

# BETTER BY DESIGN PROJECT



## FINAL REPORT Implementation in Company UNION (Peru)

Elaborated by  
CER / GRUPO GEA

**VERSION 1.0**  
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**NATIONAL CLEANER PRODUCTION CENTRE - PERU**  
**CENTRO DE ECOEFICIENCIA Y RESPONSABILIDAD SOCIAL (CER)**

## 1. GENERAL PROJECT INFORMATION

The “[Better by Design \(BBD\)](#)” sustainable lifestyles project started in 2017 under the umbrella of the UN 10YFP on Sustainable Consumption and Production, and works with major retailers operating in Nicaragua, Honduras, in particular, in food and beverage product value chains. The [BBD Project](#) aims to develop and test the application of Sustainable Product Development and Design (SPDD) and Sustainable Advertising Communication Campaign (SACC) concepts, methods, techniques and tools (SPDD and SACC Toolkit), as well as build local capacities in the region. It furthermore aims at developing and testing policies in developing and transition countries in order to promote sustainable production and consumption approaches in enterprises and other organizations.

The BBD project involved the implementation of SPDD and SACC tools in order to: first, include a life cycle approach in the manufacturing of products through the Hotspots Tool and, second, sustainable communication and marketing strategy of the assessed company through the [United Nations \(UN\) Guideline for Providing Product Sustainability Information \(Guidelines\)](#). The final result for the company is to increase economic benefits (through efficiency of production processes), address the environmental and social hotspots identified, and introduce a new product with sustainability features for consumers and create an effective communication for it.

Specific aims of company [UNION’s](#) participation in the BBD Project were to address eco-efficiency in the manufacturing process of their product (granola) and the hotspots identified in the value chain. To do so, company UNION agreed to incorporate more local providers, and biodegradable packaging, to improve the communication claim on the packaging to better inform the consumers about the benefits of the product, and to educate them on the adequate disposal of the packaging.

## 2. EXECUTIVE SUMMARY

Company UNION is a bakery industry created in 1929 which started as a small Production Center for the Colegio Unión de Miraflores (which later moved to the University “Universidad Peruana Union”). The company is part of the group of companies of the Seventh Day Adventist Church. Nowadays, company UNION is one of the leading brands in products that contribute to the prevention and preservation of health, with three brands: Union, Vita Rey and Superbom. The company has more than 60 types of products in its various categories: bakery, cereals, beverages, and supplements. These products are distributed through most important national grocery stores and retailers such as Metro, Wong, Plaza Vea and Vivanda Their target market is Peruvian families.



Company UNION’ environmental coordinator led the implementation process from December 2017 throughout January 2018. With support of Grupo GEA (National Cleaner Production Center at CER), the company identified potential areas of work and selected a suitable product, granola, for which the BBD approach was implemented and a win-win situation for the company and Grupo GEA was identified. The granola product is sold at \$4.5 in PET packages containing each 300 grams of granola.



Early 2018, the company and [Grupo GEA](#) worked on the collection of environmental and strategic data that was used for the Sustainability Product Assessment – SPDD component -related to the product selected, granola. Grupo GEA jointly with [3keel](#) and the [World Resources Forum \(WRF\)](#) applied the Hotspots Tool in the company to identify the environmental and social issues to be addressed by the company. Based on them, three issues were identified i) the incorporation of more local providers in the value chain, ii) the change of packaging material from plastic to a biodegradable one, and iii) the improvement of the communication content in order to inform the consumer about the social responsibility initiatives of the company and the adequate disposal of the packaging.

In the second semester of 2018, the project focused on the identification of sustainable packaging materials and providers for the new granola product and the improvement of the communication content on the packaging. [TIPA](#), international company with offices in Israel, Germany and USA, was identified as a potential provider of biodegradable packaging. A technical and economic feasibility study was undertaken concerning the new packaging material.

On the communication part, the [United Nations \(UN\) Guidelines for Providing Sustainability Information](#) was applied to assess compliance of the communication in the packaging of the granola product with the principles established in this Guidelines. It included a benchmarking analysis with communications of local competitors. This compliance assessment allowed a differentiation of company UNION's granola product from competitors' and identification of areas of improvement. This report on Compliance Assessment with the UN Consumer Information Guidelines is available as a stand-alone report.

Finally, the proposed new product including a new packaging and communication content was evaluated in two focus groups (in Peru and Mexico) and the results were presented at the Latin American Ecodesign Congress - [Ecodal 2018](#) - held in Puebla, Mexico (Oct).

This Executive Summary for PRODUCTOS UNION and the Compliance Assessment with the UN Consumer Information Guidelines are available [here](#).

### **3. SUMMARY OF THE FOCUS GROUP FOR THE NEW PRODUCT**

#### **3.1 FOCUS GROUP IN PERU**

The first focus group took place on 13 October and was composed of 15 students and professionals considered as millennials of the Union University: 11 women (73%) and 3 men (27%) between the ages of 19 – 23 years. The aim of the focus group was to identify their views regarding the biodegradable packaging of the new product (granola andina premium). More specifically, it was aimed to gather information on the following:

- Market potential of an environmental and social product.
- Purchase intention of the new product
- Potential consumer response towards the information claimed on the packaging (e.g. corporate social responsibility initiatives, description of the super-food contained).

Main results indicate that millennials:

- prefer an alternative packaging material to PET used to produce the current packaging.
- are interested in a product that is healthy and has a non-plastic packaging.
- do not recognize information and logos on recyclability, hence, millennials do not know how to properly dispose the packaging waste for its further recycling.

- want clearer information about recycling on the package.

Additionally, a survey was made to validate the focus group's results with the following findings:

- Preferred environmental and social improvements that would motivate consumers to buy the granola product are company's support to local social and environmental initiatives, the use of packaging with eco-friendly materials, the use and support of local ingredients, and significant health benefits of the product.
- Consumers would be able to pay between 0 and 33% in addition if there were clear environmental and social improvements related to the new granola product. The 2018 average price of the granola product is between US\$ 3.00 – 5.00.
- Consumers want to know more about the nutritional characteristics of the product. 74% did read the nutritional information in the packaging and 65% went further and researched in other sources to know even more about the product.
- Consumers are not aware of recycling practices. 60% does not recycle the packaging and 51% does not know how to recycle the package.

### 3.2 FOCUS GROUP IN MEXICO

The second focus group was held in Puebla (Mexico) on 29 October (2018) with about 20 students and professionals on eco-design. The aim of the focus group was to determine the preference of biodegradable packaging for the new product and the purchase intention. Three packaging proposals were presented (Figures 1, 2 and 3).



Figure 1. Biodegradable transparent packaging. Type 1



Figure 2. Biodegradable metallic-type packaging. Type 2



Figure 3. Biodegradable packaging with transparent cover and back-cover. Type 3

The focus group results were the following:

- The biodegradable packaging Type 1 was seen as too simple, so, participants suggested a change for a more appealing design.
- The biodegradable packaging Type 2 was not recommended since the product contained could not be seen. Consumers need to see the food product before making the purchasing decision.
- The biodegradable packaging Type 3, was the preferred option by far. The design was appealing (shining packaging) and potential consumers could see the content through the transparent cover.

On the Type 3 packaging option all (100%) participants agreed that they would be willing to pay more. 25% could pay US\$ 1.50 in addition, 37.5% would add US\$ 1.00 and the rest (37.5%) could pay US\$ 0.5 more.

### 3.3 CO2 AND WASTE GENERATION REDUCTIONS

A reduction of 10 ton CO<sub>2</sub> per year was estimated due to the change of packaging material with a bio-based compostable packaging. Waste reduction amounted to 2.6 tons (Business as usual waste generated amounts to 3.3 tons/a) assuming that 80% the bio-based compostable packaging lands in the right collection and composting sites. Since consumers are willing to pay up to 30% in addition, and by implementing eco-design recommendations towards more eco-efficiency in the product chain, company UNION estimates that savings will be generated and the additional costs of using a biodegradable packaging can be covered.

#### **4. CONCLUSIONS AND NEXT STEPS**

Company UNION was able to apply the sustainability concepts of the BBD approach in the assessment of their production and value chain. The user-friendly Hotspot Analysis Tool developed by 3keel and WRF, as well as the UN Communication Guidelines were key. Based on them, the company was able to define short and mid-term operational and communicational steps as follows:

##### **Short-term**

- Agree with suppliers on the joint extended responsibility of waste generated (of containers and packaging).
- Review the types of waste generated by providers of plastic packaging and consider more sustainable practices by providers.
- Change from PET plastic to compostable packaging to reduce waste. This change should be supported with accessible compostable facilities aiming at collecting about 80% of the new biodegradable packaging.
- Monitor the ingredients and materials inventory and use them following the First-In-First-Out (FIFO) method in order to reduce losses.
- Design an eco-efficient energy plan to reduce electric and gas consumption.
- Change the communication of nutritional, social and environmental characteristics of the packaging, according to the recommendations of this project.

##### **Mid-term**

- Define and monitor resource consumption indicators to track performance.
- Develop awareness and training campaigns for salesmen regarding adequate disposal and recycling of waste packaging generated.
- Switch foreign suppliers of ingredients to local ones, due to high logistic costs and high CO<sub>2</sub> generated.