



Application of the CCQI methodology for assessing the quality of carbon credits

This document presents results from the application of version 3.0 of a methodology, developed by Oeko-Institut, World Wildlife Fund (WWF-US) and Environmental Defense Fund (EDF), for assessing the quality of carbon credits. The methodology is applied by Oeko-Institut with support by Carbon Limits, Greenhouse Gas Management Institute (GHGMI), INFRAS, Stockholm Environment Institute, and individual carbon market experts. This document evaluates one specific criterion or sub-criterion with respect to a specific carbon crediting program, project type, quantification methodology and/or host country, as specified in the below table. Please note that the CCQI website <u>Site terms and</u> <u>Privacy Policy</u> apply with respect to any use of the information provided in this document. Further information on the project and the methodology can be found here: <u>www.carboncreditquality.org</u>

Contact

carboncreditqualityinitiative@gmail.com

Sub-criterion:	1.1.1: Eligibility of mitigation activities that are triggered by legal requirements
Carbon crediting program:	VCS
Assessment based on carbon crediting program documents valid as of:	15 May 2022
Date of final assessment:	21 February 2024
Score:	See next page



Scores

Project Type	Methodology	Additionality Tool	Score
Commercial afforestation	AR-ACM0003		2.7
Efficient Cookstoves	All methodologies		5
Establishment of natural forests	AR-ACM0003		2.7
Household biodigesters	All methodologies		5
Improved forest management	VM0003	CDM Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities	2.7
	VM0005	VT0002	2.7
	VM0010	VT0001	2.7
	VM0012	VT0001	2.7
Industrial biodigesters fed with	CAR U.S. Livestock Protocol		4.4
livestock manure	CAR Mexico Livestock Protocol		5
	ACM00010	CDM TOOL02	2.7
	AMS.III.D	No tool	4.4
		CDM TOOL21	1
		CDM TOOL32	1
Landfill gas utilization	CAR U.S. Landfill		4.4
	ACM0001	CDM TOOL02	2.7
	AMS-III.G	CDM TOOL32	1
Leak repair in natural gas transmission and distribution systems	AM0023	CDM TOOL02	2.7
Recovery of associated gas from oil fields	AM0009	CDM TOOL02	2.7
Solar photovoltaic power	All methodologies		5
Wind power (onshore)	All methodologies		5
Hydropower (dams)	All methodologies		5



Project Type	Methodology	Additionality Tool	Score
Hydropower (run-of-river)	All methodologies		5



Assessment

Plausibility of existence of legal requirements

Relevant scoring methodology provisions

"This methodology first assesses whether it is plausible that the relevant project type is or will be legally required in the relevant geographical area. For some project types and geographical areas, such as the use of efficient cookstoves in least developed countries, it may be very unlikely that any relevant legal requirements exist or will be introduced during the crediting periods. In this case, the provisions of the carbon crediting program regarding legal requirements are not relevant and a score of 5 is assigned to this sub-criterion. Otherwise, the scoring depends on the carbon crediting program's provisions regarding legal requirements."

Assessment outcome

For commercial afforestation, landfill gas utilization, establishment of natural forest, improved forest management, industrial biodigesters fed with livestock manure, recovery of associated gas from oil fields and leak repair in natural gas transmission and distribution systems it is deemed possible that legal requirements exist that could require their implementation. The scoring for these project types therefore depends on the carbon crediting program's provisions regarding legal requirements (see assessment of indicators 1.1.1.1 and 1.1.1.2 below).

For efficient cookstoves, household biodigesters, solar photovoltaic power and wind power (onshore) it is deemed very unlikely that legal requirements could exist that require their implementation. The project types are therefore assigned a score of 5 for this sub-criterion.

Justification of assessment

<u>Commercial afforestation</u>: While it is unlikely that general legislation exists that directly mandates commercial afforestation activities, it is possible that in some cases afforestation or reforestation activities are conducted in response to legal mandates. This can occur for example if rezoning or repurposing of land areas mandate different land use activities, such as forestry.

<u>Landfill gas utilization</u>: In many countries, landfills are subject to pollution control regulations. This includes air pollution, soil protection and water regulations amongst others. While this does not automatically make landfills subject to specific regulations that require collection and destruction or utilization of landfill gas, the general regulatory environment for the project type makes it plausible that it could be legally required.

<u>Establishment of natural forests</u>: While it is unlikely that general legislation exists that directly mandates the establishment of natural forests it is plausible that in some cases natural forest is established in response to legal mandates. This can occur for example if barren land is designated as a protected area (e.g., in form of national park) and due to the protection, the land is overgrown by natural forests.

<u>Efficient cookstoves</u>: There are no known cases where a legal requirement requires the use of efficient cookstoves.



<u>Improved forest management</u>: Forest management is often governed by federal, state, and local laws and regulations. In addition, landowners might have put restriction in place on forest management practices for their forests through instruments such as deeded encumbrances or conservation easements.

<u>Industrial biodigesters fed with livestock manure:</u> Many countries encourage the efficient use of manure and have adopted policies and regulations that incentivize and govern manure management practices by farmers. Further, storage and use of manure is associated with environmental harms making it a subject to regulation in many countries over the world, including its utilization. An assessment of the manure policy frameworks of 34 developing countries in 2014 showed that 30 countries have policies related to manure management. Further, 18 countries have policies in place in relation to digestion.¹

In China for example, the *Guiding Opinions on Promoting the Land Application of Livestock Manure and Strengthening the Pollution Control according to Law* adopted in 2019 contain targets for manure utilization of 80% in 2025 and 90% in 2030.² While targets do not constitute a legal requirement, it is plausible that regulation might be legislated in the coming years to support their achievement. It is therefore deemed plausible that the project type could be legally required.

<u>Household biodigesters fed with livestock manure</u>: While many governments have support programs for household biodigesters there are no known cases where their use is mandated by a law or regulation.

<u>Recovery of associated gas from oil fields</u>: Analysis performed by the World Bank shows that out of 21 oil producing countries, 13 countries have set targets or limits for the venting or flaring of associated gas. Further, 18 countries have regulation in place that prohibits routine flaring and venting. In 17 countries, development plans for new oil fields must include provisions for the use of associated gas.³ The analysis shows that, globally, the general regulatory environment for the project type makes it plausible that it could be legally required.

<u>Leak repair in natural gas transmission and distribution systems:</u> Analysis performed by the International Energy Agency shows that out of 12 producing countries, currently only two countries (United States and Canada) have prescriptive regulations on leak detection and repair. Many other countries do however have in place mandatory permitting requirements and technology standards for natural gas pipelines.⁴ The EU is currently not regulating methane emissions in the energy sector but has started the process of developing a regulatory framework that would also require companies to improve detection and repair of leaks.⁵ At COP 26 in 2021 the Global Methane Pledge was launched through which more than 100 countries pledged to reduce more than 8 gigatons of CO₂e emissions from

¹ Teenstra et a. (2014) Global Assessment of Manure Management Policies and Practices; Wageningen Livestock Research; <u>https://edepot.wur.nl/335445</u>

² Wei et al. (2021) Policies and regulations for manure management for sustainable livestock production in China: A review; Frontiers of Agricultural Science and Engineering; Volume 8; Issue 1; pages 45-57; <u>https://journal.hep.com.cn/fase/EN/10.15302/J-FASE-2020369</u>

³ World Bank (2022) Global Flaring and Venting Regulations: A Comparative Review of Policies <u>https://thedocs.worldbank.org/en/doc/fd5b55e045a373821f2e67d81e2c53b1-</u> <u>0400072022/original/Global-Flaring-and-Venting-Regulations-A-Comparative-Review-of-Policies.pdf</u>

⁴ IEA (2021) Driving Down Methane Leaks from the Oil and Gas Industry – A regulatory roadmap and toolkit <u>https://iea.blob.core.windows.net/assets/465cb813-5bf0-46e5-a267-</u> <u>3be0ccf332c4/Driving Down Methane Leaks from the Oil and Gas Industry.pdf</u>

⁵ Abnett and Nasrilla (2021) Exclusive: Gas infrastructure across Europe leaking planet-warming methane; Reuters; <u>https://www.reuters.com/business/environment/exclusive-gas-infrastructure-across-europe-leaking-planet-warming-methane-video-2021-06-24/</u>



anthropogenic methane sources by 2030.⁶ Implementing this pledge will likely require additional regulatory measures. It is therefore deemed likely that there might be regulations that require the implementation of this project type in more countries in the near future.

<u>Solar photovoltaic power:</u> While many countries have feed-in tariffs or other policies such as renewable energy targets in place that incentivize the implementation of solar photovoltaic power generation there are no known cases where regulation requires their implementation at a specific project site.

<u>Wind power (onshore)</u>: While many countries have feed-in tariffs or other policies such as renewable energy targets in place that incentivize the implementation of onshore wind power generation there are no known cases where regulation requires their implementation at a specific project site.

<u>Hydropower (dams)</u>: While many countries have feed-in tariffs or other policies such as renewable energy targets in place that incentivize the implementation of hydropower projects there are no known cases where regulation requires their implementation at a specific project site.

<u>Hydropower (run-of-river)</u>: While many countries have feed-in tariffs or other policies such as renewable energy targets in place that incentivize the implementation of hydropower projects there are no known cases where regulation requires their implementation at a specific project site.

Indicator 1.1.1.1

Relevant scoring methodology provisions

The methodology evaluates whether the program provisions address how to treat mitigation activities that are legally required and whether a program allows for the registration of mitigation activities that are required by an existing and enforced legally binding mandate. The scores are applied as follows:

Carbon crediting program requirement	Score
The program's provisions exclude from eligibility mitigation activities that are required to be implemented due to existing legal requirements, regardless of whether the legal requirements are enforced or not.	5
The program's provisions exclude mitigation activities from eligibility that are required to be implemented due to existing legal requirements but allow for exemptions from this provision where the legal requirements are systematically not enforced and non-compliance is widespread in the country.	3
The program's provisions do not specifically address this matter, or the program allows mitigation activities to be registered that are required to be implemented due to existing and enforced legal requirements.	1

Information sources considered

- 1 VCS Program Guide Version 4.0 (19 September 2019) <u>https://verra.org/wp-content/uploads/2019/09/VCS_Program_Guide_v4.0.pdf</u>
- 2 VCS Standard Version 4.1 (22 April 2021) <u>https://verra.org/wp-content/uploads/2021/04/VCS-Standard_v4.1.pdf</u>

⁶ <u>https://www.globalmethanepledge.org/</u>



- 3 VCS Methodology Requirements Version 4.0 (19 September 2019) <u>https://verra.org/wp-content/uploads/2019/09/VCS Methodology Requirements v4.0.pdf</u>
- 4 VCS Program Definitions Version 4.1 (9 April 2020) <u>https://verra.org/wp-content/uploads/2021/04/Program_Definitions_v4.1.pdf</u>
- 5 Catalogue of Approved Methodologies, Modules & Tools <u>https://verra.org/project/vcs-program/methodologies/methodology-catalog/</u>
- 6 VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, Version 3.0, 1 February 2012 <u>https://verra.org/wp-content/uploads/imported/methodologies/VT0001v3.0.pdf</u>
- 7 VM0003 Methodology for Improved Forest Management Through Extension of Rotation Age, Version 1.3, 16 May 2023 https://verra.org/methodologies/vm0003-methodology-forimproved-forest-management-through-extension-of-rotation-age-v1-3/
- 8 VM0005 Methodology for Improved Forest Management: Conversion of Low Productive to High Productive Forests <u>https://verra.org/methodologies/vm0005-methodology-for-</u> <u>conversion-of-low-productive-forest-to-high-productive-forest-v1-2/</u>
- 9 VT0002 Tool for the Demonstration and Assessment of Additionality in IFM Project Activities, Version 1.0, 23 November 2010. <u>https://verra.org/methodologies/vt0002-tool-for-the-demonstration-and-assessment-of-additionality-in-ifm-project-activities-v1-0/</u>
- 10 VM0010 Methodology for Improved Forest management: Conversion from Logged to Protected Forests, Version 1.3, 28 April 2016. <u>https://verra.org/methodologies/vm0010-</u> <u>methodology-for-improved-forest-management-conversion-from-logged-to-protected-forest-</u> <u>v1-3/</u>
- 11 VM0012 Improved Forest Management in Temperate and Boreal Forests (LtPF), Version 1.2, 23, July 2013 https://verra.org/methodologies/vm0012-improved-forest-management-in-temperate-and-boreal-forests-ltpf-v1-2/

Relevant carbon crediting program provisions

Provision 1 Source 2, section 3.13.1 "Additionality Requirements", page 33: "Additionality shall be demonstrated and assessed in accordance with the requirements set out in the methodology applied to the project, noting the following exceptions:

1) Where a VCS module using an activity method (see the VCS Methodology Requirements for further information on activity methods) is applicable to the project, additionality may be demonstrated using the module in substitution of the additionality requirements set out in the methodology.

For example, if a module uses an activity method (i.e., positive list) to deem a project activity additional, the project proponent does not have to follow the additionality requirements in the methodology applied to the project and may instead demonstrate



additionality by demonstrating that it meets the applicability conditions and any other criteria of the activity method.

Note that only modules may be used in this way. Where a methodology contains an activity method for additionality, the additionality procedures may not be applied in conjunction with a different methodology.

2) Where the applied methodology was developed under an approved GHG program and uses an activity method or other simplified procedure for demonstrating additionality, the project proponent shall demonstrate to the validation/verification body that the simplified procedure is appropriate to apply to the project considering the project characteristics, including the context in which the project activity takes place. Failing this demonstration, the project proponent shall not use the simplified procedure for demonstrating additionality, and shall instead use an appropriate additionality assessment method in substitution.

For example, where a project is developed in the United States and applies a CDM methodology which uses a simplified procedure for demonstrating additionality, the project proponent shall demonstrate to the validation/verification body that the simplified procedure is appropriate to apply given that the simplified procedure was originally developed for application in a developing country context."

Provision 2 Source 3, section 3.5.1 "Additionality – General Requirements", page 32: "Methodologies shall establish a procedure for the demonstration and assessment of additionality based upon the requirements set out below. The steps which shall be included in methodologies for each method of demonstrating additionality (i.e., project methods, performance methods and activity methods) are set out below. Methodologies shall use a project method, performance method and/or activity method to determine additionality. The high-level specifications and procedural steps for each approach are set out in Sections 3.5.3 to 3.5.9 below. New methodologies developed under the VCS Program shall meet this requirement by doing one of the following:

1) Referencing and requiring the use of an appropriate additionality tool that has been approved under the VCS Program or an approved GHG program;

2) Developing a full and detailed procedure for demonstrating and assessing additionality directly within the methodology; or

3) Developing a full and detailed procedure for demonstrating and assessing additionality in a separate tool, which shall be approved via the methodology approval process, and referencing and requiring the use of such new tool in the methodology.

Note –Reference in a methodology to the VCS Program requirements on additionality is insufficient. The VCS Program requirements are high level requirements and do not represent a full and detailed procedure for the demonstration of additionality. The only exception to this is with respect to regulatory surplus (i.e., methodologies may directly reference the VCS Program requirements on regulatory surplus and do not need to further develop a procedure for demonstrating and assessing regulatory surplus)."

Provision 3 Source 3, section 3.5.3 "Project Method – Step 1: Regulatory Surplus", page 32:



The project shall not be mandated by any law, statute or other regulatory framework, or for UNFCCC non-Annex I countries, any systematically enforced law, statute or other regulatory framework."

Provision 4 Source 3, section 3.5.6 "Requirements, Standardized Methods, Performance Methods – Step 1: Regulatory Surplus, page 33:

The project activity shall meet with the requirements on regulatory surplus set out under the project method in Section 3.5.3."

- Provision 5 Source 3, section 3.5.8 Source 5 "Standardized Methods, Activity Methods Section Step 1: Regulatory Surplus", page 34: "The project activity shall meet with the requirements on regulatory surplus set out under the project method in Section 3.5.3."
- Provision 6 Source 5, Webpage "Catalogue of Approved Methodologies, Modules & Tools":

VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v3.0

VT0002 Tool for the Demonstration and Assessment of Additionality in IFM Project Activities, v1.0

VT0003 Tool for the Estimation of Uncertainty for IFM Project Activities, v1.0

VT0005 Tool for measuring above ground live forest biomass using remote sensing, v1.0

VT0006 Tool for Calculating LULC Transitions and Deforestation Rates Using Incomplete Remote Sensing Images, v1.0

- Provision 7 Source 6, Section 2.1.1 "Sub-step 1b. Consistency of credible land use scenarios with enforced mandatory applicable laws and regulations": "This sub-step does not consider laws, statutes, regulatory frameworks or policies implemented since 11 November 2001 that give comparative advantage to less emissions-intensive technologies or activities relative to more emissions-intensive technologies or activities.
 - a) Apply the following procedure:

i) Demonstrate that all land use scenarios identified in the sub-step 1a: are in compliance with all mandatory applicable legal and regulatory requirements;

ii) If an alternative does not comply with all mandatory applicable legislation and regulations then show that, based on an examination of current practice in the region in which the mandatory law or regulation applies, those applicable mandatory legal or regulatory requirements are systematically not enforced and that non-compliance with those requirements is widespread, i.e., prevalent on at least 30% of the area of the smallest administrative unit that encompasses the project area;

iii) Remove from the land use scenarios identified in the sub-step 1a, any land use scenarios which are not in compliance with applicable mandatory laws and



regulations unless it can be shown these land use scenarios result from systematic lack of enforcement of applicable laws and regulations.

b) Outcome of Sub-step 1b: List of plausible alternative land use scenarios to the VCS AFOLU project activity that are in compliance with mandatory legislation and regulations taking into account their enforcement in the region or country and EB decisions on national and/or sectoral policies and regulations. If the list resulting from the Sub-step 1b is empty or contains only one land use scenario, than the proposed VCS AFOLU project activity is not additional.

- Provision 8 Source 7, Section 7 "Additionality", page 11: "This methodology uses a project method for the demonstration of additionality. The project proponent must test the additionality of the project using the current CDM Tool for the demonstration and assessment of additionality. In application of this tool, the project scenario as described ex-ante using this methodology and monitored using this methodology must be evaluated alongside the baseline scenario identified in Section 6.3. Where a financial analysis or a demonstration of barriers does not preclude the project scenario, the project is considered not additional."
- Provision 9 Source 8, Section 7 "Procedure for Demonstrating Additionality", page 10: "The project proponent must demonstrate that the project is additional through the use of the latest version of the VCS Tool for the Demonstration and Assessment of Additionality in IFM Project Activities."
- Provision 10 Source 9, Sub-Step 1b "Consistency of credible land use scenarios with enforced mandatory applicable laws and regulations", page 3: "12. Apply the following procedure:
 - Demonstrate that all land use scenarios identified in the sub-step 1a: are in compliance with all mandatory applicable legal and regulatory requirements;
 - If an alternative does not comply with all mandatory applicable legislation and regulations, then show that, based on an examination of current practice in the region in which the mandatory law or regulation applies, those applicable mandatory legal or regulatory requirements are systematically not enforced and that non-compliance with those requirements is widespread, i.e. prevalent on at least 30% of the area of the smallest administrative unit that encompasses the project area;
 - Remove from the land use scenarios identified in the sub-step 1a, any land use scenarios which are not in compliance with applicable mandatory laws and regulations unless it can be shown these land use scenarios result from systematic lack of enforcement of applicable laws and regulations.

Outcome of Sub-step 1b: List of plausible alternative land use scenarios to the IFM project activity that are in compliance with mandatory legislation and regulations taking into account their enforcement in the region or country and any VCS decisions on national and/or sectoral policies and regulations.

If the list resulting from the Sub-step 1b is empty or contains only one land use scenario, than the proposed IFM project activity is not additional."



- Provision 11 Source 10, Section 7 "Procedure for Demonstrating Additionality", page 16: "The project proponent must demonstrate the additionality of the project using the most recent version of VCS tool, VT0001 VCS Tool for the Demonstration and Assessment of Additionality in AFOLU Project Activities."
- Provision 12 Source 11, Section 7 "Procedure for Demonstrating Additionality", page 10: "Project proponents must use the newest version of the VCS tool: "Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities". In summary, this tool employs the following steps:
 - Step 1 Identification of alternative land use scenarios to the AFOLU project activity;
 - Step 2 Investment analysis to determine that the proposed project activity is not the most economically or financially attractive of the identified land use scenarios; or
 - Step 3 Barriers analysis; and
 - Step 4 Common practice analysis.

Project proponents must insure the assessment and outcomes of additionality are consistent with the baseline selection assessment undertaken in Section 6."

Assessment outcome

Except for the project type improved forest management the VCS relies on CDM methodologies and tools or CAR protocols to demonstrate additionality. For these project types, detailed assessments for the CDM tools are provided in the assessment sheet 1.1.1 CDM. The scorings for indicator 1.1.1.1 apply as follows:

Establishment of natural forests: 3

Landfill gas utilization:

- When using CAR US Landfill Protocol: 5
- When using CDM ACM0001 or AMS-III.G
 - With TOOL02: 3
 - With TOOL32: 1

Industrial biodigesters fed with livestock manure:

- ACM0010: 3
- AMS-III.D
 - No Tool: 5
 - \circ With TOOL21: 1
 - With TOOL32:1

Improved forest management:



- VM0003: 3
- VM0005: 3
- VM0010: 3
- VM0012: 3

Recovery of associated gas from oil fields: 3

Leak repair in natural gas transmission and distribution systems: 3

Justification of assessment

The VCS specifies that additionality shall be demonstrated and assessed in accordance with the requirements set out in the methodology applied to the project (Source 1). The VCS Methodology Requirements contain provisions that require the inclusion of a mandatory step that assesses regulatory surplus in any methodology developed under the VCS (Source 2).

The formulation of these provisions ("the project shall not be mandated by any law, statute or other regulatory framework, or for UNFCCC non-Annex I countries, any systematically enforced law, statute or other regulatory framework") would correspond to a score of 5 for Annex I countries and a score of 3 for Non-Annex I countries.

However, these provisions only apply to methodologies developed under the VCS. For the five project types commercial afforestation, landfill gas utilization, establishment of natural forest, industrial biodigesters fed with livestock manure, recovery of associated gas from oil fields, and leak repair in natural gas transmission and distribution systems, there are no projects that apply VCS methodologies. Instead, all projects registered with the VCS use CDM or CAR methodologies. Hence, for these project types, reference is made to the CDM and CAR scores for this sub-criterion.

For the project types avoided deforestation and improved forest management projects must apply VCS methodologies and tools. The respective provisions are assessed in the following sections below.

Improved forest management: For improved forest management projects, the additionality requirements are specified in the respective methodologies. VM0010 and VM0012 specify that project proponents must apply the latest version of VCS tool VT0001 "Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities" (Provisions 11 and 12). According to the provisions of VT0001 projects are not additional if they implement activities that are prescribed by mandatory applicable legal and regulatory requirements. An exception is made in cases where requirements are systematically not enforced and where non-compliance with those requirements is widespread, i.e., prevalent on at least 30% of the area of the smallest administrative unit that encompasses the project area (Provision 7). These provisions correspond to a score of 3.

When using VM0003, project proponents must apply the CDM Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities (Provision 8). The provisions of this tool correspond to a score of 3 (see CDM assessment sheets for a detailed assessment of the tools provisions).

When using VM0005, project proponents must apply the latest version of VCS tool VT0002 "*Tool for the Demonstration and Assessment of Additionality in IFM Project Activities*" (Provision 9). The provisions addressing legal additionality are identical with those of tool VT0001 (Provision 10). These provisions correspond to a score of 3 (see above).



Indicator 1.1.1.2

Relevant scoring methodology provisions

The methodology assesses the program provisions for changes in legal requirements.

Program requirements if new legal requirements enter into force which require the mitigation activity to be implemented		
The program immediately ceases issuance of credits when the new legal requirements enter into force, regardless of whether they are systematically enforced or not.	5	
The program immediately ceases issuance of credits when the new legal requirements are systematically enforced.	3	
The program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force, regardless of whether they are systematically enforced or not.	3	
The program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force and if these are systematically enforced.	2	
The program does not specifically address this matter or allows projects to continue to issue carbon credits for the remainder of the project lifetime.	1	

Information sources considered

1 VCS Standard – Version 4.1 (22 April 2021) <u>https://verra.org/wp-content/uploads/2021/04/VCS-Standard_v4.1.pdf</u>

Relevant carbon crediting program provisions

Provision 1 Source 1, section 3.8.9 "Renewal of Project Crediting Period", page 28: "Where projects fail to renew the project crediting period, the project crediting period shall end and the project shall be ineligible for further crediting.

The following shall apply with respect to the renewal of the project crediting period under the VCS Program:

1) A full reassessment of additionality is not required when renewing the project crediting period. However, regulatory surplus shall be demonstrated in accordance with the requirements set out in the VCS Program rules and the project description shall be updated accordingly.

Provision 2 Source 1, section 3.13.1 "Additionality Requirements", page 33: "Additionality shall be demonstrated and assessed in accordance with the requirements set out in the methodology applied to the project, noting the following exceptions:

1) Where a VCS module using an activity method (see the VCS Methodology Requirements for further information on activity methods) is applicable to the project, additionality may be demonstrated using the module in substitution of the additionality requirements set out in the methodology.

For example, if a module uses an activity method (i.e., positive list) to deem a project activity additional, the project proponent does not have to follow the additionality requirements in the methodology applied to the project and may instead demonstrate



additionality by demonstrating that it meets the applicability conditions and any other criteria of the activity method.

Note that only modules may be used in this way. Where a methodology contains an activity method for additionality, the additionality procedures may not be applied in conjunction with a different methodology.

2) Where the applied methodology was developed under an approved GHG program and uses an activity method or other simplified procedure for demonstrating additionality, the project proponent shall demonstrate to the validation/verification body that the simplified procedure is appropriate to apply to the project considering the project characteristics, including the context in which the project activity takes place. Failing this demonstration, the project proponent shall not use the simplified procedure for demonstrating additionality, and shall instead use an appropriate additionality assessment method in substitution.

Assessment outcome

The carbon crediting program is assigned the following scores:

Commercial afforestation: 2

Establishment of natural forests: 2

Landfill gas utilization:

- When using CAR US Landfill Protocol: 3
- When using CDM ACM0001 or AMS-III.G
 - With TOOL02: 2
 - With TOOL32: 1

Improved forest management: 2

Industrial biodigesters fed with livestock manure:

- When using ACM0010: 2
- When using AMS-III.D
 - No tool: 3
 - TOOL21:1
 - TOOL32: 1

Recovery of associated gas from oil fields: 2

Leak repair in natural gas transmission and distribution systems: 2

Justification of assessment

The VCS does not include general provisions that systematically check whether new legal requirements have come into force, or have been enforced, that would require the implementation



of the project. However, the VCS has several provisions on assessing legal requirements in the context of the renewal of crediting periods.

The VCS provisions on the renewal of the projects crediting period include a requirement to demonstrate regulatory surplus when renewing the crediting period (Provision 1). The provisions further stipulate that such demonstration must be in accordance with the requirements set out in the VCS program rules (Provision 1).

The VCS program rules define the general procedure for demonstrating additionality, stipulating that this should be done in accordance with the requirements set out in the methodology applied to the project (Provision 2).

To determine the scoring for this indicator it is therefore necessary to assess the requirements of the respective methodology for the project type. Except for the project type improved forest management, the VCS relies on CDM methodologies and tools or CAR protocols to demonstrate additionality. For these project types, detailed assessments for the CDM tools are provided in the assessment sheet 1.1.1 CDM.

For the project types commercial afforestation and establishment of natural forest, AR-ACM0003 requires the use of the CDM A/R combined tool. The demonstration of additionality using the CDM A/R Combined tool includes a mandatory step that assesses the consistency of credible alternative land use scenarios with enforced mandatory applicable laws and regulations. These provisions exclude mitigation activities from eligibility that are required by an existing legally binding mandate but allow for exemptions from this provision where mandates are systematically not enforced, and non-compliance is widespread in the country (see CDM assessment sheet for more details).

This provision corresponds to a score of 2 for this indicator as the program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force and if these are systematically enforced.

For the project type landfill gas utilization, the scoring depends on whether a CAR or CDM methodology is used.

The CAR US Landfill Gas Protocol requires that there are no laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions or other legally binding mandates requiring its implementation, or requiring the implementation of similar measures that would achieve equivalent levels of GHG emission reductions.

This provision corresponds to a score of 3 for this indicator as the program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force, regardless of whether they are systematically enforced or not.

Under the CDM, ACM0001 requires the application of either the "Combined tool to identify the baseline scenario and demonstrate additionality" (TOOL02) or TOOL32 "Positive list of technologies". AMS-III.G refers only to TOOL32.

TOOL02 includes a provision that specifies that projects can be considered additional if, based on an examination of current practice in the country or region in which the mandatory law or regulation applies, the applicable mandatory legal or regulatory requirements are "systematically not enforced and that non-compliance with those requirements is widespread" in the country (see CDM assessment sheet for more details).



This provision corresponds to a score of 2 for this indicator as the program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force and if these are systematically enforced.

TOOL32 assigns automatic additionality if the project meets certain aspects (see CDM assessment sheet for more details). This provision corresponds to a scoring of 1 because no assessment of legal requirements is undertaken at the renewal of the crediting period.

For the project type improved forest management all applicable additionality provisions exclude mitigation activities from eligibility that are required by an existing legally binding mandate but allow for exemptions from this provision where mandates are systematically not enforced, and non-compliance is widespread in the country. This corresponds to a score of 2 for this indicator as the program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force but only if these are systematically enforced.

For the project type industrial biodigesters fed with livestock manure the scoring depends, whether ACM0010 or AMS-III.D is used.

Under the ACM0010 TOOL02 must be used to demonstrate additionality. It includes a provision that specifies that projects can be considered additional if, based on an examination of current practice in the country or region in which the mandatory law or regulation applies, the applicable mandatory legal or regulatory requirements are "systematically not enforced and that non-compliance with those requirements is widespread" in the country (see CDM assessment sheet for more details).

This provision corresponds to a score of 2 for this indicator as the program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force and if these are systematically enforced.

Under AMS-III.D either the methodology's own provisions or TOOL21 or TOOL32 must be used to demonstrate additionality. Under the methodology's own provision, it must be demonstrated that no legal requirements exist that mandate the activity regardless, whether they are systematically enforced or not. This provision corresponds to a score of 3 for this indicator as the program ceases issuance of credits at the end of the current crediting period.

Under TOOL21 and TOOL32 no assessment of legal requirements takes place. The provisions of both tools therefore correspond to a score of 1 (see CDM assessment sheet for more details).

For the project types of recovery of associated gas from oil fields and leak repair in natural gas transmission and distribution systems in both cases TOOL02 must be applied that includes a provision that specifies that projects can be considered additional if, based on an examination of current practice in the country or region in which the mandatory law or regulation applies, the applicable mandatory legal or regulatory requirements are "systematically not enforced and that non-compliance with those requirements is widespread" in the country (see CDM assessment sheet for more details).

This provision corresponds to a score of 2 for this indicator as the program ceases issuance of credits at the end of the current crediting period if new legal requirements entered into force and if these are systematically enforced.

Scoring results

Solar photovoltaic power: It is deemed very unlikely that legal requirements could exist that require their implementation. The project type is therefore assigned **a score of 5** for this sub-criterion.



Wind power (onshore): It is deemed very unlikely that legal requirements could exist that require their implementation. The project type is therefore assigned **a score of 5** for this sub-criterion.

Hydropower (dams): It is deemed very unlikely that legal requirements could exist that require their implementation. The project type is therefore assigned **a score of 5** for this sub-criterion.

Hydropower (run-of-river): It is deemed very unlikely that legal requirements could exist that require their implementation. The project type is therefore assigned **a score of 5** for this sub-criterion.

Household biodigesters: It is deemed very unlikely that legal requirements could exist that require their implementation. The project type is therefore assigned **a score of 5** for this sub-criterion.

According to the above assessment, the carbon crediting program achieves the following scores:

Indicator 1.1.1.1:

- Commercial afforestation: 3
- Establishment of natural forests: 3
- Landfill gas utilization:
 - When using CAR US Landfill Protocol: 5
 - When using CDM ACM0001 or AMS-III.G
 - With TOOL02: 3
 - With TOOL32: 1
- Improved forest management (all methodologies): 3
- Industrial biodigesters fed with livestock manure:
 - When using ACM0010: 3
 - When using AMS-III.D
 - Not tool: 5
 - With TOOL21: 1
 - With TOOL32: 1
- Recovery of associated gas from oil fields: 3
- Leak repair in natural gas transmission and distribution systems: 3

Indicator 1.1.1.2:

• Commercial afforestation: 2



- Establishment of natural forests: 2
- Landfill gas utilization:
 - When using CAR US Landfill Protocol: 3
 - When using CDM ACM0001 or AMS-III.G
 - With TOOL02: 2
 - With TOOL32: 1
- Improved forest management (all methodologies): 2
- Industrial biodigesters fed with livestock manure:
 - When using ACM0010: 2
 - When using AMS-III.D
 - Not tool: 3
 - With TOOL21: 1
 - With TOOL32: 1
- Recovery of associated gas from oil fields: 2
- Leak repair in natural gas transmission and distribution systems: 2

Applying the scoring methodology, this results in the following overall scores for sub-criterion 1.1.1:

- Commercial afforestation: 2.7
- Efficient cookstoves: 5
- Establishment of natural forests: 2.7
- Landfill gas utilization:
 - When using CAR US Landfill Protocol: 4.4
 - \circ $\:$ When using CDM ACM0001 or AMS-III.G $\:$
 - With TOOL02: 2.7
 - With TOOL32: 1
- Improved forest management (all methodologies): 2.7
- Industrial biodigesters fed with livestock manure:
 - When using ACM0010: 2.7
 - When using AMS-III.D
 - Not tool: 4.4



- With TOOL21: 1
- With TOOL32: 1
- Recovery of associated gas from oil fields: 2.7
- Leak repair in natural gas transmission and distribution systems: 2



Annex: Summary of changes from previous assessment sheet versions

The following table describes the main substantive changes implemented in comparison to the assessment from 12 September 2023.

Торіс	Rationale
Score on cover sheet	Scores have been updated to include the project types commercial afforestation and improved forest management.
Plausibility assessment	Plausibility assessments were conducted for the new project types and results and justifications added.
Scoring results	Section was updated to reflect the scores for the new project types.