



Water Footprint of Refrigerator Sirius 360 Mabe

El Agua Nos Une – SuizAgua América Latina



Company
Mabe

Sector:
Home appliances

Location:
Saltillo, Coahuila y Querétaro, Querétaro, México

Date: July 28th, 2020

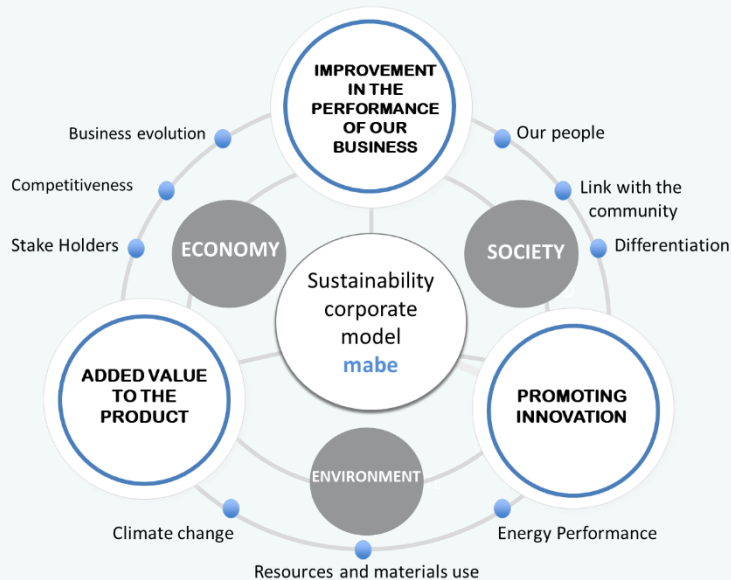
INTRODUCTION

Con Based in Mexico City, we are a proudly Mexican company with more than 70 years of history in the home appliance market. We are a large family made up of more than 19 thousand employees with a presence in more than 70 countries around the world, which allows us to position ourselves as the leading brand in the market for Latin America. Our offering of solutions is focused on three main segments: Cooking: where we are dedicated to the manufacture of stoves, ovens, grills, and warming drawers; Refrigeration: producing refrigerators, freezers and frigobars; and Garment Care: we offer products such as washers, dryers and laundry centers. We also have a range of global products designed to contribute to improving the quality of life of our consumers, among which are: air conditioners, air heaters, humidifiers, water heaters and dispensers, microwave ovens, toaster ovens, wine cellars, dishwashers and garbage disposals. These products are available to our consumers through a vast portfolio of brands among which are: mabe, io mabe, GE Appliances, GE Prole, Monogram, Easy, Centrales, Atlas, Cetron, Patrick, IEM, Durex, Hotpoint, Moart and Regina.



OUR CORPORATIVE SUSTENTABILITY MODEL

The improvement in the Performance of Our Business, as well as the Promotion of Innovation and the Added Value to our products, allow us to continuously adapt to the environment in the search for Social, Economic and Environmental balance that allows us to evolve competitively serving our groups of interest, at the same time that we become a better place to work, connecting with the communities in a positive and differentiated way, making adequate use of our resources.



CONTEXT

According to national sectoral information, Mexico is the main exporter of home appliances in Latin America. In 2018, a production of 9.595 million dollars was achieved and an average growth of 5.5%. Likewise, due to its importance in the dynamics of Mexican homes, and because it represents an integrating product of various strategies within the company, among which the following stand out:

Extended Producer Responsibility, Circular Economy, Energy Management and Management of the Climate Change, the refrigerator has been selected as the object of this study to add the Water Footprint in the evaluation of our performance.



GOAL AND SCOPE

Evaluate the environmental impact to water of a Sirius 360 refrigerator produced in Mexico, to establish a starting point towards the continuous improvement of its performance.



FUNCTIONAL UNIT

Cool and preserve 360 liters of food efficiently using energy for 24 hours, with a Sirius 360 refrigerator.

SYSTEM BOUNDARY



	Water consumption in life cycle					
	Raw materials supply	Manufacture	Packaging	Distribution	Use	End of life
Consumption	33.22%	0.88%	0.35%	0.10%	65.40%	0.04%
	Water footprint profile					
Eutrophication	5.19%	0.21%	0.06%	0.03%	94.44%	0.06%
Ecotoxicity	92.18%	1.19%	0.59%	0.04%	5.96%	0.04%
Scarcity	32.22%	0.88%	0.35%	0.10%	65.40%	0.05%





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LESSONS LEARNED

One of the main learnings that we have obtained in the development of this study focuses on the process of characterizing the information that will be used for a study of this nature, since although the data exists in the organization, it is important to define the level of “resolution”, or detail that is needed for each part or component that is within the limits of the study.

On the other hand, once the size of the sample to be analyzed has been defined, defining a standardized and systematic process for future editions of this study is a key factor in refining the results obtained.

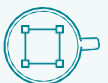
The integration of the value chain is a relevant factor to ensure the quality in the collection of the information involved in this type of studies, to strengthen communication channels, joint efforts and strategic alliances, they are the ways to reduce the impact on the cycle life of the products.



OPPORTUNITY AREAS

The areas of opportunity that are presented when developing a water footprint study consist of identifying the key stages of the product life cycle where it is possible to implement measures that improve product performance, highlighting the identification of key suppliers and opening the opportunity to generate joint work agendas that allow the identification of opportunities to reduce the impact of production processes and the potential use of parts and components, as well as packing and packaging material for new production cycles.

On the other hand, through this type of studies it is possible to link different perspectives of operation towards the sustainability of companies, highlighting practices such as the circular economy, extended producer responsibility, energy management and attention to climate change. All these, thanks to the fact that the life cycle approach offers a systematic and standardized integration framework.



MITIGATION OPPORTUNITIES

Through the analysis of the water footprint, it was possible to identify aspects in which it is necessary to strengthen communication with our value chain in order to identify existing opportunities beyond our operations to reduce the impact that our products may have throughout its life cycle.

Based on this, establish evaluation mechanisms, selection criteria and minimum performance standards for the acquisition of raw materials and the optimization of processes that are reflected in the operation of the products.



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