

**SOCIALCARBON® Standard**  
Indicators for Industries of the Ceramic Sector  
Version 8.2 - June, 2011

DOCUMENT REVISION HISTORY

Version	Description of the main adjustments	Review Date
01	First version.	05/2007
02	Modifications of indicators: Child Employment, Turn Over and Project Characteristics. Indicators excluded: Investments in Socioenvironmental Responsibilities, Costs on the Project Implantation, Credits' Prices, Quality Control and Burning Monitoring Plan.	09/28/2007
03	Modifications of indicators: Child Employment, Gender and handicapped inclusion, Financial Return, Occupational Safety, Relation with the Community, Emission Calculation and Monitoring, Residues of the Productive Process and Quality Control.	12/20/2007
04	Modifications of indicators: All indicators of the Financial Resources, Natural and Technologies Resources were changed. Indicators excluded: Financing of the Project Activities.	02/18/2008
05	Modifications of indicators: Burning Device and Kilns Alimentation.	03/28/2008
06	Modifications of indicators: Child Labor, Formality, Social Return, Occupational Safety, Carbon Market, Financial Planning, Environmental Management, Energy and Burning Devices. Indicators excluded: Net Income.	08/05/2008
07	Modifications of indicators: Professional qualification; IPE Use; Financing. Indicators excluded: Child Labor, Formality, Occupational Safety, Occupational Accident and Health. New indicators: Health and Security Actions. Alteration in some indicators: Professional Qualification, IPE Use, and Financing.	23/09/2008
08	Modification of indicators: Turnover, Residues from the Productive Process, Devices Drying and Products Variety. New indicators: Syndical Relations, Renewable Biomass Supply and Machinery.	01/10/2008
8.1	Modification of the description of indicator: Turnover rate	25/02/2011
8.2	Revision to layout. Modification to: Turnover rate, Professional Qualification, Building Capacity, IPE use, Financing, Renewable Biomass Supply, Devices Drying *changes were made only to wording, not content*	09/06/2011

**1. Elements considered for using SOCIALCARBON in industries of the ceramic sector**

The SOCIALCARBON Methodology was first developed to evaluate the communities involved in forestation projects. Through the years, due to the beginning of new scope of emission reductions projects, the SOCIALCARBON Methodology was adapted also for project developers, keeping its fundamental characteristics. The application of the SOCIALCARBON Methodology (SCM) is a diagnostic of the social and environmental conditions of the project based on the indicators of the SCM. The indicators presented in this document are specific for activities of the ceramic sector.

This sector is composed mostly of small scales companies. Although they have extensive experience in the production of ceramic devices, these enterprises have poor technological performance with regards to the efficiency of the production, the production quality control, and the environmental impacts. In addition to this, the workers´ profiles are characterized by social and economic deprivation, a lack of professional capacity, and financial difficulties.

The SOCIALCARBON Team’s experience with the industries of the sector demonstrated that to achieve sustainable development would require internal actions to address social and environmental issues, to improve working conditions, to improve human and technological resources and to reduce environmental impacts. All of these can be improved through the efficient and rational use of the inputs. Hence, the SCM gave priority to these actions, and does not evaluate the direct influence of the project on the local communities.

The boundaries for project assessment through SCM comprise the cycle of the ceramic activities, which is represented below.



**Figure 1- Indicator Reach**

Considering the fact that organizational and operational boundaries may approach hundreds of kilometers, especially, due to the distance between the company and its suppliers, the SOCIALCARBON Methodology establishes that, during the evaluation, the company shall respond only for the activities over which it keeps total or partial control; or for the impacts attributed to the project activity, according to the following framework.

- a) Being controlled totally or partially by the organization responsible for the Project.
- b) Showing evidences of its influence or relation with the Project.
- c) Being imputed, directly or indirectly, to the project, in an evident and corroborate way.

The method of application of the SOCIALCARBON Methodology can be summarized according to the following scheme:

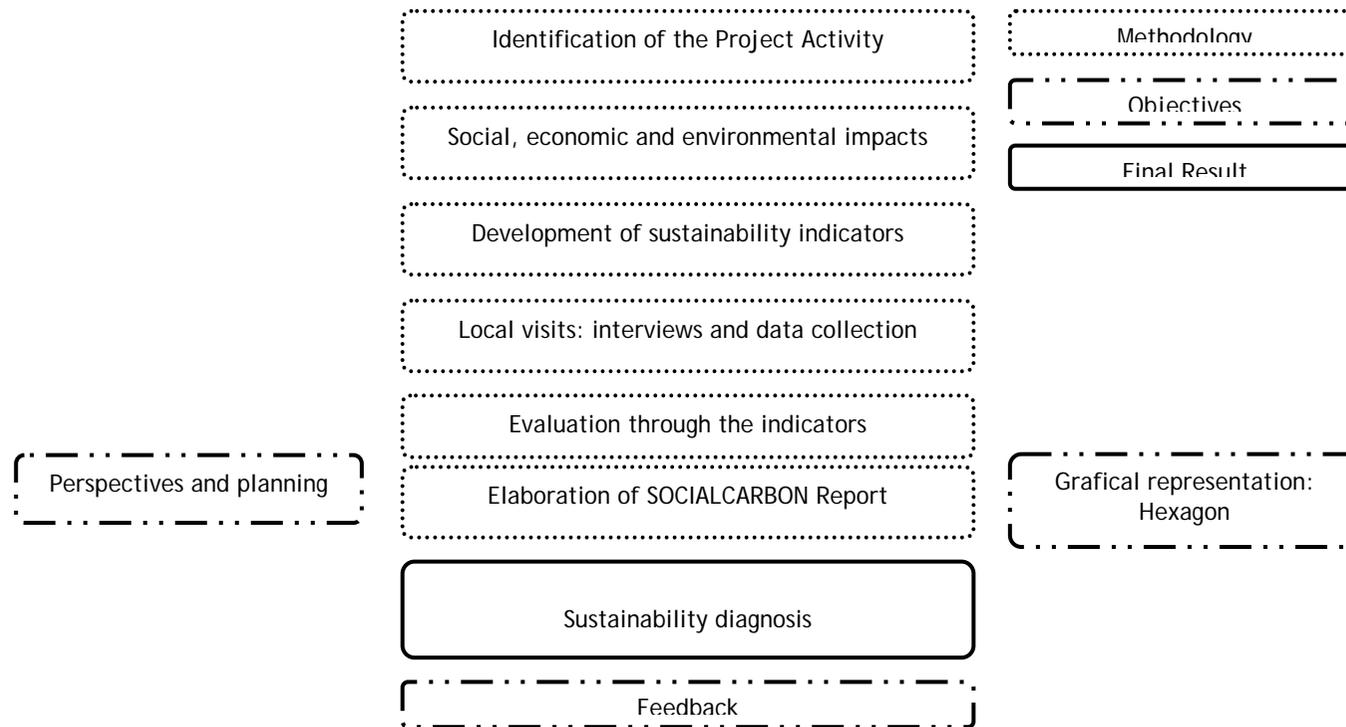


Figure 2 - Scheme of the application of the SOCIALCARBON Methodology.

Another innovation to the indicators for the ceramic sector was the introduction of the Technology indicator, considered of extreme importance to the sustainable development of the sector. This, combined with the difficulty in measuring the impacts of ceramic industries on biodiversity, resulted in the replacement of the Biodiversity Resource by the Technology Resource, defined as follow:

Technology Resource: evaluates the conditions of access to technological assets and processes with focus on its contribution for the economical, social and environmental development.

## 2. Application of the indicators

### The application may be done through:

- a) **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.
- b) **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.
- c) **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. It is recommended that the visits are made in the local where the projects are being developed, this will help to characterize the project developer and to obtain evidences.

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
Turn over	The turnover can be obtained by the fraction of the average dismissal numbers, and the employees working at the project developer in a given moment. $TR = (\text{dismissed workers} + \text{hired workers}) / (\text{number of workers employed in the project develop} \times 2)$ .	Internal questionnaire, register book or Annual Report of Social Information ( <i>RAIS - Relação Anual de Informações Sociais</i> ).
Syndical Relations	Evaluates the involvement of the entrepreneur and the workers in the syndicate.	Internal questionnaire.
Benefits	Evaluates the benefits offered by the entrepreneur to the workers, in addition to the obligatory benefits.  Note: Additional benefits for the workers will be consider that one which is not foreseen in law, working rules or collective agreement with organization that represents the workers (Syndicate), for example: more than the salary of the syndicate, bonus, Meal Voucher, Basic Alimentary Provision, Education and Capacitating Programs (including financial help), Medical, Hospital or healthy assurance, Life assurance, Private Welfare, among others. The additional benefits do not include Transportation Ticket.	Internal questionnaire and checklist of benefits delivery.
Social Inclusion	Evaluates the existence of effective programs giving priorities for hiring local manpower and social inclusion, without any prejudice against gender, handicaps, or other minority groups.	Internal questionnaire, register book or Annual Report of Social Information ( <i>RAIS - Relação Anual de Informações Sociais</i> ).
Satisfaction	Intends to identify the satisfaction of the employees, as well as the demands related to the improvement of working conditions.	Internal questionnaire and satisfaction research of the workers.
Relation with the community	Evaluates the relationship among the entrepreneur and the community, as well as his contribution in social events and activities.	Internal questionnaire, donations register and register of meeting with the community.

<b>Social Benefits</b>	Evaluates the benefits reverted to the stakeholders, when they are measurable or evidenced.  Note: The definition about reached benefit (limited, satisfactory or unsatisfactory) should consider the project and involved organization charge.	Internal questionnaire, evidence of benefits, environmental performance report and report of accompanying and benefits.
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Indicator	1	2	3	4	5	6
<b>Turn over</b>	The turnover is up to 80%.	The turnover is between 60 and 79%.	The turnover is between 40 and 59%.	The turnover is between 20 a 39%.	The turnover is between 10 a 19%.	The turnover is less than 10%.
<b>Syndical Relations</b>	Occurrence of strike in the last 12 months	Insignificant participation in the syndicate and/or indifference shown by the workers.	Significant participation in the syndicate yet centralized in the management staff.	Significant participation in the syndicate, including workers.	Besides the participation in syndicates, provides information about working conditions and has periodical meetings with the syndicates to listen to suggestions and negotiate vindications.	Obtains a solid communication channel with the syndicate, keeping them informed, as well as divulging information from the syndicate to the workers frequently.
<b>Benefits</b>	The project developer does not offer any additional benefits to the employees.	Less than a half of the employees receive some additional benefit.	More than half of the employees receive some additional benefit.	All the employees receive some additional benefit.	All the employees receive more than one additional benefit.	All the employees receive more than two additional benefits.
<b>Social Inclusion</b>	Entrepreneur avoids the hiring of: - Women. - Handicaps.	Among the works hired: - There are not women. - There are not handicaps.	Among the works hired: - Less than 20% of the workers are women. - There are not handicaps.	Among the works hired: - Less than 20% of the workers are women. - There are handicaps	Among the works hired: - More than 20% of the workers are women. - There are specific shares destined for handicaps.	In addition to the last item, the entrepreneur has policy or action to stimulate the diversity and social inclusion.
<b>Satisfaction</b>	Significant levels of workers dissatisfaction or absence of a system to evaluate and consult.	System to evaluate and consult with unsatisfactory results or large opposition by the workers.	System to evaluate and consult with little satisfactory results or moderate oppositions by the workers.	System to evaluate and consult with satisfactory results or little significant opposition by the workers.	System to evaluate and consult with positive results in general or minimal opposition by the workers.	System to evaluate and consult with very positive results or any opposition by the workers.
<b>Relation with the community</b>	The project developer has no	The project developer only sponsors in a	The project developer only sponsors in a	In addition to the last item, the	The entrepreneur has plan and goal for the	The entrepreneur does, in the last 3

	relations with the local community.	random way sports and cultural events, or some philanthropic causes of the local community.	random way sports and cultural events, or some philanthropic causes of the local community, and he has control about it.	entrepreneur promotes its own actions to benefit the local community (events, seminar, parties, and projects).	social contribution.	years, researches with the local community to know possible problems and how he can improve his actuation.
<b>Social Benefits</b>	The project didn't provide any social benefits, in the last 12 month.	The social return is not evident or measurable, in the last 12 month.	The social return is evident, but not measurable, in the last 12 month.	The social return is evident and measurable, but the benefit is limited in the scope (few people benefited, little changes, etc., in the last 12 month.	The social return is evident and measurable, with a satisfactory scope (reasonable amount of people benefited, significant changes, etc.), in the last 12 month.	The social return is evident and measurable, with a very satisfactory scope (lot of people benefited, significant changes, etc.), in the last 12 month.

**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
<b>Scholarship</b>	Evaluates the scholarship level of the employees, and the contribution of the entrepreneur for the promotion of education among the workers.	Internal questionnaire and workers register book.
<b>Professional qualification</b>	Evaluates the level of Professional qualification of the workers .Note: Professional qualification will be considered as any course which was concluded in educational institutions, which give specific abilities for the employees, promoting the earnings generation and their inclusion in the job market.	Internal questionnaire and workers register book.
<b>Building Capacity Plan</b>	Evaluates the initiatives of the project developer in regards to capacitating plans and programs, including, if they exist, their approach, strategies, frequency and the satisfaction of the employees.	Internal questionnaire and build capacity plans.
<b>Working Conditions</b>	Evaluates the improvements in relation to environmental work conditions to which the employees are submitted, considering salubrious, sanitary and ergonomic situations.	Internal questionnaire and observations on site.
<b>IPE use</b>	Evaluates the workers and entrepreneur conduct regarding equipment use and the security procedures.	Visit in the place, internal questionnaire, IPE index card and instructions to use it.
<b>Actions of Health and Security</b>	Evaluates the existence and performance of campaigns, leisure and goal and plans regarding to health and security.	Internal questionnaire, lists of the presents in lecture, goal and plans regarding healthy and security, PPRA, CIPA meeting reports and accident registers.

Indicator	1	2	3	4	5	6
<b>Scholarship</b>	More than 50% of the employees are illiterate. OR Insufficient registers about the employees' scholarship.	High illiteracy (above 13%) among the employees.	- Less than 13% of the employees are illiterate. - The scholarship level is low, however more than 50% have less than eight year of study.	- Less than 13% of the employees are illiterate. - More than 50% of the employees have more than eight year of study.	- Less than 13% of the employees are illiterate. - More than a half of the employees completed the high Scholl.	The entrepreneur develops actions to incentive the formal education among the employees.
<b>Professional qualification</b>	Employees with no technical knowledge or professional qualification. OR Lack of information about the employee's professional qualification.	Incompletes information about build capacity of the employees.	Less than 10% of the employees have some professional qualification	Less than 50% of the employees have some professional qualification.	More than 50% of the employees have some and professional qualification in them actuation area.	In addition to the last item, some workers have courses of specialization(graduation/post graduation/ technological course)
<b>Building Capacity Plan</b>	The project developer does not invest in the building capacity of its employees.	Just the administrative staffs participate of sporadic building capacity courses.	The project developer stimulates the participation of the employees in sporadic building capacity courses, without a specific plan.	The project developer regularly invests in the building capacity of the employees linked to their professional functions (ceramic sector/ industrial sector), without a specific plan.	The project developer has a structured plan geared towards the building capacity of the employees.	The project developer has a structured building capacity plan for the employees, including diverse themes as citizenship and environment, among others.
<b>Working Conditions</b>	No action taken to improve the sanitary, salubrious and ergonomic conditions in the last 12 months.	Low significant changes in the sanitary, salubrious and ergonomic conditions in the last 12 months.	The entrepreneur did actions to improve the salubrious and ergonomic conditions, indirectly, through changes in the productive process, in the last 12 years.	Entrepreneur did actions to improve the salubrious, sanitary OR ergonomic conditions in the last 12 months.	The entrepreneur made improvements in the sanitary and salubrious conditions in the last 12 month.	In addition to the last item, the company has specific goals and planning to improve the sanitary, salubrious and ergonomic conditions.
<b>IPE use</b>	Inadequate management of the IPEs, such as difficulties in maintaining the stock organized and/or monitoring absence	The IPE is available for the employee, but some workers don't use it in a correct way.	The IPE are available for the employees and there is internal control of the IPE use and retreat, but some workers don't use in a correct way.	The entrepreneur encourages the IPEs use.	- The workers use IPE in a correct way - The entrepreneur encourages the IPEs use - Systematic monitoring of the IPE	In addition to the last item, there is an efficient program to reduce and prevent accident.

	for the retreat and delivery.				use.	
<b>Actions of Health and Security</b>	Occurrence of serious accidents in the last 12 months.	There were no serious accidents, but no campaign, lecture or training was done in the last 12 months.	Only occasional campaigns or lectures of awareness regarding the occupational health and security in the last 12 months AND/OR Security internal communication in specific places (ex: posters, warnings, etc).	The company develops regular campaigns, meetings, training regarding occupational health and security in the last 12 months.	In addition to the left item, the company has goals and planning regarding the occupational health and security with difficulties to execute.	Goals and planning regarding the occupational health and security, with satisfactory execution.

**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
<b>Financing</b>	Evaluates the project developer's ability to obtain credit from financial institutions and the accomplishment of the commitments/deadlines assumed.	Internal questionnaire
<b>Production</b>	Evaluates the evolution of the production's capacity in the last year and the relation between this rise and the diversification of products or significant events that can affect the production.	Internal questionnaire and production control
<b>Expectative</b>	Evaluates the existence of the entrepreneur's expectations concerning the business in the next few years.	Internal questionnaire and study of technical and financial feasibility to the business' expansion.
<b>Renewable Biomass Supply</b>	Evaluates the availability and diversity of biomasses and suppliers, considering the guarantee of fuel supply.	Internal questionnaire and receipts of the biomass supplies.
<b>Carbon Market</b>	Evaluates the situation of commercialization of the carbon credits' of the period, considering its chronological valorization.	Internal questionnaire.
<b>Financial Planning of the emission reduction Project</b>	Evaluates the existence of financial controlling for the project activity's implantation and operation.	Internal questionnaire, cash flow, performance reports, technical and financial feasibility research of the project.

Indicator	1	2	3	4	5	6
<b>Financing</b>	Lack of information about financings.	Aware of the existence of	The company has already initiated	The company has already initiated	The company has already finished the	There is no necessity of financing.

		financings, but does not have access to obtain credits.	financings, but it has difficulties to accomplish the deadlines assumed.	financings, and has no difficulties to accomplish the deadlines assumed.	financing period and it is looking forward to new opportunities.	
<b>Production</b>	The production declined significantly in the last year, causing big losses for the entrepreneur.	The production declined in the last year, even though the losses were considerate negligible for the entrepreneur.	The production remained stable in the last year.	The production increase in a little expressive way in the last year.	The production increase in a very significant way in the last year.	In addition to the last item, the production increase is associated with the diversification of the products and/or to expansion to others markets.
<b>Expectative</b>	Business retraction.	There are not expectative.	Business stability.	Business expansion, but without established plans and marks.	Business expansion, with established plans and marks.	Business expansion, with realization of viability studies of technical, financial and environmental aspects.
<b>Renewable Biomass Supply</b>	Only 1 type of renewable biomass is used, making it difficult to prove its origin or raising its cost.	Only 2 types of renewable biomass are used, but one of them is proportionally less used.	Only 2 types of renewable biomass used regularly.	Uses 3 types of renewable biomass, increasing options when demanded, improving the cost for the project developer. OR Has its own renewable biomass furnishing, supplying part of the project developer's demand.	Uses 4 types or more of renewable biomass, providing a great variety of suppliers, enabling cost researches, making the purchases more productive OR Has its own renewable biomass furnishing, supplying most of the project developer's demand.	Besides the previous item, the entrepreneur makes tests with new types of biomass OR Has its own renewable biomass furnishing, supplying all of the project developer's demand.
<b>Carbon Market</b>	Credits of the period are not yet commercialized.	Credits of the period in negotiation.	Part of the credits of the period was commercialized.	Credits of the period were commercialized, but with prices lower than the period before.	Credits of the period were commercialized.	Credits of the period were commercialized, but with prices higher than the period before.
<b>Financial Planning of the emission reduction Project</b>	The entrepreneur doesn't have control: - of the expenses to implement the project	The entrepreneur has a partial control: - of the expenses to implement the project	The entrepreneur has a partial control: - of the expenses to implement the project	The entrepreneur has a partial control: - of the expenses to implement the project	The entrepreneur has control: - of the expenses to implement the project	In additional to the last item, the entrepreneur presented studies of technical and

	- Of the financial return of the credits' commercialization.	- Of the financial return of the credits' commercialization. But he doesn't plan his spending with the project implantation.	- Of the financial return of the credits' commercialization. The planning to implant the project was incomplete or unsatisfactory.	- Of the financial return of the credits' commercialization. The planning to implant the project was satisfactory with some deficiency.	- Of the financial return of the credits' commercialization. The planning to implant the project was satisfactory, with monitoring of cash flow.	financial viability of the project, with monitoring of the performance.
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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
<b>Sustainability Principles</b>	Evaluates the existence of specific policies and programs geared towards the project developer sustainability and the applicability of the principles, values and objectives regarding sustainability.	Internal questionnaire and environmental objectives and goals
<b>Environmental Management</b>	Evaluates the environmental management procedures adopted by the entrepreneur, including the organization and coordination of actions and documentation such as impacts identification, monitoring, and emissions of periodic report, as well as the existence of a regular certification.	Internal questionnaire, reports of environmental performance and environmental monitoring report.
<b>Environmental Legislation</b>	Evaluates the accordance of the project developer 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	Internal questionnaire and environmental license.
<b>Lawsuit Procedures</b>	Evaluates if the entrepreneur was involved with any lawsuit or administrative sanctions executed by public organs, person or people, aiming the environment and human health protection or repair.	Internal questionnaire, Terms of Conduct Adjustment, among other.
<b>Energy</b>	Evaluates the fuel applied to fire the ceramic devices, just as the origin and control of the biomass.	Internal questionnaire, observation in the local, environmental license, Supplies Controls of the fuels and management forest plan of the furnisher.
<b>Clay</b>	Evaluates the conformity with the environmental laws for the exploitation of mineral clay and the existence of Environmental Control plan concerning the clay extraction.	Internal questionnaire, license to extract the clay and plan to recuperate depredated area.
<b>Water</b>	Evaluate the origin of the water used in the productive process, besides the legal and sustainable aspects of its exploitation.	Internal questionnaire, License for the water consumes and the water bill of the public service.
<b>Emissions to the atmosphere</b>	Evaluates the control over the atmospheric emissions involving the gases emitted during the productive process, except the greenhouse gases.	Internal questionnaire, observations on site, and atmosphere emission monitoring.
<b>Residues from the Productive Process</b>	Evaluates the treatment and destination dispended to the industrial residues generated in the productive process, as well as the incorporation of external industries residues and existence of a residues management plan.	Internal questionnaire, observations on site and e evidence to prove the donation/destination of the material.

<b>Ashes</b>	Evaluates the procedures adopted by the entrepreneur in order to control the ashes and its destination.	Internal questionnaire, observations on site and evidence to prove the donation/destination of the material.
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<b>Indicator</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Sustainability Principles</b>	There are no commitments to the sustainability.	Limited incorporation of the sustainability in the values, strategies and principles of the entrepreneur.	Unsatisfactory incorporation of sustainability in the values, strategies and principles of the entrepreneur.	Adequate incorporation of sustainability in the values, strategies and principles of the entrepreneur.	Significant incorporation of sustainability in the values, strategies and principles of the entrepreneur.	Sustainability goals and objectives inserted in the values, strategies or principles of the entrepreneur.
<b>Environmental Management</b>	There is no systemic approach involving the environmental aspects or disorganized structure, or there are no emissions of periodic reports.	Punctual approaches of environmental matters and there is no periodical report regarding these matters.	Gaps in the environmental management system or difficulties to implant and emit periodic reports.	Efficient Environmental Management System, with periodic emissions of reports, but with some difficulties.	Efficient Environmental Management System, not necessarily with certifications, with periodic emissions of reports and evaluation, including studies of risk evaluation and environmental impacts.	Certified Environmental System, with efficient structure and periodic reports and evaluations.
<b>Environmental Legislation</b>	There is no knowledge about the environmental legislation and norms.	The entrepreneur knows the legal obligations, but has no environmental license, or it was suspended for not accomplishing the constraints.	The entrepreneur has environmental license, but he has difficulties to keep in date with environmental requires. He may present some temporary inconformity.	The entrepreneur has environmental license, but with difficulties to accomplish the constraints.	The entrepreneur has environmental license according to the constraints and deadline sets.	Besides the previous item, the entrepreneur has a systematic control of the licensing process and/or control of the environmental legislation of its main suppliers.
<b>Lawsuit Procedures</b>	The entrepreneur: - Has suffered in the last year public civil action due potential risk or effective damage for human healthy or for environmental.	The entrepreneur: - Has suffered in the last year judicial action by public agencies due potential risk or effective damage for human healthy or for	The entrepreneur: - Had suffered in the last year warning by public agencies due potential risk or effective damage for human healthy or for environmental.	The entrepreneur: - Has suffered in the last year warning by monitoring agency due potential risk or effective damage for human healthy or for environmental.	The entrepreneur: - Has suffered in the last year public civil action, judicial action or warning due potential risk or effective damage for human healthy or for	The entrepreneur: Didn't suffer in the last year public civil action, judicial action or warning due potential risk or effective damage for human healthy or for

	- He was convicted in the final instance.	environmental. - He was convicted in the final instance		- He has already regularized his situation.	environmental. - He was not convicted.	environmental.
<b>Energy (burning and drying)</b>	The company use native wood.	Partial substitution: The company use native wood and renewable biomass.	Total substitution: The company use renewable biomass, but it has difficulties to obtain, to prove the origin, the legality or the quantity of the biomass.	Total substitution: The company use renewable biomass, but it has difficulties to obtain, to prove the origin, the legality or the quantity of part of the biomass.	Total substitution: The company use renewable biomass without difficulties to obtain, to prove the origin, the legality or the quantity of the biomass.	In addition to the last item, the entrepreneur has systematic procedures of renewable biomass control, with basis register in an electronic way and emission of periodic reports.
<b>Clay</b>	The entrepreneur does not know the environmental concessions and licenses needed to the clay extraction. OR Entrepreneur does not know if the supplier has the environmental concessions and licenses	The entrepreneur/supplier has all licenses, but their validation is expired or they were suspended due to the not accomplishment of the constraints.	The entrepreneur/supplier obtained the environmental licenses and concession to the clay extraction, but he has difficulties to keep up with the environmental requirements, and he may present temporary irregularities in a short period.	The entrepreneur/supplier possess the environmental licenses and concession to the clay extraction	In addition to the last item, the entrepreneur/supplier has an effective Plan of Control of the environmental impacts and/or of the recuperation of degraded area.	In addition to the last item, the entrepreneur/supplier has a systematic procedure to monitor the implementation of the plan.
<b>Water</b>	Consumption of water in the productive process without specific control.	Register of the water consumption in the productive process.	Monitoring of water consumption in the productive process.	The company presented system, process or equipments to reduce the water consumption in the productive process.	In addition to the last item, the reduction of the water consumption is significant and measurable.	The management of water consumption is efficient, with emission of periodic reports.
<b>Emissions to the atmosphere</b>	- There is not monitoring of the emissions. - There are not actions to control and reduce the emission.	- There is monitoring, but the entrepreneur can't guarantee that it is in conformity with the legislations, norms and applies requisites.	- There is not monitoring of the emissions. - There are actions to control and reduce the emission with evident results, even	- There is monitoring, but the entrepreneur can't guarantee that it is in conformity with the legislations, norms and applies requisites.	- There is monitoring and the entrepreneur can guarantee that it is in conformity with the legislations, norms and applies requisites.	- There is monitoring and the entrepreneur can guarantee that it is in conformity with the legislations, norms and applies requisites.

		- There are not actions to control and reduce the emission.	though not measurable.	- There are actions to control and reduce the emission with evident results and/or measurable.	- There are actions to control and reduce the emission with evident results.	- There are actions to control and reduce the emission with measurable results.
<b>Residues from the Productive Process</b>	Residues of the productive process are discarded without any environmental control.	Part of the residues is destined to landfills or donations. The rest is kept inside the limits of the industry.	Residues of productive process are used to grounding, donations or reused in the process, but without specific control.	Besides the previous item, there are external industrial residues incorporated in the process OR Show activities that reduce the quantity of residues, but without a specific plan.	There is a plan to reduce the production of residues.	There is a management system of residues.
<b>Ashes</b>	Ashes deriving from the biomass burning in the kilns are discarded without any environmental control.	Part of the ashes is designed in an inadequate way and the other part is reused/donates without specific control.	Ashes are totally reused or donated, but without specific control.	Ashes are totally reused or donated, with control of the quantity and destination of the material.	In addition to the last item, part of them is commercialized.	The company presented management system that includes procedures to store, to monitor, to reduce the generation, and others.

**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
<b>Kilns burning efficiency</b>	Evaluates the efficiency level and the kind of the kilns used to fire the devices in the ceramic productive process.	Internal questionnaire and observations on site
<b>Devices Drying (before the fire)</b>	Evaluates the efficiency of the methods executed to dry the devices, stage before the fire and after the extrusion, the existence of artificial dryers (avoiding fissures in the final product) and also considers the employment of a system able transfer the heat provided by the kiln to the devices drying.	Internal questionnaire and observations on site
<b>Devices Firing</b>	Evaluates the existence and the automation of the fire monitoring system as well as the construction of the fire curve graphic.	Internal questionnaire and observations on site
<b>Kilns Alimentation</b>	Evaluates the existence and the automation of the procedures used for the kilns alimentation.	Internal questionnaire and observations on site

<b>Machinery</b>	Evaluates the existence and conservation of machinery that helps the workers, seeking the reduction of risks and improvement of the productive process. The factors considered as in bad conditions of conservation are: leakage, excessive noise, loose or lack of components, among others.	Internal questionnaire and observations on site
<b>Products Variety</b>	Evaluates the product variety, the kind of products, including the existence of personalized products or with high value in the consumer market.	Internal questionnaire and observations on site
<b>Quality Control</b>	Evaluates the procedures adopted by the entrepreneur, during the productive process, aiming to ensure the quality of the devices. It also verifies the existence of a quality certification.	Internal questionnaire and observations on site

Indicator	1	2	3	4	5	6
<b>Kilns burning efficiency</b>	Kilns with very low efficiency, as "caieras" kilns.	Mixed Composition of the kilns: - <i>Caieras</i> (low efficiency) - <i>Paulistinha</i> or Round (medium efficiency).	Medium Efficiency kilns as <i>Paulistinha</i> and Round kilns.	Mixed Composition of the kiln: - <i>Paulistinha</i> or Round (medium Efficiency). - Hoffman (high efficiency).	Mixed composition of the kilns: - <i>Tunel</i> (very high efficiency). - Hoffman (high efficiency). - <i>Paulistinha</i> or Round (medium efficiency).	<i>Tunel</i> kilns or other very with high efficiency kilns.
<b>Devices Drying (before the fire)</b>	Drying in open place.	Natural drying in covered area.	Presents drying system with help of: - ventilators AND/OR - canvas stove AND/OR - reuse of heat from the kilns AND/OR - Temperature and humidity control ( <i>termopares</i> ).	Part of the devices pass through semi continuous or continuous artificial drying and part is used in other drying methods.	Presents semi continuous artificial drying system OR Presents continuous artificial drying system.	Besides the previous item, obtains automatic system to control the temperature and humidity (self-regulating drying system).
<b>Devices Firing</b>	Burning process without any control.	Manual making control of the burning curve, presenting some difficulties (i.e. fails in monitoring, absence of registers, among others)	Manual making and control of the burning curve.	Semi automatic control of the burning temperature.	Automatic making and control (self-regulating system) of the burning curve, with registration of the data in digital format.	- Automatic making and control of the burning curve. - Achievement of the basis in a digital way. - Report emissions.
<b>Kilns Alimentation</b>	Manual feeds of the kilns.	Mixed Process: The alimentation of some Kilns is manual, while the alimentation of	Semi-automatic feeds of the kilns.	The alimentation of the kilns is semi automatic, presenting some enhancements	Mixed Process: The alimentation of some kilns is semi automatic, and the	Automatic feeds of the kilns.

		other kilns is realized semi automatically or automatically		(i.e. in addition to the last item, there are other automatic processes as the use of trackers, automatic controllers for the biomass injection, and others).	alimentation of other kilns is completely automatic.	
<b>Machinery</b>	Doesn't have machineries beyond those present in the production line.	Have machineries with bad conditions of conservation AND in small quantity.	Have machineries with bad conditions of conservation OR in small quantity.	Have machineries with good conditions of conservation and in reasonable quantity.	Besides the previous item, has a machine shop for repairing, improvement of machines and maintenance.	Has maintenance and calibration control, equipments in good conditions of conservation and good quantity.
<b>Products Variety</b>	Only one kind of product is produced.	Two kinds of products are produced.	Three kinds of products are produced.	Four or more kinds of products are produced.	Sporadic production of personalized items that have high market value.	Continuous production of personalized items that have high market value.
<b>Quality Control</b>	Absence of labs and analysis of quality control.	Limited and sporadic evaluations of quality control of the products.	Periodic evaluations of the quality control, but not approaching all production circle and/or all the products.	Periodic evaluations of quality control, which approach all the production circle and products.	The company has certification in part of the products.	All the products are certified.

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

Indicator	Description	Evaluation Method
<b>Additionality</b>	Evaluates if the reduced greenhouse gases emissions that were additional; this means, without the project, the reductions wouldn't happen. This item evaluates the tools used to confirm the additionally according to national and international standards.	PDD and monitoring and verification report.
<b>Emission Reductions Calculations &amp; Monitoring.</b>	Evaluates the methodologies used to calculate the emission reductions, the monitoring and if it is suitable to the national and international standard.	PDD and validation report.
<b>Validation &amp; Verification</b>	Evaluates the existence of partial or total validation/verification of the project by a third part, and if it is the credited by UNFCCC, and if the validation and verification procedures are according to national and international standards.	Certificates of emission credits

<b>Project Performance</b>	Evaluates the project performance in comparison to the e emission reductions estimated in the PDD-Project Design Document.	PDD and monitoring and verification report.
<b>Involvement of the employees in the project</b>	Evaluates the internal communication related to the emissions reduction project.	Internal questionnaire
<b>Involvement of the Stakeholders</b>	Evaluates the communication and acceptance of the project by the communities, environmental agency and public authorities among others social actors.	Internal questionnaire, meeting evidence, publication , etc.

Indicator	1	2	3	4	5	6
<b>Additionality</b>	It is not considered additional.	It has the additionally limited to the project portions.	There are uncertainties about the additionally, partial or total.	It is considered additional, but it doesn't use international and national recognized standards.	It is considered additional and it uses international and national recognized standard.	It is considered additional according to the criteria stated in a monitoring methodology approved by the CDM Executive Board.
<b>Emission Reductions Calculations &amp; Monitoring.</b>	Absence of a specific methodology to calculate the emission reductions. AND/OR It does not have a monitoring plan, nor has only a partial or insufficient monitoring.	It has an emission reductions calculation methodology limited to the project portions.	There are some doubts about the methodology consistence for calculation of the base line and monitoring plan.	It possesses a consistent methodology to calculate the emission reduction. AND It possesses a consistent monitoring plan, approaching all the dimensions of the project.	In additional to the last item, the methodology of the base line and the monitoring plans are based in international recognized standards.	It possesses a methodology to calculate the emission reductions, and a monitoring plan based in a methodology approved by the CDM Executive Board.
<b>Validation &amp; Verification</b>	There is not validation or verification done by a third part.	Validation and verification of a third part is limited to parts of the project.	Validation/verification of the project is done by an independent third party, which is not registered by the UNFCCC (DOE <sup>1</sup> ) or other GHG program.	Validation/verification of the project is done by an independent third party, registered by the or other GHG program than UNFCCC (DOE <sup>2</sup> )	Validation/Verification is done by a DOE.	Validation/ Verification are done by a Designated Operational Entity, based in international recognized procedures.
<b>Project Performance</b>	Not successful. 0% of the carbon	Very Low. From 01% to 25% of the carbon	Low. From 26% to 50% of the carbon credits	Reasonable: From 51% to 75% of the carbon	Good: From 76% and 95% of the carbon	Excellent: More than 95% of the carbon

<sup>1</sup> Designated Operational Entity.

<sup>2</sup> Designated Operational Entity.

	credits predicted in the period were effectively generated.	credits predicted by the period were effectively generated.	predicted by the period were effectively generated.	credits predicted by the period were effectively generated.	credits predicted by the period were effectively generated.	credits predicted by the period were effectively generated.
<b>Involvement of the employees in the project</b>	Workers were not informed or were insufficiently informed about the project and they are not involved.	The employees are aware of the project, even though they are reluctant about its implantation.	The employees are aware of the project, but they are no involved to it (indifference to the implantation of the project).	The employees are really aware about the project; they are involved and motivated to contribute to its implantation.	The employees really aware about the project, and also they are capacitated to the implementation of the activities and to readapt their activities.	Besides the involvement and capacitating of the employees, the project is developed in a participatory way and accomplishes the interests of the entrepreneur.
<b>Involvement of the Stakeholders</b>	The project does not contemplate the participation of the stakeholders. OR Groups/Organizations showed great opposition to implement the project.	The project contemplates the publication of the project activities to the stakeholders, but not in a formal and structured character OR Groups/organizations showed opposition to implement the project.	The project contemplates the participation of the stakeholders through invitation letter to do the consult. - Was not demonstrated any formal opposition to implement the project.	-The project was developed in a group of organizations of the same sector in an interactive and cooperative way, with great divulgation for other sectors, institutions, organizations, etc. - Was not demonstrated any formal opposition to the implementation of the project.	- The divulgation contemplates other kind of approach (seminar, meetings, publication in the mass communication, etc.) - Was not demonstrated any formal opposition to implement the project.	In additional to the last item, some expressions of support t the project were received.