

INDENA AT THE FOREFRONT FOR THE CHALLENGES OF SUSTAINABILITY

THE BOTANICAL PRODUCTS DESIGN CAN BE A SUSTAINABILITY ASSET: MIRTOSELECT® AND ENOVITA® INCORPORATES INDENA'S TRUE VISION OF CIRCULAR ECONOMY

Milan, 16th November 2023 – Indena keeps relentlessly working to generate sustainable impact on its stakeholders, cultivating with care its own precious circle: Nature, Technology, People. This actually means actions like sustainable management of supply chain, avoiding waste along the production process, using renewable energy in the plants, taking care of workers' wellbeing, producing sustainable extracts for human health and so on. In such a framework, the application of the principles of circular economy is a very important commitment of the company, which applies those principles also in product design, as in the case of two of the most important extract in the Indena's portfolio: Mirtoselect® and Enovita®.

Mirtoselect®, Indena's innovative bilberry extract, and Enovita®, its grape seed extract, incorporate the company's true vision of circular economy.

*"Today, more than ever, we are certain that a stronger commitment to sustainability has become unavoidable and we work to face some very urgent challenges, such as biodiversity loss, food waste, climate change, health issues and social vulnerability – explains **Francesca de Rensis, Marketing Director at Indena** -. Indeed, our strategy implements circular economy in product design to reduce our environmental footprint up and down the value chain and increase our efforts to upcycle food waste. What does it mean actually? It's about transforming what is usually considered "waste" into raw material or energy – continues de Rensis -. Through business models such as reuse, companies can reduce greenhouse gas emissions, pollution and biodiversity impacts: Indena considers waste and pollution as design flaws, rather than inevitable by-products of the products it makes".*

MIRTOSELECT® AND ITS IMPACT ON SUSTAINABILITY CHALLENGES

MIRTOSELECT® is Indena's innovative bilberry extract which has a positive impact on the 5 major global sustainability challenges: biodiversity conservation, waste reduction, climate change, social issues and health.

Biodiversity conservation and social issues are challenges addressed mainly through a responsible management of fruit picking. In the territories where wild bilberries come from, in the Northern and Eastern Europe, bilberry picking is a cultural activity with crucial economic, social and environmental impact. Bilberry picking is now also encouraged by some governments as a way to face biodiversity issues caused by the over-exploitation of forests' natural resources, and timber trade in particular.

MIRTOSELECT® production aims to face zero waste goal. Processing about 3,000 tons/year of bilberries would normally translate into 411 tons of waste to be discarded (13,7% of the total). But Indena's production process is able to use all material, leading to 400 tons of recycled vegetal material every year.

In fact, all fruit waste is upcycled by Indena. The bilberry fruit has a double use: it is squeezed by the supplier to produce bilberry juice for the food market and it is extracted by Indena to produce the nutraceutical product. The process implemented by Indena includes specific steps: separate bilberry extract from sugar, part of which is reused to standardize the extract and the rest is allocated to the food industry; separate bilberry and ethanol, which is reused in the production itself; fiber and seeds remaining after the first extraction and ethanol separation are reused twice, thus creating value with a by-product: first producing Omega-3 oil for the cosmetics and/or food industries and remainders being sold to the animal food industry.

Wastewater reuse is another commitment of Indena, which processes its bilberry extract in a dedicated plant where the use of cooling water is minimized thanks to cooling towers, where water is put in contact with the air to reduce temperatures so that it can be potentially reused indefinitely. After the production process,

wastewater derived from the production process is first treated internally and then sent to the municipality filtration system.

As for support to human health, MIRTOSELECT® may be effectively helpful as a nutraceutical product with positive proven benefits in vascular health and ophthalmology.

ENOVITA®: ALL THE BENEFITS OF GROWING HEALTH AND SUSTAINABILITY

Crafted from the essence of grape seeds mainly harvested from local vineyards, Enovita® not only embodies a natural approach to support optimal blood pressure and mood, but also proudly embraces sustainable and circular principles.

Enovita®'s commitment to sustainability begins with the first step in the supply chain: the use of grape seeds primarily sourced from Champagne and other French wine regions, located near Indena Tours' s production site, reduces the carbon footprint.

With unwavering dedication to minimizing environmental impact, the production process is implemented with a comprehensive waste recovery system, ensuring that production byproducts find new life rather than burden the environment.

Enovita®'s production embraces then the principles of circularity and upcycling, because the grape seeds used for extraction are essentially a byproduct of winemaking. Residual materials are transformed into seed oil for the food industry, steam from a biomass boiler, biogas suitable for energy generation, and fertilizers used to nurture the soil anew.

“By promoting local sourcing, meticulous selection of raw materials, and innovative reuse of byproducts, Enovita® champions responsible production and contributes to the pursuit of good health and wellbeing, aiming to achieve the UN’s Sustainable Development Goals – ends Francesca de Rensis.

Indena is the leading company dedicated to the identification, development and production of high quality active principles derived from plants, for use in the pharmaceutical and health food industries. Backed up by a century of botanical experience, the company owns 100 patent families, has published more than 1000 scientific studies and cooperates with the world's most prestigious universities and private research institutions. Indena employs over 900 staff, investing a significant amount of its annual turnover in research, making this activity the key to its success. Headquartered in Milan, Indena has 4 production sites and 5 international branches throughout the world and manages sales in more than 80 countries. The company's experts communicate and interact constantly with the major international regulatory authorities and cooperate on the update of all the main pharmacopoeias.

CDMO activities are the priority in Indena's strategic vision. Today, Indena has a multipurpose GMP plant equipped with reactor ranging from 250 lt to 10,000 lt (Stainless Steel, Hastelloy, Glass-lined); a kilo lab LK2 to offer different capacities for products at the highest containment level (OEL 20 ng/m3 or OEB5); two spray dryers, large and a mid-size, working with organic solvents; a 20-liter hydrogenator being complemented by a 250-liter hydrogenator (ready at the end of 2023) to satisfy a wider demand for this kind of chemistry.

Find more on [indena.com](https://www.indena.com)

Indena press contacts

bcw-burson cohn & wolfe

Luisa Cavagnera: luisa.cavagnera@bcw-global.com

Ph. +39 3497665890