The Calouste Gulbenkian Foundation is a Portuguese private institution of public utility, which was created in 1956 in accordance with the last will and testament of Calouste Sarkis Gulbenkian. It actively pursues its statutory aims in the fields of the arts, charity, education and science in Portugal and abroad, including through its UK Branch and Paris Delegation. The Foundation promotes a wide range of direct activities and grants supporting projects and programs.

THE NATURAL CAPITAL PROTOCOL CHALLENGE JERÓNIMO MARTINS

APPLIED THE NATURAL CAPITAL PROTOCOL TO VALUATE THE SOCIAL COSTS OF USING DIFFERENT PACKAGING COMPONENTS



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GULBENKIAN OCEANS INITIATIVE



The Natural Capital Protocol is a standardized framework that enables companies to understand their relationships with nature in a systematic way. It is designed to generate trusted, credible and actionable information that can inform risks and opportunities and ultimately, help realize significant business benefits, such as reducing production costs, optimizing risk management, enhancing brand image and increasing revenue streams. On top of this, companies are able to provide significant benefits to communities and to the environment.

THE COMPANY IN BRIEF

Jerónimo Martins is an international Group based in Portugal that operates in the Food Distribution and Specialised Retail sectors. Food Distribution is our main activity representing more than 90% of the consolidated sales in 2016.

With 225 years of history in the food industry, since its foundation in 1792, the Group runs businesses in Portugal, Poland and Colombia that share a common vision: to democratise the access to quality food. In the Jerónimo Martins Group, we seek to manage in a balanced way the relationship between economic prosperity, social development and environmental preservation.

Why a natural capital assessment?

Our core business is directly related to nature since we depend on the existence of food to distribute it. In 2010 our Group developed an internal review to identify and assess the main risks and opportunities arising from our use of services provided by ecosystems. For this purpose, the Ecosystem Services Review methodology was used and eight ecosystem services were identified as priorities. In 2014, a second review was conducted and eleven ecosystem services were identified as priorities. Given our Group's direct and indirect dependencies on ecosystem services, our own impacts on these services and our past experience with the Ecosystem Services Review, implementing the recently published Natural **Capital Protocol** seemed like a natural step. By applying the Protocol we hope to continue to increase our experience and knowledge on the natural capital and ecosystem services upon which we depend.

What was the Natural Capital Protocol used for?

The Natural Capital Protocol was used to measure and value the comparative life cycle societal impacts of the use of PVC and alternative plastic materials (LDPE and PET) in packaging componentsⁱ for the company's Private Brand products sold in the Portuguese market (i.e. *Pingo Doce* and *Recheio*). The company aimed to evaluate the impact of a possible replacement of PVC in these packaging components.

What were the **outcomes** of the assessment?

Jerónimo Martins applied all nine steps of the Natural Capital Protocol which are, in themselves, quite a challenge in terms of dealing with complexity and microdata. Three scenarios, using different data sources, were analysed. Results varied greatly among scenarios. Therefore, and in order to reduce uncertainty, further analysis should be pursued to include additional sources of impacts and data, as a number of both conservative assumptions and simplifications were made throughout the assessment. Nevertheless, it was possible to conclude that, unlike previously expected, the impacts with higher social cost were those related to emission of air pollutants harmful to human healthⁱⁱ and not greenhouse gas emissions or toxic releases – such as dioxins – from PVC production.

What were the main **benefits** identified by Jerónimo Martins?

This application of the Natural Capital Protocol seems to contribute to a more in-depth knowledge, namely on the identification of: i) environmental risks upstream of the supply chain; ii) possible contamination of plastic waste stream due to the use of PVC; and iii) ongoing discussions on the development of regulations that may increase costs due to eco-taxes, waste disposal fees or increased complexity of plastic sorting by type of material used.

Next steps

Possible next steps include conducting further analysis on the identified key uncertainty points and integrating the results in the decision making process regarding a possible future replacement of PVC in Private Brand packaging components.

NOTES

 $^{\rm i}$ All PVC currently used in Private Brand packaging is not in direct contact with food.

ⁱⁱ Air emissions analysed include SO₂, PM_{2 5} and NO_x.

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a more sustainable world, where human pressures on the environment must inevitable be accounted for. By considering that companies, in general, exclude natural capital from decision-making, the Foundation attempted to reverse this trend. More specifically, it promoted several initiatives that aimed to **raise awareness** on the importance of taking into account natural capital in business management, it promoted the **Natural Capital Protocol Training Program**, which was attended by 55 participants from 36 large Portuguese companies; and it offered all companies the opportunity of participating in the **Natural Capital Protocol Challenge**, whose main goal was to demonstrate the business application of the Natural Capital Protocol. These trainings and all technical contents were facilitated and provided by the **Natural Capital Coalition**.

This case study was developed in the context of the Natural Capital Protocol Challenge, a project led by the Gulbenkian Oceans Initiative in partnership with the BCSD Portugal – Business Council for Sustainable Development and the Natural Capital Coalition.

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