CEPS POLICY BRIEF

LEAVING COAL BEHIND: INTERNATIONAL CARBON CREDITS UNDER THE EU'S 2040 CLIMATE TARGET

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SUMMARY

With the EU's 2040 climate target, the emerging role of international carbon credits raises important policy choices. They could remain a limited flexibility mechanism or become a key component of the EU's external partnerships. Taking a strategic approach to international carbon credits could help align the EU's own climate ambitions and broader economic and geopolitical interests while supporting the overall global clean transition.

As part of such an approach, the EU should consider a range of carbon crediting mechanisms, aligned with partner countries' transition needs. Coal is still a major source of emissions in many emerging and developing economies, where fiscal constraints and high capital costs are slowing the shift to clean energy. To address this, carbon credits (or 'transition credits') linked to retiring coal-fired power plants early could be one option among a wider set of possible solutions, provided they ensure high environmental integrity.

International carbon credits – potentially including transition credits – could be sourced for the EU's post-2036 framework through strategic partnerships. Embedded within broader cooperation agreements, such as Clean Trade and Investment Partnerships, they could combine finance, technical cooperation and market access to support the clean transition – in both the EU and partner countries across the world.

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INTRODUCTION

COP30 in Belém marked 10 years of the Paris Agreement and the last decade has been used to assemble the framework for international climate action. Yet in terms of limiting global warming to 'well below 2°C', implementing the Paris Agreement has fallen short.

The Paris Agreement's bottom-up approach and built-in flexibilities were meant to accommodate different national circumstances and enable broad participation. Many countries have gradually increased their ambition through their Nationally Determined Contributions (NDCs). However, the assumption that countries would move at different speeds along different routes and yet ultimately deliver on the Agreement's temperature goals shouldn't be taken for granted.

Current pledges, even if fully implemented, still point to well *beyond* 2°C. In many cases, actual delivery is conditional on the availability of climate finance – one of the most contentious issues in the global climate negotiations and an increasingly scarce resource.

The real test may yet come as national climate and energy pathways become increasingly shaped by economic concerns and geopolitics. As Mark Carney noted in Davos, the world appears to be shifting away from what was once described as a 'rules-based order' towards a more fragmented landscape governed by unstable great power politics. But ignoring security and geopolitical concerns such as dependencies, lock-in or energy security will likely put the clean transition at risk. That's why a more proactive approach will be needed on how to use these concerns as a catalyst for change.

The transition away from fossil fuels, especially coal, is vital to keeping the Paris goals within reach. From a climate perspective, reducing coal reliance – together with energy efficiency – is an objective almost all countries could agree upon. Yet the ambition to phase out coal raises concerns in many countries, particularly emerging and developing economies, related to energy security, economic development and the risk of becoming dependent on alternative energy sources such as natural gas. Pursuing the transition in a socially just and equitable way is crucial, adding another layer of complexity.

This challenge could be an opportunity for the EU to not only engage with developing and emerging economies and position itself right at the centre of the negotiations but also address its own strategic interests while helping to accelerate coal phase-out. The EU's cautious re-opening to international carbon credits as part of the 2040 climate target debate offers a potential opening for further cooperation. The newly emerging Clean Trade and Investment Partnerships (CTIPs) or existing frameworks such as the Just Energy Transition Partnerships (JETPs), could help to make carbon credits an integral part of the EU's external action.

PHASING OUT COAL: THE MAIN CHALLENGE OF THE CLEAN ENERGY TRANSITION

Coal is the single largest source of energy-related CO_2 emissions globally and its emissions continue to rise, mainly driven by consumption in developing and emerging economies to sustain their economic growth. In many countries, coal remains a central pillar of generating electricity to ensure energy supply amid rapidly growing demand, even where renewable deployment is advancing quickly. Recent trends in major emerging economies, such as India, China, South Africa and Indonesia illustrate this tension – while they're among the global leaders in expanding renewable capacity, they're nonetheless continuing to rely on – and in some cases even expand on – coal use.

Although many planned coal projects have been cancelled, due to phase-out commitments, environmental concerns, financing constraints or unfavourable economics, new coal plants are still being built, particularly in China and India. Existing plants continue to operate across many countries, especially in the Asia-Pacific region, often under long-term power purchase agreements. The answer to the question of how many coal plants are still being built, and for how much longer existing ones will run, is critical for determining national emission trajectories.

The age profile of coal plants varies significantly across regions. In Asia, the average plant is around 15 years old, compared with roughly 40 years in North America. Coal plants typically have a technical lifetime of around 40-50 years – though average retirement ages vary substantially by region, ranging from nearly 60 years in Africa to roughly 25 years in Asia. If all existing and planned coal plants were to operate for an average of 35 years or until their planned retirement date, and those already older than that are retired within the next five years, they would consume more than a quarter of the remaining carbon budget for limiting warming to below 2°C[1].

Accelerating the retirement of coal plants is essential for reducing global emissions – but what replaces them must also be carefully considered. While shifting from coal to another fossil fuel, such as natural gas, may be a transitional solution to safeguard supply and keep system costs low, ideally coal phase-out would be accompanied by the parallel build-up of renewables and the grid infrastructure needed to integrate them. This is all a major challenge and, above all, will require an enormous amount of financial resources.

[1] The Global Energy Monitor estimates that if all existing, under-construction and planned coal plants were to operate for an average of 35 years (and those already older than that are due to be retired within the next five years) the resulting emissions would amount to about 300 $GtCO_2$ (January 2026 data). Putting this into perspective, the carbon budget for staying below 2°C at a 50 % probability, leaves roughly 1055 $GtCO_2$ – meaning that coal plants alone would consume about 28 % of it.

FINANCE IS THE BOTTLENECK – AND A STRATEGIC OPPORTUNITY FOR THE EU

The International Energy Agency (IEA) estimates that until 2030, developing and emerging economies (excluding China) would need between USD 500 billion to over USD 1 trillion to finance the transition away from coal, with a significant share (around a third) required from international public and private finance. This mostly includes investment in low-carbon power generation (renewables and nuclear), storage and grid expansion.

Notably, these figures don't include measures to address the social and economic impacts on workers and communities – crucial for a just transition. Limited fiscal space and high financing costs mean that, for many developing economies, the hurdles for transitioning away from coal – let alone doing so in a just and inclusive way – are very high.

To date, around USD 1 trillion in capital remains tied up in coal plants worldwide. This is another complication, especially as many coal power plants are held by state-owned utilities and operate under long-term contracts that shield them from market competition. That's why even the improving economics of renewables probably won't be enough to drive a rapid clean transition.

Climate finance under the Paris Agreement was intended to help bridge this gap but remains limited. At COP29 in Baku, the Parties agreed on a New Collective Quantified Goal (NCQG) with developed countries expected to lead in mobilising at least USD 300 billion annually by 2035 – far below developing countries' estimated investment needs. The new goal also calls on all actors to 'enable the scaling up of financing' from public and private sources combined to USD 1.3 trillion annually by 2035.

However, details on how to achieve this were deferred to the 'Baku to Belém Roadmap to 1.3T'. In practice, negotiations continue to revolve around familiar questions: how much funding is required? For what purposes? From which sources? And, perhaps most contentiously, who'll provide it?.

This is an opportunity for the EU. Supporting the global clean transition isn't only a matter of climate ambition; it can also be a long-term investment in partnerships that serve the EU's own interests, including securing market access for EU clean technologies, strengthening clean energy and material supply chains, deepening geostrategic alliances and shaping the international carbon credit market.

In the shifting geopolitical landscape, this also addresses growing calls for middle powers to act collectively and build coalitions within an increasingly fragmented world. For the EU, acting alongside like-minded partners offers a pathway to sustain momentum in

global decarbonisation while strengthening strategic ties. Partners, in turn, need credible answers on how to pursue climate targets and economic growth simultaneously. This includes addressing the coal dilemma while ensuring a just transition.

This opportunity could allow the EU to reconcile climate, economic and security concerns in line with Commissioner Hoekstra's emphasis that for the EU's future policies 'climate, competitiveness and independence need to go hand in hand'. If done well, this could help the EU to recalibrate its international role in the climate arena – evolving from an increasingly 'lone' climate leader into an 'enabler' within a broader coalition of partners who are undergoing the transition together.

The EU policy window for leveraging international carbon credit

As part of its commitment to achieve climate neutrality by 2050 under the European Climate Law, the EU was tasked to set intermediate climate targets to steer its clean transition. The next milestone for 2040, together with the EU's updated 2035 NDC, was the subject of intense political debate. Only days before COP30 in Belém, EU environment ministers finally agreed on a Council position to cut net emissions by 90 % compared to 1990 levels by 2040 and a target range of 66.25-72.5 % for the 2035 NDC.

The Council position of 19 December 2025 confirmed a limited role for high-quality international credits under Article 6 of up to 5 % of 1990 net emissions. Depending on how the legal text is interpreted, this could correspond to roughly 240 to just over 700 million tonnes of carbon credits. On 5 March, following the European Parliament's approval, the Council formally adopted the amendment to the EU Climate Law, marking the last step of the legislative procedure.

According to the amendment, international carbon credits could be counted from 2036 onwards towards EU targets. To prepare, a pilot phase between 2031-2035 will 'initiate a high-quality and high-integrity international credit market'. International carbon credits are framed as a tool to support strategic partnerships and cost-efficient mitigation, subject to strict integrity criteria and a biennial review of their contribution. Although the final text no longer explicitly excludes the use of international credits under the EU ETS, only the integration of domestic permanent carbon removals is now being considered for the trading system , effectively limiting international credits' scope for sectors covered under the Effort Sharing Regulation or land use, land use change and forestry (LULUCF) targets – at least for now.

The EU's reopening towards international carbon credits reflects growing concerns about industrial competitiveness and geopolitical realities. It also corresponds to the fact that the global emissions landscape has shifted over the last few decades. The EU's share of global emissions has declined from around 15 % in 1990 to roughly 6 % in 2024, while emerging economies now account for a substantial and rising share, with China alone making up close to a third of global emissions.

While the EU remains a major emitter with above-average per-capita emissions[2], the changing landscape raises questions about the most efficient way for Europe to fulfil its role in the decades ahead. As the clean transition advances unevenly across economies, the cost of reducing additional emissions will increasingly diverge. As the EU's fiscal space for the clean transition narrows and international climate finance remains limited, supporting both domestic *and* international mitigation is becoming increasingly important. A precondition for such a shift to be credible, however, is integrity, i.e. that credits are of high quality.

INTEGRITY PRECONDITIONS AND PRINCIPLES FOR ENGAGING WITH INTERNATIONAL CARBON CREDITS

Much of the controversy surrounding the 2040 target has focused on the potential use of international carbon credits – and not without reason. Earlier experiences of integrating such credits into the EU ETS under the Kyoto Protocol's Clean Development Mechanism left a lasting mistrust among some, as the influx of cheap and low-quality units temporarily undermined the system's integrity. Eager not to repeat history, the EU approach places strong emphasis on 'high-quality' credits.

The EU will need to define what constitutes quality and demonstrate how any future engagement with international carbon credits can credibly meet such standards. The amendment to the Climate Law does list some quality criteria, but these still need to be detailed, alongside rules on origin and other conditions. The Paris Agreement's criteria for encouraging cooperation on reducing emissions through its own carbon crediting mechanism under Article 6.4 are a good starting point for developing an EU standard. As such, the European Commission has been tasked with 'complementing' them where appropriate.

Going beyond defining minimum quality safeguards, the Oxford Principles for Responsible Engagement with Article 6 could provide a broader basis for an EU standard. Elements such as sharing mitigation outcomes between the host country and buyer could help

[2] Per capita GHG emissions for the EU were 7.14 t CO_2eq in 2024, while the global average was 6.56 t CO_2eq.

frame a more ambitious European approach. At the same time, the EU could prioritise credits that promote structural decarbonisation rather than merely delivering low-cost emission reductions. This would allow the EU to use the flexibility offered under cooperative approaches while still setting standards that go beyond minimum requirements, thus effectively supporting partners in pursuing their own clean transition. Bilateral cooperation through Article 6.2 could be suitable for this. A precondition for any form of cooperation would be that the future 'Article 6.4-aligned' EU standard is met.

Robust monitoring reporting and a verification framework will be key. This would include clear accounting rules to avoid double counting between host and acquiring countries, transparent registries and provisions for corresponding adjustments under Article 6. Ultimately, the credibility of any EU engagement with international carbon credits will depend not only on design features, but also on strong oversight, transparency and alignment with the host country's long-term decarbonisation pathway.

Phasing out coal and strengthening EU partnerships through carbon credits

The pilot phase from 2031-2035 should establish the regulatory and technical foundations for the EU to procure and use international carbon credits as well as to construct the pipeline for carbon credits post-2036. This includes defining legal requirements, developing a dedicated registry, defining eligible credit methodologies and quality standards and, if possible, sending an early demand signal for project developers.

More specifically, it could also include defining an approach for how international carbon credits would interact with domestic carbon pricing schemes that partner countries would already be implementing or may want to develop. One important element for this would be integrating an 'exit strategy' for carbon credits, i.e. a roadmap enabling partner countries to transition, if they wish, from carbon credits to their own domestic carbon pricing schemes, such as emission trading systems or carbon taxes.

Here the role of carbon credits in supporting EU candidate countries' accession preparations could be explored. As new members will be required to adopt the EU climate *acquis*, including climate targets and participation in the EU ETS, they need to adequately prepare. Where carbon credits are used, a clear plan will be needed on how to move to domestic carbon pricing through the EU ETS.

Within the EU carbon crediting framework, transition credits linked to the early retirement of coal-fired power plants could be considered. As transition credits would monetise verified emission reductions from retiring coal-fired power plants early and the

resulting revenues could allow for the plants to close more quickly. As many developing countries face significant financial constraints in accelerating their clean transition, this would help them to finance replacement low-carbon capacity and grid upgrades, and support just transition measures for affected workers and communities.

If such approaches are included in the EU's 'carbon credit toolbox' for 2036 onwards, then they would need to be practically tested and validated first. Several existing pilot projects on transition credits across different regions could help to assess their feasibility and potential role. As Article 6.4 would become the quality benchmark for the EU's approach to international carbon credits, then any transition credit methodology would need to be fully aligned with it.

Being more strategic, one way to use international carbon credits as a tool for strengthening EU partnerships would be to embed them in bilateral frameworks such as CTIPs. As these are still being defined, with South Africa as the first pilot, they could allow the EU and its partners to co-develop a framework that integrates credits within a broader industrial, trade and climate cooperation package. Properly designed, CTIPs could combine supply-side components such as technical cooperation, capacity building and finance with demand-side measures including market access and offtake arrangements for low-carbon products.

The type of credit that's integrated into the cooperation agreement would ultimately depend on the partner country and EU's preferences, but their inclusion could make coal phase-out a more attractive prospect for partner countries. Other than CTIPs, transition credits could also fit well into existing frameworks such as the JETPs. These arrangements bring together coal-dependent host countries and an International Partners Group of mainly G7 and EU members to mobilise blended public and private finance to accelerate coal retirement, renewable deployment and just transition programmes. While the EU would have less scope to shape the overall structure of such partnerships, they already provide established governance arrangements, monitoring mechanisms and the potential to crowd in a broader range of financial actors.

POLICY RECOMMENDATIONS

Many elements of the EU framework for international carbon credits still need to be developed. Several areas for further action should be considered.

- **The European Commission and Member States should start developing concepts that facilitates the use of carbon credits as a diplomacy tool.**

  The EU's 2040 target opens a set window to redefine carbon credits for deepening geopolitical alliances with low and middle-income countries but also some emerging economies. By integrating carbon credits into partnerships focused on, for example, secure clean energy and materials supply chains, the EU can create mutually beneficial alliances that accelerate global decarbonisation while safeguarding its own strategic interests. This can be operationalised thorough instruments such as Clean Trade and Investment Partnerships (CTIPs) to integrate carbon credits into the EU's external actions.

- **In parallel, EU policymakers should actively discuss how to leverage carbon credit diplomacy to accelerate coal's-phase out.**

  Currently operated and planned coal plants could, on their own, use up over a quarter of the remaining carbon budget for staying below 2°C. This is why retiring these plants early is essential but often hampered by financial constraints as well as energy security concerns and development priorities in emerging economies. Carbon crediting mechanisms, such as transition credits, could address these bottlenecks by mobilising finance for the renewable energy deployment and supporting just transition.

- **Carbon credits should be used to support the global development of carbon pricing systems – including in EU accession countries.**

  EU actors should prioritise building institutional capacity for carbon crediting and pricing frameworks in partner countries. For candidate countries, strengthening administrative and regulatory capacity is crucial for enabling future integration into the EU ETS. This can help expand carbon markets, enhance climate ambition, and facilitate future integration with the EU's carbon crediting framework, ensuring high standards. At the same time, policymakers should reflect on an 'exit strategy' for carbon credits, and work towards providing a roadmap for transitioning towards domestic carbon pricing instruments.

CONCLUSIONS

If there's real political will to include international carbon credits in its climate framework, there's a good opportunity for the EU to establish broad partnerships that mobilise finance for phasing out coal phase, including through instruments such as transition credits, and particularly for emerging and developing economies.

Partnerships would ideally go beyond the mere transfer of emission reductions through coal phase-out. They could also support a just transition in partner countries by supporting not only investment in low-carbon energy, grid infrastructure and storage but also measures for all those negatively affected by phasing out coal. For this to happen, the EU will need to establish credible – ideally simple – principles for engaging with international carbon credits, including robust integrity rules. Taking this approach would also mean having to consider various options for countries to use carbon credits as a temporary tool towards other domestic carbon pricing instruments, if suitable and if countries are actively interested in pursuing this.

Moving swiftly to operationalise the pilot phase will be essential for building institutional capacity, test methodologies and restoring trust in international carbon credits. It would also allow the EU to shape the international carbon credit market, possibly in cooperation with like-minded partners, or at least allow for the development of a 'fully owned' EU approach which is applied to its main partners.

This approach would mark a shift in the EU's role in the world's ongoing clean transition. Rather than presuming countries will pursue ambitious decarbonisation pathways, the EU could actively support them by using partnerships, standards and targeted cooperation to align interests, manage geopolitical frictions and accelerate coal phase-out where it matters most.

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