

RESTART ENERGY DEMOCRACY CARBON STANDARD

Additionality Tool for Project Activity

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Version 1.0



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ABOUT US

RED Carbon Standard stands for Restart Energy Democracy Carbon Standard and is an independent governance body for the voluntary carbon market, first of this kind, from Romania. Our carbon standard aims at empowering people and giving value to their sustainable work helping to mitigate the impact of climate change. In a world where global players take the lead over national governments, and governments would like to centralize the power in their hands, we promote decentralization by being part of communities, people, and local project developers, and provide them with value capture in the form of tokenized carbon credits.

We certify green projects such as renewables, agriculture, forestry, energy efficiency, hydrogen, enabling them to get tokenized carbon credits and sell these carbon units worldwide on the RED Platform Application, using blockchain technology, thus actively contributing to the attainment of net-zero carbon emissions.

CORE VALUES

At RED, our core beliefs centre on the acknowledgment of God as the Creator of the Universe, Earth, and all life within it. At RED, we believe that God is the Creator of the Universe, the Earth, and its vegetation, and that God is the Source of all Life on Earth and in the Universe. We believe that we are all children of God, no matter what nationality, race, or gender. We also believe that God's Love for His children are so great that He sent His Son, Jesus Christ, to guide and save us.

It is, therefore, our responsibility to take care of the Earth and all living creatures on it, to preserve nature, flora, and fauna, and to act accordingly for mankind's perpetuity as we were empowered to do so: "So God created mankind in His image, in the image of God He created them, male and female....By the seventh day, God had finished the work He had been doing; so on the seventh day, He rested from all his work. Then God blessed the seventh day and made it holy because on it He rested from all the work of Creation that he had done."

It is important to understand our role on Earth and to remember that life is a blessing and a gift from God that we received from the beginning of the Earth. We believe that all scientific evidence and the Universe's order confess to the almightiness of God and His wonderful principles of life. Our values are based on maintaining the principles of life and its continuity: love, patience, humility, compassion, and happiness. We want to preserve these principles of life, protect our Earth, which is our home, and provide solutions for helping our neighbours using our advanced technology and science-based system.



We acknowledge that climate change affects us all, yet the rise of greenhouse gas emissions caused by human activities is not the only cause of it; there are other relevant causes, such as the sun's energy intensity, which is out of humanity's control. We decided to focus on what we have the power to impact within our capabilities. We use technology to our benefit, and do not let it take control over us. We were endowed in respect of God's principles and values, and we do not consider ourselves gods who can change the well-defined path of the Earth or save the world.

Aligned with the United Nations Sustainable Development Goals (SDGs), we actively pursue these principles, integrating environmental protection with social and economic considerations. While we acknowledge the widespread impact of climate change, we focus on addressing what is within our power to influence, leveraging technology responsibly without succumbing to its control. We humbly accept our limitations, understanding that we cannot alter the Earth's course or single-handedly save the world.

Our aim is to provide future generations with a thriving home by aligning environmental protection with the timeless principles of life and continuity. We view sustainability not merely as a scientific concept but as a holistic approach that integrates ethical, social, and environmental considerations, in line with the objectives outlined in the SDGs.

DEFINITION

"The greenhouse gas emission reductions or removals from the mitigation activity shall be additional, i.e., they would not have occurred in the absence of the incentive created by carbon credit revenues."¹

Additionality, as a fundamental principle of carbon markets, ensures that the activities supported by carbon finance would not have been undertaken without the financial incentive provided by carbon revenue.

Definitions as set out in the **Terms and Definitions Guide RED Carbon Standard**, ISO 14064-2, ISO 14064-3, and ISO 14065 and shall apply to all RED Carbon Standard documentation.

ABBREVIATIONS

CAPEX	Capital Expenditures
CDM	Clean Development Mechanism

¹ <https://icvcm.org/wp-content/uploads/2022/07/ICVCM-Public-Consultation-FINAL-Compendium.pdf> pag 31

CO ₂	Carbon Dioxide
CO _{2e}	Carbon Dioxide Equivalent
COP	Conference of the Parties
EU	European Union
GHG	Greenhouse Gas
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
ISO	International Organization for Standardization
IVVB	Independent Validation and Verification Body
NPV	Net Present Value
OPEX	Operational Expenditures
PD	Project Developer
PDD	Project Design Document
RED	Restart Energy Democracy
ROI	Return on Investment
SDG	Sustainable Development Goals
UNFCCC	United Nations Framework Convention on Climate Change

1. INTRODUCTION

Climate change is one of the most pressing challenges facing our world. The scientific assessment reported by the Intergovernmental Panel on Climate Change (IPCC) shows that many of the worst impacts of climate change could be avoided by limiting global warming to 1.5°C above pre-industrial levels. Global temperatures are already more than 1°C above pre-industrial levels, and scenarios assessed by the IPCC show that limiting warming to 1.5°C with no or limited overshooting implies achieving at least net-zero global CO₂ emission requirements by the early 2050s, and Deep and sustained global reductions in other greenhouse gas (GHG) emissions.

The scenarios also show that the earlier and faster the reduction in emissions occurs, the lower the peak warming and the less likely it is that the warming limit will be exceeded. Peak warming depends on cumulative CO₂ emissions from the onset of the industrial period to their reduction to net zero, and changes in non-CO₂ emissions in the climate system until temperatures reach a maximum.

The 2015 Paris Agreement reaffirmed the importance of achieving a global balance between anthropogenic emissions by sources and anthropogenic removals by sinks in the second half of the 21st century, taking into account different possibilities in different ways in parts of the world, in an equitable in the context of efforts to achieve sustainable development and eradicate poverty. Under the second Conference of the Parties (COP.2) to the Framework Convention on Climate Change (UNFCCC) the concept of additionality was introduced as art.12.5c of the Kyoto Protocol, to ensure that Greenhouse Gas (GHG) emission reductions achieved by projects are “additional” to what would have occurred in their absence.

Additionality was identified as necessary to ensure the environmental integrity of project activities aimed at stabilizing atmospheric GHG concentrations.

In this regard, projects applying for certification under the RED Carbon standard must demonstrate this concept of additionality, i.e. demonstrate that the project activity would not have taken place in the absence of the voluntary carbon market and project activity.

2. SCOPE

This document establishes guidelines and criteria that project activities must consider for demonstrating their additionality as a requirement to participate in the international voluntary carbon market, based on the additionality tools developed by the Clean Development Mechanism and considering the transition to the NetZero for all countries that sign the Paris Agreement².

Project activities to be certified under the RED Carbon Standard must conduct a specific analysis, presented in this additionality document, to demonstrate that they would not have occurred in the absence of the voluntary carbon market.

² https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-7-d&chapter=27&clang=_en



This tool provides cases where additionality is automatically accepted and the procedures for demonstrating and assessing additionality in other cases.

3. ADDITIONALITY

The diagram below helps you understand where your project is and what you need to do to demonstrate additionality.



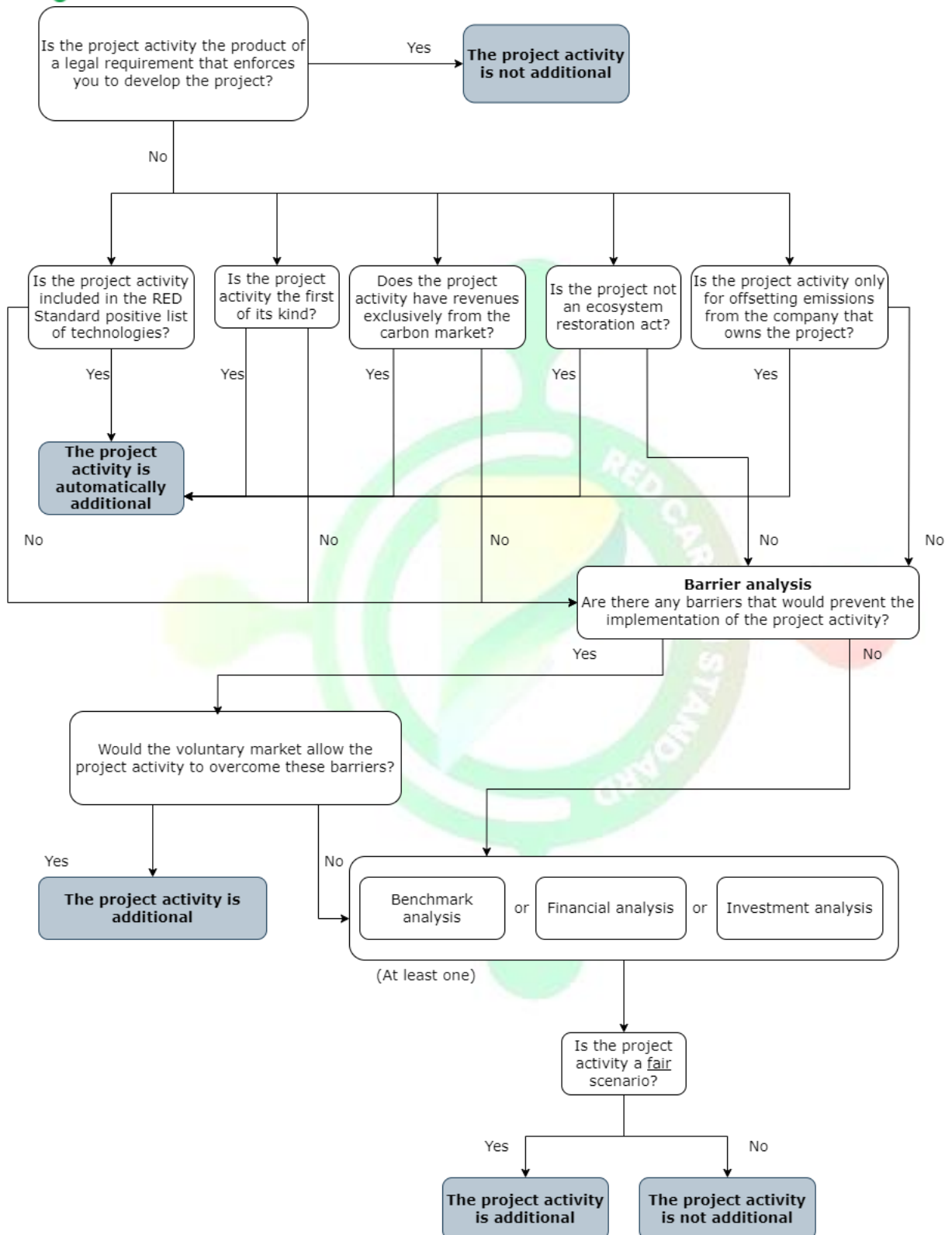


Figure 1. Scheme of demonstrating of additionality

3.1. Analysis of the Regulatory Framework

The project activity that wants to be certified by RED Carbon Standard must analyze and be consistent with existing laws or regulations so that it complies with all mandatory legal and regulatory requirements, including those that have objectives other than generating GHG emissions mitigation.

These projects should not be the result of compliance with a mandatory or legally mandated regulation or standard, nor be part of a mandatory environmental offset scheme. Therefore, project activities that do not comply with the legal framework or are the product of a legal requirement are considered non-additional and cannot be certified.

3.2. Automatically Additional Cases

If a project activity passes the requirements from 3.1. it can be considered automatically additional if belong to one of the categories:

3.2.1 Positive list of technologies used in project activity

The technologies used in the project activity is part of the positive list of technologies that confer automatic additionality. This tool considered and grouped the most important technologies needed to be implemented to meet the NetZero target in 2050:

- Renewable energy production technologies, as outlined in the European Union (EU) Directive 2018/2001 for renewable energy³. This encompasses solar, hydro, wind, geothermal, biomass gasification, as well as the production of syngas, biogas, hydrogen, and other similar technologies. Furthermore, there are methodologies to accurately calculate the reduction or removal of greenhouse gas (GHG) emissions associated with these technologies.
- Technologies employed in the recycling of various materials obtained from solid waste, such as plastic, metal, glass, electronic and electrical equipment. Methodologies are also available to assess the reduction or removal of GHG emissions linked to the recycling processes of these materials.

3.2.2 Barrier "First-of-its-kind"

According with the CDM Methodological Tool "Additionality of first-of-its-kind project activities"⁴.

The project activity is considering "first-of-its kind" if is the first in the applicable geographical area⁵ that applies a technology that is different from technologies that are implemented by any other project, which are able to deliver the same

³ <https://eur-lex.europa.eu/eli/dir/2018/2001/oj>

⁴ <https://cdm.unfccc.int/methodologies/PAMethodologies/tools/am-tool-23-v1.pdf>

⁵ Applicable geographical area - should be the entire host country. If the project participants opt to limit the applicable geographical area to a specific geographical area (such as province, region, etc.) within the host country, then they shall provide justification on the essential distinction between the identified specific geographical area and rest of the host country

output and have started commercial operation in the applicable geographical area before the Project Design Document (PDD) is published for public consultation or before the start date of the proposed project activity, whichever is earlier;

To explain that the technology used in the project activity is “first-of-its-kind” the project developer should define what the prevailing practices are in the region, what the project activity is and what is considered a similar technology. If the technology used in the project activity is not clearly define to be consider “first-of-its kind” then all technologies to which the methodology apply should be consider similar technologies.

The barrier “first-of-its-kind” enables project activity to demonstrate the additionality of a project activity in a simple and straightforward manner. A project activity is assumed to be additional if no similar project has been implemented previously in a certain geographical area. If a project activity is “first-of-its-kind”, it is clear that implementation of the specific technology is not yet “common practice”. If a project activity is “first-of-its-kind”, no additional assessment steps are undertaken to confirm additionality. Project activities that deemed to be “first-of-its-kind” pass the additionality test by default.

To explain that the project technology/activity used in the project activity is “first-of-its-kind” the project developer should:

- (1) Provide the geographical area to be used for the assessment of the number of similar project activities that have already been implemented.
- (2) Provide a list of similar project activities, including their technologies that have already been implemented in the chosen geographical area in order to prove that the project activity is still “first-of-its-kind”;
- (3) Provide a description of the technology/ies, used in the project activity to prove “first-of-its-kind” technology (all technologies or only defined “novel/innovative/brand new” technologies); i.e. patents, documents from certification bodies or authorities etc.

Given that project activities that do not meet the requirements under “first-of-its-kind” can still establish additionality on the basis of other barriers or an investment analysis.

3.2.3 Income from Carbon Market

A project activity that only generate revenue from the voluntary carbon market are consider additional. In this specific case, the mechanisms used to obtain such revenues must be justified.

A project activity that wants to start a new project may face a barrier due to prevailing practice. If this barrier can be overcome by voluntary carbon market,



demonstrated by a fair analysis, then the project activity is considered additional.

3.2.4 Ecosystem Restoration without Commercial Purpose

The project activities that are carried out as part of a project aimed at restoring ecosystems, whether through passive or active means, for non-commercial purposes and without any plans for future timber harvesting, are classified as supplementary. This is applicable only to areas that are legally recognized as protected and incorporate measures to prevent any future exploitation.

The project activities conducted within a project that involve sustainable utilization of the forest, including timber harvesting or other similar practices, along with non-commercial restoration such as reforestation and woody crops, must demonstrate additional value as per the guidelines outlined in this document.

3.2.5 Offset for my company

When a company or institution engages in project activities only to offset greenhouse gas (GHG) emissions from sectors beyond its usual operations, and the resulting credits are utilized exclusively within the organization without external trading, these activities can be deemed as additional. However, for this additional status to hold true, it is crucial that the projects are not implemented as a means of complying with regulatory or legal obligations or as part of a mandatory environmental offset scheme.

3.3 Barrier Analysis

If the automatic demonstration of additionality is not feasible in accordance with the cases specified in section 3.2, the project developer must conduct a comparative analysis that encompasses all potential baseline scenarios, including the proposed initiative as one such scenario, as well as initiatives that have the same potential to deliver the same end-product using different technologies. The initiative will not be considered additional if it is equivalent to the most plausible potential baseline scenario.

All feasible alternative scenarios to the proposed project activity should be identified and established based on barrier analysis. Objective justification for the application of this criterion must be provided, supported by solid evidence that can be quantified, traced, and documented, such as national and international statistics, independent studies and surveys, national, sub-national, and local policies and laws, and third-party transparent data. The analysis of alternative scenarios must take into account all emissions related to the operation, including indirect sources.

Alternative scenario analysis and barrier analysis are important components to determine whether a project's emission reductions or removals are additional. These analyses help evaluate whether the project goes beyond business-as-usual practices and overcomes barriers that would have otherwise prevented the emission reductions.

- a) **Alternative scenario analysis:** This analysis involves defining the alternative or baseline scenario that represents what would have happened in the absence of the project. The alternative scenario is typically based on historical data, industry benchmarks, or projected trends. It serves as a reference point to compare the project's emission reductions or removals against.
- b) **Identification of barriers:** Identify technological, financial, regulatory, or other barriers that the project had to overcome to achieve its emission reductions. These barriers represent the challenges or obstacles that would have hindered the implementation of similar projects in the absence of specific measures taken by the project activity.
- c) **Barrier analysis:** Assess the significance and impact of the identified barriers on the project's additionality. Evaluate whether the barriers are common in the industry or region, or if they are specific to the project. Consider the level of difficulty and effort required to overcome these barriers, as well as the associated costs or risks.
- d) **Barrier mitigation strategies:** Analyze the strategies and measures implemented by the project activity to address the identified barriers. This could include the adoption of innovative technologies, securing financing or investment, navigating regulatory frameworks, or engaging stakeholders. Evaluate the effectiveness of these strategies in overcoming the barriers.
- e) **Additionality determination:** Based on the alternative scenario analysis and barrier analysis, make a determination on the project's additionality. Assess whether the project's emission reductions or removals would not have occurred under the alternative scenario or without overcoming the identified barriers. This evaluation helps establish the project's contribution to additional emission reductions or removals.
- f) **Documentation and verification:** Document the findings of the alternative scenario analysis and barrier analysis in a comprehensive and transparent manner. This documentation is crucial for third-party validation and verification processes, ensuring the project's additionality claims can be independently assessed and verified.

For instance, investment and financing barriers may include lack of access to credit or capital, subsidies, or unfavorable investment conditions in the country or region where the project activities will be implemented. Implementation barriers may involve technical, economic, social, or environmental constraints that may hinder the implementation of the project activity. Technological barriers may include lack of skilled labor, access to materials, inadequate infrastructure, or failures in technology processes and operation. Institutional barriers may involve risks related to changes in government policies or laws or the lack of enforcement of legislation related to the sector in which the project activity would be developed.



Project activities that demonstrate the ability to overcome these barriers with the help of the carbon market will be considered additional. If such barriers cannot be overcome, a comparative financial analysis or benchmark analysis must be conducted to demonstrate that such initiatives do not represent the most attractive scenario.

3.3.1 Financial analysis

Financial analysis in the context of additionality within the voluntary carbon market involves evaluating the financial aspects of a project activity to assess whether the project's emission reductions or removals are additional and economically viable. This analysis helps determine the project's financial additionality and its potential for attracting investment or generating revenue in the carbon market.

Here are the key components of conducting a financial analysis for additionality in the voluntary carbon market:

- a) **Project costs:** Assess the total costs associated with implementing the project activity, including upfront investments, operational expenses, monitoring and verification costs, and any other relevant financial considerations. This helps determine the financial feasibility of the project.
- b) **Baseline costs:** Compare the project costs against the costs of the baseline scenario, which represents the alternative pathway in the absence of the project. This comparison helps evaluate whether the project involves additional financial efforts beyond what would have occurred without its implementation.
- c) **Revenue streams:** Identify potential revenue streams that the project can generate from the voluntary carbon market. This includes revenue from the sale of carbon credits or offsets, participation in carbon offset programs, access to funding mechanisms or grants, or any other financial incentives available within the market.
- d) **Market price analysis:** Analyze the prevailing market prices of carbon credits or offsets to estimate the potential revenue generation from the project. Consider factors such as the supply and demand dynamics, price trends, and market conditions to understand the financial value of the project's emission reductions or removals.
- e) **Financial viability:** Evaluate the financial viability of the project by assessing the revenue potential against the project costs. Determine the payback period, return on investment (ROI), internal rate of return (IRR), or other financial metrics to gauge the project's profitability and financial sustainability.
- f) **Risk assessment:** Identify and assess potential financial risks associated with the project, such as market volatility, policy changes, regulatory risks, or uncertainties in revenue generation. Develop risk mitigation strategies to address these risks and enhance the project's financial robustness.
- g) **Financial additionality determination:** Based on the financial analysis, evaluate whether the project's emission reductions or removals are financially additional. This means assessing whether the project's financial performance goes beyond what would have been economically feasible without the project.
- h) **Reporting and documentation:** Prepare comprehensive financial analysis reports and documentation that demonstrate the project's financial additionality. This



includes financial projections, cost-benefit analyses, sensitivity analyses, and any other relevant financial information to support the project's financial claims.

The analysis should reflect that the proposed project alternative is not the most financially attractive.

3.3.2 Benchmark analysis

A benchmark analysis for additionality in a project activity within the voluntary carbon market involves assessing whether the project's emission reductions or removals are truly additional compared to a baseline scenario. This analysis helps determine the project's eligibility and credibility within the voluntary carbon market.

Here are the key steps involved in conducting a benchmark analysis for additionality in a project activity within the voluntary carbon market:

- a) Define the purpose: Clearly establish the objective of the benchmark analysis, which is to assess the additionality of the project. Additionality refers to the extent to which the project's emission reductions or removals go beyond business-as-usual practices or regulatory requirements.
- b) Identify relevant benchmarks: Select benchmarks or reference points that represent what would have happened in the absence of the project. These benchmarks could include existing emissions levels, industry averages, or projected emissions trends.
- c) Establish the baseline scenario: Define the baseline scenario against which the project's additionality will be evaluated. The baseline scenario represents the emissions that would have occurred without the project's implementation. It should be based on sound methodologies and recognized guidelines within the voluntary carbon market.
- d) Collect project and baseline data: Gather comprehensive data related to the project, including its emissions reduction methodologies, project documentation, monitoring and reporting processes, and any other relevant information. Obtain data on the baseline scenario to establish a clear comparison.
- e) Analyze and compare: Evaluate the project's data and compare it to the baseline scenario and selected benchmarks. Assess whether the project's emission reductions or removals are in addition to what would have occurred without the project. Consider factors such as technology barriers, financial barriers, and regulatory barriers to determine the project's additionality.
- f) Identify gaps and areas for improvement: Identify any gaps or areas where the project's additionality is not clearly demonstrated. This may include deficiencies in data collection, inadequate baseline determination, or failure to overcome barriers. Determine areas for improvement to strengthen the project's additionality claim.

Develop an action plan: Based on the benchmark analysis findings, develop an action plan to address the identified gaps and enhance the project's additionality. This may involve refining methodologies, improving data collection and monitoring processes, or providing additional evidence to support the project's additionality claim.

3.3.3 Investment analysis

When using the Investment analysis to demonstrate additionality, it is required that a suitable financial indicator, such as the Net Present Value (NPV) or Internal Rate of Return (IRR), to be used in the calculation; the calculation of the financial indicator should include all relevant costs (CAPEX, OPEX) and all revenues, including subsidies or official development aid, where applicable.

The assumptions, data, and conclusions in the investment analysis need to be:

- transparently documented in the documentation submitted for registration.
- appropriately justified and substantiated by evidence.
- consistent with information presented to the company's decision-making management and investors/lenders.

All parameters and assumptions used in the analysis are internally consistent (i.e., cash flows shall be expressed in either real or nominal terms consistently, and the calculation shall be consistent with the indicator used, such as project IRR or equity IRR).

The period of assessment shall reflect the period of expected operation of the underlying mitigation activity or shall be a period of at least ten years and include the value of the assets at the end of the assessment period. All elements of the investment analysis should be assessed as a part of the validation by IVVB.

4. DOCUMENT UPDATE

Version	Date	Comments or additional information
1	07.07.2024	Initial version of the document.