

SOCIALCARBON® Standard

Indicators for Composting Project

Draft version 0.2 - June, 2011

DOCUMENT REVISION HISTORY

Version	Description of the main adjustments	Review Date
0.1	First version of the indicators	01/11/ 2010
0.2	Revision to layout only	09/06/2011

1. Elements considered for using SOCIALCARBON in composting projects

The SOCIALCARBON concept was first developed community based forest projects in 1998. Through the years, due to the beginning of new scope of emission reductions projects it was adapted also for other types of project activities such as switching fuels and renewable energy and composting projects.

Guidelines for Bundling and POAs **[under development]**

2. Application of the indicators

Collecting information

The collection of information and evidence to score indicators should be done preferable through:

- Group Work: Participatory meetings with representatives from the stakeholders involved in the project. The meeting is coordinated by a responsible professional whose function is orientating the participants to discuss the aspects included in the indicators. The results of the meeting ought to be compiled, and valued according to the indicators.
- Interviews: Key informers may be interviewed in a semi-structured way, aiming to indirectly obtain information concerning the six resources of SOCIALCARBON. The results of the interviews ought to be registered, compiled and valued according to the indicators.
- Questionnaires: Responsible professionals may apply questionnaires to key informers of the project in order to gather information. The results of the survey should be registered, compiled and valued according to the indicators.

The person responsible for collecting information or auditing the indicators may select one method or combine several to obtain the best results.

Other physical and documented evidence might be required to evidence information provided in the SOCIALCARBON Report. Each indicator provides a list of examples of evidences that could be collected. Not all of the many documents and physical evidences described in the indicators need to be checked or available for the auditing process, only those documents necessary to support or verify the audit evidence for the information that is disclosed in the indicator.

In developing countries, it is sometimes difficult to apply the traditional research methods, because documents, researches, studies, satellite images and monitoring parameters such water and air quality are not always available. For this reason, some indicators clearly states that physical and documented evidence is not required and testimonies from local stakeholders are enough to verify the audit evidence for the information that is disclosed in the indicator, especially indicators that assess the impact of the project in the communities.

Scoring indicators

Scoring of the indicators should adhere to the following guidelines:

- The person responsible for applying the indicators should obtain the information necessary to characterize the project's situation in relation to the particular indicator.
- Next, the researcher should compare the characteristics of the project with the six scenarios available for the indicator.
- The scenario that best represents the presented characteristics should be selected and the respective index should be attributed to the indicator.

Special cases:

- **The characteristics can't fit any possible scenario:** The person responsible should contact the SOCIALCARBON team to verify the need to reformulate the indicator or to create a new indicator.
- **The indicator does not apply:** The person responsible must justify why the indicator doesn't apply in the SOCIALCARBON Report and identify it as "Not Applicable." No value should be agreed upon in this case.
- **The information necessary to evaluate the indicator does not exist or is not available:** In the case when the absence of information is due to lack of evidence, Index 1 should be applied. If the absence of information is justified by confidentiality reasons, the indicator should be considered "Not Applicable" in the SOCIALCARBON Report and no value should be agreed upon.
- **The characteristics presented match with more than one possible scenario:** The person responsible should always select the scenario with the smaller index.

3. Indicators

Social Resource: The working networks, the social duties, social relations, relationships of trust, affiliations, and associations.

Indicator	Description	Evaluation Methods
Relations with purchases of compost	Evaluates the existence of a relationship between the compost producers and the compost consumers, through (e.g. partnerships, contracts, structure of negotiation)	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation: contracts or agreements with purchases of compost.
Relation with stakeholders	Participation of Project owners in associations, partnerships or networks: and how they are structured. (e.g. representation of the sector, agreements to compost destination, support in technical assistance, etc.)	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Relation with local	Access if the project has approval or support from local authorities.	

authorities [under development]		
Conflicts	Existence of conflicts among the project participants or other stakeholders that are caused by or that could have an impact on the project activities.	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Social impact	<p>Extent (in how many areas) of the relevant social impacts occurred due to the project, including additional social programs to the stakeholders and broader community. The following major areas are considered:</p> <ul style="list-style-type: none"> a) Creation or structuring associations, groups, etc. b) Solving conflicts (land, exploitation of natural resources, etc.); c) Reducing political interferences and dependency; d) Improving relations among farmers or compost consumers; - Other social areas (please specify). 	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:

Indicator	1	2	3	4	5	6
Relations with purchases of compost	Absence of formal agreements; predominantly individual and punctual negotiations.	There is interest in establishing partnerships, long term contracts, or other structures of negotiation, but there is no formal agreement.	There are formal agreements, but only few purchases participate and parties constantly fail or have major gaps in performing their role properly in these agreements.	There are formal agreements with a significant number of purchases, but parties constantly fail or have major gaps in performing their role properly in these agreements.	There are formal agreements with a significant number of purchases, parties sometimes fail or have some minor gaps in performing their role properly in these agreements.	There are formal agreements with a significant number of purchases; parties usually perform their role properly in these agreements.
Relation with stakeholders	Absence of formal associations, partnerships or networks; individualism predominates.	Interest in participating in associations, partnerships or networks, but limited knowledge about their existence.	Very limited participation in associations, partnerships or networks (e.g. participation in punctual activities)	Participation in associations, partnerships or networks, but they lack structure and/or are riven by internal conflict and/or have very limited effectiveness.	Participation in associations, partnerships or networks, with some positive results, but that still presents some gaps regarding structure and effectiveness.	Participation in associations, partnerships or networks, with evident results and/or benefits.

<p>Relation with local authorities [under development]</p>	<p>Political uncertainty and risk issues with likelihood that these make the project unviable.</p>	<p>Political uncertainty and risk issues with likelihood that these pose major risks to the project.</p>	<p>Political uncertainty risk issues with a moderate degree of uncertainty about the risks posed to the project.</p>	<p>Good degree of confidence that political issues these will not pose a significant threat to the project.</p>	<p>Moderate degree of support from local authorities to the project.</p>	<p>High degree of support from local authorities to the project and/or project is part of national or regional public policies/programs.</p>
<p>Conflicts</p>	<p>Major conflicts within the stakeholders and/or project participants are difficult to solve. People are not motivated to resolve then.</p>	<p>Major conflicts within the stakeholders and/or project participants are difficult to solve, but people are motivated to resolve then.</p>	<p>Minor conflicts within the stakeholders and/or project participants are difficult to solve.</p>	<p>Conflicts within the stakeholders and/or project participants are amenable to resolution.</p>	<p>Conflicts within the stakeholders and/or project participants are amenable to resolution and people are motivated to resolve then.</p>	<p>No conflicts, or none which the stakeholders are unable to tolerate or resolve</p>
<p>Social impact</p>	<p>There is no or very limited knowledge about the project's impact</p>	<p>Project is expected to deliver some benefits, but there is no evidence that benefits are actually happening (e.g. Actions are in planning stage with high uncertainty that benefits can be delivered).</p>	<p>Actions are in place, but there is high need of corrective actions or deviations in the plan of activities so benefits can be delivered.</p>	<p>Some programs were held successfully, but project delivers benefits in to only one of the major areas</p>	<p>Some programs were held successfully and Project delivers benefits in to two of the major areas.</p>	<p>Project delivers benefits in to three or more of the major areas. And/or There is a comprehensive framework and plan for the assessment of social effects of the project.</p>

Human Resource: The skills, knowledge, capacities for work and good health that people have. Taken together, these become fundamental for the successful pursuit of different strategies.

Indicator	Description	Evaluation Methods
Professional Skills (technology suppliers)	Assesses the skills of professionals responsible for (supporting) the design, installation and maintenance of the composting equipment. Uncertainty regarding the availability of human resources may be described as the absence of qualified professionals in the market, reduced workforce, and need for international support, among other alternatives, that may compromise the execution of the project.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Technical assistance (operation)	Frequency and availability of technical assistance for the Project activities. Technical assistance may include: <ul style="list-style-type: none"> - Maintenance and operation of equipments - Improvements on quality control for the compost - Or others (please specify) 	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Professional Skills (workers)	The existence of trained professionals or with some ability to work in the project activity as well as the need for further improvement.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Capacity building	Existence of capacity building programs for workers and/or people involved in the project.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Quality of working conditions	Level of satisfaction with the working conditions. Workers' are defined as people directly working on project activities in return for compensation (financial or otherwise), including employees, contracted workers, sub-contracted workers and community members that are paid to carry out project-related work.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Health and Safety action for workers	If a safety program is in place and if its effectiveness can be demonstrated by the number of accidents.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Human impact	Extent of the relevant human impacts occurred due to the project, including additional programs to the stakeholders and broader community. The following major areas are considered: <ul style="list-style-type: none"> a) Education and transfer of knowledge; b) Technical assistance; 	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: -

	<p>c) Improved health care (new facilities, improved water supplies, provision of electricity); d) Leisure and cultural activities; - Other human areas (please specify).</p>	<p>- Documentation:</p>
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Indicator	1	2	3	4	5	6
<p>Professional Skills (design, planning and implementation)</p>	<p>Human resources are not available in for design, planning and implementation stages of the composting technology (e.g. there is no access to qualified professionals to assist in the implementation of the composting technology in the area)</p>	<p>High uncertainty regarding availability of human resources for the project design/implementation . (e.g. there is some access to professionals to assist in the implementation of the composting technology, however they present major gaps in demonstrating qualification, experience, work with outdated technology or costs are unfeasible)</p>	<p>Significant delays in planning schedules and execution due to low availability of human resources.</p>	<p>Low Significant delays in planning schedule and execution due to low availability of human resources.</p>	<p>Human resources available for the implementation/design of the project.</p>	<p>Human resources available for the implementation/design of the project. Access to more than one supplier to design, install and maintain the composting technology.</p>
<p>Technical assistance</p>	<p>No access to technical assistance</p>	<p>Little access to technical services, but awareness of their existence</p>	<p>Technical assistance only for repair or fixing broken equipments OR technical assistance is rare/difficult to obtain.</p>	<p>Access to technical assistance on a fairly regular basis</p>	<p>Regular access to technical assistance</p>	<p>Access to technical assistance is a routine part of composting activities OR there is no need for technical assistance</p>
<p>Professional skills (workers)</p>	<p>Lack of information or near absence of professional skills for the deployment and operation of the</p>	<p>Few workers have professional skills for the deployment and operation of the composting activities</p>	<p>Some workers have professional skills for the deployment and operation of the composting activities</p>	<p>Workers have professional skills but these need upgrading (e.g. workers have the sufficient professional</p>	<p>Presence of skilled professionals for operating the project activities.</p>	<p>Presence of skilled professionals of various types (management, operation, maintenance, healthy</p>

	composting activities.	(e.g. major difficulty in finding qualified manpower to operate the project or significant loss in quality and efficiency due lack of human resources)	(e.g. difficulty in finding qualified manpower to specific activities or functions or some loss in quality and efficiency due lack of human resources)	skills to operate the project, but acquire knowledge through experience and are not necessarily trained or qualified)		and security, quality control, etc.)
Capacity Building Initiatives for workers	Lack of information regarding capacity building initiatives for workers.	Workers of the project have never participated in training or courses.	Workers of the project have participated only once in training or courses.	Workers of the project have participated in training or courses for intervals of more than one year.	Workers of the project have participated in training or courses for intervals of one year or less.	Workers the project have participated in more than one training or course in intervals of one year or less.
Capacity Building Initiatives for workers (alternative version)	Lack of information or no capacity building initiatives for workers.	Few capacity building initiatives were taken in the last year and they benefit mostly high level management.	Few capacity building initiatives were taken in the last year, but benefiting most of the workers.	Existence of programs, plans or partnerships with institutions that offer training courses, but with major gaps.	Existence of programs, plans or partnerships with institutions that offer training courses, but with some gaps.	Existence of programs, plans or partnerships with institutions that offer training courses, meeting the expectations.
Quality of working conditions	No feedback on workers satisfaction on working conditions.	Significant levels of workers dissatisfaction on the working conditions due to: - Insalubrious conditions or inadequate sanitary conditions - excessive job journeys - low salary	The organization is in a process to adjust/regularize the events described in the last scenario.	Some gaps or moderate levels of workers opposition to working conditions.	Most workers are satisfied with the working conditions and little opposition.	Largely positive workers feedback and minimal opposition to working conditions.

Health and Safety action for workers	Occurrence of life-threatening accidents related to the project in the last year.	Occurrence of accidents (nonlife-threatening) related to the project in the last year.	No accidents related to the project in the last year, but absence of employee safety program.	The organization takes only occasional actions to improve health and safety, such as distribution of safety equipments, trainings on health and security, improvements on working conditions, etc.	Organization has goals and planning regarding the occupational health and security with some gaps.	Goals and planning regarding the occupational health and security, with satisfactory execution.
Human impact of the project	There is no or very limited knowledge about the project's impact	Project is expected to deliver some benefits, but there is no evidence that benefits are actually happening (e.g. Actions are in planning stage with high uncertainty that benefits can be delivered).	Actions are in place, but there is high need of corrective actions or deviations in the plan of activities so benefits can be delivered.	Some programs were held successfully, but project delivers benefits in to only one of the major areas	Some programs were held successfully and Project delivers benefits in to two of the major areas.	Project delivers benefits in to three or more of the major areas. And/or There is a comprehensive framework and plan for the assessment of human effects of the project.

Financial Resource: The basic capital in the form of cash, credit/debt and other economic goods which are available or potential.

Indicator	Description	Evaluation Methods
Project finance risk (others than carbon credit)	Asses the finance availability and terms for the design and construction phases of the project, considering others sources of finance than carbon credits.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Price of the	Price of the compost in the market (low, satisfactory, high). Note: project developers may consider to	- Interviews, questionnaires or meetings:

compost	adapt this indicator using specific percentages of the compost commercialized or specific prices (i.e. More than 80% of the compost produced is commercialized at a price higher than US\$ XX.XX/ton)	testimony from local stakeholders. - Physical evidence: - - Documentation:
Demand for compost	Demand for compost punctual, frequent, guaranties for commercialization in short, medium and/or long term.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Expectations	Assess the expectation of the project owner on production of compost (growth, stable, decrease).	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Economic impacts	Extent of the relevant economic impacts occurred due to the project, including additional income generation programs to the stakeholders and broader community. The following major areas are considered: a) Facilitating access to credit and financial resources; b) Direct employment; c) Additional economic activities, and generation of income (crops, improvement in production, etc.); d) Additional amenity, e.g., and infrastructure (roads, electricity supply, machineries); - Other economic areas (please specify).	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Carbon market	Evaluates uncertainties regarding the price and commercialization of credits generated by the project.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:

Indicator	1	2	3	4	5	6
Project finance risk (others than carbon credit)	Finance unavailable.	High level of uncertainty about availability of finance.	Moderate uncertainty about availability of finance, but terms and conditions are unfavorable (i.e. below market average)	Moderate uncertainty about availability of finance, with good terms and conditions.	Finance available, but terms and conditions are unfavorable (i.e. below market average)	Finance available, with good terms and conditions.
Cost of the raw						

material [under development]						
Price of the compost	No commercialization of the compost produced (e.g. donations or compost is used to supply internal demand).	Most of the compost produced is not commercialized. The rest is sold at a low price.	Few pig farmers commercialize the compost generated at a satisfactory price.	Most pig farmers commercialize the compost generated at a low price.	Most of the compost produced is commercialized at a satisfactory price.	Most of the compost produced is commercialized at a high price.
Demand for compost	There is no demand for the compost produced.	Occasional demand for the compost produced, with uncertainties in its negotiation.	There is little demand for the compost produced, but there is guarantee of trading.	There is a satisfactory level of demand for the compost produced; however there are uncertainties about the commercialization of the total compost produced.	There is a satisfactory level of demand for the compost produced and there its full commercialization is guaranteed.	The demand for the compost exceeds its production.
Expectations	Expected to stop producing the compost (on temporary or permanent basis).	Expected to decrease significantly the production of compost.	Expected to have a small decrease in the production of compost.	Expected to maintain stable the production of compost.	Expected to expand composting, but without plans and goals.	Expected to expand composting with plans and goals.
Economic impacts	There is no or very limited knowledge about the project's impact	Project is expected to deliver some benefits, but there is no evidence that benefits are actually happening (e.g. Actions are in planning stage with high uncertainty that benefits can be delivered).	Actions are in place, but there is high need of corrective actions or deviations in the plan of activities so benefits can be delivered.	Some programs were held successfully, but project delivers benefits in to only one of the major areas	Some programs were held successfully and Project delivers benefits in to two of the major areas.	Project delivers benefits in to three or more of the major areas. And/or There is a comprehensive framework and plan for the assessment of economic effects of the project.
Carbon market	Uncertainties about	Carbon credits are	Price of the credits is	Price of the credits is	-	Credits with high

	the commercialization of the carbon credits for the period.	being negotiated, with little uncertainty regarding its commercialization.	below the current market value.	in accordance with the average market value.		aggregated value, above the market average.
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Natural Resource: The stock of natural resources (soil, water, air, etc.) and environmental services (soil protection, maintenance of hydrological cycles, pollution sinks, pest control, pollination, among others), from which resources for livelihoods are derived.

Indicator	Description	Evaluation Methods
Odor	Evaluates the reduction in the generation of odor. Note: some composting projects can result in positive impacts on odor (e.g. treatment of waste in swine farms), while others may result in negative impacts (installation of a composting plant).	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Impacts on soil conditions	Organization should consider to adapting this indicator in those cases, according to the relevance of the different types of impact that a composting project can generate: a) Pollution of soil due to the use of poor quality compost, leachate run off and others. b) Enhancing the soil productivity for local farmers through the availability of high quality fertilizer. c) Elimination of problems related to disposal of solid waste	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Impacts on water conditions	Organization should consider to adapting this indicator in those cases, according to the relevance of the different types of impact that a composting project can generate: d) Pollution of water due to leachate run off and others. a) Treatment of wastewaters to improve the quality of effluent to the level	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Water consumption	Evaluates the changes in water consumption due to the project activity.	
environmental impacts	Evaluates the relevant environmental impacts occurred due to the project, including additional environmental programs to the stakeholders and broader community. The following major areas are considered: a) Soil quality (including recuperation of degraded areas and reforestation) b) Water Quality (including improvements in the waste management) c) Odor d) improvement in agricultural practices (e.g. crop rotation, organic manure, integrated pest	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:

	management, among others) - Others (please specify)	
Environmental legislation	Evaluates the accordance of the project (or the unit where the project takes place) with environmental laws and norms, including agreements with public authorities, such as environmental licenses and requested authorizations for installation and occupation of your project developer	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
C - Waste/compost disposal [under development]	The destination of effluents and solid waste generated by the project activities: a) Uncontrolled effluent and solid waste disposal b) Rudimentary destination c) Existence of alternative treatment systems	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:

Indicator	1	2	3	4	5	6
Odor	Formal notifications from environmental agencies were received requiring the reduction of odor generated by the project activity.	People located close to the project activity constantly report bad odor due to mismanagement of composting activities.	Actions to reduce odor were implemented, but reports on bad odor are still frequent.	Minor or few reports of bad odor due to the composting activities by the local people.	Feedbacks from local stakeholders are positive and report reduction in the odor generated.	There is no complaining from the local people about the odor generated by the composting activities. (e.g. project located in isolated areas)
Impacts on soil	There is no or very limited knowledge about the project's impact on soil quality.	Reports or evidence of negative impact on the ground (e.g. use of poor quality compost, leachate run off).	Project is expected to deliver some benefits, but there is no evidence that benefits are actually happening.	Evident positive impacts (e.g. testimonies from local farmers, pictures or observations in the site).	Evident and measurable positive impacts (e.g. amount of non treated waste that before the project activity were disposed in the soil)	Monitoring or studies of soil quality show significant improvements.
Impacts on water	There is no or very limited knowledge about the project's impact on water quality.	Reports or evidence of negative impact on the water resources (e.g. leachate run off).	Project is expected to deliver some benefits, but there is no evidence that benefits are actually happening.	Evident positive impacts (e.g. testimonies from local stakeholders, pictures or observations in the site).	Evident and measurable positive impacts (e.g. amount of non treated waste that before the project activity were disposed in the water resources)	Monitoring or studies of water quality show significant improvements.
Water	There is no or very limited	There was an increase	There was no	Evidence of reduction	Evident and	Evident and

consumption	knowledge about water consumption due to the project activity.	in water consumption due to the project activity.	significant change in water consumption due to the project activity.	in water consumption, but not measurable.	measurable reduction in water consumption.	measurable reduction in water consumption showing significant improvements.
Environmental impacts (alternative version)	There is no or very limited knowledge about the project's impact	Project is expected to deliver some benefits, but there is no evidence that benefits are actually happening (e.g. Actions are in planning stage with high uncertainty that benefits can be delivered).	Actions are in place, but there is high need of corrective actions or deviations in the plan of activities so benefits can be delivered.	Some programs were held successfully, but project delivers benefits in to only one of the major areas	Some programs were held successfully and Project delivers benefits in to two of the major areas.	Project delivers benefits in to three or more of the major areas. And/or There is a comprehensive framework and plan for the assessment of environmental effects of the project.
Environmental Legislation	There is no knowledge about the environmental legislation and norms.	Knowledge about the legal obligations, but there are no environmental licenses and permits, or they were suspended for not complying with the constraints.	Environmental license and permits exist, but the project owner has difficulties to keep in date with environmental requires. It may present some temporary inconformity.	Environmental license and permits exist, but project owner has some difficulties to accomplish the constraints.	Environmental license according to the constraints and deadline sets.	Besides the previous item, the project owner has a systematic control of the licensing process and/or control of the environmental legislation of its main suppliers.
C - Waste/compost disposal [under development]	Uncontrolled disposal for effluents and solid waste	Part of the waste disposal is uncontrolled and part have a rudimentary destination	Most of the waste and effluents have a rudimentary destination.	Most of the waste and effluents have a rudimentary destination, but alternative treatment systems also exists	A significant part of the waste goes to alternative treatment systems also exists	Most part of the waste goes to alternative treatment systems also exists

Technology Resource: evaluates the conditions of access to new technologies, as well as its contribution to the economic development and diminished impacts to the environment.

Indicator	Description	Evaluation Methods
Access to technology	Evaluates the access to equipment/technology needed for the project activity, as well as proper operation and maintenance of equipment	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Quality control (monitoring)	Evaluates the existence of quality monitoring of the compost produced (physic and chemical properties)	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Quality control (raw material)	<p>Access the actions to control the quality of raw material used to produce the compost. Note: the raw material vary according to the project:</p> <p>Indicators were establish for:</p> <p>Treatment of waste in livestock: actions to control quality of the raw material include nutrition management/control and physical/chemical analysis of feed. The management of nutrition is important because the excrements produced by animals are a consequence of the quantity and digestibility of nutrients provided in their diets.</p> <p>Composting plant: selection and control of suppliers of organic material</p>	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Quality of the compost	Evaluates if the compost has satisfactory quality (e.g. consistency and physicochemical properties such as phosphorus and nitrogen). Note: Consistency of the compost is measured by the percentage of dry matter contained in the compost generated. The lower the percentage of dry matter in the compost, the lower the quality and the more difficult it is to transport and commercialize.	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Transportation	<p>Evaluates the efficiency and logistic of transportation of the waste and/or compost produced.</p> <p>Considering:</p> <ul style="list-style-type: none"> a) Cost of transportation b) Distance from the consumer/supplier c) Quantity transported at once (e.g. small quantities, truck usually does not reach its full capacity) d) Existence of cooperation among consumers or suppliers to transport the compost or waste. <p>Note: organization should consider adapting this indicator considering the type of transport involved in the project.</p>	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Electricity generation	Evaluates the quality of energy supply and the existence of practices that aim to improve energy efficiency among pig farmers.	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings:

[under development]		testimony from local stakeholders. - Physical evidence: - - Documentation:
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Indicator	1	2	3	4	5	6
Access to technology	Very limited or no access to equipments/ technology necessary for composting (e.g. few equipments, not enough to start operations)	Composting activities are in place with rudimentary methods, without the need of equipments or machineries (e.g. animal traction, man power, etc.)	Access to few equipments, with minimal conditions to operations, but equipments are in poor conditions with frequent failures in its operation.	Equipments working, but with some gaps or without security that it will work in the short term future due to constant maintenance problems.	Equipment in good condition and working, without significant failures in the operation and maintenance.	In addition to the previous item, are observed best practices like process automation and preventative equipment maintenance.
Quality control (Monitoring)	There is no monitoring of the quality of the compost produced.	Rare or punctual physical-chemical analysis of the compost produced.	Periodic physical-chemical analysis of a small fraction of the compost produced or with major gaps in the analyses (e.g. some important parameters are not considered, analyses are not very precise, etc.)	Periodic physical-chemical analysis of most of the compost produced, but with some minor gaps.	Periodic physical-chemical analysis of most of the compost produced.	In addition to the previous item, the characteristics of physical-chemical analysis of the compost are described on the package.
Quality control (raw material)	There is no quality control of feed and/or nutrition management.	Feed analysis is conducted occasionally.	Feed analysis and nutrition management are conducted occasionally.	Selection of the feed that will be used based on its physicochemical properties.	Selection of the feed based on its physicochemical properties with some nutrition management.	Selection of the feed based on its physicochemical properties and nutrition management.
Quality control (raw material alternative) [Under construction]	Difficulty in tracking the raw material origin quality.	Only few suppliers are available, making it easier to control its quality, but limiting the options of supplying.	Great variety of suppliers, increasing options when demanded, but difficulty in controlling its quality.	Great variety of suppliers, increasing options when demanded, with some gaps in controlling its quality.	Great variety of suppliers and quality is periodically assessed, providing some confidence in the quality of the organic matter.	Has its own supplying of most of the organic material used AND/OR quality of the suppliers is systematically controlled.
Quality of the	Absence of knowledge	Less than 39% of dry	Less than 39% of dry	39% of dry matter in	At least 40% of dry	At least 40% of dry

compost	about the percentage of dry matter present in the compost, phosphorus and nitrogen.	matter in the compost AND inadequate amounts of phosphorous and nitrogen.	matter in the compost OR inadequate amounts of phosphorous and nitrogen.	the compost AND/OR inadequate amounts of phosphorous and nitrogen.	matter in the compost and adequate amounts of phosphorus and nitrogen, which may result in some occasional non-conformity.	matter in the compost.
Transportation	High cost, most of the compost cannot reach consumers because of high transport costs or lack of trucks.	High cost, part of the compost cannot reach consumers because of high transport costs or lack of trucks.	Viable transport for most of the compost produced, but distance between the producer and the consumer is considered large.	Viable transport for most of the compost produced, consumers generally are located close to the producers, but transport is inefficient (e.g. frequent travel and underutilization of capacity of the trucks).	Existence of actions to improve transport logistics among pig farmers and consumers.	Existing cooperation among consumers and/or farmers to transport the compost to improve transport efficiency.
Energy [under development]	Difficulties in supplying energy (falls, no network connection, etc).	Energy supply satisfactory, but expensive	Energy supply satisfactory, with reasonable cost, however significant flaws occur and energy levels can be variable.	Energy supply satisfactory, with reasonable cost, however minor flaws occur and energy levels can be variable.	Energy supply satisfactory, with reasonable cost.	Energy supply satisfactory, with reasonable cost and effective actions to improve energy efficiency.

Carbon Resource: The type of carbon project developed, encompassing the methodologies utilized and project performance.

Indicator	Description	Evaluation Method
Emission Reductions Calculations & Monitoring	Evaluates methodologies used to calculate emissions and monitor compliance with national and international standards.	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:
Validation & Verification	Evaluates existence of total or partial validation/verification of project by a third party, if third party is accredited by UNFCCC, and compliance procedures for validation/verification with national and international standards.	<ul style="list-style-type: none"> - Interviews, questionnaires or meetings: testimony from local stakeholders.

		- Physical evidence: - - Documentation:
Project Performance	Evaluates performance of project, verified by comparison with estimates of emissions reductions under the PDD.	- Interviews, questionnaires or meetings: testimony from local stakeholders. - Physical evidence: - - Documentation:

Indicator	1	2	3	4	5	6
P - Emission Reductions Calculations & Monitoring	Absence of a specific methodology to calculate emission reductions AND/OR It does not have a monitoring plan, or it has only partial or insufficient monitoring.	It has an emissions reductions calculation methodology to part of the project's activities.	It possesses a consistent methodology to calculate emissions reductions AND It possesses a consistent monitoring plan that approaches all dimensions of the project.	-	In addition to the items in Index 3, methodology of baseline and monitoring plans are based in internationally recognized standards.	It possesses a methodology to calculate emissions reductions and a monitoring plan based on a methodology approved by the CDM Executive Board.
P - Validation & Verification	There is no validation or verification conducted by a third part.	Validation/verification of the project is conducted by an independent third party that is not registered by the UNFCCC (DOE ¹).	Validation and verification by a DOE is limited to parts of the project.	Validation/ verification are conducted by a Designated Operational Entity but don't follow any internationally recognized procedures.	Validation/ verification are conducted by a Designated Operational Entity following nationally/internationally recognized procedures.	Validation/ Verification are conducted by a Designated Operational Entity according to UNFCCC specifications.
P -Project Performance	Not successful: 0% of carbon credits predicted for the period were effectively	Very Low: 1% to 25% of carbon credits predicted for the period were effectively	Low: 26% to 50% of carbon credits predicted for the period were effectively	Reasonable: 51% to 75% of carbon credits predicted for the period were effectively	Good: 76% to 95% of carbon credits predicted for the period were effectively	Excellent: More than 95% of carbon credits predicted for the period were effectively

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