# Performance evaluation of corporate sustainability in an industry of plastic film

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## Objective

The aim of this study is to analyze the sustainability performance of a company.

For this, the practices related with economic, social and environmental approaches were identified and their contribution for corporative sustainability was analyzed.

This study was performed in a plastic films company.





#### Theoretical framework

An organization should have a balance between the social, environmental and economic dimensions, to be sustainable (JAPPUR, 2004).

A sustainable company "is one that contributes to the development by generating economic, social and environmental dimensions - known as the three pillars of sustainable development" (Elkington, 1994 apud Milstein, 2004).





#### Performance Evaluation

#### **Assessment Tools:**

- Methodology Dashboard;
- Barometer of Sustainability;
- Global Reporting Initiative (GRI);
- Metrics sustainability of the institution of chemical engineers from England(IChemE);
- Dow Jones Sustainability Index (DJSI);
- Ethos Indicators of Corporate Social Responsibility;
- "MAIS" Method;
- Measurement model proposed by Delai and Takahashi (2008).





# Research design

- ✓ This research is exploratory and qualitative.
- ✓ The research method was a case study.
- ✓ Work method:

A semi-structured questionnaire was developed considering the items related with social, economic and environmental approach; the importance of each item to the corporative sustainability and the way that the company apply each one was investigated.

The questionnaire was applied with three responsible managers the areas: financial, human resources and environmental management.





# Research design

<b>Economic</b> <b>Perspective</b>	Measurement criteria	Detailing	
	Investment	Investment Capital invested; Research and development.	
	Investor Relations	Corporate governance; Remuneration to shareholders.	
	Risk Management	Manage potential risks and how to use it to prevent them;	
ctive	Labor practices and teachers	Education, training and development; Diversity and opportunity; Health and Safety; Employment Generation;	
rspe	Managing customer relationships	Product labels; Advertising.	
Social perspective	Corporate Citizenship	Social Actions; Community dialogue; Code of conduct, bribery and corruption;	
Soc	Suppliers and partners	Selection, evaluation and supplier development; Contracts:	
	AR	Emission carcinogenic effect; Photochemical air pollution:	
tive	Earth	Land use; Waste Generation.	
erspec	Materials	Consumption; Consumption of hazardous materials.	
Environmental perspective	Energy	Consumption.	
	Water	Consumption; Biochemical oxygen demand; Ecotoxicity.	
	Biodiversity	Protected areas; Species.	
	Products and Services	Recyclability of products; Environmentally friendly products.	





#### Results - Economic Perspectives

	Measurement criteria	Diagnosis	Management
mic	Investiments	Investment Analysis	Indicators of default
		Research and development	Research market trends
<b>Economic</b> Perspectiv	Investor Relations	Control attributes of the business processes	Indicators of production and efficiency of manufacturing
<b>.</b>	Risk Management	Evaluation of risk management	Integrated with the corporation





#### Results - Economic Perspectives

It was found that the company's concern is to maintain a management system aligned with the goals of the corporation and its shareholders and customers Within the economic and financial approaches.

But if we refer to research and development, the company has not demonstrated an association for sustainable products, since the request of the market on their products is still considered almost nil on this aspect.





#### Results - Social Perspectives

	Measurement criteria	Diagnosis	Management
Social Perspective	Labor pratices and teachers	Array of skills and competences Management System Work Safety Assessment of employee satisfaction index	Indicators of qualification of people  Control generating indicators of accidents at work and plan of action.  Climate Survey
	Managing customer relationships	Communicating with consumers about products	Index of satisfaction of customers with monthly monitoring of occurrences Index of quality of product delivery Availability of technical
	Corporate Citizenship	Informal relationship aimed at sustainable growth, respect for differences and the environment	Quality management system.  Informal social action
	Suppliers and partners	Evaluation and qualification of suppliers	Index of quality suppliers





#### Results - Social Perspectives

The social attributes are linked to quality management.

The lack of a formal management system affects the internal communication and dissemination of social actions developed by the company.

In relation to the selection and development of suppliers, we can find alternatives linked to the issue of sustainability with respect to raw materials for example, or even, on issues related to logistics supply.





### Results – Environmental Perspectives

	Measurement criteria	Diagnosis	Management
Environmental Perpectives	AR	Review of issue that generate air pollution	Does not apply to company's current situation
	Earth	Measurement of solid waste along with their rating and target	System management of waste generated with monthly rates of control
	Materials	Appropriate destination for hazardous waste disposal	Waste management and control using indices of waste generated
	Energy	Evaluation of non-renewable energy consumption	There is no way management
	Water	Measurement in control measures regarding the water used in production processes and returned to the environment	Filtering process control and analysis of water periodically reporting
	Biodiversity	Availability of protected area	Demarcation of protected area with good preservation of vegetation and animals
	Products and services	Original product with a degree of recyclability in the process Approach to the analysis of the product life cycle	Internal recycling process with high utilization rates to generate recycled Project life cycle analysis of product





#### Results – Environmental Perspectives

On the environmental issue, waste disposal is the company's focus.

Regarding the consumption of energy it is possible to restructure the electric facilities while making the establishment of projects to reduce energy consumption.

It is also possible to reuse the water in production processes.





#### Conclusions

In this analysis, we can identify some practices related to corporate sustainability as well as the resources for expansion in the company's scope of operation.

As a continuation of this work, it is proposed to structure a management system for corporate sustainability, covering the practical perspectives of economic, social and environmental dimensions.

It is also suggested assessing the importance of each set of measurement criteria established and then to verify the level of implementation of each practice.

Another possible study refers to the analysis of the economic gains resulting from the application of these assumptions of corporate sustainability.





#### References

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