



## **DE-ICS1**

Decarb.earth Impact Carbon Standard V1.2

ISO 14064

# DE-ICS1

## Decarb.earth Impact Carbon Standard 1

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# Section 1:

## 1. Decarb.earth Project Acceptance Framework (PAF Standard)

**Project Eligibility Criteria:** This section should provide the criteria that must be met for a project to be accepted onto the Decarb.earth dMRV platform and hence qualify for carbon credits.

### 1.1. Introduction: The Path to Impact

#### 1.1.1. True Impact

The current carbon credit market, though well-intentioned, has been facing criticism for not sufficiently emphasizing projects that immediately and sustainably reduce emissions. Many carbon offset projects, while potentially beneficial in the long term, don't necessarily provide rapid and enduring solutions to the immediate threat of rising carbon levels. This delay in tangible impact undermines the urgency required to address climate change.

Moreover, there are several additional dimensions of the carbon credit market that warrant attention. There's growing concern that certain projects lead to the destruction of natural habitats and biodiversity loss, which only exacerbates our environmental crises. Small-scale projects, despite their potential for genuine impact at local levels, often face financial barriers in the current system. There's also a pressing need for projects to demonstrate true socio-economic benefits to local communities, rather than just token gestures or short-term advantages. Lastly, the absence of advanced technology in the Monitoring, Reporting, and Verification (MRV) process has hampered the transparency and efficiency of the market. Without robust MRV mechanisms, it becomes difficult to assess the authenticity and effectiveness of carbon offset projects.

It is the aim of Decarb.earth to create a Project Acceptance Standard that not only empowers projects that immediately reduces GHG emission but also takes steps in creating awareness of wider impact. We aim to create a market in which carbon credits and the projects that deliver them do not lead, directly or indirectly, to practices that abuse the planet.

#### 1.1.2. Barriers

Carbon credits and their Impact has historically been limited due to certain barriers that exist in the current project acceptance standards or carbon credit methodologies. A lot of this is due to cost and technology. Decarb aims to remove both these significant barriers to create a Project Acceptance Standard that allows and empowers even the smallest renewable energy installation to get access to carbon credit funding if it passes the crucial Impact criteria of our standard. The path to impact is

therefore blocked not just due to the lack of Impact criteria and focus but also due to cost constraints that create unnecessary hurdles in obtaining carbon credit financing.

#### 1.1.2.1. Importance of monitoring and verification in carbon credit markets:

For any project to qualify for carbon credits under existing carbon credit schemes, such as the CDM or similar schemes, accurate monitoring, reporting, and verification (MRV) of the greenhouse gas emissions reductions are paramount. The Decarb.earth dMRV (digital MRV) ensures the integrity and credibility of any carbon credits we issue by ensuring the monitoring, reporting and verification (via our VVBs partners) is of the highest quality by ensuring the processes and standards we ,and our VVBs, use are in line with ISO 14064.

#### 1.1.2.2. The technological challenge for small and medium sized RE projects:

- **Initial Investment Barriers:** Advanced metering infrastructure and monitoring equipment come at a cost, which might be prohibitive for small and medium project developers. These projects often operate on thin margins, making additional investments in monitoring technologies challenging.
- **Lack of Technical Expertise:** Even if the funds were available, deploying and maintaining advanced monitoring systems requires specific technical knowledge. The local workforce might not have the requisite skills and training them or hiring experts could further strain the project's finances.
- **Absence of Tailored Solutions:** Most of the advanced MRV tools in the market are tailored for larger projects or grids. There's a gap in the market for cost-effective, user-friendly tools designed explicitly for small to medium-sized projects.

#### 1.1.2.3. Implications of the technological barrier:

- **Lost Opportunities:** Without the capability to track and verify their impact, these projects miss out on potential revenue from carbon credits. This, in turn, affects their financial viability and can deter potential investors or developers. Currently the mere attempt by small and medium sized installations to obtain carbon credit revenue for their installations would make the entire installation non-viable from a financial point of view. This real barrier therefore ensures without a doubt that small and medium sized installations would not have access to carbon credit financing and significantly reduces the number of such installations in exactly the region where it would have the highest impact (refer to the impact criteria of this standard).
- **Undermining Decentralized Renewable Energy:** By sidelining small and medium projects from the carbon credit market, we risk undermining the growth of decentralized renewable energy, which plays a vital role in energy security, grid resilience, and rural electrification.

1.1.2.4. The role of the carbon credit methodology institutions and the need for reform:

For the CDM or similar mechanisms to be truly inclusive and effective and have real socio-economic benefits, it's crucial to recognize and address these technological barriers.

*Solutions include:*

*Developing Simplified Monitoring Protocols: For smaller projects, simplified and standardized monitoring methodologies that rely on conservative estimates might be more appropriate and still maintain the integrity of the carbon credits. Decarb.earth appeals to all carbon credit methodology institutions to simplify the monitoring requirements on RE installation by using existing and new technologies such as the block-chain based Decarb.earth dMRV.*

*Capacity Building: Investing in training programs or workshops to build local capacity in using and maintaining MRV tools can be beneficial and supporting funds such as the Decarb.earth Africa RE Fund can significantly increase the socio-economic benefits of RE carbon credits.*

By recognizing the technological barrier faced by small and medium sized RE projects, taking steps to address it, and by providing a cost effective and fully digitized technology to RE Projects, Decarb.earth will not only uphold the principles of equity and inclusiveness but also unlock the immense potential of decentralized renewable energy in our fight against climate change. It is therefore the prerogative of Decarb.earth to remove this technological barrier to each and every RE Project that have otherwise passed our Project Acceptance standard by providing access to our dMRV in a cost-effective manner.

1.1.2.5. The necessity and mandate for collaboration and gathering of information:

By accepting this standard each direct project stakeholder (project owner as well as the various carbon asset owners of the project) accepts the necessity and grants to Decarb.earth the mandate to gather all necessary information for the monitoring, reporting and verification of the RE raw data as well as all the required information of the underlying project for the creation of carbon credits. This requirement increases the collaboration as well as the effectiveness and credibility of the process of issuing carbon credits to the various owners of the carbon assets and is applicable at every stage of the lifespan of the project. This standard further requires the acceptance by the project owners and various other carbon asset owners that the required project and carbon credit information will be shared with the eventual buyer of the carbon credit as well as with the direct participants in the carbon credit value chain involved in creating, verifying, issuing and selling of the carbon credit. These participants in the value chain of the carbon credit are, amongst others but not limited to, the carbon registry partners, the carbon exchange partners as well as the verification and audit partners of Decarb.earth. Each project owner and all the various carbon asset owners of each project will be required to sign a specific data gathering and sharing mandate at the acceptance of this standard to ensure transparency and collaboration.

## 1.2. Renewable Energy (RE) projects

The Decarb.earth dMRV is first and foremost focused on renewable energy projects which currently includes the following technologies (this list will expand in due course):

- 1.2.1. Solar photovoltaic (PV) systems.
- 1.2.2. Wind energy generation projects.
- 1.2.3. Biomass energy generation projects.

## 1.3. Impact

For any RE project to be considered for acceptance onto the Decarb.earth dMRV platform it needs to satisfy all five of the following impact criteria of this Standard:

- 1.3.1. Highly efficient installations: Our main focus here is to find RE installations in countries that would be considered as a highly efficient region for the type of technology when compared to the world average potential of mWh per mWp installation. This would mean the country would be considered in the top 20% in the world on average for that conversion rate.
- 1.3.2. Dirty grid avoidance: To ensure the highest possible impact in reducing carbon emissions, we focus only on projects in countries that have a carbon footprint in their grid generation of more than 500g CO<sub>2</sub>e per kWh generated. This emission factor will be re-evaluated from time to time to ensure we only focus on the dirtiest grids.
- 1.3.3. No natural habitat or protected species removal: The Paris Agreement, adopted in 2015, represents a global effort to combat climate change and its adverse impacts. It not only emphasizes the need to limit global temperature rise to well below 2°C, but it also recognizes the crucial role of preserving ecosystems and ensuring sustainable and resilient development (Article 7, Paragraph 1). Destroying forests or natural habitats in the process of establishing RE installations negates some of the positive impacts of such installations. Deforestation and habitat degradation not only result in the loss of biodiversity, which plays a critical role in maintaining global ecological balance, but also release carbon stored in trees and soil, further exacerbating climate change.  
The United Nations, through its Sustainable Development Goals (SDGs), underlines the importance of sustainable land use and forest management, emphasizing the need to "take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species" (Goal 15). As carbon credits should encourage genuinely sustainable practices, offering carbon credits to RE projects that undermine these objectives would be counterproductive. Hence, it is imperative to Decarb.earth that the

allocation of carbon credits takes a holistic view of environmental protection, ensuring both the mitigation of climate change and the conservation of vital ecosystems and biodiversity. We therefore do not allow any RE projects onto our platform that cannot prove beyond a doubt that it has not contributed, or will not contribute, to deforestation or the loss of ecosystems, biodiversity or natural habitats, at any point during installation or the lifespan of its operation.

- 1.3.4. **Business Sustainability Impact:** For a project to be accepted on the Decarb.earth platform and qualify for carbon credits, it must be considered as having a positive business sustainability impact. To be classified as such, the business needs to meet at least one of the following criteria:
  - 1.3.4.1. The business receiving the carbon credits under this standard needs to create new jobs that are sustainable, i.e. the appointments must be permanent in nature or fixed term appointments of no less than 36 months. This can be done directly or via third party suppliers.
  - 1.3.4.2. The business receiving the carbon credits under this standard must, through their installations of RE plants, demonstrate a significant, measurable increase in the availability of electricity (more than a 5% increase) to itself (if the installation is for self-use), and/or it's off-takers, clients or customers, that would consequently improve their energy security.
    - 1.3.4.2.1. This requirement will be verified annually by the Decarb.earth VVB partners.
    - 1.3.4.2.2. This requirement will have to be proven by the business as per clause 1.3.4.2 by providing a sample (as decided on by the VVB and using the verification and materiality rules of this standard) of its client's (or its own in the case of self-use of the RE system) electricity usage bills prior to the installation of the RE system. This usage bill will be compared to the electricity generated-and-used figures of the RE system for the year under review.
      - 1.3.4.2.2.1. All electricity which was fed back into the residing electricity grid by the RE system will qualify as electricity generated-and-used for the sake of this clause 1.3.4.2.
  - 1.3.4.3. The business receiving the carbon credits under this standard needs to prove that they have reduced the cost of electricity for themselves, or their off-takers, clients or customers, by at least 10% when compared to the alternative of the grid-provided electricity. This needs to be shown to be true on an annual basis.
  - 1.3.4.4. The business receiving the carbon credits under this standard needs to prove that they have created additional benefits to the region where they have installed their RE projects by way of any one of the following criteria:
    - 1.3.4.4.1. An increase of the availability of fresh water directly to the local community at a cost of less than the market rate for

fresh and filtered water provided by the public or private institutions in the community.

- 1.3.4.4.1.1. The quality of fresh and filtered water will be verified on an annual basis by the VVB partners of Decarb.earth by comparing a sample of tested water to the UN-Water portal quality indicators and specifically those found in the SDG 6 Synthesis Report on Water and Sanitation 2023 and the Progress on Ambient Water Quality – 2021 Update.
- 1.3.4.4.2. Sustainable use of waste (landfill or wastewater treatment) that would directly reduce waste going to landfills and/or fresh water sources such as rivers.
  - 1.3.4.4.2.1. Wastewater treatment will be verified on an annual basis by the VVB partners of Decarb.earth by comparing a sample of tested water to the SDG 6.3.1 requirements of the UN as seen in the UN-Water portal quality indicators and specifically those found in the Progress on Wastewater Treatment – 2021 Update.
- 1.3.4.4.3. An increase in the collection (from nature) and recycling of plastic in the community where the RE project is installed.

- 1.3.5. Socio-economic benefit: The United Nations, through its Sustainable Development Goals (SDGs), reiterates the inextricable link between socio-economic upliftment and environmental sustainability. SDG 7 aims to "ensure access to affordable, reliable, sustainable and modern energy for all," while SDG 8 focuses on "promoting sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all." Awarding carbon credits to RE projects should, therefore, not merely be based on environmental metrics but also on their ability to drive socio-economic benefits. Such a comprehensive approach ensures that the transition to cleaner energy sources does not leave vulnerable communities behind but, instead, fosters inclusivity, prosperity, and resilience. Decarb.earth aims to contribute to SDGs by ensuring that all projects on our platform contribute to socio-economic upliftment. To do this, we require that 2% for all small-size projects, 2.5% for all medium-size projects, and 3% for large projects as per section 1.4 of this standard, of all carbon credits generated by RE projects on our platform be allocated to our either our Africa RE Project Fund or an NGO chosen by Decarb.earth, which ensures that the money generated from the sale of these carbon credits is used specifically for RE projects on the continent of Africa and in regions where energy security is a significant problem, or another approved NGO for SDG 7 or SDG 8 specific projects. This allows all projects that pass the first four Impact criteria points (1.3.1. to 1.3.4) to also pass the fifth (1.3.5) by accepting the terms of funding the Africa RE Project Fund and/or the NGO chosen by Decarb.earth.



The Decarb.earth Africa RE fund is created for the sole purpose of executing on the socio-economic benefit commitments of this carbon credit standard and is mandated specifically for investing only in projects that pass the UN SDG 7 and/or 8 criteria and.

This standard does not require the project owner to provide an Environmental Impact Assessment (EIA), for any small or medium-sized project as per the definition of this standard, but will obtain such an annual certificate from the various NGO's, including the Africa RE Project Fund to ensure the validity of the socio-economic impact created. The reason for not requiring an EIA for small and medium-sized projects is due to two reasons, firstly, the cost of EIAs has been a significant contributing factor in driving up costs of obtaining carbon credits for these projects that has led to small and medium-sized projects being excluded from the carbon markets altogether. Secondly, the Decarb.earth impact criteria that needs to be passed and our on-boarding screening of these small and medium-sized projects should provide sufficient confirmation of the environmental impact of these projects. For all large projects, as defined under this standard, a full EIA might be required by local governments, laws or for other reasons in which case it will need to be provided by the project owner, and verified by the VVB partners of Decarb.earth, before such a project will be accepted under this standard.

## 1.4. Additionality

The project must demonstrate that greenhouse gas reductions would not have occurred without the project, making the reductions 'additional' to either the status quo or near future status quo. Each project allowed onto the Decarb.earth platform must therefore prove that it will directly avoid the usage of the grid electricity due to the energy generated from its installation and usage.

- 1.4.1. **Regulatory Surplus:** The project should not be required by law or legally binding mandate. If it is, it does not provide additional benefits and is not eligible.
- 1.4.2. **Implementation Barrier Test - Technology:** For the sake of this Standard, the technology barrier is assumed for small-sized, as well as medium-scale RE projects and all such projects (with installed capacity of 15 mWp or smaller in the case of a small-scale project and 25mWp for a medium-scale project) will pass this standard for all additionality requirements, other than section 1.4.1.
  - 1.4.2.1. Small and medium-sized RE projects play a pivotal role in the transition to a greener, more sustainable energy landscape. However, the potential of these projects to earn carbon credits under mechanisms like the Clean Development Mechanism (CDM) is often undermined by a significant technological barrier. This barrier centers around the lack of requisite technology and tools to

accurately monitor and report the electricity generated and consumed by these projects.

**1.4.2.2. For the sake of this Standard, the below parameters are used for the classification of project sizes, their materiality figures for verification and their emissions reduction caps**

- 1.4.2.2.1. Small-sized RE projects refers to any RE project, as defined in this standard, with an installed capacity size of up to 15 (fifteen) MWP and no more than 50,000 mt of annual emissions reductions in CO<sub>2</sub>e.
- 1.4.2.2.2. Medium-sized RE projects refers to any RE project, as defined in this standard, with an installed capacity size of up more than 15 (fifteen) MWP, but no more than 25 (twenty-five) MWP and no more than 300,000 mt of annual emissions reductions in CO<sub>2</sub>e, or any project with more than 50,000 (but no more than 300,000) mt of annual CO<sub>2</sub>e emissions reductions.
- 1.4.2.2.3. Large-sized RE projects refers to any RE project, as defined in this standard, with an installed capacity size of more than 15 (fifteen) MWP and more than 300,000 mt of annual emissions reductions in CO<sub>2</sub>e

*A good example of an acceptable project would be an embedded Solar PV installation which refers to solar power systems that are integrated directly into the existing energy infrastructure of a building or site, rather than being a standalone system. This means the solar panels and associated equipment are directly connected to the local electricity distribution network of the building or facility. Energy generated by these installations can be used on-site to offset energy consumption, with any excess energy typically fed back into the local grid. Embedded solar installations can include rooftop solar panels on homes or commercial buildings, solar carports, and solar-integrated windows or facades. By being embedded within existing structures and connected directly to the building's electricity system, these installations can enhance energy efficiency, reduce transmission losses, and contribute to decentralized energy generation.*

- 1.4.3. Every project that passes the **“First-of-its-kind” methodology** of the CDM as laid out in Tool23 Methodological tool: Additionality of first-of-its-kind project activities, for proving its additionality will be accepted by this standard as being additional, irrespective of the other additionality tests of this standard.

## **1.5. Implementation Barrier Test - Investment**

Each project that would not be assessed as small or medium sized as per this standard will have to prove that it is experiencing difficulty in closing its investment requirement, and that of its financiers

and/or investors, without the benefit of the revenue that the carbon credits it will generate, or that an existing and operational installation (be that viewed as a completed installation as per the initial project documentation or one that is partially complete when referring to project stages mentioned in the initial project documentation) would require carbon credit revenue to either expand the project or complete it in the case of a phased project. This test will be conducted on a case-by-case basis and each conclusion will be documented and reported on the project profile of the decarb.earth website. This test will be done in line with the CDM guidance on the assessment of investment analysis, or EB62 Report Annex 5.

## 1.6. Common Practice Test

The common practice test that is usually found in carbon credit methodologies has been replaced in this Project Acceptance Standard by the Impact criteria as per section 1 point 3 (1.3) of this Standard.

## 1.7. Baseline Emission Calculation

Projects should provide a clear and scientifically sound method for calculating the baseline emissions, i.e., the amount of greenhouse gases that would have been emitted in the absence of the project. The baseline emissions calculation service is provided inherently in the Decarb.earth dMRV. Our dMRV takes the following approach to the baseline emission calculations and provide therefore the complete calculations for the project owners;

- 1.7.1. Each project's regional grid electricity provider's emissions factor is established (we update our annual emission factor table that is externally verified by a third party data service provider). This factor is expressed as CO<sub>2</sub>e emissions avoided per kWh generated and used.
- 1.7.2. As the emissions reduction calculation is based on actual raw energy data as generated by the project there are no theoretical calculations, but the emissions reduction is based solely on the electricity generated by the project system which is recorded onto our dMRV by way of data gathering technology with no human intervention (APIs).
- 1.7.3. The carbon footprint of RE system plants, equipment, and batteries are also taken into the equation and we aim to continuously grow our understanding of the true carbon footprint of these systems across their value chain. This RE system specific footprint is deducted from the emissions factor as per point 1 above and the final emissions reduction factor is calculated. This footprint is calculated and shown as CO<sub>2</sub>e per kWh generated over the expected lifespan of the system.
  - 1.7.3.1. For the sake of Biomass projects, this system specific footprint will include all relevant carbon emissions related directly to the plant and its operations.
    - 1.7.3.1.1. Decarb.earth will require proof of the design of the Biomass plant that clearly indicates that the plant and its operations are not emitting CO<sub>2</sub> emissions during its operations. All

emissions have to be captured in a closed system by the plant and its operations. The VVB partners will review this requirement on an annual basis by way of management confirmations and interviews.

- 1.7.3.1.2. The project owner will be required to submit, both at project inception or registration on the Decarb.earth platform as well as on an annual basis, that the project owners has sufficient access to sustainable and surplus biomass in the region of its operations to ensure no biomass needs to be imported into the region of its operations for the plant to continue its operations. This proof will be reviewed on an annual basis by the VVB partners of Decarb.earth.
- 1.7.3.1.3. Both clauses 1.7.3.1.1 and 1.7.3.1.2 will be reviewed and verified in this standard in line with the Puro Standard Biochar Methodology of puro.earth.

The final figure for the emissions reduction created in the form of CO<sub>2</sub>e avoided is calculated per project as per the above method and the carbon credit calculations are based on this figure. No other baseline calculations are required or accepted by this standard. All calculations will be documented on the Decarb.earth databases and verified by our auditors and verification partners.

## 1.8. Project Boundaries

Clear physical and temporal boundaries of the project are to be defined during the project evaluation phase and on-boarding onto the Decarb platform. This includes the specific location and type of installation of the project. The boundaries and zero harm applicability of each project will be assessed in accordance with the Impact criteria section 1, point 3 (1.3), of this Standard. Each project will be continually monitored and periodically audited for existence using remote access technology.

Small, medium and large-sized projects as per section 1 point 4 (1.4) of this standard refers to projects that will generate a maximum annual CO<sub>2</sub>e emissions reductions of the below:

- a) Small-scale projects are those with installed capacity of 15 mWp or less and emissions reductions of ≤ 50,000 tonnes of CO<sub>2</sub>e per annum.
- b) Medium-scale projects are those with between 50,000 and 300,000 tonnes of CO<sub>2</sub>e emissions reductions per annum and installed capacity of more than 15 mWp but less than 25mWp.
- c) Large-scale projects are those with more than 300,000 tonnes of CO<sub>2</sub>e emissions reductions per annum and installed capacity of more than 15 mWp.

## 1.9. Project Duration

RE Projects can be evaluated and on-boarded if they pass this standard up to 12 (twelve) months after commissioning. No project older than 12 months will be accepted for carbon credits under this standard. Each project will generate carbon credits under this standard for as long as it is operational and active but only for as long as the carbon footprint of the system is less than the emissions factor as calculated under section 1 point 7 (1.7) of this standard. The starting date for the project will be the first day of its commissioning or the first date for which the energy generation data is fully available and unspoiled.

## 1.10. Emission Reductions Monitoring Plan

A detailed plan for monitoring the project will be provided to ensure it is delivering the projected emission reductions. This service is provided inherently in the Decarb.earth dMRV and as the carbon credits will be issued after the achievement of the carbon emission reduction, this monitoring plan will take the shape of being a report of what was achieved and not of its projected achievement. There will be an allowance under this standard for the sale of futures based on existing carbon emissions reductions of projects that are operational. In this case the monitoring plan, however it is based on projected carbon emissions reduction, will be reported on a projection based on previously achieved emissions reductions, i.e. based on data of the project's prior and reported emissions reductions.

### 1.10.1. Monitoring methodology:

#### Objective:

To accurately monitor and report the greenhouse gas (GHG) emissions reductions in the form of carbon emissions avoided by using the on-grid alternative from the generation of renewable energy by the projects applying for carbon credits under this standard.

#### Scope:

This monitoring methodology applies to renewable energy projects that qualifies for carbon credits under this standard.

### 1.10.2. Data Collection & Monitoring equipment:

#### Energy Production Data:

Decarb collects the raw data on the total electricity generated by the renewable energy facility by way of API integrations. This is typically measured in kilowatt-hours (kWh) and can be obtained from inverter outputs, cloud-based data aggregator platforms, smart meter readings, or plant monitoring systems (PLCs).

**Equipment Specifications:**

Decarb will document the make, model, and capacity of all major equipment (e.g. solar inverters and panels, wind turbines, hydro turbines) and report this information on the project profile page, that is viewable to the buyers of the carbon credits issued under this standard, on the decarb.earth website.

The monitoring equipment, being the RE inverters, PLCs, and smart meters will be tested for calibration on an annual basis by the third-party audit/verification partners of Decarb. This proof will in most cases come in the form of an over-the-internet push update of the system by the equipment manufacturer.

**1.10.3. Monitoring Frequency & Changes:**

The Decarb platform pulls data updates on the total electricity generated by the renewable energy facility by way of its API integrations on at least a monthly basis, but in many cases on a weekly basis. These reports provide the actual electricity generated and used (already achieved) by the users of the output of the RE system and are used to calculate the emissions reductions achieved by the project. As the electricity generation and usage, and hence the emissions reductions, happens prior to reporting and monitoring, there are no monitoring change requirements. The platform will monitor and report the actual data, or in the case of future being sold of the carbon credits of our projects, the forecasted data based on historical generation data. In this case, of futures being sold, the monitoring will still occur after the fact of generation, but the reconciliation of the forecasted generation vs the actual generation, and its inevitable minor deviations, will be reported on a quarterly basis to the buyers of the carbon credits on the decarb.earth website.

**1.10.4. Baseline Exclusions and Monitoring Focus:**

Baseline calculations are done as per 1.7 of this standard and be used for the calculation of the carbon credits issued to each project under this standard. This calculation is done automatically by the Decarb platform using the reported carbon emissions factor of the region where the project is situated and the raw energy generation data of the project. The carbon footprint of the RE system itself, as explained priorly on this standard, is deducted from the Grid Emissions Factor for the purpose of the baseline calculations.

**Grid emission factor:**

The grid emission factor of the local (regional grid alternative) electricity grid (CO<sub>2</sub>e per MWh) is determined from which the displaced energy would have been sourced if not for the renewable project. This involves using historical data, regional grid averages, or country-specific factors provided by regulatory authorities. Decarb also verifies the grid emissions factors of the regions where its projects reside on an annual basis by an external data service provider.

#### 1.10.5. Avoidance of Double Counting:

Decarb ensures that the emission reductions are not claimed or sold more than once. Clear ownership and rights to the carbon credits is established before any project is accepted under this standard and double counting is a specific output report by Decarb's carbon registry partner.. This service is provided inherently in the Decarb.earth dMRV.

#### 1.10.6. GHG measured and exclusions:

In the context of emissions reduction monitoring for renewable energy projects aiming to earn carbon credits under this standard, the decision was made to measure only carbon dioxide (CO<sub>2</sub>) for all RE projects, as a direct calculation of the CO<sub>2</sub> emissions factor of the on-grid alternative, and for only biomass projects Decarb will measure CO<sub>2</sub> as well as methane (CH<sub>4</sub>). This decision is based on the potential significant contribution of these two greenhouse gasses to global warming and their prevalence in energy production processes. CO<sub>2</sub> is the primary greenhouse gas emitted through the combustion of fossil fuels and biological processes associated with renewable energy technologies like biomass. Methane, although released in smaller quantities, is particularly potent, having a global warming potential many times greater than CO<sub>2</sub> over a 100-year period. Focusing on these gasses allows for a more streamlined and cost-effective monitoring plan, as these are the most impactful gasses in terms of climate change, and they are typically the most relevant emissions for renewable energy projects.

Excluding other greenhouse gasses (GHGs) such as nitrous oxide (N<sub>2</sub>O) and fluorinated gasses from regular monitoring within this specific context of this standard is justified by their relatively minor role and lower emission rates in renewable energy operations. This exclusion simplifies the measurement process, reducing the complexity and cost of emissions monitoring. It ensures that project developers and owners can concentrate resources and efforts on tracking and mitigating the most critical emissions, thereby enhancing the accuracy and efficacy of the emissions reduction claims made for carbon credit purposes. By focusing on CO<sub>2</sub> and CH<sub>4</sub> (for biomass), projects can adhere to a targeted and scientifically rational approach that aligns with global priorities for urgent climate action.

##### 1.10.6.1. Identification of GHG sources and sinks

- 1.10.6.1.1. **Sources:** In the case of RE projects like wind, solar, or biomass as defined by this standard, the primary source of GHG emissions considered is the baseline emissions. Baseline emissions refer to the GHG emissions that would have occurred in the absence of the project. For instance, if a wind farm did not exist, the electricity would likely be generated by fossil fuel-based power plants, which emit GHGs. This standard therefore uses the main grid electricity

suppliers as the source of GHG, specifically CO<sub>2</sub>e, that the RE project avoids leading to carbon credits issued under this standard.

1.10.6.1.2. **Sinks:** For RE projects, there aren't direct sinks (like forests in afforestation projects) as they do not sequester CO<sub>2</sub>e from the atmosphere. However, this standard considers the project activity (the generation of electricity by way of renewable energy) as a metaphorical 'sink' by the fact that it is directly avoiding emissions that would otherwise be released by conventional energy sources. These RE projects don't directly act as sinks in the traditional sense (like forests or oceans that physically absorb and store carbon dioxide). Instead, they are considered "sinks" in terms of their capability to avoid emissions that would otherwise be produced by more carbon-intensive energy sources. By generating clean, renewable energy, these projects avoid the GHG emissions that would have been produced by conventional fossil fuel power generation. While they do not physically sequester CO<sub>2</sub>, the avoidance of emissions acts as a functional equivalent, preventing certain amounts of GHG from entering the atmosphere.

1.10.6.2. Assessment of GHG sources and sinks are addressed in each of the below clauses of this standard:

- 1.10.6.2.1. Baseline setting - Clause 1.7
- 1.10.6.2.2. GHG Quantification - Clause 1.7 and 1.10
- 1.10.6.2.3. Monitoring - Clause 1.10
- 1.10.6.2.4. Risk assessment and management - Section 2 of this standard
- 1.10.6.2.5. Reporting and verification - Section 2 and 3 of this standard

#### 1.10.7. Permanence:

Due to the inherent nature of RE electricity generation and usage the greenhouse gas reductions are permanent and will not be reversed as the usage has already replaced the alternative use of the on-grid alternative. The Non-permanence risk is discussed in more detail in clause 2.6 of this standard.



## 1.11. Project Ownership

### 1.11.1. Importance of Ownership Verification

Ownership verification is a critical component of any carbon credit project. Establishing clear and undisputed ownership is essential for ensuring the integrity and legitimacy of the carbon credits generated. Ownership verification helps prevent multiple claims over the same carbon emission reduction, thereby avoiding double counting and ensuring that each credit represents a unique and verifiable reduction of carbon emissions from the atmosphere.

Furthermore, clear ownership is crucial for defining responsibilities and liabilities associated with the project. It ensures that the benefits of carbon credits, such as financial incentives and recognition, are rightfully assigned. This fosters trust among stakeholders, including project developers, investors, regulatory bodies, and the voluntary or compliance markets where these credits are traded. The process of verifying ownership must be rigorous and transparent to meet both regulatory standards and market expectations.

### 1.11.2. The following steps outline the general process for ownership verification in carbon credit projects:

- 1.11.2.1. Documentation Submission (see clause 1.11.3 below for more detail): Project owners must submit all relevant documents that prove land/building or resource ownership or the right to carry out carbon emission reduction activities on the property in question via a rental or loan agreement.
- 1.11.2.2. VVB Review: These documents undergo a thorough review by the Decarb.earth VVB partners to ensure they comply with sufficient ownership or right of use regulations.
- 1.11.2.3. Site Inspection [*Large projects, as per this standard's definition, only*]: Physical inspections may be conducted to verify the accuracy of the documents submitted and the actual control over the project site if deemed necessary.
- 1.11.2.4. Public Consultation [*Large projects, as per this standard's definition, only*]: Providing a public consultation period allows for any disputes or claims over ownership to be aired and resolved before final approval if deemed necessary.
- 1.11.2.5. Confirmation: After all checks are satisfactorily completed, a confirmation of ownership verification is issued on the Decarb.earth website profile of the various project and carbon owners, which remains valid for the lifespan of the project or until the ownership changes.

1.11.3. The following documents will be accepted as proof project ownership or right of use for per clause 1.11.2.1:

- 1.11.3.1. Land and/or Building Title Deeds: Official government-issued documents proving the ownership of the land and/or building.
- 1.11.3.2. Lease Agreements: Legal documents demonstrating that the project owner has the right to use the land and/or building for the duration of the project.
- 1.11.3.3. Consent Letters: In cases where the project involves communal or government-owned land and/or building, letters of consent from relevant authorities or community leaders are required.
- 1.11.3.4. Regulatory Approvals: Permits or licenses issued by relevant government bodies that authorize the project activities on the designated land and/or building.
- 1.11.3.5. Contracts with Landowners and/or Finance providers: If the project owner is not the land or building owner, contracts that specify the terms under which the project activities are to be conducted and the benefits shared must be provided.
- 1.11.3.6. To prove ownership of the RE system, whichever document is provided by the project owner from the list of 1.11.3.1 to 1.11.3.5, must be accompanied by an invoice or contract specifically in the name of the project owner for the RE system.

## 1.12. Stakeholder consultation

Stakeholder consultation in large renewable energy projects is a crucial element for the development, approval, and success of projects intended to generate carbon credits. This process ensures that the project not only adheres to technical and environmental standards but also aligns with the socio-economic contexts and addresses the concerns of all parties affected directly or indirectly by the project. Engaging stakeholders—including local communities, government entities, non-governmental organizations, and other affected groups—helps in identifying potential environmental and social impacts early in the project cycle. This early engagement can foster local community support, enhance the social acceptability of the project, and mitigate risks associated with social resistance. Furthermore, comprehensive stakeholder consultation underpins the project's credibility and can enhance its market reputation, which is crucial for the commercial success of the carbon credits generated. All projects that are not small or medium-sized as defined in this standard will be required to submit a detailed stakeholder engagement report to be considered for acceptance as a project under this standard. The below provides more guidance to what an acceptable report would look like and emphasizes the minimum requirements, and will be applied with proportionality to the size and scope of the RE project.

The International Finance Corporation (IFC) Performance Standard 1 (PS1) provides detailed guidance on stakeholder engagement for projects with potential social and environmental impacts. This

standard emphasizes the importance of a systematic approach to stakeholder engagement throughout the life of a project. The guidance is designed to help clients of the IFC identify and engage effectively with stakeholders, particularly those who are affected or could be affected by project activities.

Key aspects of the stakeholder engagement framework outlined in IFC Performance Standard 1 include that needs to be included in the report:

- 1.12.1. Identification of Stakeholders: PS1 requires clients to identify stakeholders who are likely to be affected by the project. This involves a thorough analysis to understand the scope of impact and the stakeholders' interests, location, and vulnerabilities.
- 1.12.2. Engagement Planning: The standard mandates the development of a Stakeholder Engagement Plan that details how and when the engagements will occur. The plan should be tailored to the nature and scale of the project and its potential impacts. It should include strategies for ongoing engagement with different stakeholder groups, particularly vulnerable and disadvantaged communities.
- 1.12.3. Disclosure of Information: Information about the project and its impacts must be disclosed in a format and language that is accessible and understandable to the stakeholders. This ensures transparency and facilitates informed participation in the consultation process.
- 1.12.4. Consultation Process: PS1 specifies that consultation should be free of external manipulation, interference, coercion, or intimidation, and conducted in a culturally appropriate manner. For projects with significant impacts, the standard requires consultation to occur early in the project assessment process and on an ongoing basis. Feedback mechanisms should be established to respond to and address stakeholders' concerns.
- 1.12.5. Grievance Mechanism: Establishing a grievance mechanism is another critical component of the engagement framework. It should be readily accessible to all stakeholder segments, allowing concerns about the project's environmental and social performance to be discussed in a timely manner.
- 1.12.6. Documentation and Reporting: Keeping detailed records of engagement activities, issues raised, and actions taken in response is crucial for accountability and continuous improvement of the stakeholder engagement process.

## Section 2:

## 2. Decarb.earth dMRV platform-provided actions required for the issuance of Carbon Credits

### 2.1. Project Implementation and Monitoring

This outlines how projects should be implemented and monitored to ensure they are meeting their projected emission reductions. This includes the tracking technology setup, monitoring frequency, and monitoring methods.

### 2.2. Carbon Credit Methodology selection

This pertains to the specific carbon credit methodology by which each project will be governed, such as those for RE projects that have been issued by the CDM.

### 2.3. Carbon Credit Calculation and Issuance

This relates to the methods and equations used to calculate the amount of carbon credits generated by a project. This also includes the process of issuing carbon credits based on the carbon offset assets generated by each project in line with this standard, as well as the selected carbon credit methodology as per section 2.2 of this standard.

### 2.4. Validation, Verification and Materiality

These processes are important for ensuring the integrity of the carbon credits and maintaining trust in the carbon credit market, and are performed by an independent third-party auditing partner of Decarb.earth which audits the entire lifespan of the carbon credits as generated by each project. This section includes the continuous auditing of methodological consistency, and the necessary steps of reviewing and updating annually the Decarb.earth dMRV carbon credit generation standard (this document) as well as the compliance by the platform to the adopted carbon credit methodologies. The verification process, as explained in detail in section 3 of this standard, is to be conducted by a collection of third-party verification partners of Decarb. Each VVB (verification and validation body) allowed to partner with Decarb as an external verification partner is to be accredited under ISO 14065 for the auditing of GHG emissions.

The verification partners will provide assurance of the following to the buyers of the carbon credits issued by Decarb:

- That the raw electricity generated data used by Decarb to calculate carbon credits for its projects, under this standard, is both complete and accurate.

- That the projects for which carbon credits are issued by Decarb exist and have successfully passed the eligibility criteria of this standard.
- That the calculations done by the DEcard platform, for carbon credits, based on the raw electricity generation data, is correct.
- That the grid emissions factors used by Decarb is fair.
- That the actions of the carbon credit owners, to hold, sell or retire the credits, was done correctly by Decarb.
- That the 2% (or 2.5% or 3% as per clause 1.3.5) carbon credits held back by Decarb, for the sake of the socio-economic upliftment to be achieved as per this standard, is done in accordance with this standard and the definitions of the UN SDGs listed under this standard.
- That although some of the audit procedures are done on an annual basis, that the above statements are true on an annual basis.
- The VVB to provide a project specific (or in cases with project developers/aggregators with multiple projects) or an aggregated materiality figure during the annual verification.

The materiality and level of assurance for verification of carbon credits under this standard is to be established with the use of the CDM tool for Materiality, this is explained in guide CDM-EB69-A06. With reference to section 1.8 of this standard, the below breakdown of project materiality figures are therefore to be used for verification:

- Small-scale projects:  $\leq 50,000$ mt of emissions reductions per annum - 5% as materiality figure
- Medium-scale projects: more than 50,000 and less or equal to 300,000mt of emissions reductions per annum - 2% as materiality figure
- Large-scale projects:  $> 300,000$ mt of emissions reductions per annum - 1% as materiality figure

## 2.5. Digital Carbon Registry

This is the creation of the carbon credits generated by each project on the dMRV platform of Decarb.earth and includes where they will be registered (digital carbon registry), the process for registration, and how the carbon credits can be held, traded or retired.

## 2.6. Non-Permanence Risk and Buffer Pool

This section pertains to the handling of the risk of non-permanence of the carbon credits that were issued via the Decarb.earth dMRV, and consists of the tracking of performance, the reporting of over/under performance, and the adjustment of carbon credits issuable from each project, as well as the issuing of new carbon credits to buyers that have not received the required performance. All projects are tracked live and monthly adjustments can therefore be made using accurate and transparent data. Decarb aims with this to address the importance of the permanence of greenhouse gas (GHG) emissions reductions. "Permanence" refers to the duration that these reductions or carbon sequestration benefits are maintained without being reversed. When evaluating or developing carbon credit projects, ensuring the long-term stability of these benefits is essential, as the overarching goal is to achieve lasting climate benefits.

### 2.6.1. Significance of Non-Permanence in Carbon Credits

Non-permanence is a risk associated with carbon offset projects where the GHG reductions or removals might be reversed. The concept of non-permanence is significant because it challenges the integrity and effectiveness of carbon credits. If a credited carbon sequestration is later released back into the atmosphere, the initial benefits of the credit are nullified, undermining the goals of climate change mitigation efforts.

### 2.6.2. The Role of a Buffer Pool

To manage the risk of non-permanence, many carbon credit standards incorporate a "buffer pool." A buffer pool is a reserve of credits set aside from the total credits issued by various projects. These credits are not sold and are held to compensate for any future loss of carbon due to reversals.

Due to the nature of emissions reductions under this standard and for RE projects (excluding Biomass which is addressed in clause 2.6.3 below) in general the only risk of reversals is under the case of futures being sold for carbon credits passed under this standard. For this risk the quarterly reconciliation done as per Section 1, point 10 (1.10) of this standard is done to ensure the reporting of any deviations in the actual emissions reductions vs the sold carbon credits. In such a case, where there has been an under or over performance by the project compared to the futures, Decarb will issue a new carbon credit (under performance by the project) from the following period of the future, and henceforth adjust the forecasted emissions reductions figure of the project, to the carbon credit buyer, or in the case of over performance, issue a pro-forma invoice to the buyer for the right of first refusal of the higher than forecasted emissions reduction and carbon credits from the project. If the buyer does not take up such a pro-forma order, the carbon credit will be issued for selling on the spot market for the over performance of the project in the futures period. Due to this quarterly reconciliation and ability to issue new carbon credits from the same projects, there is no need for a buffer pool for the carbon credits issued from this standard. This risk will however be re-assessed on an annual basis in conjunction with our VVB partners, and if this becomes relevant, a buffer-pool of credits will be instituted.

### 2.6.3. Non-permanence and buffer pool for Biomass projects

The risk of non-permanence of carbon credits from Biomass plants are different from the other RE systems as defined in this standard. This standard will therefore adopt the guidelines of the VCS AFOLU Non-permanence Risk Tool and create a corresponding buffer pool of carbon credits for Biomass projects that are accepted under this standard. This will be done on a case by case basis using a proportional approach to the application. The review of the buffer pool for Biomass projects will be done on an annual basis by the VVB partners of Decarb.earth.

## 2.7. Dispute Resolution

Decarb.earth and its carbon credit marketplace partners provide the processes for resolving disputes related to the interpretation or implementation of the methodologies used and the calculation of the carbon credits issued under it.

## Section 3:

### 3. Auditing and Verification (AV) Principles

The below Decarb.earth AV principles brings together all the elements of the Project Acceptance Standard and those of the ISO 14064-2 Standard:

#### 3.1. Existence

All the on-boarded projects that generate carbon offsets on the Decarb.earth dMRV are fully verified. At the point of onboarding, the dMRV records and stores photographic proof as well as GPS coordinates, and our VVB partners conduct existence testing across the project population, which ensures the project is verifiable and visitable.

#### 3.2. Accuracy

All the raw data from the generation of electricity by the solar systems of each project is captured on-chain via smart meter readings and/or API Keys or Data Logger Codes into the back-ends of the solar inverter manufacturers or third party IoT devices. This data is recorded on the Decarb.earth dMRV platform and verified by our VVB partners for completeness and accuracy.

#### 3.3. Availability

All the raw electricity generation data, as well as the carbon emissions reduction methodology and calculations, are available to buyers at any point in time and are continuously updated in real-time on the dMRV. The accuracy of the calculations of carbon offsets, as well as the correctness of the allocation of carbon offsets to the various project participants. are verified by our VVB partners on an ongoing basis,

#### 3.4. Additional Impact

All the projects that generate carbon offsets using the Decarb.earth platform are projects that have a verifiable additional impact on the reduction of regional carbon emissions resulting from the electricity grid in the corresponding region, and have been allowed on the platform in line with the Project Acceptance Framework (PAF) Standard in Section 1 of this standard. Each aspect of the Standard will be verified by our VVB partners on an annual basis.

### 3.5. Immediacy

Each carbon offset minted by the Decarb.earth dMRV is generated in the exact same period (month/quarter/year) in which the eventual carbon credits are bought for the first time. This means if a buyer of the carbon credits backed by the projects on the Decarb.earth dMRV buys 1mt worth of carbon credits for the period of October 2023, it our project/s will generate those carbon offsets in the exact same month. The future contracts to be created in partnership with Zero 13 will be based on tracked actual data that is continuously compared and updated where necessary for the period of the future.

### 3.6. Consistent and accurate methodology

From the raw data of point 2, we calculate the carbon offsets based on the carbon emissions reductions created by the project as a result of using electricity generated from renewable sources instead of the on-grid alternative. This methodology of calculating the reduction in carbon emissions is kept consistent in nature, with only regional electricity grid carbon emissions differences factored in for each project. The carbon emissions reduction methodology applied to our projects will be based on the principles of our Decarb.earth dMRV carbon credit generation standard, as well as that of the specific Carbon Credit Methodology that is selected for the particular project. This audit principle includes the verification of the correct application of the adopted Carbon Credit Methodologies for our projects.

### 3.7. Data management procedures

Decarb will manage all data required for the auditing and verification procedures under this section of the standard in line with requirements of ISO 14064-2. This means that all data and documentation will be organized, accessible and detailed in a fashion that will enable the VVB partners of Decarb to perform the required verification work in a timeous and complete manner. This will be done by way of a well organized and complete online profile on each project owner as well as API access into the databases of Decarb provided to the VVB partners.

Decarb.earth provides the following templates to be used by the Project owners and which will be verified by our VVB partners.

#### 3.7.1. Mandates as per below template:

- 3.7.1.1. Carbon assets ownership
- 3.7.1.2. Mandate to sell carbon credits on behalf of the various owners of the carbon assets
- 3.7.1.3. Mandate to store and process Project/system (this includes the access to the data API keys obtained from clients)
- 3.7.1.4. Mandate to store and process client information





## MANDATE FOR CONSENT TO ACQUIRE AND MONETISE CARBON CREDITS

This mandate hereby grants authority to \_\_\_\_\_  
[Company name], ("the Main Agent"), with registration number \_\_\_\_\_ and registered  
address \_\_\_\_\_,  
in their capacity as either the Project Developer, Financier, System Installer, or Broker, to register the details of the  
Renewable Energy systems ("the RE Systems") on behalf of the RE System Owner. The RE System is rightfully  
owned by \_\_\_\_\_ [name of RE System owner],  
owner/director of the company \_\_\_\_\_ [insert  
company name], with registration number \_\_\_\_\_, ("the Owner"), on  
the platform [decarb.earth](https://decarb.earth), for the purpose of generating and selling carbon credits.

By acknowledging this mandate, all parties agree to the following:

### 1. Access to Energy Data

The RE System/s Owner hereby agrees to allow the Main Agent to share the systems' raw energy data to calculate the carbon credits and provide our Services as per the Decarb Ltd Service Level Agreement.

*For Decarb to register your RE system/s for carbon credits, we need to obtain access to the raw energy generation data of the system. This can be done in various ways but the most common way to provide us with the energy data is via the RE system's unique energy management system. In such an example we would plug into this database via APIs and obtain the necessary continuous live data access. If you do not have your own energy data system, we will need to integrate into the cloud database of the equipment manufacturer, also via APIs. If it is not one of our currently supported integrations, namely Solarman, SolarEdge or Solis, then a new integration will be required and this may incur costs which are for the account of the RE System Owner. For all RE systems that are already operational we will need a full data report of the historical generation data as well as access to current generation data as explained above.*

### 2. Authorisation for Carbon Credits:

The Owner hereby authorises the Main Agent to register the RE System on the [decarb.earth](https://decarb.earth) platform, on behalf of the Owner, for carbon credits from the carbon emissions reduced by the RE System/s. This authorisation includes the right to disclose private company details and specific details of the solar installation to decarb.earth so that they

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Tel/WhatsApp: +41 766 905 169, Email: [team@decarb.earth](mailto:team@decarb.earth)



may provide services in line with all applicable law which includes the data processing laws such as the Protection of Personal Information Act 4 of 2013, ("POPIA").

## **2. Sale of Carbon Credits:**

The Owner grants the Main Agent the right to sell carbon credits on behalf of the Owner. In line with decarb.earth's terms of service and carbon standard, it is understood that the carbon credits issued will be 85% of the total generated, after the deduction of fees, and distributed to the various owners of the carbon credits as specified by this document.

## **3. Carbon Credit Revenue Distribution:**

The parties agree to specify the percentage split, if any, of the revenue after fees between the Agent and the Owner in the space provided below:

*Decarb recommends that no more than 10% in total is split between the Agent/s. Mark zero if not relevant.*

- Decarb + the decarb.earth Fund - 12%
- Owner: \_\_\_\_\_ %
- Agent - Main Agent: \_\_\_\_\_ %
- Additional Agent - Developer/Financier: \_\_\_\_\_ %
- Additional Agent - System Installer: \_\_\_\_\_ %
- Additional Agent - Broker: \_\_\_\_\_ %

## **4. No Double Counting:**

Both parties commit to not attempt to generate carbon credits from the same Projects elsewhere, as it is considered double counting. Furthermore, once this Agreement is signed, neither party shall sell carbon credits generated by the Projects elsewhere.

## **5. Responsibilities and Liability:**

Decarb.earth does not assume responsibility for ensuring that funds allocated to the Owner are distributed as such if the Owner does not provide their bank details to Decarb. It is the Owner's responsibility to ensure the correct and true information is supplied to the Main Agent.



#### CONSENT TO PROCESS PERSONAL AND SYSTEM INFORMATION

At Decarb.earth we are committed to providing our services in line with all applicable law which includes the data processing laws such as the Protection of Personal Information Act 4 of 2013, ("POPI"). To do so we need access to your personal information (as it is defined in POPIA) as well as the system information of your solar system to calculate your carbon credits and provide our Services as per the Decarb Ltd legal and/or carbon purchase agreements. We therefore request your consent to access your personal and system information directly from your specified Decarb's cloud database who receives your personal information directly from the solar inverter installed as part of your solar system.

Without your consent, we will be unable to provide you with our Services as we will be unable to calculate your carbon offsets.

Please note that we will only access the information necessary to calculate your carbon offsets and process your personal and system information strictly in accordance with POPI and our privacy policy. Our fee for processing and validating the carbon credits generated by your system is 12% (twelve percent) of the total carbon credits generated (there are also transaction fees upon selling of carbon credits). This is to cover the cost of data retrieval, storage, processing as well as the cost to sell the carbon credits generated by your system.

If you are happy to provide your consent and to agree to the terms of this mandate, please sign the area below and return this form back to us.

---

**The below to be signed by the legal owner of the RE system (if not stated in contracted attached)**

I, \_\_\_\_\_ hereby consent to the access and processing of my Personal Information as well as any and all Solar System Information by Decarb.earth for the purpose of its Services.

Signature: \_\_\_\_\_

Designation: \_\_\_\_\_

Company name: \_\_\_\_\_

Date: \_\_\_\_\_

- 3.7.2. Project owner confirmation no natural habitat or protected species removal harm as per clause 1.3.3
- 3.7.3. Project owner confirmation of business sustainability impact as per clause 1.3.4
- 3.7.4. Project owner confirmation of socio-economic impact as per clause 1.3.5, which will be done via the UN SDG reporting of either of
  - 3.7.4.1. The Decarb.earth Africa RE Fund
  - 3.7.4.2. NGOs that Decarb.earth uses for this impact
- 3.7.5. Guidance on submission of reports by the Projects owners as required and laid out in this standard for:
  - 3.7.5.1. Investment Barrier test and additionality reporting for large scale projects - guidance provided in clause 1.5
  - 3.7.5.2. EIA's for large scale projects - guidance provided in clause 1.3.5 of this standard
  - 3.7.5.3. Project/system ownership - guidance provided in clause 1.11 of this standard
  - 3.7.5.4. Stakeholder management - guidance provided in clause 1.12 of this standard

## Section 4:

### 4. Applicable UNFCCC CDM Methodologies:

This project acceptance standard is based on the following CDM standard and amended for the indication sections:

#### 4.1. Methodologies used

- 4.1.1. AMS-I.A
- 4.1.2. AMS-I.D
- 4.1.3. AMS-I.F
- 4.1.4. ACM0002
- 4.1.5. ACM0006
- 4.1.6. AM0036
- 4.1.7. AM0045

#### 4.2. Tools used

- 4.2.1. CDM Tool23
- 4.2.2. CDM Guide - CDM-EB69-A06
- 4.2.3. Puro.earth - Puro Standard Biochar Methodology
- 4.2.4. VCS - AFOLU Non-permanence Risk Tool
- 4.2.5. CDM Guide - EB62 Report Annex 5

AMS-I.D  
 Small-scale Methodology: Grid connected renewable electricity generation  
 Version 18.0  
 Sectoral scope(s): 01

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## Appendix. Scope of AMS-I.D., AMS-I.F. and AMS-I.A. based on project types

**Table 1 Scope of AMS-I.D., AMS-I.F. and AMS-I.A. based on project types**

|   | Project type   | AMS-I.A. | AMS-I.D. | AMS-I.F. |
|---|--|----------|----------|----------|
| 1 | Project supplies electricity to a national/regional grid   |          | √        |          |
| 2 | Project displaces grid electricity consumption (e.g. grid import) and/or captive fossil fuel electricity generation at the user end (excess electricity may be supplied to a grid) |          |          | √        |
| 3 | Project supplies electricity to an identified consumer facility via national/regional grid (through a contractual arrangement such as wheeling)                                    |          | √        |          |
| 4 | Project supplies electricity to a mini grid <sup>1</sup> system where in the baseline all generators use exclusively fuel oil and/or diesel fuel                                   |          |          | √        |
| 5 | Project supplies electricity to household users (included in the project boundary) located in off grid areas   | √        |          |          |

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### 4.3. Project acceptance factors amended from CDM

- 4.3.1. Type of Projects - No amendments
- 4.3.2. Capacity - No amendments
- 4.3.3. Location/Regions - Replaced by Impact criteria (Section 1.3)
- 4.3.4. Grid connection - Upgraded by Impact criteria (Section 1.3)
- 4.3.5. Sustainability - Upgraded by Business Sustainability and Socio-Economic Impact criteria (Section 1.3)
- 4.3.6. Baseline calculations, emission factor use and Monitoring - Upgraded with equipment carbon footprint reductions in the emissions factor (Section 1.7)
- 4.3.7. Additionality and Barrier tests- Amended (Section 1.4 and 1.5)
- 4.3.8. Stakeholder consultation (ACM0002) - Amended (Section 1.12)