



РЕПУБЛИКА СРБИЈА
Министарство
заштите животне средине
REPUBLIC OF SERBIA
Ministry of
Environmental Protection



Circular Economy

Women's Innovations for a Sustainable and Circular Future





Circular Economy

represents a modern economic model that connects economic growth with the preservation of natural resources and reduction in negative environmental impacts of business activities. In addition to its significant contribution to environmental protection, its application can indirectly **help reduce social inequalities**, including the **gender gap**, through creating new green jobs, encouraging social innovation, developing local businesses, and strengthening women's economic independence.

When women are included in these processes, the benefits are manifold: the circular economy becomes a powerful tool for the economic empowerment of women and for building a fairer society. To fully realize this potential, it is necessary to ensure equal opportunities for women in education, provide additional training and access to finance, as well as support through mentoring programs, in order to improve their participation in the green economy. This also means dismantling stereotypes that limit women's access to technology and environmental sciences.

Greater inclusion of women in the green and circular economies is not only a matter of gender equality — it is also a matter of sustainable development. When women gain access to knowledge, funding, and entrepreneurial opportunities in green sectors, they contribute to innovation, strengthen local resilience, and accelerate the green transition. Women entrepreneurs bring forward new ideas and solutions to better address community needs, particularly in areas such as energy efficiency, waste management, recycling, and local manufacturing.

Involving women in circular economy processes means building a fairer, more resilient, and more prosperous green economy that benefits society as a whole. Under such conditions, the circular economy can contribute to creating a more inclusive and sustainable society.

In European and Central Asian countries, including Serbia, women remain insufficiently represented in green jobs and in the sectors of the future. In Serbia, women make up only one in three entrepreneurs, and most of their businesses fall into the category of micro-enterprises operating with limited resources and restricted access to markets and financial support. At the same time, in sectors with significant potential for the application of circular models — such as waste management, agriculture, and construction — women account for only 10 to 27 percent.

These figures indicate that women are still not sufficiently included in green transition initiatives, but they also reveal the tremendous potential for their increased participation in the jobs of the future and reinforcing their role in the circular economy.

Nevertheless, despite structural constraints, women are increasingly becoming active participants and recognized drivers of change in fields such as sustainable agriculture, eco-design, recycling, natural product manufacturing, and the development of circular services. Their businesses demonstrate that innovation, community care, and sustainability can form the foundation of a new economic model that brings benefits to both society and the environment.

Recognizing the significant contribution of women to the circular economy, the Ministry of Environmental Protection and the United Nations Development Programme (UNDP) in Serbia launched the public call **“Public Call for Strengthening the Role of Women in the Circular Economy”** with the support of the Global Environment Facility (GEF). The aim of this initiative was to provide women entrepreneurs with support to transform their ideas into sustainable business models and become drivers of green transformation within their communities.

The public call announced in March 2025 attracted more than 70 diverse ideas submitted by women from various sectors, ranging from social entrepreneurship to agriculture. Such a response demonstrates the growing willingness and motivation of women to actively participate in Serbia's green transformation. 20 initiatives of women entrepreneurs were supported from the multitude of inspiring ideas, with awards ranging from USD 5,000 to USD 20,000, totalling USD 240,000.

Circular Awards were granted to innovative solutions that demonstrate how circular economy principles can be brought to life in practice — through reducing waste, reusing materials, using energy more efficiently, and developing new business models. Supported projects highlight the strength of **women's entrepreneurship** across a wide range of sectors, including agriculture, tourism, fashion, services, and digital technologies. The recipients of the Circular Awards not only advance their own business activities through their ideas, but also inspire women **across Serbia** to adopt sustainable practices and jointly build a circular future where **women are key stakeholders of the green transformation**.

An added value of the public call is the effort to connect awarded teams and encourage them to continue exchanging experiences. Such collaboration creates spaces to share knowledge, ideas, and support — forming communities of practice that empower women,

strengthen their visibility, and encourage joint projects. Networking among women entrepreneurs plays a crucial role in the development of the circular economy. Through collective action, women share knowledge and resources, support one another, and create opportunities for new ideas and innovation. Women-led businesses become more visible thanks to such networking, gaining easier access to markets, partners, and investors, and are given the opportunity to jointly influence the development of sustainable practices and local communities.

These networks not only strengthen the economic independence of women, but also foster cooperation, solidarity, and collective learning. Connected women become drivers of innovation and change, linking local initiatives through shared ideas that accelerate Serbia's green transformation. Through the public call and the awarding of the Circular Awards, many women entrepreneurs have already demonstrated how innovation, sustainability, and social responsibility can successfully be put into practice.

Discover the supported initiatives that are reshaping the way we think about business, nature, and the future — and inspiring other women to take their first steps toward the circular economy.



Okružena – Closing the Loop from Ajvar to BioSunder

Implemented by: Artisanal workshop “Nanin recept s juga” from Vranje

The Okružena project transforms waste generated during ajvar production—such as pepper skins, stems, and pulp — into an innovative, fully biodegradable alternative to conventional cleaning sponges.

This is how the initiative introduces a circular model into food production, combining tradition and innovation while reducing the amount of waste that would otherwise end up in landfills. The production process relies on short supply chains that ensure all components are sourced from the local community, further contributing to the project’s sustainability. Okružena also applies an innovative approach by integrating modern technologies — automated labelling machines and digital resource-monitoring tools — which ensure greater efficiency and transparency throughout the process, including real-time monitoring of environmental impacts. Women from rural areas around Vranje are actively involved in the production process, which supports their economic empowerment and strengthens local networking. A series of educational workshops on the circular economy and sustainable business development was organized for them, helping them acquire new skills and expand their economic opportunities.



01

Agroštit – Helping Young Trees Grow

Implemented by: Company “Kuerk DOO”
from Beočin

The Agroštit project develops an innovative, environmentally friendly product made from recycled rubber granules, designed to protect young trees in agriculture, urban greening, and municipal landscaping systems.

When placed around the base of a tree, Agroštit prevents grass from growing and enables trimming without physical contact from grass-cutting equipment, which is one of the primary causes of mechanical damage to young plants. It also acts as a thermoregulator — retaining moisture during the summer and insulating the root from freezing temperatures during the winter. Thanks to its stability, Agroštit remains in place even under strong winds and provides optimum conditions for young trees to grow. This circular solution gives new life to a material that would otherwise become waste, and by extending the lifespan of rubber granules, it prevents unnecessary landfill accumulation and reduces the need for virgin materials. The product can be customized to meet various requirements and can be used across different industrial, landscaping, sports, and household applications.





Od ostatka do ekstrakta – Cold-Pressed Oils from Berry Seeds

Implemented by: Entrepreneur Stana Karić
from Brus

The “Od ostatka do ekstrakta” project introduces a circular process into local food production by using berry seeds (raspberry, blackberry, strawberry) left over from juice and syrup making.

High-quality cold-pressed oil is produced, rich in antioxidants, vitamins, and fatty acids. Specialized drying, grinding, and pressing machines transform plant by-products into valuable resources, reducing waste and creating new products. Circular principles are applied at several levels: using byproducts as raw materials, low-energy processing, redesigning the value chain, and reusing packaging. The remaining press cake can be used for natural cosmetics or dietary supplements, fully closing the material cycle. The project plans to process 500–800 kg of seeds annually, testing and preparing products for market launch. Special focus is placed on involving women from rural communities in Brus through training that supports employment, entrepreneurship, and economic empowerment.



03

MEA Revolution – Sustainable Beauty from Local Resources

Implemented by: Company “MEA Revolution DOO”
from Čačak

The MEA Revolution project develops a sustainable cosmetics manufacturing model based on extracting active compounds from leftover berry fruit using environmentally friendly solvents, with up to 60% lower carbon footprint compared to traditional organic solvents.

Thanks to its simplicity and the low cost of the technology it uses, MEA Revolution is ideal for application in small manufacturing facilities. Using locally sourced raw materials instead of imported components cuts transportation emissions and strengthens local value chains, thereby directly applying circular economy principles. Through its innovative approach and technology that enables the extraction of active compounds in an energy-efficient manner, the project introduces three new cosmetic products to the market: anti-aging and anti-urban stress day cream, regenerating effects lip, brow and eyelid detox balm/stick, and a peeling mask.





LALU RE-PAK – Circular Transition in Street Food Production

Implemented by: Company “FAST FOOD LALU”
from Belgrade

The LALU RE-PAK – Romani Woman Leading the Circular Transition in the *Street Food Sector* initiative develops a sustainable and inclusive model for the hospitality industry, demonstrating that the circular economy is not only reserved for large systems, but is equally applicable to small entrepreneurs.

As a sector traditionally based on single-use items, street food is transformed into a circular model by returning packaging into circulation and giving food a second life. The project introduces multi-use, eco-friendly packaging made by women from the Roma community, thereby eliminating plastics. In addition to sustainable packaging, the focus is also on reducing food waste through the production of crackers, pastries, and seasoned chips from leftover bread. Customers who bring their own packaging are offered discounts, and by street-level selling from an electric vehicle the owner intends to bring her products and the message of how important sustainable practices are to customers in city markets, community events, and across 20 Roma communities.

05

Biolarva Tek – Biological Larvicide Against Mosquitoes

Implemented by: Company “BioLarva Tech”
from Belgrade

The “Biolarva Tek” project develops an environmentally friendly larvicide for mosquito pest control, safe for humans, animals, and the entire aquatic ecosystem.

The innovation is based on microbiological agents that attract larvae and effectively eliminate them before they develop into adult mosquitoes and potential disease carriers. The production process uses plant-based raw materials and agriculture and beermaking by-products, reducing waste and supporting circular economy principles. The project is led by a all-female team of molecular biologists, promoting female leadership in sciences and sustainable technology development. The goal is to develop and register a market-ready functioning larvicide, applicable in various environments. This is how Biolarva Tek contributes to public health, biodiversity protection, and the of new job creation in biotechnology. The project is designed to share its results and know-how with public enterprises, health and environmental organizations, as well as entrepreneurs interested in developing their businesses in the field of biocide agent application.





Od prirode, za prirodu – Sustainable Hazelnut Production Through Women's Innovation

Implemented by: Entrepreneur Jasna Mauković from Šid

This initiative enhances sustainable agriculture through applying circular economy principles and environmental technologies, with a focus on hazelnut cultivation and their processing into cosmetic and food products.

The household behind this initiative already produces natural cosmetic products successfully, while humus production represents a new sustainable practice in their operations. The work is carried out by women from manufacturing to promotion and sales, reinforcing their economic independence and their role in the local community. The business model is based on closing the manufacturing cycle — all waste from cultivation and processing is transformed into new products. Plant biomass is used to produce humus, while by-products from oil pressing are turned into gluten-free protein flour, which helps eliminate waste and increase the economic value of each production stage. Expected measurable results include an increase in hazelnut yield of up to 100% per hectare, complete elimination of synthetic fertilizers, a reduction of pesticide use by more than 80%, annual production of at least 1–2 tons of humus per hectare, a 50% increase in cosmetic oil production capacities, and a reduction of CO₂ emissions by 10–15%. The initiative is applicable in various regions of Serbia and demonstrates that ecological and profitable agriculture can go hand in hand.

07

Circular Creative Economy for Knjaževac – Koštica dizajn

Implemented by: Company “GRIN INTERNATIONAL”
from Knjaževac

The “Koštica dizajn” initiative develops the production of cushions and stools, using waste from the textile and leather industries for their outer materials, while naturally dried sour cherry pits are used as filling, thereby reducing the amount of waste that would otherwise end up in landfills.

The advantage of these products is that they are made from pre-used natural materials — leather, cotton, and bio-waste — and the filling can be supplemented or completely replaced, thus extending the product's lifespan. Cherry pits move easily and adapt their shape, ensuring good air circulation and user comfort. They can be used for filling cushions and other utility items. They can even be heated or cooled, using the filling as a thermal pad. Cherry pits are also easy to recycle. The project connects local manufacturers in the Municipality of Knjaževac with circular economy and sustainable design principles, creating innovative, eco-friendly products. A special focus is placed on employing women from vulnerable groups, including mothers of children with disabilities and long-term unemployed women, thereby contributing to inclusion and economic empowerment within the community.





Zero Waste Protein Cookies

Implemented by: Company “Anđeli delicije DOO”
from Belgrade

This circular initiative develops a healthy sweet treat and high-protein products using local grains that are a by-product of the brewing process, rich in plant proteins and probiotics, with no added sugar.

In this way, waste from breweries is transformed into a valuable raw material to make cookies, bars, and other vegan products. The focus is on creating nutritionally rich, high-quality products, while simultaneously addressing the problem of waste in the brewing industry. The plan is to dry the spent grains in the next development stage — to be used later in the production of various high-protein food items such as cakes, cookies, bread, and pasta. This is how the project promotes circular economy principles, local resources, and sustainable food production.



Green Cosmetics Inspired by Biowaste – A Sustainable Step Toward the Circular Bioeconomy

Implemented by: Company “Sofi DOO”
from Petrovaradin

By making biochar made from apricot pits, this initiative proposes an innovative circular economy model which reduces biowaste from the agriculture and food industries, extends material use, and preserves natural resources.

Biochar is used in manufacturing face masks that eliminate toxins and impurities, providing a sustainable alternative to commercial activated charcoal. Biochar can absorb impurities and sebum, but also release nutrients or bioactive compounds into the mask, reducing the need for additional ingredients. Equally important is the fact that biochar made from apricot pits is a stable form of carbon; when incorporated in products, it can capture carbon over a prolonged period, helping to reduce overall emissions. This production model also offers economically viable alternative raw materials, reducing the market price of the final product by up to 30%.





Spasimo vunu – From Waste to Resource

Implemented by: Association “EkoValovi” from Belgrade

The “Spasimo vunu” initiative transforms raw sheep wool, which is often discarded as waste in Serbia, into a valuable resource for the production of natural, handmade products and agricultural materials.

Through the establishment of a Women’s Cooperative Incubator, the project directly empowers at least 50 women from Barajevo and Knjaževac by providing practical training in felting techniques. Women are provided with access to a shared community workspace, tools, mentoring support, and channels to place their products on the market. This will provide traditional crafts a new role in a contemporary, sustainable business model combining design, environmentalism and local development. The project contributes to greenhouse gas emission reduction, supports entrepreneurship and promotes wool as a natural, multi-purpose material. Within the “Spasimo vunu” initiative, there are plans to research and promote the use of unprocessed wool in gardening (mulching, insulation), representing a new and very rare practice in Serbia.



Priroda u tvojoj kosi – Natural Shampoo Made with Ash

Implemented by: Company “S.E.L.O 1888”
from Malo Crniće

The “Priroda u tvojoj kosi” project develops the first natural ash-based shampoo in Serbia, inspired by traditional recipes and circular economy principles.

The shampoo is made from recycled wood ash and is enriched with medicinal herbs such as rosemary, lavender, nettle, and chamomile, with zero sulphates or parabens. This environmentally friendly product promotes healthy hair care while reducing the amount of waste, using locally sourced renewable resources. The project includes the employment and training of women from underdeveloped areas, involving them in all production stages — from preparing ingredients to marketing and sales. Through a refill and reuse system of their recyclable packaging, the initiative creates a sustainable business model spanning tradition, innovation, and women’s entrepreneurship.





Prirodni sok od tamjanike TamTaNika – Processing of Biomass Residues Into a Superfood Additive

Implemented by: Entrepreneur Mina Vereš from Blace

The “TamTaNika” project applies a circular model in natural juice making from the tamjanika grape variety, by transforming grape pomace residues into the functional *SuperNika* powder used as a superfood.

At a family farm in Blace, a process combining traditional juice making with a modern environmental approach was made, slashing carbon dioxide emissions and waste. Project activities include all-natural juice making from the autochthonous tamjanika grape variety (TamTam sok), intended primarily for children and adults who do not consume alcoholic beverages, as a healthy and refreshing alternative. The pomace left over after juice making is further processed by drying and grinding to obtain a completely new product, SuperNika. This powder is rich in dietary fibre, polyphenols, protein, and cellulose, and can be used as a functional food additive. This initiative shows how a local family farm can combine tradition, science, and sustainability in creating high added value products.



Probudi kožu – Oily Body Scrub Made From Corn Bran

Implemented by: Company “Vodenica Dren”
from Mionica

The “Probudi kožu” project is launched by the Dren watermill from the village of Ključ, which traditionally mills corn, and now uses its by-product, corn bran, to create a natural oily scrub.

This initiative applies the circular economy principles, turning waste into a resource and reducing industrial waste by 30%. Unlike standard manufacturing models, this project uses its own waste as the feed-in raw material, eliminating procurement and transportation costs, while enabling complete supply chain control. The product is created by a master pharmacist's recipe and combines corn bran with medicinal herbs and natural oils. The project engages women from rural areas, including women with disabilities who undergo training and create revenue generation opportunities for themselves. “Probudi kožu” connects tradition, innovation, and sustainability in creating a one-of-a-kind, locally sourced natural cosmetics brand.





Brigid BIO krug – Waste-Free Plants

Implemented by: Company “FDS PROVANSA.RS”

from Vrbas

The “Brigid BIO krug” project develops a sustainable model for making substrates and indoor plant care products, without the use of peat and plastic.

The focus is on BIO fertilizer developed exclusively from plant-based and composted materials, replacing synthetic fertilizers and introducing 100% biodegradable packaging. These products are made of secondary raw materials from the food and plant processing industry, such as coconut fibre, worm castings, and plant biomass, thereby turning waste into a resource. This initiative also includes the development of a mobile application to serve users as a smart assistant in growing plants by providing customised advice on watering, fertilizing, or the need for repotting. “Brigid BIO krug” applies a holistic approach, from sourcing raw materials, through production, to digital support for the end user, demonstrating the “waste-free plants” principle in practice.



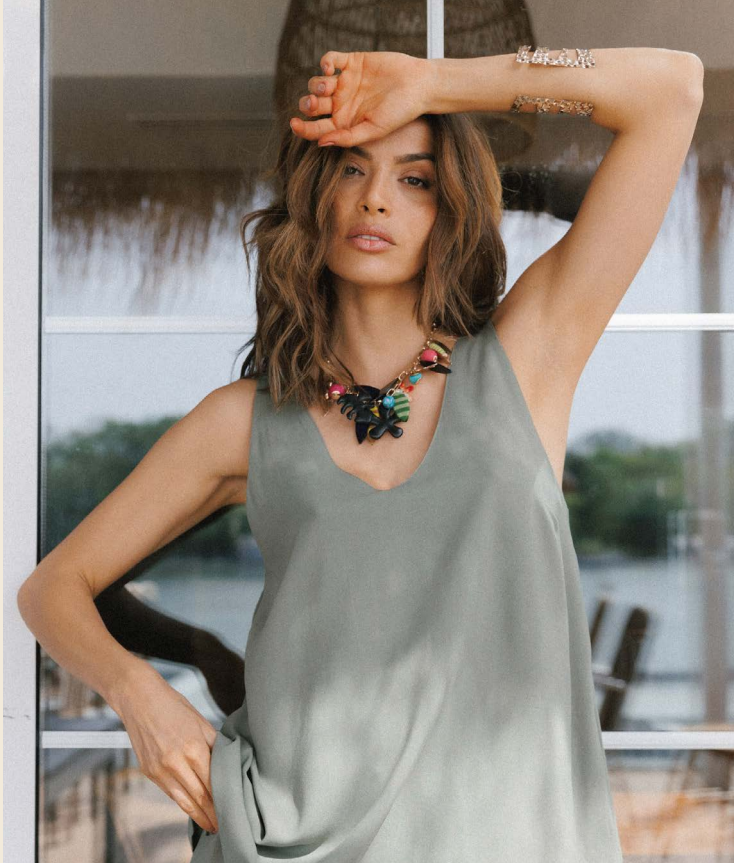
MEKIŠA – Indestructible, Soft and Washable Books for Children and Babies

Implemented by: Company “HUPA DOO”
from Bačka Topola

“MEKIŠA” introduces a circular approach to children’s publishing by producing indestructible, soft, and washable books for children and babies.

The books are made from non-woven textile resistant to wear, tearing, and washing, which enables long-term use and reduces the need for frequent replacement, with a lower environmental footprint. Seven new titles are being developed in addition to six existing ones, pending registration with the National Library of Serbia. Alongside their innovative book-making concept, MEKIŠA creates memory games and puzzles, adding to their children-focused product palette. Nine women from various backgrounds will be hired in the course of project implementation, and another of their goals is to develop a dedicated promotional and sales website.





CozyReWear – Reuse and Recycling of Textiles

Implemented by: Company “COZY2WEAR”
from Belgrade

The “CozyReWear” project develops a sustainable model in the fashion industry through full circularity of textiles, from design and production to reuse and recycling.

“Cozy2wear” already uses organic cotton and natural materials, and this initiative develops a tailoring hub for alterations and redesign of returned garments, with the goal of reintroducing them to the market. Customers will be incentivised by discounts to return used clothing items, while unusable material will be recycled and processed at the Women’s Recycling Centre in Užice, which promotes social inclusion and employment of women. In this way, CozyReWear closes the full waste-free fashion cycle and raises awareness on responsible consumption.



Eco×Deco – Furniture Made From Construction Textile Waste

Implemented by: Company “Zona eksperymentu”
from Belgrade

The “Eco×Deco” initiative transforms construction textile waste into modern furniture and decorative items: cushions, floor cushions, beds, tables, chairs for interior and exterior use.

The production process includes collecting, sorting, washing and grinding waste membranes; design and cutting sheet development and sewing the pilot and final collections. A minimum of 300 kg of waste is expected to be used, preventing approximately 690 kg of carbon dioxide emissions. The manufacturing process will include women from the textile sector, who will work on sewing, finishing, and manual processing of products made from waste membranes. The project also includes creating a visual brand identity and a web platform to handle sales. The project is implemented by Zona eksperymentu in cooperation with the Oks pillows brand and ArTech Engineering.





Modular Home Units (MHU) – Modular Houses

Implemented by: Entrepreneur Olja Radovanović from Ralja

The “Modular Home Units (MHU)” project develops an innovative system of modular houses that are easy to manufacture, transport, and assemble, with minimal environmental footprint.

The goal of the project is to enable a fast, inexpensive, and adaptable housing unit that can be easily customized to different living needs in urban and rural environments. The houses are made from local and recycled materials, reducing carbon dioxide emissions by up to 50% compared to traditional construction. The model includes the establishment of micro-production centres where women will handle key stages of design, manufacture and assembly. The first prototype will be completed and tested in real-life conditions, with a showcase of technical specifications and 3D visualization. MHU combines sustainable architecture, circular economy, and women entrepreneurship to create affordable and green housing.



Mreža industrijske solidarne simbioze – MISS

Implemented by: Company “Zavičaj u tegli”
from Belgrade

The MISS project integrates a network of rural women and female social entrepreneurs into sustainable supply chains of food and natural cosmetics supply. By improving their digital platform, women entrepreneurs receive support for advancing environmental and social business standards.

www.industrijskasimbioza.rs

More than 50 women will be included, with waste reduced by at least 30% and carbon-dioxide emissions by 5–10%. The project connects manufacturers through a social franchise and the application of circular practices, such as creating soap-based insect repellent made of plant residues. MISS promotes sustainable entrepreneurship, digital transformation, and solidarity-based economy in rural communities.



"The support we received was crucial for starting the research of the nutritional properties of the flour made from grape pomace, after the production of 'TamTaNika' grape juice. This project represents our first systemic step toward the full utilisation of waste and the creation of new, healthy products from local resources."

Mina Todić, Prirodni sok od tamjanike TamTaNika –
Processing of Biomass Residues Into a Superfood Additive

"The Circular Award enabled us to turn our idea into a concrete product and to raise fruit residues to the level of a valuable resource, instead of them ending up as waste. The support throughout the whole process was clear, timely and encouraging, and this experience opened up new opportunities for development, empowered many women from rural areas and gave us the confidence and motivation to continue creating new circular products."

Stana Karić, Od ostatka do ekstrakta,
cold-pressed oil from berry seeds

"We used the Circular Award to develop a new, improved version of our cookies. The 'Andeli' brand is already recognized in the market by our oat-based cookies, so this Zero Waste cookie will hold on to the existing base. In the new recipe, we use spent grains that remain after beer production, whereby the fermentation process removes most carbohydrates, while preserving nutritional value. This gives us a rich source of protein, omega fatty acids and vitamin E, which we used to create the first protein cookie for the Serbian (and wider) market that is rich both in protein and fibre. Each cookie contains as much as 10 g of protein."

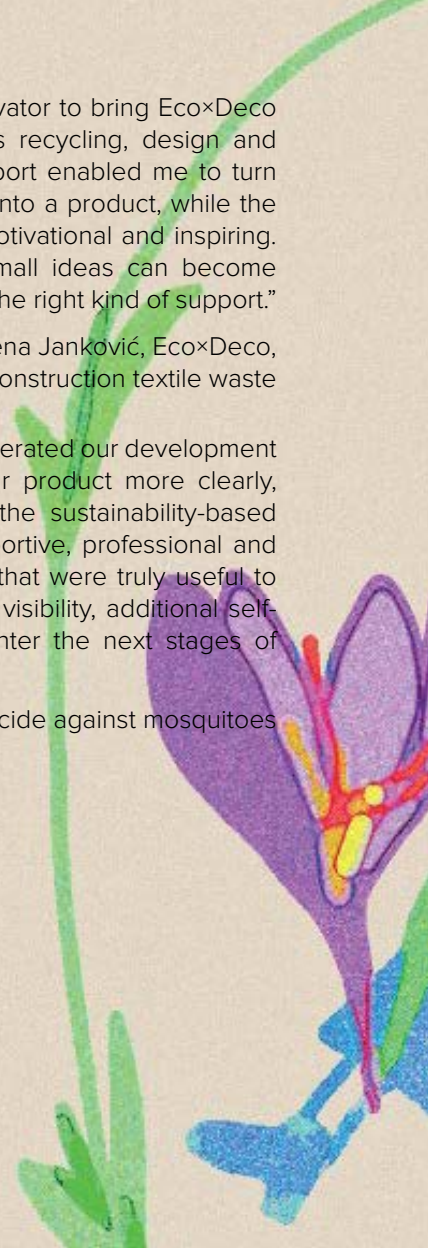
Milica Ličina, Zero Waste Protein Cookies

"The Circular Award was crucial motivator to bring Eco×Deco to life as an initiative that combines recycling, design and women's entrepreneurship. The support enabled me to turn materials that usually have no value into a product, while the whole process was very concrete, motivational and inspiring. This experience showed me that small ideas can become significant steps forward when given the right kind of support."

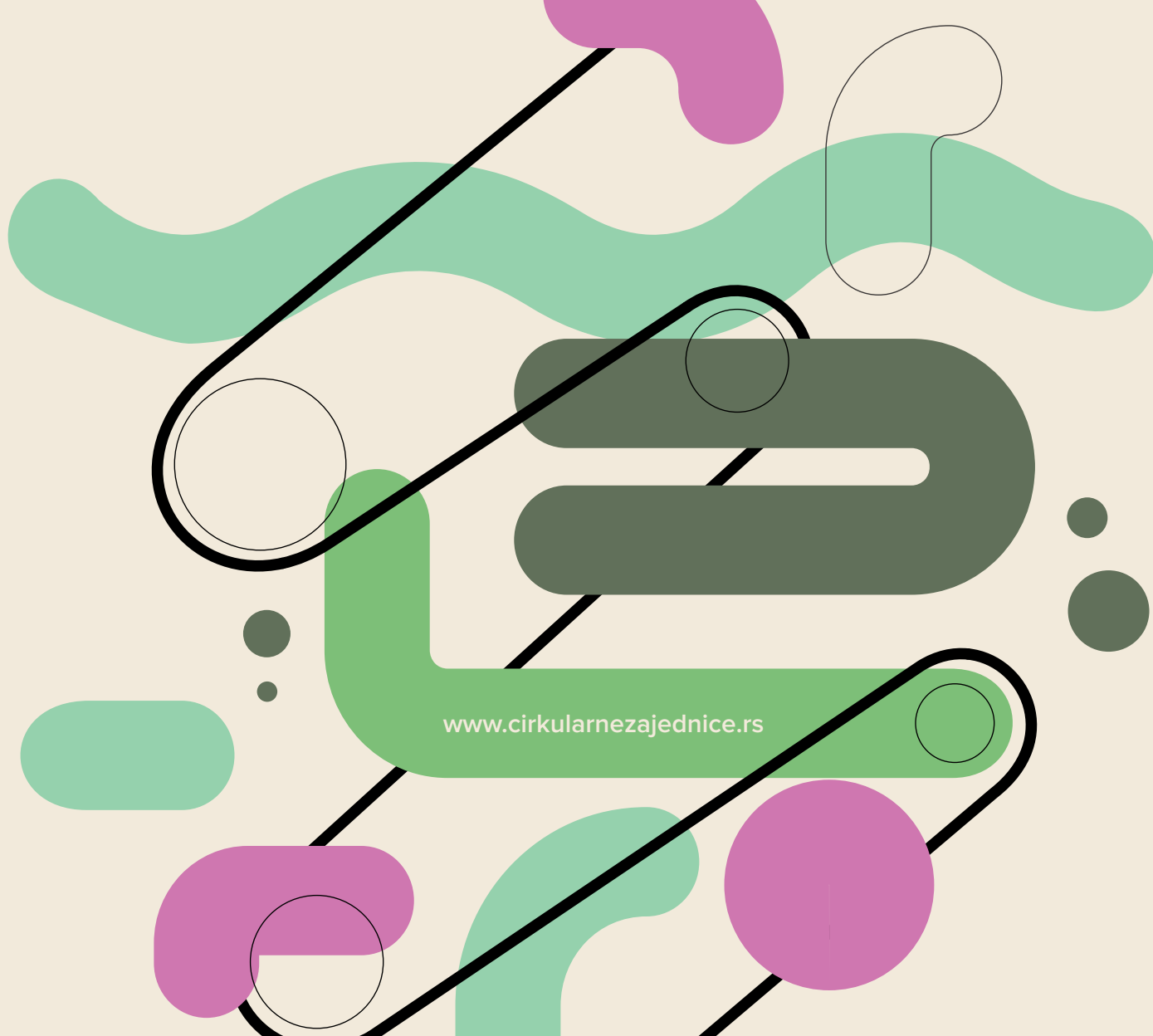
Jelena Janković, Eco×Deco,
furniture made from construction textile waste

"The Circular Award significantly accelerated our development because it enabled us to define our product more clearly, validate its potential and reinforce the sustainability-based model. The entire process was supportive, professional and very well organized, with guidelines that were truly useful to us. This recognition gave us greater visibility, additional self-confidence and the motivation to enter the next stages of growth more securely."

Teodora Marković, biological larvicide against mosquitoes







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