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Market-Driven Factors

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Price per tonne as input to project ERC value estimations

It is important to keep abreast of pricing factors that could significantly affect a given project's financial value, and adjust the price per tonne potential of various ERC types to reflect these changes. According to the Shell-BCG report, 92% of buyers expect their average portfolio credit price to increase, with a median projected increase of 60%. In 2021, the VCM experienced an unprecedented increase in prices, rising almost 60% compared to average ERC prices in 2020[1]. While market players expect the VCM to continue to track steady growth, the decline of prices and transaction volumes observed in 2022[2] demonstrates the volatility of the market and potential headwinds as buyers grapple with evolving standards and principles around offsetting claims, uncertainty around ERCs in relation to Article 6 of the Paris Agreement, and skepticism surrounding the quality and integrity of ERCs and their effectiveness as a mechanism towards net-zero emissions.

In addition, the interactions of the primary and secondary market also play a role in price as new secondary products are defined and transacted in exchanges and marketplaces where price is less opaque. For example, CBL launched the Sustainable Development-Global Emissions Offset (SD-GEO) contract in 2022[3], the fourth standardized contract traded on the CBL exchange as a spot contract and on CME Group as a futures product. Such products define specific project attributes that are eligible for standardized contracts, creating a secondary market where projects that meet these set of attributes are bought, traded, and sold as a fungible product rather than for its impact, marketing, location, and other project-level qualities. For projects that fulfil this eligibility criteria, transactions in the secondary market can impact supply and the expected price for buyers with higher market awareness or who transact in these markets.

Similarly, schemes that set eligibility criteria for project attributes can also create separate submarkets for eligible ERC projects where supply and demand factors are specific and potentially independent of wider market movements. For example, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) established by the International Civil Aviation Organization (ICAO) set its own eligibility criteria for CORSIA emission units that can be used by participating airlines looking to offset their residual emissions[4]. Since its establishment, CORSIA eligibility has been used as a mechanism for standardized contracts that also subjects CORSIA-eligible ERCs to secondary market price factors.

It is therefore recommended that stakeholders review the prices transacting in VCM on a quarter to biannual basis, consider the sources of prices available based on the ERC project, and update the price per tonne potential used for estimating the project's Project ERC value (F1) at both Step One (Initial profiling) and

Step Three (Conduct assessment).

Carbon integrity risks and mitigation measures as inputs to project assessment

As the risk matrix and mitigation measures provided for the Carbon integrity (C1) assessment for Step Three (Conduct assessment) of the Project Assessment process are based on current market conditions, these should be updated following developments in carbon integrity principles, new knowledge on the carbon integrity risks material to each project type, and where there are new technologies and methodologies to be added to the matrix. As these constantly evolve, staying updated on these developments will help project developers and stakeholders understand the market view on carbon integrity and implement necessary measures in a proactive and timely manner. As a general guidance, it is recommended that stakeholders review the matrix and mitigation measures under this criterion biannually or annually, depending on the frequency and use of the project assessment exercise and resource availability and capacity.

For the mapping of inherent risk per project type, the following checklist questions serve as a guidance for assigning each risk level for each carbon integrity principle, as exemplified in the risk matrix provided:

Additionality

- What is the risk of the project activity being required by law or becoming more economically viable or affordable?
- If the project generates non-ERC revenue, what is the risk that such revenues could suggest economic viability for the project activity without the need for ERC revenues?
- Are the methodologies to define baseline scenarios for that project activity disputed? If so, to what extent (i.e., some dispute, widely disputed, etc.)?

Measurability

- What is the risk of the project activity resulting in leakage (i.e., as a result of the project activity, there is an increase in emissions outside the project boundary due to the displacement of activities), and due to what factors?
- Are the carbon accounting methodologies for this project activity limited and/or contested? If so, to what extent?
- Are there challenges to monitoring the emission reductions or removals from the project over time? What factors are these due to?

Permanence

- What is the risk of the emission reductions or removals generated by the project activity being released back to the atmosphere in the future? What internal and external factors (within and outside the project's control) are these due to?

Following the inherent risks of each project type, identifying mitigation measures that could reduce these risks can be guided by the following checklist questions:

Additionality

- Even if the project activity could be required by law, what evidence could reflect that, in reality, the project activity would not have occurred without the ERC project?
- If the project generates non-ERC revenue, in what scenario would it not be economically viable as a single source of revenue, without ERC revenues?
- At the project level, what market best practices are there for projects to define baseline scenarios that would strengthen its credibility?

Measurability

- Based on the factors that could result in leakage, what measures could a project implement to reduce likelihood of these factors causing leakage?
- In the case of potential leakages caused by external factors, what measures could projects implement to account for these?
- What measures could a project implement to increase the data quality of monitoring and overcome identified monitoring challenges for its project type?

Permanence

- What market best practices are there for projects to evaluate the risk of its emission reductions or removals being released back to the atmosphere in the future and reduce such risk of reversals?

For both analyses, desktop research from credible sources such as market intelligence or research organizations, ERC project rating agencies, or peer-reviewed journal articles and academia can provide sufficient high-level information required for this review. Otherwise, interviews with experts such as project developers and ERC sellers and buyers can also be an effective way of understanding risks in practice.

Environmental and social risk management

The guideposts for Environmental risk management (C2) and Social risk management and benefits (C3) under Step Three (Conduct assessment) should also continuously be updated following global standards on environmental and social risks and safeguards. For example, the evolving European Union regulations such as the Corporate Sustainability Reporting Directive, the European Sustainability Reporting Standards and the European Union taxonomy for sustainable activities can inform the best practices for projects' environmental risk management that will enable their compliance to corporate buyers' regulatory requirements and procurement policies.

Footnote 1: Ecosystem Marketplace Insights (2021), "Voluntary Carbon Markets Rocket in 2021, On Track to Break $1B for First Time".

Footnote 2: The Xpansiv's marketplace for trading ERC standardised contracts observed a 32% decline in trading volume in the second half of 2022, where overall volume traded in 2022 fell by 6% compared to 2021 levels. Xpansiv (2022), "Xpansiv's Carbon Market Review: Trading Insights from 2022".

Footnote 3: Xpansiv SD-GEO

Footnote 4: International Civil Aviation Organisation, CORSIA Eligible Emissions Units

Related Content

- **Guidance for Countries in Assessing ERC Projects (Download PDF version)**

Additional Resources

- Climate-Smart PPPs
- Finance Structures for PPP

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