

Application of the Oeko-Institut/WWF-US/ EDF 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 [Site terms and Privacy Policy](#) 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: www.carboncreditquality.org

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|---------------------------|--|
| Criterion: | 6.2 Sustainable development impacts of the project type or project |
| Project type: | Industrial biodigesters fed with livestock manure |
| Date of final assessment: | 31 January 2023 |
| Score: | LDCs/SIDS: 5 Other countries: 4.79 |

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Assessment

Relevant scoring methodology provisions

The methodology assesses the extent to which a specific project or project type contributes to or hinders the achievement of each of the 17 Sustainable Development Goals (SDGs), with the exception of Goal 13 on climate action which is the primary goal of the climate mitigation projects. To assess the impacts of a project type or individual project on each SDG, the methodology draws on a seven-point ordinal scale for each SDG (see further details in the methodology). The following table illustrates the scale from -3 to +3 points to assess the impact or influence of a project type or individual project on each individual SDG goal:

| Impact of the project on the SDG goal | Points |
|---|---------------|
| Indivisible: The successful implementation of the project automatically delivers progress on this SDG goal. | +3 |
| Reinforcing: The successful implementation of the project directly makes it easier to make progress on this SDG goal. | +2 |
| Enabling: The successful implementation of the project indirectly creates conditions that enable progress on this SDG goal. | +1 |
| Consistent: There is no significant link between the project and this SDG goal. | ±0 |
| Constraining: The successful implementation of the project constrains the options for how to deliver on this SDG goal. | -1 |
| Counteracting: The successful implementation of the project makes it more difficult to make progress on this SDG goal. | -2 |
| Cancelling: The successful implementation of the project automatically leads to a negative impact on this SDG goal. | -3 |

As an additional step of the evaluation, it is assessed whether the project is implemented in Least Developed Countries or Small Island Developing States, which are recognized to face special circumstances that require additional support. Projects implemented in these countries receive an upgrade of one score point (e.g. from 3 to 4) in the overall evaluation of criterion 6.2. Note that the overall score cannot exceed 5.

Information sources considered

- 1 SDG Climate Action Nexus Tool ([SCAN-tool](#)), categories “waste” and “agriculture”
- 2 Mittal et al. 2018 – Barriers to biogas dissemination in India, a review. Online available at: <https://www.sciencedirect.com/science/article/pii/S0301421517306869?via%3Dihub>
- 3 Review of descriptions of different individual carbon credit projects

Assessment

The criterion is here assessed at the level of the project type, noting that the actual impacts may differ substantially between individual projects. The assessment thus aims to provide a picture of the typical impacts of the relevant project type. The project type is characterized as follows:

“Generation of biogas by anaerobic digestion of livestock manure. The biogas is combusted for the generation of power and/or heat, which can be fed into the grid or used on-site. A smaller fraction of

the gas may be flared. The project type reduces emissions by (i) avoiding methane emissions from the uncontrolled decomposition of livestock manure and (ii) by displacing more greenhouse gas intensive energy generation based on fossil fuels.”

The assessment results are summarized in the below table.

| SDG | Points | Justification |
|---|---------------|---|
| Goal 1: No Poverty | 0 | It is not certain that jobs created in industrial biogas projects will benefit people in extreme poverty. There is thus no significant link. |
| Goal 2: Zero Hunger | 0 | No interaction. |
| Goal 3: Good Health and Well-being | 1 | The project type reduces local air, odour and water pollution and could potentially create more healthy living conditions if people live very close by, drink from a water body (that receives the run-off from the manure) or bath in it. The direct impact on the number of illnesses is less certain (target 3.9). |
| Goal 4: Quality Education | 0 | No interaction. |
| Goal 5: Gender Equality | 0 | No interaction. |
| Goal 6: Clean Water and Sanitation | 3 | Water pollution from manure left to decay (in open lagoons) is avoided (target 6.3). |
| Goal 7: Affordable and Clean Energy | 3 | The production of biogas from manure increases the share of renewable energy (target 7.2). |
| Goal 8: Decent Work and Economic Growth | 3 | Jobs and a better work environment (e.g., less odour) are created (target 8.5) and productivity increased (target 8.2). As otherwise wasted manure is used, resource efficiency is increased, which is however limited by the fact that part of the produced biogas might be flared (target 8.4). |
| Goal 9: Industry, Innovation and Infrastructure | 3 | As manure is not left to decay anymore, the project type increases resource-use efficiency and implements more environmentally-sound technologies on an industrial level (target 9.4). |
| Goal 10: Reduced Inequality | 0 | No interaction. |
| Goal 11: Sustainable Cities and Communities | 2 | If the project is implemented on farms in the vicinity of human settlements, the adverse impact (waste, air pollution) on the surroundings is reduced (target 11.6). |
| Goal 12: Responsible Consumption and Production | 3 | Waste is reduced and the resource “manure” is managed in a better way (targets 12.2 and 12.5). |
| Goal 14: Life Below Water | 1 | The implementation of the project reduces the amount of manure leaking into soil and surrounding water bodies. If the project is located close to the sea or a river flowing into the ocean, water pollution transported into the ocean is reduced (target 14.1). |
| Goal 15: Life on Land | 0 | No interaction. |
| Goal 16: Peace and Justice Strong Institutions | 0 | No interaction. |
| Goal 17: Partnerships to achieve the Goal | 0 | No interaction. |
| Total points achieved: 19 | | |

The project type receives 19 points in the SDG impact evaluation. Furthermore, none of the goals is assessed with a score of -3. Using the scoring approach in the methodology, this results in a score of 4.79. If the underlying project is implemented in a Least Developed Country or Small Island Developing State, the score is upgrade by one point, resulting in an overall score of 5.