

Exploring opportunities for financing through carbon credits

Background

Since its establishment in 2014, [Energy Catalyst](#) has supported the development of technologies and business models through financial and advisory support to over five hundred innovative companies in the energy sector. The Energy Catalyst Accelerator Programme (ECAP) accelerates the innovation needed to reach Sustainable Development Goal 7 (affordable and clean energy) and improve lives across Africa and Asia.

Carbon credits financing has come up as a topic of interest as companies seek ways to finance their projects. Whilst the voluntary carbon market (VCM)¹ offers companies the potential to raise funds by selling carbon credits, many businesses find it difficult to navigate the market due to a limited understanding of the eligibility requirements, the process involved, and the economic potential. This blog helps equip companies with the knowledge they need to participate in the VCM.

Who can access carbon credits?

Projects that either prevent the release of greenhouse gases or remove emissions that are already in the atmosphere are eligible to generate carbon credits. However, not all projects that aim to mitigate climate change have carbon assets.² To be eligible for carbon credits, a project must be:³

- **Additional**, meaning it:
 - results in reductions or removals beyond what would have happened without the project's existence;
 - would not be financially viable without the additional revenue from carbon offset and thus would not have occurred without the credits;
 - goes beyond legal or regulatory requirements; and
 - uses new or emerging technology to reduce emissions.
- **Measurable** through a recognized methodology to ensure the offsets are real.
- **Permanent** meaning it has been independently verified by a credible third party that its carbon reduction or removal is permanent, with no chance of reversal.
- **Unique** and cannot be sold to multiple players or used to meet multiple emission targets to avoid double counting.

¹ "The State of the Voluntary Carbon Markets 2022 Q3 briefing, 'The Art of Integrity,'" Ecosystem Marketplace, accessed April 17, 2023, [Link](#) and "The Voluntary Carbon Market is Thriving," Anders Porsborg-Smith, Jesper Nielsen, Bayo Owolabi, and Carl Clayton – BCG, accessed April 17, 2023, [Link](#).

² "Standards Endorsement Review Criteria," International Carbon Reduction and Offset Alliance, accessed April 17, 2023, [Link](#).

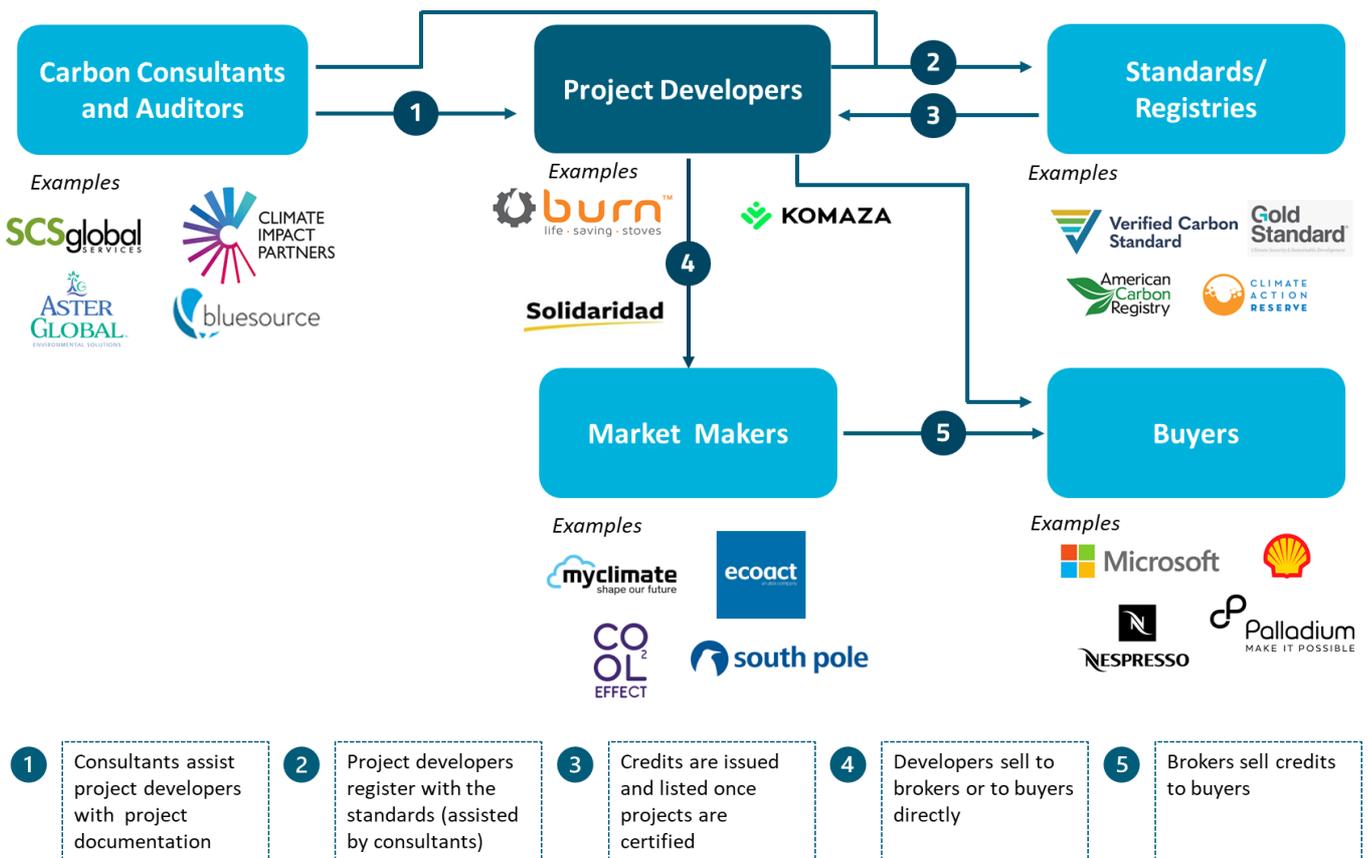
³ "Standards Endorsement Review Criteria," International Carbon Reduction and Offset Alliance, accessed April 17, 2023, 2023, [Link](#).

What is the process for obtaining carbon credits?

To obtain carbon credits, the project must be certified by a certification standard to verify that it has a measurable impact. The most common certification standards include Gold Standard, Verified Carbon Standard, Plan Vivo, Climate Action Reserve, and American Carbon Registry.

Obtaining carbon credits involves a well-defined registration process and collaboration with key players in the field.

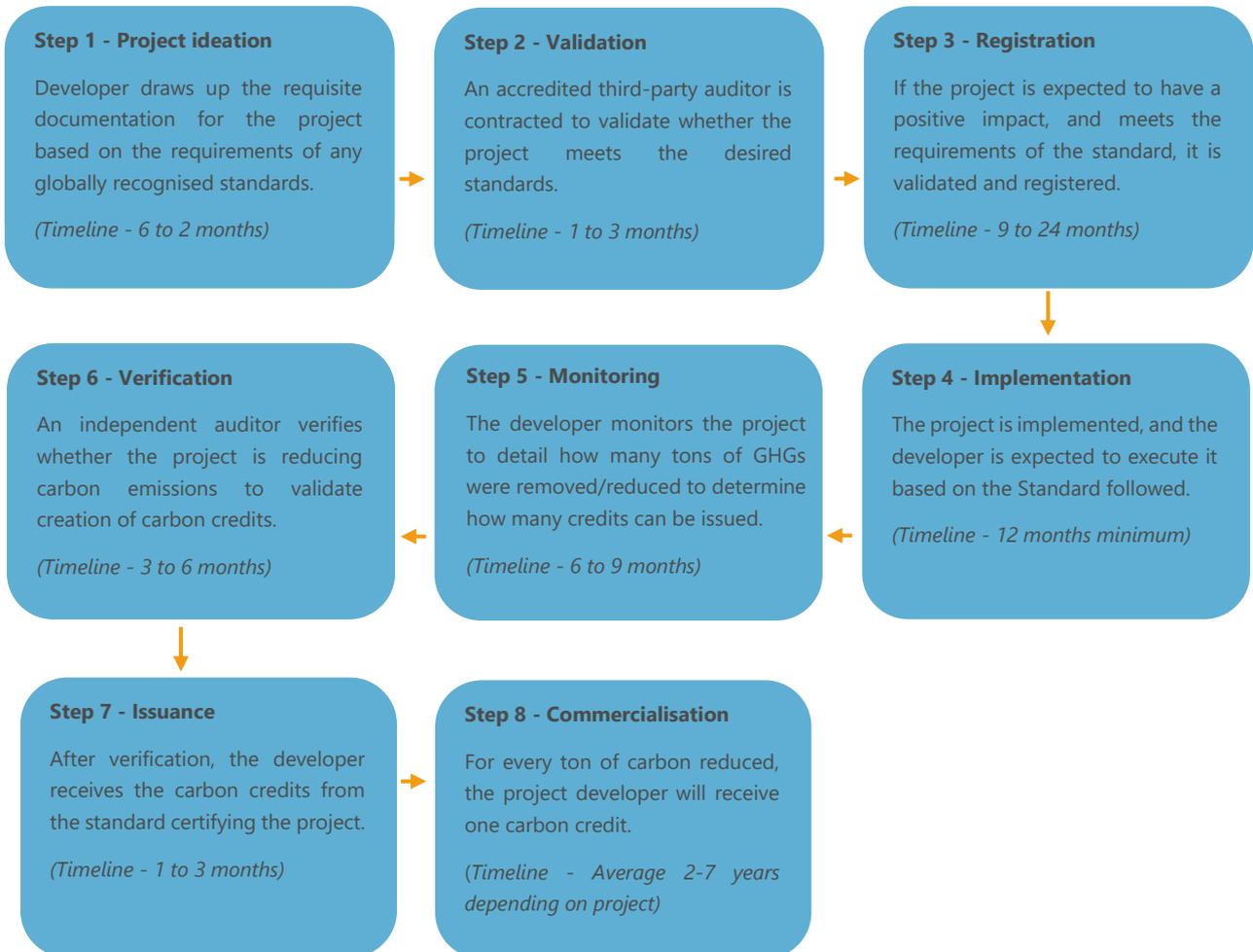
Key players in the carbon credits ecosystem:



It is crucial for companies and organisations seeking to obtain carbon credits to conduct thorough research on certification standards and market players who have successfully implemented similar projects. This research will enable them to make informed decisions about which certification standard aligns best with their objectives and which market players have the expertise and track record in their specific project domain.

Registration steps:

Registering carbon credits involves eight steps and typically costs between \$100K - 200K per project. The overall timeline from ideation to commercialisation of credits can take 2-5 years, depending on project size and type.



Once a company has obtained carbon credits, there is ongoing monitoring and reporting to ensure compliance with the relevant standard and regulations, and periodically renew the certifications. The specific costs of these activities may vary depending on the project and the applicable requirements.

Should you invest the time and resources to get carbon credits?

Before deciding on whether to embark on the carbon credits registration process, businesses should evaluate:

- Their underlying business model, including initial capital investment, commercial scale attainable, and break-even profitability to determine whether the business can operate profitably without relying on carbon credits revenue.
- The economics and resource requirements of the proposed carbon project, including:
- The potential GHG emission reduction/avoidance from their project.

- The minimum registration costs for their specific type of technology, including legal fees and third-party auditing costs.
- The estimated price of the carbon credits their technology can generate.
- The carbon credits revenue attainable based on the volume of credits and the specific price of the company's credits and whether this is enough to offset the costs of registering a carbon credit scheme, which can be between \$100K-\$200K.

These considerations may vary depending on the specific business and technology.

Looking ahead and emerging themes

Carbon credits have been recognised as a high-potential approach for companies to generate additional revenues and access financing. However, obtaining carbon credits is a complex and costly process that requires careful consideration and planning. Companies must ensure that their project meets the necessary criteria for certification and conduct a cost-benefit analysis to determine if the revenue from carbon credits will offset the costs of setting up the project.

Despite these challenges, pursuing carbon credits can provide companies with both environmental and financial benefits, while contributing to the global effort to reduce greenhouse gas emissions. In addition, with the continued global focus on decarbonisation, we are likely to see the following trends shaping carbon markets:



Carbon credits supply shortage - As more companies seek to offset their emissions, there is likely to be a shortage of ~200 million carbon credits by 2030.⁴



Higher carbon credit prices - With supply shortages and as governments and companies implement stricter carbon pricing policies, the price of carbon credits is expected to rise.



Increased focus on quality and integrity of carbon project and resulting credits - With the growing demand for carbon credits, there is an increased emphasis on ensuring the quality and integrity of carbon offset projects to avoid fraudulent activities.



Increase in demand for removal credits - As the urgency to limit the global temperature rise to below 1.5°C increases, there is a rising demand for removal credits.⁵

⁴ Bloomberg, "The World Is Running Out of Carbon Credits. The UN Wants to Help," 19 Nov. 2020, [Link](#)

⁵ Shell foundation and Boston Consulting Group, "The Voluntary Carbon Market 2022 Insights and Trends, " March 8, 2023, [link](#) and McKinsey & Company, "Key takeaways on carbon removals from the McKinsey Green Business Building Summit," McKinsey & Company, October 21, 2021, [link](#)



Innovation in financing - New approaches are needed to support companies in recovering some of the upfront costs of registration and allow smaller companies to pursue carbon credits as a viable financing option. So far, we have seen:

- Companies in similar technologies and markets aggregate to apply for carbon credits.
 - International organizations such as the World Bank collaborating with stakeholders to develop carbon funds and investment programs that focus on carbon projects.
 - Consultancies and other market intermediaries fund some of the upfront cost for later revenue share, e.g. South Pole.
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