

WATER FOOTPRINT OF PAPER ON BIO PAPPEL SCRIBE QUERÉTARO INDUSTRIAL PLANT

El Agua Nos Une – SuizAgua América Latina





Sector:

Pulp and Paper

Location:

San Juan del Río, Querétaro, Mexico.

Date: July 28th 2020



With a history of more than 35 years, Bio Pappel® began with an ambitious dream: To build a world-class paper company to promote integral sustainability by recovering post consumed paper and cardboard, the efficient use of water and energy and the sustainable use of our forests, guided by one purpose: To serve Mexico with the best of our entrepreneurship, supported by a strong culture of learning and innovation, inspired by the best business practices of the international paper industry.

Since then, the company has built a successful history in the paper industry, expanding not only vertically but geographically to become an international company and the largest manufacturer of paper and paper products in Mexico, with operations in the United States and Latin America.

Faced with this problem, Bio Pappel® has decided to be part of the solution and has started important tasks such as the efficient use of water in all its processes, zero water discharges system and wastewater treatment. In addition, Bio Pappel® is constantly looking to increase competencies. They have recently initiated a staff training project in the use of tools that allow them to improve their water management, with an internationally valid methodology and recognition over stakeholders, that will enable them to quantify their potential impacts of their activities on water resources.

This is how Bio Pappel® has provided the tools and facilities for its staff to know and develop projects for Water Footprint quantification according to the ISO 14046 standard and following the recommendations for regional coherence developed by the community of practice in Latin America.

It is important to mention that, when talking about Water Footprint, not only the volume is considered, that is, the amount of water consumed throughout the life cycle; but also its availability, varying from one region to another, as well as the water quality and the impacts such as contamination of aquatic ecosystems and the water source.



Scribe®

Is the largest integrated white paper company in Mexico and Latin America. Products: Large bond paper rolls for books, continuous forms and commercial printing, cut bond paper and notebooks.

Titan® Empaques

Is the largest paper manufacturer and leader in the production of corrugated and high graphics packaging in Mexico and Latin America.

It maintains the leadership in its field thanks to the structured strategy of vertical integration, geographical presence, a wide national network and advanced technology to stay ahead.







Products: Large paper rolls for packaging and containing, white and brown liner paper for packaging. Corrugated and high graphic boxes, newsprint and paper bags.

McKinley®

Is the largest Mexican company in paper, corrugated packaging and containing manufacturing in the United States. It has an extensive production and distribution network, from its industrial plants in the states of Washington, New Mexico, California, Texas, Georgia, Colorado, Arizona and Indiana, as well as Baja California in Mexico. Products: Paper for packaging and containing, corrugated boxes.



Bio Pappel Scribe Querétato Industrial Plant is located in Centro, San Cayetano, San Juan del Río, Querétaro.



To quantify the potential impact to water from the production of 1 notebook in Bio Pappel Scribe Querétato Industrial Plant located in San Juan del Río, Querétaro in 2018.



The LCA of the production of 1 notebook in Bio Pappel Scribe located in San Juan del Río, Querétaro in 2018, includes the life cycle inventory analysis and potential impact assessment to water from cradle to gate.





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SYSTEM BOUNDARY





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The Water Footprint evaluation based on the LCA of the notebook is focused on a school notebook, since it is the model that represents the highest volume of production during the year.



To produce 1 spiral economic notebook - Professional size / 100 pages at the Querétaro industrial plant in 2018.

RESULT OF THE EVALUATION OF THE POTENTIAL IMPACT TO WATER IN THE LIFE CYCLE ON THE PRODUCTION OF 1 NOTEBOOK IN BIOPAPPEL SCRIBE QUERÉTARO INDUSTRIAL PLANT.

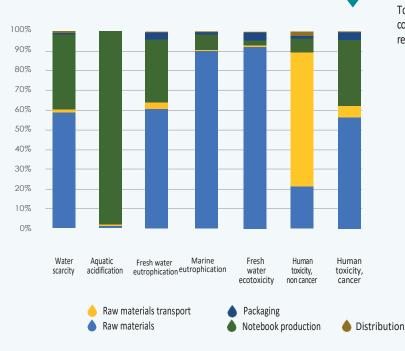


Figure 1. Impact on the production of 1 notebook in Querétaro Industrial Plant in 2018.

On Figure 1, a higher percentage of water scarcity in the raw materials stage can be seen, followed by the production; where the AWARE factor directly influences, which depends on the place of origin of the materials.

The production stage contributes significantly with a 98% on the aquatic acidification.

According to the results, the raw materials stage has a higher percentage on scarcity, freshwater eutrophication, marine eutrophication, fresh water ecotoxicity and human toxicity, cancer.

The stage that contributed the least in the analysis was the distribution.



IMPROVEMENTS FOR WATER MANAGEMENT



Direct communication with suppliers is recommended so that they are aware of the importance of extending to the chain supply, initiatives to identify and assess environmental aspects and impacts of production activities.

To Integrate the Environmental Management System as a part of the process indicators and to communicate the results to make employees aware of the impact of their activities and the use of resources.

