisions nuclear power from 2033, despite Indonesia's seismic risks and vast potential for renewable energy (IEEFA, 2021; Ministry of Energy and Mineral Resources (ESDM), 2024). Renewable competitiveness in Indonesia is hindered by heavy coal subsidies and minimal carbon pricing with slow implementation (IESR, 2024).

Simultaneously, the National Electricity Master Plan (RUKN 2024–2060) enables over 20 GW of additional captive coal capacity to power nickel and mineral processing industries (Ember, 2025a). While the JETP Secretariat plans to publish a separate captive coal study, there is likely limited appetite for decarbonisation given the government's "downstreaming" focus on domestic resource processing over raw exports. Compounding these issues is the long-awaited New and Renewable Energy Bill, which remains delayed due to PLN's reticence over power wheeling provisions (Tempo Magazine, 2025).

Forestry underpins Indonesia's mitigation strategy through the FOLU Net Sink 2030 target, which aims for net negative emissions of 140 MtCO_{2e} (Ministry of Environment and Forestry (KLHK), 2025). Deforestation remains below historic highs but has shown an uptick in recent years (Global Forest Watch, 2025). Forest loss could accelerate amid competing development priorities, including food estate projects and large-scale bioenergy expansion (Timorria, 2025), backed by a master plan to convert up to 20 million hectares of forest (MADANI Berkelanjutan, 2025). Transparency concerns further undermine confidence, as Indonesia revised its 2019 LULUCF baseline from 925 to 221 MtCO_{2e} in the draft 2035 NDC without explanation (Climate Action Tracker, 2025).

2019 historical data and 2030 projections of key emissions indicators for Indonesia

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO _{2e} /cap)	1,805 +48% vs 2010	1,530 to 1,930 -15% to +7% vs 2019	2,025 +12% vs 2019	1690 -7% vs 2019
Emissions per capita (tCO _{2e} /cap)	6.7 +33% vs 2010	5.2 to 6.5 -22% to -2% vs 2019	6.9 +3% vs 2019	5.7 -14% vs 2019
Emissions per GDP (tCO _{2e} /thousand USD)	1.50 -7% vs 2010	0.81 to 1.02 -46% to -32% vs 2019	1.07 -29% vs 2019	0.89 -41% vs 2019

4.12 IRAN

Iran's NDC and net zero targets

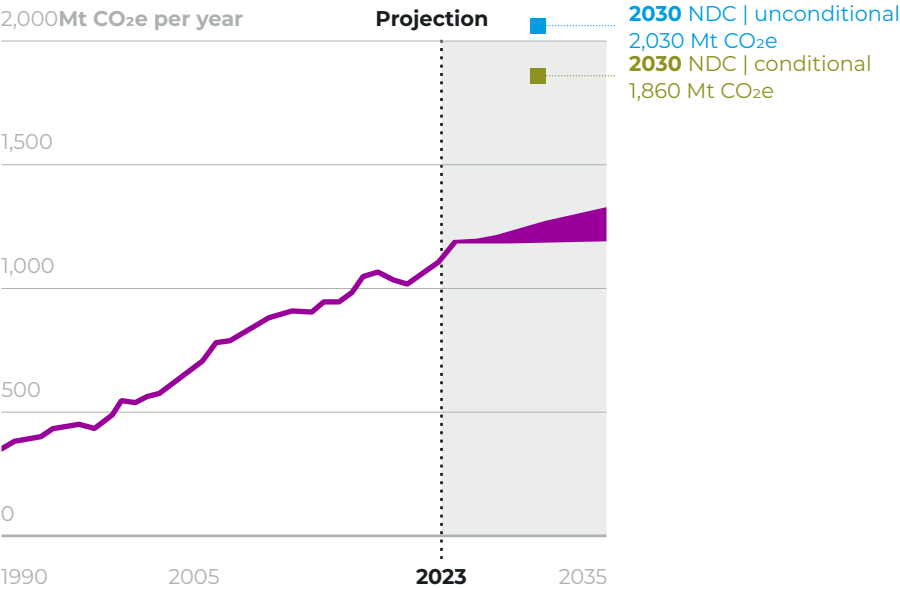
Pledge	Key targets
NDC*	Reduce emissions by 4% (unconditional) and 12% (conditional) below BAU by 2030
Net zero	No target (no LTS submitted)

*Land use emission projections do not account for the impact of natural disturbances and peat fires.

Iran is well **on track to meet both its unconditional and conditional 2030 NDC targets** with existing policies. Our projections suggest that Iran is well positioned to substantially increase the ambition of its targets in the 2025 NDC ambition-raising cycle. Iran has not ratified the Paris Agreement and is one of the few countries in the world with emissions above 1,000 MtCO₂e per year. As it stands, emissions under current policies are projected to steadily increase until 2035, driven by emissions in energy and industry sectors, and show no sign of peaking before 2035.

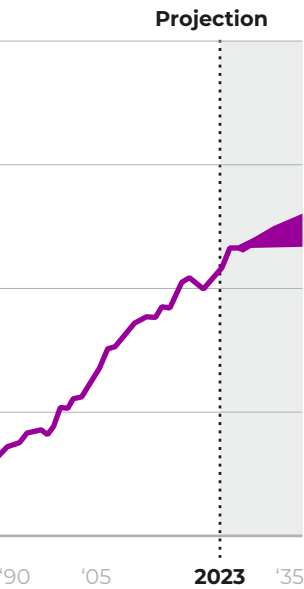
Impact of climate policies on emissions in Iran

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Of the countries that have not ratified the Paris Agreement, as mentioned above, Iran is the largest emitter. The current Intended Nationally Determined Contributions (INDC) state that Iran's climate targets and mitigation efforts are conditional on the imposition of international economic sanctions or not (Department of Environment of Iran, 2015), which were reimposed in 2018, when the USA withdrew from the Iran nuclear deal.

Iran has not set a net-zero target nor communicated a long-term strategy to the UNFCCC.

RECENT DEVELOPMENTS

Investments in mitigation measures – renewable energy deployment in particular – have significantly slowed down in the past couple of years, as the government has been prioritising Iran's economic recovery. This is best exemplified by the bill of the Seventh Five-Year Development Plan (2023-2027), a strategic document which serves as a guiding framework for annual budgets and policy developments (The Islamic Republic of Iran, 2023). Unlike the previous edition, the new plan, announced in May 2023, is exclusively focused on addressing Iran's pressing economic challenges and does not include any mitigation measures or renewable energy targets. The government has left out the section on environmental policy, as its priorities appear to lie elsewhere.

Iran's power sector remains dominated by fossil fuels, which accounted for around 92% of its electricity mix in 2024. Renewable energy has seen minimal growth in recent years. In 2024, Iran only had around 1.2 GW of installed capacity from wind and solar, which generated around 0.5% of its electricity (Ember, 2025g). Nuclear energy continues to play a small role in Iran's electricity mix, with just 0.9 GW of installed capacity. Another 1.1 GW reactor is currently under construction—initially set to start operation in 2024 but is now delayed until 2028 (World Nuclear Association, 2024).

2019 historical data and 2030 projections of key emissions indicators for Iran

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	1,030 +17% vs 2010	1,195 to 1,255 +16% to +22% vs 2019	2,030 +97% vs 2019	1,860 +80% vs 2019
Emissions per capita (tCO ₂ e/cap)	11.9 +4% vs 2010	12.5 to 13.2 +5% to +11% vs 2019	21.3 +79% vs 2019	19.5 +64% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	1.86 +10% vs 2010	1.61 to 1.70 -13% to -9% vs 2019	2.74 +47% vs 2019	2.51 +35% vs 2019

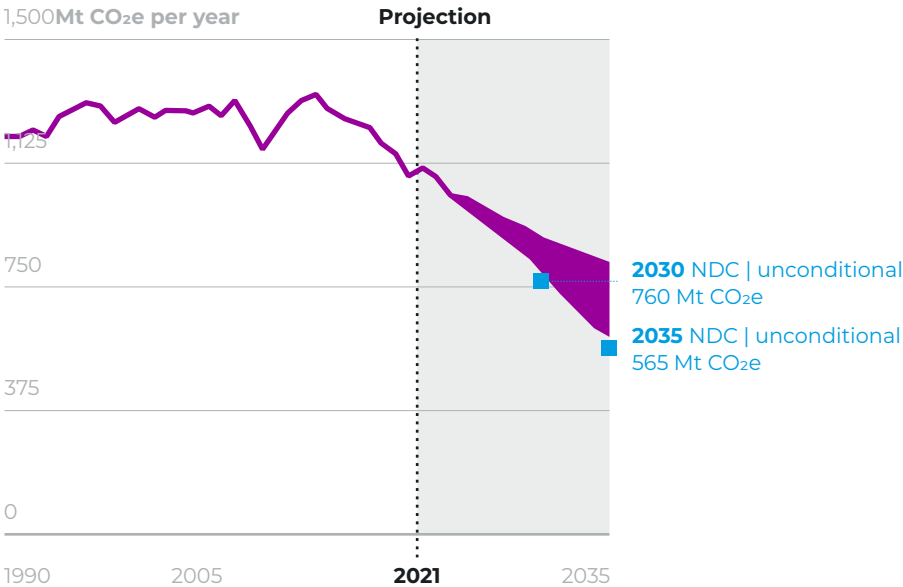
4.13 JAPAN

Japan's NDC and net zero targets

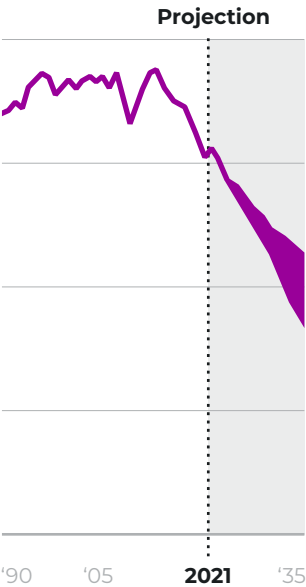
Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 46% below 2013 by 2030	Reduce emissions by 60% below 2013 by 2035
Net zero	Net zero by 2050 (GHG; LTS submitted)	

Impact of climate policies on emissions in Japan*

Including land use



Excluding land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

*Land use emission projections do not account for the impact of natural disturbances and peat fires.

TARGETS

Japan's 2030 NDC, submitted in 2021, sets an emission reduction target of 46% below 2013 levels (Government of Japan, 2022). The updated Plan for Global Warming Countermeasures and the updated long-term strategy under the Paris Agreement were adopted simultaneously (MOEJ, 2021). In its 2025 submission, Japan introduced its new NDC, aiming for a 60% reduction below 2013 levels by 2035. The new NDC also contains a 73% reduction target below 2013 levels for 2040 (Government of Japan, 2025).

Japan’s 2050 net zero target covers all emissions and economic sectors and is enshrined in domestic law. However, it does not report the expected share of emissions removed through land use sinks, technological CDR, and other removal options such as carbon credits (Government of Japan, 2019).

RECENT DEVELOPMENTS

In 2024, as part of the Green Transformation (GX) Basic Policy, the Japanese government issued the world’s first sovereign transition bonds called the Japan Climate Transition Bonds. The first tranche was auctioned in February 2024.

Japan moved to restart its currently idled nuclear reactors with an extended lifetime and plans to build new generation reactors, as part of the GX Basic Policy (METI, 2023). Despite this reversal, many regulatory and political hurdles remain, and it also remains uncertain if nuclear power would significantly contribute to Japan’s 2030 target (Renewable Energy Institute, 2023).

On the energy demand side, a significant policy development is the amendment of the Building Energy Efficiency Act in June 2022 (ECCJ, 2022). As of April 2025, all new buildings are now required to meet the minimum energy efficiency standards (not the case before). The potential impact of this policy update is, however, not quantified in this year’s analysis due to time constraints.

2019 historical data and 2035 projections of key emissions indicators for Japan

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	1,155 -6% vs 2010	605 to 820 -48% to -29% vs 2019	565 -51% vs 2019
Emissions per capita (tCO ₂ e/cap)	9.1 -5% vs 2010	5.2 to 7.1 -43% to -22% vs 2019	4.9 -47% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.19 -13% vs 2010	0.09 to 0.12 -51% to -34% vs 2019	0.08 -54% vs 2019

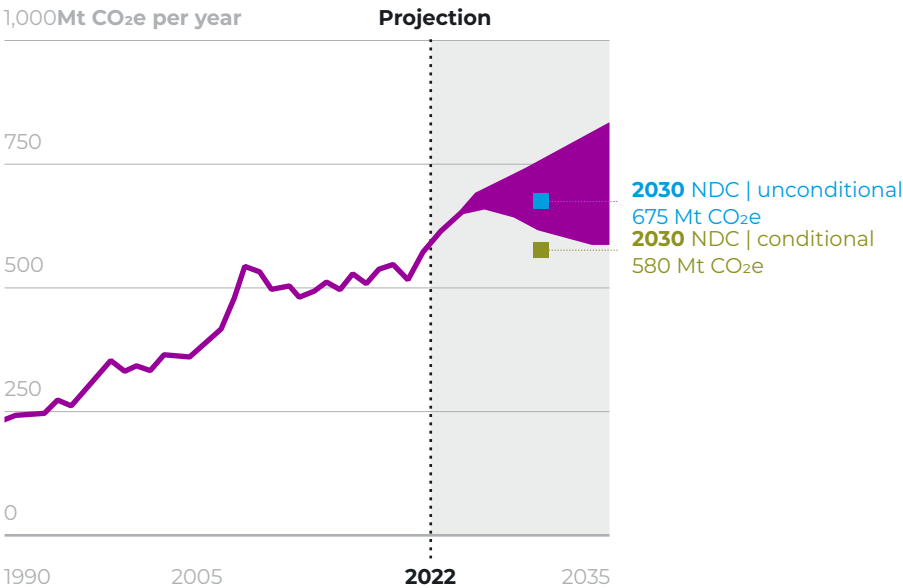
4.14 MEXICO

Mexico's NDC and net zero targets

Pledge	Key targets
NDC	Reduce emissions by 35% (mostly unconditional) and by 40% (conditional) below BAU by 2030
Net zero	No target (LTS submitted)

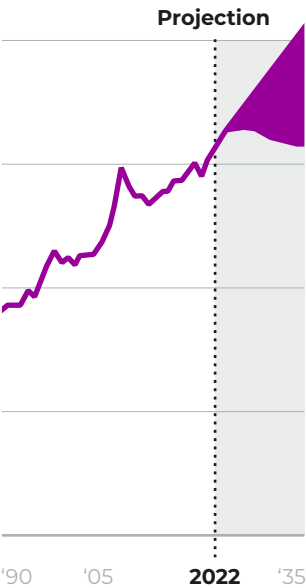
Impact of climate policies on emissions in Mexico

Including land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Mexico's NDC includes a target to reduce emissions by 35% below BAU by 2030 (including a statement that 5% of the 35% would be met with “previously agreed international support”), and a 5% further reduction conditional on international finance. As of October 2025, Mexico has not yet submitted its 2035 NDC to the UNFCCC, though it has announced that the next NDC submission will make the 2030 target unconditional and introduce a 2035 target aligned with net zero by 2050 (Government of Mexico, 2025).

Based on our analysis, Mexico **could be on track to meet its unconditional 2030 NDC target, but is projected to miss its conditional 2030 NDC target** with existing policies. Our current policy projections show a wide emissions range considering the uncertainty in the implementation of Mexico's policies under the new government, especially as it relates to the deployment of renewables. This contributes to the uncertainty of Mexico reaching its unconditional target. The land use sector is currently an emissions sink, which is projected to increase moderately towards 2035.

Our 2025 current policies scenario's upper end has not been updated, but in the lower end, we consider a revision of Mexico's renewables targets, as well as removed policies and modelling updates. Historical data (incl. LULUCF data) have also been revised upwards.

Mexico remains the only G20 country without a net zero target. The country submitted a long-term strategy (LTS) to the UNFCCC in 2016. This LTS does not include a net-zero target and has not been updated since. At COP29, Mexico formally announced a national net zero target for 2050 (Government of Mexico, 2024).

RECENT DEVELOPMENTS

Since our last update, Mexico has advanced with the implementation of several policies that can impact emissions. In May 2025, the government launched an updated National Climate Change Strategy, targeting emission reductions by 2030 through renewable energy, reforestation, circular economy initiatives, mangrove restoration, and sustainable agriculture (Ministry of Environment and Natural Resources, 2025).

In 2024, the Electric Industry Law reform, meant to prioritise state-owned fossil fuel power plants was partly reversed. Then, in January 2025, a Power Sector Law was introduced (and approved in March 2025), allowing public-private energy projects only if the state retains a minimum 54% stake, thereby reinforcing state-driven energy control (Barrera, 2025). In Mexico’s most recent power sector plan PRODESEN 2024-2038, fossil fuel installed capacity additions represent nearly 30% of total additions between 2024-2027 (SENER, 2024). For renewables, the plan aims to integrate nearly 94 GW of new capacity by 2038 across solar PV, distributed generation, wind, hydrogen-powered combined cycles, and battery storage. In the short term (2024–2027), around 18 GW of this will be renewable, including ~5 GW in solar PV, ~5 GW in wind, ~2.9 GW in distributed solar, and ~5.5 GW in battery storage systems (Energy News Pro, 2024).

2019 historical data and 2030 projections of key emissions indicators for Mexico

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	550	620 to 755	675	580
	+10% vs 2010	+13% to +38% vs 2019	+23% vs 2019	+5% vs 2019
Emissions per capita (tCO ₂ e/cap)	4.4	4.6 to 5.5	4.9	4.2
	-1% vs 2010	+4% to +26% vs 2019	+13% vs 2019	-3% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.41	0.40 to 0.49	0.44	0.38
	-8% vs 2010	-3% to +18% vs 2019	+6% vs 2019	-9% vs 2019

4.15 MOROCCO

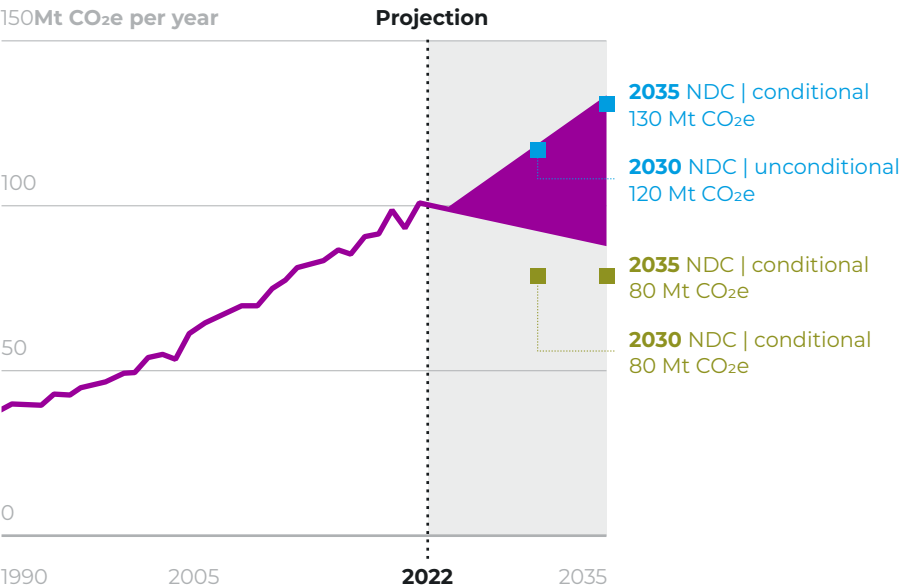
Morocco's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 45.5% below BAU by 2030, of which 18.3% unconditional and 27.2% conditional reductions	Reduce emissions by 53% below BAU by 2035, of which 21.6% unconditional and 31.4% conditional reductions
Net zero	No target (LTS submitted)	

Morocco is **projected to miss its conditional 2030 and 2035 NDC target, but is likely on track to meet its unconditional 2030 and 2035 NDC target** with existing policies. This suggests that Morocco is well positioned to increase the ambition of its unconditional target in the 2025 NDC ambition-raising cycle. Our current policies scenario shows that emissions in Morocco are highly uncertain. Moreover, while Morocco has ambitious targets, especially for renewables, policy implementation progress remains slow.

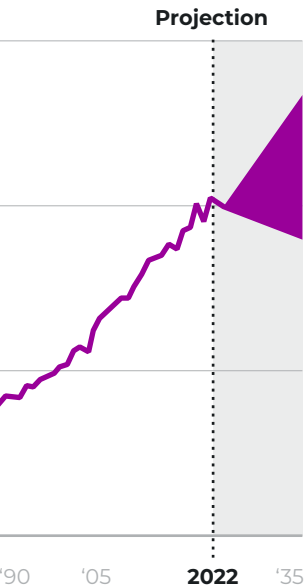
Impact of climate policies on emissions in Morocco

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Morocco's NDC sets an emission reduction target to reduce emissions by 45.5% below BAU by 2030, of which 18.3% unconditional reductions and 27.2% conditional reductions (Government of Morocco, 2021a). In September 2025, Morocco submitted its 2035 NDC to the UNFCCC, which includes an unconditional target to reduce emissions by 21.6% and a conditional target of 31.4% below BAU by 2035, for a total of 53% emission reductions below BAU by 2035 (Government of Morocco, 2025).

In its long-term strategy, Morocco announced its intention to reach net zero within the century, but did not commit to a specific year for net zero or provide any further details regarding the gas coverage, sector scope, role of land use sinks, technological CDR, or international carbon credits of this target (Government of Morocco, 2021b).

RECENT DEVELOPMENTS

Renewable energy is central to Morocco's emission reduction efforts. After missing its 2020 target of 42% renewable capacity, the country now aims for 52% by 2030. In 2024, renewables accounted for 40% of installed electricity capacity and 27% of generation, mainly from wind, while solar deployment remains constrained by regulatory and financial barriers (Ember, 2025h, 2025i).

Morocco also aims to become a global green hydrogen leader, targeting 4% of global demand by 2050 (Kingdom of Morocco, 2021). This was followed by the launch of Morocco's first green hydrogen production system in 2022. As intermediary target, by 2030, Morocco aims to generate 3,500 GWh of hydrogen powered by 3 GW of renewable energy projects, primarily from photovoltaics (PV) (80%) and wind power (20%) (CMS, 2024).

Coal, however, which accounted for 59% of Morocco's electricity mix in 2024, remains a significant obstacle to the full decarbonisation of the electricity sector. Although its share in the power mix has slightly declined, actual coal-based generation has remained relatively stable (Ember, 2025i). Morocco has no official coal phase-out year, and the country recently extended the operational life of its largest coal plant to 2044, indicating a continuation of this trend (Moroccan Ministry of Finance, 2020).

While the government outlined numerous mitigation policies for industry and agriculture in its 2021 NDC, many of which are already underway, the waste and transport sectors are noticeably lagging behind. Morocco's efforts to decarbonise the transport sector have focused mainly on expanding public transit, with few measures targeting actual road emissions. The waste sector remains largely underdeveloped, held back by limited infrastructure, a lack of targeted regulations, and insufficient financial incentives.

2019 historical data and 2035 projections of key emissions indicators for Morocco

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	100 +33% vs 2010	90 to 130 -10% to +35% vs 2019	130 +33% vs 2019	80 -20% vs 2019
Emissions per capita (tCO ₂ e/cap)	2.7 +19% vs 2010	2.1 to 3.2 -21% to +18% vs 2019	3.2 +17% vs 2019	1.9 -30% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.72 -2% vs 2010	0.41 to 0.62 -43% to -14% vs 2019	0.61 -15% vs 2019	0.36 -49% vs 2019

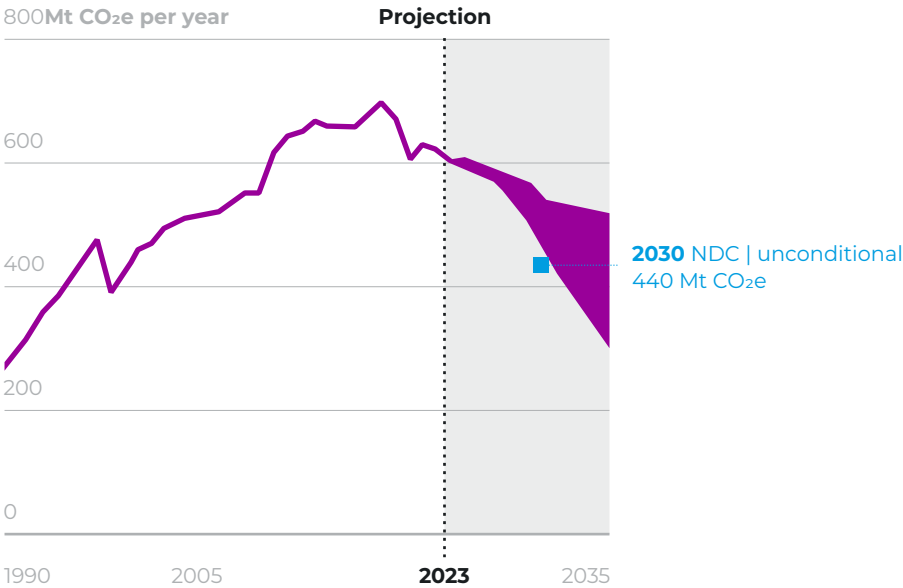
4.16 REPUBLIC OF KOREA

Republic of Korea's
NDC and net zero
targets

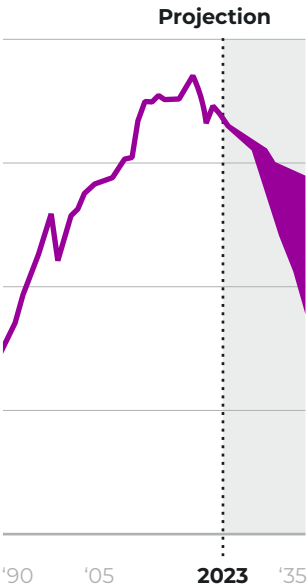
Pledge	Key targets
NDC	Reduce emissions by 40% below 2018 by 2030
Net zero	Net zero by 2050 (gas coverage unclear; LTS submitted)

Impact of climate
policies on emissions
in Republic of Korea*

Including land use



Excluding land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

*See our methodological annex (A3) on the consideration of land use for the NDC quantification.

TARGETS

The Republic of Korea's NDC includes an economy-wide target to reduce emissions by 40% below 2018 levels by 2030 (Republic of Korea, 2021). The NDC includes emission reductions from land use and international credits. As of October 2025, the Republic of Korea has not yet submitted its 2035 NDC to the UNFCCC.

The Republic of Korea's long-term strategy includes a carbon neutrality target, which has already been enshrined in law. It is unclear whether the 2050 target includes all emissions or only carbon dioxide. The Republic of Korea's plan specifies that the carbon neutrality target will be achieved without the use of international carbon credits, and it also specifies the role expected for land use sinks, as well as the individual contributions from specific sectors towards the target (Republic of Korea, 2020).

The Republic of Korea is **projected to miss its 2030 NDC target** with existing policies. Emissions are projected to decline towards 2030, but not at a sufficient pace to meet the NDC target. Most of the uncertainty in our projections relates to the impact of the Korean Emissions Trading Scheme (K-ETS) on emissions after 2025. The Republic of Korea uses a gross-net approach to account for the land use sector in its NDC. This means that it does not include the land use sector in the base year of its NDC target but does include it in the target year. Since the land use sector is a sink, this approach makes it easier for the Republic of Korea to achieve its target.

RECENT DEVELOPMENTS

The Republic of Korea’s energy and climate policies face uncertainty following the impeachment of the Yoon administration, which had continued the shift away from the 30% renewables target in its 2021 NDC to instead revitalise the nuclear power industry. The 11th Basic Electricity Plan, approved in February 2025, reiterated the new renewable energy generation target of 21.8% in 2030 and the growing share of nuclear power, while slightly expanding fossil gas and reducing coal’s contribution compared to the 10th Plan (General Committee on the Basic Plan on Electricity Supply and Demand, 2024). The incoming Lee Jae Myung administration has signalled a stronger renewables push and possible coal-phase out measures (Hwang, 2025).

In June 2024, the Yoon administration approved an exploratory drilling project off the east coast, targeting potential reserves of up to 14 billion barrels oil and gas, aiming to reduce dependence on imported liquefied natural gas (LNG) (Szymczak, 2024). Meanwhile, reforms to the Korea Emissions Trading Scheme (K-ETS) were weakened due to industry pressure, which has resulted in higher emissions caps, generous free allowances, and a carbon price well below the levels recommended by the IPCC (InfluenceMap, 2025).

The Constitutional Court ruled in August 2024 that the absence of legally binding emissions targets between 2031 and 2049 imposes an excessive burden on the future. It therefore ordered the Korean government to amend the Framework Act on Carbon Neutrality to include long-term annual reduction targets by February 2026.

2019 historical data and 2030 projections of key emissions indicators for Republic of Korea

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	670 +9% vs 2010	465 to 540 -31% to -19% vs 2019	440 -35% vs 2019
Emissions per capita (tCO ₂ e/cap)	13.0 +3% vs 2010	9.1 to 10.5 -30% to -19% vs 2019	8.6 -34% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.43 -17% vs 2010	0.24 to 0.28 -43% to -34% vs 2019	0.23 -47% vs 2019

4.17 RUSSIAN FEDERATION

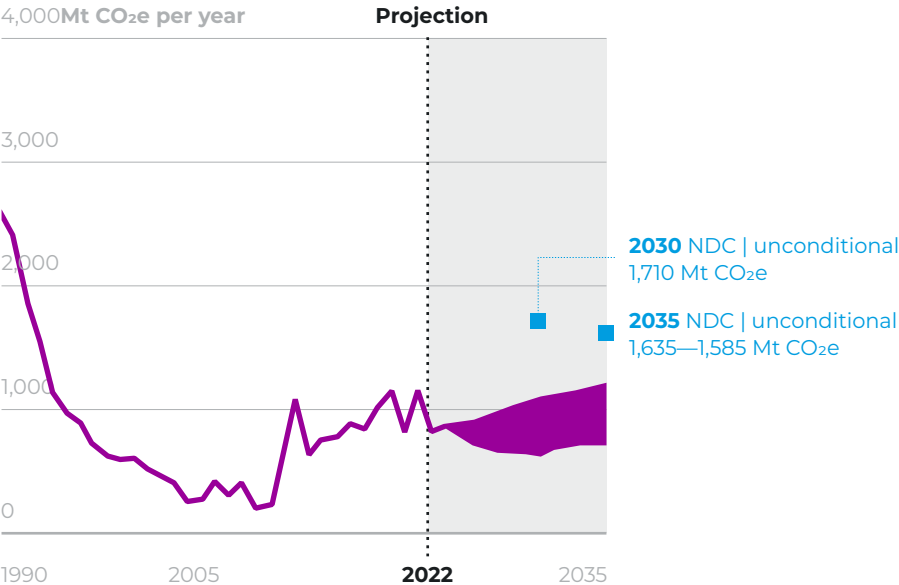
Russian Federation's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Reduce emissions to 70% of 1990 levels by 2030	Reduce emissions to 65-67% of 1990 levels by 2035, with caveats on LULUCF sinks and socioeconomic developments in the country
Net zero	Net zero by 2060 at the latest (GHG; LTS submitted)	

The Russian Federation is **on track to meet its 2030 and 2035 NDC target** with existing policies. However, both targets are significantly above current emission levels and do not drive any further emission reductions. It is important to note that for its First BTR, Russia recalculated its historical GHG emissions in the LULUCF sector, resulting in a doubling of the previously reported sink to approximately 1,200 MtCO₂e. This increase is mainly attributed to enhanced carbon uptake by managed forests, reduced forest fires, reforestation and restoration activities, and greater soil organic carbon accumulation. For our projections, these model adjustments did not lead to equally large increases in the sink. However, after post-model harmonization, initial values were adjusted, maintaining sink levels of around 1,200 MtCO₂e for both 2030 and 2035. Nonetheless, an upward trend in emissions persists due to potential forest fires and other disturbances. The lower end of our emission projections indicates that emissions have already started to decline before 2025, but the upper end of our projections shows emissions continuing to increase in the coming years.

Impact of climate policies on emissions in Russian Federation*

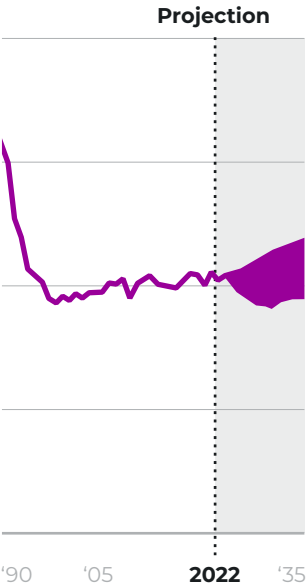
Including land use



Source: PBL IMAGE model (upper end); NewClimate Institute calculations (lower end); IIASA GLOBIOM/G4M model (2025).

*The calculations of the 2030 and 2035 NDC levels were based on the updated 1990 historical values provided in the Russian Federation's NDC 3.0 submission.

Excluding land use



TARGETS

The Russian Federation's NDC includes a target to reduce emissions to 70% of 1990 levels by 2030 aligning with the lower bound of its original 70-75% target range (Government of the Russian Federation, 2020). In September 2025, the Russian

Federation submitted its 2035 NDC to the UNFCCC, targeting a reduction of emissions to 65-67% of 1990 levels by 2035 (Government of the Russian Federation, 2025c).

The Russian Federation announced it would set a 2060 net zero target. This was followed by government approval of the ‘Strategy of socio-economic development of the Russian Federation with low emissions levels by 2050’ which formalised this target. It also included an additional target of reaching an 80% reduction in emissions below 1990 levels by 2050. The long-term strategy reiterating these targets was submitted to the UNFCCC in September 2022 (Government of the Russian Federation, 2022).

RECENT DEVELOPMENTS

Developments in Russian climate policy and ambition remain limited. In late 2023, the Russian Federation renewed its 2009 Climate Doctrine, which still acknowledges human-induced climate change and Russia’s goal to reach net zero by 2060, but they removed any references to the role of fossil fuels in driving the crisis (Presidential Executive Office, 2023; Asia Pacific Energy Portal, 2024). Meanwhile, the international climate impact of Russia’s war on Ukraine persists, and the associated rise in military spending, particularly in Europe, will lead to increased military emissions worldwide (Parkinson, 2025).

Russia’s economy is heavily dependent on fossil fuel revenues, and recent policy documents reinforce its vision of a “fossil fuel-intensive” future. The Energy Strategy to 2050, released in 2025, projects fossil fuel to account for over 85% of total primary energy consumption, while accompanying power sector strategies limit wind and solar electricity generation to just over 3% by 2042 (Government of the Russian Federation, 2025b, 2025a). Government forecasts anticipate growing demand for Russian fossil fuels, despite contrasting market trends and projections from Russia’s own Central Bank and other international agencies (Vasilenko et al., 2024).

In 2024, Russia revised its historical LULUCF data, nearly doubling reported carbon absorption by including unmanaged “reserve” forests in its GHG inventory (Light, 2021; UNFCCC / Russian Federation, 2024). This change allows Russia to claim that it has already achieved its 2050 LULUCF target without any further action. However, this approach conflicts with IPCC guidelines, which restrict carbon accounting to managed forests. Other aspects of LULUCF data have also faced scrutiny, with independent analyses challenging the accuracy of official forest fire data (Novaya Gazeta Europe, 2023).

2019 historical data and 2035 projections of key emissions indicators for Russian Federation

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	1,150 +411% vs 2010	725 to 1,195 -37% to +4% vs 2019	1,635 to 1,585 +42% to +38% vs 2019
Emissions per capita (tCO ₂ e/cap)	7.9 +402% vs 2010	5.2 to 8.5 -34% to +9% vs 2019	11.7 to 11.3 +49% to +44% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.61 +339% vs 2010	0.31 to 0.51 -50% to -17% vs 2019	0.69 to 0.67 +14% to +11% vs 2019

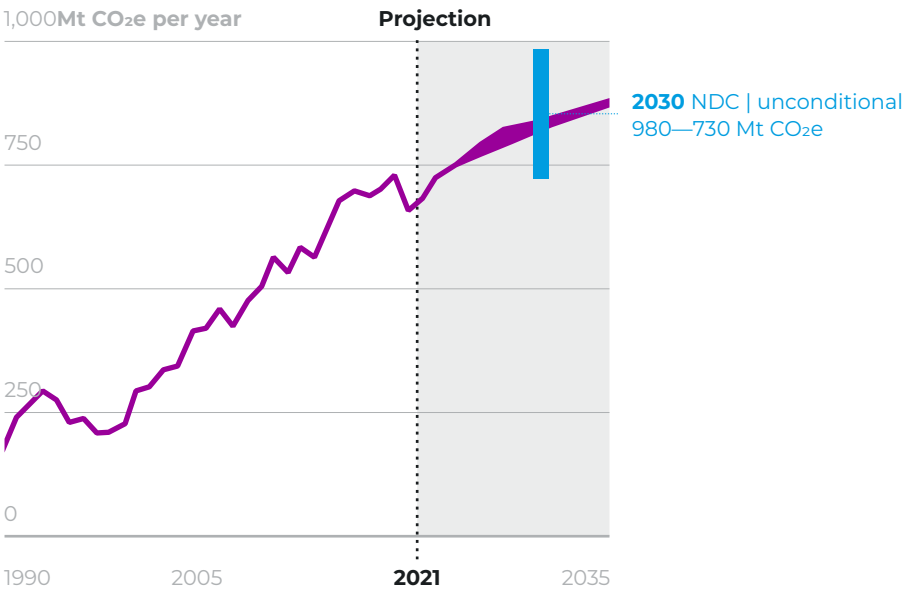
4.18 SAUDI ARABIA

Saudi Arabia's NDC and net zero targets

Pledge	Key targets
NDC	Reduce emissions by 278 MtCO₂e annually by 2030 (unclear reference)
Net zero	Net zero by 2060 (gas coverage unclear; no LTS submitted)

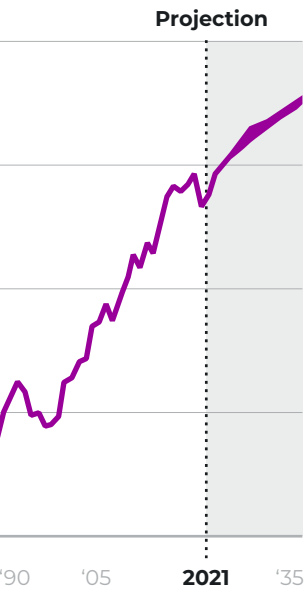
Impact of climate policies on emissions in Saudi Arabia

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/ G4M model (2025).

Excluding land use



Saudi Arabia is **likely on track to meet its 2030 NDC target** with existing policies. The lack of official estimates for the reference of its NDC target, however, increases the uncertainty of our analysis. We assume that the NDC target refers to reductions below a baseline scenario of 990-1240 MtCO₂e in 2030 (Climate Action Tracker, 2020). Emissions under current policies are projected to increase until 2035. Although the growth does slow down post-2027 in the upper end of our scenario, emissions show no clear sign of peaking before 2035.

TARGETS

Saudi Arabia's NDC includes a target to cut emissions by 278 MtCO₂e by 2030. Due to uncertainty about the reference for the target calculation, the quantification of the NDC target leads to a broad emissions range. Our estimates result in absolute emissions between 730 and 980 MtCO₂e in 2030. Other studies interpret Saudi Arabia's target differently and instead show emissions ranging between 310 and 800 MtCO₂e in 2030 (Meinshausen et al., 2021; Climate Action Tracker, 2022). As of October 2025, Saudi Arabia has not yet submitted its 2035 NDC to the UNFCCC.

The net zero by 2060 target was announced in 2021 but has not been submitted to the UNFCCC as part of Saudi Arabia's long-term strategy. Sectoral and gas coverage of the target remains unclear, as well as the role of land use sinks, technological CDR and international carbon credits for achieving the target (Kingdom of Saudi Arabia, 2021a).

RECENT DEVELOPMENTS

The Saudi Green Initiative lists several measures to reach the updated NDC target (Kingdom of Saudi Arabia, 2021a). These include increasing the share of renewable energy to 50% by 2030, installing 100–130 GW of renewable energy capacity by 2030, enhancing energy efficiency, producing hydrogen, using carbon capture for methanol and improving waste management.

Saudi Arabia has made very little progress in deploying renewables and decarbonising its power sector. In 2024, renewables generated around 2% of electricity, and Saudi Arabia still had around 6 GW of installed renewable capacity in 2025 (Ember, 2025j; Saudi Green Initiative, 2025). In contrast, it had 100 GW of oil and gas plants in operation along with a pipeline of more than 8 GW of fossil plants under construction as of early 2024 (Global Energy Monitor, 2025b). At the current pace, the 50% renewable electricity target by 2030 likely remains out of reach.

Despite diversification plans away from fossil fuels, Saudi Arabia remains highly reliant on fossil revenues (KPMG, 2022). The government is relying on carbon capture and storage (CCS) technologies to reach its climate goals while simultaneously sustaining its extensive fossil fuel production and exports (Kingdom of Saudi Arabia, 2021b). In January 2024, the Saudi national oil company, Aramco, abandoned its plan to increase oil production capacity to 13 million barrels per day by 2027 from currently 12 million barrels per day. However, this decision appears largely driven by strategic considerations rather than a commitment to phase out fossil fuels, reflecting changes in the global oil market, including slowing demand growth and increased production from non-OPEC countries (Financial Times, 2024).

2019 historical data and 2030 projections of key emissions indicators for Saudi Arabia

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	730 +29% vs 2010	830 to 840 +14% to +15% vs 2019	980 to 730 +34% to +0% vs 2019
Emissions per capita (tCO ₂ e/cap)	24.2 +5% vs 2010	22.4 to 22.6 -8% to -7% vs 2019	26.3 to 19.6 +9% to -19% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.99 -8% vs 2010	0.85 to 0.86 -14% to -14% vs 2019	1.00 to 0.74 +1% to -25% vs 2019

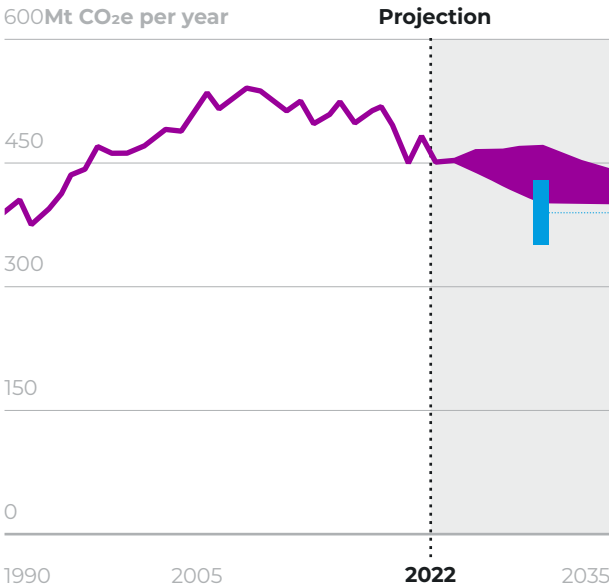
4.19 SOUTH AFRICA

South Africa's NDC and net zero targets

Pledge	Key targets
NDC	Limit emissions to 355–425 MtCO₂e by 2030
Net zero	Net zero by 2050 (CO ₂ ; LTS submitted)

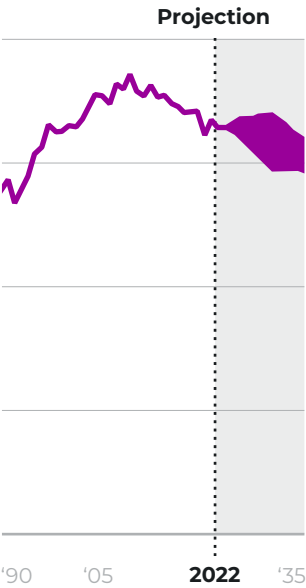
Impact of climate policies on emissions in South Africa

Including land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

Excluding land use



South Africa is **likely on track to meet the upper end of its 2030 NDC target** under an ambitious interpretation of current policies. Our analysis suggests that emissions will likely fall within the NDC's target range, although achieving the lower end of the target appears unlikely. However, we project substantial uncertainty in the country's emissions, especially considering the magnitude of emissions related to Eskom's, South Africa's public utility, coal-fired power plants. Emissions in South Africa could plateau towards 2030 or continue to decline, based on the lower end of current policy projections. Towards 2035 emissions are projected to further decline only marginally under current policies.

TARGETS

South Africa's NDC sets an economy-wide target of 355–425 MtCO₂e by 2030 (Republic of South Africa, 2021). We assume this target is unconditional. The country notes that “implementation of these ambitious mitigation targets will require substantial multilateral support” referring to the Paris Agreement's general support provisions for developing countries rather than target conditionality. As of October 2025, South Africa has not yet submitted its 2035 NDC to the UNFCCC. In its long-term strategy, South Africa commits to “moving towards a goal of net zero carbon emissions by 2050” (Government of South Africa, 2020). South Africa is still in the process of developing its 2050 target, thus all elements on scope, architecture and transparency, such as reliance on land use sinks and international carbon credits to achieve its target, remain unclear.

RECENT DEVELOPMENTS

In November 2022, South Africa launched the Just Energy Transition Partnership (JETP) investment plan, mapping out nearly USD 100 billion in required financing between 2023 and 2027 (European Commission, 2022a; Government of South Africa, 2022; Presidential Climate Commission South Africa, 2023). The JET-P has progressed from planning to implementation, with several ongoing projects reported by the government. (South African Government, 2024e). In early 2025, the USA withdrew from the partnership and rescind its committed funding. However, this withdrawal still leaves South Africa with USD 12.8 billion in funding and the government is actively seeking new partnerships (South African Government, 2025).

South Africa is undertaking major reforms to its electricity system as the government attempts to stabilise supply and reduce load-shedding. In 2024, the South African government passed the Electricity Regulation Amendment Act to establish an independent state-owned transmission network and operator, a role previously held by Eskom alongside its role as the country's largest electricity generator (South African Government, 2024d). Simultaneously, South Africa is adding significant generating capacity to the grid. Several public auctions have been held in recent years to facilitate the deployment of privately operated wind and solar farms, with the most recent auction having closed in December 2024 (South African Government, 2024b). However, South Africa also continues to add new fossil fuel generation to the system, with two large capacity additions made to existing coal plant in 2024 and 2025 (Eskom, 2024, 2025).

The Climate Change Act was adopted by the South African government in July 2024. Under the legislation, the government must set sectoral emission targets for each GHG emitting sector in line with the national emission target every five years. Carbon budgets will also be allocated to large-scale GHG emitting companies, intended to place a cap on emissions and make it mandatory for companies to constrain their emissions (South African Government, 2024c). The framework Act should be operationalised through additional legislation in the near term, with the first meaningful follow on legislation opened for public consultation in late 2025 (South African Government, 2024a).

2019 historical data and 2030 projections of key emissions indicators for South Africa

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	485 -7% vs 2010	400 to 470 -17% to -4% vs 2019	425 to 355 -13% to -27% vs 2019
Emissions per capita (tCO ₂ e/cap)	8.2 -18% vs 2010	5.9 to 6.9 -28% to -16% vs 2019	6.3 to 5.2 -24% to -37% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	1.01 -8% vs 2010	0.75 to 0.87 -14% to -14% vs 2019	0.79 to 0.66 +1% to -25% vs 2019

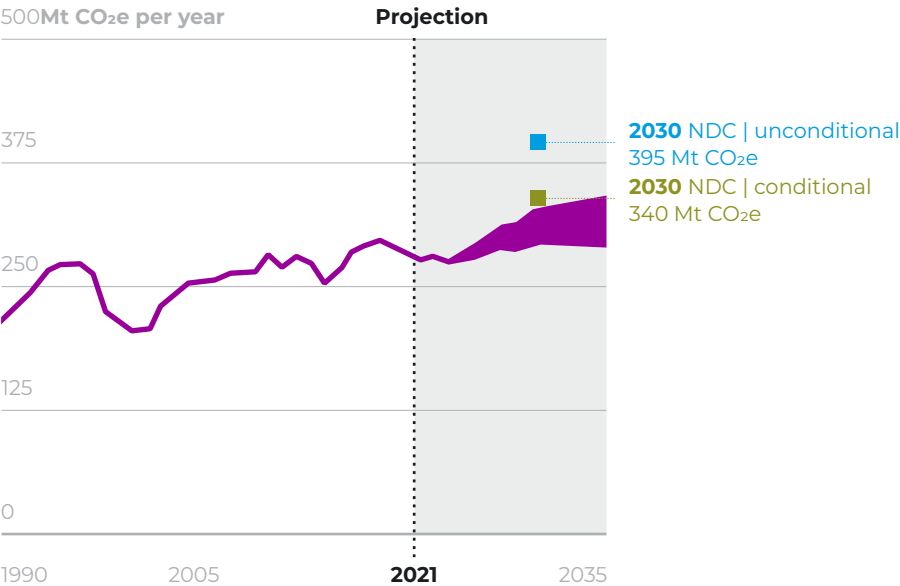
4.20 THAILAND

Thailand's NDC and net zero targets

Pledge	Key targets
NDC	Reduce emissions by 30% (unconditional) and by 40% (conditional) below BAU excluding land use by 2030
Net zero	Net zero CO₂ by 2050 and net zero GHG by 2065 (LTS submitted)

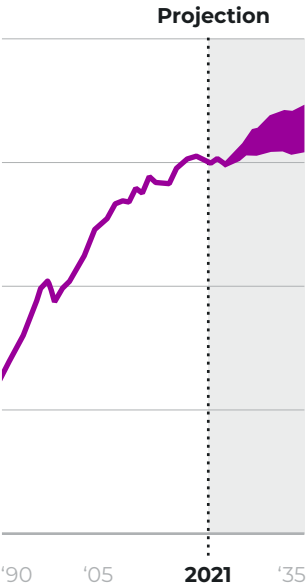
Impact of climate policies on emissions in Thailand

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/ G4M model (2025).

Excluding land use



TARGETS

Thailand's current NDC (2.0) includes an unconditional target of reducing emissions by 30% below BAU by 2030, and a conditional target of reducing emissions by 40% below BAU by 2030. Both targets and the BAU excluded the land use sector. The BAU emissions are expected to reach 555 MtCO₂e by 2030 (Government of Thailand, 2022a). As of October 2025, Thailand has not yet submitted its 2035 NDC to the UNFCCC.

Thailand submitted targets to reach carbon neutrality by 2050 and net zero emissions by 2065 to the UNFCCC before COP27. Thailand plans to use considerable land use sinks and carbon capture and storage to reach those targets (Office of Natural Resources and Environmental Policy and Planning, 2022). Neither target is codified in law, and independent observers noted implementation as critically insufficient.

RECENT DEVELOPMENTS

Since announcing its net zero target in 2022, Thailand has been working on integrating this long-term target into its national strategies, institutional frameworks and sectoral plans. Thailand established the Department of Climate Change and Environment (DCEE) within the Ministry of Natural Resources and Environment in 2023, to drive climate policymaking and planning. As of 2025, several major climate policy documents are awaiting approval by the government, slowed by the political turbulence experienced throughout 2024 and 2025. Climate and environmental issues nonetheless featured prominently in the new Prime Minister’s inaugural statement, which pledged accelerated clean energy and industry transitions, stronger land-based mitigation, and the establishment of an emissions trading system, though delivery remains uncertain given political constraints (The Nation Thailand, 2025).

Thailand’s landmark Climate Change Act (CCA) has been in the final stages of legislative review for a year, and was submitted for approval by the newly appointed Cabinet in September 2025. The draft CCA proposes several new measures the support emissions reductions in line with above targets, including carbon pricing, a carbon tax, an emissions trading system, a monitoring and evaluation framework, a domestic CBAM, and a climate fund feeding into a comprehensive climate investment plan, backed by the Thai Board of Investment. (Department of Climate Change and Environment, 2025).

The land and energy sectors are the focus of Thailand’s climate change mitigation strategies (Government of Thailand, 2022b). The draft NEP 2024 lays out a roadmap for the energy sector to support Thailand’s development and climate objectives, doubling electricity capacity by 2037 with over half of the total capacity targeted to be from renewable sources (Ministry of Energy, 2024). The National Energy Plan (NEP) 2024, and its sub-plans, the Alternative Energy Development Plan (AEDP), the Energy Efficiency Plan (EEP), the Gas Plan and the Oil Plan, are all in the final stages of development and review, expected in 2025.

2019 historical data and 2030 projections of key emissions indicators for Thailand

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	385	390 to 425	395	340
	+9% vs 2010	+2% to +11% vs 2019	+3% vs 2019	-11% vs 2019
Emissions per capita (tCO ₂ e/cap)	5.4	5.5 to 6.0	5.6	4.8
	+5% vs 2010	+2% to +11% vs 2019	+4% vs 2019	-11% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.85	0.75 to 0.81	0.76	0.65
	-17% vs 2010	-12% to -4% vs 2019	-10% vs 2019	-23% vs 2019

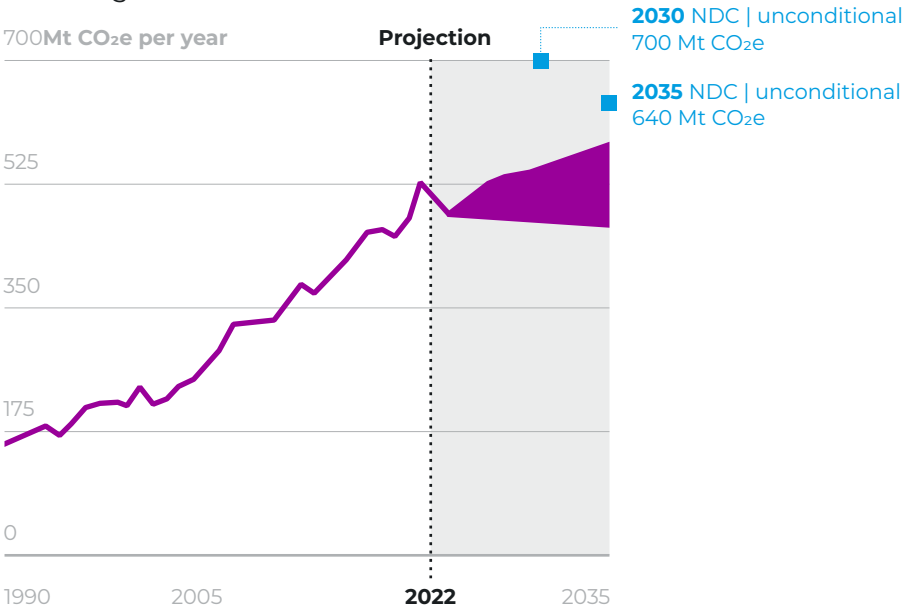
4.21 TÜRKİYE

Türkiye's NDC and net zero targets

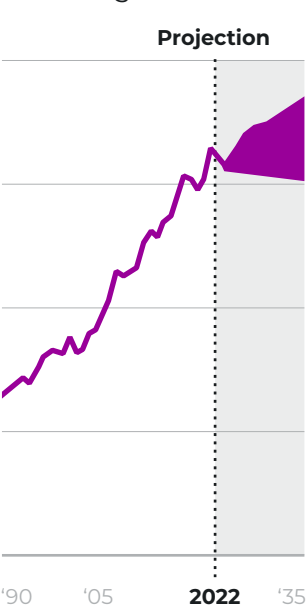
Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 41% below BAU by 2030. Peaking date at the latest in 2038	Reduce emissions by 465 MtCO₂e compared to BAU, to 640 MtCO₂e by 2035 (announcement only)
Net zero	Net zero by 2053 (gas coverage unclear; no LTS submitted)	

Impact of climate policies on emissions in Türkiye

Including land use



Excluding land use



Source: PBL IMAGE model (lower end); NewClimate Institute calculations (upper end); IIASA GLOBIOM/G4M model (2025).

TARGETS

Türkiye's NDC sets an unconditional target to reduce economy-wide emissions by 41% below BAU by 2030 (Government of Türkiye, 2023) and indicates an intention to peak emissions no later than 2038. During the Climate Summit 2025, Türkiye announced its intention to achieve 465 MtCO₂e emission reduction by 2035 (from an unspecified BAU) and reduce emissions to 640MtCO₂e (Türkiye Today, 2025).

Türkiye aims to reach net zero by 2053 (Government of Türkiye, 2021). Its long-term strategy, released at COP29, reaffirms this target and sets specific reductions in a few subsectors, such as cement, iron and steel, aluminium, and fertilisers

Türkiye is **on track to meet its 2030 and 2035 NDC targets** under current policies. However, both targets are significantly above current emission levels and do not drive any further emission reductions. We project substantial uncertainty as emission projections in Türkiye are highly dependent on socio-economic assumptions. Emissions under current policies are projected to plateau and slightly decline at the lower end or steadily increase until 2035 without any sign of peaking.

The LULUCF sector remains a net sink, consistent with 2024 historical data; however, a decline in the trend from 2019 to 2022 is observed due to intensive wood harvesting from salvage logging, increased demand from Türkiye's expanding wood industry, and large-scale forest fires and other climate-related disturbances.

(Government of Türkiye, 2024). However, most sectors lack clear targets, and the use of offsets, CDR, and the inclusion of aviation and shipping remain unspecified.

RECENT DEVELOPMENTS

Türkiye's efforts focus on energy security and efficiency, as the country faces the fastest rising energy demand among OECD countries. The National Energy Plan 2022–2035 sets long-term targets, including 120 GW of solar and wind capacity by 2035, part of a 160 GW renewable energy goal with hydro and biomass (Turkish Ministry of Energy and Natural Resources, 2022). Achieving this requires annual additions of 7.5–8 GW. Implementation has fluctuated: 2023 saw the lowest wind additions in 13 years, while 2024 wind installations recovered to 1.1 GW and solar reached a record 8.6 GW (Ember, 2025c). To reduce dependence on electricity imports, Türkiye's 2030 Energy Efficiency Strategy and Action Plan sets a target of cutting primary energy consumption by 16% by 2030, supported by a USD 20 billion investment program in energy efficiency (Ministry of Energy and Natural Resources, 2024).

Coal and gas remain central to the economy, with no scheduled phase-out. In 2024, Türkiye became Europe's largest coal-fired electricity producer (Reuters, 2024c). In recent years, most proposed coal projects have faced local resistance and legal blocks, and the widespread cancellations represent a positive trend, though a committed coal phase-out is still needed (Carbon Brief, 2024; Global Energy Monitor, 2025a). Türkiye also plans to expand gas production and develop a regional hub, including 270 new drilling operations in 2025 (Türkiye Today, 2024).

In July 2025 Türkiye's Parliament passed the country's first national Climate Law, establishing a legally binding Emissions Trading System (ETS), clarifying institutional roles with a Climate Change Directorate, and creating a Carbon Market Board to regulate and enforce carbon pricing (Government of Türkiye, 2025). The ETS will limit emissions intensity from major polluters, with a planned pilot phase by 2026. The law also mandates local adaptation planning and promotes clean energy support.

In transport, the Transport and Logistics Master Plan 2053 envisages USD 298 billion investment, scaling rail passenger share to 5% and freight to 20% by 2035 (Ministry of Transport and Infrastructure, 2023). Complementary policies promote domestic EV production, notably through the Togg electric vehicle program, and the expansion of high-speed electric rail (Ministry of Industry and Technology, 2022; Kasapovic and Knowles, 2024; Railway Gazette International, 2024; Railway Supply, 2024).

2019 historical data and 2035 projections of key emissions indicators for Türkiye

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	455 +35% vs 2010	465 to 580 +3% to +28% vs 2019	640 +41% vs 2019
Emissions per capita (tCO ₂ e/cap)	5.3 +16% vs 2010	5.2 to 6.4 -3% to +21% vs 2019	7.1 +33% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.36 -17% vs 2010	0.20 to 0.25 -45% to -31% vs 2019	0.27 -24% vs 2019

4.22 UNITED ARAB EMIRATES (UAE)

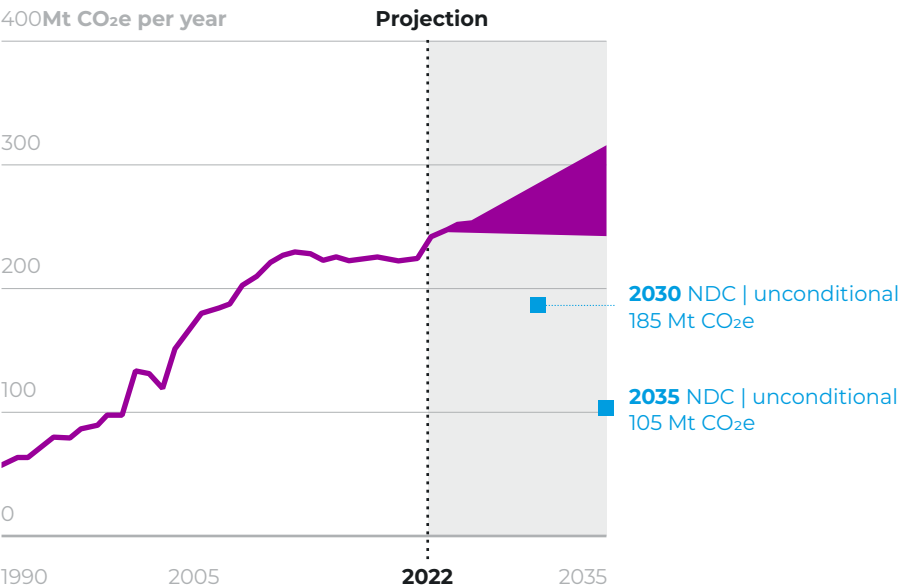
UAE's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Limit emissions to 182 MtCO₂e by 2030	Reduce emissions by 47% below 2019 baseline by 2035 (105 MtCO₂e in 2035, incl. LULUCF)
Net zero	Net zero by 2050 (GHG; LTS submitted)	

The UAE is **projected to miss its 2030 and 2035 NDC target**. Emission projections are highly uncertain under current policies and are expected to plateau towards 2030 and beyond at the lower end of our projections.

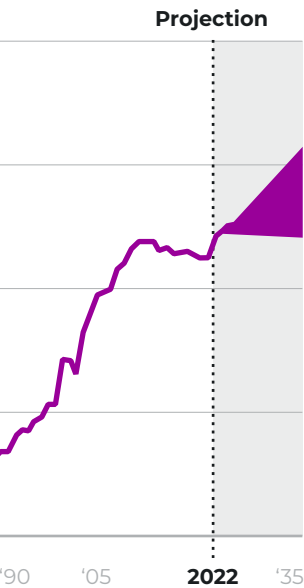
Impact of climate policies on emissions in the UAE

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

The UAE NDC the unconditional target of reducing emissions to 182 MtCO₂e by 2030 (Government of the UAE, 2023a). The NDC includes sectoral measures to support this economy-wide target. In November 2024, the UAE published their updated NDC, targeting a 47% reduction compared to 2019 levels by 2035, reaching an emissions level of 105 MtCO₂e.

The government also announced a 2050 net zero target and has released several official communications on its net zero plans since (Government of the UAE, 2021). The UAE also submitted an LTS to the UNFCCC in 2024 (United Arab Emirates, 2024).

The strategy aligns the NDC and net zero targets and presents sectoral pathways and mitigation measures by sector and their expected impact. The net zero target aims to reduce emissions to 13 MtCO₂e by 2050 while increasing LULUCF sinks to 3.5 MtCO₂e and removing 9.5 MtCO₂e through technical removal options.

RECENT DEVELOPMENTS

After a few years of exponential growth, the UAE's wind and solar capacity has remained almost constant between 2023 and 2024 (Ember, 2025k). With current plans, it will reach 9 GW of installed capacity of wind and solar by 2030, up from around 6 GW in 2024 (Tollast, 2022; Government of the UAE, 2023b).

Major targets and policies expected to impact emissions in the UAE remain unchanged from last year. For the period between 2030 and 2050, the UAE plans to reduce its emissions to 3.5 MtCO₂e. Most of the emissions reductions will come from the industry and power sectors. In the industry sector, which includes oil and gas production, 32% of the reductions will be met through carbon capture and storage (CCS), which translates to roughly 43.5 MtCO₂e. In the power sector, natural gas is scheduled to account for 50% of total installed capacity in 2050, but with a 0 tCO₂/MWh grid coefficient. This implies an equally extensive use of CCS in the power sector (United Arab Emirates, 2024).

Alongside its plans to reduce emissions, the UAE continues to invest in oil and gas, with no clear plan to phase down production in the foreseeable future. Indeed, the UAE is planning investments of USD 150 billion to support oil and gas expansion, and it recently brought its oil production target up from 2030 to 2027 (The Guardian, 2023).

In May 2025, the UAE enacted a climate law requiring all public and private entities to measure, report, and reduce their greenhouse gas emissions. The law also mandates the development of climate adaptation plans and the establishment of systems for emissions monitoring and verification (UAE Government, 2024).

2019 historical data and 2035 projections of key emissions indicators for the UAE

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	225 +2% vs 2010	245 to 310 +9% to +39% vs 2019	105 -53% vs 2019
Emissions per capita (tCO ₂ e/cap)	23.8 -26% vs 2010	19.0 to 24.3 -20% to +2% vs 2019	8.1 -66% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.54 -26% vs 2010	0.33 to 0.43 -38% to -21% vs 2019	0.14 -74% vs 2019

4.23 UNITED KINGDOM (UK)

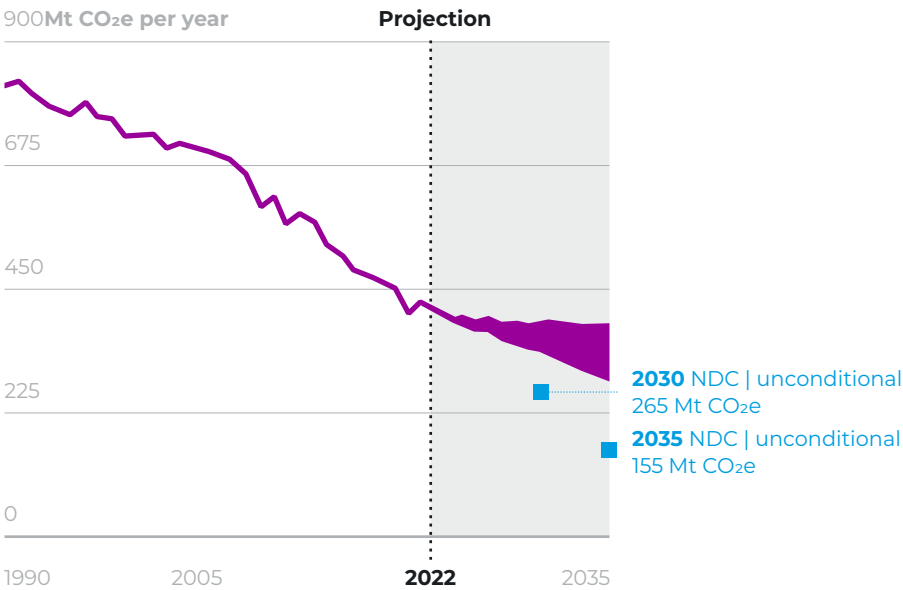
UK's NDC and net zero targets

Pledge	Key targets	
	2030	2035
NDC	Reduce emissions by 68% below 1990 by 2030	Reduce emissions by 81% below 1990 by 2035
Net zero	Net zero by 2050 (GHG; LTS submitted)	

The UK is **projected to miss both its 2030 and 2035 NDC targets** under current policies, despite emissions being on a downward trend up to 2035. However, the declining trend could slow down substantially and result in emissions plateauing towards 2035. The upper end of the range only includes those policies where there are proven delivery mechanisms, a credible combination of public/private financing, and clear timelines in place. The lower end of the range includes policies which display some risks related to delivery mechanisms, financing, or implementation timelines.

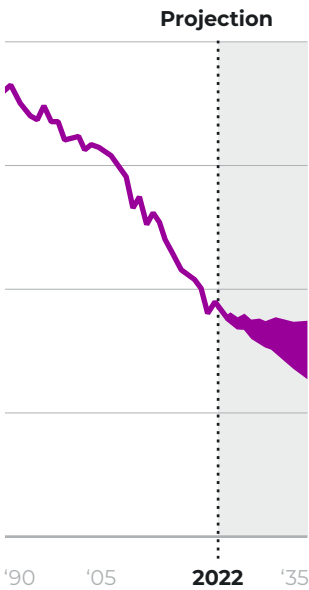
Impact of climate policies on emissions in the UK

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

The UK's 2030 NDC commits to reducing emissions by 68% below 1990 levels by 2030 (UK Government, 2022). The 2035 NDC sets a target of 81% emissions reductions below 1990 levels and includes information on the NDC process and implementation plan (UK Government, 2025). The 2035 submission does not alter the ambition of the 2030 target.

The UK enshrined its 2050 net zero emissions target in law in 2019 and has introduced multiple policies and sectoral plans since that support emissions reductions in the aftermath. Based on these policies, the UK government released a Net Zero Strategy

in October 2021 and submitted it to the UNFCCC (Government of the UK, 2021). The updated Strategy, called the “Carbon Budget Delivery Plan”, was published in March 2023, and clarifies how government measures will reduce emissions.

RECENT DEVELOPMENTS

The new Labour government has been busy trying to get the UK back on track to meet its NDC and net zero targets. The government has made significant progress removing policy barriers to spur the rollout of renewables, EVs, and heat pumps.

Continued growth in renewables, particularly wind power, enabled the complete phase-out of coal power by October 2024, and is now displacing gas from the power supply (Ember, 2025e). In the Clean Power 2030 Action Plan, published in December 2024, the government lays out pathways to further scale renewables to fully supply national power demand with clean sources in just five years’ time (UK Government, 2024).

In the transport sector, the government reinstated the 2030 phase-out of new fossil fuel cars and has continued to see a doubling of new EVs on the road each year (UK Climate Change Committee, 2025). Some concerns have been raised about the revision of the Zero Emission Vehicle (ZEV) mandate, which leaves room for manufacturers to underestimate emissions from hybrid vehicles and to convert non-ZEV improvements to ZEV credits, effectively weakening their EV sales targets.

Government interventions to remove planning barriers, introduce the Clean Heat Market Mechanism, and increase funding for the Boiler Upgrade Scheme, all led to a significant increase in heat pump installations in 2024 and 2025 (UK Climate Change Committee, 2025). The Labour government has decided not to pursue the 2035 phase-out of new fossil fuel boiler installations proposed by the former Tory government. However, these may be effectively precluded by the Future Homes Standards for energy efficiency, expected Q3 2025 (UK Parliament, 2024).

2019 historical data and 2035 projections of key emissions indicators for the UK

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2035 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO ₂ e/cap)	450 -27% vs 2010	285 to 385 -37% to -15% vs 2019	155 -66% vs 2019
Emissions per capita (tCO ₂ e/cap)	6.8 -31% vs 2010	3.9 to 5.3 -42% to -22% vs 2019	2.1 -68% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	0.15 -38% vs 2010	0.08 to 0.11 -48% to -30% vs 2019	0.04 -71% vs 2019

4.24 UNITED STATES OF AMERICA (USA)

USA's NDC and net zero targets

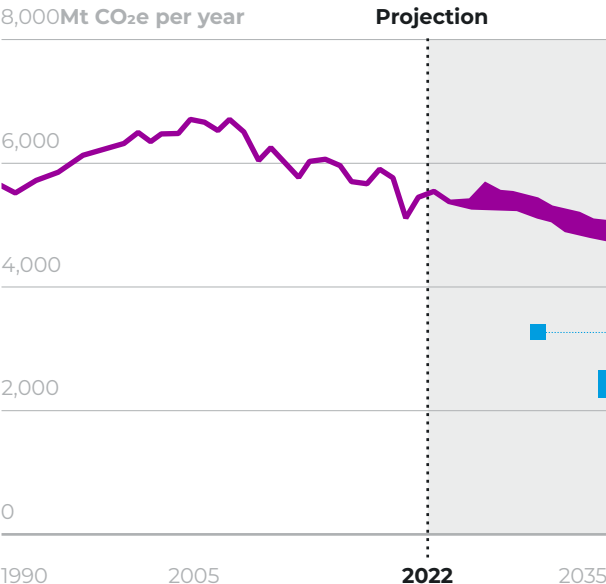
Pledge	Key targets
NDC	The Trump Administration withdrew the USA from the Paris Agreement, effectively nullifying the NDC targets to reduce emissions by 50–52% below 2005 levels by 2030 and by 61–66% below 2005 levels by 2035
Net zero	No net zero target; the Trump Administration is not pursuing the Biden Administration's LTS and its net zero target by 2050 (GHG; LTS submitted)

The USA has begun the process of withdrawing from the Paris Agreement and, as a result, **annulling its NDC targets**. The Trump Administration is pursuing an executive and legislative agenda to repeal targets, policies, and funding for climate change mitigation, therefore effectively reversing the Biden Administration's course on climate action.

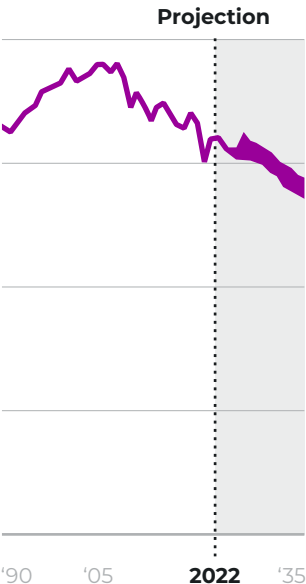
In a significant shift from last year's projections, following the signing into law of the Trump Administration's 'One Big Beautiful Bill' on July 4, 2025, the USA projections have been adjusted to reflect the repeal of several Inflation Reduction Act schemes and programmes relating to renewable energy deployment, electric vehicle adoption, and more (Council on Foreign Relations, 2025; Thomson Reuters, 2025). Additionally, several Environmental Protection Agency regulations relating to vehicle emission and power plant standards have been rolled back, and our policy projections reproduce that impact (The Guardian, 2025; The New York Times, 2025). As a result, the emission decline rate for the USA according to our projections decreases by almost 10% compared to our last year's report, though it does not plateau or reverse.

Impact of climate policies on emissions in USA*

Including land use



Excluding land use



Source: PBL IMAGE model (upper end); NewClimate Institute calculations (lower end); IIASA GLOBIOM/G4M model (2025).

*NDC targets are still presented, as still operational. The USA withdrawal from the Paris Agreement (effective January 27, 2026) means the NDC will no longer be operative.

TARGETS

The Trump Administration has initiated the USA's exit from the Paris Agreement, voiding the USA's existing NDC targets for 2030 and 2035, which the Biden Administration had submitted in April 2021 and December 2024, respectively (The White House, 2025). The Biden Administration's targets aimed for a 50–52% reduction

below 2005 levels by 2030 and a 61–66% reduction by 2035 (U.S. Government, 2021b, 2024). It is important to note that the USA was likely to miss the NDC target already under the Biden Administration (Nascimento et al., 2024).

Under the Trump Administration, the USA no longer plans to reach net zero emissions by 2050; a target which the Biden Administration had established in its 2021 LTS (U.S. Department of Energy, 2025). The Biden Administration expected land use sinks to reach up to -1,400 MtCO_{2e} in 2050, while technological CDR could reach up to -500 MtCO_{2e} (U.S. Government, 2021a).

RECENT DEVELOPMENTS

In July 2025, President Trump signed into law the One Big Beautiful Bill Act (OBBB), rolling back most tax credits for clean electricity, fuels, vehicles, and industry introduced by the 2022 IRA, and revoking most unobligated federal funding for climate and clean energy programmes (U.S. Congress, 2025). The OBBB will significantly slow the deployment of renewable energy and clean energy technologies. Prior to the OBBB's passage, the IRA had mobilised historic public and private investment in the USA energy transition, accelerating the buildout of renewable energy and the production and adoption of clean energy technologies (Jenkins et al., 2025; King et al., 2025).

In July 2025, the Environmental Protection Agency (EPA) proposed to rescind the 2009 Endangerment Finding, which serves as the EPA's legal basis for regulating GHG emissions (U.S. Environmental Protection Agency, 2025b). If the EPA revokes the finding, all GHG regulations for light-, medium-, and heavy-duty vehicles will be removed. The EPA also proposed to repeal all GHG emissions standards for fossil fuel-fired power plants in June 2025 (U.S. Environmental Protection Agency, 2024a). Independently of the Endangerment Finding's proposed revocation, the EPA, in March 2025, initiated the process to reconsider its vehicle emissions standards for passenger cars, light- and medium-duty vehicles for 2027 until 2032 (U.S. Environmental Protection Agency, 2025a). The standards were made more stringent in 2024 and would have resulted in auto manufacturers producing battery-electric vehicles for 30-56% of new light-duty vehicle sales by 2032 (U.S. Environmental Protection Agency, 2024b).

The USA was the world's largest producer of crude oil and fossil gas under the Biden Administration. The Trump Administration is projected to increase oil and gas production to new record levels in 2025. The USA is also poised to increase liquefied natural gas (LNG) exports by 25% in 2025 relative to 2024 (U.S. Energy Information Administration, 2025).

2019 historical data and 2030 projections of key emissions indicators for the USA

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections	
		Current policies	NDC unconditional
Absolute emissions (tCO _{2e} /cap)	5,765 -7% vs 2010	4,770 to 5,040 -17% to -13% vs 2019	2,595 to 2,265 -55% to -61% vs 2019
Emissions per capita (tCO _{2e} /cap)	17.1 -15% vs 2010	13.2 to 13.9 -23% to -19% vs 2019	7.2 to 6.2 -58% to -64% vs 2019
Emissions per GDP (tCO _{2e} /thousand USD)	0.31 -25% vs 2010	0.18 to 0.20 -40% to -37% vs 2019	0.10 to 0.09 -68% to -72% vs 2019

4.25 VIET NAM

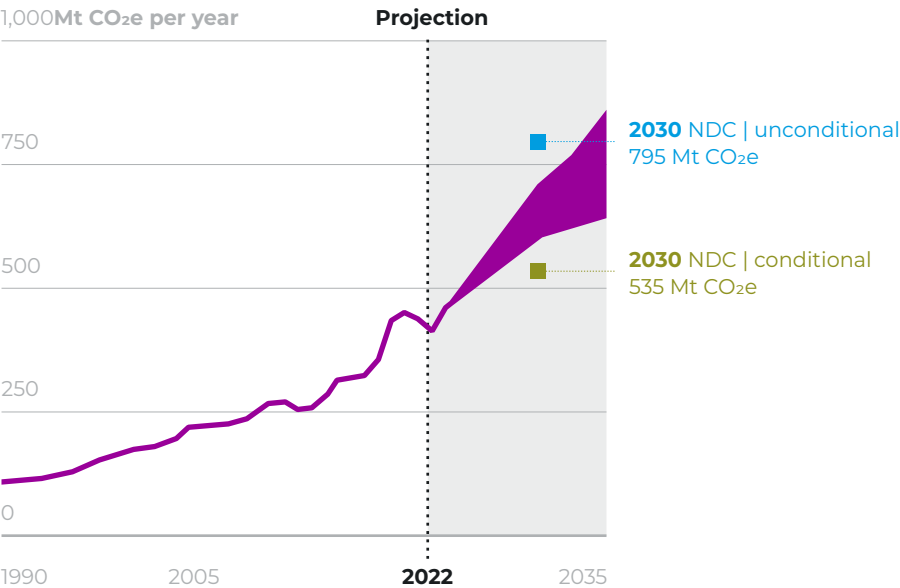
Viet Nam's NDC and net zero targets

Pledge	Key targets
NDC	Reduce emissions by 15.8% (unconditional) and by 43.5% (conditional) below BAU by 2030
Net zero	Net zero by 2050 (GHG; no LTS submitted)

Viet Nam is well **on track to meet its unconditional 2030 NDC target but is projected to miss its conditional target**. Both targets are well above 2020 emission levels. The land use sector is currently a sink of emissions, which is expected to increase up to 2030 and slow down overall emissions growth in the country. However, total emissions are projected to increase substantially up to 2035, driven by an increase in the energy and industry sectors. They show no sign of peaking before 2035.

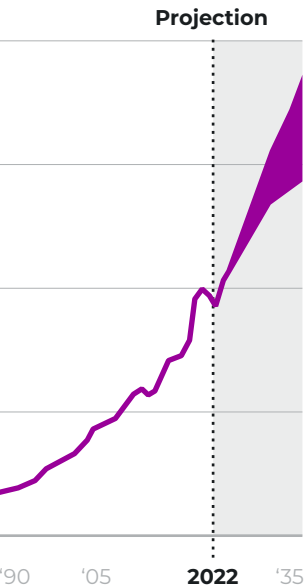
Impact of climate policies on emissions in Viet Nam

Including land use



Source: NewClimate Institute calculations; IIASA GLOBIOM/G4M model (2025).

Excluding land use



TARGETS

Viet Nam's NDC includes an economy-wide unconditional target to reduce emissions by 15.8% by 2030 below BAU and a conditional target to reduce emissions by 43.5% by 2030 below BAU. As of October 2025, Viet Nam has not yet submitted its 2035 NDC to the UNFCCC.

Viet Nam also targets to reach net-zero emissions by 2050. This target covers all emissions and economic sectors and is enshrined in Viet Nam's National Strategy on Climate Change (Government of Viet Nam, 2022). This strategy estimates that emissions in 2050 will be around 185 MtCO₂e or a 90% emissions reduction compared to the BAU level in 2050; this indicates the expected role of land use sinks, technological carbon dioxide removal, and international credits.

RECENT DEVELOPMENTS

In November 2023, Viet Nam presented its Resource Mobilization Plan (RMP), detailing how it will utilise USD 15.5 billion in Just Energy Transition Partnership (JETP) funds to support low-emission and climate-resilient development (Socialist Republic of Viet Nam, 2023). These funds are expected to help Viet Nam peak its power sector emissions at 170 MtCO₂e by 2030 and increase the share of renewable power generation from 25% in 2020 to at least 47% by 2030 (European Commission, 2022b). By July 2025, Viet Nam had mobilised over USD 7 billion under the JETP through three major energy infrastructure projects: a EUR 67 million credit agreement to construct a 500 kV power transmission line; a EUR 480 million credit package for the Bac Ai Pumped Storage Hydropower Project; and a EUR 65 million loan for upgrades to the Tri An Hydropower Plant (VietnamPlus, 2025).

Viet Nam's Eighth Power Development Plan (PDP8), released in May 2023, outlines energy development to 2030 (Barnes, 2023; Vu and Guarascio, 2023; Wengel, 2023). Coal remains significant at 20% of the mix, rising to over 30 GW by 2030. LNG power plants, using both domestic and imported gas, will reach 37 GW (15% of total), a fourfold increase since 2020. Renewables are expected to meet 48% of energy needs by 2030, contingent on the full implementation of JETP partner pledges. Viet Nam revised the PDP8 in April 2025, setting more ambitious targets to increase the share of renewables excluding hydropower to 28–36% by 2030 and then to 75% by 2050. The revised plan also restricts the approval of new coal-fired power plants after 2030 and promotes the transition of existing coal facilities. Nuclear power was reintroduced, targeting 4,000–6,400 MW by 2030–2035 and 10,500–14,000 MW by 2050 (Hanh, 2025a; VnEconomy, 2025).

Viet Nam approved a project in January 2025 to establish and develop its carbon market, launching a pilot Emissions Trading System (ETS) in June targeting key sectors such as steel and cement. Detailed implementation rules were issued to guide the pilot phase, with the aim of officially launching domestic carbon trading platforms from 2029 onwards (Hanh, 2025b; S&P Global, 2025).

2019 historical data and 2030 projections of key emissions indicators for Viet Nam

Emission values are rounded to the nearest five

Indicator (incl. land use)	2019 historical	2030 projections		
		Current policies	NDC unconditional	NDC conditional
Absolute emissions (tCO ₂ e/cap)	435 +63% vs 2010	605 to 710 +39% to +63% vs 2019	795 +83% vs 2019	535 +23% vs 2019
Emissions per capita (tCO ₂ e/cap)	4.5 +46% vs 2010	5.8 to 6.8 +30% to +52% vs 2019	7.7 +70% vs 2019	5.1 +14% vs 2019
Emissions per GDP (tCO ₂ e/thousand USD)	1.71 -8% vs 2010	1.38 to 1.61 -19% to -6% vs 2019	1.81 +6% vs 2019	1.21 -29% vs 2019

REFERENCES

A

Al Jazeera (2025a) Brazil's President Lula vetoes parts of environmental 'devastation bill'. Doha: Al Jazeera. Available at: <https://www.aljazeera.com/news/2025/8/9/brazils-president-lula-vetoes-parts-of-environmental-devastation-bill>

Al Jazeera (2025b) 'Ethiopia's PM Abiy Ahmed says mega dam GERD on the Nile "now complete"'. Available at: <https://www.aljazeera.com/news/2025/7/3/ethiopias-pm-abiy-ahmed-says-mega-dam-gerd-on-the-nile-now-complete>

Anand, S. (2025) 'Centre rolls out ₹1,000 crore ADEETIE scheme for MSMEs to adopt energy-efficient technologies', ETEnergyWorld [Preprint]. Available at: <https://energy.economictimes.indiatimes.com/news/power/1000-crore-adeetie-scheme-launched-to-boost-energy-efficiency-in-msmes/122511465>

APERC (2022) APEC Energy Demand and Supply Outlook 8th Edition. Annex II: Data Projection Tables. Asia Pacific Energy Research Centre

Asia Pacific Energy Portal (2024) RUSSIAN FEDERATION: Climate Doctrine of the Russian Federation (Order of the President No. 861-pp of 2009). United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). Available at: <https://policy.asiapacificenergy.org/node/220>

Australian Government (2021) Australia's Long-term Emissions Reduction Plan: A whole-of-economy Plan to achieve net zero emissions by 2050

Australian Treasury (2025) Future Made in Australia: policy overview. Available at: <https://treasury.gov.au/policy-topics/future-made-australia> (Accessed: 20 August 2025)

B

Baker McKenzie (2024) Hydrogen Developments. Chicago: Baker McKenzie. Available at: <https://resourcehub.bakermckenzie.com/en/resources/hydrogen-heat-map/emea/egypt/topics/hydrogen-developments>

Barnes, M. (2023) Vietnam's Power Development Plan 8: What You Should Know, Vietnam Briefing. Available at: <https://www.vietnam-briefing.com/news/vietnam-power-development-plan-approved.html/> (Accessed: 6 October 2023)

development-plan-approved.html/ (Accessed: 6 October 2023)

Barrera, A. (2025) 'Mexico power law draft calls for public-private tie-ups, but under state control', Reuters [Preprint]. Available at: <https://www.reuters.com/world/americas/mexico-power-law-draft-touts-public-private-tie-ups-with-majority-state-stake-2025-01-29/>

Berti, L. (2025) Amazon deforestation spikes as Brazil blames criminal fires. Oakland, CA: Mongabay. Available at: <https://news.mongabay.com/2025/07/amazon-deforestation-spikes-as-brazil-blames-criminal-fires/>

BloombergNEF (2025) 'Energy Transition Investment Trends 2025'. Available at: <https://about.bnef.com/blog/global-investment-in-the-energy-transition-exceeded-2-trillion-for-the-first-time-in-2024-according-to-bloombergnef-report/>

C

Carbon Brief (2024) 'Guest post: Just 15 countries account for 98% of new coal-power development'. Available at: <https://www.carbonbrief.org/guest-post-just-15-countries-account-for-98-of-new-coal-power-development/>

Casa Civil (2023) Novo PAC. Available at: <https://www.gov.br/casacivil/pt-br/novopac> (Accessed: 31 July 2024)

CBC News (2025) 'Carney pauses EV mandate, says auto industry under pressure', CBC News [Preprint]. Available at: <https://www.cbc.ca/news/politics/carney-ev-mandate-pause-1.7625992>

Climate Action Tracker (2020) Country assessment: Saudi Arabia. September 2020. Berlin and Cologne, Germany

Climate Action Tracker (2022) Climate Action Tracker: Country Assessments: As of December 2022, Country Assessments. Available at: <https://climateactiontracker.org/countries/> (Accessed: 6 December 2022)

Climate Action Tracker (2025) '1.5°C Compatible Climate Action and Targets: Indonesia'. Climate Action Tracker. Available at: https://climateactiontracker.org/documents/1322/CAT_2025-06_Briefing_1-5CompatibleTargets_Indonesia.pdf

Climate Change Authority (2024) 2024 Annual Progress Report. Available at: <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-11/2024AnnualProgressReport.pdf> (Accessed: 20 August 2025)

CMS (2024) 'Renewable energy in Morocco'. Available at: <https://cms.law/en/int/expert-guides/cms-expert-guide-to-renewable-energy/morocco> (Accessed: 23 August 2024)

CNN (2024) 'Ethiopia bans gas-powered car imports to boost electric vehicle adoption'.

Available at: <https://edition.cnn.com/2024/08/17/climate/ethiopia-evs-gas-car-ban-climate>

Cognitud (2025) 'Carney signals strong support for new Canadian oil pipeline in national interest push', Cognitud [Preprint]. Available at: <https://www.cognitud.com/news/carney-signals-strong-support-for-new-canadian-oil-pipeline-in-national-interest-push>

Council on Foreign Relations (2025) 'Congress's "One Big Beautiful Bill" Will Shrink Renewable Energy Investments—Yet Some Technologies Are Preserved'. Available at: <https://www.cfr.org/article/congresss-one-big-beautiful-bill-will-shrink-renewable-energy-investments-yet-some>

D

Dafnomilis, I., Soest, H. van, Roelfsema, M., et al. (2023) 'Climate Policy Modelling Protocol - IMAGE model'. PBL Netherlands Environmental Assessment Agency

Daily News Egypt (2024) First transformer installed in Egypt-Saudi electricity interconnection project. Cairo: Daily News Egypt. Available at: <https://www.dailynewsegyp.com/2024/08/10/first-transformer-installed-in-egypt-saudi-electricity-interconnection-project/>

DCCEEW (2023) National Electric Vehicle Strategy. Canberra: Department of Climate Change, Energy, the Environment and Water (DCCEEW)

DCCEEW (2024) Australia's emissions projections 2024. Available at: <https://www.dcceew.gov.au/climate-change/publications/australias-emissions-projections-2024> (Accessed: 20 August 2025)

Department of Atomic Energy (2025) Nuclear Power in Union Budget 2025-26. Delhi. Available at: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2099244>

Department of Climate Change and Environment (2025) 'Summary of Key Points of the Draft Climate Change Act'. Government of Thailand. Available at: <https://www.dcce.go.th/datacenter/3350/>

Department of Climate Change, Energy, the Environment and Water (2024) National Hydrogen Strategy 2024. Available at: <https://www.dcceew.gov.au/sites/default/files/documents/national-hydrogen-strategy-2024.pdf> (Accessed: 20 August 2025)

Department of Environment of Iran (2015) Intended Nationally Determined Contribution, Islamic Republic of Iran

DISER (2020) Technology Investment Roadmap. First Low Emissions Technology Statement – 2020. Department of Industry, Science, Energy and Resources, Australian Government

E

ECCC (2023) Canada's Electric Vehicle Availability Standard (regulated targets for zero-emission vehicles). Environment and Climate Change Canada (ECCC). Available at: <https://www.canada.ca/en/environment-climate-change/news/2023/12/canadas-electric-vehicle-availability-standard-regulated-targets-for-zero-emission-vehicles.html> (Accessed: 16 August 2024)

ECCJ (2022) The government enacted the revised Building Energy Conservation Act, Asia Energy Efficiency and Conservation Collaboration Center. Available at: <https://www.asiaeec-col.eccj.or.jp/policynews-202207/> (Accessed: 22 September 2022)

ELEVATE (2022) 'ELEVATE: Supporting international climate policy'

den Elzen, M., Dafnomilis, I., Forsell, N., et al. (2022) 'Updated nationally determined contributions collectively raise ambition levels but need strengthening further to keep Paris goals within reach', Mitigation and Adaptation Strategies for Global Change, 27(6), p. 33. doi:10.1007/s11027-022-10008-7

den Elzen, M.G.J., Dafnomilis, I., Hof, A.F., et al. (2023) 'The impact of policy and model uncertainties on emissions projections of the Paris Agreement pledges', Environmental Research Letters, 18(5), p. 054026. doi:10.1088/1748-9326/acceb7

Ember (2025a) 'Captive Coal Expansion Plan Could Undermine Indonesia's Climate Goals'. Available at: https://ember-energy.org/app/uploads/2025/02/EN-Indonesia-RUKN-2025_14022025.pdf

Ember (2025b) Egypt. London: Ember. Available at: <https://ember-energy.org/countries-and-regions/egypt/>

Ember (2025c) 'Electricity Data Explorer: Change in installed capacity from wind and solar in Turkey'. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=T%C3%BCrkiye&data=capacity&metric=absolute&chart=year_over_year&tab=change&fuel=wind_and_solar

Ember (2025d) 'Electricity Data Explorer: Electricity Generation Share by Source in Ethiopia'. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=Ethiopia&ata=generation&metric=pct_share&fuel=total

Ember (2025e) 'Ember Electricity Data Explorer: Electricity Generation Share by Fuel in the United Kingdom'. Ember. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=United+Kingdom&metric=pct_share&data=generation&fuel=total

Ember (2025f) 'Ember Electricity Data Explorer: Electricity Generation Share by Source in Indonesia'. Available at: https://ember-energy.org/data/electricity-data-explorer/?metric=pct_share&entity=Indonesia

Ember (2025g) 'Ember Electricity Data Explorer: Electricity Generation Share by Source in Iran'. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=Iran&metric=pct_share

Ember (2025h) 'Ember Electricity Data Explorer: Morocco Electricity Capacity Share'. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=Morocco&data=capacity&metric=pct_share&fuel=total

Ember (2025i) 'Ember Electricity Data Explorer: Morocco Electricity Generation Share'. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=Morocco&data=generation&metric=pct_share&fuel=total

Ember (2025j) 'Ember Electricity Data Explorer: Share of Electricity Generation in Saudi Arabia'. Available at: https://ember-energy.org/data/electricity-data-explorer/?entity=Saudi+Arabia&metric=pct_share&data=generation

Ember (2025k) 'Ember Electricity Data Explorer: Wind and Solar Capacity Data in the United Arab Emirates'. Available at: https://ember-energy.org/data/electricity-data-explorer/?data=capacity&entity=United+Arab+Emirates&fuel=wind_and_solar

Empresa de Pesquisa Energética (EPE) (2024) Relatório PDE 2031 – Capítulo 5: Emissões na Produção e no Uso da Energia. Brasília: Empresa de Pesquisa Energética (EPE). Available at: https://www.epe.gov.br/sites-en/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-245/Relatorio_PDE2031_Cap05_EUS.pdf

Energy News Pro (2024) 'Mexico: Revised Renewable Capacity Targets from 2024 to 2038', Energy News Pro [Preprint]. Available at: <https://energynews.pro/en/mexico-revised-renewable-capacity-targets-from-2024-to-2038/>

Eskom (2024) Eskom adds 800 MW to grid as Kusile Unit 5 achieves commercial operation. Available at: <https://www.eskom.co.za/eskom-adds-800mw-to-grid-as-kusile-unit-5-achieves-commercial-operation/>

Eskom (2025) Kusile Unit 6 achieves commercial operation, unlocking full 9600 MW capacity across Eskom's flagship stations. Available at:

<https://www.eskom.co.za/kusile-unit-6-achieves-commercial-operation-unlocking-full-9600mw-capacity-across-eskoms-flagship-stations/>

ETEnergyWorld (2024) 'India launches world's first green steel taxonomy, aims to cut emissions to 2.2 tCO₂ by 2030', ETEnergyWorld [Preprint]. Available at: <https://energy.economictimes.indiatimes.com/news/coal/india-launches-worlds-first-green-steel-taxonomy-aims-to-cut-emissions-to-2-2-tco2-by-2030/116271557>

European Commission (2022a) Joint Statement: South Africa Just Energy Transition Investment Plan. European Commission. Available at: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_6664 (Accessed: 25 September 2023)

European Commission (2022b) Political Declaration on establishing the Just Energy Transition Partnership with Viet Nam. Available at: https://ec.europa.eu/commission/presscorner/detail/en/statement_22_7724

European Commission (2025a) 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Enhancing Europe's Climate Resilience (COM(2025) DC 0570)'

European Commission (2025b) 'Framework for State Aid measures to support the Clean Industrial Deal'. Available at: <https://eur-lex.europa.eu/eli/C/2025/3602/oj>

European Commission (2025c) 'Omnibus package: Simplifying rules on sustainability and EU investments'. Available at: https://finance.ec.europa.eu/news/omnibus-package-2025-04-01_en

European Commission (2025d) 'Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2021/1119 establishing the framework for achieving climate neutrality'

European Commission (2025e) 'The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation'. Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025DC0085>

European Scientific Advisory Board on Climate Change (2025) 'Staying the course on climate action essential to EU security and competitiveness'. Available at: <https://climate-advisory-board.europa.eu/news/staying-the-course-on-climate-action-essential-to-eu-security-and-competitiveness>

Evans, S. and Viisainen, V. (2024) 'Analysis: Trump election win could add 4bn tonnes to US emissions by 2030', Carbon Brief, 6 March

F

Fana Media Corporation (2022) 'Ministry of Finance announces low tax reform to encourage electric vehicles'. Available at: <https://www.fanamc.com/english/ministry-of-finance-announces-low-tax-reform-to-electric-vehicles/>

Financial Times (2024) 'Saudi Arabia Ditches Plan to Raise Oil Production'. Available at: <https://www.ft.com/content/136f89a8-f8d2-427e-a633-377104c837ea?shareType=nongift>

Fricko, O., Havlik, P., Rogelj, J., et al. (2017) 'The marker quantification of the Shared Socioeconomic Pathway 2: A middle-of-the-road scenario for the 21st century', *Global Environmental Change*, 42, pp. 251-267. doi:10.1016/j.gloenvcha.2016.06.004

FurtherAfrica (2025) 'Ethiopia's EV Fleet Triples in Two Years'. Available at: <https://furtherafrica.com/2025/06/13/ethiopias-ev-fleet-triples-in-two-years/>

G

GEM, CREA, E3G, et al. (2025) Boom and Bust Coal 2025. Available at: <https://globalenergymonitor.org/report/boom-and-bust-coal-2025/>

General Committee on the Basic Plan on Electricity Supply and Demand (2024) Draft Plan of the 11th Basic Plan on Electricity Supply and Demand. Ministry of Trade, Industry and Energy, Republic of Korea

Global Energy Monitor (2025a) 'Global Coal Plant Tracker Dashboard'. Available at: <https://globalenergymonitor.org/projects/global-coal-plant-tracker/dashboard/>

Global Energy Monitor (2025b) Global Oil and Gas Plant Tracker. Available at: <https://globalenergymonitor.org/projects/global-oil-gas-plant-tracker/>

Global Forest Watch (2025) 'Indonesia Deforestation Rates & Statistics'. Available at: <https://www.globalforestwatch.org/dashboards/country/IDN/?lang=en>

Government of Argentina (2021) Actualización de la meta de emisiones netas de Argentina al 2030 - Octubre 2021

Government of Argentina (2022) Estrategia de desarrollo resiliente con bajas emisiones a largo plazo a 2050

Government of Australia (2021) Low emissions technology statement 2021

Government of Australia (2025) Australia's 2035 Nationally Determined Contribution. Technical

Report Second NDC. Department of Climate Change, Energy, the Environment and Water, Commonwealth of Australia. Available at: <https://unfccc.int/sites/default/files/2025-09/Australias%20Second%20NDC.pdf>

Government of Brazil (2023) Nationally Determined Contribution (NDC)

Government of Brazil (2024) 'Brazil's Second Nationally Determined Contribution (NDC)'. Available at: https://unfccc.int/sites/default/files/2024-11/Brazil_Second%20Nationally%20Determined%20Contribution%20%28NDC%29_November2024.pdf

Government of Canada (2021) Canada's 2021 Nationally Determined Contribution under the Paris Agreement. Available at: https://unfccc.int/sites/default/files/NDC/2022-06/Canada%27s_Enhanced_NDC_Submission1_FINAL_EN.pdf

Government of Canada (2022) Exploring Approaches for Canada's Transition to Net-Zero Emissions. Ottawa, Canada: UNFCCC

Government of Canada (2025a) 'Canada's 2035 Nationally Determined Contribution'. Available at: https://unfccc.int/sites/default/files/2025-02/Canada%27s%202035%20Nationally%20Determined%20Contribution_ENc.pdf

Government of Canada (2025b) 'Output-Based Pricing System'. Available at: <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system.html>

Government of China (2021a) China's Achievemnets, New Goals and New Measures for Nationall Determined Contributions

Government of China (2021b) China's Mid-Century Long-Term Low Greenhouse Gas Emission Development Strategy. Beijing, China

Government of Colombia (2020) Colombia's Updated Nationally Determined Contribution (NDC)

Government of Colombia (2025) 'Nationally Determined Contribution (NDC 3.0) of Colombia — Transformations for Life'. Available at: <https://unfccc.int/sites/default/files/2025-09/NDC%203.0%20Declarativa%20Colombia%20Transformaciones%20para%20la%20Vida%20V.25.09.2025%20Gob.%20Nacional.pdf>

Government of Egypt (2022) Egypt's First Updated Nationally Determined Contribution

Government of Egypt (2023) Egypt's Second Updated Nationally Determined Contribution

Government of Ethiopia (2016) Federal Democratic Republic of Ethiopia: Growth and Transformation Plan II (GTP II)(2015/16-2019/20).

Addis Ababa: National Planning Commission, Federal Democratic Republic of Ethiopia

Government of Ethiopia (2020) Ten Years Development Plan: A Pathway to Prosperity (2021-2030). Available at: https://europa.eu/capacity4dev/nexus_ethiopia/documents/ethiopia-ten-years-development-plan-2021-2030-planning-and-development-commission-federal (Accessed: 13 September 2022)

Government of Ethiopia (2021) Updated Nationally Determined Contribution

Government of Ethiopia (2023) Ethiopia's Long-Term Strategy Low Emission and Climate Resilient Development Strategy (2020-2050). Bonn: United Nations Framework Convention on Climate Change (UNFCCC)

Government of Ethiopia (2025) 'Ethiopia's Nationally Determined Contribution 3.0 (2025-2035)'. Available at: <https://unfccc.int/sites/default/files/2025-09/Ethiopia%20NDC%203.0%20Final.pdf>

Government of India (2022a) India's Long-Term Low-Carbon Development Strategy

Government of India (2022b) India's Updated First Nationally Determined Contribution Under Paris Agreement (2021-2030). New Delhi

Government of India (2024) PM Surya Ghar: Muft Bijli Yojana. New Delhi: Government of India. Available at: <https://www.india.gov.in/spotlight/pm-surya-ghar-muft-bijli-yojana>

Government of Indonesia (2021) Long-Term Strategy for Low Carbon and Climate Resilience 2050 (Indonesia LTS-LCCR 2050). UNFCCC

Government of Indonesia (2022) Enhanced Nationally Determined Contribution. UNFCCC

Government of Japan (2019) The Long-term Strategy under the Paris Agreement. Government of Japan

Government of Japan (2022) 'Japan's First Nationally Determined Contribution (Updated Submission)'. Available at: https://unfccc.int/sites/default/files/NDC/2022-06/JAPAN_FIRST%20NDC%20%28UPDATED%20SUBMISSION%29.pdf

Government of Japan (2025) 'Japan's 2035/2040 Nationally Determined Contribution'. Available at: <https://unfccc.int/sites/default/files/2025-02/Japans%202035-2040%20NDC.pdf>

Government of Mexico (2024) 'Mexico reafirmó su compromiso con la acción climática ambiciosa en la COP29'. Available at: <https://www.gob.mx/inecc/prensa/mexico-reafirmo-su-compromiso-con-la-accion-climatica-ambiciosa-en-la-cop29-386859?idiom=es>

Government of Mexico (2025) 'Primera versión del anteproyecto del NDC 3.0'. Available at: https://sil.gobernacion.gob.mx/Archivos/Documentos/2025/07/asun_4910938_20250703_1751555872.pdf

Government of Morocco (2021a) Contribution déterminée au niveau national NDC - actualisée

Government of Morocco (2021b) Long Term Low Carbon Strategy

Government of Morocco (2025) 'Morocco NDC 3.0'. Submission of Morocco's Updated Nationally Determined Contribution, Bonn, Germany: United Nations Framework Convention on Climate Change (UNFCCC). Available at: https://unfccc.int/sites/default/files/2025-10/MOROCCO%20NDC%203.0%20_30.9.25.pdf

Government of South Africa (2020) South Africa's Low-Emission Development Strategy 2050. Available at: https://www.environment.gov.za/sites/default/files/docs/2020lowemission_developmentstrategy.pdf (Accessed: 26 November 2020)

Government of South Africa (2022) South Africa's Just Energy Transition Investment Plan (JET IP) for the initial period 2023-2027

Government of Thailand (2022a) Thailand's 2nd Updated Nationally Determined Contribution. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Thailand_2nd_Updated_NDC.pdf (Accessed: 3 November 2022)

Government of Thailand (2022b) 'Thailand's 2nd Updated Nationally Determined Contribution'. Available at: https://unfccc.int/sites/default/files/NDC/2022-11/Thailand_2nd_Updated_NDC.pdf (Accessed: 3 November 2022)

Government of the Russian Federation (2020) Russian Federation Updated Nationally Determined Contribution (NDC)

Government of the Russian Federation (2022) Strategy of socio-economic development of the Russian Federation with low greenhouse gas emissions until 2050. UNFCCC

Government of the Russian Federation (2025a) Energy Strategy of the Russian Federation to 2050. Available at: <http://static.government.ru/media/files/LWYfSENa10uBrrBoyLQqAAQj5eJYIA60.pdf>

Government of the Russian Federation (2025b) Government Approves the General Scheme for the Placement of Power Industry Facilities until 2042. Available at: <http://government.ru/docs/53923/>

Government of the Russian Federation (2025c) 'Second Nationally Determined Contribution of the Russian Federation'. Bonn, Germany: United

Nations Framework Convention on Climate Change (UNFCCC). Available at: https://unfccc.int/sites/default/files/2025-09/RF_second_NDC.pdf

Government of the UAE (2021) UAE Net Zero 2050, The Official Portal of the UAE Government. Available at: <https://u.ae/en/information-and-services/environment-and-energy/uae-net-zero-2050> (Accessed: 5 November 2021)

Government of the UAE (2023a) Third Update of the Second Nationally Determined Contribution of the United Arab Emirates. UNFCCC

Government of the UAE (2023b) Third Update of the Second Nationally Determined Contribution of the United Arab Emirates. UNFCCC

Government of the UK (2021) Net Zero Strategy: Build Back Greener. UNFCCC

Government of Türkiye (2021) Remarks following the Presidential Cabinet Meeting. Available at: <https://www.tccb.gov.tr/haberler/410/130712/-turkiye-ekonomisi-salgin-sartlarini-ve-daha-once-yasadigi-kimi-sikintilari-geride-birakarak-hak-ettigi-yere-dogru-hizla-yol-aliyor->

Government of Türkiye (2023) Updated First Nationally Determined Contribution. Available at: https://unfccc.int/sites/default/files/NDC/2023-04/TURKIYE_UPDATED_1st_NDC_EN.pdf (Accessed: 18 April 2023)

Government of Türkiye (2024) '2053 Long Term Climate Strategy'. Available at: https://unfccc.int/sites/default/files/resource/Turkiye_Long_Term_Climate_Strategy.pdf

Government of Türkiye (2025) 'Law 7552 - Climate Law'. Available at: <https://www.resmigazete.gov.tr/eskiler/2025/07/20250709-1.htm>

Government of Viet Nam (2022) 896/QD-TTg in Vietnam, Decision 896/QD-TTg 2022 approving the National strategy for climate change until 2050 in Vietnam. Available at: <https://thuvienphapluat.vn/van-ban/EN/Tai-nguyen-Moi-truong/Decision-896-QD-TTg-2022-approving-the-National-strategy-for-climate-change-until-2050/525126/tieng-anh.aspx> (Accessed: 12 September 2022)

Green Earth (2024) 'Ethiopia takes major step toward carbon finance with reforestation project'. Available at: <https://www.green.earth/news/ethiopia-takes-major-step-toward-carbon-finance-with-reforestation-project>

Gusti, M. and Kindermann, G. (2011) 'AN APPROACH TO MODELING LANDUSE CHANGE AND FOREST MANAGEMENT ON A GLOBAL SCALE', in Proceedings of 1st International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH-2011). SCITEPRESS, pp. 180-185. doi:10.5220/0003607501800185

H

Hanh, V.N. (2025a) 'Vietnam Revises PDP8: Key Targets of the National Power Development Plan'. Vietnam Briefing. Available at: <https://www.vietnam-briefing.com/news/vietnam-revises-pdp8-key-targets-of-the-national-power-development-plan.html/>

Hanh, V.N. (2025b) 'Vietnam's Carbon Market Development Objectives and Implementation Plan Under Decision 232'. Vietnam Briefing. Available at: <https://www.vietnam-briefing.com/news/vietnams-carbon-market-development-objectives-and-implementation-plan-under-decision-232.html>

Havlík, P., Valin, H., Herrero, M., et al. (2014) 'Climate change mitigation through livestock system transitions', Proceedings of the National Academy of Sciences of the United States of America, 111(10), pp. 3709-14. doi:10.1073/pnas.1308044111

Hwang, J. (2025) 'Climate issues return to presidential campaign spotlight', The Korea Herald [Preprint]. Available at: <https://www.koreaherald.com/article/10486379>

I

ICAP (2025) Argentina | International Carbon Action Partnership. Available at: <https://icapcarbonaction.com/en/ets/argentina> (Accessed: 20 August 2025)

IEA (2023) 'World Energy Outlook 2023'. International Energy Agency (IEA)

IEA (2024) 'World Energy Outlook 2024'. International Energy Agency (IEA). Available at: <https://iea.blob.core.windows.net/assets/5e9122fc-9d5b-4f18-8438-dac8b39b702a/WorldEnergyOutlook2024.pdf>

IEEFA (2021) Tackling Indonesia's Nuclear Power Euphoria: How to Reconcile Nuclear's Technical Promise With Market Realities. Institute for Energy Economics and Financial Analysis (IEEFA). Available at: https://ieefa.org/sites/default/files/resources/Tackling-Indonesias-Nuclear-Power-Euphoria_June-2021.pdf

IESR (2024) Indonesia Energy Transition Outlook 2024. Institute for Essential Services Reform (IESR). Available at: <https://iesr.or.id/wp-content/uploads/2024/03/Indonesia-Energy-Transition-Outlook-2024-1.pdf>

IMF (2025) 'World Economic Outlook Database: April 2025 Edition', World Economic Outlook. International Monetary Fund. Available at: <https://www.imf.org/en/Publications/WEQ/weo-database/2025/April> (Accessed: 1 August 2025)

InfluenceMap (2025) 'New Briefing: South

Korea's Emissions Trading Scheme Weakened by Pressure from Major Industries'. InfluenceMap. Available at: <https://influencemap.org/pressrelease/K-ets-2025-32674>

Instituto Talanoa (2024) O Ecossistema do Financiamento Climático no Brasil. Brasília: Instituto Talanoa. Available at: https://institutotalanoa.org/wp-content/uploads/2024/09/00_NOAukpact-Desktop-v20240912.pdf

IPCC (2021) 'Chapter 7: The Earth's Energy Budget, Climate Feedbacks, and Climate Sensitivity', in Masson-Delmotte, V. et al. (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, UK; New York, NY, USA: Cambridge University Press, pp. 923–1054. doi:10.1017/9781009157896.009

IPCC (2023a) Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Geneva, Switzerland: Intergovernmental Panel on Climate Change. doi:10.59327/IPCC/AR6-9789291691647

IPCC (2023b) Synthesis Report of the IPCC Sixth Assessment Report (AR6) - Summary for policymakers. Intergovernmental Panel on Climate Change (IPCC). doi:10.4324/9781315071961-11

J

Jenkins, J., Farbes, J. and Haley, B. (2025) 'Impacts of the One Big Beautiful Bill On The US Energy Transition – Summary Report'. Available at: <https://zenodo.org/records/15801701>

Jenkins, J.D., Mayfield, E.N., Farbes, J., et al. (2022) Preliminary Report: The Climate and Energy Impacts of the Inflation Reduction Act of 2022. ZERO LAB, Princeton University

K

Karyza, D. (2025) 'New "green" RUPTL risks sidelining, rather than empowering renewables', The Jakarta Post [Preprint]. Available at: <https://www.thejakartapost.com/business/2025/06/02/new-green-ruptl-risks-sidelining-rather-than-empowering-renewables.html>

Kasapovic, M. and Knowles, W. (2024) 'Turkey's electric vehicle sector will grow slowly'. Available at: <https://www.oxan.com/insights/turkeys-electric-vehicle-sector-will-grow-slowly/>

King, B., Kolus, H., Gaffney, M., et al. (2025) 'What Passage of the "One Big Beautiful Bill" Means for US Energy and the Economy'. Available at: [https://rhg.com/research/assessing-the-impacts-](https://rhg.com/research/assessing-the-impacts-of-the-final-one-big-beautiful-bill/)

[of-the-final-one-big-beautiful-bill/](https://rhg.com/research/assessing-the-impacts-of-the-final-one-big-beautiful-bill/)

Kingdom of Morocco (2021) 'Feuille de route - Hydrogene verte'

Kingdom of Saudi Arabia (2021a) Reducing Emissions - Saudi Green Initiative. Available at: <https://www.saudigreeninitiative.org/targets/reducing-emissions/> (Accessed: 15 July 2022)

Kingdom of Saudi Arabia (2021b) Vision 2030

KPMG (2022) Saudi Arabia budget report 2023. Available at: <https://assets.kpmg.com/content/dam/kpmg/sa/pdf/2022/kpmg-saudi-arabia-budget-report-2023.pdf>

KPMG (2024) Argentina: New incentive regime for large investments approved. Available at: <https://kpmg.com/us/en/home/insights/2024/07/tnf-argentina-new-incentive-regime-for-large-investments-approved.html> (Accessed: 6 August 2024)

Kuramochi, T., Nascimento, L., Moisio, M., et al. (2021) 'Greenhouse gas emission scenarios in nine key non-G20 countries: An assessment of progress toward 2030 climate targets', Environmental Science & Policy, 123, pp. 67–81. doi:<https://doi.org/10.1016/j.envsci.2021.04.015>

L

Light, F. (2021) 'Russia Says Its Forests Neutralize Billions of Tons of Greenhouse Gases. Scientists Have Their Doubts.', The Moscow Times [Preprint]. Available at: <https://www.themoscowtimes.com/2021/07/05/russia-says-its-forests-neutralize-billions-of-tons-of-greenhouse-gases-scientists-have-their-doubts-a74428>

M

MADANI Berkelanjutan (2025) MADANI Insight: Ekspansi Tanpa Refleksi — Kritik atas Kebijakan Pembukaan Lahan 20 Juta Ha. MADANI Berkelanjutan. Available at: <https://madaniberkelanjutan.id/wp-content/uploads/2025/05/MADANI-Insight-Ekspansi-Tanpa-Refleksi-Kritik-atas-Kebijakan-Pembukaan-lahan-20-Juta-Ha.pdf>

Magnani, A. (2025) 'Amazon Basin oil auction leaves legal and economic uncertainty', Gas Outlook, 15 July. Available at: <https://gasoutlook.com/analysis/amazon-basin-oil-auction-leaves-legal-and-economic-uncertainty/> (Accessed: 20 August 2025)

MapBiomas Brasil (2025) Área queimada no Brasil em 2024 supera média histórica em 62%. Brasília: MapBiomas Brasil. Available at: <https://brasil.mapbiomas.org/2025/06/24/area-queimada-no-brasil-em-2024-supera-media-historica-em-62/>

McCormick, M. and Smyth, J. (2024) 'Oil and gas profits triple under Joe Biden even as industry decries him'. Financial Times

Meinshausen, M., Lewis, J., Guetschow, J., et al. (2021) NDC factsheets (as of 14 February 2022). Climate Resource. Available at: <https://www.climate-resource.com/tools/ndcs> (Accessed: 8 July 2022)

Mesa Argentina de Carbono (2025) ARGENTINA SIGUE AUSENTE EN LA LISTA DE ACUERDOS PARA TRANSFERENCIA DE EMISIONES QUE PROPONE EL ARTÍCULO 6 DE PARÍS. Available at: <https://mesacarbono.org.ar/argentina-sigue-ausente-en-la-lista-de-acuerdos-para-transferencia-de-emisiones-que-propone-el-articulo-6-de-paris/> (Accessed: 20 August 2025)

METI (2023) The Basic Policy for the Realization of GX - A roadmap for the next 10 years - (provisional translation). Tokyo, Japan: Ministry of Economy, Trade and Industry

Ministerio de Ambiente y Desarrollo Sostenible Colombia (2021) 'Colombia Carbono Neutral', una estrategia para combatir el cambio climático'

Ministry of Energy (2024) 'Energy Development Plan'. Government of Thailand. Available at: <https://old.energy.go.th/wp-content/uploads/2024/10/%E0%B9%81%E0%B8%9C%E0%B8%99%E0%B8%9E%E0%B8%A5%E0%B8%B1%E0%B8%87%E0%B8%87%E0%B8%B2%E0%B8%99%E0%B8%8A%E0%B8%B2%E0%B8%95%E0%B8%B4.pdf>

Ministry of Energy and Mineral Resources (ESDM) (2024) Laporan Kinerja Ditjen EBTKE Tahun 2024. Direktorat Jenderal Energi Baru Terbarukan dan Konservasi Energi (Ditjen EBTKE), Kementerian ESDM. Available at: <https://www.esdm.go.id/assets/media/content/content-laporan-kinerja-ditjen-ebtke-tahun-2024.pdf>

Ministry of Energy and Mineral Resources (ESDM) (2025a) 'Rencana Umum Ketenagalistrikan Nasional (RUKN) Tahun 2023–2060'. Republic of Indonesia. Available at: https://gatrik.esdm.go.id/assets/uploads/download_index/files/28dd4-rukn.pdf

Ministry of Energy and Mineral Resources (ESDM) (2025b) 'Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) PT PLN (Persero) Tahun 2025–2034'. Republic of Indonesia. Available at: https://gatrik.esdm.go.id/assets/uploads/download_index/files/b967d-ruptl-pln-2025-2034-pub.pdf

Ministry of Energy and Natural Resources (2024) 'Turkey's Energy Efficiency 2030 Strategy and II. National Energy Efficiency Action Plan'. Republic of Türkiye. Available at: <https://enerji.gov.tr/duyuru-detay?id=20425>

Ministry of Environment and Forestry (KLHK) (2025) 'PHOTO BOOK: FOLU Net Sink –

Indonesia's Climate Actions Towards 2030'. Republic of Indonesia. Available at: https://www.menlhk.go.id/cadmin/uploads/PHOTO_BOOK_FOLU_NET_SINK_Indonesia_s_Climate_Actions_Towards_2030_a3d4f1fa43.pdf

Ministry of Environment and Natural Resources (2025) 'Actualización de la Estrategia Nacional de Cambio Climático'. Available at: https://dsiappsdev.semarnat.gob.mx/datos/portal/publicaciones/2025/ENCC_2025_SEMARNAT.pdf

Ministry of Industry and Technology (2022) 'Mobility Vehicles and Technologies Roadmap'. Republic of Türkiye. Available at: <https://www.sanayi.gov.tr/assets/pdf/plan-program/MobiliteAracveTeknolojileriYolHaritasi.pdf>

Ministry of Planning and Development (2020) 'CRGE Strategy: Progress in Implementing 2011–2019 (2020)'. Ministry of Planning and Development of Ethiopia. Available at: https://mopd.gov.et/media/climate-documents/CRGE_Strategy_Progress_in_Implementing_-_2011-2019_2020.pdf

Ministry of Transport and Infrastructure (2023) '2053 Transport and Logistics Master Plan'. Republic of Türkiye. Available at: <https://www.uab.gov.tr/uploads/pages/bakanlik-yayinlari/20221025-2053-ulasirma-ve-lojistik-ana-plani-eng.pdf>

MOEJ (2021) 'Cabinet decision on the "Plan for Global Warming Countermeasures" and "Japan's Long-term Strategy under the Paris Agreement", and decision by the Global Warming Prevention Headquarters on "Japan's NDC (Nationally Determined Contribution)". 22 October'. Ministry of the Environment, Japan. Available at: <https://www.env.go.jp/en/headline/2551.html> (Accessed: 9 February 2022)

Moroccan Ministry of Finance (2020) 'Signing Ceremony for the Extension of the Power Purchase Agreement of the Jorf Lasfar Thermal Power Plant'. Available at: <https://www.finances.gov.ma/En/Pages/detail-actualite.aspx?fiche=4738>

Myllyvirta, L. (2025) Will China fulfil its key climate pledge? Beijing: Centre for Research on Energy and Clean Air. Available at: <https://energyandcleanair.org/will-china-fulfil-its-key-climate-pledge/>

N

Nascimento, L., den Elzen, M., Kuramochi, T., et al. (2023) 'Comparing the Sequence of Climate Change Mitigation Targets and Policies in Major Emitting Economies', Journal of Comparative Policy Analysis: Research and Practice, pp. 1–18. doi:10.1080/13876988.2023.2255151

Nascimento, Leonardo, Scheewel, J.-L., Kuramochi, T., et al. (2024) Progress of Major Emitters Towards Climate Targets: 2024 Update. Cologne, Germany: NewClimate Institute. Available at: <https://newclimate.org/resources/publications/progress-of-major-emitters-towards-climate-targets-2024-update>

Nascimento, L. and Höhne, N. (2023) 'Expanding climate policy adoption improves national mitigation efforts', npj Climate Action, 2(1), p. 12. doi:10.1038/s44168-023-00043-8

Nascimento, L., Kuramochi, T. and Höhne, N. (2022) 'The G20 emission projections to 2030 improved since the Paris Agreement, but only slightly', Mitigation and Adaptation Strategies for Global Change, 27(6), p. 39. doi:10.1007/s11027-022-10018-5

NDC Partnership (2024) 'Ethiopia Launches NDC Implementation Plan to Enhance Climate-Resilient Green Economy'. Available at: <https://ndcpartnership.org/news/ethiopia-launches-ndc-implementation-plan-enhance-climate-resilient-green-economy>

NDRC (2021) 'Action Plan for Carbon Dioxide Peaking Before 2030'

NDRC (2022) Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy. Available at: https://en.ndrc.gov.cn/policies/202110/t20211024_1300725.html (Accessed: 30 March 2022)

NEA (2025) 'Transcript of NEA's 2025 Q3 Press Conference (Chinese)', National Energy Administration of China. Available at: <https://www.nea.gov.cn/20250731/83ffa46373ec42dd99e0e3271028c151/c.html> (Accessed: 11 August 2025)

Novaya Gazeta Europe (2023) 'Greenpeace: Real Area of Forest Fires in Russia Ten Times Bigger Than Official Statistics'. Available at: <https://novayagazeta.eu/articles/2023/05/11/greenpeace-real-area-of-forest-fires-in-russia-ten-times-bigger-than-official-statistics-en-news>

Nugent, C. (2024) 'Argentina chooses US investor to spur nuclear-powered AI dream', Financial Times, 21 December. Available at: <https://www.ft.com/content/6e0ad76b-02e8-447d-afe1-da41be52d708> (Accessed: 20 August 2025)

Nugent, C. and Mooney, A. (2025) 'Javier Milei eyes exit from Paris climate deal', Financial Times, 23 January. Available at: <https://www.ft.com/content/4957bc54-5b7b-496d-8c98-ba42ff508e85> (Accessed: 20 August 2025)

O

Office of Impact Analysis, Department of the Prime Minister and Cabinet (2024) Cleaner, Cheaper to Run Cars: The Australian New Vehicle Efficiency Standard. Available at: <https://oia.pmc.gov.au/published-impact-analyses-and-reports/cleaner-cheaper-run-cars-australian-new-vehicle-efficiency> (Accessed: 20 August 2025)

Office of Natural Resources and Environmental Policy and Planning (2022) Thailand's Long Term Low Greenhouse Gas Emissions Development Strategy

Offshore Energy (2024) Egypt sets its cap on attracting multibillion-dollar oil & gas investment while adding more renewables to its energy mix. Available at: <https://www.offshore-energy.biz/egypt-sets-its-cap-on-attracting-multibillion-dollar-oil-gas-investment-while-adding-more-renewables-to-its-energy-mix/>

de Oliveira Bredariol, T. (2024) Brazil's opportunity to lead the global dialogue on energy and climate. Paris: International Energy Agency. Available at: <https://www.iea.org/commentaries/brazil-s-opportunity-to-lead-the-global-dialogue-on-energy-and-climate>

OpenElectricity (2025a) National Electricity Market (NEM) data — 7 day, 30-minute discrete-time view. Available at: <https://explore.openelectricity.org.au/energy/nem/?range=7d&interval=30m&view=discrete-time&group=Detailed> (Accessed: 20 August 2025)

OpenElectricity (2025b) Western Electricity Market (WEM) data — 7 day, 30-minute discrete-time view. Available at: <https://explore.openelectricity.org.au/energy/wem/?range=7d&interval=30m&view=discrete-time&group=Detailed> (Accessed: 20 August 2025)

P

Parkinson, S. (2025) Military Spending Rises and Greenhouse Gas Emissions: What Does the Research Say? Research Report. Lancaster, UK: Scientists for Global Responsibility. Available at: https://www.sgr.org.uk/sites/default/files/2025-09/SGR_MilEx_GHG_WEB.pdf

Parliament of Australia (2022) Climate Change Bill 2022. Parliament of Australia

Pauw, W.P., Castro, P., Pickering, J. and Bhasin, S. (2020) 'Conditional nationally determined contributions in the Paris Agreement: foothold for equity or Achilles heel?', Climate Policy, 20(4), pp. 468–484. doi:10.1080/14693062.2019.1635874

Powering Past Coal Alliance (2023) Colombia and Panama join growing coalition of countries committed to phasing out coal. Available at: <https://poweringpastcoal.org/press-releases/>

[colombia-and-panama-join-ppca/#:~:text=As the world's sixth-largest coal exporter%2C Colombia's decision,out coal power generation%2C while protecting mining communities.](#) (Accessed: 13 October 2023)

Presidential Climate Commission South Africa (2023) South Africa's Just Energy Transition Investment Plan (JET-IP). Presidential Climate Commission South Africa. Available at: <https://www.climatecommission.org.za/south-africas-jet-ip> (Accessed: 28 September 2023)

Presidential Executive Office (2023) Russia's new Climate Doctrine approved. Kremlin. Available at: <http://en.kremlin.ru/acts/news/72598> (Accessed: 16 August 2024)

Press Information Bureau, Government of India (2025) Carbon Pricing in India: Market Mechanisms for Climate Leadership. Background. Press Information Bureau, Government of India. Available at: <https://www.pib.gov.in/PressNoteDetails.aspx?NotelD=154721&ModuleId=3>

Preston, R. (2023) Kenya and Ethiopia agree to build 3000km Lamu - Addis Ababa SGR, International Railway Journal. Available at: <https://www.railjournal.com/infrastructure/kenya-and-ethiopia-agree-to-build-3000km-lamu-addis-ababa-sgr/> (Accessed: 13 August 2024)

R

Railway Gazette International (2024) 'Turkish elections bring rail plan announcements'. Available at: <https://www.railwaygazette.com/policy/turkish-elections-bring-rail-plan-announcements/66128.article>

Railway Supply (2024) 'Turkey continues to actively modernize its railway transport'. Available at: <https://www.railway.supply/en/turkey-continues-to-actively-modernize-its-railway-transport/>

Rangelova, K. (2024) Brazil rises as G20 renewables powerhouse, Ember Insights

Rao, A. (2024) 'India Shifts Gears: "PM E-DRIVE Scheme" Replaces FAME to Accelerate EV Adoption', India Briefing [Preprint]. Available at: <https://www.india-briefing.com/news/india-shifts-gears-pm-e-drive-scheme-replaces-fame-policy-34445.html/>

Reconstruction, E.B. for and Development (EBRD) (2025) Egypt – Nexus Water-Food-Energy (NWFE) – Energy Pillar: Incentive Payments. London: European Bank for Reconstruction and Development. Available at: <https://www.ebrd.com/home/work-with-us/projects/tcpsd/21695.html>

Renewable Energy Institute (2023) The GX Basic Policy Falls Short in Proposing Strategies for Overcoming the Current Crises

Republic of Korea (2020) 2050 Carbon Neutral Strategy of the Republic of Korea: Towards a sustainable and green society. UNFCCC

Republic of Korea (2021) 2030 National Greenhouse Gas Reduction Target (NDC) Upgrade Plan

Republic of South Africa (2021) South Africa's First Nationally Determined Contribution Under The Paris Agreement (Update)

Reuters (2024a) 'Canada pushes out target for net-zero electricity grid by 15 years', Reuters [Preprint]. Available at: <https://www.reuters.com/sustainability/climate-energy/canada-pushes-out-target-net-zero-electricity-grid-by-15-years-2024-12-17/>

Reuters (2024b) Egypt reaffirms 42% renewable energy goal for 2030, but urges international help. London: Reuters. Available at: <https://www.reuters.com/business/energy/egypt-reaffirms-42-renewable-energy-goal-2030-urges-international-help-2024-11-12/>

Reuters (2024c) 'Turkey becomes Europe's largest coal-fired electricity producer'. Available at: <https://www.reuters.com/business/energy/turkey-becomes-europes-largest-coal-fired-electricity-producer-maguire-2024-05-21/>

Reuters (2025) 'Argentina espera superávit de balanza energética de 8.000 mln dlrs en 2025: subsecretario', Reuters, 6 May. Available at: <https://www.reuters.com/latam/negocio/6WZPE7GSWZKLTD/VFD53PUURGI-2025-05-06/> (Accessed: 20 August 2025)

Rodríguez, P.V. (2023) 'Colombia dejó de firmar contratos de exploración de carbón, petróleo y gas, confirmó Gustavo Petro en la COP28', Infobae, 1 December

Roelfsema, M., van Soest, H.L., den Elzen, M., et al. (2022) 'Developing scenarios in the context of the Paris Agreement and application in the integrated assessment model IMAGE: A framework for bridging the policy-modelling divide', Environmental Science & Policy, 135, pp. 104–116. doi:<https://doi.org/10.1016/j.envsci.2022.05.001>

S

Salsabila, N.P. and Wong, J. (2024) 'Indonesia's new climate goals: positive developments but some red flags', Climate Action Tracker Blog, 30 August

Saudi Green Initiative (2025) Saudi Green Initiative Target: Reduce Carbon Emissions by 278 Mt per Year by 2030. Available at: <https://www.sgi.gov.sa/about-sgi/sgi-targets/reduce-carbon-emissions/?csrt=8411891296021016378> (Accessed: 25 August 2025)

SENER (2024) PRODESEN 2024 - 2038. Ciudad de México

Socialist Republic of Viet Nam (2023) 'Resource Mobilisation Plan: Implementing Viet Nam's Just Energy Transition Partnership (JETP)'. Socialist Republic of Viet Nam

South African Government (2024a) 'Minister Dion George approves publication of draft National Greenhouse Gas'. Available at: <https://www.gov.za/news/media-statements/minister-dion-george-approves-publication-draft-national-greenhouse-gas>

South African Government (2024b) 'Minister Kgosiensho Ramokgopa on 8 Preferred Bidders under Renewable Energy Independent Power Producer Procurement Programme and 8 Preferred Bidders under Battery Energy Storage Independent Power Producer Procurement P'. Available at: <https://www.gov.za/news/media-statements/minister-kgosiensho-ramokgopa-8-preferred-bidders-under-renewable-energy>

South African Government (2024c) 'President Cyril Ramaphosa assents Climate Change Bill'. Available at: <https://www.gov.za/news/media-statements/president-cyril-ramaphosa-assents-climate-change-bill-23-jul-2024>

South African Government (2024d) 'President Cyril Ramaphosa signs Electricity Regulation Amendment Act into law'. Available at: <https://www.gov.za/news/media-statements/president-cyril-ramaphosa-signs-electricity-regulation-amendment-act-law-16>

South African Government (2024e) 'South Africa Makes Significant Strides in the Implementation of its Just Energy Transition Investment Plan'. Available at: <https://justenergytransition.co.za/wp-content/uploads/2024/12/press-release-south-africa.pdf>

South African Government (2025) 'South Africa's Just Energy Transition Project Management Unit Acknowledges the United States' Withdrawal from the Just Energy Transition Partnership'. Available at: https://justenergytransition.co.za/wp-content/uploads/2025/03/20250306_SouthAfricasJustEnergyTransitionProjectManagementUnitAcknowledgestheUnitesStatesWithdrawalfromtheJustEnergyTransitionPartnership.pdf

S&P Global (2024) Egypt to halt all LNG exports from May to meet domestic needs. New York: S&P Global. Available at: <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/lng/042324-egypt-to-halt-all-lng-exports-from-may-to-meet-domestic-needs>

latest-news/lng/042324-egypt-to-halt-all-lng-exports-from-may-to-meet-domestic-needs

S&P Global (2025) 'Vietnam to Start Pilot Emission Trading in 2025, Allow Offsetting 30% Emissions'. S&P Global Commodity Insights. Available at: <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/energy-transition/061125-vietnam-to-start-pilot-emission-trading-in-2025-allow-offsetting-30-emissions>

Srouji, J. (2025) Are Countries' New Climate Plans Ambitious Enough? What We Know So Far. Available at: <https://www.wri.org/insights/assessing-2025-ndcs> (Accessed: 20 August 2025)

State Information Service (SIS) (2024) PM witnesses the signing of 4 green ammonia deals worth \$33b. Cairo: State Information Service. Available at: <https://sis.gov.eg/Story/193422/PM-witnesses-the-signing-of-4-green-ammonia-deals-worth-%2433b?lang=en-us>

Stehfest, E., van Vuuren, D.P., Kram, T., et al. (2014) Integrated assessment of global environmental change with IMAGE 3.0, Model description and policy applications, The Hague: PBL Netherlands Environmental Assessment Agency. Bilthoven, the Netherlands: PBL Netherlands Environmental Assessment Agency

Szymczak, P.D. (2024) 'South Korea Launches Exploration Drilling To Confirm Major Find Off Its Southeast Coast', Journal of Petroleum Technology [Preprint]. Available at: <https://jpt.spe.org/south-korea-launches-exploration-drilling-to-confirm-major-find-off-its-southeast-coast>

T

Tempo Magazine (2025) 'Power Wheeling in New and Renewable Energy Bill', Tempo Magazine [Preprint]. Available at: <https://magz.tempo.co/read/cover-story/42276/power-wheeling-in-new-and-renewable-energy-bill>

Tesfaye, L., Alemayehu, S., Jalango, D., et al. (2024) Climate-smart agriculture investment plan for Ethiopia. Technical Report 200. CGSpace: CGIAR. Available at: <https://hdl.handle.net/10568/145352>

The Economic Times (2025) 'India generated record solar, wind power in first half of 2025', The Economic Times [Preprint]. Available at: <https://economictimes.indiatimes.com/industry/renewables/india-generated-record-solar-wind-power-in-first-half-of-2025-report/articleshow/124361853.cms>

The Guardian (2023) 'Revealed: UAE plans huge oil and gas expansion as it hosts UN climate summit'

The Guardian (2025) 'Trump bids to scrap almost all pollution regulations – can anything stop

this?' Available at: <https://www.theguardian.com/environment/2025/jul/31/trump-epa-endangerment-finding>

The Institute of Energy Economics, Japan (IEEJ) (2025) The 7th Strategic Energy Plan. Technical Report. Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI), Japan. Available at: https://www.enecho.meti.go.jp/en/category/others/basic_plan/pdf/7th_outline.pdf

The Islamic Republic of Iran (2023) Iran's Seventh Five-Year Development Plan Bill (2023-2027)

The Nation Thailand (2025) 'Thai Premier Unveils 15-Point Urgent Agenda to Parliament', The Nation Thailand [Preprint]. Available at: <https://www.nationthailand.com/news/politics/40056074>

The New York Times (2025) 'Trump moves to scrap climate rule tying greenhouse gases to public health'. Available at: <https://www.nytimes.com/2025/07/29/climate/epa-endangerment-finding-repeal-proposal.html>

The White House (2025) 'Putting America First in International Environmental Agreements'. Available at: <https://www.whitehouse.gov/presidential-actions/2025/01/putting-america-first-in-international-environmental-agreements/>

Thomson Reuters (2025) 'The One Big Beautiful Bill Act: Changing the landscape for US clean energy'. Available at: <https://www.thomsonreuters.com/en-us/posts/sustainability/one-big-beautiful-bill-act-clean-energy/>

Timorria, I.F. (2025) 'Raja Juli Minta Target Net Sink FOLU di Second NDC Ditinjau, Pertimbangan Ketahanan Pangan dan Bioenergi', Bisnis.com [Preprint]. Available at: <https://hijau.bisnis.com/read/20250616/651/1885466/raja-juli-minta-target-net-sink-folu-di-second-ndc-ditinjau-pertimbangan-ketahanan-pangan-dan-bioenergi>

Tollast, S. (2022) Solar power in the Middle East: how some countries are racing to go green, The National News. Available at: <https://www.thenationalnews.com/weekend/2022/09/16/solar-power-in-the-middle-east-how-some-countries-are-racing-to-go-green/> (Accessed: 18 October 2022)

Turkish Ministry of Energy and Natural Resources (2022) Turkey's National Energy Plan [Türkiye Ulusal Enerji Planı]

Türkiye Today (2024) 'Turkey plans 270 drilling operations in 2025 to boost oil and gas production'. Available at: <https://www.turkiyetoday.com/business/turkiye-plans-270-drilling-operations-in-2025-to-boost-oil-gas-production-73046/#:~:text=Türkiye>

Türkiye Today (2025) 'Türkiye announces ambitious climate targets as renewable energy exceeds 60% of capacity'. Available at: <https://www.turkiyetoday.com/nation/turkiye-announces-ambitious-climate-targets-as-renewable-energy-exceeds-60-of-capacit-3207482>

U

UAE Government (2024) 'Federal Decree-Law No. (11) of 2024 on the Reduction of Climate Change Effects'. Abu Dhabi, United Arab Emirates: UAE Government. Available at: <https://uaelegislation.gov.ae/en/legislations/2558>

UK Climate Change Committee (2025) 'Progress in Reducing Emissions – 2025 Report to Parliament'. UK Climate Change Committee. Available at: <https://www.theccc.org.uk/publication/progress-in-reducing-emissions-2025-report-to-parliament/>

UK Government (2022) 'The United Kingdom's Nationally Determined Contribution'. Available at: <https://unfccc.int/sites/default/files/NDC/2022-06/UK%20Nationally%20Determined%20Contribution.pdf>

UK Government (2024) 'Clean Power 2030 Action Plan'. Government of the United Kingdom. Available at: <https://assets.publishing.service.gov.uk/media/677bc80399c93b7286a396d6/clean-power-2030-action-plan-main-report.pdf>

UK Government (2025) United Kingdom of Great Britain and Northern Ireland's 2035 Nationally Determined Contribution. Available at: <https://assets.publishing.service.gov.uk/media/679b5ee8413ef177de146c1e/uk-2035-nationally-determined-contribution.pdf>

UK Parliament (2024) 'Environmental Standards for New Housing'. UK Parliament. Available at: <https://commonslibrary.parliament.uk/research-briefings/cdp-2024-0118/>

UNEP (2023) Emissions Gap Report 2023: Broken Record – Temperatures hit new highs, yet world fails to cut emissions (again). Nairobi: United Nations Environment Programme. doi:10.59117/20.500.11822/43922

UNFCCC (2015) Adoption of the Paris Agreement. FCCC/CP/2015/L.9/Rev.1. Paris, France: United Nations Framework Conventions on Climate Change

UNFCCC (2023) 'Draft decision-/CMA.5: Outcome of the first global stocktake', in FCCC/PA/CMA/2023/L.17. Bonn, Germany: United Nations Framework Convention on Climate Change

UNFCCC (2025a) 'Outcome of the First Global Stocktake'. Available at: <https://unfccc.int/topics/>

[global-stocktake/about-the-global-stocktake/outcome-of-the-first-global-stocktake](#)

UNFCCC (2025b) Outcome of the first global stocktake | UNFCCC. Available at: <https://unfccc.int/topics/global-stocktake/about-the-global-stocktake/outcome-of-the-first-global-stocktake> (Accessed: 20 August 2025)

UNFCCC / Russian Federation (2024) Russian Federation. 2024 National Inventory Document (NID). Update. United Nations Framework Convention on Climate Change. Available at: <https://unfccc.int/documents/645136>

United Arab Emirates (2024) 'The United Arab Emirates First Long-Term Strategy: Demonstrating Commitment to Net Zero by 2050'. Available at: <https://unfccc.int/documents/636722>

United Nations (2024) 'World Population Prospects', World Population Prospects. New York: United Nations Department of Economic and Social Affairs. Available at: <https://www.un.org/development/desa/pd/content/World-Population-Prospects-2024>

United Nations (2025) The Paris Agreement, United Nations. Available at: <https://www.un.org/en/climatechange/paris-agreement> (Accessed: 20 August 2025)

U.S. Congress (2025) 'H.R.1 - 119th Congress (2025-2026): One Big Beautiful Bill Act'. Available at: <https://www.congress.gov/bill/119th-congress/house-bill/1>

U.S. Department of Energy (2025) 'Secretary Wright Acts to "Unleash Golden Era of American Energy Dominance"'. Available at: <https://www.energy.gov/articles/secretary-wright-acts-unleash-golden-era-american-energy-dominance>

U.S. Energy Information Administration (2019) U.S. LNG exports to Europe increase amid declining demand and spot LNG prices in Asia. Available at: <https://www.eia.gov/todayinenergy/detail.php?id=40213> (Accessed: 14 November 2019)

U.S. Energy Information Administration (2025) 'Short-Term Energy Outlook'. Available at: <https://www.eia.gov/outlooks/steo/report/index.php>

U.S. Environmental Protection Agency (2024a) Greenhouse Gas Standards and Guidelines for Fossil Fuel-Fired Power Plants. Available at: <https://www.epa.gov/stationary-sources-air-pollution/greenhouse-gas-standards-and-guidelines-fossil-fuel-fired-power> (Accessed: 23 August 2024)

U.S. Environmental Protection Agency (2024b) 'Multi-Pollutant Emissions Standards for Model Years 2027 and Later LightDuty and Medium-

Duty Vehicles: Final Rule'. U.S. Environmental Protection Agency

U.S. Environmental Protection Agency (2025a) 'EPA Announces Action to Implement POTUS's Termination of Biden-Harris Electric Vehicle Standards'. Available at: <https://www.epa.gov/newsreleases/epa-announces-action-implement-potuss-termination-biden-harris-electric-vehicle>

U.S. Environmental Protection Agency (2025b) 'Proposed Rule: Reconsideration of the 2009 Endangerment Finding'. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-reconsideration-2009-endangerment-finding>

U.S. Government (2021a) The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050. UNFCCC

U.S. Government (2021b) 'The United States' Nationally Determined Contribution: Reducing Greenhouse Gases in the United States: A 2030 Emissions Target'. Available at: <https://unfccc.int/sites/default/files/NDC/2022-06/United%20States%20NDC%20April%2021%202021%20Final.pdf>

U.S. Government (2024) 'United States of America 2035 NDC'. Available at: <https://unfccc.int/documents/498019>

V

Vasilenko, E.P., Sidorovskiy, M.O. and Shishigin, S.V. (2024) China on the Road to Carbon Neutrality: Analytical Note. Bank of Russia, Department of Financial Stability. Available at: https://www.cbr.ru/Content/Document/File/166501/analytic_note_20241018_dfs.pdf

VietnamPlus (2025) 'Vietnam Mobilises Over 7 Billion USD for Just Energy Transition'. VietnamPlus. Available at: <https://en.vietnamplus.vn/vietnam-mobilises-over-7-billion-usd-for-just-energy-transition-post322374.vnp>

VnEconomy (2025) 'Government Approves Revised Power Development Plan 8'. VnEconomy. Available at: <https://en.vneconomy.vn/government-approves-revised-power-development-plan-8.htm>

Vu, K. and Guarascio, F. (2023) Vietnam's \$135 billion power plan for 2030, World Economic Forum. Available at: <https://www.weforum.org/agenda/2023/05/vietnam-pdp8-power-plan-for-2030/> (Accessed: 6 October 2023)

van Vuuren, D.P., Stehfest, E., Gernaat, D., et al. (2021) The 2021 SSP scenarios of the IMAGE 3.2 model. doi:10.31223/X5CG92

W

Wambua, J. (2024) 'Ethiopia's forest revolution brings carbon finance billions within reach'. Available at: <https://theexchange.africa/africa/carbon-finance-ethiopia/>

Wengel, F. (2023) Vietnam's Eight National Power Development Plan (PDP8)

Worland, J. (2023) 'Why Colombia's President is Determined to Ditch the Country's Oil Wealth', TIME, 12 December

World Nuclear Association (2024) Nuclear power in Iran. Available at: <https://world-nuclear.org/information-library/country-profiles/countries-g-n/iran> (Accessed: 23 August 2024)

World Resources Institute (2025) 'NDC Tracker'. Available at: <https://www.climatewatchdata.org/ndc-tracker>

WWF-Brasil (2025) Brazil's Congress passes the "Devastation Bill" and paves the way for unprecedented environmental destruction. Brasília: WWF-Brasil. Available at: <https://www.wwf.org.br/?92184/Brazils-Congress-passes-the-Devastation-Bill-and-paves-the-way-for-unprecedented-environmental-destruction>

X

Xinhua News Agency (2025) 'China's new energy vehicle production and sales volume will exceed 12 million units in 2024', The State Council of the People's Republic of China. Available at: https://www.gov.cn/yaowen/liebiao/202501/content_6998270.htm

**International Institute for
Applied Systems Analysis
(IIASA)**

Schlossplatz 1
A-2361, Laxenburg, Austria

Phone: +43 2236 807 0
Email: info@iiasa.ac.at
Website: www.iiasa.ac.at



**NewClimate – Institute for
Climate Policy and Global
Sustainability gGmbH**

Cologne Office
Waidmarkt 11a
50676 Cologne, Germany

Berlin Office
Schönhauser Allee 10-11
10119 Berlin, Germany

Phone: +49 221 999 83 300
Email: info@newclimate.org
Website: www.newclimate.org



**PBL Netherlands
Environmental Assessment
Agency**

Visiting address
Bezuidenhoutseweg 30
2594 AV The Hague, Netherlands

Postal address
P.O. box 30314
2500 GH The Hague, Netherlands

Phone: +31 70 328 8700
Email: info@pbl.nl
Website: www.pbl.nl



PBL Netherlands Environmental
Assessment Agency