FOOD WASTE PREVENTION PROGRAMME

Circular Economy Strategy

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TABLE OF CONTENTS

DEPARTMENT OF CIRCULAR ECONOMY
Nueva Pescanova Group

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PREAMBLE

Sustainable development and responsible action are key aspects of the business culture of the Nueva Pescanova Group.

The predominant economy today is linear, a model that consists of extracting, transforming, using, and throwing away, generating huge amounts of waste that is harmful to the environment. We need a change towards a more efficient and sustainable circular economy, based on the principles of reduction, reuse, and recycling.

We are committed to a circular economy by developing responsible and sustainable seafood, optimizing the definition and design of our processes, following efficiency and environmental performance criteria, and optimizing the use of natural fishing resources and organic by-products of our fishing and seafood processing activities.

1. PROCESS IMPROVEMENT

In our Sustainability Policy, we had already assumed that we want to make the most out of natural resources by maintaining their value and transferring it to the final product, and, obviously, to the consumer. We instil efficiency improvement in all our processes and we see it as key to halting food waste. We identify 3 stages of improvement: obtention of raw material(s); transformation/processing and circularity; and adequacy for consumption.

We start by reducing losses and waste in fishing operations, e.g., using specific sensors installed in the fishing gear to help reduce possible damage to the fish and subsequent rejections due to loss of quality. We pursue the maximum efficiency of the fishing operation, the use of selective fishing gear and the optimal use of the fishing product, and we have further equipped some of the new vessels with specific tanks to allocate fish viscera for subsequent use for fishmeal and fish oil upon offloading at the port.

Both during primary processing on board and later in the factory, we continuously improve the use of raw materials in the cutting and filleting processes, in the selection and production lines, minimizing losses due to non-conforming products. We are also committed to circular economy solutions for the resulting by-products, working on technical solutions within the Group and also in alliances with other companies and sectors in various countries, allocating these by-products for optimal recovery. Similarly, we optimize the logistics of packaging, palletization, and transport, always ensuring the cold chain is maintained to avoid quality losses and consequent rejections.

We also work on product and packaging innovation, adapting the formats to consumers' needs and preferences, in individual or family portions, or other formats suitable for the HORECA channel. The pre-cooked products, the ease of preparation and the most convenient and practical formats/packaging help enormously to reduce waste already in the consumption phase.

2. MANAGEMENT OF ORGANIC BY-PRODUCTS

We are committed to the optimised use of the by-products of our activity so that they do not become a waste and we believe that we must manage waste responsibly to minimize potential environmental impacts.

We collaborate in alliances with other companies in circular economy projects to implement technical solutions for the use of our organic by-products: fish offal, heads, bones, viscera, and skin, which are recovered for fishmeal and fish oil, and shrimp and prawns heads and shells (exoskeletons) are recovered for animal feed or fertilizer. We report the annual amounts of by-products managed per activity and company in the annual non-financial information statement (EINF) report. Similarly, other organic by-products that originated in the transformation and processing of our food products in the industrial centres are recovered in various ways by authorized operators.

3. LIFE REFISH PROJECT

The fishing and seafood processing industries are critical to the food security and livelihoods of millions of people. It is essential to ensure the efficiency and sustainability of these activities. In this project we focus on improving the performance of two processes:

- The use of unwanted catches, associated with the prohibition of discards sent back into the sea and the EU landing obligation, resulting in the reduction of waste from biological resources and the mortality of fishing species.
- The recovery of seafood by-products, reducing the loss of natural resources and the risk of health and sanitary problems in fish populations (because infected by-products are returned to the sea), in processes more efficient than the current by-products recovery in fish flour.

The LIFE REFISH consortium (Conservas Rianxeira of the Jealsa Group, OPROMAR, Pescanova España, Stolt Sea Farm, CSIC and Valora Marine Ingredients) gathers the main international players in this sector to demonstrate the feasibility of a biorefinery capable of improving sustainability (environmental, social, and economic) of the fish and shellfish industry, maximizing the value of landed discards and generated by-products.

Project name: *Flexible biorefinery to valorise discards and by-products of the European fish and seafood production.*

Reference: LIFE21-ENV-ES-LIFE REFISH/101074323.

Acronym: LIFE21-ENV-ES-LIFE REFISH.

Starting date: 01/09/2022; Ending date: 31/08/2025.

Through interconnected recovery processes (for example, hydrolysis, nanofiltration, vacuum evaporation), high-quality hydrolysates of proteins, oils, mineral fraction, collagen hydrolysates, gelatines, fish mince, chitin and chitosan would be obtained in a respectful way for the environment, being its value greater than the current one to produce fishmeal or fish oil.

This R&D project is aligned with our commitment to sustainability, it allows us to improve the use of fishing resources, increase efficiency and minimize environmental impact, contributing to the development of the circular economy.

4. SEA2TABLE PROJECT

The SEA2TABLE 4.0 project, in which Pescanova España (Nueva Pescanova Group) participates, has been supported by the Galician Agency for Innovation (GAIN) through a resolution dated February 24, 2021, within the framework of the fourth call for projects under the 'Factory of the future, smart and sustainable factory of industry 4.0' programme.

The project (*Development of digital multi-factory technologies 4.0 in the smart and sustainable food industry*) has the following main objectives:

- Implement a new factory model in the food industry that promotes sustainability and production efficiency through the application of artificial intelligence technologies in a multi-factory environment.
- Achieve a digitized supply chain that guarantees quality, safety, and traceability throughout the value chain, thus protecting the final consumer against food fraud and, in turn, making it possible to ensure that the final product comes from sustainably managed resources.
- Streamline decision-making and make the supply chain more flexible through the consolidation of all the information collected in the three industrial centres that the Nueva Pescanova Group has in Galicia.

With the project, efficiency is being increased and continuous improvement is promoted in the processing plants, which translates into loss reduction and the consequent reduction in waste generation.

5. INNOAQUA PROJECT

The Project "*Innovative Approaches for an Integrated Use of Algae in Sustainable Aquaculture Practices and High-Value Food applications*" (INNOAQUA) is subsidized by European funds from the HORIZON-CL6-2022-FARM2FORK call. The general objective of the project is to improve the competitiveness and sustainability of the EU aquaculture industry through the integration of innovative, demand-driven solutions using microalgae and macroalgae.

The role of the Group consists of testing the use of products resulting from the research, such as:

- Seaweed protein from sustainable crops, either as an additional ingredient for the preparation of mixed products or as an alternative to fish protein for vegan products of marine origin.
- Incorporation of omega-3 from seaweed into vegan products.
- Biofilm from algae by-products, for use as packaging for seafood products.

6. PEZCONOCIDOS PROJECT

Starting in October 2022, PEZCONOCIDOS is a project with which we seek to value the integral use of fishing resources. This is a pioneering gastronomic innovation initiative, created by the alliance of Nueva Pescanova, chef Ángel León and Compass Group, to maximize the use of fishing products thanks to the development of new products made from fish that are rarely consumed in the present.

Ángel León will create new ways of consuming these species that originated in the Nueva Pescanova Group's fishing activity. Nueva Pescanova will then be in charge of preparing these recipes on an industrial scale. For its end, Compass Group will serve these innovative proposals in the menus it offers in its gastronomy services.

The chef and the Compass Group team have seen first-hand the fishing activity conducted by the Nueva Pescanova Group in Namibia. They have identified and selected the non-commercialized species that, thanks to this project, will finally reach the consumer's tables.

7. INNOVATION IN THE NUEVA PESCANOVA GROUP

More information about the innovation activities in the Nueva Pescanova Group is available at https://www.nuevapescanova.com/en/engagement/corporate-social-responsibility-2/innovation/