



Gold Standard[®]
for the Global Goals

ACTIVITY REQUIREMENTS

RENEWABLE ENERGY ACTIVITY REQUIREMENTS

PUBLICATION DATE: **dd14/mm01/2021**

VERSION: **1.43**

NEXT PLANNED UPDATE: 14/01/2022

Contact Details

The Gold Standard Foundation
Chemin de Balexert 7-9
1219 Châtelaine
International Environment House 2
Geneva, Switzerland
Tel: +41 22 788 70 80
Email: standards@goldstandard.org

SUMMARY

This document provides necessary guidelines and requirements for Renewable Energy activities seeking certification of the project design and/or to issue Gold Standard Certified Impact Statements and Products for example; GSVERs.

TABLE OF CONTENTS

| | |
|--|-----|
| SUMMARY | 1 |
| TABLE OF CONTENTS | 2 |
| 1 SCOPE AND APPLICABILITY | 3 |
| 1.1 General Applicability | 3 |
| 2 ELIGIBLE PROJECT TYPES | 3 |
| 3 GENERAL ELIGIBILITY CRITERIA | 7 |
| 3.1 Types of project: | 7 |
| 3.2 Location of project: | 87 |
| 3.3 Project area, boundary and scale: | 8 |
| 3.4 Suppressed demand | 9 |
| 3.5 Stacking | 9 |
| 4 ELIGIBILITY PRINCIPLES AND REQUIREMENTS | 9 |
| 4.1 Principle 1 – Contribution to Climate Security & Sustainable Development.... | 109 |
| 4.2 Principle 2 – Safeguarding Principles | 10 |
| 4.3 Principle 3 – Stakeholder Inclusivity | 10 |
| 4.4 Principle 4 – Demonstration of Real Outcomes..... | 10 |
| 4.5 Principle 5 – Financial Additionality & Ongoing Financial Need..... | 10 |
| ANNEX A – ADDITIONAL ELIGIBILITY CRITERIA FOR SPECIFIC PROJECT TYPES | 12 |
| 1 TECHNOLOGY SPECIFIC ELIGIBILITY CRITERIA | 12 |
| 1.1 Hydropower project activity | 12 |
| 1.2 Project activity using biomass resources..... | 14 |
| 1.3 Project activity using Biogas (landfill gas and biogas from agro-processing, wastewater and other residues) | 16 |
| 1.4 Project activity using Waster Heat/Gas recovery | 16 |
| 1.5 Fossil co-generation..... | 17 |
| 1.6 Waste incineration and gasification | 17 |
| 1.7 Waste handling and disposal | 19 |

1 | SCOPE AND APPLICABILITY

1.1 | General Applicability

- 1.1.1 | This Requirements document, hereafter “the RE Activity Requirements”, provides necessary guidelines and requirements for Renewable Energy activities seeking certification of the project design and/or to issue Gold Standard Certified Impact Statements and Products.
- 1.1.2 | The RE Activity Requirements document is designed to be read in conjunction with the [Principles & Requirements](#), and associated documents including Gold Standard Approved Methodologies and Product Requirements such as [GHG Emissions Reductions & Sequestration Product Requirements](#) and [Renewable Energy Label Product Requirements](#).
- 1.1.3 | To maintain the integrity of the standard, Gold Standard reserves the right to issue updates and changes, clarifications or corrections to its requirements. Typically, this will involve a notice period and guidance will be provided on how to apply the new rules and requirements. Likewise, the Gold Standard reserves the right to require additional information and evidence to be supplied by the Project Developer [and Validation/Verification Body](#).

2 | ELIGIBLE PROJECT TYPES

- 2.1.1 | All Renewable Energy Projects for which Gold Standard certification is being sought shall fulfil the requirements as set out in this document and those referenced or associated documents.
- 2.1.2 | In order to be eligible for Gold standard certification, all Renewable Energy Projects, shall meet the following Eligibility Criteria:
- a. Projects shall generate and deliver energy services (e.g., mechanical work/electricity/heat) from non-fossil [fuel](#) and renewable energy sources.
 - b. Projects shall comprise of renewable energy generation units, such as [solar](#) photovoltaic, tidal/wave, wind, hydro, geothermal, waste to energy and renewable biomass, that are:
 - Supplying energy to a national or a regional grid; OR
 - Supplying energy to an identified consumer facility via national/regional grid through a contractual agreement such as wheeling.

- c. Any Project supplying electricity to a mini-grid¹ shall refer to [Community Services Activity Requirements](#).
- d. Projects generating on-site energy for captive consumption at an industrial facility shall refer to the requirements in this document.

2.1.3 | New Gold Standard Verified Emission Reductions (GS VER) or Gold Standard labels for Certified Emission Reductions (GS CER), Renewable Energy projects connected to national or a regional electricity grid² must be located in [either](#) a;

- a. Least Developed Country (LDC), Small Island Developing State (SIDS) or a Land Locked Developing Country (LLDC)³ [or](#)
- b. Low Income and Low Middle-~~Income~~ country where the penetration level of the proposed Renewable Energy Technology type is less than 5%⁴ of the total grid installed capacity, at the time of the first submission to preliminary review

Renewable Energy projects connected to national or a regional electricity grid ~~in~~ [are ineligible for GS VERs/CERs, if located in](#)

- ~~an Upper Middle-[Income Country](#) or High-Income Country⁵ [or are ineligible for GS VERs/CERs.](#)~~
- [SIDS and LLDC, defined as a High- Income Country⁶](#)

¹ A mini-grid is defined as power system with a total capacity not exceeding 15 MW (i.e. the sum of installed capacities of all generators connected to the mini-grid is equal to or less than 15 MW) which is not connected to a national or a regional grid.

² Renewable Energy project supplying electricity to mini-grid are exempted from this eligibility requirements and shall follow Gold Standard Community Services Activity Requirements for GS-VER or GS-CER projects.

³ Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States < <https://www.un.org/ohrls/>>

⁴ The penetration rate is the ratio of installed capacity of proposed renewable technology in the grid to total installed capacity of the grid in the host country or region. The 5% threshold will be periodically reviewed and updated, potentially with specific tools and approaches for different technologies/regions in future.

⁵ Refer to the latest country classification by income available at <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>

⁶ [ibid](#)

- 2.1.4 | Grid Connected off-shore wind projects and waste to energy projects that involve utilization of landfill gas/biogas to electricity generation with or without thermal energy production are exempted from eligibility requirement outlined in paragraph 2.1.3 |above.
- 2.1.5 | The eligibility⁷ requirement outlined in paragraph 2.1.3 |above is effective from **24 Jan 2020**. This requirement is applicable in case of projects and PoAs as follows;
- a. Projects submitted for preliminary review after **24 Jan 2020** shall demonstrate compliance with the requirements of paragraph 2.1.3 |.
 - b. PoAs registered before 24th Jan 2020:
 - i. A registered PoA can include new VPAs/CPAs until the next renewal of the PoA following the approved inclusion criteria as per the registered PoA Design Document (i.e. previous RE eligibility rules). At the time of next PoA renewal, the inclusion criteria for new VPAs/CPAs must be updated in line with the paragraph 2.1.3 |above.
 - ii. Any new VPAs/CPAs included as per the previous rules can continue till the end of their respective maximum allowed crediting period.
 - iii. Registered PoAs that have inclusion criteria as per previous eligibility rules cannot extend PoA boundary to include new countries or expand the scope to include new renewable technology types until next PoA renewal.
 - iv. Registered PoAs that have inclusion criteria in line with paragraph 2.1.3 |above can extend the PoA boundary to include new countries or expand the scope to include new renewable technology types.
 - c. PoAs validated and/or listed before 24 Jan 2020
 - i. Validated and /or listed PoAs submitting request for registration after 24 October 2020⁸ shall define the VPAs/CPAs inclusion criteria in line with the new RE activity requirements, paragraph 2.1.3 |above.
 - d. New PoAs listed after 24 October 2020
 - i. PoAs submitted for preliminary review after 24 October 2019, shall define the VPAs/CPAs inclusion criteria in line with the new RE activity requirements, paragraph 2.1.3 |above.

⁷ This outcome only affects the eligibility of projects issuing GS VERs or GS CERs, projects applying other pathways (for example Gold Standard Renewable Energy Labels) are not affected.

⁸ The relevant rule update was released on 17/01/2020, available [here](#).

- e. Projects/PoAs seeking transition to Gold Standard
 - i. Projects/PoAs seeking transition from another carbon crediting scheme to GS4GG or labelling of emission reductions under GS4GG are exempted from eligibility requirements of paragraph 2.1.3 |above if the projects/POAs started their first crediting period with the original carbon crediting scheme from 01/01/2016 or later but before 24/01/2020.
 - ii. PoAs seeking transition⁹ from another carbon crediting scheme to GS4GG or labelling of emission reductions under GS4GG are exempted from eligibility requirements of paragraph 2.1.3 |above. At the time of submission to Gold Standard, PoAs seeking transition shall update the inclusion criteria for new CPAs in line with the paragraph 2.1.3 |above. CPAs that started their first crediting period with the original carbon crediting scheme from 01/01/2016 or later but before 24/01/2020 are exempted from the eligibility requirements of paragraph 2.1.3 |above.

2.1.6 | Where exceptional circumstances exist, a project may seek an exception to paragraph 2.1.3 | above. This include cases when a project serves impoverished beneficiaries at preferential electricity rates or the project is located in a conflict zone¹⁰, or penetration of proposed project technology type is not a common practice¹¹ in the relevant region of the host country. Exceptional circumstances will be judged on a case by case basis and are entirely at the discretion of Gold Standard. If exceptional circumstance exists;

- a. A request for exception approval should be submitted before submitting the project for preliminary review.
- b. The project developer shall submit a deviation request describing the exceptional circumstances that are relevant to the proposed activities, accompanied, at a minimum, with an Investment Analysis to demonstrate the financial additionality. The developer shall follow the latest version of CDM methodology tool "[Methodological tool: Investment analysis](#)" to demonstrate financial additionality as per the CDM Requirements. The review process may include independent expert analysis, paid for by the

⁹ The relevant rule update was released on 13/05/2020, available [here](#).

¹⁰ It refers to the conflict zones - as no-go areas for investment purpose, which might affect the decision making considering the long-term risk to the investment.

¹¹ The latest version of CDM methodology tool "[Common practice](#)" with applicable adjustments to include projects considered carbon revenue shall be applied to demonstrate the exceptional circumstances i.e., the project activity is not "common practice" in the relevant region of the host country.

Project Developer but reimbursable against fees for first issuance (not reimbursable in the event of an unsuccessful application for exceptional circumstances). Penetration level significantly higher than the 5% benchmark, when proposed as an exception, are unlikely to be approved.

- c. Projects must still demonstrate additionality at the time of design certification.

2.1.7 | An exception to paragraph 2.13 is pre-approved for distributed installations of renewable technologies, as outlined below;

- a. Grid connected Renewable Energy projects/ VPAs that involve distributed installation of Renewable technology, where individual unit size is up to a maximum 500 kW of installed capacity, are eligible for the issuance of GS-VERs or GS-CERs.
- b. Projects/ VPAs must be submitted to Gold Standard for preliminary review on or before 31/12/2023.
- c. Projects/ VPAs must still demonstrate additionality at the time of design certification or inclusion, as applicable.

2.1.8 | Additional eligibility criteria for specific Renewable Energy project technologies like Hydropower, projects using biomass resources, biogas, waste heat/gas recovery, fossil co-generation, waste incineration and gas, and waste handling and disposal etc., are prescribed in Annex A.

2.1.9 | Projects seeking to issue of both Renewable Energy Labels and GS VERs shall meet the applicable requirements of:

- a. Applied Impact Quantification Methodologies for Emissions Reductions
- b. [GHG Emissions Reductions & Sequestration Product Requirements](#)
- c. [Renewable Energy Label Product Requirements](#)

3 | GENERAL ELIGIBILITY CRITERIA

3.1 | Types of project:

3.1.1 | Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are mentioned in the paragraph 2|_above.

3.2 | Location of project:

3.2.1 | Eligible projects may be located in any part of the world. Hydropower projects shall not be located in High Conservation Values (HCVs)¹² areas. Please refer to Annex A for further information on hydropower projects.

3.3 | Project area, boundary and scale:

3.3.1 | Project Area and Boundary shall be defined in line with the applicable Methodologies and Product Requirements.

3.3.2 | The following scale categories are applied to RE activities:

- a. Microscale
 - i. RE project issuing less than or equal to 10,000 GS VERs
 - ii. RE project seeking any product other than GS VERs with an installed capacity less than equal to 2 MW_{electricity} / 6 MW_{thermal}
- b. For the purpose of applying GS approved methodologies for quantification of GS VERs/CERs, 'small scale' is defined as per the indicated type, as follows;
 - i. Renewable energy Project with a maximum output capacity of 15 MW (or an appropriate equivalent). In this context:
 - a. "Output" is the installed/rated capacity as indicated by the manufacturer of the equipment or plant, irrespective of the actual load factor of the plant. The installed/rated capacity of renewable electricity generating units that involve turbine generator systems shall be based on the installed/rated capacity of the generator;
 - b. Regarding the "appropriate equivalent" of 15 MW, the project developer may refer to MW(p)¹³, MW(e) or MW(th). As MW(e) is the most common denomination, MW is defined as MW(e), and otherwise an appropriate conversion factor shall be applied;
 - c. For biomass, biofuel and biogas project activities, the maximal limit of 15 MW(e) is equivalent to a 45 MW thermal output of the equipment or the plant (e.g. boilers). For thermal applications of biomass, biofuels or biogas (e.g. cookstoves), the limit of 45 MW(th) is the installed/rated capacity of the thermal application equipment or device(s) (e.g. biogas stoves). For electrical or mechanical applications, the limit of a 15 MW installed/rated output shall be used. In the case of co-firing renewable and fossil fuels, the rated capacity of the system when using fossil fuel shall apply;

¹² Refer to High Conservation Value Resource Network for definition of High Conservation Value Area. Available at <https://hcvnetwork.org/>

¹³ For solar photovoltaic applications, 15 MW(p) may be defined by manufacturers' specifications under testing conditions of 1000 W/m² and 25 deg C or 600 W/m² and 35 deg C.

- d. For thermal applications of solar energy project activities, “maximum output” shall be calculated using a conversion factor of 700 W(th)/m² of aperture area of glazed flat plate or evacuated tubular collector, that is, the eligibility limit in terms of aperture area is 64,000 m² of the collector.²⁰ The project participants may also use other conversion factors determined as per the requirements in paragraph 73 above, but shall then justify why the chosen conversion factor is more appropriate to the project activity;
- ii. End-use energy efficiency improvement project activities that reduce energy consumption, on the supply side, with a maximum energy saving of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period. In this context, for project activities that improve thermal energy efficiency, the maximum energy saving of 60 GWh(e) per year is equivalent to 180 GWh(th) per year saving
- iii. Other project types not included in Renewable and End use energy project types that result in GHG emission reductions not exceeding 60,000 tCO₂eq per annum in any year of the crediting period.

3.4 | Suppressed demand

3.4.1 | Certain Impact Quantification methodologies allow projects to account for a Suppressed Demand scenario when establishing a baseline. In such cases, the application of the Suppressed Demand baseline is limited to small scale and microscale projects.

3.5 | Stacking

3.5.1 | A single Renewable Energy project may potentially pursue any number and combination of Certified Impact Statements or Products. However, certain Product Requirements, which supersede the generic requirements stated in this document can set restrictions on co-issuance of Certified Impact statements or Products. For instance, GS VERs or GS CERs with REC labels cannot be claimed for the same MWh.

3.5.2 | Where a Suppressed Demand baseline is applied, it is not allowed to ‘stack’ Gold Standard Certified Impact Statements or Products as the definition of the baseline may be contradictory.

4 | ELIGIBILITY PRINCIPLES AND REQUIREMENTS

This section describes the additional requirements and/or deviations from the Principles & Requirements. Renewable Energy projects seeking Gold Standard certification shall meet these additional requirements.

4.1 | Principle 1 – Contribution to Climate Security & Sustainable Development

4.1.1 | Project shall mandatorily contribute to SDG 13 (Climate Action) and two other SDGs. It is recommended to include a contribution to SDG 7 (Affordable and Clean Energy) as one of the other 2 SDGs.

4.2 | Principle 2 – Safeguarding Principles

4.2.1 | Project developers shall conduct a Safeguarding Principles Assessment and conform to the [Safeguarding Principles & Requirements](#).

4.3 | Principle 3 – Stakeholder Inclusivity

4.3.1 | Projects shall identify and engage relevant stakeholders and seek expert stakeholder input where necessary in the design, planning and implementation. Specific stakeholder consultation requirements for hydropower, renewable biomass, MSW incineration projects are outlined in Annex A of this document.

4.4 | Principle 4 – Demonstration of Real Outcomes

4.4.1 | The project start date shall be determined as per paragraph 4.1.39 of [Principles & Requirements](#).

4.4.2 | Projects may receive Issuance of Certified Impact Statements or Products for a maximum of three Certification Renewal Cycles i.e., a total of 15 years, unless mentioned otherwise in the Product Requirements.

4.4.3 | Projects shall mandatorily undergo Design Certification Renewal every 5 years as per [Principles & Requirements](#).

4.4.4 | The baseline shall be reassessed at the time of Crediting Period Renewal following the applicable methodology and [Principles & Requirements](#).

4.5 | Principle 5 – Financial Additionality & Ongoing Financial Need

4.5.1 | Projects seeking the issuance of Certified Impact Statements or Products (for example GS VERs) shall demonstrate financial additionality and Ongoing Financial Need in accordance with [Principles & Requirements](#) unless mentioned otherwise in the Product Requirements.

4.5.2 | Project and VPAs, where applicable may refer to valid [CDM Tool 32: Methodological tool: Positive list of technologies](#) to demonstrate additionality. Under no circumstances should deemed automatic additionality conditions imply an exemption from the Gold Standard eligibility criteria related to the technology types.

4.5.3 | Projects and VPAs shall meet prior consideration requirements in accordance with paragraph 4.1.49 and 4.1.50 of [Principles & Requirements](#).

4.5.4 | An eligible Microscale project that meets any one of the criteria below shall be deemed additional:

- a. The project is located¹⁴
 - i. In a Least Developed Country (LDC), Small Island Developing States (SIDS) or Land Locked Developing Country (LLDC) or in a special underdeveloped zone (SUZ)¹⁵ of the Host Country. OR
 - ii. In a host country or part of the host country different from those defined above, provided that the Project Developer can demonstrate that project implementation will essentially benefit poor communities¹⁶. The Project Developer shall seek approval from Gold Standard providing a detailed description as to how the activity will benefit poor communities.
- b. The project is supplying electricity to regional or national grid; however, convincing evidence can be provided to demonstrate that project implementation will significantly improve access to electricity for the local communities, households or SMEs.
- c. The project involves the installation of Solar Photovoltaic and Solar Thermal electricity generation, off-shore wind, marine technology, household rooftop wind turbine of size up to 100 kW or biomass integrated gasification combined cycle.
- d. Other renewable energy technologies or measures for which the CDM EB has adopted the host country recommendation¹⁷. The end date of the validity shall be before the time of first submission to Gold Standard OR approved by The Gold Standard as part of positive list.

4.5.5 | In case the deemed additionality criteria are also valid at the time of Renewal of Crediting Period, the Ongoing Financial Needs assessment is deemed to be met unless otherwise stated in product requirements.

¹⁴ Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States <<https://www.un.org/ohrls/>>

¹⁵ Refer to SUZ definition & applicable criteria – paragraph 8 (a) of [CDM Methodological tool for Demonstrating additionality of microscale project activities](#) or latest version of this tool.

¹⁶ “Communities” of consumers may for example include households; Applications may include lighting (interior, public street lighting), electrical appliances such as refrigerators. No specific definition of ‘poor communities’ is pre-established. The international or national definitions such as populations below poverty line can serve as the basis to assess the eligibility of the targeted communities.

¹⁷ <https://cdm.unfccc.int/DNA/submissions/index.html>

ANNEX A – ADDITIONAL ELIGIBILITY CRITERIA FOR SPECIFIC PROJECT TYPES

Annex A outlines the additional eligibility criteria for ~~specific~~ project types that involve specific renewable energy technology.

1 | TECHNOLOGY SPECIFIC ELIGIBILITY CRITERIA

1.1 | Hydropower project activity

- 1.1.1 | The Gold Standard will evaluate the eligibility of hydropower activities with an installed capacity greater than 20 MW on a case-by-case basis at the time of preliminary review. This 20 MW capacity threshold shall apply to each one of the project activities as part of a bundle, and not to the overall bundle, and to each CPA/VPA as part of a PoA. The Project Developer shall provide the following additional information as part of the documentation to be reviewed:
- a. A Stakeholder Consultation Report, in accordance with the relevant [Stakeholder Consultation and Engagement Requirements](#). For project activities involving existing dams (such as dams built for irrigation purposes), the stakeholder consultation shall include a site-visit by local stakeholders taking part in the consultation.
 - b. A Compliance Report showing that the project is in compliance with the latest World Commission on Dams (WCD) guidelines¹⁸, validated by a [GS-VVB](#).
- 1.1.2 | Hydropower projects located in High Conservation Values (HCVs)¹⁹ areas shall NOT be eligible for certification under Gold Standard for the Global Goals (GS4GG). The Project Developers must assess if the project activity is located in HCVs area. For such assessment, the Project Developer shall consult with local government authorities AND refer to existing international sources of information such as the [World Database on protected planets](#), [IUCN](#), [UNEP](#), the [Ramsar list of wetlands](#), and the [United Nations list of protected areas](#). The outcome of the assessment shall be provided with the project documentation submitted for preliminary review.
- 1.1.3 | Unless deemed by the Gold Standard as already addressed satisfactorily as part of an existing Environmental and Social Impact Assessment (ESIA), the opinion of an independent, relevant expert(s) shall be provided, at a minimum, on all of the following assessment questions (evidence must be

¹⁸ <https://www.irn.org/wcd/>

¹⁹ Refer to High Conservation Value Resource Network for definition of High Conservation Value Area. Available at <https://hcvnetwork.org/>

provided to substantiate the opinion to justify the relevance or non-relevance of a given assessment question):

| | Assessment Questions | Requirements |
|----|---|---|
| a. | <p>Are there any competing uses of water resources at the project location, of what nature and how severe are they?</p> <p>Convincing evidence must be provided that the hydropower project does not divert water from other current users or if it does, these users are in agreement with the shift of use.</p> | The expert opinion must be provided in time for validation and be reflected in the Monitoring Plan for verification along the crediting period. |
| b. | <p>What is the minimum ecological flow that shall be complied with at any point in time, accounting for the specificities of local ecosystems and seasonality?</p> <p>What quality assurance and control procedures shall be put in place for appropriate continuous monitoring over the crediting period?</p> | The expert opinion shall be provided in time for validation. |
| c. | <p>Is the groundwater level seriously affected by the hydropower project?</p> <p>What quality assurance and control procedures shall be put in place for appropriate continuous monitoring over the crediting period?</p> | The expert opinion shall be provided in time for validation. |
| d. | <p>Is the design of the fish passages and screens (water intake structure) installed in line with internationally recognised guidance?</p> <p>Are these measures indeed effective over the crediting period, and if not, what shall be done to improve the situation?</p> | <p>The expert opinion shall be provided in time for validation.</p> <p>The expert opinion shall be provided in time for verification.</p> |
| e. | <p>What sediment management plan shall be considered?</p> <p>Is it indeed effective over the crediting period, and if not, how shall it be improved?</p> | <p>The expert opinion shall be provided in time for validation.</p> <p>The expert opinion shall be provided in time for verification.</p> |
| f. | <p>What mitigation measures shall be put in place to prevent soil erosion?</p> <p>Are they effective and if not, what complementary action shall be taken?</p> | <p>The expert opinion shall be provided in time for validation.</p> <p>The expert opinion shall be provided in time for verification.</p> |

- 1.1.4 | Besides the assessment questions listed above, the expert(s) is free to include any other issue that they identify as being relevant to the project. The Gold Standard, Project Representative(s) and the independent expert shall enter into a tripartite Memorandum of Understanding (MOU) within the context of the requirements prescribed in paragraph 1.1.3 (Annex A) above. The Project Developers have the opportunity to provide their views on the identified issues and their relevance as part of the report to be delivered by the expert. For regular cycle projects, the independent expert(s) shall be invited to the Stakeholder Consultation and will identify the list of issues for which an independent expert opinion will be needed on time for validation and/or verification.
- 1.1.5 | The list of assessment areas for potential issues are subject to approval by Gold Standard as part of the review of the stakeholder consultation report. For retroactive projects, a Detailed Preliminary Review (Pathway 2 as per Principles and Requirements) shall be conducted. Independent expert(s) shall be contracted on time to deliver, as part of the documentation submitted for preliminary review, the list of assessment areas for which an independent expert opinion will be needed on time for validation and/or verification. This list is reviewed and potentially approved by Gold Standard as part of the preliminary review.
- 1.1.6 | Project Developer shall plan for and conduct a one-day training for the hydropower plant staff on the different issues identified by the independent expert. This training shall be included in the Monitoring & Reporting Plan.

1.2 | Project activity using biomass resources

- 1.2.1 | Project activities making use of non-renewable biomass resources shall NOT be eligible for Gold Standard registration. Project developers shall, therefore, provide convincing evidence that the project activities make use of renewable biomass resources. The renewability of the biomass shall be monitored throughout the crediting period and be included in the Monitoring & Reporting Plan, where required by the applied Impact quantification methodology.
- 1.2.2 | Project activities expected to make use of biomass resources already in use shall NOT be eligible for Gold Standard registration unless convincing evidence is provided to demonstrate that the current users agree with the envisioned shift of use (potential leakage associated to such a shift must be taken into account). In the absence of such an agreement, Project Developers

shall demonstrate that their project activity makes use of surplus biomass²⁰ for each type of biomass resources used. They must do so once, ex-ante on time for validation for small-scale project activities (installed capacity upto 15 MW_{el} or 45 MW_{th}), and in time for validation and for each one of the verifications (inclusion in the Monitoring Plan) for project activities greater than 15 MW_{el} or 45 MW_{th}.

- 1.2.3 | Project Developers shall demonstrate that their project will only make use of degraded land and shall include this criterion in the Sustainability Monitoring Plan to ensure there is no diversion of land from other essential purposes like food production. Two exceptions may be considered:
- a. Convincing evidence is provided showing that the envisioned energy crop is part of a traditional rotational cropping, OR
 - b. An increase of the productivity is obtained, locally and to the benefit of the current users, through measures implemented in the context of the activity so as to at minimum compensate for the part of the land newly allocated to growing the energy crop.

Compliance with these criteria above must be monitored over the crediting period and thus be part of the Monitoring & Reporting Plan.

- 1.2.4 | Activities making use of GMOs shall also comply with the requirements prescribed in 'Principle 9.3 - Genetic Resources' of the [GS Safeguarding Principles and Requirements](#).
- 1.2.5 | Activities resulting in avoidance of methane from biomass decay shall be eligible as long as biomass is used as a substitution for non-renewable fuels in project activities delivering energy services or for the production of a usable product with demonstrable sustainable development benefits (e.g. composting).
- 1.2.6 | The use of non-renewable fuel in biomass heat and/or electricity generation plants is authorised as long as the renewable fuel share reaches 50%²¹ after the first 3 years of operation for retrofit projects, and represents 80%²² from the outset for Greenfield projects.
- 1.2.7 | The eligibility of project activities making use of Palm oil and/or palm oil mill by-products or residues for electricity and/or heat generation, and/or for

²⁰ The demonstration of surplus biomass (for each type of biomass resource) shall be made by the Project Developers by applying the latest version of the CDM Methodological Tool: Project and leakage emissions from biomass.

²¹ Refers to the percentage of the total fuel consumed on an annual energy basis.

²² The reference date for the 3-year period is the start date of crediting period.

biofuel production shall be evaluated on a case-by-case basis by Gold Standard, at the time of preliminary review. The Project Developers shall provide the following on top of the usual project documentation:

- a. A Stakeholder Consultation Report, in accordance with Stakeholder Consultation and Engagement Requirements, and provided as part of the documentation to be reviewed at the time of the preliminary review.
- b. A Compliance Report showing that the project is in compliance with the latest version of the Roundtable on Sustainable Palm Oil (RSPO) guidance document on Principles and Criteria for Sustainable Palm Oil Production²³ (including the national interpretations), validated by a GS VVB, and provided as part of the documentation to be reviewed at the time of the registration review. Project Developers must demonstrate that they have started the process for RSPO compliance at the time of preliminary review. If the project is located in a country where a national interpretation of the RSPO principles has not been established and approved by the RSPO, compliance shall be established against the international RSPO Criteria. In such a case, the certification body must develop local indicators through a consultative process, available in the local language.

1.3 | Project activity using Biogas (landfill gas and biogas from agro-processing, wastewater and other residues)

- 1.3.1 | Methane recovery project activities shall be eligible for emission reductions from both methane avoidance (including from the flared biogas fraction) and non-renewable fuel substitution as long as evidence is provided on time for validation to demonstrate that the system was designed in a way to at least make use of some of the biogas recovered for the delivery of energy services (e.g., electricity, heat).
- 1.3.2 | Methane recovery project activities at wastewater treatment plants related to Palm Oil production shall comply with all the Palm Oil related rules mentioned above (paragraph 1.2.7 |above).

1.4 | Project activity using Waster Heat/Gas recovery

- 1.4.1 | Project activities involving waste heat recovery in industrial processes shall be eligible for emission reductions related to on-site energy consumption. Emission reductions related to the export of heat or electricity generated from waste heat shall NOT be eligible unless it can be shown that the primary and unique source of energy for the industrial process is renewable energy. This

²³ RSPO Website <http://www.rspo.org>

requirement applies on an annual basis and the electricity generation profile does not have to necessarily match the on-site demand profile on an instantaneous basis.

- 1.4.2 | Project activities involving waste gases recovery and use in industrial processes shall be eligible for emission reductions related to on-site energy consumption. Emission reductions related to the export of heat or electricity generated from the waste gases recovered shall NOT be eligible unless it can be shown that the primary and unique source of energy for the industrial process is renewable energy. This requirement applies on an annual basis and the electricity generation profile does not have to necessarily match the on-site demand profile on an instantaneous basis. Emissions from the combustion of the recovered gases shall, of course, be taken into account in the calculation of project emissions.

1.5 | Fossil co-generation

- 1.5.1 | Fossil-fired co-generation project activities shall be eligible for emission reductions from end-use energy efficiency improvements, i.e., related to on-site energy consumption. Emission reductions related to the export of heat or electricity generated from the waste heat recovered shall NOT be eligible. This requirement applies on an annual basis and the electricity generation profile does not have to necessarily match the on-site demand profile on an instantaneous basis.

1.6 | Waste incineration and gasification

- 1.6.1 | Eligible Municipal Solid Waste (MSW) incineration activities seeking Gold Standard certification shall also meet the following requirements:
- a. **Stakeholder consultation:** The Project Developer shall ensure meaningful, effective and informed participation from stakeholder groups such as local communities who are living in nearby area and may be impacted adversely or positively from-by the project. The Project Developer shall carry out the stakeholder consultation(s) following the Stakeholder Consultation and Engagement Requirements.
 - b. **Project Eligibility:**
 - i. The project shall involve energy generation (electricity and/or heat) from MSW incineration. The MSW incineration shall be considered as recovery operations concerning the waste hierarchy as long as the project activity recovers energy from municipal waste incineration in an efficient way.
 - ii. Project activities planning to make use of waste materials that are already in use in the pre-project situation shall NOT be eligible unless convincing evidence is provided to show that the current users agree with the shift of use resulting from the project. In the absence of such an agreement, the Project Developers shall demonstrate that the

project activity makes use of surplus waste materials²⁴ and shall include this analysis in the Monitoring & Reporting Plan. They must be done as follows for projects with installed energy generation capacities of:

- less than or equal to 15 MW_{el} or 45 MW_{th} – once, ex ante, in time for validation
 - greater than 15 MW_{el} or 45 MW_{th} – once, ex ante in time for validation and each verification
- iii. The project shall develop and implement a waste management awareness programme to encourage stakeholders to adopt best practices for waste reduction, reuse and recycling and avoid any negative impact on prevailing waste management practices in the project boundary. Such a programme may include a variety of activities, such as– community outreach and education campaigns, educational campaigns via local schools and other institutes, educational displays, television/radio campaigns, etc.
- iv. The programme performance shall be evaluated frequently, at minimum biennially following the date of design certification, to assess its effectiveness and it shall be amended when required.

c. Emissions and operational requirements:

- i. To avoid any potential negative impact, the project seeking certification under Gold Standard for the Global Goals shall meet the most stringent regulatory requirements available for emissions and operation of MSW incineration plant. In this regard, the Project Developer shall compare the host country regulatory requirements with the most recent version of European Union Regulations for Waste Incineration Plants & Waste Co-incineration Plants and shall submit the comparison table for Gold Standard review at the time of preliminary review. If, due to the type of technology or otherwise, it is not feasible to meet the most stringent regulatory requirements, the Project Developer shall submit the rationale and proposed mitigation measures at the time of preliminary review. In such cases, Gold Standard will make a decision in consultation with the experts (if required) on a case-by-case basis.
- ii. The Project Developer shall put into place measures to ensure compliance with [applicable](#) host country or other applicable regulations.

²⁴ The demonstration of surplus waste materials shall be made by the project developer by following the approach prescribed for demonstrating surplus biomass in the latest version of the CDM Methodological Tool: Project and leakage emissions from biomass.

- iii. Where the Project Developer becomes aware that a requirement of the applicable regulations has been breached or is being breached, the Project Developer shall:
 - Inform the Gold Standard immediately
 - Immediately take the measures necessary to ensure compliance is restored within the shortest possible time
- iv. Where a breach of the applicable regulations poses an immediate danger to human health or threatens to cause an immediate significant adverse effect upon the environment, the project shall be withdrawn from Gold Standard until compliance is restored to the satisfaction of Gold Standard.

d. Ongoing monitoring requirements

- i. The Project Developer shall report on compliance status with regards to regulatory requirements within six months of the operational start date, where applicable, and annually after the first reporting.
- ii. The Project Developer shall include the relevant information in the Annual Report, as required under Gold Standard for the Global Goals.

1.7 | Waste handling and disposal

1.7.1 | Project activities planning to make use of waste materials that are already in use in the pre-project situation shall NOT be eligible unless convincing evidence is provided to show that the current users are in agreement with the shift of use resulting from the project. In the absence of such an agreement, the Project Developers shall demonstrate that the project activity makes use of surplus waste materials²⁵ and shall include this analysis in the Sustainability Monitoring Plan. They must do so once, ex-ante on time for validation for small-scale projects (installed capacity upto 15 MW_{el} or 45 MW_{th}), and in time for validation and for each one of the verifications (inclusion in the Sustainability Monitoring Plan) for projects greater than 15 MW_{el} or 45 MW_{th}.

²⁵ The demonstration of surplus waste materials shall be made by the project developer by following the approach prescribed for demonstrating surplus biomass in the latest version of the CDM Methodological Tool: Project and leakage emissions from biomass.

DOCUMENT HISTORY

| Version | Date | Description |
|---------|------------|---|
| 1.4 | Dd/mm/2021 | <ul style="list-style-type: none"> a. Revision of the document template b. Specifying the eligibility of Renewable Energy projects located in countries that coincide with the (geographical and economical) classifications specified in paragraphs 2.1.3 (a) and (b) of this document. c. Making editorial improvements |
| 1.3 | 14/01/2021 | <ul style="list-style-type: none"> a. Revision of the document template b. Incorporating the following two Rule Updates into the document: <ul style="list-style-type: none"> i. Eligibility Requirements for Renewable Energy Projects Transitioning to or Seeking Labelling Under GS4GG (RU 2020 AR – RE V1.2) ii. Eligibility Requirements for Renewable Energy POAs (RU 2020 AR - RE V1.2) c. Providing specific approval criteria for distributed installations of renewable technologies d. Providing additional guidance and criteria on project scales e. Making editorial improvements |
| 1.2 | 23/10/2019 | <ul style="list-style-type: none"> a. Revision of the document template b. Providing geographic location & economic status based eligibility criteria for grid connected RE projects (addition of paragraph 2.1.3) and related exceptions (as para 2.1.4) c. Revising Annex-A to provide additional guidance and criteria on specific Renewable Energy project types d. Making editorial improvements |
| 1.1 | 01/03/2018 | <ul style="list-style-type: none"> a. Revision of the document template b. Making editorial improvements |
| 1.0 | 01/07/2017 | Initial adoption |