# G-20 Zero-Carbon Policy Scoreboard 2025



Executive summary

November 3, 2025

**BloombergNEF** 

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This is an extended excerpt from the *G-20 Zero-Carbon Policy Scoreboard 2025*. Clients can access the full report on the BNEF website and Bloomberg terminal.

### **Executive summary**

### G-20 low-carbon support remains stable – despite headlines to the contrary

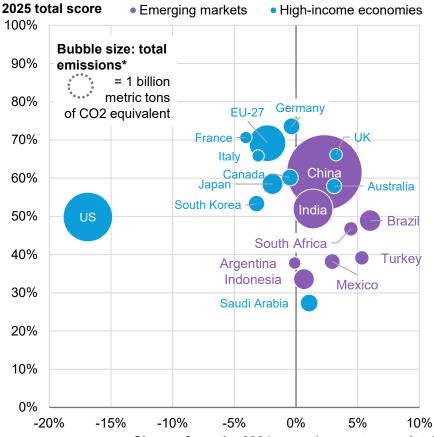
Countries' new climate pledges will be the headline topic at this year's United Nations summit in Belem, Brazil, from November 10. But more difficult than announcing a target is delivering the concrete policy support to meet it. This task became trickier – though not impossible – in the last year, as governments face pressure to reconcile the need for decarbonization with economic and geopolitical priorities. The Policy Scoreboard takes stock of low-carbon government support in the Group of 20, comprising 75% of global emissions.

- Most high-income economies (as classified by the World Bank) have weakened support in the last year. Their average score decreased three percentage points to 59% of the policy support needed to stay on track for net zero, based on BloombergNEF analysis. The US fell 17 points.
- However, all low- and middle-income economies have made gains, closing the gap between the two country groups. The emerging markets, which account for a large share of world emissions, had an average score of 45% – a rise of three percentage points compared with 2024.
- From a global perspective, these markets' progress is as notable as signs of a rollback in high-income economies. As a result, the G-20's average score stands at 53% – less than 0.1 percentage points below the 2024 assessment. That said, a significant uplift in support is needed across the world to get on track to net zero.

#### **Sector findings**

- Governments are rolling out more low-carbon regulations like carbon pricing and mandates. However, they often do not drive decarbonization in practice because they are too weak, participants enjoy generous concessions, or enforcement is lax.
- Markets are also continuing to introduce mandates for climate-risk disclosure by corporations and financial institutions, though some economies have rolled back their sustainable finance strategies. Meanwhile, the G-20 continues to provide hundreds of billions of dollars in public support for fossil fuels.
- These governments are increasingly using subsidies and other measures to promote domestic clean-tech manufacturing. The US is making extensive use of tariffs. But elsewhere in the G-20, the rollout of new trade barriers has slowed.

### G-20 scores for 2025 and change from 2024 assessment vs total emissions



Change from the 2024 score (percentage points)

Source: BloombergNEF. Note: Emissions data from ClimateWatch, excluding land use, land-use change and forestry. EU means European Union. The African Union is not covered in this report because as a body it has implemented minimal low-carbon policy measures.

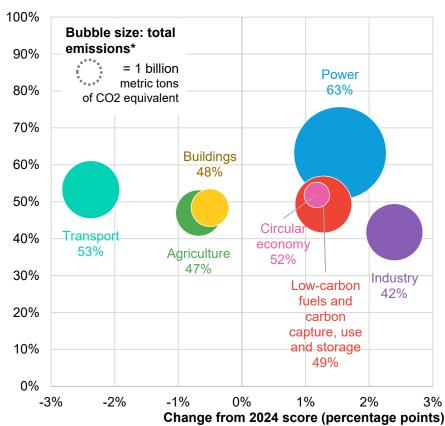
### **Executive summary**

### More policy is needed for low-carbon industry, fuels and agriculture

- Power continues to have the highest average score. Renewables subsidies are being reformed and storage incentives are starting to yield results. But grid programs struggle to keep pace with renewables adoption, more coal power is in the pipeline and plans to use ammonia co-firing will likely be costly with limited environmental benefit.
- The G-20 is gradually increasing support for low-carbon fuels, and carbon capture, use and storage (CCUS). Yet policy uncertainty has caused project delays and cancelations, and more demand-side support is needed. New mandates could be effective once they are rolled out and properly enforced.
- The two sectors most dependent on consumer uptake road transport and buildings –
  had the biggest fall in average score, as policymakers sought to appease public, as
  well as industry, backlash. Some mature electric vehicle markets have cut support, in
  contrast to some newcomers. Governments have sought to improve EV driving costs,
  and focus charging incentives at specific consumer segments and technology types.
- In buildings, heat pumps are promoted by subsidies, carbon pricing and boiler bans.
   But these efforts were counterbalanced by support cuts and political opposition to heating mandates. In warmer climates, policymakers have focused on air conditioning efficiency and appliance standards.
- After years of mostly high-level plans, low-carbon industry policy is shifting from
  aspirational to actionable, buoyed by project funding and carbon pricing. Meanwhile,
  more markets have begun to look toward creating demand signals, which often requires
  standards to define and certify green products, as well as instruments to stimulate or
  mandate green procurement and usage.
- The leaders on circular economy policy offer robust incentives and regulations, and are starting to integrate green practices into their industrial strategies. The remaining G-20 members have begun to target the immediate issue of waste pollution, but policies lack ambition and stringency.
- Agriculture is a weak link in climate policy efforts. Many governments still provide farmers' subsidies that could have environmentally harmful impacts while offering limited support for sustainable practices. Some more ambitious markets have diluted environmental conditions on subsidies and rolled back funding.

### Average 2025 score per sector, change from 2024 and greenhouse gas emissions

#### 2025 score



Source: BloombergNEF. Note: Emissions data from ClimateWatch, excluding land use, land-use change and forestry. "Industry" comprises 70% of manufacturing and industrial processes. "Low-carbon fuels" includes data for fugitive emissions, other fuel combustion and 30% of manufacturing and industrial processes. The bubble size for "Circular economy" is based on emissions from the waste sector.

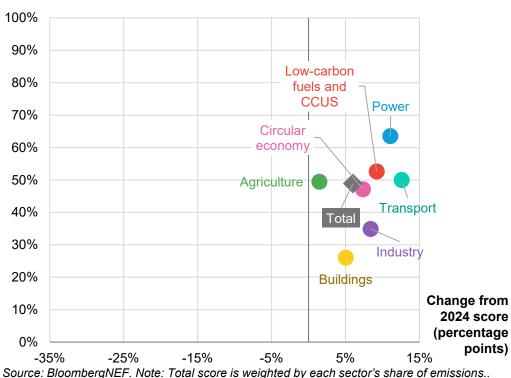
### **Executive summary: Brazil**

### Brazil ratchets up low-carbon policy support ahead of COP30

- Brazil stands out as the top improver in the G-20 this year, increasing its total score by six percentage points to 49%. This performance should help improve its credibility as it hosts the 2025 UN climate summit in Belem.
- Another string to its bow is its 2035 emissions target, which is much more ambitious than a net-zero pathway, based on BNEF analysis. However, despite progress this year, Brazil still lacks support in some major economic sectors – notably agriculture, industry and transport.

#### Brazil score for 2025 and change from 2024

#### **2025 score**



- Brazil had the biggest increase in score out of all the G-20 for power, low-carbon fuels and CCUS, transport, industry and circular economy. It passed legislation to introduce a compliance carbon market. While promising on paper, the scheme will take time to have a concrete impact on emissions.
- A mix of auctions, tax breaks and support for small-scale projects helped Brazil increase renewables capacity (excluding hydro) by 26% in 2024. But it lacks storage incentives, despite a sharp increase in renewables curtailment in recent years making the case for greater power system flexibility.
- To help cement its position as a major biofuels player, Brazil passed a Fuel of the Future law in 2024. This included stricter blending rates, investment in CCUS and low-carbon fuels, and a performance-based system requiring airline decarbonization. It also boosted support for low-carbon hydrogen.
- The country had the largest increase in EV sales growth in 2024 out of the G-20. Sales were partly bolstered by tax breaks and Brazil's openness to Chinese automakers, including new government support to encourage domestic manufacturing.
- Brazil has introduced a package of new policies targeted at tackling industrial
  emissions, including the forthcoming carbon market and new green taxonomy.
  Initiatives like the New Industry Brazil program and Industry Decarbonization
  Hub aim to mobilize public and private-sector capital for projects. The
  government launched the National Circular Economy Strategy and Recycling
  Incentive Law in 2024, while its new clean transport program accounts for
  vehicle circularity.
- Brazil had its smallest increase in score for agriculture, though the sector's share of emissions make it a priority. Low-carbon support comprises a fraction of total subsidies and little aid is targeted at livestock emissions the biggest source of greenhouse gas produced on farms. In addition, Brazil approved in 2025 new environmental licensing legislation that could weaken deforestation controls on small agricultural areas. President Luiz Inácio Lula da Silva vetoed some parts of the law, but the proposal has returned to Congress.

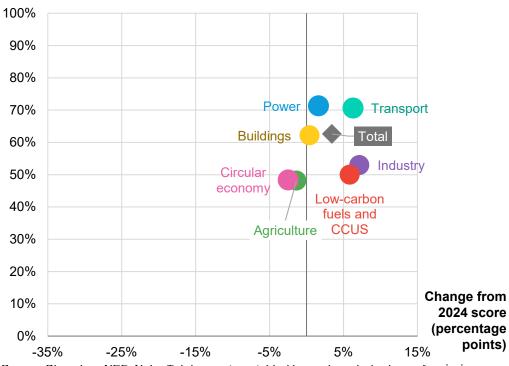
### **Executive summary: China**

### China is the highest-scoring emerging market for low-carbon policy

- China is pivotal to the global energy transition, as both the largest emitter and a leader for clean energy deployment and manufacturing. In terms of domestic low-carbon policy, China increased its total score by three percentage points to 63% this year, making it the top-ranking emerging market in the G-20.
- Its new emissions target for 2035 is modest in terms of the implied reduction in greenhouse gas output. But it provides more certainty as China's first pledge to be based on absolute volumes of emissions covering all greenhouse gases.

#### China score for 2025 and change from 2024

#### 2025 score



Source: BloombergNEF. Note: Total score is weighted by each sector's share of emissions.

- China scores highest for power policy, having auctioned the most renewables capacity per year since 2022, though projects will face more uncertainty in the new subsidy program. It also accounts for the lion's share of new G-20 coalfired capacity, as policymakers focus on energy security in the face of rising power demand and the need for more system flexibility. The government has also rolled out a new energy storage target and support plans.
- More sectors have been included in China's carbon market, which has undergone reforms that should make it more effective as a green policy. In the meantime, it will be a weak incentive for deployment of low-carbon fuels and CCUS. Instead, the rollout of hydrogen production has been largely led by state-owned entities seeking to meet government targets. These enterprises will also be eligible to participate in China's first nationwide program specifically for hydrogen.
- China is also a world leader for EVs: purchase subsidies were phased out in 2022, but policymakers have rolled out a vehicle scrappage scheme. In the meantime, EV sales continue to grow on the back of favorable economics.
- China is one of the largest heat pump markets globally and launched a new plan in 2025. Cooling efficiency remains a focus area, with mandatory appliance labeling and temperature limits.
- A mix of policies aim to spur industrial decarbonization, including carbon pricing and funding. In the last year, China piloted carbon footprint labeling for some products, adopted a standard assessment method for low-carbon steel, and introduced a renewables mandate for some industrial sectors.
- China had its only scoring decreases for circular economy and agriculture, making them its worst-performing areas. Cities have imposed phased bans and restrictions on single-use plastics but implementation remains uneven. Relatively little support is aimed specifically at low-carbon agriculture, as policymakers focus on improving productivity and rural area revitalization. China also ranks second highest for the share of total agriculture support with potentially environmentally harmful effects.

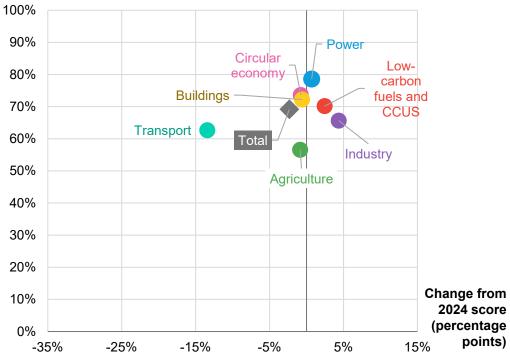
### **Executive summary: European Union**

### The EU retains the top spot but shows signs of slowing momentum

- The European Union and its member states have rolled back some lowcarbon policies in the last year, causing the bloc-level score to decline two percentage points to 69%. But they retain the top ranking out of the G-20, due to their comprehensive and impactful clean energy support.
- The EU is running behind on submitting its new climate pledge. But if the bloc's 2035 emissions target remains in line with the Council of the EU's announcement in September, the bloc would continue on a net-zero pathway.

#### EU score for 2025 and change from 2024

#### 2025 score



Source: BloombergNEF. Note: Total score is weighted by each sector's share of emissions..

- The EU Emissions Trading System remains its pivotal climate policy and is becoming increasingly effective at driving abatement. The bloc's second carbon market is to cover buildings and transport. But a political backlash has delayed national-level implementation, raising uncertainty for companies and consumers. This is one of several examples where domestic political shifts have spurred member states to put off making EU policy changes at national level. This trend has also hit the new Renewable Energy Directive (RED III), which includes much-needed clean power permitting reforms.
- Despite these delays, carbon pricing, renewables auctions and coal phase-out targets continue to promote clean power deployment. Negative price hours and ambitious renewables goals have spurred some countries to revamp subsidy programs.
- RED III will also create demand for green hydrogen and biofuels, though the targets could be challenging to meet and enforce. Still, the EU and member states score points for their low-carbon hydrogen and CCUS subsidies.
- The EU had its biggest decrease in score for transport policy. Countries introduced unexpected subsidy cuts, while the EU has relaxed CO2 emissions targets for new cars in the wake of industry opposition.
- Member states also announced sudden subsidy changes in the buildings sector. But the EU has adopted a roadmap for phasing out fossil-fuel heating.
- The bloc remains a standout for industry policy, with its landmark Clean Industrial Deal to promote decarbonization and boost competitiveness. In addition, the EU and member states provide robust funding schemes to help industries adopt low-carbon technologies.
- In agriculture, the EU provides more and better low-carbon policies than other G-20 economies. But it has lost points for the persistent uncertainty around support programs, with unexpected policy changes and delays. The EU has also weakened the environmental conditions on farmers' income support, with further rollbacks in the pipeline.

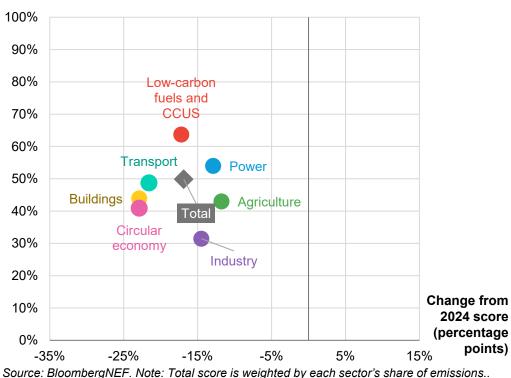
### **Executive summary: US**

### President Trump takes an ax to US low-carbon policy

• The US has undergone an about-turn in low-carbon policy support since January 2025. One of Donald Trump's first steps was to sign an executive order to withdraw the US from the Paris Agreement, invalidating its climate plan submitted at the end of 2024. Some federal rollbacks have been offset by state-level policies, which are included in this assessment. But this was not enough to prevent the US score dropping by 17 percentage points to 50%. It is now the lowest-ranking high-income economy bar Saudi Arabia.

#### US score for 2025 and change from 2024

#### **2025 score**



- In the power sector, the government has tightened access to the US's main federal policy to promote renewables and storage the clean energy tax credits. It has also issued stop work orders for offshore wind farms under construction, and revived support for coal and natural gas generation.
- All EV tax credits have ended, and the federal supply-side mandates for zeroemission vehicles have been gutted. It also lost points for the repeal of a key policy allowing California to impose stricter vehicle emissions rules, followed by 11 other states (though it may yet be revived by the courts). Altogether these 12 states accounted for 40% of the US light-duty vehicle market in 2024.
- The US previously topped the G-20 ranking for low-carbon fuels and CCUS. But it has fallen to sixth place. It brought forward the cutoff date to qualify for the 45V green hydrogen credit, imposed tighter rules on eligibility for clean fuels and CCUS, and weakened the incentives for sustainable aviation fuel. The 45Q tax credit for CCUS was retained and the rate increased for CO2 utilization. But the administration has revoked billions of dollars in federal grants for low-carbon fuels and CCUS, which could deal a critical blow to many early-stage projects.
- The cuts have also affected industrial material decarbonization efforts, while the administration also axed funding for the Industrial Demonstrations Project, and abandoned the Federal Buy Clean Initiative and related grants.
- In addition, the Trump administration froze and then scrapped almost all funding to promote agricultural decarbonization practices. Low-emission conditions have been removed or watered down for surviving programs.
- State-level policies will continue to help drive clean energy deployment together with increasingly favorable economics. Examples include renewables mandates, EV incentives, energy codes for buildings and carbon markets. But the Trump administration has also taken steps to weaken states' capacity to impose low-carbon regulations. Even if these efforts are unsuccessful, the federal changes alone have invalidated the US position as any kind of a climate policy leader.

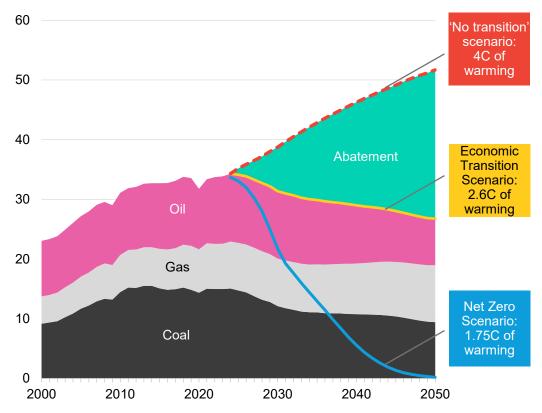
### Introduction



# The Policy Scoreboard answers which G-20 economies have the best low-carbon support

CO2 emissions reductions from fuel combustion by measures adopted in BNEF's Economic Transition Scenario versus 'no-transition' scenario and Net Zero Scenario

Billion tons of CO2

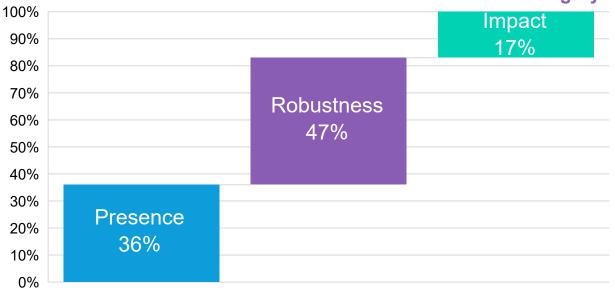


Source: New Energy Outlook. Note: The 'no transition' scenario is a hypothetical counterfactual that models no further improvement in decarbonization and energy efficiency. In power and transport, it assumes that the future fuel mix does not evolve from 2023 (2027 in shipping). This is consistent with at least a 4C temperature rise by 2100, an outcome that would be highly detrimental for the environment.

- This year's United Nations climate summit, known as COP30, begins in a
  week in Belem, Brazil. One question will be center of attention which
  governments have pledged bolder commitments, and which are dragging
  their feet? But targets mean little without concrete support measures to
  achieve them.
- Devising these Nationally Determined Contributions, or NDCs, will be no
  easy task. Average surface temperatures in 2024 were the warmest on
  record, according to National Aeronautics and Space Administration, NASA
  and the National Oceanic and Atmospheric Administration, and the
  European Union's Copernicus Climate Change Service.
- As well as the pressing need to reduce greenhouse gas emissions, governments will need to balance energy security and affordability, bolster industrial competitiveness, mitigate geopolitical pressures and promote economic growth.
- To inform the debate, BNEF's annual G-20 Policy Scoreboard assesses the world's biggest economies based on the quantity and quality of low-carbon support. Now in its fifth year, the assessment uses more than 100 metrics to derive a score out of 100% for each G-20 member.
- Without new policy, governments could only rely on historical efficiency trends and the deployment of economically competitive, commercially atscale technologies. If this happens, global energy-related CO2 emissions decline 13% by 2035 and 22% by 2050 compared with today, according to BNEF's New Energy Outlook. This trajectory, which assumes no new policies to restrict emissions or encourage uptake of low-carbon solutions, is consistent with limiting global temperature rises to 2.6C by 2100.
- BNEF's Net Zero Scenario represents a bold but credible pathway
  consistent with limiting the global temperature rise to 1.75C. Still,
  considerably more policy support would be needed to reduce energyrelated CO2 emissions 37% by 2030 from today four times faster than the
  9% in our economics-driven base case.

### The Scoreboard assesses the G-20 based on the quantity and quality of low-carbon policy





#### How many policies are in place?

- Different types are awarded a different score.
- Targets and plans receive the fewest points, followed by financial and fiscal incentives.
- Regulation-based measures like mandates and carbon pricing merit the highest number of points.

#### How good are the policies?

Our qualitative assessment of • Quantitative metrics to the implemented policies takes account of:

- Effectiveness and completeness of the policy mix
- Stringency of targets and regulations
- Transparency and predictability of the policymaking process.

#### Is there data that the policies are working?

- evaluate whether there is evidence to suggest the policies are having their intended effect.
- Examples include electric vehicle sales, renewables share of the power mix, clean hydrogen production pipeline.

- This report evaluates the G-20 economies based on more than 100 metrics, which can be broken down into the three categories – presence, robustness and impact.
- Jurisdictions vary as to what level of government implements the most impactful policies. Therefore, the scores for Canada and the US take account of federal and state-level programs. Similarly, the score for the EU is based on bloc-level policies and measures introduced by the biggest member states. The individual scores for France, Germany and Italy incorporate national and EU-level policies. For a list of the covered jurisdictions, see the Appendix. The African Union is a G-20 member but is not included in the Scoreboard because it has implemented minimal low-carbon policy.
- Each G-20 economy has a different breakdown of emissions by sector. For example, Saudi Arabia's warmer climate means the buildings sector is 1% of its total (excluding land use and forestry), compared with 16% in the UK. Agriculture comprises 48% of Brazil's emissions, though only 2% in South Korea. Still, every G-20 member will need to decarbonize every sector – whether it comprises 1% or 99% of the total. To take account of these differences across the G-20, each member's total is an average of each sector's score weighted by each sector's share of economywide emissions.

This report focuses on the low-carbon policy implemented by the G-20 economies. For BNEF's annual assessment of energy transition progress and investment attractiveness across emerging markets in particular, see Climatescope 2025. This year's edition examines how these markets have advanced toward a low-carbon future since the Paris Agreement, through renewable energy policies, clean energy investment, and the growth of renewable power capacity.

Source: BloombergNEF. Note: For the full list of metrics, clients can see the full report.

# **Cross-sector policy**



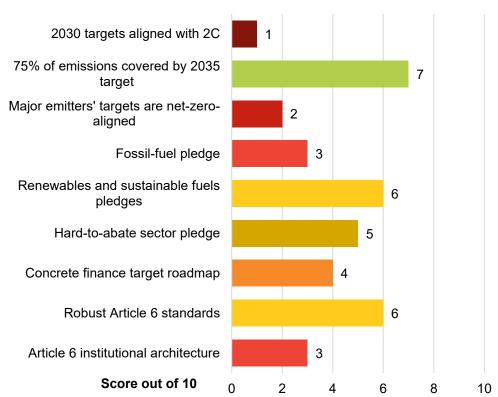
Source: Bloomberg Mercury. Creator: Esteban Vanegas

### **International climate** talks

# This year's climate talks will focus on ambition, action, finance and carbon markets

 Brazil will host this year's United Nations climate summit in Belem over November 10-21. These negotiations reach a milestone every five years. But the 2025 talks in Belem will be no Glasgow, let alone a Paris. The key question will be whether governments are willing to make bolder climate pledges while meeting other, potentially less green, political priorities. Meanwhile, the world's second-biggest emitter, the US, is not expected to attend.

#### **Expected progress at 2035 climate talks in Belem**



Source: BloombergNEF. Note: NDC 3.0s are the next Nationally Determined Contributions. Article 6 refers to the Paris Agreement provisions relating to cooperative mechanisms.

- As with the last four COPs, BNEF has highlighted nine goals that will be key to the talks' success and progress toward the Paris Agreement objectives.
   Based on BNEF's expectations of these goals being achieved in Belem, COP30 scores 4.1 out of 10.
- BNEF is fairly optimistic that most parties will have submitted new climate plans known as Nationally Determined Contributions by the end of COP30. A more important indicator of the success of the talks will be whether major economies' new 2035 emission targets mark a rise in ambition. BNEF considers this to be unlikely.
- Calling Belem "the COP of implementation", Brazil is reviving and adding
  concrete goals such as tripling renewables by 2030 and quadrupling
  sustainable fuels by 2035. Hopefully the 2025 talks will achieve more than
  the previous "implementation COP" in Sharm el-Sheikh, which resulted in
  relatively little progress. Still, while such commitments are valuable political
  signals, they aren't enough to deliver action.
- Key to the success of COP30 will be for parties to reiterate the pledge to transition away from fossil fuels that was a highlight at the 2023 summit but failed last year. The signs don't bode well, especially with the US, which has previously pushed for bolder goals, out of the room.
- Parties need to make progress on identifying how to realize last year's
  targets for climate finance to developing economies. But lingering
  resentments, the lack of a clear way to assign responsibility and the need for
  consensus mean they probably won't make much headway.
- But, after a decade of negotiations, parties still need to make the final
  decisions needed for Article 6 carbon credit schemes to begin trading. In
  Belem, they are likely to adopt standards on eligible project activities and
  legacy credits. But they may well hit a dead end on establishing the
  infrastructure to facilitate carbon trading.

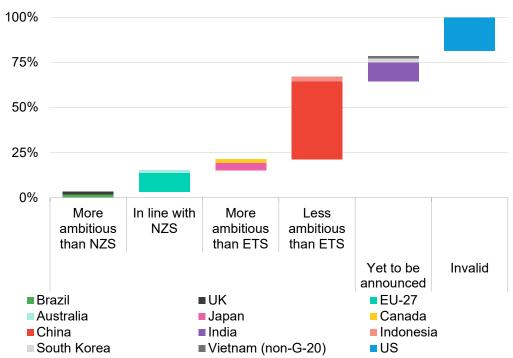
#### Clients can read more:

COP30 Climate Talks to Advance Amid Geopolitical Turmoil

### But not all 2035 emissions targets are in line with a net-zero trajectory

 Under the Paris Agreement, NDCs outline how a government intends to tackle climate change, with each version to be more ambitious than the last. The process is voluntary, meaning peer pressure is critical to spurring countries to ramp up their climate goals.

#### Status of 2035 emissions-reduction targets and share of emissions of select major economies



Source: BloombergNEF, ClimateWatch emissions data, United Nations. Note: NZS means Net Zero Scenario. Figure shows carbon emissions from energy only. Applies parties' maximum, economy-wide, unconditional, greenhouse gas reduction targets. "EU-27" here includes Norway and Switzerland. China and the EU have announced likely targets but have not submitted formal NDCs. China's target is based off the year emissions peak. US plan was invalidated after President Trump signed an executive order to exit the Paris Agreement.

- Six G-20 members have issued their latest NDCs, including their first 2035 emissions targets. China and the EU have announced their new 2035 targets but not yet submitted their new NDCs.
- In terms of ambition, Australia, Brazil, the EU and the UK's 2035 goals are bolder than, or in line with, BNEF's Net Zero Scenario. This represents a credible pathway to net zero globally by 2050 and limits warming to 1.75C by the end of the century.
- In contrast, Japan and Canada's 2035 stated targets would fall short of the Net Zero Scenario. But they are bolder than BNEF's Economic Transition Scenario, which models a least-cost evolution of the energy system based on techno-economic trends and in the absence of new policy regimes.
- China's pledge is modest: under BNEF's economics-driven base case, energy-related CO2 emissions in 2035 are 37% below the peak, which we assume to be in 2024. This would put emissions well above even BNEF's economics-driven base case.
- But the new target is significant in terms of climate diplomacy: not only does it cover all greenhouse gases, not just CO2, it is also based on absolute emissions rather than intensity. This shift is in line with repeated requests by developed economies and could signal China's intention to cement its relationship especially with the EU, given weakening ties to the US.
- The Policy Scoreboard takes account of this analysis when assessing each G-20 economy. The US goal was also aligned with a net-zero trajectory but was invalidated by President Trump's decision to exit the Paris deal. As such, the US is allocated a score of zero for this metric, as are India and Indonesia because they have yet to issue a new NDC. The remaining G-20 economies that are not analyzed in the New Energy Outlook are allocated scores based on their targets' implied change in emissions.

#### Clients can read more:

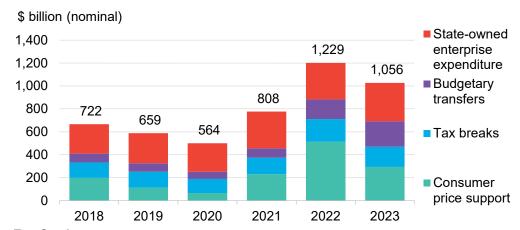
Setting 2035 Targets to Get on Track to Net Zero

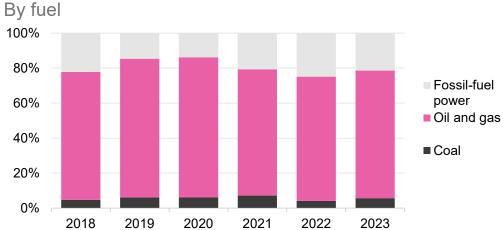
### Fossil-fuel subsidies

# The G-20 provided \$1 trillion per year in fossil-fuel support over 2021-23

#### G-20 fossil fuel support

By type



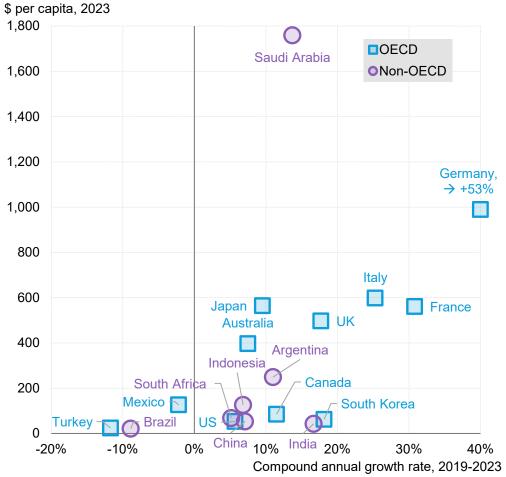


Source: Organisation for Economic Co-Operation and Development, International Energy Agency, Oil Change International, International Institute for Sustainable Development, BloombergNEF. Note: Includes budget transfers, tax expenditure, public finance, expenditure by state-owned enterprises, and consumer-price support. Figure excludes the EU multilateral banks (the European Investment Bank and European Bank for Reconstruction and Development) and the African Development Bank.

- The G-20 has not made much headway on realizing its 2009 <u>pledge to</u> "phase out and rationalize over the medium term inefficient fossil-fuel subsidies" a commitment the group has repeated at most of its summits since then, including <u>India in 2023</u> and <u>Brazil in 2024</u>. G-20 support for coal, natural gas, oil and fossil-fuel power averaged \$1 trillion per year over 2021-23, marking a 59% rise on the 2018-2020 mean.
- The energy crisis was a significant driver of the rise, as governments sought to shield consumers and to a lesser extent producers from surging energy prices. Some countries faced other challenges that pushed up fossil-fuel support, including abnormally hot weather, unexpected drought, fuel shortages and power plant outages. Still, even without the added support due to these factors, the G-20 would likely have continued to provide hundreds of billions of dollars per year for fossil fuels.
- This support slows the energy transition, as it distorts prices, encouraging
  potentially wasteful use and production of fossil fuels, and leads to
  investment in long-lived, emissions-intensive infrastructure. Such subsidies
  may reduce government spending on low-carbon policy support. In addition,
  even when these measures aim to help low-income households and other
  vulnerable consumers, they tend to disproportionately benefit the wealthy.
- In terms of the type of support, consumer price subsidies averaged \$346 billion over 2021-23, having declined to \$66 billion in 2020. Spending by state-owned enterprises was the second-biggest component of fossil-fuel support in recent years, where such entities play a significant role in the energy sector especially in China and Saudi Arabia.
- The breakdown of fossil-fuel support by fuel has changed little in recent years. While coal accounts for a small share, the high volume of total fossil-fuel support over 2021-23 means G-20 governments still provided \$56 billion per year on average to the most emissions-intensive fuel. China and Indonesia were the biggest providers, with coal continuing to play a key role in their energy systems.

# Saudi Arabia and Germany topped the G-20 for fossil-fuel support per capita in 2023

#### Fossil-fuel subsidies provided by G-20 economies



Source: The Organisation for Economic Co-Operation and Development and the International Institute for Sustainable Development's Fossil Fuel Subsidy Tracker. Note: Includes only tax breaks, budgetary transfers and retail price subsidies from G-20 governments except international bodies like the EU banks. As a result, these figures may differ from the values in BNEF's Climate Policy Factbook 2024.

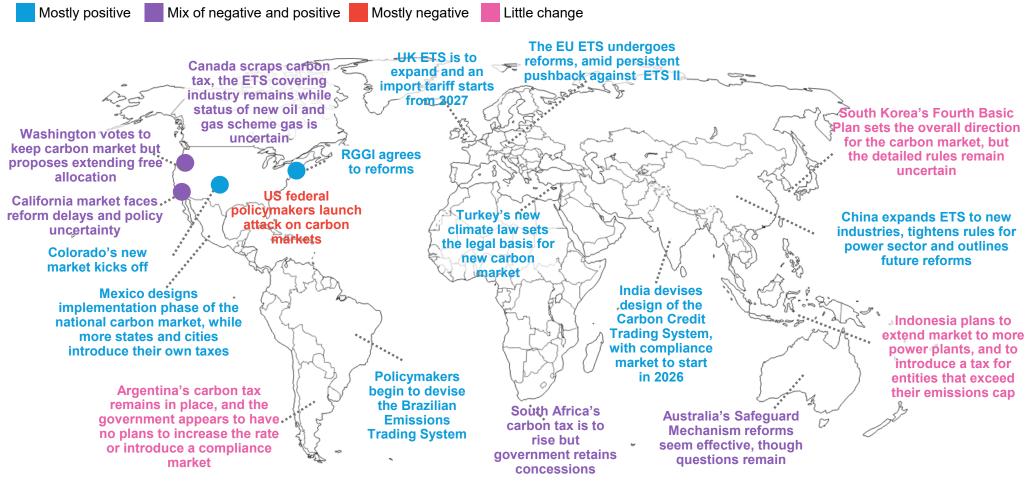
- BNEF's Policy Scoreboard takes account of the G-20 economies' progress in phasing out fossil-fuel support based on the two metrics shown in the figure. These are the per-capita sum in 2023 and the compound annual growth rate of the absolute volume of support over the five years to 2023.
- G-20 members of the Organisation for Economic Co-Operation and Development (OECD) were especially exposed to the impact of the global energy crisis due to reliance on Russian gas and imports of liquefied natural gas. As a result, these countries also provided more fossil-fuel support on a per-capita basis in 2023 than other G-20 economies.
- In contrast, markets with domestic coal or gas supply like the US, South Africa, Indonesia and Canada generally maintained a steady rate of fossilfuel support over the five years to 2023. Some like Brazil, with its hydrodominated power system, even saw a decrease during the period.
- These markets also tended to provide less fossil-fuel support per capita in 2023. However, the clear exception is Saudi Arabia, which is a major oil and gas producers and exporters.
- Canada is one of the few G-20 members that have taken steps forward, publishing guidelines in 2023 on the definition of <u>inefficient fossil-fuel subsidies</u>. A key issue with fossil-fuel subsidy reform around the world is the lack of agreement on what constitutes a fossil-fuel subsidy and when it is inefficient. The Canadian government introduced a framework requiring ministers to identify whether any initiative would meet this definition, and if so, they must revise their plan.
- The EU has also made some headway. Its eighth Environment Action
  Programme, which covers 2022-2030, called for an immediate phaseout of
  such support, and progress is monitored by the European Commission's
  State of the Energy Union report. Member states must also include
  information on fossil-fuel subsidy reform in their annual energy and climate
  progress reports. In addition, as of 2025, all fossil-fuel heating subsidies
  must end.

### **Carbon pricing**

# Most of the G-20 take steps to introduce or strengthen carbon pricing

#### **BNEF** assessment of progress in G-20 carbon-pricing policies

The Scoreboard awards points if countries make substantive progress on introducing a carbon tax or compliance market. In addition, G-20 economies earn more points if – as many have done in the last year – they enhance these policies, for example by expanding programs to more sectors, eliminating concessions for participants, or undertaking other reforms to make the schemes more effective at driving emission abatement.



Source: Governments, Bloomberg News, BloombergNEF. Note: ETS means emissions trading scheme. RGGI is the Regional Greenhouse Gas Initiative.

### But most programs pack little bang for their buck

#### Existing carbon pricing across the world

Bubble size: absolute emissions covered by carbon price

= 250 million metric tons of CO2 equivalent

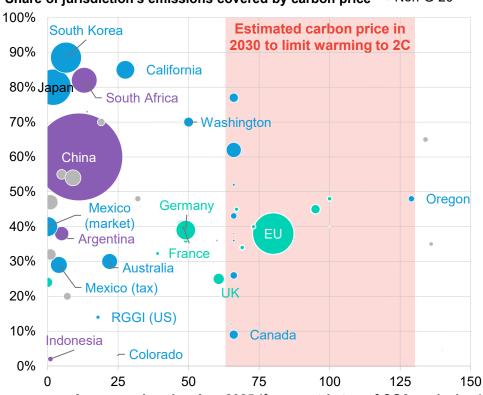
OECD Europe

Other OECD

Non-OECD

Share of jurisdiction's emissions covered by carbon price

Non-G-20



Average price, Jan-Aug 2025 (\$ per metric ton of CO2 equivalent)

Source: BloombergNEF, Carbon Credit Fungibility Data Viewer 1.0; Global Carbon Market Prices LiveSheet 1.2 exchanges, World Bank, governments. OECD is the Organisation for Economic Co-Operation and Development. Figure includes market-wide carbon prices and subnational policies in Canada and the US. RGGI is the Regional Greenhouse Gas Initiative in the US.

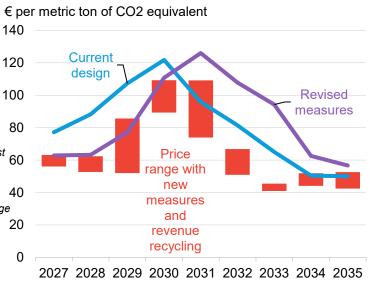
- The G-20 leads the world in terms of implementation of compliance carbon pricing. These economies are home to 60 such programs – the lion's share of the global total – and more are in development.
- These schemes vary considerably in scope and pricing: broadly speaking, the policies that cover a bigger share of the jurisdiction's emissions have lower prices, such as South Korea and South Africa. Many of the G-20 programs in Europe tend to be at the other end of the spectrum.
- As a result, most of these policies are unlikely to make a dent in countries' low-carbon targets. Often prices are too low, with an average of \$48 per metric ton of CO2 equivalent across the world. These should be between \$63/t and \$127/t in 2030 to limit global warming to 2C, based on recommendations by the World Bank's High-Level Commission on Carbon Pricing, adjusted for inflation.
- The EU, Canada and the UK markets have already breached the lower end
  of this range. But this is not the case for most existing programs, while even
  fewer stand a chance of reaching \$226-385/t the World Bank's estimate
  for a 1.5C warming scenario.
- Price is not the only factor that determines carbon-pricing effectiveness:
   some emissions-trading schemes have weak caps and baselines due to low
   climate ambition, as discussed <u>below</u> for Australia and India. Many continue
   to provide a sizeable share of permits for free, with few publishing plans to
   phase out such a free allocation. The plans that have been issued are
   relatively unambitious. Touted as one of the most stringent carbon markets,
   the EU Emissions Trading System is due to continue providing free
   allocation to industrial players until 2034.
- As for carbon taxes, many include sizeable allowances and other concessions that enable companies to reduce their exposure to the levy. South Africa's tax as well as Canada's now canceled policy are such examples, as outlined <u>below</u>.

# The world's biggest carbon markets – China and the EU ETS – are set to be more impactful

- The EU ETS has reviews on the horizon, with topics including whether to modify the market stability reserve (a critical supply control mechanism), to expand coverage, and to allow carbon removal credits for compliance. Another uncertainty will be the assessment of the <u>Carbon Border Adjustment Mechanism</u>. In terms of the EU ETS's effectiveness, generous free allocation to industry has meant it has largely driven power sector abatement to date, as will be the case for the next five years. Thereafter, BNEF expects the price to be determined by industrial options for decarbonization, reaching €147/tCO2e by 2030.
- The EU's second carbon market, EU ETS II, kicks off in 2027 and will cover road transport and buildings. Due to concerns about the impact on consumer bills, the European Commission announced in October plans to propose measures aimed at depressing prices by increasing the supply of allowances through the market stability reserve, or MSR. Under the new rules, as many as 80 million allowances could be released annually by the MSR if carbon prices exceed a "soft cap" of €45/tCO2 (real 2020) for two consecutive months. This is up from 20 million under the current design.

# Forecast EU ETS II carbon price under different scenarios

Source: BloombergNEF. Note:
New measures used to forecast prices include changes in the Market Stability Reserve cost containment and supply adjustment rules. Showing range of carbon price forecasts if 0-100% of ETS II revenue are recycled for subsidy and lower electricity prices for electric vehicles and heat pumps.



- The MSR could also intervene more flexibly during periods of low liquidity, measured by surplus allowances. Any unused allowances in the reserve by 2030 would be set aside for possible future use, rather than being made invalid under the current rules. BNEF estimates that this measure could lower average carbon price forecasts for the decade by nearly 20%, to around €78/tCO2e, compared with €99/t under the current design.
- The UK has answered some questions around its ETS: the maritime and waste sectors will be incorporated, though this is expected to have limited impact on the market if allowance supply is increased in line with sectoral emissions. In addition, by 2029, participants can use credits from domestic carbon removal projects for compliance, potentially easing the burden on industrial companies to cut their missions. But supply may struggle to keep up with demand, given that, as of July 2025, the UK only has 10 removal projects in the pipeline for 2030.
- China has incorporated aluminum, cement and steel industries into its carbon market, boosting covered emissions to 60% up from 40% in 2021. It plans to further expand the scheme and cover all heavy-emitting industries by 2027, based on government documents made public in August 2025. This year's expansion is unlikely to have a marked impact on industrial emissions in the near term due to generous free allowance volumes. However, policymakers may begin to reduce the total emissions cap, and they have already tightened rules for power-sector participants, including less free allocation, restrictions on allowance banking, and a ban on borrowing from future phases.
- In addition, the government documents published in August suggest that the
  whole market will shift from a cap based on emissions intensity (that is, per unit of
  GDP) to an absolute emissions cap by 2030. Such a move could make the policy
  significantly more effective at driving decarbonization. Emerging markets like
  such intensity-based targets as they allow for economic expansion. But they also
  often mean that absolute emissions can rise.

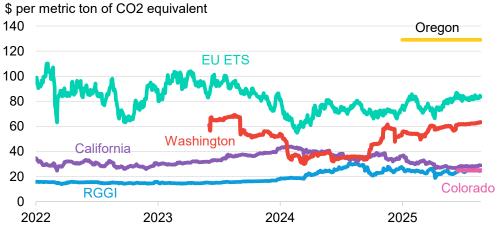
#### Clients can read more:

EU ETS Market Outlook 1H 2025: On the Brink of Change EU's Looser Rules for New Carbon Market Trigger Big Falls Carbon Market Turns Into China's Energy Transition Engine

### **US** state-level programs are under attack

- In the last year, the US has seen a new carbon market begin (Colorado), an existing market survive a vote to repeal it (Washington) and a suspended program relaunch (Oregon). California and the Regional Greenhouse Gas Initiative, or RGGI, remain the country's biggest carbon markets. But all of these state-level schemes are under fire from federal policymakers. Although existing programs are unlikely to be abolished, the additional political uncertainty will likely keep a lid on carbon prices and stifle smaller markets.
- The RGGI states agreed to long-awaited reforms in July 2025, which should make it a stronger driver of decarbonization. The states must now transpose the new rules, with a target date of January 2027. Market reforms continue in California. One question was resolved in September 2025 when the California scheme was officially extended to 2045. But outstanding issues include emissions cap ambitions, price ceilings and rules on offsets.

#### Carbon prices around the US vs the EU ETS



Source: California Air Resources Board, Regional Greenhouse Gas Initiative, Washington State Department of Ecology, Colorado Department of Public Health, Oregon Department of Environmental Quality, Bloomberg Terminal, BloombergNEF Note: The Colorado price reflects the settlement price at the first two auction rounds. The Oregon price reflects the fixed price of a Community Climate Investment Credit.

- As for the newer programs, Washington saw prices rise on the back of shrinking permit supply, increased purchase limits and delays to its linkage with the California-Quebec system. Its long-term pricing trend is uncertain, as policymakers plan to extend free allocation to 2050 for heavy-emitting industries exposed to international competition.
- The move is meant to alleviate the financial burden for the sectors with limited low-cost green solutions available, and to discourage their relocation overseas. But it would also limit the policy's effectiveness at driving the decarbonization of these industries, which accounted for over 37% of Colorado's emissions in 2023.
- The US's newest market in Colorado has yet to reach Washington's pricing heights. It requires 18 of the highest-emitting manufacturers to collectively cut emissions by 20% below 2015 levels by 2030. But its impact will be limited given that 10 of the facilities have already met their individual goals and the scheme does not include Colorado's biggest emitter, the power sector.
- Oregon's carbon market known as the Climate Protection Program first began in 2022 but was suspended due to procedural errors. Having been relaunched in January 2025, only fuel suppliers will have compliance obligations in the first two-year phase but then the scheme will be expanded to energy-intensive trade-exposed industries and direct natural gas users. Participants may comply by submitting allowances, some of which will be distributed for free by the government. They can also meet up to 15% of their obligation by purchasing carbon credits (Community Investment Credits) for a fixed price of \$132/t.

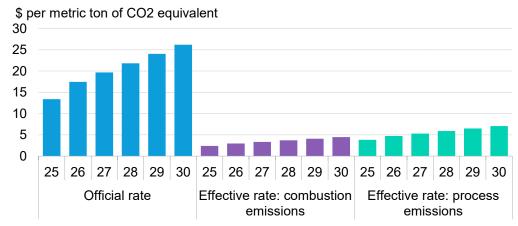
#### Clients can read more:

US Carbon Price Hits Rock Bottom as Confidence Cracks New US Carbon Market Proves It Can Play With the Big Kids US Carbon Price Shoots Up 17% as Auction Demand Soars California-Quebec Carbon Market Outlook 2025 Trump's Attack on Climate Law Rattles US Carbon Market

# Carbon taxes proliferate in Mexico, increase in South Africa and kick the bucket in Canada

- The South African government has taken steps to make its carbon levy more effective as a green policy: the tax rose to 236 rand (\$13.4) per ton of CO2 equivalent on January 1, 2025 up from 190 rand/t and will reach 462 rand/t by 2035. In addition, the country's biggest emitter, the power sector, will become subject to the carbon tax from 2026, as the levy on electricity generation will be scrapped.
- On the downside, the government has confirmed that various concessions will be retained, including the 60% tax-free allowance, even though they were meant to be temporary. As such, at most, companies will pay the tax on only 40% of their emissions.
- They can further reduce their liability in other ways for example if they are
  exposed to international competition. As a result, on paper, the 2035 rate is 462
  rand/t, but companies may pay as little as 79 rand/t on combustion emissions
  and 125 rand/t on process emissions.

### Official rates for South Africa's carbon tax and effective rates with concessions



Source: BloombergNEF, South African government. Note: Effective rates assume maximum use of offsets and concessions, except productivity.

- In Canada, the fiscal-only impact of the carbon tax was progressive, according to an October 2024 report by the Office of the Parliamentary Budget. That is, lower-income households enjoyed a net gain when taking account of the federal fuel charge and the associated rebate. However, this was not enough to save the tax, which was scrapped on Prime Minister Mark Carney's second day in office in March 2025.
- The impact of the country's Large-Emitter Trading System, which covers
  power and industry, remains limited in a similar way to South Africa's carbon
  tax. On paper, the LETS guidance price was C\$80/t (\$56/t) in 2024-25, but on
  average emitters paid an effective cost of C\$10/t, according to the Canadian
  Climate Institute.
- In the meantime, the former federal government published regulations in November 2024 to introduce a cap-and-trade on upstream oil and gas players and liquefied natural gas producers. If phased in over 2026-29 as planned, such a program could be impactful in the long term given that oil and gas emissions accounted for 31% of Canada's emissions in 2023.
- The scheme's status is unclear: the new Liberal administration pledged to
  maintain the policy before the April 2025 election. But Prime Minister Carney
  has since taken steps to appease the oil and gas sector, and media reports
  suggest he may offer to scrap the cap in return for oil and gas companies'
  investment in carbon capture and storage.
- In Mexico, four more cities and states have introduced carbon taxes in 2025, ranging over 58-566 pesos/ton (\$3-28/t). As a result, the country has a patchwork of more than 10 subnational levies as well as the national carbon tax.
- Policymakers have yet to make substantive progress on the regulations to launch a fully-fledged compliance carbon market after the pilot scheme ended in 2021. The program was due to be fully launched in 2023, but the transition phase was extended.

# Brazil, Japan and Turkey take concrete steps toward compliance carbon pricing

- The law to implement the Brazilian Emissions Trading System (SBCE) was enacted in December 2024. But the program is unlikely to have a major impact on Brazil's ambitious near-term emissions goals. One reason is timing: based on the implementation schedule, the market will only kick off in full in the early 2030s, at the earliest. In addition, the program will not cover agriculture, which accounted for 35% of emissions (including land use and forestry) in 2022.
- The Turkish Emission Trading System (TR ETS) will have a more limited sectoral scope, covering power and industry at the start. The country's first comprehensive climate law was approved in July 2025, establishing the legal basis for the new carbon market. A two-year pilot phase is expected to begin in 2026. Given its ambitions to become an EU member state, Turkey may seek to align its market as much as possible with the EU ETS, as it has done with its overall energy policies. Key differences between the EU market and proposed TR ETS design will be the use of an intensity-based cap and use of offsets, though the EU market may well allow domestic removal credits in the future.
- In Japan, the green transformation emissions trading scheme (GX-ETS) will begin the first compliance phase by April 2026. Current proposals suggest the market will cover around 60% of the country's emissions. Unlike Brazil and Turkey, Japan has experience of compliance carbon pricing having introduced a nationwide tax in 2012. But with an average price of \$2 per metric ton, the levy has done little to spur decarbonization.
- All three programs will allow the use of domestic carbon credits subject to certain limits, potentially creating significant demand. For just Japan, BNEF estimates that annual demand for eligible units could reach around 52 million metric tons of CO2 equivalent in 2030. This suggests a potential market size of \$0.7-1 billion assuming domestic J-Credit and JCM prices align with global voluntary credit levels. However, to ensure the new compliance programs are effective at spurring emissions abatement, it will be key for the governments to introduce stringent rules on credit integrity. For more detail, see: Japan's New ETS Could Unlock a \$1 Billion Carbon Market.

#### Brazil, Japan and Turkey's new cap-and-trade schemes based on government announcements and proposals

	Brazilian Emissions Trading System (SBCE)	Japan's Green Transformation Emissions Trading Scheme (GX-ETS)	Turkish Emissions Trading System (TR ETS)
Expected launch	Early 2030s	By April 2026	Pilot stage (2026-27)
Type of scheme	Cap and trade with absolute emissions cap	Baseline and credit	Cap and trade with intensity-based emissions cap
Sectors covered	All sectors except agriculture	All sectors	Power and industry (proposed)
Inclusion thresholds	Emissions over 25,000t per year	Emissions over 100,000t per year	Emissions over 50,000t per year
Allocation method	Free allocation and auctioning after phase 1	Free allocation and auctioning from FY 2033	Free allocation and auctioning from 2028
Use of carbon credits	Yes – domestic only	Yes – domestic or bilateral scheme*	Yes, but not during pilot phase – domestic only
Credit limits	Yes – to be determined	Up to 10% of compliance obligation	Up to 10% of compliance obligation

Source: BloombergNEF, governments, International Carbon Action Partnership. Note: \*Joint Crediting Mechanism. T means metric tons.

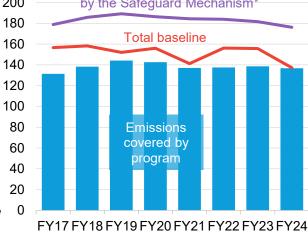
### Australia and India face questions on emission thresholds and credit oversupply

#### **Emissions covered by Australia's Safeguard** Mechanism and in related sectors

Source: BloombergNEF, Australian government, Clean Energy Regulator. Note: FY refers to the Australian financial year, which runs from July 1 to June 30. \*Stationary energy excluding electricity, fugitive emissions and industry. Excludes waste and transport as most entitles would be too small to be included in the Safeguard Mechanism.

#### Total emissions for sectors covered 200 by the Safeguard Mechanism\* 180 Total baseline 160

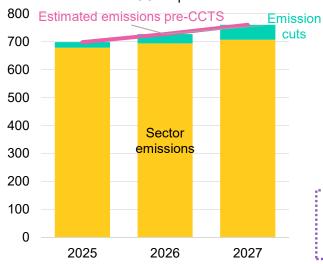
Million metric tons of CO2 equivalent



#### **Estimated emissions** covered by India's **Carbon Credit Trading Scheme**

Source: BloombergNEF, Down to Earth. Note: Actual CCTS compliance cycles take place on a fiscal-year basis, but this chart shows calendar years. Assumes reductions of 3%, 5% and 7% in 2025, 2026 and 2027, respectively, relative to a 2024 baseline of India's entire industry emissions. Estimated emission projections are based on BNEF's New Energy Outlook 2025.

#### Million metric tons of CO2 equivalent



- Australia has one of the few baseline-and-credit programs in the world, and India is on track to follow suit. These schemes award participants with credits for emitting less than their allocated thresholds, but if they exceed their baselines they must buy credits.
- The reforms to Australia's Safeguard Mechanism have shown signs of working, as program emissions fell 1.4% in financial year 2024. But it is hard to identify whether the reduction was due to the program or broader trends, given that the total for all companies in the program sectors fell by more (3%) that year. In addition, while the government tightened baselines overall, some big emitters like liquefied natural gas facilities saw theirs rise. This has again raised questions about whether the thresholds are too generous and the potential impact of the mounting credit surplus.
- India's Carbon Credit Trading Scheme (CCTS) kicks off in late 2025, comprising two tracks: a compliance baseline-and-credit scheme covering nine industrial sectors, and a voluntary crediting mechanism. Several factors could limit its effectiveness; first, unlike most new carbon markets. the regulated track will not cover the power sector, which accounts for around 40% of India's greenhouse gas output.
- Second, the baselines will be based on emissions per unit of GDP, rather than absolute volumes. Emerging markets like such targets as they allow for economic expansion. But they also mean that absolute emissions can rise, as is expected under the CCTS. Third, a voluntary credit oversupply seems inevitable. As of August 2025, approved projects under the CCTS had issued 278 million units since 2017, with a listed capacity of up to 120MtCO2e per year. This compares with the 67MtCO2e of required emissions reductions in the first CCTS phase, based on BNEF analysis.

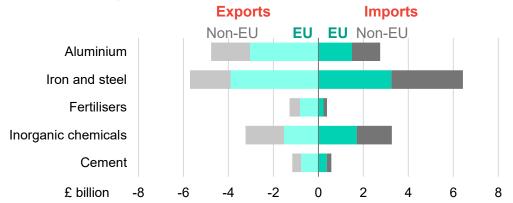
#### Clients can read more:

LNG Gains in First Year of Australia Carbon Market Reforms India's Cheap, Oversupplied Carbon Market Can't Rival EU's

# Countries pursue strategies to mitigate exposure to the EU carbon border tariff

• The EU's Carbon Border Adjustment Mechanism is undergoing reforms. Amendments took effect in October, which should lessen the administrative burden for importers. This included eagerly awaited high-level principles regarding how companies may claim a reduction in the number of CBAM certificates to be surrendered for carbon prices effectively paid in non-EU countries. This could include the use of default carbon prices set by those countries or the European Commission. However, there are concerns that generous crediting, especially via defaults, could weaken CBAM's impact. The precise repercussions will not be known until the detailed rules are published. Countries including Israel, Malaysia, Morocco, Serbia and Turkey have indicated that CBAM has influenced their plans to introduce domestic carbon pricing. Some governments are also pushing for concessions to reduce their exposure but without implementing a carbon price. As part of a new trade framework with the US announced in August, the EU has pledged to consider additional "flexibilities in the CBAM implementation" having taken note of "the US concerns related to treatment of US small and medium-sized businesses".

#### UK trade of goods covered by the EU CBAM



Note: BloombergNEF, UK government. Note: Percentage refers to EU trade as a proportion of the UK trade with the world.

- Reducing exposure to CBAM is another reason why the UK is working toward linking its carbon market with the EU ETS. Over the last four years, more than half of the UK's export of goods covered by CBAM head for the EU, according to the country's government.
- As the UK also makes progress on implementing its own carbon border tariff, a link between the two markets should streamline trade between the economies. Such mergers are also meant to increase market liquidity and price stability, improve abatement options, and reduce the chance of carbon leakage between the two jurisdictions. But agreeing on how to link schemes is complex and time-consuming negotiations and implementation took around 10 years for Switzerland and the EU.
- In May 2025, the UK and EU confirmed their commitment to link schemes. The UK ETS is more ambitious than the bloc's scheme, with a tighter emissions cap trajectory. It also has fewer low-cost abatement options: the closure of its last coal-power plant in 2024 means more expensive solutions like industrial decarbonization will be required. As a result if the linkage takes effect after 2030, the average carbon price is expected to be higher than BNEF's base-case projection, though the precise trajectory will depend on the linkage start date.
- The EU and UK are not alone in seeking to link their programs: having formally begun discussions in 2024 about linking its market with the California-Quebec system, Washington anticipates reaching a 'linkage agreement' in 2026 and implementing it in 2026-27. This could be ambitious given that, if all goes to plan, the new rules will only be adopted in summer 2026. Quebec and California would also need to conduct their own checks and gain approvals, as well as finalizing delayed market reforms.

#### Clients can read more:

EU ETS Market Outlook 1H 2025: On the Brink of Change UK Carbon Market Link With EU Would Avoid Border Tax Costs

### **Climate-risk policy**

### Markets continue to mandate climate-risk disclosure as ESG becomes more contentious

- Rationale: when assessing sustainable finance policy for the Scoreboard, BNEF focuses on climate-risk disclosure, encompassing both the physical and transition consequences linked to global warming. Due to the potential economic consequences of these risks, governments must mitigate their exposure by mandating companies and financial institutions to report against these vulnerabilities. This may lead financial institutions to price climate change impacts into their investment or lending activities, to lessen the risk of an economic crisis and shift portfolios away from activities not aligned with a low-carbon economy.
- Methodology: the Scoreboard takes account of the level of climate-risk policy support in each market such as a green taxonomy (a classification of what economic activities are considered environmentally sustainable) or mandatory climate-risk disclosure for corporations and financial institutions.
- Leaders: the EU and its member states are at the top of the ranking, due to ambitious sustainable finance policy mostly at the bloc level. But these policies may be less impactful in the future, if the EU goes ahead with proposals to simplify and weaken its rules on climate-risk disclosure for financial institutions and corporations, and its sustainable taxonomy. Brazil is not far behind the EU in terms of its existing policy framework, which is one of the most comprehensive in the world. It will release its taxonomy during COP30, becoming the second jurisdiction (after the EU) to require that organizations report against it.
- Laggards: the markets at the bottom of the leaderboard like Saudi Arabia have yet to develop any mandatory rules on climate risk. However, China may move up in the ranking in the coming years as it has announced plans to mandate climate-risk reporting from corporations.
- Ranking moves: three markets have changed ratings in 2025 the US has plummeted downward, after rescinding all of its flagship sustainable finance policies, including the Securities and Exchange Commission climate disclosure rule. In contrast, Australia and Mexico have improved their rating, after they passed rules that mandate reporting against the International Sustainability Standards Board (ISSB) framework. Both Australia and Mexico enforce climate-related financial disclosure, while Mexico in addition requires general sustainability disclosure. These changes highlight an overall trend to mandate more climate-risk disclosure in the future.

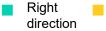
#### Clients can read more:

Sustainable Finance Policy Quarterly: 3Q 2025

Theme page: Tracking ESG Policy Rollbacks Around the World

#### **BNEF** rating of climate-risk policy

	Oct 2024	Oct 2025
Australia		<b>■</b> ↑
Brazil		
France		
Germany		
India		
Italy		
Japan		
Mexico		<b>■</b> ↑
UK		
EU		
Canada		
South Africa		
Turkey		
Argentina		
China		
Indonesia		
Saudi Arabia		
South Korea		
US		<u> </u>



Mixed

Wrong direction/ insufficient progress

Improvement  $\Psi$  Deterioration

Source: BloombergNEF.

# Five G-20 markets have rolled back their sustainable finance policy strategies

- At least five G-20 members have begun watering down or have scrapped ESG policies since the end of 2024. Three main reasons explain this retreat. First, some markets, such as the EU and Canada, are seeking to ease regulatory burdens on domestic companies to protect their competitiveness. This has led other markets like South Korea to postpone the implementation of their climate rules as they wait for clarity regarding policy around the world, in particular in the EU. Some policymakers are assessing the effectiveness of their policies at redirecting capital to the energy transition, the motive presented by the UK for cancelling plans to develop a green taxonomy. Finally, elections in the EU and US shifted political power toward parties less committed to embedding ESG in financial markets.
- Assessing the effectiveness of a policy is good practice. But retreating on measures in force for a short period of time creates uncertainty for organizations and
  penalizes players that have already invested resources in developing the capabilities to adhere to these regulations. Backtracking on ESG policies also impedes
  momentum in redirecting capital toward the energy transition and signals a change in priority from policymakers. Some organizations had already voluntarily
  implemented the necessary steps to report on extra-financial performance and integrate climate risk into their decision-making processes after policymakers
  indicated their support for sustainable finance practices but were yet to pass rules. The shift in political signalling could impact voluntary reporting in the future.

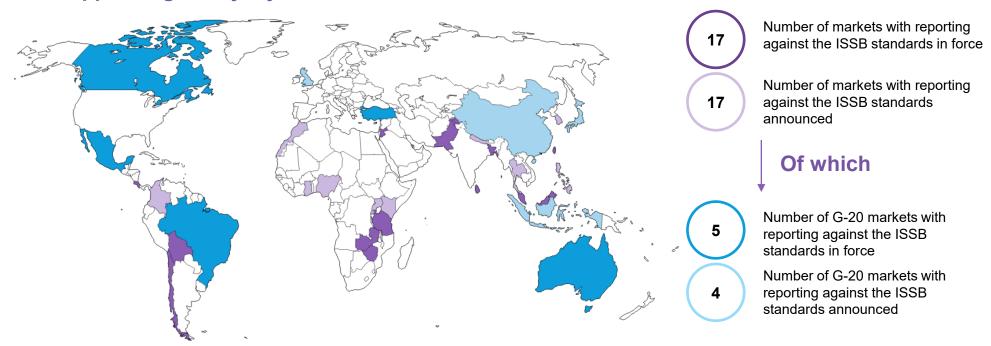
#### Sustainable finance policy rollback tracker for G-20 markets



Source: BloombergNEF. Notes: CSRD stands for Corporate Sustainability Reporting Directive and CSDDD stands for Corporate Sustainability Due Diligence Directive. ISSB stands for International Sustainability Standards Board.

# A unified climate-risk disclosure standard is spread around the world

#### ISSB support regionally, by distinct market



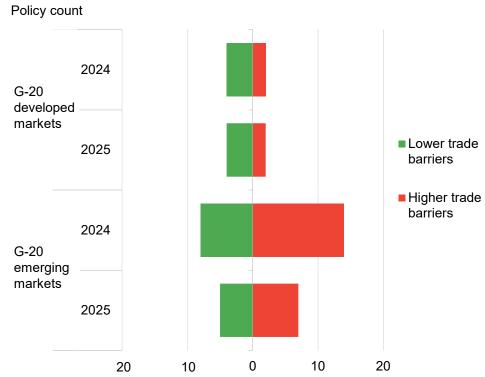
Source: BloombergNEF. Note: Planned integration can be voluntary or mandatory. Canada is 'in force' only as voluntary reporting framework, while other jurisdictions mandate reporting. Data is shown for distinct economies.

- One of the key issues in sustainability and climate-risk reporting until now has been the fragmentation of reporting frameworks globally. Organizations operating
  across several markets or with a global investor base would have had to report according to several standards, leading to higher compliance costs. The
  International Sustainability Standards Board (ISSB) launched a framework in 2023 to unify extra-financial reporting, that is data that cannot be captured by
  purely financial metrics. It revolves around two main ESG disclosure chapters: the IFRS S1 on overall sustainability-related financial information; and IFRS S2
  on climate-related information.
- The ISSB framework is gradually becoming the global standard for sustainability- and climate-related financial disclosure: 17 markets around the world require reporting against it and an additional 17 are developing their own rules following the international sustainability standards. Within the G-20, five have reporting rules following the ISSB standards and four have plans to do so. Canada implemented the ISSB framework with the goal of mandating reporting against it, but the regulator announced in April 2025 that it was pausing development of the rule.

# Trade and supply chains

# Introduction of clean-tech trade barriers slows outside the US

### Changes to clean-tech trade policy by selected G-20 markets, excluding China and the US



Source: BloombergNEF. Note: 2025 data are through September 17. The US, China, Russia and the African Union are excluded. Developed markets include Australia, Canada and the EU including the three G20 member states (France, Germany, Italy); emerging markets include Argentina, Brazil, India, Mexico, South Africa and Turkey. Indonesia, South Korea, Japan, Saudi Arabia and the UK have not implemented clean-tech trade policy changes in the last two years. Goods covered are solar cells and modules, lithiumion batteries, wind nacelles, steel wind towers and passenger battery electric vehicles. Requirements to use locally produced goods are not included, despite impact on trade, as these rules are distinct from trade policies that impact trade barriers and the cost of trade.

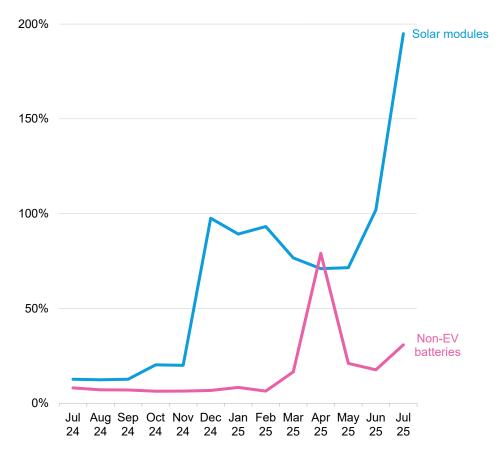
- Outside the US, G-20 markets have implemented fewer restrictive trade measures
  on clean energy, storage and transport components in 2025 than in 2024. That is
  a surprising development. The volatility of Trump's import tariff policies, which
  have dominated headlines this year, has created the impression that global
  protectionism is intensifying. That is not the case yet for clean-tech goods.
- In 2024, G-20 markets (excluding the US and China) introduced 16 measures
  raising trade barriers on solar, battery, passenger battery electric vehicles and
  wind products. Trade policy changes assessed include changes to tariffs, quotas,
  surveillance requirements and rebates. Higher barriers reflect tariff or surveillance
  increases, or reduced quotas or rebates; lower barriers are the reverse.
- Passenger BEVs emerged as a key new target. Many of these policies specifically focused on Chinese clean energy products, reflecting tensions between surging Chinese exports and other governments' efforts to reduce reliance on foreignmade components.
- So far in 2025, developed economies have been more inclined to lower trade barriers than emerging markets. Temporary tariff reductions offered are for certain battery products. Temporary rate reductions introduced in 2024 had largely expired by the start of this year.
- Emerging markets have introduced fewer restrictive measures this year than last year. Brazil and Turkey were responsible for 11 of 14 restrictive trade policies enacted last year and all six implemented so far in 2025. Both governments have long used tariffs as tools to boost domestic manufacturing.
- The US remains an exception. Its frequent and often-reversed tariff changes under the current administration make direct comparison with other G-20 markets difficult. For this reason, the US is excluded from the left-hand chart.

#### Clients can read more:

Clean Tech at Heart of Growing Tariff Storm Clean Energy Trade and Emerging Markets

### Tariffs take center stage in US trade policy

### Trade-weighted average US import tariff on solar modules and non-EV batteries



Source: Sinoimex, US International Trade Commission, BloombergNEF. Note: The trade-weighted average tariff is calculated by summing monthly US solar module and non-EV battery imports multiplied by their respective import tariffs by trading partner, then dividing by total monthly imports.

- US import tariffs have dominated headlines through much of 2025. President
  Donald Trump's second administration has been marked by frequent tariff changes,
  affecting clean-tech products alongside many other goods.
- Solar products and non-EV batteries have faced sharp tariff swings. Over the past nine months, rates have risen under several measures: the 10% "reciprocal tariff" introduced on April 5, the higher market-specific "reciprocal tariffs" implemented on August 6 after repeated delays, and a series of market-specific actions targeting China, Canada, Mexico, Brazil and India since the start of the year.
- These new measures add to a long list of tariffs inherited from earlier administrations, dating back to 2012, when the first duties were imposed on Chinese solar products.
- As a result, importing clean energy equipment into the US is now significantly more
  expensive. The trade-weighted average tariff shown on the left reflects the average
  import duty applied by the US, weighted by each trading partner's share of total
  monthly imports. This provides a more accurate measure of trade costs than a
  simple average of tariff rates.
- The trade-weighted average tariff on imported solar modules reached 195% in July 2025, up from 13% a year earlier. Battery tariffs rose from a lower 8% rate to 31%. Though lower than solar, battery tariffs have a larger impact on project costs. Batteries make up a higher share of energy storage project costs than solar modules do for solar generation projects.
- Even higher rates are expected. August data, not released at the time of writing, will
  reflect the full impact of market-specific reciprocal tariffs, and further rises could
  come in November if additional measures on China are approved. The decision,
  scheduled for November 10, would have the greatest impact on battery imports, as
  China supplied 40% of the US non-EV battery market in the first half of 2025.

#### Clients can read more:

US Energy Trade and Tariff Indicators Series US Energy Trade and Tariff Indicators: Aug. 25-Sept. 24

### **Emerging markets consider new measures to** stem imports

- Exports from China to emerging markets are booming as clean-tech components are cheaper than ever. Governments face a choice between openness to pursue the lowest-cost transition and taking a more defensive policy stance that delivers local value through domestic manufacturing.
  - Policy outcome known



#### Potential clean-tech import tariff hikes

- South Africa's trade commission has proposed higher tariffs on multiple products across solar, wind and battery value chains.
- Plan was part of a four-week public consultation during which South Africa's solar and wind industry associations raised concerns.
- The plan is under review while the responses from the consultation are evaluated.

#### Date unknown Potential ban on some BEV imports

### In December 2023, the Uzbek government

- proposed banning vehicle imports by individuals intending to resell them.
- The plan would prevent private individuals from transferring ownership of a vehicle after it clears customs.
- In March 2024, Chinese automaker BYD requested that the government curb imports by private individuals intending to resell their passenger vehicles.
- It remains unclear whether the policy is in force or still under review amid widespread backlash from firms and consumers.

Policy outcome unknown



#### July 1, 2026

#### Higher passenger BEV import tariffs

- Import tariff rate will rise to 35% in January 2026 from the current 25% rate.
- The tariff hike is due to the scheduled expiry of a tariff-reduction policy.

#### **Date unknown**

#### Potential additional anti-dumping duties on Chinese solar cells and modules

- An investigation into allegedly trade-distorting practices by Chinese solar firms was announced in September 2024.
- Additional tariffs could be levied due to this investigation, though dates are unknown.



#### **Date unknown**

#### Potential higher import tariffs across 1,400 products

- Pending approval by Mexico's Congress, tariffs will be imposed on products imported from trading partners with which Mexico has not signed free-trade agreements.
- Details on specific product tariffs are pending. But divulged details indicate that passenger EV duties would be increased to 50%, from 15%.



#### July 1, 2026

#### Higher passenger BEV import tariffs

- Since 2023 passenger BEVs imported by six selected companies have been exempt from Indonesia's 50% tariff.
- Exemption was conditional on company commitments to set up local factories.
- From 2026, government inspections will determine how many BEVs qualify for import exemptions, based on the proportion of local content in each produced vehicle.



#### **January 1. 2026**

#### Higher wind nacelle import tariffs

Brazil's import tariff rate will rise to 25% in January 2026, from 20%. The tariff hike was announced May 28, 2025, in Resolution 736.

#### **January 1, 2026**

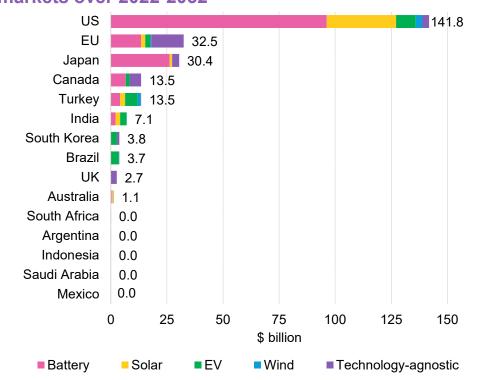
#### VAT on passenger BEV imports

- In 2026, Kazakhstan will start charging a 16% value added tax on BEV imports, ending its current tax exemption.
- It's unclear whether import tariffs will also rise to 15% in January from 0% currently. In 2023, the Eurasian Economic Commission – of which Kazakhstan is a member – extended a previous import tariff exemption through 2025.
- There is no sign it will be extended once more.

Source: BloombergNEF. Note: List is not exhaustive. Does not include other surcharges, levies or fees that apply to imported goods.

# G-20 members set out \$250 billion in subsidies for clean-tech manufacturing

Estimated subsidies available for solar, battery, wind and electric vehicle manufacturers in selected markets over 2022-2032



Source: BloombergNEF. Note: US assessment correct as of August 19, 2025. For non-US markets, assessment as of December 31, 2024. Shows national subsidy schemes across grants, loans, loan guarantees and tax credits. "Technology-agnostic" support targets several technologies. Sector-specific funding breakdown assumed in some cases based on prior disbursements. Shows the value of currently accessible subsidies. "EV" refers to passenger battery-electric vehicles. For detail of subsidy calculation, see Energy Transition Supply Chains 2025.

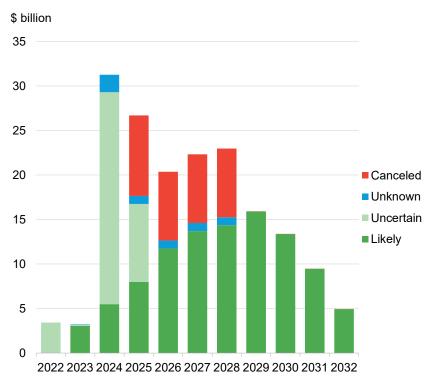
- Import tariffs are just one part of policymakers' toolkits to promote domestic
  manufacturing. Alongside local content requirements, subsidies for clean-tech
  manufacturers are another notable element of onshoring strategies. BNEF has
  tracked subsidies for solar, battery, wind and EV manufacturers, limiting our
  scope to national grants, low-interest loans, loan guarantees and tax credits.
  That excludes harder-to-track forms of support like cheap electricity or land.
- By this measure, nowhere does spending match the US, even with revised totals following Trump's <u>curtailment of previously earmarked support</u>. Those subsidies birthed an impressive \$108 billion factory pipeline, but renewed policy changes and uncertainty have frozen many projects.
- Despite the EU's ambitious local manufacturing targets, the bloc has put just \$32.5 billion of support on the table. Short of budgetary options, much of the funding is repurposed from existing programs.
- Member states wishing to expand their clean-tech manufacturing capacity must pick up the slack by drawing from their budgets. Booming clean-tech imports, low prices and struggling local manufacturers limit that spending's effectiveness.
- Japan's approach is to concentrate 86% of its \$30.4 billion in expected support for the battery sector. That is in line with its domestic manufacturing target of 150 gigawatt-hours by 2030. Reaching that goal may be a stretch, Japan hosts 15.7 gigawatt-hours of battery cell manufacturing currently.
- Elsewhere, clean-tech manufacturing support is limited. Reasons vary: clean-tech manufacturing often ranks low among policy priorities, market conditions are tough, capital requirements significant, and locally produced technology tends to be pricier than low-cost, high-quality imports. Equally, fewer subsidies may be needed in emerging markets with competitive manufacturing environments.

#### Clients can read more:

Energy Transition Supply Chains 2025: Country Profiles Energy Transition Supply Chains 2025

# Trump cuts \$32 billion from clean-tech factory support, with more cuts to come

Estimated annual subsidies available for solar, battery, wind and EV factories, by certainty of funding delivery



Source: BloombergNEF. Note: "Likely" refers to funding that the Trump administration has confirmed for future years. "Uncertain" refers to funding that has neither been confirmed to continue nor canceled, but is relatively insulated from policy reversals, clawbacks, or administrative changes. "Unknown" refers to funding that has neither been confirmed to continue nor canceled, but appears more vulnerable to such changes. Funding that has already been canceled or clawed back by the Trump administration is shown in red.

- Trump has taken an <u>ax to US subsidy programs</u> supporting solar, battery, wind and EV manufacturing. With the One Big Beautiful Bill Act, passed in July, the administration has clawed back about \$32 billion of unspent Department of Energy grants, low-interest loans and guarantees the support that had been intended to build out clean-tech supply chains.
- Further cuts are likely. The administration has signaled it wants to explore legal options to cancel issued loans and grants, with even previously earmarked climate spending under review. In this environment, it's concerning that the Department of Energy has removed website listings for several manufacturers previously awarded or selected for grant funding.
- That leaves a lot of funding with unknown or uncertain availability. Taken to its most extreme, revoking previously distributed finance could lop off an additional \$42 billion the arsenal of US clean-tech subsidies.
- The cancellation of such support particularly impacts EV makers as there are no longer any
  federal programs that directly support EV manufacturing. That said, automakers may find
  some solace in the retention of subsidies for producing batteries, the largest cost
  component for an EV.
- Concerns over additional supply chain rules may further shrink available subsidies. The
  45X advanced manufacturing tax credit, which allocates money for each component made
  and sold, now comes with strings attached. Receiving the production tax credit will require
  compliance with as-yet undefined "foreign entity of concern" (FEOC) rules.
- Projects have to avoid equipment suppliers that are owned by, or affiliated with FEOC
  markets deemed to be a strategic threat. As China, the world's largest clean-tech supplier,
  is defined as a FEOC market, the requirements have the potential to add unworkable
  supply-chain constraints.
- On the surface, the budget of 45X emerged largely unscathed from the OBBBA legislative process, with few explicit cuts. But new supply chain criteria mean that while remains available in theory, it may become much harder to access.

#### Clients can read more:

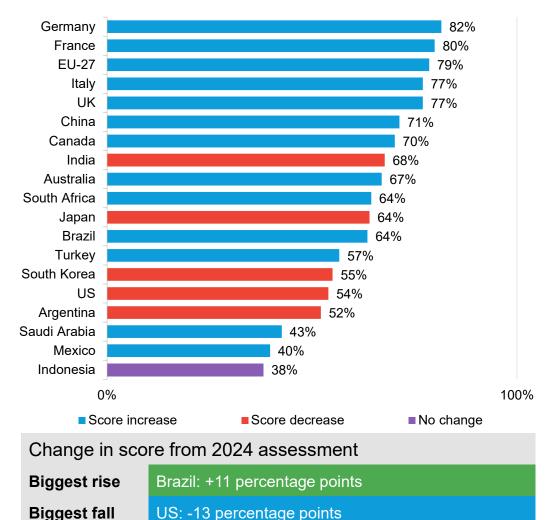
Trump Signals Deeper Cuts to Clean-Tech Factory Subsidies Trump's Big Bill Sets Many Hurdles for Chinese Clean Tech

# Sector highlights



# The G-20 economies had an average score of 63% for power policies

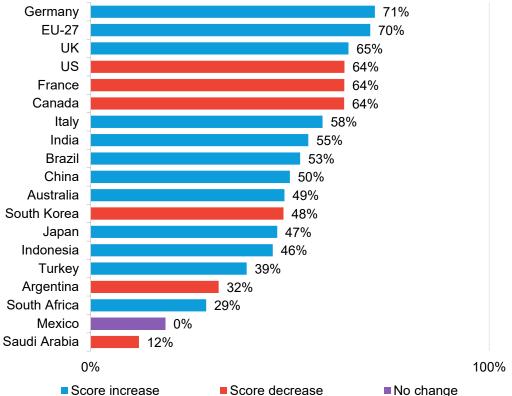
#### Power - 2025 scores



- Clean power policy scores across the G-20 average 63% in 2025, an increase of two percentage points from 2024. The EU, its member states, and the UK top the rankings for another year on the back of strong clean power and coal-phase out targets, robust emissions trading regimes, growth in renewables and policy stability.
- Brazil, the UK and Turkey experienced the largest increases in their power score, at 11, nine and seven percentage points, respectively. Brazil passed legislation to introduce a compliance carbon market, as did Turkey. Read more <u>above</u>. In both countries, existing policy shows signs of working, with a 26% rise in renewables capacity (excluding hydro) for Brazil in 2024 and 36% in Turkey.
- The UK's score jumped on the back of the successful phase-out of coal in 2024, improvements to its renewables auction program and robust deployment of renewables, storage and clean firm capacity, including launching a novel cap-and-floor revenue scheme for long-duration storage.
- Unsurprisingly, the US saw its power score decline, dropping from seventh
  to 15th place in the rankings. Since taking office, President Donald Trump
  has presided over cuts to clean energy tax credits, stop work orders for
  offshore wind farms under construction, and a revival of policy support for
  coal and natural gas generation.
- Power scores for Australia and India saw minimal change from last year as their rapid deployment of renewables is offset by sluggish action on coal phase-outs. Australia has closed just 18% (5 gigawatts) of its coal fleet since 2012 while India has 25GW of new capacity under construction, equivalent to 11% of its fleet in 2024.
- Indonesia, Mexico and Saudi Arabia remain the three markets with the lowest scores although the latter two improved their performance. Mexico's score increased by five percentage points. The government implemented a series of reforms in 2025 to attract much-needed private investment into clean energy and announced a new public investment plan for power grids.

# The G-20 economies had an average score of 49% for low-carbon fuels and CCUS policies





Change in score from 2024 assessment

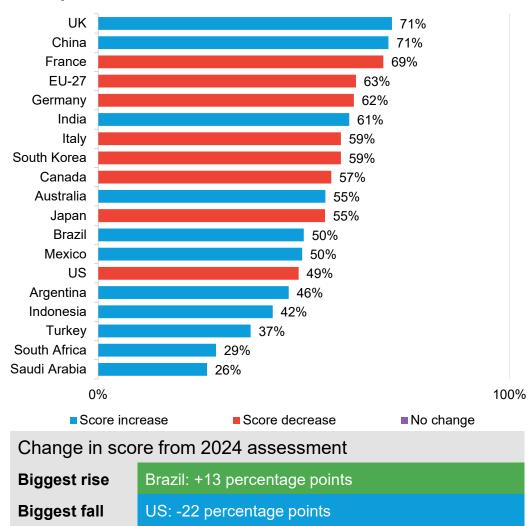
Biggest rise Brazil: +9 percentage points

US: -17 percentage points

- The biggest change in the 2025 ranking is the US decline from first place to fifth. It retained the 45Q tax credit for CCUS and increased the rate for CO2 utilization. But it brought forward the cutoff date to qualify for the 45V green hydrogen credit and weakened the incentives for sustainable aviation fuel (SAF). Across these sectors, projects had to wait months for policy certainty, while the government scrapped billions of dollars in already awarded funding. Some of these changes were offset by state-level support.
- On paper, the EU's new Renewable Energy Directive will create demand for green hydrogen and biofuels. But most member states have yet to implement these policies at the national level, and even when the rules take effect, enforcement could be tricky. Nonetheless, the EU and member states score points for their low-carbon hydrogen and CCUS subsidies, as does the UK. Both the EU and the UK mandates for SAF also began this year. Italy still lags behind France and Germany in terms of deployment of hydrogen and CCUS, though France has also seen a slowdown.
- Brazil had the largest increase in score. To help cement its position as a
  major biofuels player, it passed a new Fuel of the Future law in 2024, which
  includes stricter blending rates and supports investment in CCS, biodiesel,
  biomethane and SAF. It also boosted support for low-carbon hydrogen, with
  planned tax breaks worth 18.3 billion reais (\$3 billion).
- India leads the Asia-Pacific markets: the government has introduced subsidies for electrolyzers and green hydrogen production, and demandside tenders. It has also toughened the ethanol-blending mandate and proposed a CCUS funding program. The forthcoming compliance carbon market will help create demand for these technologies.
- Australia has an almost perfect score for policy "impact" driven by progress
  on commissioning new carbon capture capacity as well as hydrogen and
  biofuels production. But it falls relatively low in the G-20 ranking: this is
  partly because much of the policy support aimed directly at low-carbon fuels
  and CCUS is at state level, which is not included in this assessment.

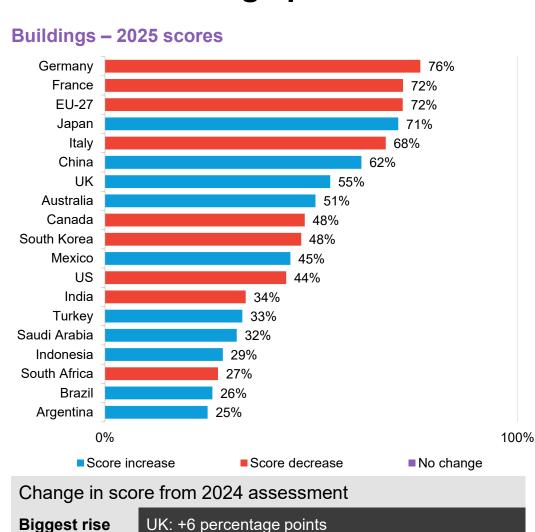
# The G-20 economies had an average score of 53% for road transport policies

#### Transport – 2025 scores



- If the Scoreboard assessed the G-20 based on overall strength as an electric vehicle market, China would be far and above the rest. On average, EVs in cheaper to buy than combustion engine vehicles, enabling electrified models to comprise 38% of the market's new vehicle sales in 2024. This performance helped it to increase its score by five percentage points this year. But as the Scoreboard focuses on existing policy support specifically, China ranks second in this year's assessment.
- This may not remain the case in future rankings, however. The UK, which
  came first this year, decreased its score, as did other mature EV markets. In
  some cases, governments scrapped demand-side incentives like purchase
  subsidies. But the EU, its member states and the UK especially lost points
  for weakening supply-side mandates in the wake of industry backlash.
- Other G-20 economies have yet to roll out impactful demand-side policies, preferring to rely on tax breaks, and are far from introducing stringent supply-side regulations. However, some newer EV markets are beginning to see growth. For instance, Brazil rolled out new manufacturing support and saw EV sales treble in 2024. The Latin American country has also benefitted from remaining relatively open to Chinese players. Read more on automaker-targeted incentives in the section on industrial policy.
- The US score fell 22 percentage points for transport policies its biggest decrease out of all sectors. All of its tax credits have expired, and its supply-side mandates for zero-emission vehicles have been gutted. The US score, which takes account of state-level policies, was also hurt by the repeal of a key policy in California that is followed by 11 other states. Altogether, these 12 states made up 40% of the US light-duty vehicle market in 2024.
- In the US, charging operators faced uncertainty while funding for its multibillion-dollar highway fast-charging program was frozen, though it has been restored. In Europe, most home charging schemes have ended. But about \$4 billion in government funding is set to go into commercial vehicle chargers, while some countries are seeking to improve the relative economics of power used for charging and gasoline.

# The G-20 economies had an average score of 48% for buildings policies



Source: BloombergNEF. Note: \*The 2024 scores have been recalculated using this year's methodology and may therefore differ from those published in last year's report.

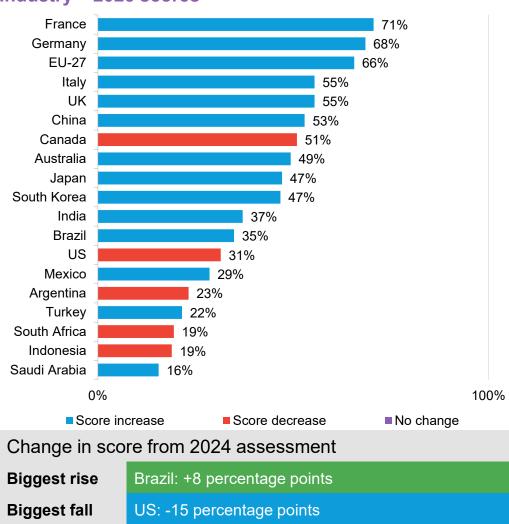
US: -23 percentage points

- The Scoreboard covers policies to decarbonize the buildings sector in both colder and warmer climates, such as energy efficiency plans, heat pump incentives and energy performance standards. Our assessment of these policies' robustness also takes account of each G-20 member's climate and thus need for building heating.
- The main source of building-sector emissions in economies with heating needs such as Europe, North America, Japan and China remains the reliance on coal-, oil- and gas-based systems. Policy efforts to electrify heating are supported by "carrots and sticks" in the form of subsidies, carbon pricing and boiler bans. Yet reforms to support programs and political backlash against heating mandates led to lower scores in Europe and North America this year. The UK was the exception, posting the largest increase among the G-20 after expanding heat pump support, introducing a boiler ban and setting a heat pump manufacturing quota.
- The largest heat pump markets China, Japan and the US are mature
  and less sensitive to short-term policy changes, with sales driven mainly by
  housing construction and replacement cycles. Nonetheless, the US score
  fell the most of all markets as federal incentives were cut.
- In cooling-dominant markets, there was more focus on curbing electricity demand with efficiency standards and appliance regulations than outright mandates. Energy labeling systems for air-conditioning units are now the norm across all G-20 economies, while subsidy programs exist only in China, Japan, Saudi Arabia and the US with the latter set to scale back its subsidies from 2026. National cooling plans are less common, but new initiatives in Indonesia and Mexico lifted their scores, building on India's example. Temperature limits are an emerging policy lever. China and India have formal rules for some building types, and Argentina introduced a cap on power supply for cooling in 2024. As heating electrification adds power demand and cooling use continues to climb, efficiency gains and long-term demand-management plans will become central to building decarbonization policy.

Biggest fall

# The G-20 economies had an average score of 42% for industry policies

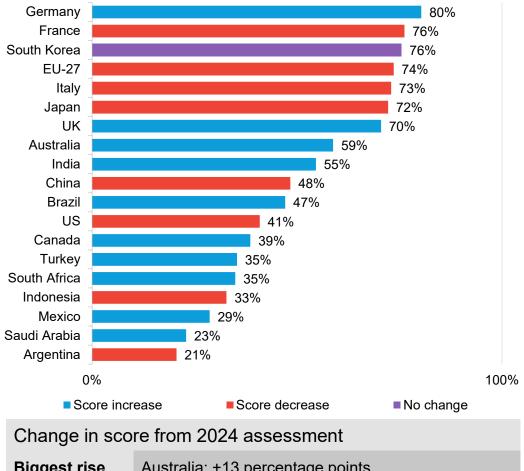
#### Industry - 2025 scores



- After years of mostly high-level plans, low-carbon industry policy is shifting
  from aspirational to actionable. It is increasingly framed as a way to boost
  competitiveness, blending energy affordability, clean-tech scale-up and
  market incentives, with funding rivaling traditional industrial subsidies. Still,
  the G-20 had an average score of 41% for industry policy support. This is
  well below the mean for other sectors in this assessment, which is crucial
  given industry accounts for a large share of emissions in many economies.
- The EU remains a standout, with its landmark Clean Industrial Deal
  introduced this year to promote decarbonization and boost competitiveness.
  The star performers in the region, such as France and Germany, have
  retained their top rankings with robust funding schemes and instruments
  such as carbon contracts for difference to help industries adopt
  electrification, hydrogen, carbon capture and other maturing technologies.
- Brazil had the biggest rise in score, thanks to new policies targeted at tackling industrial emissions. This included the New Industry Brazil package, as well as the forthcoming compliance carbon market. The country also scored points for reducing industry energy use from fossil fuels.
- The US, by contrast, saw the biggest drop. Since Donald Trump returned to
  the Oval Office this year, significant sums of funding have been frozen and
  some canceled. The UK's score also fell. While the country has committed
  to boosting industrial competitiveness via multiple strategies, it now has few
  targeted low-carbon financial incentives.
- All Asia-Pacific economies, except Indonesia, made progress in expanding carbon pricing schemes to cover emissions from industries, mitigating exposure to the EU's carbon border tariff due to begin from 2026.
- Demand-side levers also began to emerge more widely, complementing the supply-side project funding to ensure offtake of low-carbon feedstock and products. Some policymakers are promoting the use of clean power in material production, such as via mandates in China and tax credits in Australia, or subsidizing the adoption of low-carbon materials, like in Japan.

# The G-20 economies had an average score of 52% for circular economy policies

#### Circular economy – 2025 scores



Change in score from 2024 assessment

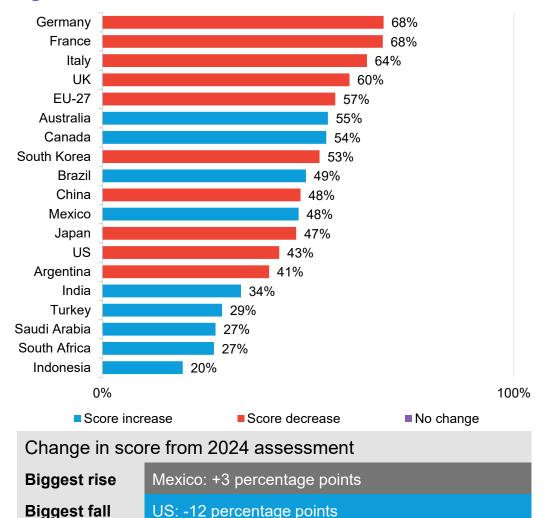
Biggest rise Australia: +13 percentage points

US: -7 percentage points

- The seven markets with a circular economy score over 60% remain at the top of the G-20 ranking. Having pioneered early waste-reduction policies, they offer robust and effective circular economy programs. More recently, these markets are starting to recognize circular economy-related practices as a crucial part of their industrial strategies
- The remaining G-20 members are making gradual progress by targeting the immediate issue of waste pollution. Many have enforced single-use plastics bans and recognize the economic importance of circular practices. But policies lack ambition and stringency compared with the leading group.
- Australia climbed 13 percentage points and three spots in the ranking after releasing a National Waste Policy Action Plan and Circular Economy Framework in December 2024. As part of these policies the country has set new goals including the target to double its circularity (share of secondary materials in the economy) by 2035, compared to 2020 levels of 5%.
- Brazil achieved the second-biggest increase in score of six percentage
  points. In 2024, the government launched the National Circular Economy
  Strategy and the Recycling Incentive Law, which grants tax benefits to
  individuals and companies that invest in recycling and reuse projects. Its
  new clean transport program accounts for vehicle circularity and the
  publication of Reverse Logistics Decrees should raise packaging recovery
  and recycling rates in industrial processes.
- The US moved down two places with a score of 41%. The country lacks a
  national circular economy strategy, while the sector faced heightened policy
  uncertainty as did the rest of the economy. It is not clear whether the 2030
  target to reach a 50% recycling rate, implemented during the Biden
  presidency, still applies. However, many states have adopted policies to
  encourage waste reduction, recycling and material efficiency.
- Markets with scores below 30% include Mexico, Saudi Arabia and Argentina. In these markets, a circular economy is on the government agenda but there is little momentum or funding for infrastructure.

# The G-20 economies had an average score of 47% for agriculture policies

#### Agriculture – 2025 scores



- All but two of the G-20 members decreased their score for low-carbon agriculture policy this year, with an average fall of one percentage point. This illustrates the significant room for improvement especially for markets where agriculture accounts for a sizeable share of emissions that is, Argentina, Australia, Brazil, France, India, Indonesia and Mexico. The EU and UK may have better low-carbon policy than other G-20 economies. But they have lost points for the persistent uncertainty around support programs. The EU has also weakened the environmental conditions on income support.
- Brazil had its smallest scoring increase for agriculture. In particular, the strongly pro-agribusiness Congress approved in 2025 new environmental licensing legislation that could weaken deforestation controls on small agricultural areas. President Luiz Inácio Lula da Silva vetoed some parts of the law, but the proposal has returned to Congress.
- In the US, the Trump administration froze and then scrapped almost all funding to promote agricultural decarbonization, including on-farm renewables deployment. Low-carbon conditions have been removed or watered down for surviving programs.
- The US score is bolstered by the continuing low-carbon support in some states, but this is not enough to compensate for the developments at the federal level, including the persistent uncertainty about the Farm Bill. The US also lost points from the quantitative metrics that seek to evaluate the impact of policies in place. This was also the case for other OECD economies: both Japan and South Korea use more nitrogen fertilizer relative to cropland and release more emissions per unit of crop production.
- The poor performance across most of the G-20 means that the biggest rise
  in score amounted to less than one point. In this case, Mexico is devising a
  strategy and financial incentives to tackle methane released from livestock

   the source of almost 80% of the country's agriculture emissions.
- The Scoreboard focuses on policies to tackle greenhouse gas emissions, while the term "sustainability" typically has a broader scope. For the sake of variety, this section uses "sustainable" and "low-carbon" interchangeably.

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