

## 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](http://www.carboncreditquality.org)

Criterion:	<a href="#">4.1 Enhancing adoption of low, zero or negative emissions technologies and practices</a>
Project type:	<a href="#">Industrial biodigesters fed with livestock manure</a>
Date of final assessment:	<a href="#">31 January 2023</a>
Score:	4

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# Assessment

## Relevant scoring methodology provisions

The scoring approach assesses the degree to which the technologies or practices applied under the project type facilitate the transition towards net zero emissions. The main consideration is whether the project type employs negative, zero or low emissions technologies or practices. Moreover, it is considered whether the project type poses risks for locking-in technologies or practices that may result in an increase in GHG emissions in the long-term, thereby undermining the achievement of net zero emissions, or whether the project type employs innovative technologies or practices which may accelerate the transition to net zero emissions. See further details on the scoring in the methodology.

## Assessment outcome

The project type is assigned a score of 4.

## Justification of assessment

This assessment refers to the project type “Industrial biodigesters fed with livestock manure” which 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.”

According to the scoring methodology, industrial biodigesters fed with livestock manure partially belong to (i) technologies and practices that generate indirect upstream or downstream emission reductions as a result of the use of technology or practice, since the project type involves the generation of renewable electricity which displaces more greenhouse gas (GHG) intensive electricity generation, and partially to (ii) technologies and practices that emit comparatively lower levels of GHG emissions during their operation but still cause emissions, as the project type leads to continuous GHG emissions from manure management.

In the case of (i), the methodology assigns a default score of 5 and a score of 4 for technologies or practices that have a superior alternative or do not represent the best available technology. In the case of (ii), the methodology assigns a default score of 3. A score of 4 is applied to technologies or practices that use best available technology, and for which the risk of locking-in investments that lead to continuous GHG emissions is low. A score of 2 applies to technologies or practices that do not use best available technology and for which the risk of locking in investments which lead to continuous GHG emissions is significant. As continuous GHG emissions from manure management are a central aspect of this project type result in a lower score, this aspect is the main basis for assigning the score.

We consider industrial biodigesters fed with livestock manure as the best available technology to treat manure but not the best available technology for generating renewable electricity, as other renewable electricity generation technologies may involve lower greenhouse gas emissions. We do

not consider that industrial biodigesters fed with livestock manure involve significant lock-in risks. Therefore, a score of 4 is assigned to this project type.