

Sustainability and Valorization of Culture <i>Initiatives to support sustainability practices and culture.</i>
IC6 - Sustainability Principles Awareness and Culture Valorization <i>Investment on sustainability events or prizes among stakeholders.</i>
IC7 - Protection of History, Culture and Values of the Local, Regional and National Community <i>Initiatives to preserve the history, culture and values of the local community, regional or nationally.</i>

obligatory indicators defined above the average measured by the survey conducted during the development of the Seal (step iv). Since this seal is awarded after self-evaluation, the company must also certify the veracity of the information and sign a commitment statement. In order to proceed and get the Silver and Gold levels, the corresponding company facility has to pass through an auditing process. The process is performed by an accredited certifier, which involves not only the examination of documents, which proofs the compliance with the Seal indicators, but also the visit of the facility installation and the interview with key personnel in order to check some of declared information, especially those ones related to social indicators, as the inexistence of child labor.

To determine to which Seal level the company should apply for certification, the same software of self-assessment of the Bronze Seal may be used. It provides a hint about the potential company Seal level based on Yes/No self-assessment answers. The company facility is awarded the Silver Seal, after auditing, if the number of obligatory and very important indicators is above the average. The company facility is awarded the Gold Seal, after auditing, if the number of obligatory, very important and desirable indicators is above the average. The Diamond Seal requires that the company complies with all the indicators above average, as well as demonstrates progress in the indicators' fulfillment during the last two years, through auditing.

The validity of the Seal varies according to the level. White and Bronze Seals are valid for one year. Silver, Gold, and Diamond Seals are valid for two years. The complete system of indicators is planned to be re-evaluated and updated every four years.

In order to support the self-assessment, a software tool was developed to be used for membership adhesion (White level), self-analysis (Bronze level), and certification (Silver, Gold and Diamond levels), comprising the interaction between the involved institutions – the Seal manager, the interested companies and the certifiers. It is important to mention that at this time, the Seal has two accredited certifiers acting in national and international domains. Figure 1 illustrates this workflow. The validation of the final system of indicators was conducted using this tool. In addition, the software will allow the creation of a database

concerning the evolution of the industry in terms of sustainability international practices adherence.

5. Survey

In order to validate the set of proposed indicators, their categories and the Seal levels, a survey was conducted supported by the developed software. The purpose of this first analysis was, given a significant sample of participating companies, to analyze if the Seal objectives were being met, and evaluate if the indicators were feasible and understandable.

Thirteen companies filled the self-evaluation form to achieve the Bronze level – five that have 0 to 50 employees, four that have 51 to 200, one that has 201 to 500, and three that have over 501 employees. One of them continued the evaluation process to achieve the Gold level. The companies are from different sectors (Components or Shoes) and sub-sectors. Figure 2 presents the compliance of the companies with the aforementioned indicators.

The assessed companies reached high scores in the self-assessment results – two reached the Bronze level, and eleven got the Gold level. It is important to note that the Bronze Level is the one that does not demand auditing. It means that some companies during the preparatory process for getting Silver and Gold have realized that criteria for granting these levels is much more strict than they have guessed. Because of this, some of the companies are now working to evolve towards higher levels at much slower pace than expected.

Based on these results, it is possible to state that the Seal's first premise was achieved: it is inclusive, that is, it is feasible for different companies and footwear segments to pursue the Seal granting. It could also be verified that the classification of indicators into obligatory, very important and desirable is aligned to business practices, since the indicators with the least compliance were desirable ones - IE15 (Use of Alternative Sources of Renewable Energy), and IA16 (Compliance with Environmental Management System certification - ISO 14001).

In the cultural pillar, the less attended indicator was a very important one, IC4 (Disclosure and Dissemination of Social Balance), not a desirable. The authors believe this is an indication of an adjustment to be made on the Seal: whether reassessing the category of the indicator, or improving the question either to be broader or to include other types of communications and reporting initiatives. The application of the system here proposed can help companies in this issue.

Two indicators also raised doubts: IE6 (Machines Productivity Control) and IA10 (Chemicals Consumption Control). In the case of IE6, labor-intensive companies should have the option to answer "Not Applicable", and, in the case of IA10,

the same applies to chemical companies. This resulted in the adjustment of the self-assessment system to allow “Not Applicable” answers to some indicators.

Summarizing the results get until now, it can be stated that the companies of Brazilian footwear sector are much more compliant with the economic and environment indicators. It is very understandable giving that economic issues are related with the company survival in the market, and environmental

practices are one of the most mature in the sustainability scenario. In terms of social practices, the Brazilian companies promote a lot of actions towards social inclusion, however they somewhat sin neglecting the proper registration of these practices and other benefits conceived to the employees. Finally, the cultural pillar is the most immature due to its innovative approach and the fact that “Made in Brazil” has risen as an important flag for exportation in the last ten years.

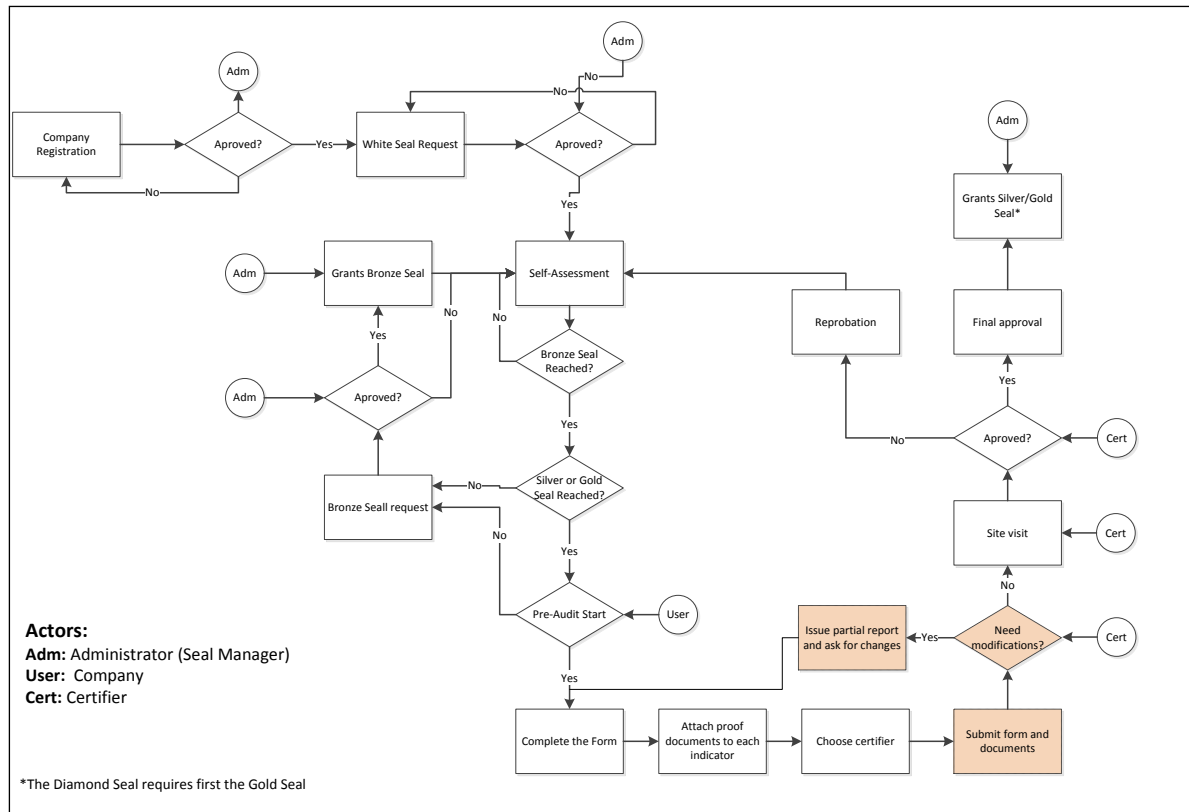


Figure 1. Sustainable Origin Seal Workflow

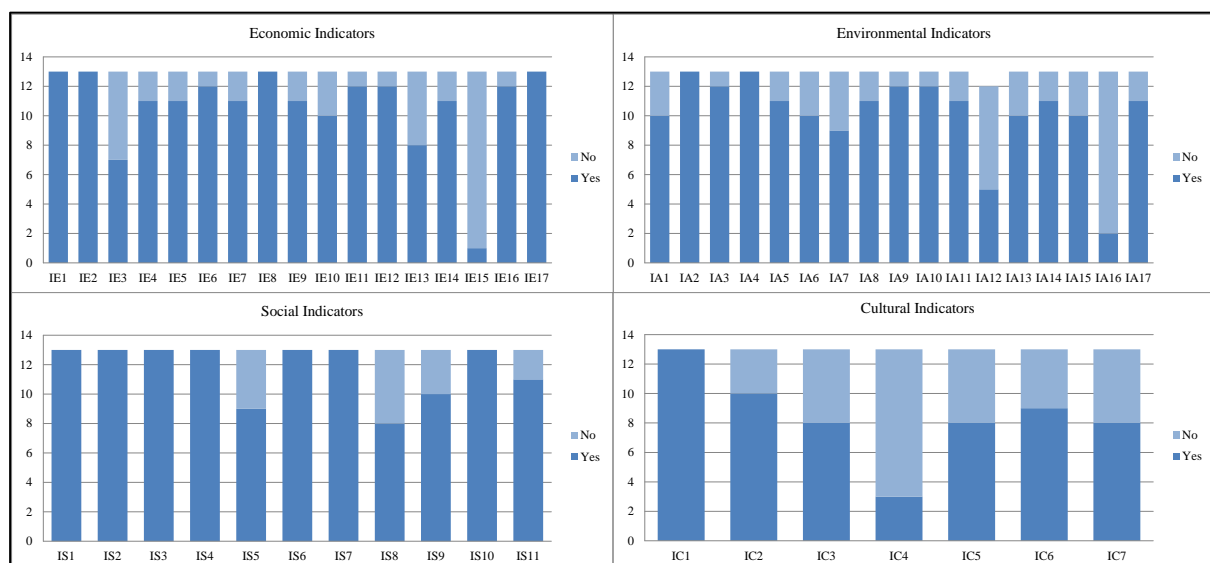


Figure 2. Survey Answers for Each Indicator

6. Case Study

After evaluating the indicators in general, a case study was conducted to investigate if the detailed information asked for each indicator were feasible and understandable, and if the evidential documents were applicable. The studied company is **Cipatex**, and it achieved the Gold level of the Sustainable Origin Seal. It started manufacturing synthetic laminates in the 1960s, and now works with plastics, chemicals and non-woven materials. The evaluated facility produces PVC synthetic laminates, and is located in the City of Cerquillo, state of Sao Paulo, Brazil. The company has more than 501 employees.

In general, the process of filling all data was toilsome, but very educational – the companies could verify all the aspects that must be registered, followed and managed in order to have a *de facto* sustainable operation. Following, some highlighted points that can incur in changes in the system or become attention points in the future:

- The indicators that require water consumption control (IE1 and IE9) had their verification facilitated when the company had a closed water loop – for companies that have an open loop, some measurements devices are required along the productive process in order to measure the water input and output, which is not a common practice. In addition, there are different types of water sources. When the company deploy its own well or spring, it normally does not control the water consumption;
- Evolution was hard to be demonstrated in the rational use of raw-materials (IE4), since the amount varies according to the clients demand. For instance, if a determined raw material is used in the first semester, and another one is used in the second semester, it might not be possible to compare the use of raw materials between the two semesters;
- Some Quality & Productive Programs (IE7) does not have a maturity level or evolution management, making it difficult to show the company's evolution in them. For instance, the Rio Grande do Sul state quality and productivity program (“Programa Gaúcho da Qualidade e Produtividade”) has 3 maturity levels. On the other hand, Lean Manufacturing practices do not necessarily have associated maturity levels;
- The raw material origin control (IA1, also related to IA10) is usually only considered for the first supplier, not including other links of the supply chain;
- The waste treatment solution for customers (IA12) did not make sense for some companies that have no access to the clients' production processes;
- The Cultural Pillar presents some challenges regarding the calculation of how much was invested in the initiatives – it is important that the companies consider employees' working hours to calculate this amount. As example, let us consider the IC3 (Promotion of Sustainability Actions focusing on Culture for Stakeholders and Employees), which includes the number and the nature of developed activities and the investment done in terms of material and human resources, involving men & women hours worked.

Some indicators demanded a new category for attendance: “partial”. In the studied case, the collective transportation support (IA6) is outsourced, so the third party fuel consumption cannot be managed. In this case, there is a support for collective transportation, but it is not fully managed, thus being partially attended. In the case of wastewater, emissions, and solid waste treatment, reusing and recycling (IA3), the studied company controls wastewater and solid waste metrics, but there is no control on emissions (besides having filters in the chimneys, the emitted volume is not measured). In these cases, the company should get a proportional score, for instance 0.5 point for each indicator.

The analyzed company started the data collection by itself, but as it was the first to do that, a closer technical support was required in order to fully understand each indicator and the data required. This reflected in some adjustments in the Seal Manual, the base document for the whole process. The raised issues presented beforehand also resulted in some adjustments in the Manual.

During the auditing process, another idea was raised: to expand the certification flow including a remote evaluation phase, as illustrated by the dotted boxes in Figure 1. The interaction between the certifier and the interested company would start before the site visit, as the company uploads evidential documents in the software, and the certifier can evaluate the uploaded documents and emit preliminary evaluations until the moment that all the documents are compliant to what is established in the Seal Manual, and a site visit can be scheduled. This avoids the lack of preparation on the company's side at the moment of the certifier's visit (and consequent expenses), given that all documentation has to be uploaded to the software prior to this visit. The presented flow will also be changed to include a phase after the site visit in which the evaluated company can fix any non-conformity in a given time frame.

7. Conclusions

Sustainability is a new premise for innovation and competitive advantage, which can lead to lower costs, risk reduction and increased revenues. Creating a specific certification for the footwear sector aims to bring these opportunities to a sector that has lost market share in recent years. The Seal is innovative because (i) it is specific to the footwear industry; (ii) it does not focus only in environmental and social pillars, a common practice among the other tools, making it difficult to incorporate sustainability practices into the companies' strategic planning, and (iii) it incorporates culture as a pillar, besides being inclusive and planning a step-by-step adoption.

The development of the Seal was conducted through an extensive literature review and through questionnaires to develop and validate the system of indicators. The main contributions of this work were the development of a system of indicators that fully meet the needs of the footwear industry in Brazil, besides presenting a method that can be used to develop similar systems for other sectors.

The Sustainable Origin Seal is part of a main program, called **Sustainable Origin**, a broader effort to promote sustainability and increase the footwear sector's competitiveness. By now, 46 companies applied to the White Level, 13 for the Bronze Level, one of which evolved to the Gold Level, one is passing the auditing process trying to achieve the Gold Level, and there are others preparing themselves to start the auditing process.

Sustainability is a new challenge and this means that the companies are not always conscious of its meaning, issues, and returns. The decision of applying or not for this certification is based on the expected return it can give. This is one of the main challenges for the Silver, Gold, and Diamond levels: to demonstrate the returns companies can achieve. The international recognition of the Seal is an important step on this regard, because it could open or create more business opportunities to companies which hold the Seal certification. The success of the Seal also depends on the number of evaluated and certified companies – the database that can be built is also valuable information for identifying sector trends in terms of innovation and sustainability related to all aspects covered to the Seal.

As future works, conducting more case studies in the certified companies is recommended to verify the current situation and deepen the understanding of the impact of this Seal in the footwear sector.

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