

**ENERGY TRANSITION ACCELERATOR:
CORE FRAMEWORK**

December 2023

Over the past year, the U.S. Department of State, The Rockefeller Foundation, and the Bezos Earth Fund have worked in partnership to design the Energy Transition Accelerator (ETA) with the aim of catalyzing finance to speed the just energy transition in emerging and developing countries. This Core Framework outlines the foundational elements of the ETA as well as areas to be further elaborated and refined over the coming months with the goal of formally establishing the ETA by Earth Day 2024.

Guided by the imperative of keeping a 1.5°C limit on warming within reach, the ETA will bring together governments and private sector stakeholders committed to accelerating the clean energy transition in emerging and developing countries to deliver earlier, deeper greenhouse gas reductions and enhanced access to clean electricity. The ETA Coalition will be an innovative platform leveraging carbon finance to support electricity sector transition strategies and the achievement of countries' nationally determined contributions.

Based on a preliminary analysis of three large developing economies with high fossil-based power generation, the ETA could mobilize from \$72 billion to \$207 billion in transition finance through 2035, or 20 percent to 35 percent of the countries' total power sector transition costs. A portion of the finance generated will be dedicated to addressing adaptation and resilience in vulnerable countries.

The Core ETA Framework is based on extensive analysis and design work coordinated by the Center for Climate and Energy Solutions (C2ES) and Environmental Defense Fund (EDF). It also is informed by broad consultation with a wide array of stakeholders, including the ETA High-Level Consultative Group of more than 30 experts and intergovernmental, private sector, and civil society leaders from all regions of the world (see [Appendix I](#)). This Framework outlines the ETA's mission, guiding objectives, and core elements, as well as its strategic collaboration with the World Bank, and next steps in formally establishing the ETA Coalition.

An Urgent Need

In outlining the steps needed in this critical decade to keep a 1.5 °C limit on warming within reach, the International Energy Agency's (IEA) latest *Net Zero Roadmap* underscores the critical

urgency of transforming power systems in developing and emerging countries to achieve earlier, deeper greenhouse gas reductions.¹

The IEA’s analysis of potential net-zero pathways recognizes that electricity emissions will continue to grow in the near term in many fast-growing emerging economies, as electricity production rises to support economic growth, improve energy access, and enable the electrification and decarbonization of other sectors. However, electricity emissions must peak sooner and decline faster in order for these economies to be on a net-zero pathway.

The rapid and just transformation of developing country power systems requires a dramatic infusion of capital. The IEA estimates that, globally, clean energy investment must triple by the early 2030s. In emerging market and developing economies (excluding China), investment must increase *seven-fold*, to \$1.9 trillion a year.²

In its 2023 *World Energy Outlook*, the IEA notes significant obstacles to this scale-up – including tightening financial and fiscal conditions, high levels of government indebtedness, and the high cost of capital for clean energy projects – and it calls for more concessional funding to improve risk-adjusted returns and mobilize private capital at scale. The IEA underscores the urgency of “innovative, large-scale financing mechanisms...to support clean energy investments in emerging and developing economies, [and] measures to ensure an orderly decline in the use of fossil fuels, including an end to new approvals of unabated coal-fired power plants.”³

The ETA Response: Leveraging Carbon Finance

The Energy Transition Accelerator addresses this urgent need for transition finance through an innovative market-based strategy to catalyze capital supporting accelerated power sector decarbonization in developing and emerging economies.

The ETA Coalition will bring together willing sellers and buyers employing high-integrity carbon crediting in support of faster energy transition. Participating private sector and sovereign government buyers will offer advance purchase commitments for credits to be generated by participating host countries through the implementation of ambitious energy transition strategies. Credits will be issued when emission reductions are achieved and verified and, when delivered to buyers, may be used for voluntary or “compliance” purposes.

Participating host countries will generate high-quality carbon credits for verified reductions in emissions from electricity generation. The revenue generated can be channeled by host countries to those activities most effectively contributing to the sector’s decarbonization, as necessary. These activities could include early coal plant retirement, accelerated renewables deployment,

¹ IEA (2023), Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach, IEA, Paris <https://www.iea.org/reports/net-zero-roadmap-a-global-pathway-to-keep-the-15-0c-goal-in-reach>, License: CC BY 4.0

² IEA (2023), Scaling Up Private Finance for Clean Energy in Emerging and Developing Economies, IEA, Paris <https://www.iea.org/reports/scaling-up-private-finance-for-clean-energy-in-emerging-and-developing-economies>, License: CC BY 4.0

³ IEA (2023), World Energy Outlook 2023, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2023>, License: CC BY 4.0 (report); CC BY NC SA 4.0 (Annex A)

grid and storage improvements, or the development and implementation of enabling policies. An innovative feature of the ETA will be the introduction of a sector-scale crediting approach for the electricity sector intended to ensure environmental integrity and to incentivize broad sectoral transformation (see Carbon Crediting Program below).

As described below and in [Appendix II](#), preliminary estimates indicate the ETA could generate up to \$41 billion in crediting revenue to host countries through 2035. The anticipated revenue from future credit sales can be leveraged to help unlock upfront finance for the energy transition through innovative financial arrangements mobilizing other public, private, and philanthropic flows. Preliminary estimates indicate that through such leveraging the ETA could mobilize up to \$207 billion in total transition finance through 2035.

The ETA Partners, in consultation with pilot countries and prospective buyers in the ETA Coalition, will finalize the ETA's governance and administrative arrangements, pricing and transaction structure, and terms of participation in 2024. The ETA will be governed and will operate as an independent initiative with a designated secretariat.

GUIDING PRINCIPLES

As guiding objectives, the ETA Partners have designed the Energy Transition Accelerator to:

- Incentivize comprehensive, country-led power sector transition strategies and actions that achieve long-term structural change in line with keeping 1.5 °C within reach.
- Support developing countries in implementing these ambitious strategies serving their climate, energy, and broader sustainable development goals, and in achieving their nationally determined contributions (NDCs).
- Provide interim pathways for private sector buyers to pursue science-aligned net-zero strategies and finance high-integrity emissions reductions beyond their value chains, while anticipating a gradual phase-out of reduction-based emissions offsetting in achieving net-zero goals.
- Promote strong environmental integrity by ensuring that ETA credits represent emissions reductions that are real and additional and that their use is compatible with emerging best practice for private sector net-zero strategies and with Article 6 of the Paris Agreement.
- Promote an inclusive, just energy transition that addresses energy poverty and the needs of workers and communities whose livelihoods are affected by changes in fuels and technologies.
- Catalyze new climate finance that supplements, not substitutes for, existing public, private, multilateral, and philanthropic finance, including companies' continued investment in reducing emissions within their own value chains.

The ETA Coalition

Members of the ETA Coalition will include host jurisdictions that will generate carbon credits through the implementation of energy transition strategies, as well as sovereign governments and private sector entities that commit to pay for and/or acquire those credits, for either voluntary or compliance uses.

Host Jurisdictions

To participate in the ETA Coalition as a supplier of carbon credits, a jurisdiction must:

- Be a national government, or a subnational government (with the approval of the national government), or its designee (e.g., a system operator or utility);
- Have, or be within a country that has, a current NDC that encompasses electric power generation;
- Have, or commit to develop in the short term, a Just Energy Transition Plan and/or a set of related policies approved by the national government that:
 - outlines the country’s strategy for a pathway to net zero emissions by mid-century;
 - includes measures to mitigate social and environmental implications;
 - outlines associated investment requirements; and
 - commits to no new permitting of unabated coal generation plants (in the case of Just Energy Transition Partnership countries, consistent with commitments made in the JETP agreements).

Countries may signal their intent to participate in the ETA in advance of its formal establishment by becoming pilot jurisdictions.

Private Sector Buyers

To participate in the ETA Coalition as a buyer of credits, a private sector buyer must⁴:

- Publicly commit to science-based targets (SBTi) or equivalent quantified science-aligned targets consistent with limiting warming in line with the long-term temperature goal of the Paris Agreement;
- Publicly commit to mid-century net zero targets following established best practice;
- Publicly report a greenhouse gas emissions inventory following the Greenhouse Gas Protocol (GHGP) or Partnership for Carbon Accounting Financials (PCAF);
- Develop and maintain a plan to meet the above-mentioned emissions reductions targets, and publicly report on progress towards achievement of targets; and
- Separately publicly report any use of carbon credits, including purpose of use.

The ETA Partners will continue to work across the corporate accountability ecosystem including the Voluntary Carbon Market Integrity initiative (VCMI), the Science-Based Targets initiative

⁴ Consistent with applicable regulatory requirements.

(SBTi), CDP, the Greenhouse Gas Protocol (GHGP), and the Advanced and Indirect Mitigation Platform (AIM platform) to ensure consistency of its requirements with existing and emerging guidance from these key standard setters.

In addition to participation criteria, the ETA will promote environmental integrity in the use of ETA credits by setting out credit use cases through which companies can incorporate credits in their corporate climate strategies while continuing to prioritize direct action and investment to reduce emissions within their own value chains. These use cases will allow ETA private sector buyers to maintain the environmental integrity of their voluntary climate commitments while helping to mobilize the finance needed to decarbonize developing country electricity systems. [Appendix III](#) outlines an initial set of credit use pathways.

Sovereign Buyers/Donors

To participate in the ETA Coalition as a sovereign buyer or donor, a country must:

- Have an NDC that represents its highest possible ambition and aligns with clear and credible pathways towards net zero emissions, and have established, or have plans to establish as soon as possible, a 2050 Long-Term Strategy to implement this net zero goal; and
- Commit to no new permitting of unabated coal generation plants.

Carbon Crediting Program

The ETA Coalition will support innovative approaches for crediting emission reductions from the implementation of strategies and activities that are aligned with participating countries' just energy transition and climate mitigation objectives; are third-party certified and administered according to a high-integrity standard; and represent real, additional, and verified emissions reductions.

Concerns have arisen about the environmental integrity of past carbon crediting practices in the quickly evolving power sector. To address these challenges, the crediting approaches supported by ETA will represent a significant evolution from traditional methods. Credits transacted by the ETA Coalition will meet minimum criteria including that:

- apply appropriate tools to avoid emissions leakage;
- meet high performance standards for demonstrating additionality;
- represent actual impacts on emissions levels evidenced by scientific, up-to-date, conservative and reliable data;
- enable ambitious host country just transition policies and targets;
- require baselines to be set below business-as-usual and adjusted downward as necessary to support their compatibility with host country NDCs, Long Term-Low Emission Development Strategies, and avoid crediting for or locking in levels of emissions that are incompatible with the long-term temperature goal of the Paris Agreement; and

- are consistent with Article 6 of the Paris Agreement, the Emission Unit Eligibility Criteria of CORSIA, and the Core Carbon Principles of the Integrity Council for the Voluntary Carbon Market (ICVCM).

An Innovative Sector-Scale Crediting Approach

The ETA partners are supporting the development by Environmental Resources Trust (ERT), a wholly owned nonprofit subsidiary of Winrock International, of a sector-scale crediting standard that rewards host jurisdictions for verified emission reductions achieved on an aggregate basis across the entire electricity sector (i.e., a sector no-lose crediting standard). The aim is for this sectoral approach to facilitate systemic changes to decarbonize electricity through a broad range of activities contributing to emissions reductions, such as early coal plant retirement, accelerated renewables deployment, and grid and storage improvements.

Importantly, unlike targeted project-based crediting approaches, a sector level approach can support and credit countries for the impact of infrastructure investments, as well as legal, policy, and regulatory measures, such as changes in dispatch order, that can accelerate decarbonization. The approach can also mobilize resources that host governments can use to address the needs of communities and workers affected by the energy transition. By accounting for emissions performance across the sector, the approach can also address issues of uncertainties related to additionality and the risk of emissions leakage.

In recognition of key differences in the structure and state of development of developing country power systems, ERT/Winrock will consider distinct methods suited to different host government scenarios, such as:

- jurisdictions whose emissions from electricity generation have already peaked;
- those with rising electricity demand and emissions; and
- those with low per capita grid capacity and electricity access.

The [key elements](#) of the sectoral crediting standard being developed by ERT/Winrock have been released in tandem with this Core ETA Framework. ERT/Winrock plans to continue to consult with pilot countries, experts, and other key stakeholders and to release a proposed crediting standard for formal public consultation in 2024.

The ETA Coalition may endorse and source credits via other methodologies that meet the minimum criteria outlined above and support the generation of high-integrity carbon credits.

Support for Adaptation and Resilience

Carbon crediting standards employed by the ETA Coalition will have procedures in place to channel 5 percent of the credits generated to raise additional funds for adaptation and resilience in vulnerable countries.

Aligning with Article 6

The ETA will operate in a manner fully compatible with Article 6 of the Paris Agreement.

Host countries supplying credits to private sector buyers for voluntary use, or receiving payments for performance from sovereign contributors, can retain the underlying emissions reductions in their national emissions totals reported toward their NDCs. When ETA credits are used for voluntary purposes, host countries are not required to authorize the credits per Paris Agreement Article 6.2 guidance or to subsequently apply corresponding adjustments.

Sovereign buyers may purchase ETA credits for use toward their NDC targets, and private sector buyers may purchase ETA credits for use toward compliance purposes including international mitigation purposes such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSI), only if the host country authorizes the credits for such purposes under Article 6.2.

Sovereign buyers and host governments transacting authorized credits will implement the guidance under Article 6.2, including applying corresponding adjustments and submitting all related information in respect of credits purchased through ETA consistent with Article 6.2 guidance. Host governments will also apply these same procedures and guidance in respect of authorized credits purchased by private sector buyers referred to above.

Just Transition and Safeguards

Standards employed by the ETA Coalition will include a set of robust environmental, social, and just transition safeguards addressing:

1. Alignment with a host jurisdiction's just energy transition plan and/or related policies
2. Decommissioning and demolition of coal
3. Disclosure of information and facilitation of stakeholder engagement
4. Implementation of anti-corruption measures
5. Management of land acquisition, restrictions on land use and involuntary resettlement
6. Establishment of a grievance redress mechanism
7. Assessment and management of social risks
8. Evaluation and sustainable management of environmental risks, resource efficiency, pollution prevention, biodiversity conservation and natural resources
9. Preservation of cultural heritage
10. Assurance of secure energy supply

[Appendix IV](#) elaborates these intended safeguards and provides further information on the ETA's Safeguards and Just Transition Framework. Host countries with strong experience implementing the World Bank's Environmental and Social Framework may use it in lieu of the ETA safeguards.

Structuring and Leveraging ETA Finance

The ETA is premised on a pay-on-delivery model: through advance purchase commitments, buyers agree to pay upon delivery for credits that are issued in respect of verified greenhouse gas emissions reductions.

The ETA Partners intend as a default to establish a basic transaction structure, with designated intermediaries, in which the host country receives the credits on issuance and sells these to an ETA intermediary and/or corporate buyers in exchange for direct payment for the credits. Advance purchase commitments from buyers will potentially reflect a tiered price structure (e.g., depending on the credit's social and/or environmental attributes) to be determined in consultation with intended buyers and sellers. (As noted below, sovereign contributors to the World Bank's SCALE trust fund can offer their results-based payments as an if-needed floor price guarantee, to provide market de-risking for host jurisdictions.)

The direct crediting revenue generated by the ETA will depend largely on the number and size of countries participating, the volume of credits generated (the degree to which countries outperform the crediting performance level), and credit prices. The preliminary analysis summarized in [Appendix II](#) suggests that, for an illustrative set of three large high-fossil countries, direct crediting revenue could range from \$11 billion to \$41 billion through 2035.

The investments needed to effect faster power sector transformation will, however, require significant upfront capital, some of which can be more easily financed on commercial terms (e.g., new renewable generation capacity) and some of which may not (e.g., decommissioning coal and just transition costs). The anticipated revenue stream created by carbon credits sold under ETA can be leveraged by host countries to help unlock some of the upfront finance needed for the implementation of their transition strategies.

The preliminary analysis summarized in [Appendix II](#) suggests that, for the illustrative set of countries examined, ETA revenue can be leveraged to mobilize a total \$72 billion to \$207 billion through 2035, depending on how the host countries choose to allocate the proceeds of crediting and on the leveraging ratio achieved. This represents between 20 percent and 35 percent of the countries' total power sector transition costs.

One key question in structuring ETA transactions is the degree to which the ETA itself should be directly involved in proactively mobilizing upfront capital. The ETA could remain a simpler carbon finance mechanism whose crediting proceeds can integrate with other public, private, and philanthropic flows being mobilized through other initiatives or the market. Host governments could, in parallel, structure sovereign green bonds to raise upfront finance, with the bond principal coupon repaid partly or wholly through carbon credit revenues. Alternatively, the ETA could create one or more special purpose vehicles or funds to mobilize upfront finance from investors directly into specific projects or groups of investments.

In further consultation with potential host countries and interested buyers and investors, the ETA Partners will continue to explore potential models for structuring ETA transactions, each of which has implications for the risks and incentives for buyers, investors, and host countries, and for host country financial management.

Collaboration with the World Bank

The State Department, including on behalf of ETA Partners, has entered into a strategic collaboration with the World Bank and its SCALE partnership to leverage the complementary strengths of the ETA and SCALE toward their shared objective of providing support and incentives for developing countries to undertake ambitious energy transition strategies that deliver real and significant emission reductions.

SCALE (Scaling Climate Action by Lowering Emissions) is a trust-funded partnership designed to catalyze transformative climate action by supporting host countries to build the institutional infrastructure and experience needed to generate and transact verified, high-integrity carbon credits in a participatory and socially inclusive manner, preparing them to access carbon markets. One priority for SCALE is accelerating just energy transitions. The United States, SCALE's initial donor, and the World Bank are working together to capitalize the fund through additional sovereign donor contributions.

The World Bank will support host countries to design, finance and implement just energy transition strategies and programs, including leveraging SCALE support and ETA resources. The collaboration between ETA and SCALE will help to grow demand for ETA credits by providing an avenue for SCALE's sovereign contributors to participate in the ETA Coalition, either to provide results-based climate finance through SCALE, thus supporting host country NDC achievement, or to acquire ETA credits for use toward their own NDCs. SCALE's results-based climate finance has the benefit of providing revenue certainty to host countries by committing to pay a guaranteed floor price for credits not transacted with private sector buyers.

In addition, ETA host jurisdictions participating in SCALE as client countries can access World Bank technical assistance and capacity-building support for the development and implementation of their just energy transition strategies and for the delivery of verified greenhouse gas reductions.

Next Steps

With this Core Framework as a foundation, the ETA Partners aim to formally establish the Energy Transition Accelerator as an independent initiative by Earth Day 2024.

As further steps toward forming the ETA Coalition and fully operationalizing the ETA:

- The ETA Partners, in consultation with potential government and private sector participants, will finalize governance arrangements, pricing and transaction structure, and terms of participation for the Coalition.
- The World Bank will advise pilot countries and other countries interested in ETA participation of the technical assistance and capacity-building support available to client countries through the SCALE partnership and other World Bank programs.
- ERT/Winrock will gather additional input from potential host countries and other interested stakeholders and, following a period of formal public consultation, will finalize its standard for use by the ETA.

- Potential host jurisdictions will be invited to submit formal proposals to apply the standard and interested buyers will enter into advance purchase commitments for ETA credits.

The ETA Partners will continue to provide periodic updates to, and invite input from, a wide array of interested stakeholders.

For Further Information

Inquiries on the ETA may be directed to info@etaccelerator.org.

APPENDICES

I. ETA HIGH-LEVEL CONSULTATIVE GROUP PARTICIPANTS

Participants in the ETA High-Level Consultative Group (HCLG) represent a broad range of perspectives and expertise and have provided ETA Partners their independent views on issues related to the design of the Energy Transition Accelerator.

Luiz Amaral, CEO, Science Based Targets Initiative (SBTi)

Inger Andersen, Executive Director, United Nations Environment Programme

Dr. Ghosh Arunabha, Founder-CEO, Council on Energy, Environment and Water (CEEW)

Peter Bakker, President and CEO, World Business Council for Sustainable Development (WBCSD)

Manish Bapna, President and Chief Executive Officer, Natural Resources Defense Council (NRDC)

Harry Boyd-Carpenter, Managing Director, Climate Strategy and Delivery, European Bank for Reconstruction and Development

Barbara Buchner, Global Managing Director, Climate Policy Initiative (CPI)

Mark Carney, Co-Chair, Glasgow Financial Alliance for Net Zero (GFANZ) and UN Special Envoy for Climate Action and Finance

Laura Cozzi, Director of Sustainability, Technology and Outlook, International Energy Agency (IEA)

Ramon Cruz, President, Sierra Club

Ani Dasgupta, President and CEO, World Resources Institute (WRI) for the Greenhouse Gas Protocol

Suzanne Di Bianca, Executive Vice President and Chief Impact Officer, Salesforce

Saliem Fakir, Executive Director, Africa Climate Foundation

Dr. Birol Fatih, Executive Director, International Energy Agency

Christiana Figueres; UNFCCC and Co-Founder of Global Optimism

Anne Finucane, Chairwoman, Rubicon Carbon

Dirk Forrister, President and CEO, International Emissions Trading Association (IETA)

Marina Grossi, President, Brazilian Business Council for Sustainable Development (CEBDS)

Andrea Guerrero, Director, Field Innovation, Growald Climate Fund

Professor Saleemul Huq, Director, International Centre for Climate Change and Development

Kara Hurst, Vice President, Head of Worldwide Sustainability, Amazon

Mark Kenber, Executive Director, Voluntary Carbon Markets Integrity Initiative (VCMI)

Francesco La Camera, Director-General, International Renewable Energy Agency (IRENA)

Rich Lesser, Global Chair, Boston Consulting Group (BCG)

Arshad Mansoor, President & CEO, Electric Power Research Institute (EPRI)

Catherine McKenna, UN Secretary-General's High-level Expert Group on Net-Zero Commitments

Rebecca Mikula-Wright, Chief Executive Officer, Investor Group on Climate Change & Asia
Investor Group on Climate Change

Marcene Mitchell, Senior Vice President of Climate Change, WWF

Helen Mountford, CEO, ClimateWorks Foundation

Brian Moynihan, Chair of the Board and Chief Executive Officer of Sustainable Markets Initiative, Bank of America

Annette Nazareth, Chair, Integrity Council for the Voluntary Carbon Market (IC-VCM)

Damilola Ogunbiyi, CEO and Special Representative, UN Secretary-General for Sustainable Energy for All (SEforALL), and Co-Chair of U.N. Energy

Max Scher, Vice President, Sustainability Research and Innovation, Salesforce

Vera Songwe, Co-Chair, High Level Expert Group on Climate Finance

Achim Steiner, Administrator, United Nations Development Programme and vice-chair of United Nations Sustainable Development Group

Lord Nicholas Stern, Chairman of the Grantham Research Institute on Climate Change and the Environment, London School of Economics

Laurence Tubiana, Chief Executive Officer, European Climate Foundation

Fabby Tumiwa, Executive Director, Institute for Essential Services Reform (IESR)

Joanne Yawitch, Chief Executive Officer, National Business Initiative, South Africa

II. MOBILIZATION POTENTIAL

The volume of transition finance that can be mobilized by the ETA will depend on factors including the number, size, energy mix of the jurisdictions participating; the timing and volume of emission reduction credits generated and sold; the price of these credits; how jurisdictions choose to allocate the credit revenues they receive; and the leveraging rate that can be achieved, which, in turn, is influenced by general fiscal and policy conditions and the incentives provided/risk mitigation measures undertaken to mobilize additional private capital.

To assess the ETA's mobilization potential, the ETA design team estimated potential crediting revenue and total finance mobilized for an illustrative set of three large high-fossil developing countries that, collectively, generated 1400 TWH of electricity in 2022 and emitted 450 million tons of CO₂ emissions from electricity.

Estimates were developed under four scenarios with different assumptions on revenue generation, credit revenue allocation, and leverage ratio:

Revenue generation – Scenarios 1 and 2 assume low crediting volumes and a credit price of \$20/ton, while Scenarios 3 and 4 assume high crediting volumes and a price of \$50/ton.

Credit revenue allocation – The effect of ETA revenues on transition finance will depend on how individual governments allocate them. Revenues could be used for two specific areas:

- Non-commercial, non-revenue-generating costs such as retiring fossil fuel power plants and implementing just transition programs. While these may not generate internal returns or attract private financing, they would address key barriers, including buying out long-term coal supply and generation contracts and providing reassurance to stakeholders that energy transition initiatives will be equitable and inclusive.
- ETA revenues could also be used to mitigate risk or otherwise subsidize private investment in commercial areas that generate internal returns, such as building renewable energy generating capacity and, to a lesser extent, improving electricity grids to accommodate more renewable energy, which could catalyze private investment.

Scenarios 1 and 3 assume that non-commercial transition costs (fossil fuel retirement and just transition) are fully funded (to the extent possible) before any ETA revenues are used to incentivize private investment in the commercial components of the transition (grid upgrades and renewable electricity generation). To demonstrate the effects of prioritizing the mobilization of private finance, scenarios 2 and 4 assume that only just transition costs are fully funded (to the extent possible) before remaining revenues are used to incentivize private investment in grid upgrades and renewable electricity generation.

Leverage ratio – A June 2023 joint report by the IEA and the IFC suggests that \$1 of concessional funding for climate transactions can mobilize \$7 of commercial third-party capital (i.e., excluding non-concessional investment from the IFC itself).⁵ However, successfully realizing this 7x ratio may require strengthening of key local institutions (such as utilities, market regulators, and local financial institutions) as well as enabling energy and financial policy reforms. Convergence’s 2023 State of Blended Finance report found an average mobilization ratio of 6.1x for mitigation blended finance deals, though this figure is 5.4x for deals in the renewable energy sector and 5.9x for those related to energy efficiency.⁶

To conservatively illustrate the potential effects of the ETA on the transition capital stack, the analysis shows for each of the four scenarios how much private investment ETA revenues could catalyze for the commercial components of the energy transition assuming leverage ratios of 4x and 7x.

Based on these assumptions, as shown in Table 1, the ETA could potentially generate between \$11 billion and \$41 billion in direct ETA revenue through 2035. This would be at least one-third – and up to 100 percent – of the non-commercial portion of the three countries’ estimated power sector transition costs. The total finance mobilized could range from \$124 billion to \$207 billion through 2035, between 20 percent and 35 percent of the countries’ total power sector transition costs.

TABLE 1

Scenario	ETA revenue	Direct financing (FF ret. & JT)	Leveraged financing (RE, T&D)		Total financing mobilized	
			4x ratio	7x ratio	4x ratio	7x ratio
1	\$10.9	\$10.9	--	--	\$10.9	\$10.9
2	\$10.9	\$10.8	\$0.6	\$1.0	\$11.3	\$11.8
3	\$41.0	\$25.6	\$61.3	\$107.2	\$86.9	\$132.9
4	\$41.0	\$13.3	\$110.5	\$193.4	\$123.8	\$206.7

⁵ IEA (2023), Scaling Up Private Finance for Clean Energy in Emerging and Developing Economies, IEA, Paris <https://www.iea.org/reports/scaling-up-private-finance-for-clean-energy-in-emerging-and-developing-economies>, License: CC BY 4.0

⁶ Convergence Blended Finance (2023). The State of Blended Finance 2023: Climate Edition. Convergence Report. <https://www.convergence.finance/resource/state-of-blended-finance-2023/view>

III. CREDIT USE PATHWAYS

Voluntary credit use pathways

As a means of promoting environmental integrity in the voluntary use of ETA credits, the ETA Partners have identified several pathways that private buyers in the ETA Coalition could follow in incorporating credits into their corporate climate strategies, while continuing to prioritize direct action and investment to reduce emissions within their own value chains. These use cases reflect emerging best practices in corporate climate mitigation. While the use cases presented here are not intended to be prescriptive or exhaustive, the ETA Partners believe that they will allow ETA private-sector buyers to uphold the environmental integrity of their voluntary climate commitments while helping to mobilize the finance needed to decarbonize developing country power systems.

Four use cases are presented below: the use of ETA credits to address emissions from purchased electricity (case 1) and from electricity used by a company's suppliers (case 2); to offset unabated emissions (case 3); and to invest in emissions reductions beyond a company's mitigation target (case 4).

The first two use cases, which involve using ETA credits to address emissions *within* a company's supply chain, deserve particular emphasis. These use cases embody the principle that ETA credits will represent rigorously quantified and verified emissions reductions in electricity emissions in participating countries. As a result, for companies that purchase electricity in developing countries, or that have supply chains in developing countries that depend on electric power, ETA credits will represent a means of directly addressing a significant share of their scope 2 or 3 emissions.

Indeed, given the ETA's sectoral crediting approach, the ETA Partners believe that use cases 1 and 2 will be among the *most effective* means for companies to reduce electricity-related emissions throughout their supply chains – in a way that is not limited to a company's own sources of electricity, or to its individual suppliers, but that has a systemic impact across the power sectors of entire countries. As a result, these two pathways (in particular use case 2) have the potential to be a game-changing development in the high-integrity use of carbon credits – one that could unlock very substantial investment in accelerating the global clean energy transition while providing companies with a valuable tool to address their Scope 2 and 3 emissions.

Use Case 1: Use of ETA credits towards emissions from purchased electricity (Scope 2)

In this use case, ETA credits used by a private-sector buyer will be treated as **reductions in the emissions from the company's purchased electricity** that are associated with the buyer's climate mitigation target. The buyer would account for ETA credits using market-based accounting, in a similar way that renewable energy certificates (RECs) may be used to meet Scope 2 targets under the GHG Protocol. Two hypothetical examples of use case 1 are as follows:

(Country-based approach) A company purchases electricity in a country in the ETA Coalition. It buys ETA credits generated in that country (in an amount up to the emissions associated with the company’s purchased electricity in that country) and accounts for those emission reductions in its Scope 2 emissions using the market-based accounting method of the GHG Protocol.

- or -

(Sector-based approach) A company purchases electricity in developing countries that are not yet participating in the ETA Coalition. The company buys ETA credits (in an amount up to the emissions associated with the company’s purchased electricity in developing countries) and accounts for those emission reductions in its Scope 2 emissions using the market-based accounting method of the GHG Protocol.

The sector-based approach reflects the reality that, especially in the near term, the ETA will be able to encompass only a limited number of countries. As the number of participating countries increases, the country-based approach (or an intermediate region-based approach) would become more practical.

Use Case 2: Use of ETA credits towards emissions from electricity used by suppliers (upstream Scope 3)

In this use case, ETA credits used by a private-sector buyer will be treated as **reductions in the indirect emissions from the company’s supply chain attributable to electricity use** that are associated with the buyer’s climate mitigation target. As in use case 1, the buyer would account for ETA credits using appropriate methods of market-based accounting.⁷ Two hypothetical examples are the following:

(Country-based approach) A company purchases goods and services from suppliers located in a country that is participating in the ETA Coalition. The company buys ETA credits generated in that country (in an amount up to the estimated emissions associated with the electricity used by the company’s suppliers in that country) and accounts for those emission reductions in or alongside its Scope 3 emissions inventory.

- or -

(Sector-based approach) A company purchases goods and services from suppliers located in developing countries that are not yet participating in the ETA Coalition. The company buys ETA credits (in an amount up to the estimated emissions associated with the electricity used by the company’s suppliers in developing countries) and accounts for those emission reductions in or alongside its Scope 3 emissions inventory.

⁷ GHG Protocol is in the process of considering revisions to accounting treatment of market-based instruments; the use case described here can be considered to be consistent with the “supply shed” approach under discussion, as well as with other “book-and-claim” mechanisms being developed for other technologies (e.g., sustainable aviation fuel certificates).

As in use case 1, the sector-based approach reflects the reality that, especially in the near term, the ETA will encompass only a limited number of countries.

Use case 3: Use of ETA credits to offset a limited amount of unabated emissions

In this use case, ETA credits will be used by a private-sector buyer to offset a limited amount of unabated emissions covered by the buyer's climate mitigation target. Use of ETA credits in this way would be subject to appropriate restrictions (e.g., only Scope 3 emissions might be eligible, up to a maximum percentage of emissions), in order to ensure that ETA credits were used to complement rather than substitute for a company's effort to reduce emissions in its own value chains.

The Scope 3 Flexibility Claim (beta version) released by the Voluntary Carbon Market Integrity initiative (VCMi) provides an example of use case 3. A company may use/communicate this claim in a given year if it purchases and retires enough high-quality carbon credits in that year to make up the "emissions gap" between a company's most recently reported Scope 3 emissions and where a trajectory consistent with the Scope 3 emissions portion of a company's science-aligned target indicates the company's Scope 3 emissions should be, for the same year. Additionally, companies may only use this claim if they meet VCMi Foundational Criteria; are making progress to meeting Scopes 1 and 2 emissions reduction targets; have an emissions gap as described above that is less than or equal to 50% of the company's Scope 3 emissions inventory in the year the company is making the Scope 3 Flexibility Claim; and over time decrease the number of credits used towards their Scope 3 Flexibility Claim leading to their phase out no later than 10 years after the first claim is made, or by 2035, whichever is the earlier.

Use case 4: Use of ETA credits to achieve emissions reductions beyond a climate mitigation target

Finally, a private-sector buyer may use ETA credits as a means of securing additional quantified emissions reductions beyond what the company must achieve to meet its climate mitigation target.

- For example, a company that seeks to make a Silver, Gold, or Platinum claim under the VCMi Claims Code of Practice could purchase and retire ETA credits equal to an appropriate fraction (e.g., 60 to 100% for VCMi Gold) of its remaining emissions after being on track to meet its near-term emissions reduction target.
- Alternatively, under the Science-Based Targets initiative (SBTi), a company could purchase and retire ETA credits as a "Beyond Value Chain Mitigation" contribution, again entirely additional to the emissions reductions that the buyer has made to meet its science-based target.

Other credit use pathways

Other credit use cases may be relevant to companies purchasing credits for use toward the International Civil Aviation Organization's Carbon Offsetting and Reduction Scheme for

International Aviation (ICAO's CORSIA) or for domestic compliance use, as well as to sovereigns purchasing credits for use toward their NDCs or to provide results-based payments to host governments. These use cases are not foreseen to be a primary source of demand under ETA but are nonetheless accommodated. See "[Aligning with Article 6](#)" for details.

Compliance use cases

Private sector credit buyers could purchase credits for use toward, for example, ICAO's CORSIA or a domestic regulation that requires credits to be authorized by a host government under Article 6.2 of the Paris Agreement in order to be eligible for compliance use. Provided an ETA host government is willing to apply the guidance for cooperative approaches under Article 6.2, including to authorize and apply corresponding adjustments in respect of the credits, such use cases will be supported under the ETA and by procedures set out in the ETA crediting standard. *Sovereign credit buyers* could replicate this private sector buyer approach to purchase credits for use toward an NDC target.

Sovereign results-based payments

Sovereign contributors could also provide results-based payments for credits, which are not counted toward their NDC targets. In this case, similar to use case 4 in the previous section, the host government would include the underlying mitigation in accounting for its NDC. Sovereign contributors could structure these payments as floor price guarantees to host governments, for example through participation in the SCALE Trust Fund administered by the World Bank Group.

IV. JUST TRANSITION AND SAFEGUARDS

Core to the ETA is the inclusion of a Just Transition and Safeguards Framework providing a set of safeguards and elements for a fair and equitable transition to cleaner energy, which would help to uphold credit integrity and the rights and interests of impacted stakeholders, including Indigenous Peoples and local communities. A holistic approach to social and environmental safeguards can help ensure that ETA carbon credits represent not just greenhouse gas emission reductions but also achievement of other priorities and benefits, such as environmental, social and governance objectives.

The Just Transition and Safeguards Framework will consist of:

- Eligibility criteria: Pre-qualifying criteria to be met by a jurisdiction to participate in the ETA Coalition as a supplier of carbon credits (described in the Core ETA Framework).
- Safeguards: Requirements outlined below to be met by a host jurisdiction in order to receive credits, with progress monitored over time.
- Elements: Suggested elements, to be elaborated, that are complementary to safeguards and to be implemented by a host jurisdiction based on relevance to the country.

The safeguards and elements will be accompanied by structural, procedural, and outcome indicators that outline specific conditions or practices to be evaluated to ensure progress toward the intended outcomes. Additionally, a set of metrics will be defined to measure the effectiveness of the host jurisdiction in achieving its just energy transition objectives.

Safeguards

The Just Transition and Safeguards Framework will require a host jurisdiction to designate a governmental body with responsibility for ensuring safeguards are implemented, monitoring compliance with safeguards, and providing guidance and support on how to satisfy safeguard requirements. The Framework outlines the following safeguards to be adapted for inclusion in the crediting standard:

1. Alignment with JET plan and/or related policies: Decarbonization efforts are aligned with the JET plan and/or related policies which include the national decarbonization and socio-economic development priorities.
2. Decommissioning and demolition of coal: Measures are in place to ensure that there is no new coal development or life extension of existing coal assets, with decommissioning and demolition of coal plants included as part of the plans.
3. Disclosure of information and facilitation of stakeholder engagement: Effective and inclusive engagement with relevant stakeholders is facilitated, ensuring that all concerned parties have access to essential information. This includes timely and accessible disclosure of environmental, social, and cultural risks and impacts in a comprehensible format.

4. Implementation of anti-corruption measures: Guidelines and standards are in place to promote transparency, ethical behavior and integrity and mitigate risks associated with corruption.
5. Management of land acquisition, restrictions on land use and involuntary resettlement: Disruptions to affected communities caused by decarbonization efforts are minimized by respecting land tenure rights and avoiding involuntary resettlements. Where involuntary resettlements are unavoidable, it will be minimized and appropriate measures to mitigate adverse impacts on displaced persons will be carefully planned and implemented, incl. expressed free, prior, and informed consent (FPIC).
6. Establishment of a grievance redress mechanism: Non-discriminatory and non-cost prohibitive mechanisms are implemented for facilitating the resolution of disputes and establishing grievances at all relevant levels.
7. Assessment and management of social risks: Social impact assessments are completed and used to identify mitigation measures and actions to ensure the transition is socially sound and sustainable.
8. Evaluation and sustainable management of environmental risks, resource efficiency, pollution prevention, biodiversity conservation and natural resources: Environmental impact assessments are completed and used to identify mitigation measures and actions to ensure the transition is environmentally sound and sustainable. These assessments will consider threats to resource efficiency, air quality, biodiversity, and natural resources.
9. Preservation of cultural heritage: Impact on cultural heritage is avoided by conducting assessments that consider the direct, indirect, and cumulative risks and impacts on cultural heritage and identifying and implementing measures to address these impacts. If avoidance is not possible, then cultural heritage experts are engaged to assist in the identification, valuation assessment and protection of cultural heritage.
10. Assurance of secure energy supply: The energy transition plan ensures that neither national energy security nor energy access are compromised. If this is unavoidable, then measures will be implemented to mitigate and address any potential adverse impacts on energy security and/or access.

Host countries with strong experience implementing the World Bank's Environmental and Social Framework may use it in lieu of these safeguards.

Just Transition Elements

In addition to these safeguards, The Just Transition and Safeguards Framework will contain a menu of suggested elements to be implemented by a host jurisdiction based on relevance to the country. Information on the implementation of elements can be made available to buyers as a way of indicating the quality of associated carbon credits. The governmental body designated to oversee safeguards should guide host jurisdictions on the selection of elements and their implementation and should verify that their requirements are being met to ensure the accuracy of information made available to buyers.

Elements that can help suppliers appear more attractive to buyers include: 1) development of skills for individuals affected by the transition; 2) expansion of the clean energy economy; 3) promotion of local economic growth; 4) development of clean infrastructure; 5) promotion of equity initiatives; 6) incorporation of social protection measures in just transition planning; 7) support for SDGs and co-benefits; 8) development of new employment opportunities; and 9) cultivation of competitive local supply chains.

V. ETA DESIGN TEAM

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