

# GREEN SOLUTIONS CATALOGUE

ACCELERATING SUSTAINABILITY AND INNOVATION WITH SOLUTIONS  
FROM LITHUANIA

**Lithuania**  
**+** **Co-create**



# INTRODUCTION

## Dear Prospective Partners,

This catalogue is intended to introduce international partners to the green technologies and eco-friendly practices developed in Lithuania.

Within these pages, a diverse array of solutions designed to address global environmental challenges can be found. Our offerings include (color indicative in the catalogue):

- ▶ **state-of-the-art renewable energy technologies,**
- ▶ **sustainable agricultural innovations** and
- ▶ **other environmentally friendly solutions** such as plastic management systems, transportation planning solutions and more.

Each solution reflects Lithuania's commitment to sustainability and innovation.

The information presented in this catalogue has been meticulously gathered through extensive consultations. Each entry provides information on the green products and companies. Products are assessed across five key aspects:

- 💰 **price** (specified or customizable),
- 🌿 **greenness** (what makes it green),
- 🌐 **current markets** (current geographical reach),
- 📍 **markets of interest** (preferred development markets),
- 📱 **status of the product** (prototype, pilot, scale or clarified otherwise).

In addition, each business has evaluated its alignment with 17 Sustainable Development Goals (SDGs). Furthermore, you will find detailed descriptions of how each product works, offering insight into their practical applications and benefits.

We invite you to explore the pioneering projects and initiatives that position Lithuania as an emerging leader in green solutions. It is our sincere hope that this catalogue will serve as a foundation for fruitful development cooperation, driving collective efforts towards a greener, healthier, and more sustainable world.



# SOLUTIONS SUMMARY

Business	Solution	Process	Status	Interest	Page
Nando	Microbiological soil enhancers	Farmers and agricultural producers can apply Nando's microbiological soil enhancers during planting and growing season to improve crop yields and soil health.	The products are fully developed. The company is a leader in the Baltic region.	Europe, Africa, the Middle East, S. America	<b>5</b>
Green Energy Park Global	Green hydrogen production as affordable and clean energy	Green hydrogen is produced through environmentally friendly methods emitting no greenhouse gases or other pollutants and serves as a carbon-free energy source for various applications.	Large-scale pilot projects are being implemented in Brazil and Croatia.	Globally	<b>7</b>
Ecogrant	RecyClass audit and support services for plastic waste recycling and plastic packaging	The team provides support for countries and companies aiming to transition to a circular economy. Due to new regulations, most packaging will need to be preserved and recycled according to EU circular economy standards. From 2030, all single-use plastic packaging will be required to be 100% recyclable and made with recycled content.	Recyclass are accredited and experienced experts in plastic recycling business.	Globally	<b>9</b>
Recar	Used car parts management and sales system	The universal tool allows sellers and buyers efficiently manage the search, upload and selling systems, as well as evaluate the process. It offers warehouse management in real time to upload parts to different sales platforms, collect order information, use automated warehousing and more.	Fully developed customizable system.	Europe and Eastern Partnership countries	<b>11</b>
OBDeleven	Professional diagnostic tool NextGen for cars	Company offers in-depth diagnostics and extensive car customization options in secondary market. Together with a mobile application, a vehicle can quickly be scanned for faults, comfort features can be enabled or disabled, live data monitored, and vehicle systems can be programmed to extent its life.	Fully developed device usable with over 12 well-known brands.	Globally	<b>13</b>
Solet	Solar panels for home and business, EV charging	Sunlight installations cover a wide range of power capabilities and can be tailored to individual houses or business needs. Professional installation teams evaluate the setting and mount the systems on roof top or grounding surfaces.	Customizable solutions and a long experience in the field.	Eastern Partnership countries and Uzbekistan	<b>15</b>
GJ Magma	Strategic insertion of organic fertilizer by Scarabaeus machine	Granular manure, vermicompost or sapropel soil improver are inserted with Scarabaeus machine locally to the plant root growth zone to make previously nonproductive soil fertile for 4-5 years, 5 times cheaper. The use of sapropel soil improver also saves up to 50% of irrigation water.	A fully developed collection of sensors.	Asia	<b>17</b>
MC Baltics	Professional consulting services with a focus on sustainable mobility solutions	MC Baltics consultants provide technical, institutional, legal, procurement, and economic know-how to private and public customers across various transportation modes (road, rail, water, air).	Extensive experience in over 40 countries.	Globally	<b>19</b>
NRD Companies	Virtual Fiscal Device Management System (VFDMS)	VFDMS is a technology solution designed to assist countries in modernizing their tax systems through the introduction of E-Invoicing, fiscalization, and streamlined tax reporting.	The system is an advanced product that can meet specific needs.	Africa, Asia	<b>21</b>

# SOLUTIONS SUMMARY

SoliTek	Solar panels integrated into railway/highway noise barriers	The solar panel manufacturer makes green panels from start to spark (most solar panels are made using fossil fuel-based electricity), while offering added benefits like shade, reduced irrigation (agriculture panels), and noise/heat absorption (noise barriers & facades)	The largest solar energy solution producer in Northern Europe, piloting solar-integrated projects.	Ukraine and developing nations	<b>23</b>
Deep Scientific	Cost-efficient teabagsize molecular sensor	Sensor solutions can be tailored to specific industry needs, alongside expert consultancy in environmental science and sensor technology. The sensor detects a variety of molecular concentration in air, soil and water.	A fully developed collection of sensors.	Asia	<b>25</b>
AUGA	Biomethane-powered tractor (M1), an electric agricultural platform (E1) and sustainable feeding technology	One M1 tractor can save 114 tonnes of CO2e emissions per year compared to conventional diesel tractors. One AUGA E1 unit can save 56 tons of CO2e per year. The feed production and feeding technology optimises livestock farming through centralised sustainable feed production, automated feeding processes, and AI tools used to monitor and reduce methane emissions, making milk production more sustainable and cost-effective.	AUGA M1 - pilot. E1 and sustainable feed production and feeding technology prototype.	Nordic countries and the EU	<b>27</b>
LightMirror	Reflective panels for energy economy	Sunlight is redirected to nearby buildings, transforming it into a valuable and manageable resource by organized installation of reflective panels at the edges of roofs.	Fully developed and applicable to various buildings.	Middle latitudes climate regions	<b>29</b>
Provectus Redivivus	Sound insulation panels	A recycled rubber and regenerated polyurethane layer bonded to a 12.5 mm high-density plasterboard offers sound insulation of 59-61 dB. Lightweight, space-saving, and highly effective panels, under the Silence World brand, reduce noise pollution in residential and commercial spaces as well as environmental impact through waste recycling and CO2-neutral production.	Fully developed and applicable to various buildings.	Developing economies across Eastern Europe, Asia, and Latin America and globally	<b>31</b>
Burbuliukas ir Co, Fresh Post	Healthy fast food	To promote a diet that is both nutritious and environmentally friendly, the brand ensures ethically sourced ingredients by selecting them from local suppliers who share commitment to sustainability. Brand offers eco-chic functional, recyclable, compostable and aesthetically pleasing packaging for their product. In their facilities, brand implements energy consumption minimizing practices.	Fully developed and looking for franchise partners.	European Union	<b>33</b>
Burbuliukas ir Co, Respo	Water ionizer	Water ionizer comes in the 2-in-1 tap which provides both regular and ionized water. The device filters impurities, adds minerals, and offers five pH modes. The device features efficient filtration and mineral enrichment. Its easy-to-use mobile app offers real-time monitoring, maintenance reminders, and water consumption insights.	Pilot (first working versions of product)	India and globally	<b>35</b>
Environmental Project Management Agency	Professional consulting services	Offers international consultancy services to public sector in the areas of environment and climate. Provides peer-to-peer assistance to partner countries, helping them strengthen their capacities through hands-on guidance on environmental and climate policy structures, as well as the processes involved in developing and implementing relevant legislation.	Solid experience in the field	Globally	<b>37</b>



# NANDO: biofertilisers

## “Bio NPK Powder S”

- promotes healthy and strong plant growth
- strengthens the plant’s resistance to drought
- promotes soil biodiversity

## “Biotero”


- accelerates straw mineralisation
- manages mold and toxin formation
- improves soil structure



 20 to 25 euro per hectare or customizable

 The products are Ecocert certified, confirming compliance with organic farming standards

 More than 30 countries in Europe, North America, South America, Africa, Middle East and Asia

 Upper middle income countries and lower middle income countries

 Scale



Nando is a biotechnology company that develops and manufactures high-added-value microbiological products and chemical additives for agriculture and industry.



# HOW IT WORKS

The beneficial microorganisms of "BioNPK Powder S" convert nutrients (N, P, K, Si) into forms accessible to plants and promote their uptake. Mycorrhizal fungus, by colonising plant roots, increases the sorption **capacity of nutrients** (especially P) and water and provides protection against pathogenic microorganisms. Trichoderma viride fungus, by secreting bioactive compounds, **promotes plant growth** and increases plant resistance to stress factors. Crop residues are a valuable source of organic matter as well as micro- and macroelements when applied to the soil.

Microorganisms of "Biotero" play a key role in the decomposition of residues and **circulation of nutrients** as well as the **formation of humic compounds** in soil. They produce extracellular enzymes to decompose organic material into accessible nutrient elements: carbon, nitrogen, and phosphorus.



# BUSINESS

Nando develops and markets biostimulants, surfactants and chemical products for use in crop and livestock production and in various industries.

Boasting a significant R&D center in Northern Europe and partnering with research institutions and universities globally, "Nando" has successfully developed a portfolio of over 50 specialised products:

- **Bacteria, fungi and other biostimulants for plant growth enhancement and residue degradation;**
- **Microbiological and technological solutions for seed and fertiliser producers;**
- **Surfactants to improve the potential of plant protection products and fertilisers and the efficiency of the mixtures used;**
- **Manure management, composting, microclimate improvement and other solutions for livestock production;**
- **Wastewater, waste and environmental improvement solutions for industry.**

"Nando", established in 2007, today is the leader in its field in the EU and "Nando" aims to become a global biotechnology innovator, with solutions that create economic benefits and sustainability in all sectors of agriculture and industrial applications.



# GREEN ENERGY PARK GLOBAL: green hydrogen and ammonia

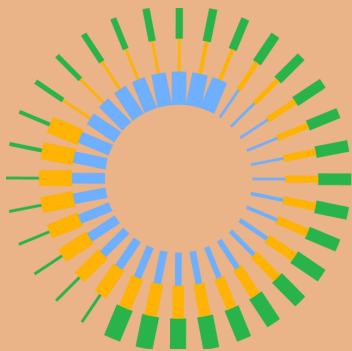
## Green hydrogen

produced via renewable energy-powered electrolysis, is a sustainable, carbon-free alternative to fossil fuels. It is produced emitting no greenhouse gases or other pollutants.

Green hydrogen has broad applications in industrial heat, transport, power generation, and energy storage.

## Green ammonia

acts as a **stable carrier** for hydrogen.



## Green Energy Park

“Green Energy Park Global” is a renewable energy company focused on hydrogen technology.



Customizable



Produced emitting no greenhouse gases or other pollutants, serves as a carbon-free energy source



Worldwide



Worldwide



Pilot



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION

# HOW IT WORKS

Hydrogen usually exists as a gas, and it is often found in water (H<sub>2</sub>O) and in many other compounds.

**Green** hydrogen is **hydrogen produced** through environmentally friendly methods, **primarily via water electrolysis** powered by renewable energy sources like **wind, solar, or hydroelectric power**. This process involves using electricity to split water (H<sub>2</sub>O) into hydrogen (H<sub>2</sub>) and oxygen (O<sub>2</sub>).

The term "green" is used because this method does not emit greenhouse gases or other pollutants, making it a **sustainable alternative to traditional hydrogen production methods**, which often rely on fossil fuels and emit significant amounts of CO<sub>2</sub>.

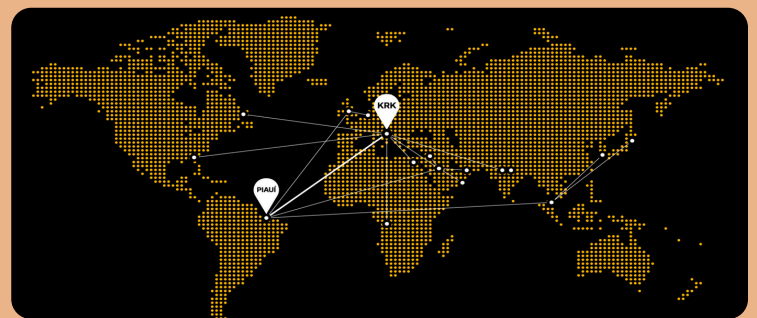
In terms of hydrogen, **green ammonia** can be seen as a **carrier for hydrogen, storing hydrogen atoms in a stable and easily transportable form**.

# BUSINESS

Green Energy Park Global is a **renewable energy company** focused on hydrogen technology.

**Develops, finances, constructs, and manages** renewable energy facilities under a common brand, uniting upstream, midstream, and downstream operations globally.

Key projects include a **10.8GW hydrogen production plant and sea port infrastructure in Brazil** and an **ammonia import and distribution facility** in Krk island in Croatia.





# ECOGRANT: services for plastic waste management

## RecyClass Recyclability certification:

demonstrates that product or packaging is designed for recyclability

## RecyClass Recycling Process:

certification scheme for companies processing waste into recycled materials

## RecyClass Recycled Plastics Traceability:

certification scheme for companies using recycled materials in new plastic products



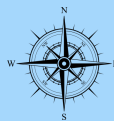
Tailored to each customer's needs



Reduces environmental impact of plastic waste through comprehensive recycling and certification processes



Worldwide



Worldwide



Solid expertise in the field

ECOGRANT specializes in providing professional services to plastic waste collection, sorting, recycling, and manufacturing companies.



# HOW IT WORKS

ECOGRANT provides end-to-end solutions, from waste collection to recycling and new product production, ensuring a streamlined process tailored to customer's needs.

Company's expert guidance simplifies compliance with EU regulations, including the upcoming PPWR (Packaging and Plastic Waste Regulation). Company integrates advanced technologies in plastic collection, recycling, and production, enhancing efficiency and product quality.

Additionally, ECOGRANT helps obtain RecyClass certification, boosting customer company's reputation, competitiveness, and EU market access.

By promoting the recyclability and traceability of plastic products, ECOGRANT ensures that waste is efficiently converted into reusable materials.

ECOGRANT's solutions comply with EU regulations, making them applicable and affordable in developing countries. Their services enhance market competitiveness while meeting customer expectations by certifying the entire product life cycle.

ECOGRANT's commitment to sustainability is backed by over 20 years of experience, advanced technology integration, and collaborations that boost the use of recycled plastics and reduce environmental impact.

# BUSINESS

**ECOGRANT** provides a **comprehensive suite of services for plastic waste management**, specializing in collection, sorting, recycling, and certification for plastic packaging companies within the European Union markets. ECOGRANT works with plastic packaging companies to ensure their products are recyclable and made with traceable recycled materials. In collaboration with RecyClass, company supports the industry in improving the recyclability of plastic products, promoting the traceability of plastic waste, and boosting the use of recycled materials, enhancing sustainability and market competitiveness.

Their core services include **certifying the recyclability** of plastic products, **supporting the traceability** of plastic waste, and **boosting the use** of recycled plastics. Accredited with the **ES17065 standard** and in collaboration with RecyClass, we help businesses **adapt to new EU regulations, implement advanced technologies, and improve market competitiveness.**

With over 20 years of industry experience, company offers **tailored expertise and comprehensive end-to-end solutions**, ensuring **compliance** and enhancing **sustainability** for their clients.





# RECAR: a marketplace for used car parts

## Comprehensive solution for managing and selling used car parts:

- business management tool to administer and integrate car parts into a marketplace
- helps reduce automotive waste, diverting usable components from landfills



ReCar is committed to becoming the leading platform for used car parts in the EU, offering businesses the tools and support needed to operate efficiently while promoting environmental sustainability.

The platform encourages the **recycling and reuse of car parts**, significantly reducing the need for new parts and the associated environmental impact. Company implements **eco-friendly delivery methods** to minimize their carbon footprint and support a sustainable future.

-  Depends on specifics
-  Helps reduce automotive waste, diverting usable components from landfills
-  17 European countries :  
14 members and 3 non-members of the EU
-  Ukraine and other European countries
-  Scale



# HOW IT WORKS

ReCar offers a comprehensive solution for managing and selling used car parts, integrating with popular e-commerce sites like eBay, Amazon, Google Shopping and our own Marketplaces - dalys.lt and Partversal (in the 17 different EU markets by the day) to maximize reach and streamline operations.

With the company's advanced control tower customers can boost team productivity and gain real-time visibility into their business.

The company continuously innovates and improves their services to meet user needs and industry trends, ensuring their clients stay competitive and environmentally responsible.



# BUSINESS

Company's vision is **to be the go-to platform in the EU market for used car parts**, empowering businesses to operate efficiently and promoting environmental sustainability through the reuse of automotive parts.

- **Ease of Operation:** Make it effortless for sellers to establish and run their businesses in the EU market with the necessary tools and support.
- **Customer Satisfaction:** Ensure customers can easily find, purchase, and receive the used parts they need through a seamless and user-friendly platform.
- **Environmental Consciousness:** Prioritize eco-friendly practices throughout the supply chain, promoting the reuse of parts and implementing sustainable delivery methods to minimize environmental impact.

Company's business model incorporates eco-friendly principles, from product sourcing to customer delivery, ensuring every step of the process supports environmental sustainability.



# OBDeleven: vehicle diagnostics device

**OBDeleven**



**Smart diagnostics device for cars**

helps users take care of their car, increase it's value and features and helps when purchasing a new car

OBDeleven specializes in creating and manufacturing cutting-edge devices that empower users to diagnose car errors, enhance vehicle comfort features, and gain essential insights when purchasing a used car.



60 Eur per unit (basic)



Allows to prolong usage of existing vehicles through smart diagnostics



Operates and ships globally



All countries except Belarus



Scale



# HOW IT WORKS

OBDeleven's innovative product **extends the lifespan of vehicles** by offering **smart diagnostic** solutions. Everyday users can perform dealership-level diagnostics directly from their smartphones. The accompanying mobile application not only identifies issues but also provides suggestions on how to fix them via Google, enhancing the user experience.

Additionally, the One-Click App's features allow users to unlock hidden comfort features, thereby increasing their vehicle's value. The Car Purchase Assistant offers crucial information about the car's history, helping users make informed buying decisions.

The company's product is designed to help users maintain their vehicles, increase their value, and provide peace of mind during the car purchasing process. As the most cost-effective diagnostic tool on the market, **it is especially beneficial for users in developing countries, offering the best value and features for money.**

The platform proudly operates and ships their products globally, ensuring that drivers everywhere can benefit from their innovative solutions.

# BUSINESS

OBDeleven creates and manufactures devices that allow users to diagnose car errors, unlock hidden car comfort features and receive valuable insights when purchasing a used car.

OBDeleven has an official license from Volkswagen, BMW, Toyota Groups.





# SOLET: solar energy

## Solar plants

generate renewable energy from sunlight

## Battery storage

allows for efficient storage of excess solar energy

## EV charging systems

support cleaner transportation and enhances energy efficiency and grid stability



Solet integrates expertise, innovation, and efficiency to drive the future of solar energy solutions.



Depends on specifics



The company considers and innovates the entire product life cycle to develop a green offering



Sweden, Denmark, Georgia, Armenia, Moldova, Ukraine, Uzbekistan, Lithuania



All regions



Solid expertise in the field



# HOW IT WORKS

Solet's green solutions encompass the design and seamless integration of solar plants, battery storage systems, and electric vehicle (EV) charging stations tailored for both homes and businesses. Using advanced modeling software, Solet ensures each system operates at peak efficiency.

The company handles everything from installation to 24/7 maintenance, providing a reliable and sustainable energy source. This holistic approach not only reduces energy costs but also supports a greener future by enhancing energy independence and promoting the use of renewable resources.

Solet constantly works on applying innovative solutions towards the business processes and innovative solutions for the products they offer.

# BUSINESS

Solet is at the forefront of the solar energy revolution, actively driving sustainable projects across various countries. With a strong presence in Sweden, Denmark, Georgia, Armenia, Moldova, Ukraine, Uzbekistan, and Lithuania, they have established themselves as leaders in the industry.

The company excels in the design and seamless integration of solar plants, battery storage systems, and electric vehicle (EV) charging stations. These solutions are tailored to meet the unique needs of both homes and businesses, ensuring optimal performance and safety.

They leverage advanced modeling software to maximize efficiency, and company's comprehensive services include everything from installation to 24/7 maintenance, providing reliable and sustainable energy solutions.

Solet focus on reducing energy costs, enhancing energy independence, and promoting the use of renewable resources. Their commitment to innovation extends beyond products to business processes, ensuring that their solutions are both economically viable and environmentally friendly. They aim to meet customer expectations while remaining competitive in the market, with a strong emphasis on responsible consumption, sustainable infrastructure, and climate action.



# GJ MAGMA: agricultural machine "Scarabaeus"

**Agricultural machine "Scarabaeus"** transforms nonproductive and degraded soils into fertile land, dramatically reducing the cost and resources required for soil restoration.

**GJ Magma Ltd. is a pioneering company specializing in the exploration of solid minerals and the development of innovative technologies to enhance soil fertility.**



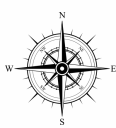
95 000 Eur per unit



Reduces the cost of soil restoration, amount of irrigation water and mineral fertilizers



Arid areas where 2-3 harvests are obtained per year



Southern Europe, Middle East, North Africa, Sub-Saharan countries, Australia



Pilot



# HOW IT WORKS



The Scarabaeus technology revolutionises soil restoration by inserting organic soil improvers directly into plant growth lines, minimizing the amount needed by up to five times compared to traditional methods. This precise application not only reduces costs significantly but also ensures that the restored soil retains the same fertility as if the full amount of soil improver had been used. This method is particularly advantageous in arid regions, where water and nutrient conservation are critical. The technology's effectiveness has been proven in unfavorable conditions in Lithuanian sand-gravel quarry soil, similar to the Sahara soil in terms of properties, and the desert conditions of Tabernas, Spain, where crop yields were comparable to those from fertile soils.

Using traditional methods, restoring nonproductive soil can cost up to 4,500 euros per hectare when using granular manure. In contrast, the Scarabaeus technology can achieve the same results for just 900 euros per hectare.

The technology is especially valuable in regions like Southern Europe, the Middle East, North Africa, Sub-Saharan Africa, and Australia, where two or three harvests per year are possible, and the need for sustainable soil management is critical. By reducing the amount of irrigation water and mineral fertilizers required, Scarabaeus technology reduces environmental impact including possible groundwater pollution.

# BUSINESS

GJ Magma Ltd.'s core activities revolve around the exploration of solid minerals such as gravel, sand, clay, dolomite, and peat, as well as assessing the environmental impact of mining.

However, most innovative contribution to sustainable land use is the development of the "Scarabaeus" technology, designed to modify nonproductive or degraded soils into fertile land efficiently and cost-effectively.



# MC BALTICS: consulting services

**Development of Sustainable Urban Mobility Plans (SUMP):**  
creating detailed plans to optimize urban transport

**Analysis and support on alternative Public Transport Options:**  
advocating for electric buses and other eco-friendly vehicles

**CO2, alternative fuels and Emissions Assessments:**  
providing in-depth analyses and reporting

**Eco-friendly Transport Solutions:**  
consulting on green transport strategies

**Digitalization of Transport Processes:**  
enhancing efficiency through digital solutions

**Capacity building:**  
support and train clients on their way to green transformation



MC Baltics provides consulting services in sustainable urban mobility planning, transport and logistics digitalization, comprehensive CO2, alternative fuels and emissions assessments, traffic safety assessment and holistic infrastructure management.



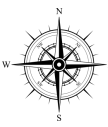
**Customizable**



**Reduces environmental impact through innovative transportation solutions**



**Europe, Africa, Central Asia**



**Worldwide**



**Solid expertise in the field**



# HOW IT WORKS

MC Baltics stands at the forefront of sustainable urban mobility, offering comprehensive consulting services that span engineering, research, and the digitalization of transport systems. Their core mission is to create safer, more efficient, and environmentally friendly transportation networks that cater to the unique needs of various regions.

The company's services include the development of Sustainable Urban Mobility Plans (SUMP), which optimize traffic flow, reduce congestion, and integrate sustainable transport modes like electric buses. By focusing on alternative public transport options, we help reduce reliance on fossil fuels and lower emissions, paving the way for cleaner and more sustainable urban environments.

MC Baltics specializes in CO2 and emissions assessments, providing detailed analyses that enable clients to track their carbon footprints and develop strategies to minimize their environmental impact. Their expertise in eco-friendly transport solutions includes consulting on the integration of renewable energy sources and vehicle efficiency improvements, tailored to the specific needs of each client.

A key component of their service offering is the digitalization of transport processes. MC Baltics implement intelligent transport systems, real-time data analytics, and digital platforms that enhance the efficiency and sustainability of transport networks.

Moreover, company are committed to supporting clients in their journey toward green transformation through capacity-building initiatives and necessary trainings. They take a customer-centric approach, offering competitive, cost-effective solutions that meet the expectations of our clients while contributing to a more sustainable future.

# BUSINESS

MC Baltics is a consulting firm specializing in engineering and research services focused on sustainable urban mobility, transport digitalization, and emissions reduction.





# NRD Companies: e-government solutions and consultancy

## VFDMS (Virtual Fiscal Device Management System):

a technology solution that assists countries in introducing E-Invoicing and simplifying tax reporting.



Customizable



Reduces paper consumption, increases resource conservation, promotes digitalization



Countries in Africa and Asia



Worldwide



Scale

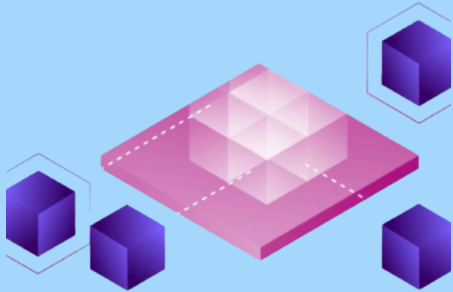


## NRD Companies

NRD Companies is a leader in digital transformation services for governments, specializing in e-government solutions and consultancy.

# HOW IT WORKS

## VFDMS



The Virtual Fiscal Device Management System (VFDMS) is a technology solution designed to assist countries in modernizing their tax systems through the introduction of E-Invoicing, fiscalization, and streamlined tax reporting. NRD Companies works with governments to design a system that meets the country's specific needs and regulations regarding to tax collection, and integrates it with existing government systems, while also providing training to government staff. Following this, businesses (taxpayers) are gradually brought onto the new system by being mandated to integrate their sales and accounting systems with the VFDMS, starting with a pilot group that receives training and support to ensure a smooth transition. After the successful pilot phase, e-invoicing becomes mandatory for all businesses.

The key benefits for tax authorities from adopting VFDMS include:

- **Improved Tax Compliance:** VFDMS helps combat tax evasion and fraud by providing real-time access to invoice data, enabling better monitoring and increased tax revenue.
- **Enhanced Efficiency and Transparency:** The system streamlines tax administration processes, reducing manual effort, minimizing errors, and increasing transparency in public spending.
- **Data-Driven Decision Making:** The comprehensive reporting and analytics tools provide valuable insights into economic trends and taxpayer behavior, facilitating informed policy decisions.

By implementing VFDMS, countries can enforce mandatory transaction reporting by taxpayers, which is a significant step towards ensuring transparency and accountability in financial transactions. Thus, the system allows tax authorities to enhance tax revenue collection and gain better insights into economic activities, which is crucial for developing economies.

## BUSINESS

NRD companies help governments and institutions build robust digital infrastructures, streamline processes, and enhance public service delivery. Their expertise covers a wide range of areas, including legal and regulatory frameworks, business process re-engineering, system analysis and design, project management, and capacity building. NRD has a proven track record of delivering successful projects worldwide, leveraging their deep understanding of digital governance and commitment to collaborative methodologies for project implementation.



# SOLITEK: integrated solar panels

**Integrated solar panels:** a solar power solution to power railway/highway noise barriers. Solar-integrated noise barriers become dual-purpose: block the noise from trains/cars and generate free electricity simultaneously.



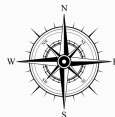
**Customizable. Approx. 15% more expensive than standard noise barriers**



**Made using renewable energy only, 98,8% recyclable, 30-year warranty, 50-year lifetime**



**Europe, United States**



**Ukraine, African and other developing countries**



**Pilot**

<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 
<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	<b>13</b> CLIMATE ACTION 



SoliTek is the largest manufacturer of solar panels, integrated solar solutions, and smart energy storage batteries in Northern Europe.



# HOW IT WORKS

SoliTek's solar panels integrated into railway/highway noise barriers, also known as photovoltaic (PV) noise barriers, not only serve their primary purpose of reducing noise pollution by blocking the noise generated by trains and vehicles but also offer an additional, significant benefit. While traditional noise barriers are designed solely to mitigate sound, PV noise barriers go further by harnessing solar energy to generate free, clean electricity.

These innovative PV noise barriers are a perfect example of multifunctional infrastructure, combining efficient transport infrastructure with sustainable energy production. The solar panels integrated into the barriers convert sunlight into electricity, which can be fed back into the grid or used to power nearby infrastructure, such as railway systems, lighting, or even local communities.

By integrating solar panels into noise barriers, SoliTek not only enhances the functionality of existing infrastructure but also contributes to reducing carbon emissions and promoting the use of renewable energy.

SoliTek solar panels are installed in the upper part of a regular railway/highway noise barrier. The solar panels block up to 30 dB of noise. It's estimated that a pilot 22 kW solar plant integrated into railway noise barriers will produce at least 15 MWh a year of clean energy, which will be used for railway or local community needs.

# BUSINESS

Even as a manufacturer of renewable products, SoliTek seeks to make their production exceptionally sustainable.

For that, SoliTek solar panels are recognized as the greenest in the world and have received the renowned Cradle to Cradle Gold certificate.

The company not only aims to make the footprint of its solar panels as small as possible but also to ensure they provide even more benefits beyond generating electricity, such as creating shade, reducing irrigation needs (agriculture-integrated solar panels), absorbing noise (noise barrier-integrated solar panels), heat (façade-integrated solar panels), etc.



# DEEP SCIENTIFIC: 3D-printed electrochemical sensors

## 3D-printed

### electrochemical sensors

monitor and purify **air, water, and soil**, both on Earth and in space. Specializing in CO2 conversion, Deep Scientific transforms captured CO2 into valuable products like hand sanitizers, contributing to environmental sustainability and circular economy practices.



Deep Scientific specializes in standardized sensing platforms for air, water, and soil, applicable both on Earth and in Space environments



29.99 Eur per a sensor pack unit number depending on the type and complexity of the sensors included



Reduces pollution, supports circular economy, consists of biodegradable composition



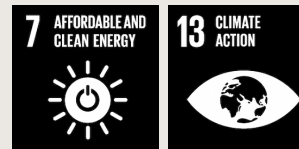
Lithuania



Worldwide



Scale



# HOW IT WORKS

Deep Scientific offers cutting-edge green solutions through their 3D-printed electrochemical sensing platforms, designed to monitor and purify air, water, and soil in both terrestrial and space environments.

Their technology incorporates electrolyzers and magnetic nanorobots for advanced environmental cleaning, enabling precise CO<sub>2</sub> conversion and pollutant removal. These electrolyzers efficiently transform captured CO<sub>2</sub> into valuable products, such as hand sanitizers, while magnetic nanorobots target and eliminate contaminants at the nanoscale. This innovative combination of sensing and cleaning technologies reflects company's commitment to sustainability and the circular economy, providing scalable, eco-friendly solutions that actively contribute to environmental restoration and resource efficiency.

Deep Scientific products include wearable devices designed for both sensing and cleaning environmental pollutants. These devices integrate advanced 3D-printed electrochemical sensors to monitor air, water, and soil quality in real-time, alerting users to the presence of harmful substances. Additionally, their wearables are also equipped with magnetic nanorobots and electrolyzers that actively clean the environment by converting CO<sub>2</sub> into useful products like hand sanitizers and removing contaminants at the nanoscale. This combination of sensing and cleaning technology in a wearable format makes their products both practical and powerful tools for personal and environmental health.

## BUSINESS

Deep Scientific leverages 3D-printed electrochemical sensors and advanced technologies like UV light to monitor and clean these environments. Their expertise includes CO<sub>2</sub> conversion processes, turning captured CO<sub>2</sub> into valuable products. Committed to sustainability and the circular economy, Deep Scientific provides innovative, scalable solutions that not only detect but also actively contribute to environmental purification, making their technology essential for both terrestrial and extraterrestrial applications.





# AUGA TECH: agricultural technologies



## AUGA M1 (Technology Readiness Level (TRL) 8)

a biomethane and  
electric-powered  
tractor



To be defined at later stages



Minimize environmental impact  
across the entire agricultural  
lifecycle



Lithuania



Nordic countries, European Union



Pilot (AUGA M1) and prototype  
(AUGA E1; Feed production and  
feeding technology)

## AUGA E1 (TRL 6)

a multimodal electric  
agricultural platform  
that can handle  
various agricultural  
tasks (e.g., cutting,  
sowing, treshing)



## Sustainable feed production and feeding technology (TRL 6)

optimised livestock  
farming with  
sustainable milk  
production



AUGA Tech, is a company indirectly owned  
by AUGA group, developing "Mission no cost  
to nature" technology portfolio aimed at  
changing the face of farming.

# HOW IT WORKS

One AUGA M1 tractor can save 114 tonnes of CO<sub>2</sub>e emissions per year compared to conventional diesel tractors. AUGA M1 tractor uses biomethane, a renewable fuel produced from secondary raw material, which offsets more emissions per unit of energy in the production and use cycle than it itself emits.

AUGA Tech is also developing AUGA E1, a multimodal electric-powered platform, designed to handle all key farming cycle operations, complementary to AUGA M1. AUGA E1 will use standard and AUGA Tech modified implements to complete a range of agricultural operations. One AUGA E1 unit can save 56 tons of CO<sub>2</sub>e per year. Initial farm testing for this technology is set to begin in 2024. AUGA E1 does not only eliminate the need for fossil fuels but also offers economic benefits such as reduced operational costs and additional revenue source from grid-balancing capabilities during off-season.

In addition to AUGA Tech's agricultural machinery, a sustainable feed production and feeding technology, aimed at significantly reducing greenhouse gas emissions from milk production,

has been pioneered. This patent-pending technology involves centralized production of sustainable feed, automated feeding systems, and advanced AI-driven monitoring of emissions.



# BUSINESS

The company's technology portfolio includes AUGA M1, the world's first hybrid biomethane and electric-powered tractor for professional use, AUGA E1, a multimodal electric agricultural platform, and a sustainable feed production and feeding technology. By enlisting external financial and industry partners and successfully testing AUGA technologies, they will become accessible to farmers.

AUGA Tech's solutions enhance sustainability and efficiency in farming. AUGA M1 hybrid tractor operates on both electricity and biomethane produced from secondary raw materials of livestock farming activities, namely cow slurry and chicken manure, significantly reducing CO<sub>2</sub> emissions compared to traditional diesel-powered machinery.

AUGA E1, a versatile electric platform, complements AUGA M1 by handling various agricultural tasks, such as cutting, sowing, treshing and more, with zero fossil fuel consumption. The feed production and feeding technology optimises livestock farming through centralised sustainable feed production, automated feeding processes, and AI tools used to monitor and reduce methane emissions, making milk production more sustainable and cost-effective.



# LIGHTMIRROR: architecture of reflective panels

## Reflective panels

redirect sunlight into hospitals and care homes, reducing energy costs for lighting and heating.

Solution includes:

- hardware (panels and mounting systems);
- proprietary software for light-retracing and thermal modeling, optimizing panel placement and energy efficiency in healthcare facilities.



Customizable



Reduces electricity consumption; reduces carbon footprint, etc.



Europe, United States



Ukraine, other European countries



Pilot

LightMirror develops reflective panels that bring sunlight into hospitals and care homes, reducing the need for artificial lighting and heating.



# HOW IT WORKS

LightMirror develops an innovative system of reflective panels and software to redirect natural sunlight into hospitals and care homes, significantly reducing their energy consumption and improving patient well-being.

Their solution consists of:

- **Hardware:** Specially designed reflective panels installed on building roofs and facades to capture and redirect sunlight. They also have PV reflective panel.
- **Software:** Proprietary light-retracing and thermal modeling tools that optimize panel placement and predict energy savings.

This integrated system increases indoor illumination by 10-30% during autumn and winter, cutting electricity costs for lighting and heating. By bringing more natural light into healthcare facilities, LightMirror creates a more healing environment that can speed up patient recovery and boost staff productivity.

Their technology addresses the critical issue of high energy consumption in hospitals, which in Poland use an average of 611 kWh/m<sup>2</sup>/year compared to the EU standard of 110 kWh/m<sup>2</sup> for new healthcare buildings. LightMirror offers a simple, cost-effective solution to this complex problem, helping healthcare facilities reduce their carbon footprint while improving the quality of care they provide.

As company scales, it aims to expand their solution to other building types and integrate with existing energy management systems, revolutionizing how buildings harness and utilize natural light for energy efficiency.

# BUSINESS

By installing reflective panels at the edges of roofs, natural light can be redirected into other buildings, making it a controllable asset that cuts costs and improves the overall well-being of patients and residents.

Company specializes in:

- Custom reflective panels for healthcare buildings;
- Proprietary light-retracing software for rapid feasibility studies;
- Integrating natural light solutions with existing infrastructure.

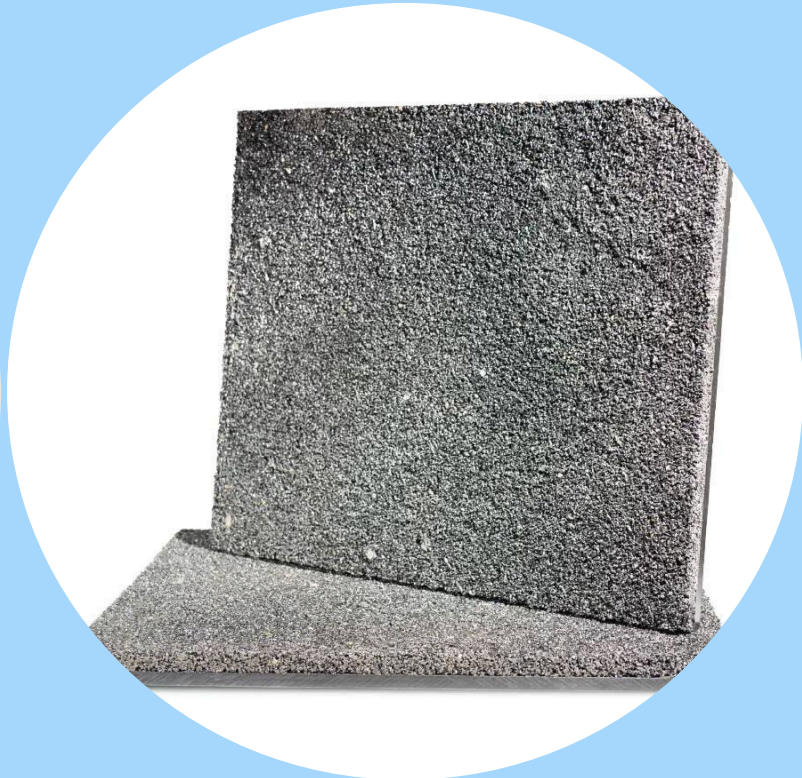
Key points for partners/customers:

- Significant energy savings (lighting and heating);
- Improved patient recovery through increased natural light;
- Minimal disruption during installation;
- Scalable solution with growing interest across Europe;
- Potential for rapid expansion, especially in Ukraine's reconstruction efforts.



# PROVACTUS REDIVIVUS: sound insulation solutions

**Sound insulation panels** are made from recycled materials with zero-waste manufacturing. The panels, combining recycled rubber, regenerated polyurethane, and plasterboard, offer enhanced noise reduction for residential and commercial spaces.



**PROVACTUS**  
— REDIVIVUS —

**Provectus Redivivus develops technologically advanced products from secondary raw materials, designed for the construction sector, manufacturing industry, and individual needs.**



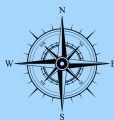
**Customizable**



**Entirely from recycled materials, CO2-neutral, reduces waste and promotes circular economy principles**



**European Union, with a primary focus on the Baltic States, Scandinavia, and Central Europe**



**Developing economies across Eastern Europe, Asia, and Latin America**



**Scale (advanced)**

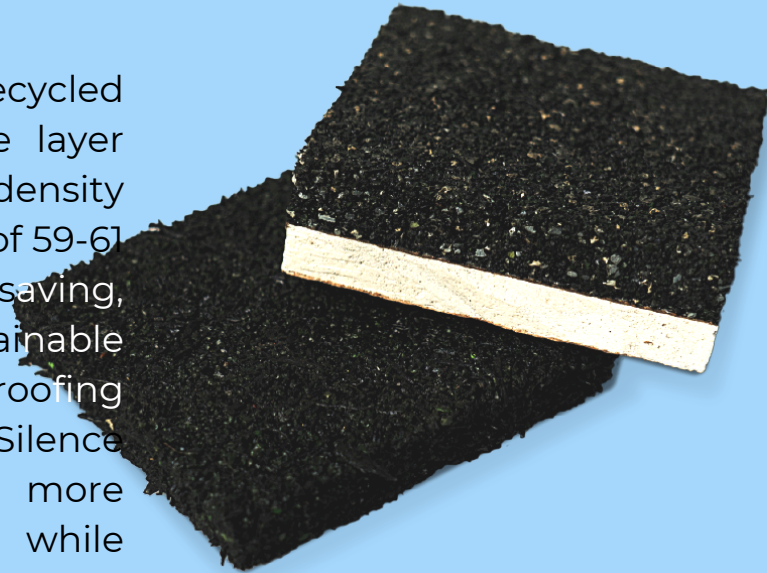


# HOW IT WORKS

Company's flagship product, the sound insulation panel, is designed to reduce noise pollution in residential and commercial spaces.

It features a unique combination of a recycled rubber and regenerated polyurethane layer bonded to a 12.5 mm high-density plasterboard, offering sound insulation of 59-61 dB. The panels are lightweight, space-saving, and highly effective, providing a sustainable alternative to traditional soundproofing methods. Their products, under the Silence World brand, help to create quieter, more comfortable living environments while reducing environmental impact through waste recycling and CO2-neutral production.

These eco-friendly products address noise pollution while contributing to a cleaner environment and sustainable living.



## BUSINESS

Provectus Redivivus specializes in developing innovative sound insulation solutions using recycled waste materials with a zero-waste manufacturing process.

Their technologies contribute to reducing environmental pollution, are zero-waste, and have no CO2 footprint.



# BURBULIUKAS IR CO

## FRESH POST: healthy fast food

### Healthy fast-food brand

**Fresh Post** provides a unique dining experience by offering fresh, balanced fast food designed for health-conscious consumers.

# FRESH POST

Fresh Post is a leading healthy fast-food brand in Lithuania, dedicated to providing fresh, nutritious meals made from locally sourced ingredients. With a focus on sustainability, company offers eco-friendly packaging and energy-efficient operations.



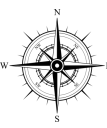
Customizable (mid-level)



Traceable, ethically sourced ingredients, sustainable, adaptable and affordable practices, eco-friendly packaging



Lithuania

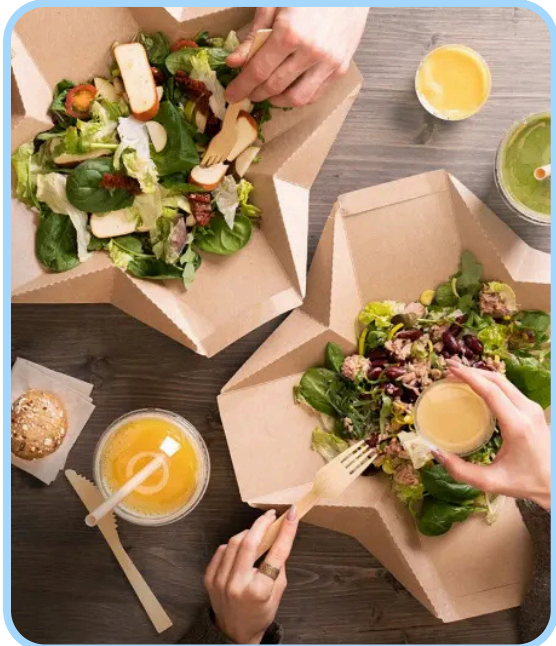


European Union



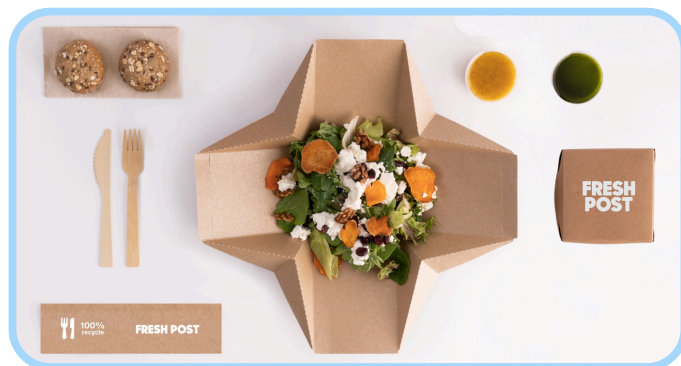
Scale (advanced)

<p>2 ZERO HUNGER</p>	<p>3 GOOD HEALTH AND WELL-BEING</p>	<p>6 CLEAN WATER AND SANITATION</p>	<p>8 DECENT WORK AND ECONOMIC GROWTH</p>
<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<p>13 CLIMATE ACTION</p>	



# HOW IT WORKS

Fresh Post carefully selects their ingredients from local suppliers who share commitment to sustainability, ensuring that their offerings are not only fresh but also ethically sourced. This means supporting local farmers and reducing transportation emissions, thereby lowering our carbon footprint. Each ingredient is chosen with care, promoting a diet that is both nutritious and environmentally friendly.



In addition to responsible sourcing, Fresh Post takes great pride in their eco-chic packaging. Designed to be both functional and aesthetically pleasing, the packaging reflects the commitment of Fresh Post to sustainability without compromising on style. The brand aims to reduce single-use plastics and utilize materials that are recyclable or compostable, encouraging their customers to participate in the movement towards a more sustainable lifestyle.

Moreover, Fresh Post operations are focused on energy efficiency. The brand implements practices that minimize energy consumption in their kitchens and facilities, demonstrating that being eco-conscious can go hand in hand with excellent service and quality.

## BUSINESS

Fresh Post philosophy is rooted in the belief that healthy eating should not come at the expense of the planet.

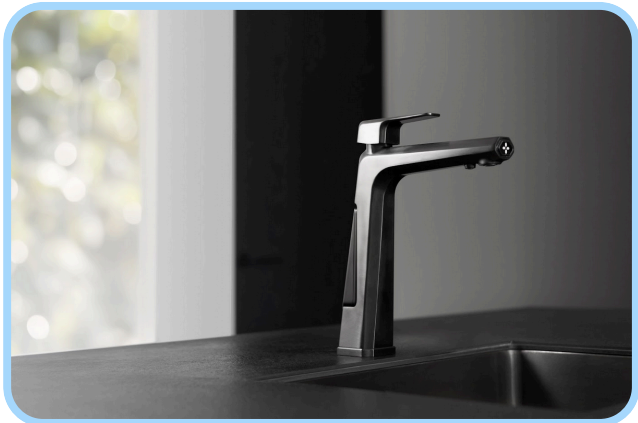
The brand begins their process with sourcing high-quality, locally-grown ingredients, ensuring freshness and sustainability. Each meal is prepared quickly and thoughtfully, maintaining nutritional value without sacrificing flavor. The company serves their dishes in eco-friendly, functional and stylish packaging, making it easy for customers to enjoy their meals on the go.

Currently, Fresh Post operates multiple locations across Lithuania and are actively seeking franchise partners worldwide to expand their unique concept.



# BURBULIUKAS IR CO RESPO: water ionizer


**Smart Home Water System Respo**  
an eco-friendly under-counter water ionizer that lets users customize their water's pH.



**A water ionizer manufacturer with nearly 30 years of experience.**



 **1300-1500 (to partner/distributor)  
2500 Eur (to customer)**

 **Reduces the need for bottled water, promotes a longer product life cycle, saves resources, supports healthy hydration in low-mineral areas**

 **Worldwide**

 **India and worldwide**

 **Pilot**



# HOW IT WORKS

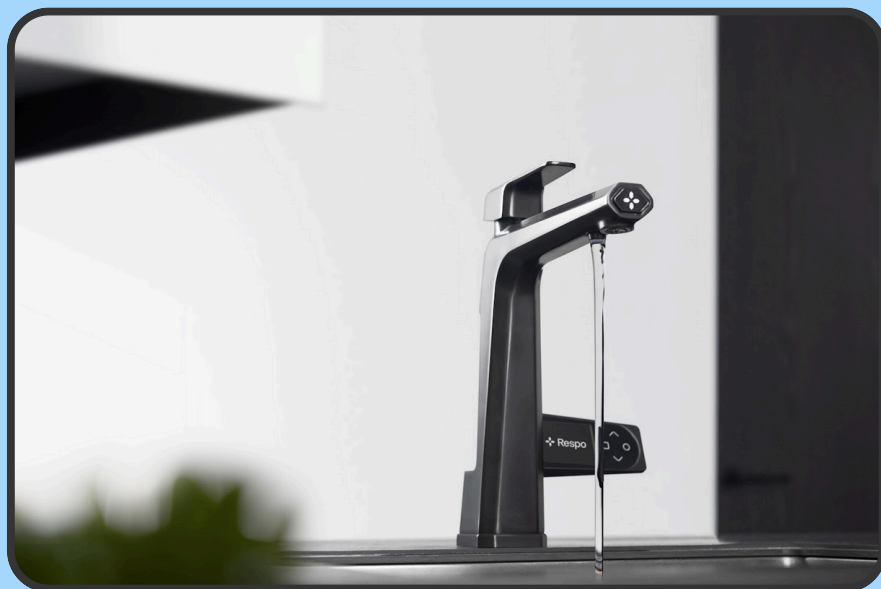
Respo is an eco-friendly under-counter water ionizer designed to promote sustainable hydration by allowing users to customize their water's pH.

The sleek 2-in-1 tap, available in six colors, provides both regular and ionized water, reducing the need for bottled alternatives and minimizing plastic waste. The device features efficient filtration and mineral enrichment, ensuring clean, healthy water while supporting areas with low mineral content. The device filters impurities, adds minerals, and offers five pH modes for a healthier, sustainable water solution. Its easy-to-use mobile app offers real-time monitoring, maintenance reminders, and water consumption insights, encouraging efficient and sustainable water use.

With its modern design and focus on sustainability, Respo makes a stylish and environmentally conscious addition to any home.

## BUSINESS

Company provides modern, high-quality water solutions that elevate water quality, taste, health advantages and reduces bottled water use.





# ENVIRONMENTAL PROJECT MANAGEMENT AGENCY: consulting

**Waste prevention** and management

**Energy efficiency**

**Water pollution reduction**




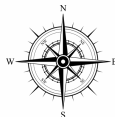

**Air quality improvement**

Mitigation of **climate change**

**Transport infrastructure**

Modernization of **buildings**

**Nature conservation**

-  **Customizable**
-  **Reduces environmental and climate impact by providing reliable consulting solutions**
-  **Europe and Asia**
-  **Worldwide**
-  **Solid expertise in the field**



Environmental Project Management Agency under the Ministry of Environment of the Republic of Lithuania promotes public environmental and climate investments and ensures their effective management. The Agency serves as a national Competency Centre, providing solutions for the implementation of state policies in the environment and climate sectors.



# HOW IT WORKS

The Agency offers international consultancy services in the environment and climate sectors. Their team of experts provides peer-to-peer assistance to partner countries, helping to strengthen their capacities through hands-on guidance. With a solid background in the public sector, Agency possesses firsthand knowledge of environmental and climate policy structures, as well as the processes involved in developing and implementing relevant legislation.

The Agency has implemented numerous projects in Europe and Asia, such as a deposit return for glass and plastic beverage containers system establishment support project in Moldova, waste management system development and improvement support project in Serbia or best practice on forest management knowledge-sharing initiative with Georgia.



# BUSINESS

Agency's work empowers nations to enhance governance, implement effective policies, and build robust systems for the future.

The agency welcomes collaboration with governments, public institutions, and international organizations seeking to strengthen their environmental and climate frameworks. By leveraging their practical experience in legislation, public management, and environmental initiatives, the Agency can help you achieve long-term sustainability.



# For your green ideas

Green Solutions Catalogue is an integral component of the project “Fostering Green Innovation Export through the Instruments of Development Cooperation”. This project was carried out in partnership between the Create Lithuania programme and the Ministry of Foreign Affairs of the Republic of Lithuania.

This document serves as a pilot catalogue. We are grateful to all businesses that contributed to this initiative.

Vilnius 2024

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[www.ltaid.lt](http://www.ltaid.lt)



[green@urm.lt](mailto:green@urm.lt)



More about the project



E-catalogue



MINISTRY  
OF FOREIGN AFFAIRS  
REPUBLIC OF LITHUANIA



Create Lithuania