



E3G

Energy&Climate
INTELLIGENCE UNIT

KEEPING 1.5°C ALIVE

The G20+ emissions gap to close this year

May 2022

AUSTRALIA
BRAZIL
INDONESIA
MEXICO
UNITED STATES
SOUTH KOREA
ARGENTINA
RUSSIA
UNITED KINGDOM
INDIA
SOUTH AFRICA
JAPAN
SAUDI ARABIA
CHINA
TURKEY
ITALY
GERMANY
FRANCE
EUROPEAN UNION
CANADA
UNITED ARAB EMIRATES
EGYPT

This paper looks at what the world's biggest economies need to do this year to keep 1.5°C alive.

It covers the G20, a group accounting for around 75% of global greenhouse gas (GHG) emissions, along with host countries of COP27 and COP28: Egypt and the United Arab Emirates respectively.

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The paper uses analysis from the [Climate Action Tracker](#), a project by [Climate Analytics](#) and [New Climate Institute](#), and the [1.5°C National Pathway Explorer](#) by Climate Analytics.

About

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action. [About – E3G](#)

The Energy & Climate Intelligence Unit (ECIU) is a non-profit organisation supporting informed debate on energy and climate change issues in the UK. Britain faces important choices on energy and on responding to climate change, and we believe it is vital that debates on these issues are underpinned by evidence and set in their proper context.

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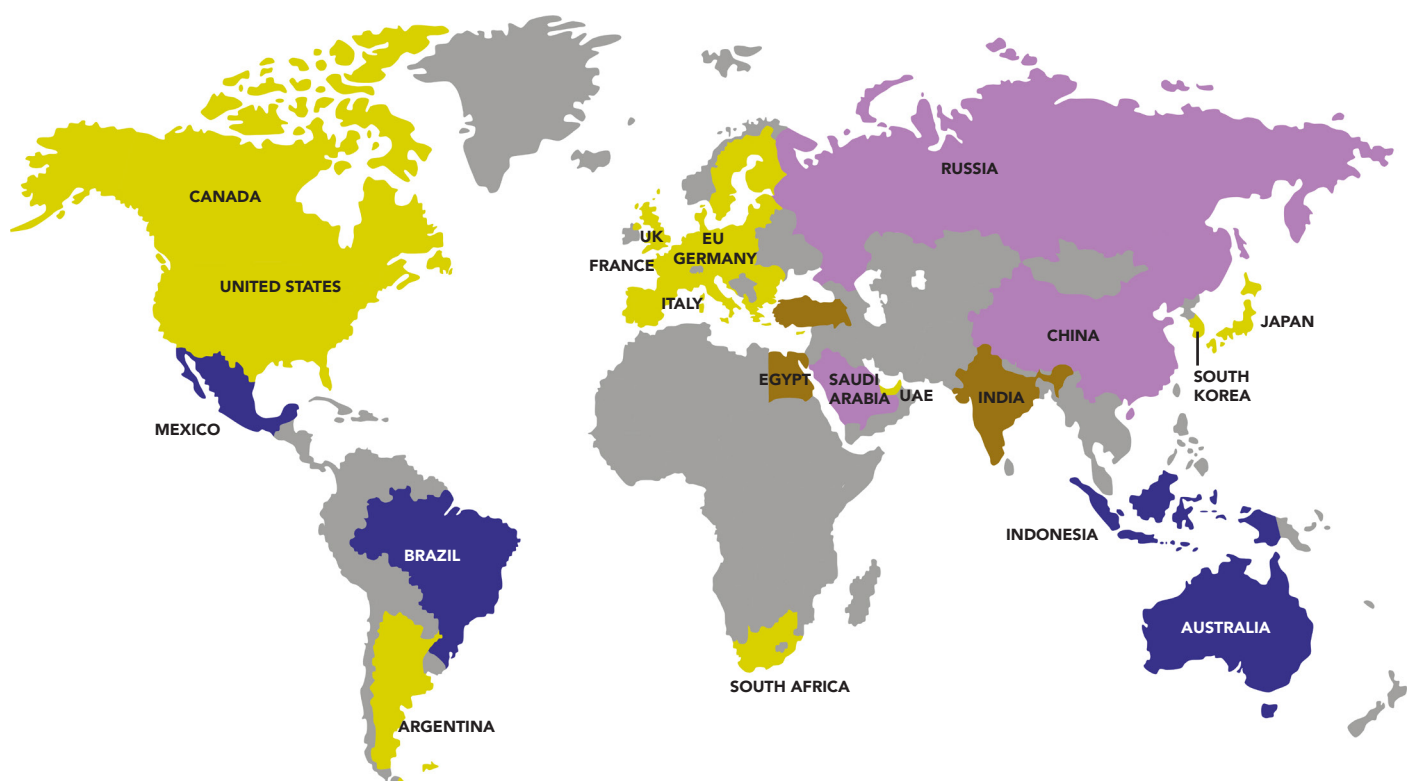
Highlights

- **Countries agreed on the Glasgow Climate Pact** at the UN Climate Change Conference of the Parties (COP26) in Glasgow in November 2021. They sent a clear signal of the need to do more to close the current emissions gap to 1.5°C in this decade.
- **All countries need to decide this year how they'll do more** before 2030 to keep 1.5°C alive, both raising the ambition of their climate targets and setting out clear policies and plans for delivering on their promises.
- **Countries that did not submit enhanced nationally-determined contributions** (NDCs) last year should do so as soon as possible in advance of COP27.
- **Countries without 1.5°C-aligned climate emissions pledges** should revise and strengthen their 2030 emissions climate targets by the end of 2022 - especially the G20 group of major emitters responsible for around 75% of global greenhouse gas emissions.

- **Implementation of climate targets is critical to turn promises into action.** Countries have an opportunity to deliver on the sectoral pledges they have committed to at COP26 and should reflect these in their NDCs. They can also explore further sectoral pledges they could sign to implement their 2030 targets in their NDCs. For all countries, implementation requires further policies and crucially investment to deliver real emissions reductions.
- **The geopolitical context has changed considerably since COP26**, with Russia's invasion of Ukraine in February 2022. Many nations are looking to speed up decarbonisation to end their reliance on fossil fuels and therefore cut off finance flows into Russia; that could provide significant scope for enhanced ambition in those nations' NDCs.

G20 countries - and incoming COP presidencies - by NDC status

- Implementation needed:** submitted enhanced 2030 emissions reduction target, but still not on target for 1.5°C
- Stragglers:** submitted enhanced 2030 emissions target, but still substantial scope for improvement
- Stallers:** updated NDC, but not enhanced
- Laggards:** not submitted a new or updated NDC



All countries are expected to actively communicate at COP27 how they have revisited and strengthened their mitigation ambition for this decade, and all countries are urged to communicate long-term strategies for a just transition towards net-zero emissions by, or around mid-century.

But the spotlight is on the G20 countries and the hosts of COP27 (Egypt) and COP28 (UAE) to showcase how they are raising ambition this year, particularly:

- **Australia, Brazil, Indonesia and Mexico**, who did not enhance their 2030 climate targets when they updated their NDCs last year.
- **Egypt, India and Turkey**, who did not yet submit a new or updated NDC.
- **China, Russia and Saudi Arabia**, who have submitted 2030 emissions reduction targets that are enhanced compared to their previous NDCs, but where there is still considerable scope to improve their 2030 emissions reduction commitments.
- **The remaining countries** covered in this paper have enhanced their 2030 emissions reduction targets but are still not on a 1.5°C pathway, and should still revisit and strengthen them this year. Crucially, they need to put forward plans and policies to implement the ambition they have set out. The UK is the closest to 1.5° alignment of the countries listed here, but it still has gaps in policy and investment to get on track for that pathway. The UK is also expected to provide more international climate finance, if it is to contribute to a 1.5°C aligned fair-share pathway that reflects its greater historical and economic responsibility.

This briefing focuses on countries' mitigation ambition for this year, but the COP27 stage will be a major adjudication moment on developed nations' delivery on their obligations coming out of the Glasgow Climate Pact. This includes commitments to reach \$100bn a year in climate finance (which was to have been met by 2020), balance it between adaptation and mitigation, double adaptation financing, and take action to address loss and damage.

Ambitious national and sectoral climate targets alone are not enough to reduce emissions. Implementation and delivery of these promises are both critical. This requires countries to come forward with new plans and policies, and crucially investment, that can set themselves on their decarbonisation pathways. While precisely what this involves for each country will differ, there are overarching steps that countries could be taking this year to ensure that their climate targets are strengthened and turned into action.

Governments are expected to:

- **Review the Glasgow sectoral deals they have committed to and ensure they are reflected with specific sectoral targets and policies in their NDCs.** This can help ensure that international sectoral commitments are translated into domestic-level commitments that are enforceable. For instance, countries that have committed to the Global Methane Pledge can set domestic methane targets commensurate with the overall goal of the pledge to reduce global methane emissions 30% by 2030.
- **Review where their sectoral commitments would go beyond their current 2030 climate targets and consider how this can enhance their headline ambition.**
- **Deliver enhanced detail on plans and policies to give their targets credibility.**
- **Unlock climate finance for developing countries.** Developed countries should work intensively on mobilising the promised climate finance required to unlock the higher levels of ambition in developing countries' NDCs, and to support their adaptation to worsening climate impacts. This is critical path for the implementation of their emissions reductions. Meeting the \$100bn a year pledge, co-developing just energy transition partnerships (in the model of the South Africa deal achieved at COP26), and mobilising private finance are priorities.



Context

A new geopolitical context

The world has changed in significant ways since COP26, with Russia's invasion of Ukraine. Many countries that were already facing joint challenges of an ongoing debt crisis, COVID-19 recovery and climate change impacts are now facing the additional challenge of volatile fossil fuel prices, increasing energy and food costs, as well as rising global inflation.

The [World Bank](#) described the increases in energy and food prices as the worst since, respectively, 1973 and 2008, forecasting energy prices will rise by a further 50% again in 2022, keeping prices high through to the end of 2024.

Oil prices will average \$100 a barrel in 2022, with gas prices 40% and coal prices 80% higher than in 2021. National budget space is being squeezed, for all government action.

Yet this multiple crisis context makes an even stronger case for prioritising spending on cheaper renewable energy, alongside resilience-based policy and planning approaches that channel limited financial resources to addressing climate risk alongside other vulnerabilities.

At the same time, reliance on Russian fossil fuels is a top national security concern for many nations. In a [joint statement](#) recently, US envoy John Kerry and European Commission Vice-President Frans Timmermans affirmed the situation has “only strengthened the imperative of staying on track and accelerating the clean energy transition. The sooner countries can diversify their energy sources, improve energy efficiency, and introduce renewables, the better”. It has become clear that the permanent solution for protecting national security and energy sovereignty lies with decarbonisation and tackling climate change.

That is helped by the [IPCC mitigation report's clear evidence](#) that the economics of energy choices are shifting radically and permanently, with fossil fuels rising in price, as renewables and other technologies, such as electric vehicles and batteries, falling steeply and rapidly.

This new geopolitical context brings new risks to international groupings like the G20, and international political decision-making processes, where Russia has long been a laggard and often a blocker.

However, it also calls for renewed investment in the multilateral cooperation frameworks to which governments have committed precisely to address global threats like climate change. Delivering on climate promises becomes ever more vital in this tense geopolitical environment, even if the immediate crisis sees a short-term uptick in fossil fuel use to enable diversification away from Russian fossil fuels, before more rapid decarbonisation.

The European Union, for example, having banned imports of Russian coal and announced intent for a similar ban on oil, is actively exploring how accelerating decarbonisation plans can help this process.

In the context of its planned 55% emissions cuts by 2030, its [RePower EU plan](#) seeks to go faster on deployment of wind and solar power, aiming to publish a proposal for faster permitting of renewable projects and other measures to remove obstacles, as well as changing rules on power purchase agreements.

It is embracing the [IEA proposal for EU demand reduction](#), calling on citizens to act to cut their energy use. The UK has [also signalled a speeding up](#) of renewables roll-out, increasing the rate of deployment of offshore wind by 25%, aiming for 50GW of deployment by 2030.

Following the science

The Intergovernmental Panel on Climate Change ([IPCC](#)) is in the process of preparing its sixth [assessment report](#). The first part, in August 2021, an [assessment of the climate science](#), warned that we are running out of time to act to keep warming to 1.5°C, with rapid and deep cuts in emissions this decade the solution. UN Secretary General, Antonio Guterres called it a 'code red' for humanity.

In February 2022, the [second part of the assessment](#) was published, warning that climate impacts were worse than predicted, with far worse ahead if we do not cut emissions and adapt to impacts already baked in. 3.5 billion people worldwide are living in environments highly vulnerable to climate change and, with no improvements to vulnerability or adaptation, sub-Saharan Africa could lose 12% of GDP by 2050 and 80% by 2100 with high emissions. The summary, agreed with the IPCC's 195 member governments, concluded that:

"The cumulative scientific evidence is unequivocal: climate change is a threat to human well-being and planetary health. Any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all."

Both reports were clear that acting now is cheaper than bearing the costs of worsening impacts. [The third part](#), published in April 2022, reiterated that there is only a small window for action.

But it offers solutions – policies, technologies and finance – to deliver the emissions cuts needed in the 2020s and put the world on track for net-zero emissions by mid-century. It was clear that an electrified global energy system, powered by clean renewable electricity and storage, gives countries their best chance of energy security and a safer, fairer world.

It also makes clear that no new fossil fuel infrastructure can be put in place, leaving a stark warning of the financial and stranded asset risks for those nations still heavily reliant on fossil fuels.

The reports also highlighted the urgency to meet commitments on finance - to enable developing nations to at least double funding for adaptation by 2025 and to continue their economic development in ways that align with the global clean transition. A four-to-eight times

scale-up of annual financial flows to developing countries is needed to enable their climate transitions, according to the [IPCC](#).

In a blunt assessment of the overall message from the IPCC, working group three co-chair, Professor [Jim Skea](#) said:

“It’s now or never, if we want to limit global warming to 1.5°C; without immediate and deep emissions reductions across all sectors, it will be impossible.”

Keeping promises

COP26 concluded in November 2021 with agreement of the [Glasgow Climate Pact](#). Recognising the gaps in mitigation, adaptation and finance, the Pact committed all parties to returning in 2022 with greater ambition.

On ambition to mitigate climate change, the Pact committed nations to come back to COP27 with more ambitious targets and policies for the 2020s, and with delivery plans for achieving net-zero, in line with 1.5°C. It also emphasised the importance of restoring nature and ecosystems to achieve this.

Alongside the formal negotiations and Paris Agreement pledges, many nations made significant commitments in UK presidency-brokered 'sector deals'. These included:

- commitments to halt and reverse [forest loss](#) and land degradation by 2030
- cut [methane emissions](#) by 30% below 2020 levels by 2030
- accelerate uptake of [zero emission vehicles](#)
- end [financing for fossil fuels](#) by the end of 2022
- hasten [phase-out of coal](#) and [phase out oil and gas production](#).

The UK COP Presidency, handing over to Egypt, will be working this year to increase sign-up to those pledges and ensure that nations build their commitments into their NDCs and national policy frameworks to ensure they make progress on delivering against them.

Further opportunities for driving ambition and implementation lie with the [Glasgow Breakthroughs agenda](#), which saw countries form champion groups seeking to drive accelerated sectoral transitions across power, road, transport, steel, agriculture, and hydrogen. Although not analysed in this report, they remain a valuable set of initiatives for clean technology development that could serve as a basis for enhanced action.

On ambition for addressing climate impacts and enabling developing countries to manage climate change, the agreement committed wealthier developed nations to a doubling of adaptation finance and acknowledged the urgency with which they should deliver on their 2009 promise of \$100bn a year in climate finance, which should have been in place in 2020.

Given burgeoning impacts and the much greater harm they inflict on poorer nations, least able to bear the cost, the Glasgow Climate Pact also set in motion a more detailed workstream on loss and damage, which developing nations will want to see move rapidly towards a financial facility with concrete arrangements to help them to bear those costs.



Shining a spotlight on delivery

This briefing provides an overview of major emitting countries and upcoming COP presidency countries' national climate commitments, an assessment of their climate mitigation ambition and implementation efforts, and highlights opportunities for them to step up and raise their ambition in line with 1.5°C ahead of COP27.

It assesses whether NDCs have been enhanced, but in many cases, even where targets are better than they were, they remain far from being on track in most cases.

How to read the tables

We have categorised countries on the basis of how their new or updated climate commitments, and their announced 2030 emissions reduction targets compare to previous NDCs that they put forward around the time when the Paris Agreement was adopted. There are four main categories:











1. Countries that submitted NDCs with mitigation commitments that are the same as or weaker than previous NDCs
2. Countries that didn't submit new or updated NDCs
3. Countries that have not meaningfully submitted enhanced 2030 emissions reduction targets
4. Countries that submitted enhanced 2030 emissions reduction targets but urgently need to get on track to implementing them, and ensuring they are on a 1.5°C pathway. (N.B. These countries should still also revisit their NDCs, as called for by the Glasgow Climate Pact)

The tables below start with contextual information, such as each country's emissions ranking, and any elections or international roles. It then covers the existing NDC, whether it is enhanced compared to original NDCs, whether it is on track or not for meeting the NDC, and provides the scale of the gap needed for each country to get on track for 1.5°C alignment

Only one country has revised their NDC since COP26 (Brazil - although updated, it did not enhance the target in comparison to Brazil's original 2015 NDC). The assessment of whether the target has been enhanced is simply in comparison to their previous target; it does not reflect that their target has been enhanced sufficiently to be in line with the Paris Agreement and Glasgow Climate Pact – that is covered in the narrative sections about whether the country is on track, and where there remain gaps to close.

Each table then summarises the country's net zero target – whether it is in law, policy or just a statement, and whether the country has submitted a long-term strategy that reflects that target. There then follows a summary of which COP26 sector deals the country has signed up to, and provides some brief narrative as to the opportunities for further enhancement.

Key to tables

ENHANCED	Enhanced from previous NDC or target commitment; does not necessarily mean enhanced very much, enough, or in line with 1.5°C.  Enhanced  Not enhanced  No submission		
REVISED SINCE COP26	Whether or not an NDC has been updated or revised since the end of COP26 in November 2021.		
BAU	Business as usual		
CAT RATING	Climate Action Tracker overall rating for a country. Countries are rated on a scale from worse to better of: Critically Insufficient, Highly Insufficient, Insufficient, Almost Sufficient, and 1.5C Paris Agreement Compatible. Further information on the overall country ratings is provided by CAT .		
CONDITIONAL	Conditional target – for developing countries – where finance or some other form of additional, outside support is required to achieve the target.		
UNCONDITIONAL	Unconditional target – for developing countries – what they can achieve without any additional finance or some other form of outside support		
LULUCF	Land-use, land-use change and forestry		
LTS	Long-term strategy, as required of each party to the Paris Agreement, to set out how they will deliver what is required of them by mid-century'		
AMBITION GAP FOR 1.5° ALIGNMENT (EXCLUDING LULUCF)	<p>Gap between a country's current 2030 emissions target and a 1.5°C-aligned domestic pathway compared to 2010 baseline. The gap is shown in percentage points and tonnes of CO₂equivalent (MtCO₂e). The higher the percentage/tonnes, the wider the gap to be closed to be compatible with 1.5°C.</p> <p>An important caveat is that this analysis does not take into account what a fair contribution to reducing emissions might be for each country, but rather focuses on the pace of decarbonisation needed to keep 1.5°C within reach. These ambition gaps have been sourced from the 1.5°C national pathways explorer. See methodology section for further detail on how gaps are calculated.</p> <p>To put the numbers into context, the UNEP Emissions Gap 2021 report estimates the gap between 2030 emissions under current policy projection, and where we need to be in 2030 for 1.5°C alignment to be 30 GtCO₂e – which is 30,000 MtCO₂e.</p>		
	Global methane pledge		Global coal to clean power transition statement
	Glasgow leaders' declaration on forests and land-use		Statement on international public support for clean energy transition
	COP26 declaration on accelerating the 100% zero-emission cars and vans		Beyond Oil and Gas Alliance
	Powering Past Coal Alliance		



Laggards: spotlight on countries that submitted NDCs that are the same as or weaker than previous NDCs

Of greatest concern are the countries that have submitted new or updated 2030 emissions reduction targets that are the same or weaker than what they have brought forward in previous NDCs.

These countries claim to have submitted new 2030 climate targets, yet analysis shows that these commitments either delivered no new ambition beyond their previous climate targets or resulted in lower ambition on 2030 emissions reductions targets than previous NDCs.

AUSTRALIA

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Global emissions %	Emissions ranking	Elections 2022	International role
1.3%	15th	Yes	None

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> 26-28% below 2005	Highly insufficient	This calculation is currently not available from 1.5C national pathways explorer for Australia's NDC. However according to the CAT , Australia has a domestic 1.5°C ambition gap in 2030 of around 190 MtCO ₂ e.
Enhanced	<input checked="" type="checkbox"/>		
On track?			Notes

Not even on track for a weak target set in 2015; further policies, investment & implementation required to achieve NDC.

[CAT analysis estimates](#) that a 1.5C aligned domestic pathway would require emissions in 2030 of 277.7MtCO₂e (excluding LULUCF).

Net zero target	2050	In policy	Reflected in LTS
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Glasgow sector deals



							Not member but 3 Aus cities are

Australia has the second highest level of per-capita CO₂ emissions in the G20 and is the only developed country within the G20 that has not enhanced its 2030 emissions reduction target.

It is the [world's largest exporter](#) of liquefied natural gas (LNG) and the world's second largest exporter of coal after Indonesia. Its heavy reliance on fossil fuels for power, as well as export, suggest considerable scope for committing to the methane sector deal to enhance its NDC. It only very recently set a net-zero target and has so far not established that in law, and has provided little by way of policies to get on track for delivering. Growing sub-national commitments to phase out coal could pave the way for a national level commitment. Australia is expected to revise its NDC and enhance its 2030 top-line target.



Global emissions %	Emissions ranking	Elections 2022	International role
2.9%	6th	Yes – 2 October: presidential elections	None

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		50% below 2005	Highly insufficient	This calculation is currently not available for Brazil's NDC.
Enhanced				
On track?			Notes	

Not even on track for its weakened target; further policies, investment & implementation required to achieve its NDC.

[NGOs in Brazil](#) call for 81% cuts on 2005 & [Climate Analytics](#) estimate 2030 emissions should be 608MtCO₂e (excl LULUCF)

Net zero target	2050	Declaration/pledge	No LTS for achieving net zero
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Glasgow sector deals

							Not member

Brazil has, in the past, been a leader on climate action. Since Jair Bolsonaro's election as President, however, their revised NDC has actually [worsened](#) as they made changes to the baseline year, and the rate of [deforestation in the country has accelerated](#).

Nearly two-thirds ([62.2%](#), [884MtCO₂e in 2018](#)) of Brazil's greenhouse gas emissions come from agriculture, land-use, land-use change and forestry (LULUCF), and the scale of the Amazon rainforest is such that it is central to global efforts to limit temperature rises. Brazil's commitment to the sector pledge on deforestation is encouraging, but has not yet been reflected in action or in the country's NDC. Brazil is still expected to revise and strengthen its NDC and enhance its 2030 top-line target.



Global emissions %	Emissions ranking	Elections 2022	International role
3.5%	5th	No	G20 Presidency in 2022

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/>	29% (unconditional) 41% (conditional) cut from BAU	Highly insufficient	191% points 1,368 Mt CO ₂ e
Enhanced	<input type="checkbox"/>			
On track?			Notes	

Independent studies either do not agree or are inconclusive on whether Indonesia is on track to meet its unconditional NDC, mainly due to the uncertainty of LULUCF emissions projections as a result of peat fires.

[Climate Analytics calculates](#) that Indonesia's 2030 emissions should be at 449MtCO₂e to be on a 1.5° aligned domestic pathway.

Net zero target	2060	Proposed/in discussion	LTS only explores scenarios for net zero by 2060 but no clear pathway
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Glasgow sector deals

							Not member

Indonesia is heavily reliant on coal and its NDC envisages it making up 25% of its energy mix in 2050. Although it signed the coal to clean sector deal (albeit with [caveats](#)), it has not yet done more than signalling it will consider accelerating coal phase out into the 2040s. Firmly committing to a timeline will require international support. At the moment, the wider investment environment in Indonesia favours fossil fuels over large-scale renewable projects, with continued coal investment risking fossil fuel-lock-in and stranded assets. Indonesia's National Development Planning Agency, Bappenas, has proposed a [2045 net zero pathway](#) which it argues would be more economically and socially beneficial. Indonesia's emissions from land-use, land-use change and forestry have accounted for almost 50% of the country's total emissions over the last 20 years [according to CAT](#), so the commitment to ending deforestation has the potential to be a major driver for enhanced climate action. Indonesia is expected to revise and strengthen its 2030 topline target in its NDC.



Global emissions %	Emissions ranking	Elections 2022	International role
1.42%	11th	Obrador won recall election in April 2022	None

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	✗ 22% (unconditional) 36% (conditional) below BAU	Highly insufficient	57% points 375 Mt CO ₂ e
Enhanced	✗		
On track?		Notes	

Not on track even for its existing weak target; further policies, investment & implementation are required to achieve it.

The 1.5C national pathway explorer estimates a 43% reduction on 2015 levels (excluding LULUCF) would be compatible with a [1.5C aligned domestic pathway](#).

Net zero target	None	None	LTS submitted but with no net zero target
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Glasgow sector deals

							Member, but no phase out date

Mexico has formerly been seen as a climate leader, but its NDC was suspended by a Mexican court in 2021 after a Greenpeace challenge. The current government has doubled down on investments in state-run fossil fuels and stalled progress on renewables; it is the second largest oil producer in Latin America.

Their NDC as it stands will lead to higher emissions in 2030 than their previous NDC due to a revision of its baseline projections. Mexico's sector deal commitments should provide scope for enhanced ambition in its NDC, including setting a phase-out date for coal, given it is a member of the Powering Past Coal Alliance. Mexico can consider further opportunities to strengthen its commitment to accelerate uptake of zero emission vehicles, including through committing to a clear target date for all sales of new cars and vans being zero emission Mexico is expected to revise its NDC and strengthen its 2030 topline emissions reduction target.



Stallers: spotlight on countries that didn't submit new or updated NDCs



A number of important countries and major emitters fell short of even communicating new NDCs last year at all.

At COP26, all countries agreed that those who have not yet submitted new or updated NDCs should do so before COP27 taking place in Egypt in November 2022.

EGYPT



Global emissions %	Emissions ranking	Elections 2022	International role
0.67%	28th	No	COP27 Presidency

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		No 2030 emissions reduction target	Highly insufficient	Not applicable as Egypt's NDC does not have an economy-wide 2030 emissions reduction target
Enhanced				
On track?			Notes	

Egypt does not have a 2030 emissions reduction target against which to measure progress.

[According to CAT](#), Egypt would need to commit to cutting emissions in 2030 by around 25% on today (with international support, as part of a conditional NDC) for a 1.5°C domestic pathway

Net zero target	None	None	No LTS submitted
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Glasgow sector deals

							Not a member but coal-free



Egypt's current NDC does not have a mitigation target and it has not yet submitted a new NDC with a 2030 target. As hosts of COP27, Egypt has an opportunity to demonstrate climate leadership and respond to the Glasgow Climate Pact by submitting a new 1.5C aligned 2030 target in its NDC.

Egypt has not yet committed to a net zero target. Communicating a new or updated NDC alongside a clear long-term strategy with a net zero target is a key opportunity before COP27. Egypt did not sign to any Glasgow sector deals other than the commitment to phase out coal, but Egypt is already coal-free. Egypt can explore opportunities to sign further commitments, particularly on methane, ahead of COP27.

INDIA



Global emissions %	Emissions ranking	Elections 2022	International role
6.8%	3rd	No	G20 Presidency in 2023

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		N/A	Highly insufficient	125% points 2,805 Mt CO2e
Enhanced				
On track?			Notes	

Yes, but leaves room for ambition in an enhanced NDC as India is projected to achieve its current target under current policies without major additional measures

















[CAT calculates](#) that India needs to phase out old, high-capacity coal, stop any new coal capacity addition, and phase out coal use from its power sector by 2040 in order to get on track for a 1.5°C domestic pathway..

Net zero target	2070	Political pledge	No LTS submitted
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Glasgow sector deals

							Not a member

India made one of the boldest new commitments at COP26, confirming a 2070 net zero target and an ambition to source half of the country's energy requirements from renewables by 2030, with 500GW of installed non-fossil fuel electricity capacity by then. It has committed to cutting 1 billion tonnes of emissions this decade, and reducing the carbon intensity of its economy by 45% below 2005 levels by 2030. It has an opportunity before COP27 to fulfil its commitment under the Glasgow Climate Pact and submit a detailed 2030 target in a new, enhanced NDC, building on commitments made at COP26. Doing so would see India's CAT assessment improve, though would still be ['insufficient'](#). Further action would still be needed for a 1.5C pathway. Actions can be taken by identifying sectoral commitments that India can support, and by formalising its commitment to a 2070 net zero target in a long-term strategy with a clear delivery plan. Germany and the UK have both entered into bilateral deals with India to provide and support access to additional financial support for delivering their decarbonisation goals.

		Global emissions %	Emissions ranking	Elections 2022	International role	
		1%	17th	No	None	
NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)		
Revised since COP26		21% below BAU	Critically insufficient	184% points 735 Mt CO2e		
Enhanced						
On track?			Notes			
Yes – Turkey is overachieving its target, however it is already less ambitious than current policy projections leaving ample room for increased ambition in 2030						
Net zero target		2053	In policy document	No LTS submitted		
Glasgow sector deals						
						 Not a member
						

Turkey has an opportunity to further strengthen its emissions reduction target to be 1.5°C aligned. Turkey also has an opportunity to further formalise its 2053 net zero target in a long-term strategy, with additional details on pathways and policies to deliver it.

A [process is already underway](#) to update the NDC, set a climate law formalising the 2053 target, and produce an LTS. It can make further sectoral commitments, either by ensuring domestic targets and policy reflect existing commitments on deforestation and zero emission transport, or by adopting further sectoral commitments including on methane emissions.



Stragglers: spotlight on countries with significant room to improve

These countries did submit new or updated 2030 emissions reduction targets but they were unambitious; they can still go further this year to improve



Global emissions %	Emissions ranking	Elections 2022	International role
23.9%	1st	No	Host Convention on Biodiversity (CBD) COP15 & co-convene Ministerial on Climate Action (MoCA)

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> > 65% carbon intensity cut on 2005 & peak CO ₂ emissions before 2030	Highly insufficient	62% points 6,805 Mt CO ₂ e
Enhanced	<input checked="" type="checkbox"/>		
On track?		Notes	

Yes but leaves room for ambition as China is projected to achieve target under current policies without major additional measures









The [1.5°C national pathway explorer](#) estimates a 1.5° pathway would imply 6.4 Gt CO₂e in 2030, as opposed to current NDC levels of 13.2 Gt (excluding LULUCF).

Net zero target	2060	In policy document	LTS submitted, reflecting net zero
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Glasgow sector deals

							Not a member

As the world's largest emitter, sufficient global progress this decade to keep 1.5° within reach relies on China going further than currently signalled in its NDC. China's current commitments are likely to be over-delivered by existing policies and measures, leaving space for further ambition in a revised NDC. As China is expected to [peak emissions](#) in the second half of the decade on current form, this could include setting an earlier peak year ([ideally before 2026](#)), or a specific cap on carbon emissions. China's NDC targets currently do not cover non-CO₂ gases like methane. China can put in place more ambitious and stringent policies to incentivise emission intensive industries to accelerate their transition including steel. Having signalled willingness to act on methane in their partnership announcement with the US at COP26, this could also include setting a methane-reduction target. China has also previously signalled its intent to [peak coal between 2026-2030](#); it has yet to set out plans for achieving that, however. China has also yet to confirm that its net zero target covers all greenhouse gases.

		Global emissions %	Emissions ranking	Elections 2022	International role
		4.1%	4th	No	None
NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)	
Revised since COP26	<input checked="" type="checkbox"/>	70% of 1990 levels (making a 30% cut)	Critically insufficient	82% points 1,655 Mt CO2e	
Enhanced	<input checked="" type="checkbox"/>				
On track?			Notes		
Yes, but the NDC is already less ambitious than current policy projections & critically insufficient leaving ample room for improvement.			The 1.5C national pathway explorer estimates a reduction of 76% from 1990 levels excluding LULUCF would be compatible with a 1.5C aligned domestic pathway		
Net zero target		2060	In law	No LTS submitted, however a domestic strategy has been published	
Glasgow sector deals					
					
					Not a member
					



Russia is currently engaged in a war against Ukraine, making its engagement in international processes more difficult. Russia is a major fossil fuel supplier, although this is coming under pressure from international sanctions and moves by many countries and blocs to speed up decarbonisation as a means of reducing reliance on Russian fossil fuels. There is scope for Russia to submit a more ambitious NDC simply by aligning with current policies, but there is also scope – as a major fossil fuel producer – to target methane cuts as a means of strengthening climate action, as well as building deforestation commitments into its NDC in line with its pledge to the COP26 deforestation deal.. Russia has also yet to submit a long-term strategy to the UNFCCC to set out a pathway to net zero; this plan could include addressing the existing energy plan's focus on continued fossil fuel extraction, use and export, as well as bringing method of accounting for land-use, land-use change and forestry (LULUCF) removals in line with UN rules.

SAUDI ARABIA

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Global emissions %	Emissions ranking	Elections 2022	International role
1.3%	14th	No	None

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		278 MtCO2e reduction below BAU by 2030	Highly insufficient	89% points 515 Mt CO2e
Enhanced				
On track?			Notes	

Not on track for a weak target; further policies, investment and implementation are required to achieve their NDC.

The [1.5°C national pathway explorer](#) estimates a 1.5°C compatible pathway would be a 39-51% reduction below 2015 (excluding LULUCF).

Net zero target	2060	Political pledge	No LTS submitted
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Glasgow sector deals

							Not a member

Saudi Arabia is the [third highest per-capita emitter](#) in the G20. It is the [second-largest producer of oil](#) globally – the largest of the oil-producing and exporting countries bloc (OPEC). Saudi Arabia has a target for 50% of power to come from renewables by 2050, but renewables remain a negligible part of the energy mix.

Saudi Arabia has yet to produce a credible long-term plan for achieving net zero. As a major fossil fuel producer, its signing of the global methane pledge includes one route to strengthening its NDC to get closer to 1.5° alignment. The NDC does not set a quantified BAU, and leaves flexibility to use an alternative BAU if fossil fuel revenues fall short of expectations; closing these loopholes is a priority. Saudi Arabia is expected to communicate a clear BAU trajectory to enhance the transparency of its NDC.







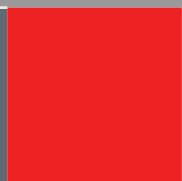






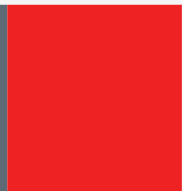




Implementation needed: spotlight on countries that urgently need to implement their targets

These countries can still improve their already-enhanced 2030 climate targets (and should do so this year as called for by the Glasgow Climate Pact), but critical action is needed to make progress delivering the targets in the first place.

ARGENTINA

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		Global emissions %	Emissions ranking	Elections 2022	International role
		0.8%	21st	No	None
NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)	
Revised since COP26		349 MtCO2e	Highly insufficient	31% points	
Enhanced				100 Mt CO2e	
On track?			Notes		
No - further policies, investment & implementation are required to achieve their NDC.			The 1.5°C national pathway explorer estimates 1.5°C compatible domestic pathway requires getting to 213 MtCO2e in 2030 (excluding LULUCF)		
Net zero target		2050	Declaration/pledge	No LTS submitted	
Glasgow sector deals					
					
			Not a member		
					

Argentina is investing in expanding its oil and gas sectors, as having the second largest reserve of shale gas, and fourth largest of shale oil worldwide, according to the IEA.

Having signed up to the global methane pledge, and with shale being a major contributor to methane emissions, there is potential for Argentina to strengthen its NDC by committing measures to cut methane to its target. It has also yet to produce a long-term strategy for how it will get to net zero.



Global emissions %	Emissions ranking	Elections 2022	International role
1.6%	10th	Trudeau re-elected in 2021	Co-convenor of the Ministerial on Climate Action (MoCA)

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		40-45% below 2005 levels	Highly insufficient	18% points
Enhanced				128 Mt CO2e
On track?			Notes	

No - further policies, investment & implementation are required to achieve their NDC

CAT estimates a [1.5°C aligned domestic pathway](#) would involve a 54% reduction on 2005 (excl LULUCF)

Net zero target	2050	In law	LTS does not yet reflect net zero target
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Glasgow sector deals

					2035 PHASE OUT		Founder member – 2030 phase out

Canada has the [highest per-capita CO₂ emissions](#) in the G20, and is a major producer of fossil fuels.

Given its prominence in committing to a just transition away from coal, and the sector deals it has signed, an enhanced Canadian NDC could include reform of fossil fuels subsidies, and a clear plan to tackle emissions in the oil and gas sector. Canada has signalled that it will set declining emissions target for this for every five years, with the first of these coming later this year. It has also yet to submit an LTS which reflects its net zero target



Global emissions %	Emissions ranking	Elections 2022	International role
6.8%	Would be ranked 3rd after China & US	Not at EU level	Co-convenor of the Ministerial on Climate Action (MoCA)

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> 55% reduction on 1990 levels	Insufficient	19% points 777 Mt CO ₂ e
Enhanced	<input checked="" type="checkbox"/>		
On track?		Notes	

No - further policies, investment & implementation are required to achieve their NDC.

The [1.5°C national pathway explorer](#) estimates that a 1.5°C aligned pathway would involve reductions of 68% below 1990 levels (excluding LULUCF).

Net zero target	2050	In law	Reflected in LTS
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Glasgow sector deals

							Not a member - no EU phase out date

The EU has centred climate action within its overarching political and economic strategy via the European Green Deal.

The war in Ukraine has prompted a re-think of its reliance on Russian fossil fuel exports and seems likely to speed up/bring forward some decarbonisation plans. An enhanced NDC from the EU could involve an assessment of how far those policies to reduce dependence on Russian oil and gas contribute to going beyond the existing 55%.



Global emissions %	Emissions ranking	Elections 2022	International role
0.74%	25th	Macron re-elected in May	EU Presidency for first half of 2022

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> EU target of at least 55% below 1990	Insufficient	24% points 123 Mt CO ₂ e
Enhanced	<input checked="" type="checkbox"/>		
On track?		Notes	

No - further policies, investment & implementation are required to achieve their NDC.

France has a separate domestic target of 40% reduction on 1990 by 2030. The [1.5°C national pathway explorer](#) estimates that a 1.5°C-aligned pathway would involve reductions of 62% below 1990 levels (excluding LULUCF).

Net zero target	2050	In law	LTS submitted
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Glasgow sector deals

							Member

According to its High Council on Climate Change, France must double its current annual rate of emissions reductions just to reach its existing, weak domestic 2030 climate target.

As such, France's Council of State – its highest judicial authority – has ordered the government to align its policies with its current target by the end of the year. Further opportunities can include ensuring domestic policies and targets exist that align with its current sectoral pledges.

GERMANY

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Global emissions %	Emissions ranking	Elections 2022	International role
1.59%	9th	Scholz elected in late 2021	G7 Presidency

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> EU target of at least 55% below 1990	Insufficient	11% points 104 Mt CO ₂ e
Enhanced	<input checked="" type="checkbox"/>		
On track?		Notes	

No - further policies, investment & implementation are required to achieve their NDC.

The [1.5°C national pathways explorer](#) estimate a 1.5c aligned domestic pathway a reduction of 73% below 1990 levels excluding LULUCF would be compatible with a 1.5c aligned domestic pathway

Net zero target	2045	In law	LTS submitted but does not reflect net zero
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Glasgow sector deals

							Member

Germany has recently [adopted plans to transform its power sector](#) to 100% renewable energy by 2035 in response to concerns over reliance on Russian fossil fuels. This can lay foundations for higher headline ambition and accelerated implementation of its target, which could include ensuring sectoral commitments are reflected in domestic targets and policies.

The new government is also committed to phasing out internal combustion engine cars by 2035 which would lay the basis for it to sign the Glasgow sector pledge on zero emission vehicles. Germany also has an opportunity to further formalise its commitment to net zero by submitting a long-term strategy with detail on pathways and policies for its implementation.



Global emissions %	Emissions ranking	Elections 2022	International role
0.79%	23rd	No	Co-host of COP26

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> EU target of at least 55% below 1990	Insufficient	This calculation is not currently possible for Italy's target (which is part of the EU's NDC)
Enhanced	<input checked="" type="checkbox"/>		
On track?			Notes

No - further policies, investment & implementation are required to achieve their NDC.

Italy [signalled](#) in 2021 that it would raise its ambition to a 60% reduction on 1990 levels by 2030

Net zero target	2050	In policy document	No LTS submitted
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Glasgow sector deals



							Member
					SIGNED AS 'FRIEND' OF BOGA		

Italy co-hosted COP26 with the UK, and so retains the joint presidency until COP27. Since COP26 it has [committed itself to the EU phase-out date](#) for ICE vehicles of 2035 in late 2021.

Italy's recovery package from COVID-19 commits only 16% for green spending, below the EU's 37% benchmark. Climate Analytics assessed that Italy's reduction on 1990 levels needs to be in the range of 67-73% to be 1.5° aligned.



Global emissions %	Emissions ranking	Elections 2022	International role
2.4%	7th	No	G7 Presidency in 2023

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		46-50% below 2013 levels	Insufficient	26% points 339 Mt CO2e
Enhanced				
On track?			Notes	

No - further policies, investment & implementation are required to achieve their NDC.

The [1.5° C national pathways explorer](#) estimate a 1.5c aligned domestic pathway would require reductions of 66% below 2013 levels. excluding (LULUCF)

Net zero target	2050	In law	Reflected in LTS
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Glasgow sector deals



							Not a member

Former Prime Minister Suga built momentum towards more ambitious climate policies, including an energy policy committing to 36-38% renewables by 2030 – albeit coal still accounting for 19% by that point.

Prime Minister Kishida has so far made no comment on his predecessor's commitments to retire the least efficient coal plants. To enhance its NDC, Japan could add a commitment to ending sales of internal combustion vehicles and strengthen its methane target, In light of signing the global methane pledge.



Global emissions %	Emissions ranking	Elections 2022	International role
1.06%	16th	No	None

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		350-420 MtCO2e	Insufficient	12% points
Enhanced				62 Mt CO2e
On track?			Notes	

No - further policies, investment & implementation are required to achieve their NDC.

[CAT](#) estimate that the lower end of their NDC target scale is close to being compatible with a 1.5° aligned domestic pathway.

Net zero target	2050	Proposed/In discussion	LTS submitted but not clearly reflecting net zero
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Glasgow sector deals

							Not a member, but city of Durban is

South Africa is heavily dependent on coal, and its state-owned energy operator, Eskom, faces significant financial challenges. South Africa signed a deal at COP26 with France, Germany, UK, US and EU to mobilise up to \$8.5bn to support a just energy transition to support South Africa's decarbonisation.

Progressing and implementation of this deal will increase the likelihood of South Africa's delivering on the lower, almost 1.5°C aligned, end of their target. Its net zero target is an aspiration in its long-term strategy; firming this into a stronger, detailed commitment is a priority.

SOUTH KOREA

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Global emissions %	Emissions ranking	Elections 2022	International role
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1.4%

13th

Yoon elected in March 2022

None

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
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Revised since COP26



40% below 2018 (LULUCF); 32% (excl LULUCF)

Highly insufficient

32% points
213 Mt CO₂e

Enhanced



On track?

Notes

No - further policies, investment & implementation are required to achieve their NDC.

The [1.5C national pathways explorer](#) estimates a reduction of 61% below 2017 levels (excluding LULUCF) would be compatible with a 1.5C domestic pathway. NDC submitted Dec 2021, but reflects targets announced before COP26.

Net zero target	2050	In law	Reflected in LTS
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Glasgow sector deals

			2050 PHASE OUT				Not a member ,

Newly-elected President Yoon has raised concerns about the NDC being burdensome for industry, but has so far shown no sign of resiling from Korea's international commitments. Power generation in the country is still heavily reliant on coal.

Having signed up to the coal to clean sector deal in Glasgow, Korea could go further and commit to an earlier phase out date for coal by 2030, in line with the IEA's Net Zero 2050 roadmap. CAT estimate that Korea could increase its 2030 renewable energy target from just over 20% to more than 50%. Reflecting the sector deals signed up to at COP26 in its NDC could also strengthen its target before COP27.



Global emissions %	Emissions ranking	Elections 2022	International role
0.54%	33rd	No	COP28 Presidency

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> 23.5% below BAU	Highly insufficient	73% points 141 Mt CO ₂ e
Enhanced	<input checked="" type="checkbox"/>		
On track?		Notes	

No - further policies, investment & implementation are required to achieve their NDC.

The [1.5°C national pathways explorer](#) estimate that UAE's current NDC translate to a rise of 13% above 2015 levels by 2030, but a 1.5C aligned domestic pathway would require a 36-49% reduction, excluding LULUCF

Net zero target	2050	In declaration/pledge	No LTS submitted
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Glasgow sector deals



							Not a member ,

The United Arab Emirates is developing large renewable and nuclear energy projects but also continuing to expand coal power well into 2050 under current strategies. CAT highlight that their target of 12% 'clean coal' in their energy strategy is not compatible with their net zero commitment.

Factoring in Glasgow sector deals to their NDC, and submitting an LTS for achieving net zero could strengthen their existing target.



Global emissions %	Emissions ranking	Elections 2022	International role
1%	18th	No	COP26 Presidency

NDC target		2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26		At least 68% below 1990 levels	Almost sufficient	10% points
Enhanced				61 Mt CO2e
On track?			Notes	

No - further policies, investment & implementation are required to achieve their NDC.

According to CAT, UK's updated 2030 target falls in a range considered consistent with a domestic 1.5°C compatible target. 'Ambition gap' above considers gap from UK's projected 2030 NDC levels & middle of the 1.5°C compatible range.

Net zero target	2050	In law	Reflected in LTS
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Glasgow sector deals

			2024 PHASE OUT		2030 PHASE OUT		Founder member ,

The UK has an ambitious NDC, in line with 1.5° when compared to domestically modelled pathways, and rated almost sufficient overall by Climate Action Tracker. It needs to close the policy and investment gap towards implementation. As COP26 President, the UK secured the Glasgow Climate Pact which sets the expectation on all nations to return with enhanced NDCs before COP27. Having signed up to most of the sector deals, the UK could enhance its own NDC further by building in a specific target for methane reduction, and set out in detail how it will contribute to its commitment to end deforestation this decade.



Global emissions %	Emissions ranking	Elections 2022	International role
11.8%	2nd	Congressional mid-terms, November 2022	Convener of Major Economies Forum

NDC target	2030 NDC	CAT rating	Ambition gap for 1.5°C alignment (excluding LULUCF)
Revised since COP26	<input checked="" type="checkbox"/> 50-52% below 2005	Insufficient	12% points 831 Mt CO ₂ e
Enhanced	<input checked="" type="checkbox"/>		
On track?		Notes	

No - further policies, investment & implementation are required to achieve their NDC.

[CAT estimates](#) that a 1.5° aligned domestic pathway would mean reductions of at least 57-63% by 2030 below 2005 levels excluding LULUCF

Net zero target	2050	In policy document	Reflected in LTS
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Glasgow sector deals

							Founder member ,

Under President Biden, the US re-entered the Paris Agreement in January 2021 and hosted a climate leaders' summit in April 2021. The US signed several of the sectoral deals, and led the methane pledge, with the EU. In the case of some of the sector deals to which it did not sign up, several states and cities are signatories: the State of California as an associated member of the Beyond Oil and Gas Alliance; three states and 10 major cities are signed up to the sector deal to speed up transition away from internal combustion vehicles. Despite renewed ambition, the US has struggled to pass the necessary legislation and budget through the Senate, and the Biden administration now faces the risk of losing control of the Senate at mid-term elections, putting their commitments in greater doubt. Strengthening their commitments could include incorporating a methane target into the US NDC, and a clearer plan for net zero in their LTS.

Summary table

Summary of countries' climate commitments (as of May 2022)

Country	Share GHG emissions (2018, %)	New/up-dated 2030 emissions reduction target	Enhanced?	Net zero target	Status of net zero target	Long-term strategy (LTS) with net zero target
G20 countries						
Argentina	0.8%	349 MtCO ₂ e by 2030	Yes	2050	Pledge	No submission
Australia	1.3%	26-28% below 2005 by 2030	No	2050	In policy	Yes
Brazil	2.9%	50% below 2005 by 2030	No	2050	Pledge	No submission
Canada	1.6%	40-45% below 2005 by 2030	Yes	2050	In law	Submitted but does not reflect net zero
China	23.9%	> 65% carbon intensity reduction below 2005 by 2030	Yes	2060	In policy	Yes
France	0.74%	40% below 1990 by 2030	Yes	2050	In law	Yes
Germany	1.59%	65% below 1990 by 2030	Yes	2045	In law	Submitted but does not reflect net zero
India	6.8%	No submission	No submission	2070	Pledge	No submission
Indonesia	3.5%	29% (uncond) & 41% (cond.) below BAU by 2030	No	2060	Proposed	LTS only explores scenarios for 2060 net zero commits to no clear pathway
Italy	0.79%	55% below 1990 by 2030 (EU)	Yes	2050	In policy	No submission
Japan	2.40%	46-50% below 2013 by 2030	Yes	2050	In law	Yes
South Korea	1.40%	40% below 2018 by 2030	Yes	2050	In law	Yes
Mexico	1.42%	22% (uncond) and 36% (cond) below BAU by 2030	No	None	N/A	Submitted but does not reflect net zero
Russia	4.1%	70% of 1990 levels by 2030	Yes	2060	Pledge	No submission

Country	Share GHG emissions (2018, %)	New/up-dated 2030 emissions reduction target	Enhanced?	Net zero target	Status of net zero target	Long-term strategy (LTS) with net zero target
Saudi Arabia	1.3%	Reduce GHG emissions by 278m tons CO ₂ e annually by 2030	Yes	2060	Pledge	No submission
South Africa	1.06%	350-420 Mt-CO ₂ e by 2030	Yes	2050	Pledge	Submitted but does not clearly reflect net zero
Turkey	1.0%	No submission	No submission	2053	In policy	No submission
UK	1.0%	68% below 1990 by 2030	Yes	2050	In law	Yes
USA	11.8%	50-52% below 2005 by 2030	Yes	2050	In policy	Yes
EU	6.8%	55% below 1990 by 2030	Yes	2050	In law	Yes
COP Presidency Countries						
Egypt	0.67%	No submission	No submission	None	N/A	No submission
UAE	0.54%	23.5% below BAU by 2030	Yes	2050	Pledge	No submission

Methodology

This briefing was prepared using publicly available information and analyses on countries' climate commitments and opportunities for further emissions reductions. Countries in scope are the G20 member states (as a group of major emitters representing around 75% of global GHG emissions) and the COP27 and COP28 Presidencies, Egypt and the UAE respectively. For each country, we provide the following information relevant to countries' mitigation ambition under the Paris Agreement:

1.. Contextual information

For each country, we provide information on its percentage share of global GHG emissions and its position in emissions ranking based on total GHG emissions, informed by data from Climate Watch. We also provide information on whether there are national elections, based on data from the International Foundation for Electoral Systems, or key political positions on the international stage held by countries that are relevant to climate action and ambition in 2022.

2. Top line 2030 emissions reduction targets

For each country we state the 2030 emissions reduction target included in their new or updated NDC or announced at the head of government/state level where this is available. We also indicate whether the country has responded to the Glasgow Climate Pact's call for countries to revisit and strengthen their NDC.

The assessment's method for determining whether and to what extent these countries have enhanced their NDCs with respect to greenhouse gas (GHG) emissions is based on WRI's technical note for determining the impact of NDC Enhancement on Country-Level Emissions and based on data from Climate Watch's 2020 NDC Enhancement Tracker.

We also include the overall CAT rating for evaluating the country's climate plans and actions. In order to determine 2030 emissions reduction levels required to be compatible with domestic 1.5°C pathways, we rely on publicly available analysis which are cited throughout the document and analysis by Climate Action Tracker.

For each country, we provide the ambition gap for 1.5°C alignment, which is calculated as the difference between the level of emissions under the current 2030 emissions reduction target in the NDC and the middle of the 1.5°C compatible range excluding LULUCF emissions. The difference is shown in percentage points and million tonnes of CO₂ emissions equivalent. For example, Argentina's NDC, submitted in 2021, aims for absolute emissions of 313 MtCO₂e in 2030 (excluding LULUCF), which is a 2% reduction below Argentina's 2010 emissions levels.

The level of ambition required for a 1.5°C compatible domestic emissions pathway is 33% reduction below 2010 levels or 213 MtCO₂e excluding LULUCF, thus the ambition gap is 31% in percentage point terms and 100 MtCO₂e in tonnes of CO₂ equivalent. An important caveat is that this analysis does not take into account what a fair contribution to reducing emissions might be for each country, but rather focuses on the pace of decarbonisation needed to keep 1.5°C within reach. For more information on ClimateAnalytics' 1.5°C national pathways explorer.

3. Implementation

Complementary to setting targets, countries are expected to put forward policies to achieve the emissions reductions needed to address climate change. The paper provides assessments of whether countries are on track to meet their targets based on analysis by the Emissions Gap Report 2021, the Climate Analytics 1.5°C Pathway Explorer and the Climate Action Tracker.

4. Net zero targets and long-term strategies (LTS)

The paper includes information on the country's net zero commitment year and the form in which a country's net zero target is communicated, e.g. whether in a policy document, in law or as a political pledge by a cabinet member or head of state. This is based on the Net Zero Tracker assessment and data from Climate Watch's long-term strategy and net-zero trackers. It also provides an assessment of whether a country has submitted a LTS to the UNFCCC (based on the UNFCCC long-term strategy registry) and whether its LTS reflects its net zero target.

5. Glasgow sectoral deals

For each country, we assess the sectoral pledges each country committed to in Glasgow. This focuses on the Global Methane Pledge, the Glasgow Leaders' Declaration on Forests and Land Use, the Global Coal to Clean Power Transition Statement, the Powering Past Coal Alliance, the Statement on International Public Support for the Clean Energy Transition, the COP26 Declaration on Accelerating the Transition to 100% Zero Emission Cars and Vehicle and the Beyond Oil and Gas Alliance. Other sectoral alliances were not systematically assessed.

6. Further opportunities

This briefing also provides information on priority opportunities and steps that individual countries can take for enhanced climate action ambition and implementation ahead of COP27.

On top line 2030 emissions reduction targets: this briefing places emphasis on the need for enhanced top-line 2030 emissions reduction targets by COP27, especially from those countries that have yet to come forward with a new or updated NDC, or have put forward NDCs that did not meaningfully enhance their targets, maintained the same level of ambition, or weakened their 2030 emissions targets compared to previous NDCs. While other countries have enhanced their top-line 2030 emissions reduction target, they are still expected to revise and

strengthen their 2030 emissions reduction targets to be compatible with 1.5°C pathways.

On implementation: the briefing indicates where countries could enhance the implementation of their climate targets. Where countries are not on track to meet their 2030 NDC target - or not even on track to meet their previous NDC, or NDC targets that have not been enhanced – further policies, investment and implementation are required. Where countries are on track to meet or overachieve their 2030 NDC target, in some cases this is because the target leaves room for further ambition or is less ambitious than current policy projections.

On net zero targets and long-term strategies (LTS): countries who have yet to submit a long-term strategy are expected to do so by COP27, as per the Glasgow Climate Pact. Those countries that have a net-zero target are expected to submit or update LTS with a pathway to net-zero. Those countries that have yet to commit to net zero by mid-century are expected to do so by COP27.

On Glasgow sectoral deals: Countries, who signed up to the Glasgow sectoral pledges, are expected to reflect these targets in a revised NDC by COP27. The remaining countries are expected to sign up to those pledges and reflect them in their NDCs ahead of COP27

Resources

Information sources used prominently throughout this paper include:

- Climate Action Tracker (CAT): <https://climateactiontracker.org>
- Climate Analytics: 1.5°C National Pathways Explorer. Available at: <http://1p5ndc-pathways.climateanalytics.org/>
- Climate Diplomacy Snapshots: <https://unclimatesummit.org/climate-diplomacy-snapshots/>
- Climate Transparency: <https://www.climate-transparency.org/>
- Net Zero Tracker: <https://zerotracker.net/>
- UNEP Gap Report: <https://www.unep.org/resources/emissions-gap-report-2021>
- World Resources Institute (WRI) & Climate Analytics: [Closing the Gap: The Impact of G20 Climate Commitments on Limiting Global Temperature Rise to 1.5°C](#)
- World Resources Institute (WRI): [assessment of G20 countries' 2030 emissions targets](#), building on underlying data from [Climate Watch](#)