Poland.
Business Forward

PARP
PFR Group

The Green Technology Sector in Poland

Report 2024

European Funds
for Smart Economy

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Republic of Poland

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The catalog of companies and organizations is by no means a complete list of entities in the Polish Green Technology Sector. Instead, it contains entries of those that volunteered to submit. The data was provided by the entities themselves and was not revised by the authors of the publication.

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Katarzyna Duber-Stachurska

President of the Polish Agency for Enterprise Development

Environmental degradation and global warming are the biggest challenges modern society has ever faced. They must be addressed quickly and smartly before their effects become irreversible and result in the destruction of our way of life.

Challenges, as history teaches us, also stimulate the growth of innovation and boost human creativity. They lead to economic development and technological breakthroughs. With clear track of records and ambitious goals, European Union is the world's leader of the environmental policy. The community pledged, among others, to become the first carbon neutral continent by 2050 and to reduce carbon gas emissions by 55% by 2030.

This 'green revolution' impacts many sectors of the economy. New regulations and social awareness increase the demand for environment friendly products and services. As the committed EU member, Poland actively participates in the environmental transition. Polish entrepreneurs create and implement solutions allowing for overcoming the crisis and leading to a more sustainable world. The 'green technologies' term covers many different areas such as renewable energy technologies, water management, air quality technologies, smarty city, hydrogen, and circular economy.

The number of Polish companies offering green solutions has increased significantly in recent years. Some of these companies are already successfully competing on foreign markets, others are still at the stage of start-ups striving for global success.

To support Polish companies operating in the field of green technologies, the Polish Ministry of Economic Development and Technology launched in 2024 the Internationalization of the SME's - Brand Hub, program financed by the European Union. Our Agency was entrusted with the role of the operator of the Green Technology Promotion Program within this project. This initiative will allow Polish SMEs operating in the green technology sector to take part in the most important environmental fairs and exhibitions worldwide.

Our publication along with an extensive catalogue of companies is one of the deliverables of the Brand Hub Program. I hope that this booklet helps you get to know the Polish green technology industry better and find valuable business partners.

Let's work together for a more sustainable future! 🔴

Poland in figures (2023)

Population

37.6 million

Foreign trade turnover

Import EUR

340.5 bn

(7.0% decrease, yoy)

Export EUR

351.0 bn

(1.4% increase, yoy)

Unemployment rate

2.8%

(as of November 2023)

The 3rd lowest in the EU

GDP

Total – USD

808.6 bn

per capita USD

20 681

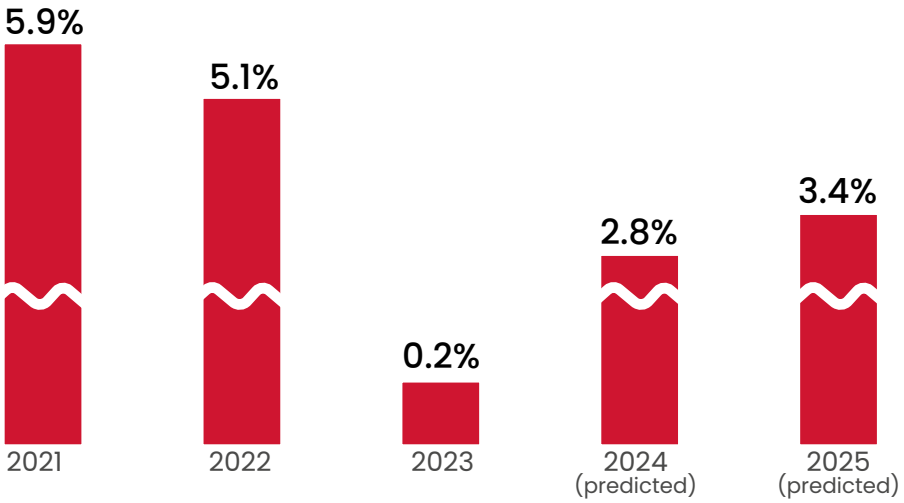
CO_2

Green house gas emissions

– 2.4%,

(4th quarter 2023, yoy)

(while increasing GDP)



World Economy Rank by GDP 21st (2022)

The 6th largest economy in the EU

Sources: Statistics Poland, World Bank, Eurostat

Turning challenges into opportunities – development of green technologies in Poland

The development of the green technology sector is a global trend that affects Poland, too. Due to favorable conditions, Poland as an EU member has a chance for dynamic growth of this industry.

Green technology is a hard-to-define category, encompassing many sectors, products, businesses or services. Although there is no one definition of what can fall into this category, green technologies can be understood as those that protect the environment, are less polluting, use all resources in a more sustainable way, recycle more of their wastes and products, and handle residual waste in a more acceptable manner than the technologies for which they were substitutes.[1]

Climate change caused by greenhouse emissions and gradual depletion of natural resources have made the transformation towards environmentally friendly economy and development of green technologies inevitable. Since the mid-nineties, the necessity for more decisive actions to achieve climate neutrality has become recognized globally. By signing a groundbreaking agreement on climate change in 2015 in Paris, 196 countries committed to take specific actions to reduce greenhouse emissions and combat global warming.
The EU and all its member states including Poland, have ratified the above-mentioned treaty and have decided to go one step further. The EU has pledged to become the first climate neutral economy and society by 2050. A strategy called the European Grean Deal was developed, with a package of legal, financial and social initiatives towards green transition. One of the measures to achieve this goal is a set of 13 legislative proposals (new or updated regulations) called Fit for 55, announced in 2021, which aim is to help the EU to reach a more ambitious goal to reduce gas emissions (mainly carbon dioxide) by 55% until 2030 compared to 1990.

But the EU promises something more than just laws and regulations to comply with. Green Deal is a growth strategy providing investment and support for innovations in green technologies. More than €1 trillion EU funds will be invested over the next decade to support projects

[1] UN Definition of green technologies, Agenda 21 Rio Declaration, https://unglobalcompact.org/what-is-gc/mission/principles/principle-9

helping to reach the new goals. They will cover all sectors of the economy such as energy, transport, industry, agriculture and finance. New rules will shape the way we live, how we produce and what we buy. Regulations on a global and EU level will push the transition toward green economy and will increase the demand for environmentally friendly solutions.

Over the past few years, we have observed significant changes in all subsectors related to green technology in Poland. Photovoltaics and wind energy have experienced a dynamic growth in terms of capacity, while such other subsectors as biomass and bioenergy have demonstrated considerable potential for technological innovation. New trends, for example electricity grids have emerged, improving the efficiency and sustainability of energy distribution. As social awareness grows, circular economy solutions are becoming increasingly common. Last but not least, leveraging its vast experience in hydrogen-related technologies, Poland can play the key role in development of this sector.

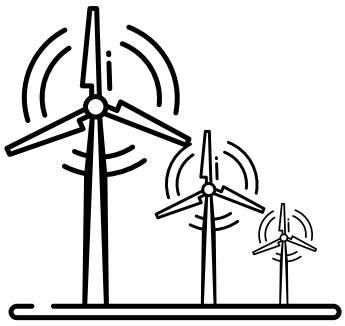
Wind energy

Wind power is a form of renewable energy that harnesses the power of the wind to generate electricity.

This process involves the use of wind turbines to convert kinetic energy from the wind turning the blades into electrical energy. This conversion is done via a generator located in the head of a wind turbine.
Over the past two decades, the global installed wind generation capacity – both onshore and offshore – has increased about 45 times reaching 1021 GW in 2023. Wind power is considered a sustainable, renewable energy source .[1]

Sector Overview

In 2023, wind farms in Poland had an installed capacity of 9.56 GW, producing around 8.4 TWh of energy. This accounted for about 14% of electricity production in the total energy mix[2]. Poland has one of the fastest-growing markets in Europe in terms of wind energy production. The country's potential was ranked seventh in Europe regarding the growth rate of new onshore wind farm capacity. By 2030, the total installed capacity of wind energy in Poland is expected to double compared to 2022 .[3]



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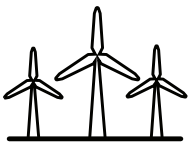


1400

onshore wind installations

[1] https://www.statista.com/statistics/268363/installed-wind-power-capacity-worldwide/, visited on 14th May, 2024
[2] https://www.cire.pl/artykuly/opinie/rynek-energii-elektrycznej-w-grudniu-oraz-w-calym-2023-r-analiza-na-podstawie-danych-entso-e, visited on 14th May, 2024
[3] Polish Wind Energy Association

The onshore wind energy sector in Poland is developing dynamically, reaching high levels of efficiency of renewable energy production. There are about 1400 onshore wind installations connected to the electricity grid, of which 799 have a capacity of more than 1 MW[4] . The estimated demand for products and services in the onshore wind farm supply chain under certain conditions might reach PLN 80 billion by 2030. This translates into a potential average annual turnover of PLN 6 to 9 billion for local enterprises[5].

As offshore projects enter the realization phase, there is significant potential for local enterprises along the entire value chain. The total offshore wind potential of the Polish part of the Baltic Sea is estimated at 33 GW, with an expected average annual energy production of 130 TWh. Local enterprises related to harbor, logistics, and service infrastructure, as well as the production of parts for onshore and offshore wind turbines, should be considered pillars of the sector[6].

Potential and Prospects for Sector Development – New Trends and Innovation

The trend of utilizing industrial land in the onshore wind energy sector could significantly reduce infrastructure costs, enhance access to industrial customers, and potentially add 19 GW of capacity in the long run[7].

There is also a noticeable shift towards offshore wind farms. The Baltic Sea offers immense potential for offshore wind energy, with higher wind speeds and consistency compared to onshore sites. The development of offshore wind energy in Poland is becoming increasingly promising thanks to a sustainable approach that combines local content and international cooperation.

Technological innovation is also playing a crucial role in the sector's evolution. Advanced wind turbine designs, such as larger and more efficient blades, are enhancing energy capture and reducing costs. These innovations are being developed to optimize wind energy production, making it more reliable and cost-effective.

Digitalization and smart grid integration are other key areas of innovation. The use of artificial intelligence and machine learning to predict wind patterns and optimize turbine performance is becoming

[4] Institute for Renewable Energy
[5] Polish Wind Energy Association
[6] https://www.teraz-srodowisko.pl/publikacje/energetyka-wiatrowa-w-polsce-2023/teraz-srodowisko-publikacja-energetyka-wiatrowa-w-polsce-2023.pdf, visited on 17th May, 2024
[7] Polish Wind Energy Association

more prevalent. These technologies help maximize energy output and reduce maintenance costs. Additionally, smart grid technologies are improving the integration of wind energy into the national grid, enhancing stability and efficiency.

Polish Export Potential - Competitive Advantages and Global Market Cooperation

Polish innovations in the wind energy sector have a great export potential. One of the key areas of development is the advanced wind turbine design, including vertical turbine systems that can be integrated into buildings or function as standalone units. Such designs promise high generation efficiency in various weather conditions and are particularly suited for urban areas due to their silent operation and effectiveness in low-wind scenarios.

Offshore wind farm solutions are another significant area. The Polish industry is well-equipped to support the construction and operation of these farms, with expertise in the design and construction of installation and service units, as well as the production of steel support structures, wind towers, and fully equipped offshore transformer stations.

Smart grid integration technologies are also being developed to enhance the efficiency and reliability of wind energy. Predictive maintenance systems are revolutionizing how wind farms operate, using advanced analytics and machine learning to predict and prevent equipment failures before they occur. This leads to reduced downtime and maintenance costs, increasing the overall efficiency of wind energy production.

Energy storage solutions are crucial for managing the intermittent nature of wind energy. Innovative storage technologies are being developed to store excess energy generated during high-wind periods for use when wind speeds are lower, ensuring a steady and reliable energy supply. Wind farm management software is another area of innovation, providing operators with real-time data and analytics to optimize performance and maintenance schedules.

Solar energy

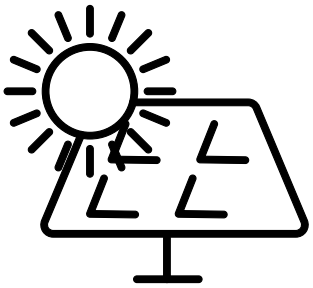
Solar energy - the radiant energy emitted by the sun, drives countless natural processes on the Earth and can be harnessed as solar power.

Sector Overview

Solar energy has emerged as a pivotal component of Poland's renewable energy landscape, currently accounting for about 25% of electric energy production from renewable energy sources and for about 7% of the total energy mix[1]. In 2023 solar photovoltaic (PV) capacity installed in Poland surpassed 17 GW, marking a remarkable increase from single megawatts only a decade ago. This growth has been driven by the proliferation of small-scale residential installations and larger commercial solar farms fueled by technological advancements, as well as growing public awareness of environmental issues and government incentives including national programs and grants.

Potential and Prospects or Sector Development – New Trends and Innovation

In 2022, Poland was the 2nd country in Europe in terms of the PV market dynamics with 60% growth of installed capacity as compared to previous year[2]. PV remained the technology with the highest increase of installed capacity in 2023



Solar energy accounting for

25%

of electric production from RES

7%

of whole energy mix

Solar photovoltaic capacity in 2023

17 GW

113 000

jobs in PV sector (2021)

[1] Agencja Rynku Energii

[2] Instytut Energetyki Odnawialnej, Rynek fotowoltaiki w Polsce 2023

with the average monthly growth of 400 MW. Although the Polish PV sector is mainly based on prosumer-owned micro-installations with ca. 70% of total PV capacity installed in small units below 50 kW, large scale PV farms above 1MW are becoming more prominent, due to support of PLN 6.4 bn in investments[3].

The future of the solar energy sector in Poland looks promising due to the stable demand in the prosumer market and ca. PLN 20 bn of investments annually[4]. As a result, PV completely dominates the market of power generation, what accelerates the development of complementary solutions.
One key trend is the increasing adoption of energy storage solutions. Integrating batteries with solar PV systems allows for storage of energy produced during sunny periods for cloudy days and nights, enhancing the reliability and stability of solar power. By the end of 2022, Poland was using about 7000 energy storage units with a total capacity of around 55 MWh[5].
Another significant trend is the development of agro-photovoltaics, where solar panels are installed on agricultural land. This dual-use approach allows farmers to generate electricity while continuing crop cultivation beneath the panels, maximizing land use efficiency and providing them an additional revenue stream.

Polish companies are at the forefront of solar innovations like building-integrated photovoltaics (BIPV), comprising of windows or facades. Not only does it generate energy but it also enhances the aesthetic appeal of buildings. Bifacial solar panels, which capture sunlight on both sides, and perovskite solar cells, known for their high efficiency and lower production costs, additionally boost the performance and affordability of solar installations.

Polish Export Potential - Competitive Advantages and Global Market Cooperation

Solar energy remains a major sector of investment across the energy industry in Poland. Large size of the market and a dynamic growth rate create a huge opportunity for local producers to develop their products and services not only for internal but also for international markets. As a result, Polish innovative technologies are gaining recognition in the PV sector worldwide. One of them is a market-wide implementation of perovskites in photovoltaics. Perovskites developed by a Polish company are printed on flexible films. Lightweight, ultra-thin, translucent

[3] Ibid.
[4] Ibid.
[5] Ibid.

cells obtained this way are expected to be highly efficient even under artificial light conditions. Another solution with high export potential is a quantum coating allowing for conversion of sunlight into electricity on glass.

Polish producers successfully provide solutions for the agricultural PV sector. Herein, a modified PV construction is required with light-transmitting modules placed on structures higher than those commonly used. One of Polish companies developed two models of structures sited on agricultural land, designed specifically for crops and soft fruit. Polish companies also work on advanced systems ensuring the better overall PV efficiency, for example, by including structures that follow the sun's movement and place the panels in the optimum position to the increase energy yield up to 30%.

Polish companies also provide advanced services in the floating PV (FPV) sector, that enables exploitation of unused surfaces on water reservoirs to generate green energy. Compared to ground and roof-based installations, FPV takes up less space and generates about 10% more energy as PV panels are additionally cooled by water.
In response to the growing amount of PV production and installation waste, there is a strong need for highly effective recycling technologies to re-use materials such as glass, aluminum, plastics, and recover more valuable compounds - silicon and silver. These huge R&D challenges are addressed by research institutions and private companies, developing universal methods based on grinding down the waste material to the micron particle size level.

Importantly, Poland is one of the top countries in terms of employment in the PV sector, with estimated 113,000 jobs in 2021. As the biggest PV employer in Europe and seventh globally, Poland can provide professional support for countries with a developing PV sector[6]. ●

[6] https://www.teraz-srodowisko.pl/publikacje/energetyka-sloneczna-w-polsce-2023/teraz-srodowisko-publikacja-energetyka-sloneczna-w-polsce-2023.pdf, visited on 16th May, 2024

Geothermal energy

Geothermal energy is the heat extracted from the Earth's crust, used for electricity generation or heating purposes.

Geothermal energy is an extremely promising renewable source, providing a stable and constant energy supply, regardless of the weather conditions. Obtaining geothermal energy requires vast capital expenditures and poses a risk of displacement of geothermal sources or too cold geothermal waters in some locations. After addressing technical issues associated with the access to geothermal sources, geothermal energy presents a huge potential as a source of renewable, low-carbon, and sustainable energy.

A quarter of Poland's area

has conditions for exploitation of thermal waters

Sector overview

Geothermal energy could play an important role in a stable supply of energy in Poland. Almost a quarter of Poland's area has conditions for exploitation of thermal waters estimated at up to 230 PJ, which corresponds to about 19-31% of the country's total demand for heat. Despite its huge geological potential, the use of geothermal energy in district heating is still insignificant, providing only 1 PJ of system heat, thus, the potential of geothermal energy is not fully exploited, as in many other EU countries[1].

Currently geothermal energy is mainly used as a source of heat in seven geothermal heat plants operating in Poland with a total installed capacity of around 130 MWt[2]. They provide geothermal heat and water for the heating needs of the municipal sector, with four of them additionally used for recreational and balneological purposes, such as filling swimming pools with thermal water, producing skincare products based on thermal

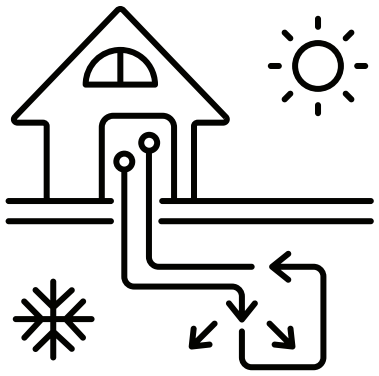
[1] https://www.cire.pl/files/portal/186/news/346900/fd1481f10558bcd95f9a8b7c005f17ffd6b409812b-65509bad20662375db5c71.pdf, visited on May 15th, 2024

[2] https://kongresgeotermalny.pl/viii-ogolnopolski-kongres-geotermalny/przeglad-wykorzystania-energii-geotermalnej-w-polsce-w-latach-2022-2023/, visited on May 15th, 2024

water, and serving as a source of drinking water. Only one plant in Poland invested in a thermal water graduation tower and food production process based on thermal waters.

Potential and Prospects for Sector Development – New Trends and Innovation

In recent years, governmental institutions have been taking steps to increase interest in geothermal energy. Local governments were provided with free assessments of thermal water resources while entrepreneurs were encouraged to use geothermal resources by programs supporting the opening of new and upgrading of existing geothermal heat/electric plants.



In 2022, the Polish ground source heat pump market was ranked **6th** in Europe

These initiatives complement the Long-term Program for the Development of Geothermal Resources in Poland, outlining a roadmap for geothermal development until 2040, with a perspective to 2050.
The most versatile solution in Poland is the shallow geothermal energy obtained from thermal waters of relatively low temperature and depth, by means of ground source heat pumps. In 2022, the Polish ground source heat pump market was ranked 6th in Europe, led mainly by small companies[3]. According to the aforementioned long-term program, 230,000 ground source heat pumps should be installed between 2022 and 2050, including 195,000 units for household use, and 35,000 units for public, commercial, and office buildings[4].

Due to geographical conditions, hybrid systems for integrating geothermal energy with other renewable sources are gaining popularity in Poland to optimize their use. Another trend is the increased focus on enhancing the efficiency and economic viability of geothermal projects. Innovations in drilling technology, such as improved drilling rigs and enhanced geothermal systems (EGS), enable

[3] European Heat Pump Associacion
[4] https://www.cire.pl/files/portal/186/news/346900/fd1481f10558bcd95f9a8b7c005f17ffd6b409812b-65509bad20662375db5c71.pdf, visited on May 15th, 2024

accessing deeper and hotter geothermal resources, which were previously uneconomical to exploit.

Polish Export Potential - Competitive Advantages and Global Market Cooperation

Poland is emerging as a significant player in the geothermal energy sector, increasing the usage of its huge geothermal resources and advancing in technological capabilities. SMEs play a crucial role, accounting for approximately 60% of the geothermal sector, driving innovation and agility. This enables Poland to meet its domestic energy needs and become an exporter of geothermal technology and expertise, starting with advanced techniques for mapping and assessing geothermal resources, allowing for accurate identification and evaluation of geothermal potential.

MEERI PAS (Mineral and Energy Economy Research Institute of the Polish Academy of Sciences) conducts cutting-edge research on geothermal energy and develops new technologies for utilization of geothermal resource. Polish entrepreneurs develop innovation technology integrating geothermal energy systems into building designs, such as using geothermal heating and cooling in combination with energy-efficient architectural elements. These solutions enhance building sustainability.

In turn, the development of sophisticated systems for monitoring and controlling geothermal plants, provides real-time data and analytics to optimize their performance and efficiency. Geothermal heating sector leaders are continuously innovating to improve the efficiency and operational sustainability. Novel solutions include extensive district heating networks that distribute geothermal heat to multiple buildings and areas, not only improving energy distribution but also reducing regional reliance on fossil fuels.

As the demand for sustainable energy solutions grows worldwide, Poland's expertise and innovative approaches to geothermal energy make it a competitive player in the global market.

Biomass energy

Biomass emerged as a leading renewable energy source in the quest for sustainable energy solutions.

Contrary to fossil fuels, biomass can be rapidly replenished. The energy stored in biomass can be released by various methods, including natural processes like controlled decay and fermentation (producing gases such as methane or liquid biofuels) or by combustion. Biomass energy is utilized globally for versatile applications including electricity generation, heating, and transportation, positioning biomass as a critical component in the transition to cleaner energy systems.

The advantages of biomass as a renewable energy source include stability and predictability in energy production. The energy conversion efficiency of biomass is generally lower compared to other renewable energy sources like wind and solar. Due to high and variable moisture content, biomass is best used in small generation units close to their production site. Solid biomass can be compressed into pellets for consumer distribution and transportation.

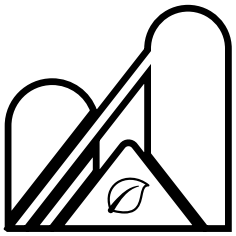
Sector Overview

Biomass holds significant potential for renewable energy in Poland. Over the past decade, the biomass sector in Poland has grown significantly and has become professionalized. By the end of 2021, Poland had 45 solid biomass-burning installations with a total capacity of about 1.2 GW[1]. In 2021, solid biofuels produced from biomass contributed to around 70% of Poland's renewable energy consumption (as compared to about 41% for EU-27 countries)[2]. In heat production, the role of biomass was even more critical, since solid biofuels accounted for about 90% of renewable heat generation in Poland and 12% of total heat generation[3]. Solid biomass substrates are also used in the biogas production process. Currently, there are over 380 biogas installations in Poland, able to generate around 2.4 TWh of electricity[4].

According to the Energy Policy of Poland until 2040, biomass has the greatest potential in district heating,

[1] Energy Regulatory Office
[2] European Environment Agency
[3] Statistics Poland
[4] https://www.teraz-srodowisko.pl/publikacje/biogaz-biometan-insight-Polska-2024/teraz-srodowisko-publikacja-biogaz-biometan-insight-Polska-2024.pdf, visited on June 2nd, 2024

and the net installed capacity of biogas power plants is expected to triple to reach 3.4 GW. However, the limited supply and rising prices push consumers to explore alternative biomass sources beyond traditional woodchips and pellets.



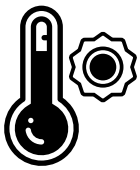
45 solid biomass-burning installations with a total capacity of about

1.2 GW

In 2022 solid biofuels accounted for about

90%

of renewable heat generation in Poland



and **12%** of total heat generation

Potential and Prospects for Sector Development – New Trends and Innovation

Poland has favorable conditions for the biomass production for thermal energy, especially from forest and agricultural sources, and biomass could theoretically fully cover industrial and municipal heating needs.

Poland's biogas and biomethane sector shows potential for technological innovation. Biomethane, purified biogas of natural gas quality, can be used in gas grids and as vehicle fuel, also in public and heavy transport. The "Innovative biomethane plant" project carried out by the Barczewo Energy Institute Ltd. aims to develop an efficient biogas plant technology that converts diverse organic substrates into biogas and upgrades it to biomethane. A full-scale technology demonstrator will produce compressed biomethane in the form of bioCNG, compressed carbon dioxide for industrial applications, electricity for local use as well as solid organic-mineral and liquid fertilizers. The Łukasiewicz Research Network - New Chemical Synthesis Institute in cooperation with Envirogas have developed an advanced modular treatment plant for biogas purification. It allows for the removal of impurities such as nitrogen, oxygen, and carbon dioxide from raw biogas, enabling the production of biomethane with over 99.4% purity utilizing the existing gas infrastructure.

Polish Export Potential - Competitive Advantages and Global Market Cooperation

Polish companies have several competitive advantages that position them well in the international market.

Compared to Western competitors, Polish companies often benefit from lower production costs, allowing them to offer competitive prices. Innovative technologies developed by Polish firms, such as advanced biogas purification systems and CHP installations, are in high demand in Europe.

Poland is developing advanced biogas purification technologies, enabling industrial-scale biomethane production. The global biomethane market is growing at 10% annually, estimated at USD 10 bn in 2023[5]. Poland has the potential to increase its market share, with export revenues from biomethane potentially reaching 500 million PLN annually by 2030.

CHP systems enable simultaneous production of electricity and heat. Polish companies offer advanced, efficient, and eco-friendly CHP installations. The European CHP market is projected to grow 8% annually, reaching USD 20 bn by 2025. Export revenues from CHP installations could reach PLN 300 million annually by 2025.

Polish companies can also play a key role as a provider of technical solutions for biogas used as fuel for public and heavy transport. The biofuel market is currently growing at about 4% annually, projected to reach around USD 176 billion by 2030. Export revenues from biofuel technologies could reach PLN 250 million annually by 2030.

Integrating biogas plants into the circular economy opens new export opportunities for Poland that can become a leader in providing comprehensive solutions in this area.

[5] https://www.marketsandmarkets.com/Market-Reports/biomethane-market-190903532.html, visited on June 11th, 2024

Electricity grids

Energy distribution in Poland depends on the interaction between various players including electricity distributors, energy operators, and energy suppliers.

The national electricity network comprises extra-high voltage transmission network, together with medium voltage and low voltage distribution networks. Assuming a 30-year lifespan of the network and about 15 to 80-year lifespan of the grid infrastructure components, electricity grids need constant modernization and investment[1]. The transformation of electricity grids is driven by technological advancements, regulatory changes, and increasing environmental awareness with the implementation of smart grids as the pivotal area.

Sector overview

National electricity transmission system in Poland is managed by PSE (Polskie Sieci Elektroenergetyczne) as the main operator of 400 kV and 220 kV extra-high voltage lines of a total length of more than 15,000 km, comprising 109 substations. Additionally, there are five large distribution system operators[2]. In recent years, Poland has initiated steps to modernize its energy grid by diversifying energy sources, incorporating renewable energy, and enhancing grid infrastructure. Modernization efforts are partly driven by European Union directives. In addition to big companies, several small and medium-sized enterprises (SMEs) have started to operate in the power grid sector, especially in the field of smart grids. SMEs play a crucial role in driving innovation, providing specialized products and services, and contributing to the overall technology development. These companies are engaged in diverse activities such as software development, hardware manufacturing, system integration, consulting, as well as research and development.

Potential and Prospects for Sector Development – New Trends and Innovation

Smart grids represent a critical trend in the development of energy infrastructure, integrating advanced information and communication technologies (ICT) to improve the efficiency, reliability, and sustainability of

[1] W. Dołęga (2023), Krajowa sieć elektromagnetyczna – analiza stanu i zagrożeń funkcjonowania, Rynek Energii 3(166),2023

[2] Ibid.

electricity distribution. Investments in smart grid systems determine the elasticity and energy efficiency within power grids. Modern smart energy distribution systems offer, among other things, the possibility to balance the amount of energy in the grid, which translates into efficiency in connecting distributed renewable energy sources (RES). As of 2022, the market size for smart grid technology was estimated to reach almost USD 40 billion globally[3].

Emerging trends such as the integration of:

artificial intelligence (AI),

blockchain,

Internet of Things (IoT)

are set to revolutionize the industry, enhancing grid efficiency, security, and resilience.

AI enables predictive maintenance and real-time grid optimization. Blockchain technology facilitates peer-to-peer energy trading and enhances cybersecurity. IoT devices, such as smart meters and sensors, provide granular data, enabling more precise response to demand and energy management. Energy storage technologies are becoming integral components of smart grids, balancing supply with demand and ensuring grid stability.

Polish Export Potential - Competitive Advantages and Global Market Cooperation

The Polish smart grid sector has great export potential due to its competitiveness and prospects for global cooperation. One of Poland's main advantage lies in the ability to deliver cost-effective yet high-quality solutions. For instance, Polish companies excel in producing advanced smart meters and grid automation systems at competitive prices. Moreover, Poland's successful implementation of innovative technologies, such as AI and blockchain, in its smart grid infrastructure positions it as a frontrunner in the global arena. Numerous Polish SMEs have developed AI-driven energy management systems that optimize grid operations and reduce costs for utilities through

[3] https://www.kingsresearch.com/smart-grid-market-160, visited on May 14th, 2024

software and hardware solutions. These systems integrate various energy sources and manage distribution efficiently.

Additionally, the integration of blockchain technology ensures secure and transparent energy transactions, fostering trust and efficiency in energy markets worldwide. Collaborative ventures with international partners further enhance Poland's export potential. By partnering with leading technology providers, Polish firms gain access to cutting-edge solutions and global distribution networks, facilitating market penetration and expansion. Through strategic alliances and innovative technologies, Poland is highly likely to emerge as a key player in the global smart grid market, driving the transition towards more resilient and sustainable energy systems. Polish power grid sector representatives along with R&D institutions are coordinating efforts with international partners to assure regional cooperation and knowledge exchange. On the European level, PSE is a member of ENTSO-E initiative which implies common efforts of European transmission system operators to assure optimal functioning and expansion of electricity markets using RES and newly established technologies. There is also bilateral cooperation between Poland and countries having interconnected national electricity systems (Germany, the Czech Republic, Slovakia, Sweden and Lithuania)[4].

[4] https://www.pse.pl/obszary-dzialalnosci/wspolpraca-miedzynarodowa, visited on May 16th, 2024

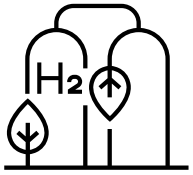
Hydrogen technologies

Hydrogen technologies refer to the entire value chain of the hydrogen economy, from hydrogen production, transmission and storage to possible areas of application.

Depending on the hydrogen production process, there are three major classes ('colors') of hydrogen: the most common grey hydrogen, generated in the steam reforming process (from methane or natural gas), with associated undesirable CO2 emissions, blue hydrogen - also produced from fossil fuels, but with CO2 capture, storage or usage technologies and green hydrogen, produced in water electrolysis using electricity from renewable energy sources (RES). Currently, only 1% of total hydrogen production comes from RES. The global market for hydrogen production is expected to grow significantly with the increasing share of green hydrogen, with a projected value of up to USD 2.5 trillion by 2050[1].

Sector Overview

Poland is the third largest producer of hydrogen in the EU, following Germany and the Netherlands. In 2022, national hydrogen production reached 785,000 tons (ca. 1% of global production) with a potential maximum production capacity of 1.1 million tons per year (10% of total Europe's hydrogen production capacity). Polish vast experience in hydrogen storage, transport and safety justifies strategic thinking about Poland as a future leader in the development of the hydrogen market. However, currently hydrogen in Poland is produced mainly from natural gas for industrial purposes (96% of total domestic demand). Hydrogen is expected to play a key role in the future energy mix, particularly in hard-to-electrify sectors and as energy storage, due to the growth of renewable energy sources like wind and solar.



Poland is the

3rd largest producer of hydrogen in the EU

In 2022 national hydrogen production reached

785 000 tons

11 Hydrogen valleys operating in Poland

[1] https://edmontonjournal.com/technology/innovation-and-tech-in-alberta/the-global-hydrogen-market-is-expected-to-be-worth-up-to-2-5-trillion-by-2050, visited on May 6th, 2024

The Polish hydrogen sector needs transformation towards sustainable hydrogen production. Currently there are 20 hydrogen production facilities in the country based on steam reforming and by-product processes and one to be opened soon this year based on the electrolysis process. This green hydrogen will be used for mobility purposes in refueling stations. The largest hydrogen production centers are concentrated within the specific regions of the country - around the so-called hydrogen valleys. Hydrogen valleys support the development of hydrogen technology demonstrators with the cooperation of business, science, and local administration. Each of 11 hydrogen valleys operating in Poland has its unique profile and specialization.

Potential and Prospects for Sector Development – New Trends and Innovation

Public transport and rail transport sectors are one of the main directions for developing hydrogen technologies in Poland. Local manufacturers are expanding their hydrogen bus offerings to meet rising demand. The Polish State Railways plans to build 50 hydrogen stations by 2028, facilitating the transition from diesel to hydrogen trains. Several Polish consortia, comprising industrial and academic partners, have announced investments in hydrogen rail transport.

At the same time, other prospective sectors of hydrogen development include district heating, transmission and storage, as well as refueling stations. Hydrogen production facilities emerged due to the modernization of already operating combustion plants as well as new investments made by companies interested in building pilot plants. The Polish transmission pipeline operator plans to implement high-priority investment projects including Nordic-Baltic Hydrogen Corridor (from Finland, via the Baltic States and Poland to Germany) and National Hydrogen Framework, connecting producers with local distribution networks and end users. The current gaps on the Poland's refueling map will be covered due to the planned opening of dozens of hydrogen refueling stations for individual, public and freight transport. Poland has a huge potential in designing and building heating systems using hydrogen. There are a couple of companies, with both Polish and international capital, specializing in modernization of the heating systems for industry as well as for housing cooperatives and single-family houses.

Polish Export Potential - Competitive Advantages and Global Market Cooperation

With significant amount of hydrogen-related know-how, the Polish hydrogen sector presents huge potential in research and development. In terms of local production know-how, among the solutions that deserve the attention

of foreign investors, should be underlined: manufacturing and designing electrolyzes for future hydrogen generation. Polish companies are working on energy storage facilities, such as hydrogen tanks, modern hydrogen transport systems, and boilers that allow the combustion of hydrogen with the addition of air so that the addition of other gases is not necessary. In other types of boilers, also developed in Poland, hydrogen is burned in pure oxygen in a closed system, guaranteeing the high efficiency of the device. Another intensively developing sector is the hydrogen production systems cooperating with renewable energy sources, to enable certified production of green hydrogen for local needs, or as part of the individual needs of production plants.

Poland is a valuable member of many international research partnerships and initiatives as well. One of them include cooperation between Hy2Tech Synthos and US-based Ultra Safe Nuclear aiming to develop blue hydrogen production technology from micromodule nuclear reactors. International research agreements also play vital role as Polish and Japanese governments pursue an arrangement that implies hydrogen development cooperation in the area of carbon capture and storage technologies. Under the agreement, the National Nuclear Research Centre is working with the Japan Atomic Energy Agency to develop high-temperature nuclear reactors with the presumed result of designing and building a small, 10 MW experimental reactor in Swierk. Hydrogen sector development presents a huge opportunity along with its multi-sectoral use that should be reinforced with an appropriate investment in the near future.

Circular economy sector

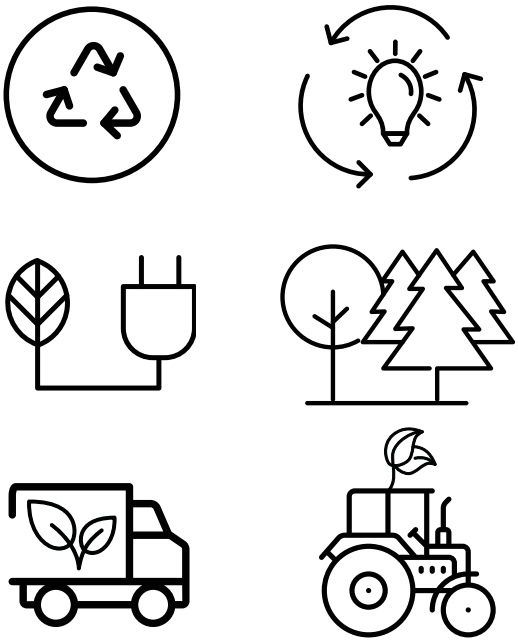
The circular economy (CE) sector in Poland is currently experiencing dynamic growth, driven by challenges related to environmental preservation, efficient resource utilization, and evolving regulatory landscapes.

The European Green Deal and new taxonomy regulations since 2024 emphasize transitioning from linear to circular business models. With rising demand for sustainable products, the sector faces both challenges and opportunities. Key areas include securing sustainable financing, exploring global markets, and minimizing resource risks to strengthen resilience. Strategies to enhance efficiency involve extending product lifecycles, optimizing supply chains, and adapting to regulatory changes.

Sector Overview

Assessing circular economy (CE) practices, particularly in Poland, is facilitated by the Circularity Gap Report[1] which employs the National Circularity Index (NCI) to measure the proportion of reused materials in the country's total consumption. The 2022 report shows Poland's NCI at 10.2%, which is above the global average of 8.6%, and higher than Norway's 2.4% and Sweden's 3.4%. This highlights significant growth potential while underscoring numerous challenges that businesses and society must overcome to fully achieve a circular economy. The more that needs to be done, the more opportunities arise for companies to engage and innovate.

Key sectors in the circular economy include material recycling, renewable energy, sustainable production, environmental technologies, sustainable transport, and agricultural innovations.



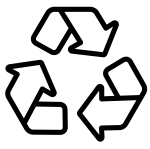
These sectors collectively promote the use of sustainable resources and waste reduction. Material recycling converts waste into new products, reducing reliance

[1] https://www.eog.gov.pl/media/111457/20220927_CGR_Poland_Report_210x297mm.pdf, visited on June 24th, 2024

on virgin resources and pollution. Renewable energy uses sources like solar, wind, and hydro, with minimal environmental impact. Sustainable production enhances resource efficiency and reduces waste and pollution, often using eco-friendly materials and energy-saving technologies. Environmental technologies protect ecosystems through pollution control and water purification. Sustainable transport minimizes environmental impact via electric vehicles, improved public transport, and alternative fuels. Agricultural innovations increase food production efficiency while conserving resources through precision farming and organic agriculture.

The sector is growing due to rising environmental awareness and interest in sustainable development. According to the latest report from Plastics Europe titled 'Plastics in a Circular Economy - Analysis of the Situation in Europe' more plastic waste was recycled (26.9% in total) than sent to landfills for the first time in Europe. In Poland, the plastic recycling rate reached 21.2% in 2022, showing an increase compared to 2018, when the recycling rate grew by 8.7%.[2] Polish companies are investing in innovative solutions to lead in this sector. AI and IoT advancements have enhanced waste segregation, monitoring, volume reduction, digital waste circulation, and carbon dioxide removal. The industry includes waste recycling, production of secondary raw material, and advanced waste management technologies. In 2022, Poland's waste management sector was valued at PLN 9.2 billion, with a recycling rate of 34.3%, processing around 12 million tons of waste.[3]

Polish waste management sector



Value: **9,2** bn PLN

Recycling rate: **34,3%**

Potential and Prospects or Sector Development – New Trends and Innovation

A new trend in Poland's circular economy is the use of AI and IoT for real-time waste processing, significantly reducing environmental footprints. Emerging leaders in this space include companies specializing in highly efficient raw material recovery technologies, intelligent waste meters, secondary-use materials from municipal waste, industrial wastewater treatment with recovery and closed-loop systems and producing circular TPE

[2] https://plasticseurope.org/knowledge-hub/the-circular-economy-for-plastics-a-europe-an-analysis-2024/, visited on June 24th, 2024

[3] https://www.teraz-srodowisko.pl/media/pdf/aktualnosci/14718-raport-pekao.pdf, visited on June 24th, 2024

from post-consumer plastic and rubber from car tires. The sector's adaptability to market dynamics and regulations has gained international recognition. Investments in technology result in products and services that meet strict quality and environmental standards.

Polish Export Potential

Polish innovations in the circular economy are setting new standards for sustainability and efficiency. Solar and hybrid sewage sludge dryers, powered by renewable energy sources like solar energy, biogas, sewage, and geothermal energy, exemplify Poland's commitment to green technology. Additionally, innovative solutions such as intelligent waste meters, reverse vending machines, wind turbine blade recycling, advanced soil research convert coffee waste into five fractions of bioresources and the repurposing of industrial waste in construction and road materials are transforming product lifecycle and close lifestyle stages and promoting resource efficiency. Current trends in Poland focus on enhancing recycling efficiency and upgrading waste management infrastructure, ensuring that resources are maximally reused, and environmental impacts are minimized. With a sustainable approach and conscious investment policy, these innovations are not just eco-friendly but are also driving Poland's economic growth. This sector creates new economic opportunities, positioning Poland as one of the leaders in the global circular economy and contributing to a more resilient and sustainable future. The success of these initiatives highlights Poland's potential to lead the way in circular economy practices, demonstrating how sustainability and economic growth can go hand in hand.

Water services sector

There is a need to improve water quality and availability, considering climate change, new social challenges, new pollutants, and the condition of surface and ground water.

Water services include water supply and sewage disposal. They are entirely dependent on the state of the natural environment. Therefore, it is crucial for the sector to implement solutions that protect nature and align with the green transition.

Sector Overview

Water services are provided to citizens by municipalities and public or private entities. There are approximately 2,700 water utilities of different sizes, catering for different needs, which makes the market develop intensively, in various directions. Over the past 20 years, the infrastructure has significantly developed with support from the European Union, which has notably improved the quality of services and competencies of companies. As the infrastructure is constantly expanded, the number of consumers using such services is growing every year.

Solution and technology providers are crucial stakeholders in this sector. These are international corporations and minor, local enterprises developing techniques and technologies for water supply companies. Apart from engineering products, they also offer systems of intelligent management and modern communication with consumers. Over 1,900 public and almost 3,000 private companies operate in the water supply and sewage sector. The vast majority hire under 50 employees. Their role in the economy grows, and each year new companies offering technological and IT solutions enter the market. Their advantage is the ability to operate not only in Western markets but also in Ukraine.

Potential and Prospects for Sector Development

Trends that will affect the export potential:

- **network expansion**, mainly in rural areas, based on trenchless technologies and the use of environmentally neutral materials;
- **development of technologies towards increasingly advanced water and sewage treatment,** as well as controlling pollutants at the source of their formation;
- **growing demand for diagnostic tools** such as cameras for pipe inspection, leak location, and smart metering;
- **modeling and implementing IT systems** for flow simulation, failure detection, renewal planning, and

optimization of infrastructure operation;
- effective tracking of pollution pathways and implementation of micropollutant treatment methods;
- development of analytical methodologies for monitoring pollutants of particular concern (e.g., PHAS, microplastic, EDC);
- effective implementation of solutions that strengthen cybersecurity and crisis management.

Polish Export Potential

The dynamic development of the water infrastructure and the emergence of latest global trends have a significant impact on the export potential of the sector. The market is developing dynamically due to internal needs, making solutions offered by Polish companies applicable worldwide, with the price-quality ratio being their key competitive advantage. Polish companies already present on international markets provide products and services such as water ozonation systems, mobile container stations, pumps, and smart rainwater tanks. Polish entities have also extensive experience in cooperation with the world of science, knowledge transfer and implementation of international research projects.

Strengths of the Polish sector:
- IT solutions: water supply and sewage system modeling, data mining, smart metering;
- technologies developed in international cooperation, e.g., removal of pharmaceuticals and detection of microplastic;
- water recovery, reuse, and renewal technologies;
- rainwater management;
- modern utility management, covering all areas of the company's activity, from infrastructure operation and management to accounting, finance, personnel management, competence development, etc.
- sewage sludge management based on fermentation processes, energy production from biogas, and agricultural applications (production of fertilizers and soil improvers);
- the use of renewable energy as the fundamental energy source for the industry (biogas, photovoltaic, heat pumps, water turbines, etc.);
- highly-qualified and well-educated staff.

The ‘New Quantum Era’ in construction industry

The success story of ML System

ML System is the first company in the world to have launched a production line of transparent window glass with quantum coating capable of producing free energy from the sun. The Polish leader in the BIPV industry boasts 13 patents and has ambitious plans for the future.

According to the ‘Building Integrated Photovoltaic Skylights Market 2020-2027’ report, ML System is one of the key building integrated photovoltaics (BIPV) producers in the world. Established in 2006 in south-eastern Poland, the company focused its efforts on providing the global market with highly innovative and cutting-edge mass-use renewable energy solutions that facilitate decarbonization and counteract climate change. The company’s motto ‘We are changing the world for future generations’ is not just a collection of empty words. And the biggest testament to that is its portfolio full of high-tech BIPV solutions such as glass, facades, sunshades and roofs that can produce the energy.

In 2020 ML System announced its development strategy called the ‘New Quantum Era’, which assumed the implementation of mass production of transparent glass with quantum coatings producing free energy from the sun – an absolute novelty on the market. One year later, the first in the world production line of transparent ‘quantum windows’ was launched and QGlass – as company dubbed it – production started.

This project was a global revolution in the construction and automotive industry. Today, apart from glass, the company has expanded its portfolio of products employing quantum technologies, improving their efficiency and safety of use.

Products dedicated to sustainable construction offered by ML System are gaining recognition on the global market by meeting legislative requirements related to decarbonization and climate protection. Its Innovative technologies and production processes make it possible to increase efficiency and competitiveness on various continents. Currently, the company’s export, which ML System has been engaged in since 2018, accounts for 13% of total sales and ML System products can be found in 28 countries around the world.

Thanks to its unique know-how and production potential achieved through investment and R&D expenditure, ML System products are among a few solar energy solutions on the market that meet the parameters of materials approved for use in construction.

The company is constantly working on new technologies and one of their latest achievements is highly efficient electrolyzer for hydrogen production with high purity of 99 percent! The ultimate goal for ML System is to create a complete green hydrogen technology dedicated to small and medium-sized photovoltaic systems that could be used both by households and businesses. Once marketed, this scalable solution will make heating systems and hydrogen vehicle refueling independent of external sources of supply.

AI-powered smart waste bin that will do it for you!

The success story of Bin-e

Waste sorting can be problematic, ineffective and expensive unless it is Bin-e. This Polish high-tech company offers AI-powered smart waste bins dedicated to public spaces. By introducing the digitalization of waste sorting, the company attracted the attention of numerous corporate clients, including big global brands. Currently, Bin-e collects and sorts waste in 28 countries around the world, reducing costs and contributing to a more efficient recycling chain.

'Bin-e addresses the pressing problem of waste management and the lack of effective recycling practices, which leads to pollution and environmental degradation. It ensures that raw materials are sorted correctly with minimal user effort. Packaging can go straight to recovery without having to be reprocessed in sorting plants, thus increasing the overall efficiency of the recycling chain. By optimising the waste management system, we provide our clients with lower infrastructure maintenance costs' says Jakub Luboński, Bin-e co-founder and CEO.

Thanks to cutting-edge technologies such as AI and computer vision, Bin-e instantly and effortlessly recognizes the disposed objects and sorts them effectively on the spot. By increasing recycling rates, reducing landfill waste and promoting sustainability in various environments such as commercial buildings, public spaces, and smart cities, it aligns perfectly with UN Sustainability Development Goals and EU's ESG reporting.

Other technologies used in the device include real-time monitoring and automated waste sorting with very own one-in-the-world patented unique compression mechanism! Besides that, devices are equipped with screens that allow for displaying your own content and creating an additional source of revenue with funds collected from advertisers. Instead of external advertising, the display can also communicate your own marketing content and educate users about recycling.

The entire endeavour started in 2016 when Jakub Luboński and Marcin Łotysz set up a company to address the challenge of efficient waste sorting. It took them two years to enter the market with the first Bin-e iteration. Throughout the years, the product evolved and expanded into a whole family of intelligent smart waste bins dedicated to specific applications.

‘We established a strategic partnership with a Spanish company called AMBILAMP with whom we developed the final version of Bine-e electro and Bine-e electro AI dedicated to collecting valuable types of waste such as bulbs, batteries and electronic devices. Our solution simplifies and optimizes the entire process of electronic waste collection, which is much more demanding for users than casual waste disposal’, says Marcin Łotysz, Bin-e co-founder.

At the forefront of Bin-e's future endeavours is the development of Bin-e Reward, a dedicated device designed for seamless integration into deposit systems. This innovative solution will make the return of recyclable items like plastic bottles and metal cans (in exchange of coupons to use in supermarkets) easier than ever, promoting sustainable practices and contributing to a circular economy.

Currently, the company’s products are available in 28 countries, including most of the EU member states, as well as the United Arab Emirates, Australia, Hongkong, and Israel. Bin-e is used by facility management companies including Sodexo, Samsic, Coor, and CBRE. The company was also trusted by direct global corporate clients such as Dell, Volvo, McDonald’s, Lyreco and PNB Paribas.

‘We have set up our own production line and increased production capabilities, allowing for more efficient and cost-effective manufacturing, thus making our products more affordable and accessible to customers. We aspire to create a circular economy where waste is considered a resource and a recycled material’ says the CEO.

What can we expect of Bin-e in the future? The endeavour is heading towards further R&D and product development works. First of all, the company aims at developing weatherproof outdoor smart waste bins that will open entirely new business opportunities and potential revenue streams. Secondly, the world has some serious problems with textile recycling and Bin-e is about to address them with specially designed devices that will tackle this issue. Stay tuned! ●

Retrieved from the dump: diverting waste into usable raw materials

The success story of Bioelektra Group

More than two million metric tons of municipal waste are generated worldwide every single year and there are no signs of slowing down. Fortunately, we have companies like Biolelektra Group which excels in effective recovery of raw materials. By the end of 2023, the company processed over 255,000 tons of waste, which corresponds to approximately 51,000 garbage trucks!

'Our company's mission is to recover as many raw materials as possible to the economy in the form of recycling and thus to be reused instead of ending up in a landfill or being burned' says Jarosław Drozd, President of the Biolelektra Group Management Board, an undisputed leader in municipal waste recovery on the Polish market.

The Biolektra Group's solution responds to the main challenges faced by circular economy, namely highly effective recovery of raw materials and other recyclable items from mixed municipal waste. The technology is based on waste sterilization and automatic segregation without human intervention and preliminary sorting. It accepts any type of municipal waste. From mixed through selective collections to fractions generated by other processes, including the over- and under-sieve fraction. The solution allows for achieving the maximum level of recovery for recycling fractions of materials such as ferrous and non-ferrous metals, plastic and glass.

'The competitive advantage of our RotoSTERIL BEG7000 technology lies in the effective recovery of raw materials in technical, qualitative, and economic terms. It is also flexible and the processing capacity of the installation can be relatively easily increased or decreased by adding or subtracting autoclaves', adds the CEO.

As of now, the company has processed over 255,000 tons of waste in its own plant, which corresponds to 51,000 tons of garbage trucks! The biodegradable organic fraction itself, which has been reused and meets the requirements of an organic fertilizer, amounts to 85,000 tons, constituting one third of all waste. Additionally, secondary raw materials recovered and returned to the economy in the form of recycling, with average morphology, amounted to approx. 1,300 tons of aluminum, 5,100 tons of ferrous metals, 5,000 tons of plastic and 7,500 tons of glass.

‘Our goal is to create a sizable European company dealing with municipal waste management over the next 5-7 years. The core of the business is to be a network of municipal waste processing plants located on the Polish and other European markets. We want each of these plants to process over 100,000 tons of municipal waste annually. Recently we have launched a new investment in Poland – a brand-new waste processing plant with the capacity of 150,000 tons of waste per year. It is planned to be operational in the first quarter of 2025’ the CEO sheds light on Bioelektra’s future plans.

Company’s business partners include renowned companies operating on the waste management market as well as municipalities. The Group’s Slovakian subsidiary Bioelektra SE is making preparations for the construction of waste processing plants in two locations there. Advanced talks on the implementation of technology take place in the UK and several other locations.

Polish companies and business support organizations - catalog

3R

https://www.3r.com.pl; iwona.bakiera@3r.com.pl

Areas of activity

Recycling

We provide comprehensive assistance in storage, records, audits and resale of used IT equipment. We provide support in stocktaking and equipment audits. We have been in the market for 8 years. We have highly qualified IT staff specializing in hardware and data security. Every month, we process over 5,000 devices (laptops, PCs, printers, tablets etc.) on average. We specialize in B2B and B2G services.
The main areas of our expertise include IT equipment repurchase, destruction of sensitive data carriers, stocktaking of IT equipment, audits and valuation. We are ISO 27001 certified in information security and ISO 9001 in quality management.

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4 ECO

https://www.4-eco.pl; biuro@4-eco.pl

Areas of activity

Solar energy, Energy efficiency, Air quality

4 ECO Sp. z o.o. is a company operating for 5 years in the field of renewable energy throughout Poland. We provide comprehensive solutions in the field of consulting, sales, installation and maintenance of photovoltaic installations, energy storage and heat pumps. We are also an authorized distributor of PSCoat thermal insulation coatings, utilizing innovative quartz microsphere technology. We are highly concerned about safety and top quality of our services. The 4 ECO team is made up of passionate people who are open to development. A qualified installation crew ensures timely execution of orders, high quality, and market competitiveness. 4 ECO Sp. z o.o clients include individual customers, public institutions and entrepreneurs.

4Nature System

https://www.4naturesystem.com; info@4naturesystem.com

Areas of activity

Air quality, Smart city, Smart green technology

4Nature System is a PropTech firm enhancing human-nature connections and improving air quality through live plants supported by advanced IoT technology. Workplaces with green spaces, including vertical greenery, boost health, productivity, and life satisfaction. Our innovative biophilic design, mobile app, and IoT platform with environmental and plant sensors ensure adaptive, autonomous control allowing for more live greenery in offices at low maintenance costs.
Our modular, compatible solutions provide limitless design possibilities aiding architects and designers in creating healthy, sustainable workspaces with vertical green elements.

Abrys

https://www.abrys.pl; kontakt@abrys.pl

Areas of activity

Publishing specialist magazines

Abrys delivers knowledge and information in the area of environmental protection (waste management, water and sewage management, recycling, communal management). The company publishes four specialist magazines, hosts the www.portalkomunalny.pl website, and others internet portals, organizes webinars, conferences, study trips and congresses, provides ecological education for local communities, students and teachers. Abrys owns an ecological marketing agency that runs educational and communication activities in the field of environmental protection and difficult investments. Abrys organizes ecological events and supports cooperation between Polish and foreign companies in the environmental market.

AGATA

https://www.dustcontrol.expert; info@hydrosiew.pl

Areas of activity

Water resources management, Air quality

AGATA has been operating since September 26, 1986, providing modern, hydrodynamic, and ecological solutions to prevent excessive secondary dusting and unorganized emissions. Our solutions improve the production processes of enterprises, often reducing their existing costs. The company is the undisputed leader in this field of dust control due to the wide range of services and devices, effective selection of applied solutions, and individual approach to problems related to excessive dusting. We proudly serve the largest heavy industry companies in Poland, such as Grupa Enea, PGE Polska Grupa Energetyczna S.A., and KGHM Polska Miedź S.A. "We invite you to join us in creating a better tomorrow."

Agrex-Eco

https://www.agrex-eco.pl; info@agrex-eco.pl

Areas of activity

Recycling

Agrex-Eco is a response to the market demand for comprehensive services for businesses investing in modern waste management. We offer innovative machinery and technologies from renowned foreign manufacturers. Agrex-Eco offers equipment for sorting lines and the production of alternative fuels, machinery for processing bulky and construction waste and for work in composting facilities.

Alter Energia

https://www.alter-energia.pl; https://www.aiem.pl; kontakt@alter-energia.pl

Areas of activity

Solar energy, Wind energy, Bioenergy, Energy efficiency, Hydrogen technologies, Circular economy, Air quality, Smart city, Explosimetry, Research laboratory equipment

Alter Energia Sp. z o.o., as a subsidiary of the Alter SA brand – a manufacturer of gas detection devices with 30 years of tradition offering primarily excellent technical solutions, modern constructions and top quality materials, specializes in energy efficiency and broadly understood distribution of photovoltaic systems and laboratory equipment. Years of experience in the installation market have allowed Alter Energia Sp. z o.o. and Alter SA to create a strongly customer-oriented brand. Our expertise and professionalism are appreciated by our partners, which has been evidenced by numerous awards and references, such as Forbes Diamond and Competitiveness Leader in 2018.

AMARGO

https://www.amargo.pl/; biuro@amargo.pl

Areas of activity

Energy efficiency, Hydrogen technologies, Circular economy, Water resources management, Air quality, Heat and energy recovery systems, Carbon footprint

Amargo is a consulting and production company specializing in consulting and audits, design, production and assembly of chemical-resistant tanks and plastic water tanks along with complete industrial installations. It successfully implements investments in the design and build model. Due to changing regulations and new trends in sustainability, Amargo also implements heat and energy recovery systems aligning with the idea of circular economy and carbon footprint reduction. Amargo tanks fit into the European Green Deal, CO2 emission reduction, pollution reduction, decarbonization, closed-circuit economy, hydrogen use, and battery industry.

Amsterdam Standard

https://amsterdamstandard.com; hello@amsterdamstandard.com

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Energy efficiency, Circular economy, Water resources management, Air quality, Smart city

Amsterdam Standard is a software development house offering team extension services. Our Sustainable Scaling Systems bring the missing talent and knowledge to your teams or project. If you are looking for a long-term partner to help solve your SaaS scaling problems, look no further than us. With 41 active partnerships and a commitment to becoming 100% carbon neutral by 2025, we provide a tailored growth path for businesses focused on Climate Tech and beyond. Our 12-year track record speaks for itself, with many of our clients staying for longer than 5 years. Our model is designed to be cost-effective, offering skilled expertise readily available to scale up or down according to your needs.

Anmet

https://www.anmet.com.pl; m.sobczyk@anmet.com.pl

Areas of activity

Wind energy, Energy efficiency, Circular economy

Anmet has been operating since 1999. From the beginning, the company has been operating in the metal recycling industry, providing services to companies from Poland and Germany. The company has proven to be a reliable partner focused on customer needs. Since 2015, it has expanded its offer to include recycling wind turbine blades. Today, it provides services to owners and operators of wind farms in the field of emission-free cutting, transport and management of composites. Currently, the company is working on two new installations, based on its own research.

Antea Polska

https://www.anteagroup.pl; pl@anteagroup.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency, Hydrogen technologies, Water resources management, Air quality, Gas&water infrastructure, Hydraulic engineering

Antea Polska S.A. is one of the leaders in engineering and consulting services in Poland with over 30 years of experience. Its comprehensive offer covers all phases of investments in the field of energy (thermal and renewable), gas (LNG included), infrastructure (in the broad sense), water management and hydrotechnical engineering. The company provides professional services including due diligence, concepts, feasibility studies, technical assistance, design and acting as owner's engineer. It also helps to obtain non-repayable subsidies within the EU operational programs. Antea Polska S.A. is a reliable partner for both public and private companies.

Apanet Green System

https://greensys.pl/en/; sekretariat@greensys.pl

Areas of activity

Smart city

Apanet Green System focuses on sustainable and intelligent lighting control with the use of our own controllers manufactured in Poland and developed by our engineers. The system controls lighting according to real needs, such as traffic density, weather conditions, or season. This translates into significant energy savings. The investment itself can be financed with external sources – we are happy to advise and assist in obtaining funding. Our systems work flawlessly in many cities, on roads and motorways. We recommend taking a look at our projects in the Case Study section on our website.

Apator

https://www.apator.com; apator@apator.com

Areas of activity

Solar energy, Wind energy, Energy efficiency,
Water resources management, Smart city

Apator is an international group of manufacturers and distributors of modern measuring devices and systems, and a supplier of innovative power network automation solutions. Apator specializes in three business segments, namely electricity, gas, water and heat, manufacturing and delivering its proprietary solutions for measuring all utilities (electricity meters, water meters, heat meters, gas meters) as well as IT and technical solutions for intelligent power, water, and gas networks. Apator develops an offer of solutions supporting the implementation of renewable energy technologies applicable in local energy management.

Asket

https://www.asket.pl; office@asket.pl

Areas of activity

Bioenergy, Agro-biomass, Non-woody biomass

We are a producer of Biomasser briquetting machines for straw of moisture content up to 30%. No need for drying before briquetting saves time and money. Briquettes are 100% natural, and additive-free. They are used for heating, animal husbandry (bedding, fibrous snacks, toys), and can increase the yield of biomethane production. They are easy to store and transport, limiting the growth of mold and bacteria. Our machines are electrically driven and available in both a stationary and mobile variant. Their modular construction allows for increasing productivity flexibly with minimal initial investment costs. Holder of the European Technology Verification (ETV), participant of the governmental GreenEvo program and EU Horizon projects.

The Association West Pomeranian Chemical Cluster “Green Chemistry”

https://zielonachemia.eu; biuro@zielonachemia.eu

Areas of activity

Bioenergy, Hydrogen technologies, Circular economy

The Association West Pomeranian Chemical Cluster “Green Chemistry” is an internationally successful R&D cluster gathering enterprises and scientific units from the West Pomeranian region and other parts of Poland within new value chains built around R&D and demonstration green chemistry projects leading to increased innovative activities of its members on both the Polish and foreign market. The cluster primarily aims to connect business and science to increase the efficiency of implementations in companies to increase their competitive advantage.

Atagor

https://www.atagor.com; atagor@atagor.com

Areas of activity

Geothermal energy, Bioenergy, Water resources management, GRP pipes, Fittings, Tank containers

We are a producer of GRP pipes, fittings, and tank containers for many industries, as well as a variety of advanced anticorrosive protection systems, such as Inover casing fillers, composites and reinforcement material, trenchless technologies, Inover wax petrolatum tapes, etc.

Atende Industries

https://www.atende.industries; info@atende.industries

Areas of activity

IT solutions - cloud platforms for Industry 4.0

Atende Industries focuses on the development and popularization of cloud platforms for Industry 4.0, actively participating in the transformation process of the industrial sector, in particular by co-creating new hi-tech products for the optimized electricity grid system (Smart Grid). We employ a pioneer, proprietary technology, developed over the years leveraging our experience gained from the implementation of the largest smart metering system in Poland. Our flagship software called besmart.energy, is a modern energy management system for energy communities, energy producers, microgrid owners etc.

Atrem

https://www.atrem.pl; atrem@atrem.pl

Areas of activity

Solar energy, Wind energy, Bioenergy, Smart city

Atrem is a Polish company listed on the Stock Exchange, which since 1999 has been offering comprehensive services in the field of broadly understood engineering support for large infrastructural and construction projects, i.e. industrial automation, telecommunications and power engineering. Atrem engineers have completed projects including wind farms, photovoltaic systems, cogeneration systems using biogas, and trigeneration systems. The company constantly implements new projects in the renewable energy sector and takes part in tenders.

B2B-Europe.pl

https://www.construktor.com; info@b2b-europe.pl

Areas of activity

Components and parts of gravity conveying machines

The company designs and manufactures parts and equipment and its key priority is to offer zero-emission gravitational energy. The company is the holder of Forbes Diamonds and the Puls Biznesu Business Gazelles. Since 2023, it has been constantly looking for innovative solutions that work in production facilities located on many continents. It serves almost all manufacturing industries, co-operating with production companies, end-customers and trading firms. Our production is based on components manufactured in Poland or in Europe. Many of our production solutions are patent protected.

BARTESKO

http://bartesko.pl; biuro@bartesko.pl

Areas of activity

Energy efficiency, Air quality, Smart city, Ecology

We are a manufacturer of cabins for tractors, agricultural machinery, combine harvester, forklifts, and building machinery as well as bent and flat hardened glasses, roofs, fenders, masks, locks and other spare parts. Recently we have started producing electric platform trucks and trailers, used in the industry, warehouses, airports, and seaports.

BBP Inżynieria

https://bbpinzynieria.pl/; oferty@bbpinzynieria.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Energy efficiency, Air quality, Smart city, Electro power energy, Electric charger service

BBP Inżynieria sp. z o.o. is an innovative company specializing in the field of electrical power engineering. Our company's main focus is on designing, constructing, modernizing and servicing power stations, hydro, solar, and wind power plants. Since 2023, we have also been an authorized electric charger service provider. Additionally, we operate in the field of energy storage facilities suitable for wind and solar power plants. We offer ecological solutions developed by our team of experienced engineers and specialists. Our projects support sustainability goals by reducing greenhouse gas emissions and promoting the use of renewable energy sources.

BCM Architekci

https://www.bcmarchitekci.pl; biuro@bcmarchitekci.pl

Areas of activity

Smart city, Green building projects

We are a design studio with many years of experience, a qualified team of architects with extensive professional experience and great technical and construction knowledge. Our projects are characterized by functionality and the use of modern, sustainable technologies (zero emission). Good organization and flexibility of the team allow us to keep deadlines. We treat each design topic that we undertake as a challenge. We create spaces meeting for investors' expectations. We engage in both commercial and individual projects, housing, hotels, and public projects.

Beyond.pl

https://www.beyond.pl; office@beyond.pl

Areas of activity

ICT

Beyond.pl is a leading data center, managed cloud, and managed services provider in Poland and the CEE, offering services in two state-of-the-art data centers in Poznań, Poland with a target capacity of 42 MW. Data center 2 is one of the EU's most secure (EN 500 600 Class 4, ANSI/TIA-942 Rated 4) entities of this type and the first AI-ready facility in Central Europe. It is powered by certified 100% renewable energy and offers very high energy efficiency (PUE) of 1.2. The company has been delivering IT services for almost 20 years. Beyond.pl currently serves around 500 Polish and international companies.

Bin-e

https://bine.world/; contact@bine.world

Areas of activity

Circular economy, Waste management systems

Bin-e addresses the pressing problem of waste management and the lack of effective recycling practices, which leads to pollution and environmental degradation. Our AI-powered Bin-e enables efficient waste segregation and real-time monitoring. We aspire to create a circular economy where waste is considered a valuable resource. Our solution aligns with several UN Sustainable Development Goals, including SDG 11, 12, 13. We work towards specific indicators, such as SDG 11.6, 12.5, 12.6, and SDG 13.2.

BIOCENT

https://biocent.com.pl/; biuro@biocent.pl

Areas of activity

Water resources management

BIOCENT S.A. provides comprehensive solutions and equipment for purifying and pumping technological sewage and rainwater. Our offer includes grease separators, hydrocarbon separators, retention tanks, sewage pumping stations, flow regulators, inspection hatches, return flap valves, wall and duct penstocks, storm gate valves. The company has developed an innovative coalescing filter, with a unique 3D-printed shape. Biocent focuses on the development of new technologies, which allows us to provide our customers with top quality products.

Bioeko Grupa TAURON

https://bioeko.tauron.pl; sekretariat.bioeko@tauron.pl

Areas of activity

Circular economy, Combustion and Mining By-Products and Biomass

Bioeko Grupa Tauron Sp. z o.o. is a producer of aggregates, binders, concrete and cement additives, based on anthropogenic materials sourced from the energy sector. Our materials, intended for use in the construction industry and road construction sector, are low-emission substitutes for natural raw materials, designed to prevent the consumption of non-renewable resources and to extend the life cycle of raw materials, thus fitting within the circular economy model. Our gypsum can also be used in agriculture as an alternative to natural materials. We also supply our sustainable biomass to incineration facilities in energy groups, and to public and commercial institutions.

Bioelektra Group

https://www.bioelektra.com; bioelektra@bioelektra.com

Areas of activity

Circular economy

Bioelektra Group S.A. is a technology company with a proprietary, unique and patented municipal waste processing solution that eliminates the need for virtually all landfill, maximizes the recovery of reusable materials, emits no odors or leakages and halts all gas emissions from processed waste. All types of municipal waste are accepted, and the technology is characterized by an autonomous process managed by proprietary machine-learning algorithms, with no requirement for human intervention. The technology has proven recovery results. The Bioelektra waste processing facility in Poland has successfully processed over 300k tons of municipal solid waste since 2014.

Biogas System

https://biogas-system.com/; kontakt@biogas-system.com

Areas of activity

Bioenergy, Hydrogen technologies

Biogas-System S.A. offers a technology that allows for the most efficient production of biogas from most available organic materials. The advantages of our method include the possibility of using various substrates, odorlessness, quick and simple construction, and full automation. Our biogas plants are effective both economically and environmentally. We offer comprehensive services: construction of biogas plants, analyzes and preliminary studies, formal and legal preparation of the investment, design, and turnkey implementation. We also provide warranty and post-warranty service as well as technological supervision of the biogas plant installation.

Bioseco

https://bioseco.com/; offers@bioseco.com

Areas of activity

Wind energy, Bird protection

Bioseco S.A. offers bird protection systems for wind farms. Innovative detection technology based on stereovision with dedicated bird deterrent systems reduces the risk of bird collision. The system is a response to the needs of the wind energy market, saving birds and protecting investors from unnecessary turbine shutdowns.

Biostyma

https://www.biostyma.pl/; biuro@biostyma.pl

Areas of activity

Innovative biostimulant plant

Biostyma is a manufacturer and distributor of fertilizers and biostimulants. The company has introduced a product containing a novel active substance which is an ionic derivative of salicylic acid covered by a patent application number PCT/PL2023/050110 and which has been developed by scientists from the Poznań Science and Technology Park. It mimics the action of a phytohormone, enabling sophisticated stimulation of plant metabolism, which results in increased nutrient efficiency and improves quantitative and qualitative parameters of the crop yield while reducing the amount of fertilizers used and the cost of cultivation.

Botres Polska

https://www.botres.com; office@botres.com

Areas of activity

Bioenergy, Circular economy, Biogas production, Energy from waste

We are a Polish company supplying the modern biogas technology to the domestic market. As a turnkey supplier, we design, build and operate industrial biorefineries. Our plants produce clean energy in the form of electricity and biomethane, clean water and high-quality fertilizer from any type of waste through anaerobic digestion. Based on a technological cooperation with Austrian Botres Global, we offer a full range of services such as concept and design/ project development, documentation/maintenance of documentation, obtaining environmental permits, planning, construction, operation, maintenance and inspection.

BRAMY - SERWIS Dariusz Kaszkowiak

https://www.naprawa-sterownikow.com.pl; biuro@bramy-serwis.pl

Areas of activity

Circular economy

Bramy-Serwis is a European leader in the comprehensive refurbishment of high-speed gates with PVC curtains. The company based in Wronki excels in circular economy not only by refurbishing entire high-speed gates but also by providing professional refurbishment of industrial gate control electronics and overhauling high-speed gate drives for hundreds of companies. With advanced technical facilities and a skilled workforce, we complete orders efficiently. Once a gate has been refurbished or electronics have been repaired, customers are provided with technical support to remotely solve the most challenging diagnostic problems.

Brewa

https://www.brewa.pl/; kontakt@brewa.pl

Areas of activity

Solar energy, Energy efficiency

Our company has been operating in the Renewable Energy industry since 2015, providing customers with energy self-sufficiency and helping them face the challenges that the world of the future brings, while taking care of the environment. We work creatively, always developing solutions tailored to our customers' needs. We take care of everything, from consulting and paperwork through design, to installation and service. Our motto is 'Self-sufficiency in a convenient way'.
We cater to both corporate and individual customers.

Bright Coders' Factory

https://bcf-software.com; contact@bcf-software.pl

Areas of activity

Software for energy sector

Bright Coders' Factory excels in developing advanced software solutions tailored for the energy industry, including state-of-the-art SCADA systems. Our expertise extends to designing and implementing SCADA systems that allow for real-time monitoring, control, and data acquisition in energy operations. By integrating SCADA technology into our software offerings, we empower energy companies to efficiently manage their infrastructure, enhance safety protocols, and optimize resource utilization. Collaborate with Bright Coders' Factory to leverage cutting-edge SCADA systems alongside bespoke software solutions for unparalleled operational efficiency in the energy sector.

BROOKVENT Polska

https://www.brookvent.pl/; informacja@brookvent.pl

Areas of activity

Energy efficiency, Circular economy, Air quality

Simply... We do ventilation. Brookvent was founded in 1984, since then, our ethos has been to invest heavily in R&D and continuously supply the construction industry with innovative energy-saving ventilation systems. Every day, we help contractors, consultants, specifiers, and architects find the best ventilation solutions for their residential projects. We provide a full service that stretches from initial technical proposals and designs to product supply and aftersales. By consistently producing top-quality products, Brookvent has become a leading ventilation system supplier all over Europe. Currently we are introducing a system based on heat recovery from exhaust air and have entered the heat pump market. We offer HRV/FTX, roof fans, in-line fans, window vents, wall vents, acoustic solutions, complete ventilation systems.

Budmet

https://www.budmetnocon.pl; budmet@budmetnocon.pl

Areas of activity

Solid biofuel equipment

We are a company with over 40 years of experience and tradition in the production of state-of-the-art pellet boilers, providing not only exceptional thermal comfort, but also care for the environment and savings for our customers. Our devices are characterized by very low emission, which makes them environmentally friendly, each boiler meets standards required by law, including ecodesign standards, and class 5 conditions according to PN-EN: 303-5. Precise workmanship and top quality materials ensure many years of seamless operation. We offer a satisfaction guarantee, giving customers peace of mind that they are in good hands.

Centrum Elektroniki Stosowanej

https://www.ces.com.pl; sekretariat@ces.com.pl

Areas of activity

Bioenergy, Energy efficiency, Cogeneration, Biogas energy

We are an engineering company with Polish capital that has been operating in the energy market for over 30 years, introducing modern, energy-efficient products and services in the field of cogeneration and biogas equipment, emergency power supply, drive control and automation. In our business, we do not limit ourselves to introducing ready-made solutions, but take an individual approach to each customer, offering products based on unique installation needs, translating into the success of the entire operation. We are still developing, looking for both modern technologies and new areas for their implementation.

The Charging Company

https://thecharging.company; charge@thecharging.company

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Bioenergy, Energy efficiency, Hydrogen technologies, Circular economy, Water resources management, Air quality, Smart city, Virtual investment assets for energy markets

The vision of The Charging Company is centered on energy – a passion that has driven us towards our goal of dominating the global market with virtual energy assets. We aim to be a part of the energy transformation and are proud to be passionate about green energy, hydrogen, and energy savings. We want to change the world by building a sustainable future that provides access to clean and cheap energy, becoming the foundation for global peace. Our commitment to researching ways to deliver unlimited and wasteless wireless energy distribution is an exciting prospect that we hope to achieve soon.

Codibly

https://www.codibly.com; contact@codibly.com

Areas of activity

Solar energy, Wind energy, Energy efficiency, Software consultacy

For over a decade, Codibly has led the way in sustainable tech solutions, focusing on renewable energy and e-mobility software and integration services. Our seasoned experts drive impactful transformations, offering expertise in residential management, regulatory compliance, microgrids, DER, VPPs, and energy efficiency in renewable energy. In e-mobility, Codibly excels in charging point management, EV fleet management, smart charging, and demand response integration, delivering tailored solutions. Additionally, the company provides customized software development, consultancy, training, and team augmentation, all prioritizing environmental sustainability.

ConnectPoint

https://www.connectpoint.pl; biuro@connectpoint.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency, ESG reporting

For 14 years, we have been working on the digital transformation of organizations in the energy, public, and manufacturing sectors. Our innovative IT/OT solutions boost efficiency and minimize energy consumption, helping to achieve sustainable development goals. Nexo Energy and ThermOS assist buildings in managing and storing excess energy. Furthermore, the SmartRDM Platform enables effective gathering, processing, and analysis of ESG data, as well as the establishment of Key Performance Indicators. Our partners include Microsoft, Google, and Aveva.

CONTEC

https://contec.tech/; office@contec.tech

Areas of activity

Circular economy

Contec S.A. specializes in processing end-of-life tires (chemical recycling), transforming them into circular rubber and plastic raw materials that deliver low-carbon-footprint products for the manufacturing industry - recovered carbon black, recovered tire pyrolysis oil, and recovered steel. Contec S.A. is the only company in the world that uses molten salt as a heat transfer medium. The molten proprietary technology enables a safer, more efficient, and economical production method, designed with repeatable quality in mind.

CONTENUR Polska

https://www.contenur.pl; contenur.polska@contenur.com

Areas of activity

Circular economy, Smart city

Contenur's mission is to design, manufacture, commercialize and maintain urban waste containers that improve the quality of life, sustainability, and the appearance of towns and cities. Our vision is to be a multinational company, a market leader wherever it operates, a benchmark for its customers, and a motivator for its employees. Our factory in Mielec supplies waste segregation containers both to the domestic and foreign markets.

CrownIoT

https://crowniot.com/index_EN.html; info@crowniot.com

Areas of activity

Circular economy, Water resources management, Smart city

CrownIoT operates in the Internet of Things (IoT) market. We have developed a platform dedicated to water utilities - aggregating and presenting data from water meters online in our user friendly interface. We provide IoT solutions to develop and improve circular economy, water resources management and smart city. We work with latest software and hardware technologies for cities, industry, energy, agriculture and homes. We propose a comprehensive system in the SaaS model, but we are flexible. CrownIoT guarantees devices, connectivity, software and full support. We can integrate various makers, communication technologies, and challenging projects into one operational system.

DOT

https://www.systemdot.pl; system@systemdot.pl

Areas of activity

Circular economy

Dot is an advanced and complex system for distributing detergents and cosmetics in reusable containers. We refill big collective packaging as well as small rPET bottles. This is a zero plastic waste solution for our B2B partners. We help our clients reduce single use plastic and therefore the resulting carbon footprint. We collect and analyze figures on savings and provide clients with data that can be used in non-financial ESG reporting. Dot supports the fulfillment of SDGs, especially goal 11 - Sustainable Cities and Communities, goal 12 - Responsible Consumption and Production, and goal 13 - Climate Action. Dot has a positive impact on nature because it aligns with circular economy principles.

DS Energy Solar

https://www.dsenergy.pl; info@dsenergy.pl

Areas of activity

Solar energy, Energy efficiency

Our company improves the efficiency of heating and refrigerated installations in commercial buildings, implements solutions reducing expenditure on electricity and heating. We offer reliable advice and innovations in renewable energy and HVAC. We guarantee high quality services and reliable consulting. We offer the highest quality products from reputable brands. We guarantee competitive prices and favorable financing conditions. Our comprehensive services ensure failure -free operation our installations for years.

DTJ

https://www.DTJ.PL; dtj@dtj.pl

Areas of activity

Circular economy

DTJ Sp. z o.o. is a family-owned company. We are a European RecyClass certified recycler specializing in recycling plastic film waste and producing high-quality LDPE regranulate for film blowing. DTJ Sp. z o.o. participated in the CIRCE2020 program, which promotes a Circular Economy. At DTJ, we do not sell our products; instead, we collaborate with our clients, approaching each one individually. We use modern technologies and collaborate with scientific institutions to ensure the most accurate properties of our products. DTJ Sp. z o.o. is a modern enterprise that builds its business on mutual trust and professional customer service.

DUAL FUEL SYSTEMS

https://www.fuelfusion.pl/en; info@dualfuel.eu

Areas of activity

Use of alternative fuels (LNG, CNG, LPG)

Dual Fuel Systems is a Polish company specializing in the production and development of LPG, CNG or LNG fuel systems for Diesel engines. Our product called Fuel Fusion was introduced to the market in 2017 and it is result of 25 years of experience in the fuel system industry. Fuel Fusion was installed in over 5000 machines e.g. trucks, power generators, garbage trucks, agricultural and construction machinery. Replacing some fuel with gas makes Diesel engines helps reduce the emission of harmful substances. The key advantage of the system is the availability of reports presenting all important data on savings, performance of the system and machine itself. The company is open for new business partners worldwide.

DWS Wind Turbine Service

http://www.dwsservice.pl/; kontakt@dwsservice.pl

Areas of activity

Wind energy

DWS is a leading Polish company in the wind energy sector, offering a wide range of services not only in Poland but also internationally. We specialize in the servicing, repairs and long-term maintenance of wind turbines, which makes us a key player in ensuring seamless operation of wind farms. We have all necessary competencies and experience, supported by practical knowledge and training provided by leading wind turbine manufacturers.

EcoBean

https://www.ecobean.pl; contact@ecobean.pl

Areas of activity

Circular economy

We turn coffee waste into sustainable chemicals with a low carbon footprint. EcoBean is the most technologically advanced processor of spent coffee grounds. The obtained coffee oil, antioxidants, polylactide (PLA), lignin, and protein additives are then used in various industries, from pharmaceuticals cosmetics and packaging, to fodder additives. Our partnership with the Warsaw University of Technology (WUT) enables us to achieve the highest level of coffee waste valorization and source the most technologically advanced chemicals available in line with the principles of the circular economy.

ECOGRID OZE

https://www.ecogrid.pl; kontakt@ecogrid.pl

Areas of activity

Solar energy, Energy efficiency, Energy storage systems, Heat pumps

Ecogrid is a company based in Dolny Śląsk, offering renewable energy installations to domestic, commercial and industrial users, large or small. We offer a range of renewable services, such as PV systems, battery storage, EV charging, air conditioning and heat pumps. Whether you are looking to cut costs, reduce your carbon footprint or secure your future energy supply, we believe that there has never been a better time to take control of your energy and invest in renewables. Apart from renewables, we offer reactive power management systems to reduce energy bills in your company. You can be sure our employees are fully trained and qualified to provide the best service to you.

Ecopet

https://ecopet.pl/; sekretariat@ecopet.pl

Areas of activity

Producer of sustainable design beverage closures

Ecopet sp. z o.o. is an experienced producer of lightweight beverage closures with sustainable design. We successfully implemented caps remaining attached to bottles throughout the product's lifetime according to Directive (EU) 2019/904 of the European Parliament and of the Council. Manufacturing processes in the company are based on technical systems designed and built to work together for increased productivity, energy efficiency, and ease of use.

Ekolandia

https://www.ekolandia.biz; ekolandia@olandia.pl

Areas of activity

Solar energy, Bioenergy, Hydrogen technologies

Ekolandia Sp. z o. o. is a family company established in 2017. It produces energy from renewable, environmentally friendly sources. The company's strategic goal is to produce 50 gWh of energy per year in its own photovoltaic power plants and biogas plants until 2028. Ekolandia is a member of the Wielkopolska Hydrogen Valley created by the Local Government of the Wielkopolska Region to engage in systemic hydrogen production in accordance with the adopted 'Strategy for the Development of Hydrogen Wielkopolska until 2030 with an Outlook to 2040'.

Ekomotor

https://www.ekomotor.pl; ekomotor@poczta.fm

Areas of activity

Bioenergy, Energy efficiency, Hydrogen technologies, Air quality

Ekomotor Sp. z o.o. established in 1988, conducts research on the application of monolithic sorbents and catalysts in the environmental protection processes, and specifically in the purification of engine exhaust gases and other waste streams. It produces catalytic converters for the purification of diesel engine exhaust gases. Ekomotor Sp. z o.o. is the owner of the condensate purification technology. The company is also interested in implementation of processing of gas storage (H2/CH4) and chemical waste, especially spent plastics, oils, ion exchange resins and similar materials.

EKO-SOWA

https://www.eko-sowa.pl; biuro@eko-sowa.pl

Areas of activity

Solar energy, Wind energy, Geothermal energy, Bioenergy, Energy efficiency, Water resources management, Air quality

Eko-Sowa is your go-to solution for eco-friendly heating and ventilation systems. Specializing in high-quality installations, we prioritize customer satisfaction and environmental sustainability. Our range includes underfloor heating, heat pumps, and PV systems, all designed for efficiency and eco-friendliness. With years of experience and expertise, we guarantee reliable and advanced solutions tailored to your needs. Visit our website for more information.

Ekotop Roman Sobczyk

https://www.ekotop.eu; ekotop@ekotop.eu

Areas of activity

Water resources management

We provide counselling, designing and implementation of environmental protection solutions. We specialize in sewage sludge management technologies, designing solar and hybrid sludge dryers exploiting renewable sources of energy (energy of the sun, sewage, earth, biogas etc.) We have extensive experience and technical knowledge about different types of composting. Our efforts have been appreciated by GreenEvo - Green Technology Accelerator or by the 'Teraz Polska' Foundation.

EKO-WIATR BIS KRZYSZTOF STATUCH

https://ekowiatrbis.pl/; https://ekowiatrbis.pl/

Areas of activity

Solar energy, Wind energy

EKO-WIATR BIS was established in 2007 by experienced wind energy experts. Fast development has allowed the company to run a business related to widely understood renewable energy in the entire Poland. We specialize in wind and solar projects, supervise investments, maintain and run wind farms, PV farms along with their electric structure, as well as HV/MV substations, servicing devices found in every wind turbine, reportable to the Office of Technical Inspection.

Elbudbis

https://elbudbis.pl/; office@elbudbis.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency

Elbudbis is an engineering company specializing in providing comprehensive services to the power sector, ranging from formal and legal arrangements through design works to construction and modernization of the power infrastructure. We have been on the market since 2013, focusing mostly on electricity contracting, but we also offer construction and assembly services such as the installation or modernization of MV, HV and LV overhead cable lines, installation or modernization of overhead and indoor power stations with a voltage of 400, 220, 110 and 15 kV, assembly of solar or wind farms.

ELECTRIC

https://www.electric.com.pl; sekretariat@electric.com.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Bioenergy, Energy efficiency, Hydrogen technologies

Electric Sp. z o.o., based in Konin in the Wielkopolski region, has been on the energy market since 1991. This company specializes in industrial automation and power installations as well as designing, obtaining funding and constructing renewable energy installations for individual customers, local authorities and entrepreneurs. Since its inception, Electric has been focusing on providing comprehensive energy solutions, high-quality services and professional approach to each customer. With a wealth of experience and a team of highly qualified specialists, Electric has earned trust among its customers and a well-established position in the energy market.

Elektrometal Energetyka

https://elektrometal-energetyka.pl/main-page/; export@ee-sa.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Bioenergy, Energy efficiency

Power system automation solutions from Elektrometal Energetyka SA are dedicated to the RES sector. Elektrometal Energetyka SA is a leading Polish manufacturer of power system automation solutions, supplying over 4,000 protection devices and bay controllers annually, to both domestic and European customers. We cater mainly to investors and contractors representing the RES sector. Our equipment is already in use at more than 4,000 renewable energy facilities and this number is still growing. We provide installations for both private companies and facilities supplying energy to the surrounding area.

Elektrorecykling Polska

https://eng.elektrorecykling-polska.pl/; info@elektrorecykling-polska.pl

Areas of activity

Circular economy, Secondary raw materials, Plastic regranulates

Electrorecycling Polska Sp. z o.o. specializes in the processing of plastics derived from waste electrical and electronic equipment (WEEE). The company focuses on the separation, flotation, and regranulation of polymers, showcasing its expertise in handling complex recycling processes. Additionally, it is highly active in both domestic and international sales, positioning itself as a producer of high-quality post-consumer regranulates. Its product range includes a variety of materials such as ABS, PS, and PP, indicating a broad spectrum of recycling capabilities and a commitment to sustainability through the repurposing of electronic waste materials.

Elemont

https://www.elemont.pl; elemont@elemont.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Bioenergy, Energy efficiency, Hydrogen technologies

At Elemont we provide comprehensive consultancy and completion of electrical installations, automation & control systems. We also serve as a general contractor of complex projects in the renewable energy sector in the EPC mode. We specialize in modern energy production methods, hydrogen&energy storage technologies as well as thermal waste treatment plants and solar&wind farms. What sets us apart from competition is our work system. We operate according to the BIM methodology for managing building information throughout the investment process, starting from the concept through all design and construction stages to facility management.

Elsta

https://www.elsta.pl; office@elsta.pl

Areas of activity

Solar energy, Bioenergy, Energy efficiency, Hydrogen technologies

Elsta was established in 1988, providing comprehensive services in the production and supply of electrical equipment for industrial plants operating in the green technology sector. We design, manufacture and deliver MV and LV switchgears, E-houses and container transformer stations as well as battery storage systems. Elsta has a dedicated team of inhouse electrical engineers who design, build and test the required electrical and control systems. Our electrical and automation engineers provide project-specific integration tests, and documentation of the entire electrical system. Elsta operates its business mainly in Poland, Sweden and Great Britain.

EmbeddedSystems.do

https://www.EmbeddedSystems.do; office@embeddedsystems.do

Areas of activity

Solar energy, Energy efficiency, Circular economy

Our forward-thinking company specializes in green energy-powered electronics, focusing on advanced sensors and data loggers for monitoring temperature, humidity, shocks, and air quality. We have proudly developed a solar-powered smart data logger, marking a significant step in sustainable technology. Additionally, we modernize outdated electronic devices for the energy industry, transforming them into innovative components designed for future development. Primarily serving clients in the USA, our team of engineers is based in Gdynia, demonstrating our commitment to eco-conscious electronic design and global environmental sustainability.

Enerad

https://enerad.pl/; biuro@enerad.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency

Enerad.pl is a platform designed for easy and quick access to solutions available in the broadly understood energy market. Enerad.pl mediates between individual clients and companies, and providers of high-quality services and products in the energy sector, such as photovoltaic systems, heat pumps, electricity, and gas supply. Enerad promotes companies and products, enables their comparison, and provides tools/calculators for estimating the efficiency of investments in renewable energy sources. The company's mission is to facilitate the transition to sustainable energy sources, promote ecological technologies, to provide education, and to support clients in their investments.

EPD Technika Solarna

https://www.epdwroclaw.pl; biuro@epdwroclaw.pl

Areas of activity

Solar energy, Energy efficiency, Hydrogen technologies, Circular economy, Smart city

EPD Technika Solarna Sp. z o.o. is a family owned and run company providing engineering and consulting services to public, industrial and residential clients. The scope of our engineering services includes multi branch technical HVAC, energy supply and renewable energy sources, energy supply and energetic efficiency improvement documentation for public, industry and residential, comprehensive technical documentation for photovoltaic power plants along with support for the investment process, cost estimation, proxy in investments, investment consulting, energy efficiency auditing, energy efficiency documentation.

ESCOlight

https://www.escolight.com.pl; info@escolight.com.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency

Cost-free decarbonization. We provide solutions that reduce energy costs and support the decarbonization strategy. ESCOlight combines the technological know-how with a flexible financing model. We are an energy service company, taking over all project risks and ensuring a warranty on the installation, maintenance services and full insurance throughout the entire contract period. Our decarbonization services, i.e., energy transition, are financed from savings obtained through optimization, which makes them costless. ESCOlight is a member of the LUG Capital Group, which is the leader of the lighting industry in Poland.

ESIX

https://www.esix.pl; faktury@esix.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency, Electric power, Electricity, Service

We are a company created by several power engineering enthusiasts with a passion for innovation and the ability to adapt quickly to the changing world of electricity and electric power. We offer innovative solutions in the field of power engineering and renewable energy sources, tailored to our customers' needs. We have modern equipment and use the latest technologies to provide our partners with stable, safe and effective solutions. We have over 20 years of experience in the market, but we are a young team with great knowledge, skills and, above all, passion for our business!

Espacia

https://www.espacia.eu; biuro@eko-rozwiazania.pl

Areas of activity

Solar energy, Heating

We are a Polish company specializing in heating based on the PTC infrared heating foil. It does not require any repairs or maintenance. As the manufacturer and owner of the Espacia brand, we provide a 25-year warranty. Heating foil can be compared to the sun, which rays heat the building and everything inside. Electricity consumption in a house with an area of 100 square meters is approximately 4,000 kWh/year. This solution is much cheaper than a heat pump, which requires greater investments and servicing. We are proud of our product, which generates much less waste thanks to its long life and failure-free operation, having positive impact on the environment and global warming.

ESPIR TECH

https://www.ecobalers.com; export@ecobalers.com

Areas of activity

Devices for waste volume reduction

We are a Polish manufacturer of waste volume reduction equipment, mainly balers and compactors, present on the market for over a decade. We have completed several thousand projects in Poland and Europe. We produce balers and compactors under our Ecobaler brand, marketed via our dealer network. We are open to cooperation offers.

Espro

https://www.espro.technology; biuro@espro.technology

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Energy efficiency, Smart city

Espro is a provider of power solutions, specializing in the design, construction, and maintenance of industrial electrical installations and networks. Our activities range from comprehensive projects for the construction and modernization of power grids to industrial installations featuring innovative automation and green technology solutions. We offer solar energy and energy efficiency services. With our experience and knowledge, we design and implement technologically advanced solutions that enhance energy efficiency while minimizing environmental impact. We support projects related to the development of smart cities, renewable energy infrastructure, and energy efficiency.

ETP Elektro

https://etp-elektro.pl; biuro.elektro@etp-group.com

Areas of activity

Solar energy, Wind energy, Hydropower, Energy efficiency, Hydrogen technologies, Smart city

Excellence from experience. We provide specialist engineering, manufacturing and services for low-voltage equipment as well as protections, controls and automation for high-voltage switchgears. Over the years, we have perfected our standards and procedures to deliver top-notch products together with their servitization, including warranty and post-warranty services and maintenance. This means to our customers that at ETP Elektro they can purchase not only a top quality product but also a comprehensive solution that goes with it, partnering with a reliable expert that is there for them for as long as it is needed.

Eurowind Energy

https://eurowindenergy.com; info-pl@eurowindenergy.com

Areas of activity

Solar energy, Wind energy

Eurowind Energy is a global group present in most European countries and the United States. The company designs, builds and manages wind, solar and hybrid parks along with infrastructure to sell green electricity at the final stage. We also have experience in hydrogen production and are gaining experience in complete management of power storage projects in the USA. The company was founded in 2006 and currently employs over 500 people in 16 countries.

EV Volta

https://www.ev-volta.com; damian.sciepko@ev-volta.com

Areas of activity

Smart city

EV Volta manufactures modern professional AC and DC charging stations equipped with payment terminals. Our charging stations are designed for easy operation and a safe charging process of all electric and hybrid vehicles.

FAKRO

https://www.fakro.pl; https://www.fakro.com; fakro@fakro.pl

Areas of activity

Solar energy, Bioenergy, Water resources management

Fakro is the world's second-largest manufacturer of roof windows. Fakro with its own research and development center has submitted over 220 patent applications. Many Fakro design solutions set new trends for the roof window industry. Fakro, employing over 4,000 people, consists of 11 production plants and 17 distribution companies. Fakro products can be found in over 60 countries. The company pursues the ESG goals in accordance with its Go Green philosophy. We have our children's future in mind in everything we do. We design, plan, and produce with respect for the natural environment.

FibriTech

https://fibri.tech/; office@fibri.tech

Areas of activity

Circular economy, Biomaterials

FibriTech offers eco-friendly alternatives to fossil-based materials. Aiming to reduce pollution and waste, FibriTech addresses the shortcomings of plastic recycling and supports closed-loop economy principles. By consulting stakeholders, the company tailors biomaterials to market demands and complies with regulations like the Green Deal and the UN SDGs. FibriTech biomaterials, made from natural fibers, feature a 3D porous structure that is both light and strong, adaptable for various applications. Currently, the company focuses on oil and petrochemical absorbers that effectively clean water surfaces and manage industrial leaks. We plan to enter the category of substrates for soilless plant cultivation in the future.

Fol-druk Flexo

https://www.fol-druk.pl; joanna.sobiesiak@fol-druk.pl

Areas of activity

Circular economy

Fol-druk Flexo Sp. z o.o is a Polish flexographic printing house located in Płock, specializing in the production of packaging for the food and industrial purposes in the BRC GS PM v6 standard. The company's offer includes flexographic printing on flexible plastics, solvent-free and solvent lamination, foil cutting, cold-seal packaging, laser cutting with easy-open effect, macro- and micro-perforation, packaging refinement using matte, paper, soft touch and other varnishes. We cooperate with our clients in the production of recyclable packaging, providing them with technical support from packaging design to a timely delivery.

Fresh Inset

https://freshinset.com/; krzysztof.czaplicki@freshinset.com

Areas of activity

Water resources management, Food waste

The Vidre+™ technology from Fresh Inset enhances freshness, nutritional value, and appearance of fruit, vegetables, and flowers, significantly extending their shelf life from days to months. This benefits stakeholders — growers, packers, labeling/packaging manufacturers, logistics providers, and retailers — without the need for any reorganization. Vidre+™ seamlessly integrates into packaging and labels, turning them into smart versions. Fresh Inset's flagship smart sticker/label is just the beginning; the company is also innovating plastic films and cardboard boxes. Having global expansion plans, Fresh Inset prioritizes ESG goals, reducing food waste and CO2 emissions.

FSWO

https://fswo.pl/; krakow@fswo.pl

Areas of activity

Promotion of Green Technologies

FSWO Event Agency undertakes activities aimed at development in the ESG area, which has been evidenced by the EcoVadis and Avetta certificates.
The former proves positive impact on the environment, human rights and ethical business, and the latter - legal and financial compliance, attention to safety and sustainability. FSWO has digitalized its documentation to reduce paper consumption. Marketing materials are replaced by apps, e.g. the iplatform. app enabling participant verification. The agency organizes charity campaigns, collections and CSR initiatives. For FSWO events are an excellent tool to promote sustainability and to educate participants on this topic.

GALKOR

https://www.galkor.pl; sekretariat@galkor.pl

Areas of activity

Water resources management

We are a manufacturer of modern electroplating lines and water treatment systems. Our offer includes SYSTEM DS20 - a series of modular process lines for the plating of steel products, a zinc ion recovery module to increase process efficiency, both in terms of rationalizing the use of raw materials and reducing the generation of hazardous waste containing heavy metals. The core of this solution is a PVC-based polymer composite containing a metal ion complexing agent (POIR.03.02.01-04-0007/21-002-02).

Gas Sample

https://gassample.com; biuro@gassample.com

Areas of activity

Bioenergy, Energy efficiency, Hydrogen technologies, Air quality

Gas Sample is an analytical system integrator for chemical/petrochemical/ gas plants and refineries. We deliver complete analytical systems under an EPC contract. We offer our unique Bricks'n'Cloud solution which consists of a mini-modular, self-diagnostic sample conditioning system for liquids and gases, a dedicated predictive application that allows for registering analyzer alarms, and a sample conditioning system. The system protects from unexpected accidents resulting in possible pollutant emission, decreases media volume in conditioning system. It is a perfect solution for CleanTech plants, renewable fuels or green hydrogen. In 2024, we delivered the system to an HVO plant.

GAZUNO

https://www.gazuno.pl; info@gazuno.pl

Areas of activity

Geothermal energy, Energy efficiency,
Heating and cooling recovery based on heat pumps

Gazuno is an engineering company providing for over 15 years such RES solutions as gas absorption and electrical heat pumps, chillers, and dedicated control automation. The company provides investor support from concept ideation through implementation to market launch. Gazuno helps select devices and fittings, creates technological diagrams and operational analyses, energy characteristics, and the design of automation that connects all devices into a coherent system. Thanks to remote access, it optimizes the efficiency of devices and provides inspections and services for installations, with access to public and commercial institutions, industrial facilities, and district heating companies.

Gecon

https://www.gecon.net.pl; business@gecon.net.pl

Areas of activity

Circular economy, Reuse goods supplier

Gecon operates in the 3R (Reduce, Reuse and Recycle) market, collecting secondhand goods. Gecon provides a specialty service to the REUSE and RE-COMMERCE sector. We are a service and logistics operator handling after-sales processes for manufacturers, distributors or retailers. We have 6 service centers and sorting facilities for electronics, white goods, textiles, footwear, books, and domestic appliances. We are at the forefront of innovative technological processes, providing our customers with sustainable products. Our mission is to inspire conscious consumers and to give them satisfaction with purchasing eco-friendly products. Be Happy, Be ECO, Be GECON.

GEORGE

https://www.george.pl; biuro@george.pl

Areas of activity

Ecological Wooden Buildings

George is a manufacturer of prefabricated and modular buildings as well as windows and doors made of eco-friendly materials, chiefly Scandinavian whitewood and pine. Our goal is to manufacture high-quality and durable products. Our windows and doors are ecological in the contrary of those made of PCV. Although the price is different wood remains for us the main manufactural material. Our modular and prefabricated cabins are designed for residential purposes but also for glamping. We are one of the best manufacturers of quality log cabins in Europe and the biggest designer and producer of glamping lodges and pods.

Geyer & Hosaja

https://www.geyer-hosaja.com.pl;
gh_partynia@geyer-hosaja.com.pl

Areas of activity

Circular economy

We are a 100% Polish, family-owned company with a longstanding tradition. We take pride in our quality and experience gathered over 30 years of our market presence. In our four production plants located in Poland, we hire over 1,000 employees. We place particular emphasis on waste processing and closed-loop production. GH produces around 80,000 tons of elastomer products per year, which puts us among the biggest manufacturers of rubber products in Central Europe. We offer a very wide range of products finding application in various industries: car mats, rubber compounds, retreaded tires, EPDM granules, road safety products, agriculture and floor mats, to name but a few.

go&management

https://www.goandmanagement.com; office@goandmanagement.com

Areas of activity

Hydrogen technologies, Biogas, Biomethane

We are an advisory body for decision-makers at all stages of project completion. Our staff is made of high-class specialists in the field of management and technology. In modern times when sustainability and care for the environment are the highest priorities, we provide green technologies to our clients on the Polish market. Our portfolio includes hydrogen storage units, hydrogen transportation units, hydrogen mobile refueling stations, as well as technologies related to electrolysis, renewable chemicals, waste gas treatment, waste sludge treatment, sulfuric acid, biogas & biomethane production.

GP Truck Trading

https://www.gptruck.pl; biuro@gptruck.pl

Areas of activity

Municipal

We have been present on the Polish market for 25 years. We specialize in the construction, sale and maintenance of such municipal vehicles as garbage trucks or tippers as well as crane equipment, etc. Our offer also includes septic trucks and high pressure sewer cleaning trucks. As GP Truck Trading, we are the exclusive representative of Farid, an Italian manufacturer of garbage trucks bodies, as well as an authorized distributor of Hiab, and a dealer of Maxus electrics vehicles. We have our own factory in Tychy (in Silesia), where we manufacture Janco/GP Lift hook-lift equipment, as well as slurry tanks and dump truck bodies. We provide full service for municipal vehicles.

GPR Guma i Plastik Recycling

https://www.gpr-guma.pl; info@gpr-guma.pl

Areas of activity

Circular economy

GPR is a company that has been operating in the rubber and plastics recycling industry for over 30 years - it processes used car tires and post-consumer hard polyethylene (HDPE) waste into finished products (waste container wheels, road safety bases, speed bumps) sold both domestically and abroad. With its proprietary technical solutions and environmentally friendly technologies, the company offers fully recyclable products, consisting in 96% of secondary raw materials. The company has been ISO 9001 & ISO 14001 certified continuously since 2008, to confirm high quality of its products and compliance with environmental protection standards. For more information visit our website.

Green Energy Patryk Chojnacki

https://greenenergypv.pl; green.fotovoltaika@gmail.com

Areas of activity

Solar energy, Heat pumps

Photovoltaic installations, installation of heat pumps.

Green Sequest

https://greensequest.earth/; kontakt@greensequest.earth

Areas of activity

Carbon Dioxide Removal

Green Sequest is developing enhanced rock weathering, which is a verifiable and scalable method of removing CO2 from the atmosphere. The rock used in the process is serpentinite, characterized by high capacity to remove CO2 from the atmosphere. It is used as a fertilizer in agriculture, providing benefits for soils, and in road infrastructure to build bicycle lanes. At the same time, Green Sequest is also developing an effective measurement, reporting and verification method to correctly quantify removals and enable carbon credit generation.

Green Wallbox

https://greenwallbox.com/; info@greenwallbox.pl

Areas of activity

Electromobility

Green Wallbox is a young Polish company founded in 2020. We recognized that the domestic market lacked solutions addressing changing drivers' needs. Hence, we decided to provide futureproof chargers and accessories. Our mission is to provide every user with the best possible solution for charging an electric car from their own installation. We know that a change is needed today, so we are looking for safe and effective EV charging solutions.

GREENTEC

https://www.greentec.pl; greentec@greentec.pl

Areas of activity

Solar energy, Wind energy, Air quality, Air-to-water heat pumps

Greentec is a pioneering company dedicated to environmental sustainability and renewable energy solutions. Specializing in innovative technologies, Greentec focuses on developing and implementing eco-friendly practices in various sectors, including heat and cool energy production. With a commitment to reducing carbon footprint and promoting sustainability, Greentec strives to create a cleaner and greener future for generations to come.

GreenTree Group

https://www.greentree.com.pl/; biuro@greentree.com.pl

Areas of activity

Circular economy, Compostable packaging

GreenTree Group is a manufacturer of foils and compostable packaging. Our solutions are dedicated primarily to the food industry, but not only. Our products hold a number of certificates confirming their approval for contact with food as well as certificates confirming composability in accordance with the EN 13432:2002 standard. Most of our products are of plant origin. We offer laminated foils, including weldable foils, thermoforming foils, soft foils, monofoils, antistatic foils and injection applications. Our mission is to reduce the use of plastics and protect the planet from ubiquitous microplastics.

GRYWIT Anna Jankowiak

https://www.esgassured.com; info@esgassured.com

Areas of activity

Energy efficiency, Circular economy, Changing eco

ESG Assured is a mobile app allowing employees and other stakeholders to gain ESG knowledge in real time, to verify it and to support decarbonization with real actions. It enables a dialogue with stakeholders and a materiality survey. We have built a dedicated mechanism for integrating sustainability goals into employee bonuses - setting, monitoring implementation, and accountability. We help optimize corporate processes and integrate ESG aspects therein, as this is the only way to incorporate ESG into business strategy. We help reduce personal employee carbon footprint by an average of 30%. We focus on social aspects and daily wellbeing, too.

HABER Energia

https://www.haberenergia.pl; biuro@haberenergia.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Bioenergy, Energy efficiency

We manufacture and build modern and complete energy distribution systems. Haber Energia has been manufacturing and marketing highly specialized electrical switchgears for RES, industrial, commercial, residential, IT and other facilities for over 40 years. With individual approach to each order we ensure a wide spectrum of applications. Our design team compiling technical documentation always tailors our solutions to environmental and site conditions which our switchgears will operate in. Customized solutions and top quality of workmanship are our key strengths in the low and medium voltage power distribution equipment market.

HAWKO

https://www.hawko.pl; biuro@hawko.pl

Areas of activity

Energy savings and environmental protection

We are a manufacturer of modern polymer preparations used for cleaning, maintaining and restoring the efficiency of water heating and cooling installations. Our products are completely biodegradable, safe and environmentally neutral. Hawko polymer preparations are used in both low- and high-temperature settings, i.e. for refrigeration and air-conditioning installations, including glycol systems, and temperatures below 0°C. Hawko preparations are characterized by lubricating properties, creating a polymer film on the walls of the installation, providing a chemical barrier between the medium and the installation.

Horus-Energia

https://horus-energia.pl/en/; zapytania@horus-energia.pl

Areas of activity

Solar energy, Bioenergy, Energy efficiency, Hydrogen technologies

Horus-Energia has been on the market since 1984. At the beginning, we specialized in diesel engine-based generator sets. Over time, our focus shifted to gas-fired cogeneration units. We have more than 10 years of experience in cogeneration based on hydrogen-fired engines. We supply complex hydrogen systems, combining electrolyzers, hydrogen storage tanks, engines, compressors and all fittings. In all our projects, we are responsible for the design, construction, installation and maintenance. In addition, our company offers other energy systems, such as PV or biogas solutions as well as heat pumps and electricity storage.

Hydropolis

https://www.hydro-polis.com/en/; info@hydro-polis.com

Areas of activity

Circular economy, Smart city, Agritech

Hydropolis is a leading manufacturer of ultra-efficient technology for plant growth in controlled environments. We design turnkey solutions for vertical farming including technology, software, automation and know-how. Years of research have led Hydropolis to achieve higher yields at lower operating costs compared to competitors. Our model is to design, build and operate vertical farms.

Hynfra

https://www.hynfra.pl; office@hynfra.pl

Areas of activity

Hydrogen technologies

Hynfra is a technology integrator, system designer, project developer and executor. Our expertise lies in spearheading infrastructure projects and the installation of systems dedicated to producing hydrogen through electrolysis, powered by electricity derived from renewable sources — thereby generating renewable hydrogen, its derivatives, and thermal energy. Our company cooperates on multiple levels with local governments as well as industrial and chemical businesses worldwide. In line with our commitment to innovation in hydrogen technologies, we are actively seeking business partners to collaborate with on projects related to renewable hydrogen production infrastructure and logistics.

Hynfra Energy Storage

https://hynfraenergystorage.pl; biuro@hynfraenergystorage.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency,
Smart city, Battery Energy Storage System

Hynfra Energy Storage as a pioneer BESS developer and technology integrator that runs its own BESS projects and implements energy storage projects for RES developers and the industry. We offer flexible, integrated solutions to improve returns and maximize the economic, environmental, and resiliency value across energy assets. The scope of our services includes the whole value chain of BESS projects: feasibility and conceptual studies, complete project development starting from choice of project location, through all necessary permits and capacity market certification up to the RTB stage, project management and construction and COD in cooperation with our strategic partners.

IFS Polska

https://www.ifspolska.pl/en/; contact@ifspolska.pl

Areas of activity

Solar energy, Energy efficiency, Smart city,
Battery Energy Storage Systems, BMS, EMS

IFS Polska sp. z o.o. specializes in designing and manufacturing expert systems, including power electronics, electronics, industrial automation and systems for professional energy - equipped with proprietary embedded software.
The company has been harnessing the Polish technological expertise for over 14 years. Our specialists design, build, and deliver reliable, functional, and fully secure industrial energy storage facilities, battery energy storage systems, DC/DC converters, battery testers, and solutions for the power industry. IFS Polska is also the manufacturer of its own innovative battery management system (BMS), which together with our proprietary Energy Management System (EMS), constitutes a complete product applicable in large BESS systems.

Innosil

https://www.innosil.pl/; info@innosil.pl

Areas of activity

Systemic acquired resistance inducers

Innosil is a spin-off company that has developed a technology based on new systemic acquired resistance inducers that are an alternative to plant protection agents. Instead of focusing on fighting plant pathogens, the substances activate and strengthen the natural immunity mechanisms of plants so that they can defend themselves against diseases. The use of SAR inducers has a number of advantages over the application of conventional plant protection agents. It overcomes the problem of pathogen resistance, and it ensures long-term resistance against a wide range of pathogens which continues for weeks even after the application of SAR inducers has been terminated.

Inspeerity

https://inspeerity.com/; contact_center@insperity.com

Areas of activity

Solar energy, Energy efficiency, Smart city

We help businesses work better and grow faster with our software and advice. We create an environment where everyone feels a part of the team. Inspeerity is more than just technical skills. We guide our clients to help them make the best decisions for their business. Our goal is to become the top choice for businesses seeking technology solutions & advice. We believe that supportive workplace increases engagement, improves teamwork & attracts gifted and passionate developers.

INSTAL 3D
PIOTR HOŁDOWICZ

https://www.instal3d.pl; biuro@instal3d.pl

Areas of activity

Solar energy, Energy efficiency, Air quality

We are a design and construction company in the sanitary installations industry. We comprehensively implement both small and large investments, from design through execution to service and maintenance. From the beginning of our activity, we have been promoting such modern and energy-saving thermal comfort systems as air conditioning, heat pumps, and ventilation/heat recovery. We offer comprehensive solutions for both home and commercial use.

INSTAL-FILTER

https://instalfilter.pl/; biuro@instalfilter.pl

Areas of activity

Energy efficiency, Air quality

Instal-Filter SA offers a comprehensive portfolio of innovative air technology products for various industrial sectors both in Poland and internationally. We recognize that each client's air pollution control needs are unique. Our team of experts specializes in delivering custom-designed solutions tailored to your specific applications. With over 25 years of experience and hundreds of successful projects in de-dusting, filtration, and neutralization installations, we have developed a world-class infrastructure capable of addressing complex air protection challenges effectively.

Institute of Fluid-Flow Machinery, Polish Academy of Sciences

https://www.imp.gda.pl/en/; imp@imp.gda.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Bioenergy, Energy efficiency, Hydrogen technologies, Air quality, Smart city

The Institute was founded in 1956 to research operating principles, design and construction of machines used for energy conversion. Currently, the Institute focuses on fluid mechanics, multiphase flows, thermodynamics and heat transfer, combustion, plasma physics, laser technology, machine mechanics, mechanics of smart structures, technical diagnostics, tribology, aeroelasticity and other fields of engineering and technical sciences. It runs five centers divided into 19 scientific departments and a PAS Research Centre in Jabłonna specializing in renewable energy source research.

The Institute of New Technologies in Environmental Engineering

http://int.edu.pl/; sekretariat@int.edu.pl

Areas of activity

Adaptation to climate change; Wastewater management

The Institute of New Technologies in Environmental Engineering is a spin-out aiming to commercialize the results of scientific and research work. The mission of the Institute is to create innovative solutions in the green technology sector in the field of adaptation to climate change, wastewater management, circular economy, all in line with the Nature-Based Solutions initiative.

Institute of Power Engineering - National Research Institute

https://www.ien.com.pl/en; instytut.energetyki@ien.com.pl

Areas of activity

Hydrogen technologies

The Institute of Power Engineering - National Research Institute is one of the largest institutes in Poland and Central Europe providing research in the field of energy technologies. It is a modern state-owned research and development center.
The Institute covers a wide area of energy research initiatives from expert work for the power sector to exploration of the most advanced energy generation technologies, such as fuel cells, clean coal technologies and renewable energy sources. Its key advantages include experienced scientific, engineering and technical staff as well as numerous modern laboratory facilities, some of which are unique in their kind.

Instytut Energii Barczewo

https://www.instytutenergii.pl; i.wisniewska@instytutenergii.pl

Areas of activity

Bioenergy, Energy efficiency, Circular economy

Instytut Energii Barczewo sp. z o.o. is a technology-based enterprise that specializes in the design and implementation of installations for methane fermentation, composting and waste stabilization. Instytut Energii Barczewo is a contractor of the first biomethane production plant in Poland. The 'Innovative biomethane plant' project was launched by the National Centre for Research and Development and aimed to develop an agricultural biogas plant technology capable of utilizing a wide range of waste substrates. We have applied our proprietary Anabiorec technology and completed a full scale highly efficient, odorless and energy self-sufficient biomethane treatment plant.

IoT Oak

https://iotoak.com; office@iotoak.com

Areas of activity

Solar energy, Energy efficiency, Smart city

IoT Oak specializes in green technology solutions, particularly in efficient energy management processes. Our flagship product, the Green Energy Controller helps optimize energy consumption from renewable sources. This innovative system enables prosumers to enhance the efficiency of their photovoltaic installations by intelligently managing energy production and consumption. By storing excess energy during periods of overproduction and utilizing it during peak consumption times, our solution reduces electricity costs and promotes sustainable energy usage. With expertise in embedded systems and the IoT technology, we are dedicated to greener solutions for the future.

IOZE hydro

https://ioze.pl/; info@ioze.pl

Areas of activity

Hydropower

IOZE hydro is a part of the IOZE group. We design, manufacture, assemble and commission complete hydro sets. We offer modern, highly efficient turbines in various types of construction individually designed for a specific location. We provide competitive and economical solutions for micro and small hydropower plants. We also supply complete and multidimensional solutions for hydropower investments, from potential assessment, through investment process management, technology delivery, to project implementation. Our claim is ‘turn water into profits’, and we know how to implement it while respecting the natural environment.

ITA

https://www.ita-polska.com.pl; info@ita-polska.com.pl

Areas of activity

Wind energy, Energy efficiency, Hydrogen technologies

ITA is a Polish enterprise specializing in measurement and machining technologies. We carry out metrology activities aimed at the verification of structures, such as reduced material consumption, resulting in lower weight and lower energy consumption of moving components, including wind energy applications. We digitize objects for quality and design purposes, including green energy structures (wind energy, hydropower, hydrogen technologies, circular economy or smart city). We optimize machining technologies from the point of view of machining performance and efficiency as well as energy efficiency.

ITTI

https://www.itti.com.pl; sales@itti.com.pl

Areas of activity

Solar energy, Circular economy, Smart city, Waste recycling industry

We are an SME from the IT sector providing customized software solutions for private companies, public entities at both the national and international level. ITTI has been operating since 1996 and located in Poznań, Poland. Our green technology solutions include smart machine monitoring for better planning and use of resources to comply with the European Green Deal objectives, an electrical waste disposal management system; a solar energy monitoring and management system; a mobile app for effective management of free parking spaces in municipal parking areas.

Izodom 2000 Polska

https://izodom.pl; izodom@izodom.pl

Areas of activity

Building materials

Izodom 2000 Polska is the only complete technology for the construction of energy-efficient and passive houses. Izodom is a family company, present on the market since 1991, with production located in Poland and several European countries. The Izodom technology has been certified by the German Passive House Institute in Darmstadt. Izodom is the only firm to use the IZOClick system for joining blocks without mortar, which eliminates thermal bridges. Our products are available in over 50 countries, and our technology has been used to build, among others, a royal palace in Morocco.

KABLONEX

https://kablonex.pl; sekretariat@kablonex.com.pl

Areas of activity

Circular economy

Kablonex is a producer of flexible packaging in Europe. We are a family company built entirely on the Polish capital. We have extensive experience in foil production, and cooperate with largest contractors. We invest in new machines and employee development, which makes us a solid and reliable foil supplier. We have a new recycling machine dedicated to PCR. We continue to increase our sales of foil containing recycled materials. We have our own 1MW photovoltaic farm that was erected in 2021 to make us more sustainable. We have in our offer the patented POD ECO 5-layer foil which is fully closed-loop recyclable.

KAM-BET MINING COMPANY

kambet.hydrogen@gmail.com

Areas of activity

Hydrogen technologies

We are a company originating from the mining industry. Our goal is to recultivate and utilize post-mining areas to produce green hydrogen. We plan to produce hydrogen from solar energy, and, in the long-term perspective, also from wind energy. Our company is located near Płock and Włocławek.

KOMPOL

https://www.kompol.pl; kompol@kompol.pl

Areas of activity

Circular economy

Kompol was established in 1989. We are a manufacturer of paper and plastic packaging. We specialize in supplying foil and paper packaging to nationwide retail chains. We guarantee high quality products at competitive prices. Our offer includes plastic bags, paper bags, wrapping paper, reusable polypropylene bags. We also offer foil gloves, cooler bags, PET containers. When creating packaging, we consciously choose methods that minimize our impact on the environment by using energy-efficient processes, recycled raw materials, and eco-friendly resources.

Konstal Pleszew

https://www.kotly24.pl; info@konstalpleszew.pl

Areas of activity

Biomass energy

Our company is a well-established family-owned manufacturing enterprise that has been specializing in the production of high-quality biomass boilers for over thirty years. Our products, including wood and wood pellet boilers, are distinguished not only by their efficiency and reliability but above all by their environmental friendliness and safety of use. We prioritize ecology, which is why our boilers comply with the latest emissions and energy efficiency standards and regulations. As a company with a longstanding tradition and extensive experience in the heating industry, we take pride in our solid reputation and customer loyalty.

Konstrubowski engineering

https://konstrubowski.pl/english/; biuro@konstrubowski.pl

Areas of activity

Bioenergy, Energy efficiency, Circular economy, Water resources management

We are a design studio specializing in mechanical and industrial engineering. We mainly work in the thermal waste processing industry (mechanical furnaces, slagging and ashing plants, pipelines, air ducts) and in the broader industrial sector (process plants, components for steel mills and foundries, and process furnaces). In addition to designing, we also provide engineering calculation and simulation services for various industries to improve energy efficiency. Having people with degrees on our team allows us to carry out R&D tasks. We are also working on our own hydrothermal gasification technology for organic waste and plastics.

Kronos-Polymer

https://www.kronos-polymer.pl/; biuro@kronos-polymer.pl

Areas of activity

Circular economy

Kronos-Polymer is a dynamically developing company that processes waste polyethylene films into LDPE granules for re-production. Innovative raw material preparation technology, the washing and drying process, the use of an innovative extruder, appropriate degassing and plasticization of the material and triple filtration allow us to process even highly contaminated waste. We specialize in recycling agricultural foil, which is produced from high-quality raw material, and with our technology it can be reused to produce foil and pipes. The management of difficult-to-recycle agricultural waste is our contribution to the popularization of circular economy.

KSK Developments

http://www.ksk-dev.com/; ksk@ksk-dev.com

Areas of activity

Circular economy, Smart city

The company specializes in the design, implementation and production of smart city solutions, such as devices managing vehicular and pedestrian traffic at intersections, parking lots and in places requiring special supervision, e.g. gate entrances, narrow sidewalks or road sections permanently or temporarily closed to traffic. We manufacture detectors that monitor exothermic biochemical processes occurring in compost heaps at waste treatment plants. We produce devices that monitor the filling level in containers collecting solid, semi-liquid and liquid substances, including waste and pollutants, e.g. drainless toilets during mass events.

Liki Mobile Solutions

https://likims.com; hello@likims.com

Areas of activity

Solar energy, Energy efficiency, Smart city

Liki Mobile Solutions is dedicated to green technology initiatives, especially to efficient energy management. Our flagship product, the energy controller, streamlines energy consumption from renewable sources, empowering users to optimize their photovoltaic installations. Alongside our commitment to sustainability, we offer expertise in embedded systems, IoT technology, UI/UX design, web development, custom software development, and product design. With a focus on innovation and environmental responsibility, we deliver comprehensive digital solutions tailored to our clients' needs. We strive to create digital solutions that drive positive environmental impact.

Lower Silesian Regional Development Agency (DARR)

https://www.darr.pl; darr@darr.pl

Areas of activity

ESG audits, Advisory and consultancy

We believe the future of our planet relies on sustainable development, responsible business practices, and investment in innovations. Our mission is to support companies in achieving sustainable development goals by providing high-quality ESG audits and advice. Our team consists of experts experienced in ESG goals, ensuring high-quality services. With international presence and collaboration with partners worldwide, we deliver solutions tailored to our clients' local and global needs. If you are seeking a partner to generate and implement international sustainable projects or business practices, contact us. Together, we can create a better future for our planet and future generations.

LUMA Design

https://www.lumadesign.pl; biuro@lumadesign.pl

Areas of activity

Bioenergy, Energy efficiency, Circular economy, Air quality

Luma Design is located in Poland at the Energy Centre of the AGH University of Science and Technology in Krakow. We specialize in designing and implementing comprehensive systems solving the problem of effective resource management and indoor air flow. The company designs, builds, and tests prototypes as well as prepares and implements comprehensive heating and ventilation systems with heat recovery units, heat pumps, and thermal energy storage. Key functions of the unified heating and ventilation system include ventilation, heating and cooling of the building, thermal energy storage.

Łukasiewicz Research Network – Institute of Electrical Engineering

https://www.iel.lukasiewicz.gov.pl; sekretariat@iel.lukasiewicz.gov.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency, Hydrogen technologies, Circular economy, Smart city

Łukasiewicz - Institute of Electrical Engineering is one of the oldest and the largest research institute in the field of electrotechnical industry in Poland. The Institute is recognized as a world leader in energy processing and storage, electromobility and intelligent transport, energy systems, hydrogen technologies and electrotechnical materials. For over 75 years, Łukasiewicz - IEL has been supporting companies in the development of new technical solutions and the improvement of existing products. The Institute combines the work and experience of the best scientists and experts in the field of energy systems, hydrogen technologies, and materials engineering.

Łukasiewicz Research Network - Institute of Microelectronics and Photonics

Łukasiewicz
Institute of Microelectronics
and Photonics

https://imif.lukasiewicz.gov.pl/en/contact/; sekretariat@imif.lukasiewicz.gov.pl

Areas of activity

Bioenergy, Energy efficiency, Hydrogen technologies, Smart city

Among its numerous projects, Łukasiewicz - IMiF is developing LED technology and radar motion sensors supported by real-time data analysis algorithms, which enhance energy efficiency and environmental adaptability, promoting sustainable urban development. Graphene is used in hydrogen technologies, including the production of composite coatings, photocatalytic materials, and membranes for fuel cells. The newly established laboratory will enable the testing of hydrogen fuel cells and advanced microstructural studies. The LTCC Technology Research Group is investigating the production of SOFC components and the creation of biodegradable substrates for electronics.

Łukasiewicz Research Network - Institute of Non-ferrous Metals Division Legnica

http://www.imn.legnica.pl/; sekretariat.legnica@imn.lukasiewicz.gov.pl

Areas of activity

Circular economy, Recovery of industrial metals

We are a recycling and research center for the Polish non-ferrous metal metallurgy and hydrometallurgy. We recover metals like lead, tin, zinc, copper, antimony, tungsten, molybdenum, nickel, cobalt, vanadium, and precious metals. Our products include lead bullion, zinc chloride, zinc phosphate, zinc oxide and sulfate concentrates, tungstic acid, molybdic acid, copper sulfate, copper oxide, cupric acetate, vanadium oxide, sodium tungstate, Pb-Sn alloy. We produce and distribute also abrasive materials and water treatment materials. We provide waste recycling for the R4 process (spent catalysts, ventilation dusts, slugs, spent acid alkaline solutions, scraps, dross, etc.).

Łukasiewicz Research Network - New Chemical Syntheses Institute

Łukasiewicz
New Chemical Syntheses Institute

https://www.ins.lukasiewicz.gov.pl; sekretariat@ins.lukasiewicz.gov.pl

Areas of activity

Bioenergy, Hydrogen technologies, Circular economy, Air quality

Łukasiewicz – New Chemical Syntheses Institute is a research-and-development organization established over 70 years ago in Puławy, Poland to support the chemical industry in supplying innovative technologies to develop and optimize production processes. We are a part of the Łukasiewicz Research Network composed of 22 institutes in Poland, supporting the economic growth of companies with our innovations and expertise. We engage in research and development in close partnership with the industry, providing services in the field of chemical technology, applied catalysis, hydrogen technologies, biogas, biomethane, NOx reduction, etc.

Łukasiewicz Research Network - Warsaw Institute of Technology

Łukasiewicz
WIT

https://wit.lukasiewicz.gov.pl/; info@wit.lukasiewicz.gov.pl

Areas of activity

Bioenergy, Energy efficiency, Hydrogen technologies, Air quality, Smart city

Lukasiewicz Research Network - Warsaw Institute of Technology develops modern technologies and products for the sustainable construction industry. We also provide solutions for waste management, mechanization and automation of production processes, property security, as well as machinery and equipment operation. We specialize in electroplating processes, heat and thermochemical treatment as well as corrosion protection. We also support companies in implementing sustainable development projects, financed with domestic and European funds.

Marbet Wil

http://marbetwil.com/; info@marbetwil.com

Areas of activity

Circular economy, Industrial waste neutralization

Marbet Wil offers its original technological solution enabling the recovery of hazardous waste through stabilization with the Sulstar® sulfur polymer and solidification into products dedicated to railway, road and hydrotechnical engineering. Sultech® is a solution for disposing of solid waste such as dust, ash, sand, or slag while eliminating the need for landfilling. The stabilization and recovery (economic reuse) of hazardous industrial waste in polymer concrete Sultech® is particularly useful in stabilizing waste containing heavy metals that are chemically bonded to be insoluble in water. Other substances are inserted into a matrix of low-absorbent and tight material.

MB Recycling

https://mbrecycling.pl/; biuro@mbrecycling.pl

Areas of activity

Circular economy, Smart city

The main area of MB Recycling activity is the collection of spent electrical and electronic equipment as well as spent portable batteries and accumulators which are then processed and reused. MB Recycling recycles all types of electrical waste and all types of batteries. The company owns five modern plants in Poland and one in Ukraine, all specializing in the processing of spent electrical and electronic equipment, sorting portable batteries and recycling alkaline and zinc-carbon batteries. The company has created its own system for collecting spent equipment, portable batteries and accumulators, called Electric Waste (Elektryczne Śmieci).

Metalerg

https://www.metalerg.pl; kotly@metalerg.pl

Areas of activity

Bioenergy, Energy efficiency, Circular economy, Biomass, Straw, Non-wooden biomass

Metalerg's experience in the production of straw burning boilers dates back to the early 1990's, when we started to collaborate on this technology with a Danish company called DTI. Today the company holds numerous patents and is a leader in modern straw combustion, setting growth direction for competitors and the whole industry of eco-friendly heating. Buying a straw-fired boiler is an investment for years, therefore the company focuses on the longevity of its solutions at the production stage, offering devices that operate continuously for up to twenty years. Today the company sells its boilers in the whole EU, UK, the USA, Kazakhstan, and China.

MH.Energy

https://mh.energy; biuro@mh.energy

Areas of activity

Hydrogen technologies

We help companies of all sizes on their road to energy efficiency and independence. We analyze the hydrogen market in detail, which helps us understand opportunities and challenges faced by the industry. We analyze trends, technologies, competitive environment and investments to identify opportunities and threats faced by our clients. We have experience in designing and implementing hydrogen systems. We advise on the choice of technologies to achieve the best results and best value for money. We design hydrogen infrastructure to help your organization increase efficiency and reduce energy costs.

ML System

https://mlsystem.pl/; marketing@mlsystem.pl

Areas of activity

Solar energy, Hydrogen technologies, Smart city

ML System is a technology company from Zaczernie near Rzeszów developing groundbreaking technologies for more than 17 years now, responding to the needs of the energy transition process. We manufacture facade panels, building glass, photovoltaic roof tiles and installation components, and have been consistently increasing our share of the domestic and foreign markets since our inception. Currently, ML System has 28 foreign destinations. The company is committed to continuous development, as evidenced by 17 patents granted until the end of May this year and 9 more pending.

Modertrans Poznań

https://www.modertrans.pl; office@modertrans.Poznan.pl

Areas of activity

Production of zero-emission light railway vehicles

Modertrans Poznań has been present on the market since 2005. Its current profile has been shaped by many years of cooperation with public transport operators, other companies in our sector, and research institutions. The scope of activities include the production and modernization of trams and railway vehicles; the production of traction and trailer bogies (for 1.000, 1.435 and 1.520 mm gauge); rail vehicle designs. Modertrans Poznań implements innovative solutions to ensure low-emission vehicles that do not negatively impact the environment. Our trams combine original design and functional tailor-made solutions.

mPower

https://www.mpowertech.com.pl; kontakt@mpowertech.com.pl

Areas of activity

Hydrogen technologies, Water resources management, Smart city

Our mission is to support our customers during the design, construction and integration of electric and hydrogen–based drivetrains. We design and build drive systems that are precisely fitted to the needs of different applications. We offer power electronic solutions based on silicon-carbide semiconductors and our own designs in fields of electric machines and hydrogen–based energy sources. Experienced engineers and designers, highly sophisticated design software and advanced technologies allow fast implementation of various designs and highly complex projects.

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mTap Smart City

https://www.mtapsmartcity.com; michal.piekarski@mtapsmartcity.com

Areas of activity

Energy efficiency, Smart city

mTap Smart City is a company specializing in innovative urban lighting management solutions, with a focus on intelligent streetlamp control systems. The core of mTap Smart City's solutions is a data platform empowering cities to optimize lighting operations by creating action scenarios, real-time lamp status monitoring, circuit creation and management, brightness control, and individual lamp on/off control. Our flagship product is the mTap lamp controller, a state-of-the-art device that can be installed on any streetlamp using NEMA or ZHAGA. The controller enables individual lamp control through DALI or 1-10V protocols.

NANOSENS

https://www.nanosens.pl; biuro@nanosens.pl

Areas of activity

Bioenergy, Hydrogen technologies, Air quality

NANOSENS Sp. z o.o. is a Polish family company founded in 1990. From the beginning, we have been focusing on the production of devices and providing solutions for the identification and measurement of gaseous substances in industry, municipal economy and environmental protection. We design our devices with occupational safety, control of production processes, and environmental air measurement in mind. We produce gas detectors and meters, gas concentration control systems, analyzers of biogas and other gas mixtures, and air pollution analyzers. We invent, design, test and produce in Poland.

Naturalna Energia.plus

https://naturalnaenergia.plus/; centrala@naturalnaenergia.plus

Areas of activity

Bioenergy

We are a supplier of micro and small biogas plants with capacity up to 74 kWe, utilizing waste from the agricultural and agri-food processing sector (manure, dung, chicken manure, pomace, peelings, etc.) and municipal management (sludge and green waste). The company is the exclusive authorized partner of BIOLECTRIC and METHANIA biogas plant manufacturers in Poland. The company is a member of the Grupa Naturalna Energia - five specialized entities working in cooperation to provide comprehensive services for investments. We provide comprehensive investment management: from concept ideation through audit, design and construction to commissioning and servicing.

NAVIC Engineering Polska

https://www.navic.pl; biuro@navic.pl

Areas of activity

Wind energy, Bioenergy, Energy efficiency, Hydrogen technologies

NAVIC is a multidisciplinary design studio established in 2003. We deliver engineering services to the industry, support technology development for our clients and do traditional multidisciplinary engineering. Besides that, NAVIC supports clients in green transformation processes, boosting process efficiency, reducing emissions, converting production process according to BAT, utilizing waste streams. We cooperate mainly with production companies, especially in the heavy industry, the chemical, petrochemical and pharmaceutical sector, but also firms from the food or light industry and public administration. We optimize our designs to implement new solutions without interrupting production or reducing the duration of maintenance stops as much as possible.

Neo Energy Group

https://www.neoenergygroup.pl; info@neoenergy.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Bioenergy, Hydrogen technologies, Air quality, Energy storage

Neo Energy Group (NEG) is a developer and operator of renewable energy sources active in the market since 2004. The Group comprises companies making a wide range of renewable energy investments, including photovoltaic installations, wind farms, biogas plants, and energy storage projects. NEG, as a pioneer in the large-scale photovoltaic and wind energy, has completed numerous projects over the course of two decades and has been actively expanding its installation portfolio throughout the country. NEG also owns and operates every fourth landfill biogas installation in Poland, contributing to over 75% of the electricity produced from this source in our country.

Neti

https://neti-soft.com; contact@neti-soft.com

Areas of activity

Software development

Neti specializes in building IT blockchain solutions. In the area of green technologies, we build software for managing and trading carbon credits and CO2 emission allowances.

NetLand

https://www.netland.com.pl; netland@netland.com.pl

Areas of activity

Energy efficiency, Water resources management, Smart city

NetLand Sp. z o.o. has been on the market since April 2008, continuously evolving and offering innovative solutions in the field of information technology. We specialize in the implementation, delivery, and deployment of various IT projects for both the public and private sector. The company is also a renowned producer of proprietary solutions for managing utilities such as water, heat, and electricity. Our range also includes transmission and measurement devices for remote media reading. With our innovative technologies, we ensure effective and precise monitoring and resource management, contributing to process optimization and cost savings.

NEW TECH LAB

https://www.newtechlab.pl; firma@newtechlab.pl

Areas of activity

Fire Extinguishment

NEW TECH LAB is an innovative company with many years of experience in the firefighting industry and in the use of ABC extinguishing powders in many industrial sectors. The main New Tech Lab warehouse (firefighting waste collection point) is located in Skawina, not far from the Kraków's Balice airport, and it cooperates with customers from all over Europe. As one of a few companies in Poland, New Tech Lab can fully dispose of various types of fire extinguishers, in full compliance with the environmental protection law as well as Polish and EU standards.

Nicrometal

https://nicrometal.com/; nicrometal@grupanicro.com

Areas of activity

Industrial waste management

Nicrometal S.A. is a corporate group specializing in comprehensive management of manufacturing waste, collaborating with the aviation, shipbuilding, and defense sectors in particular. It is a major partner of the Military Property Agency, fully licensed for these operations. The group, including Nicrometal SA, Nicro-plast Sp. z o.o., and MRJ Metal Recycling Sp. z o.o., leads in the recycling innovation, optimizing industrial waste processes. Committed to our 'Driven by recovery passion, we build trust' motto, we ensure proper waste recovery, partnering with communities and adhering to the ISO 9001:2015 and ISO 14001:2015 standards.

Niezależny dom

https://www.niezaleznydom.pl/; biuro@niezaleznydom.pl

Areas of activity

Solar energy, Energy efficiency, Air quality

Niezależny Dom Sp. z o.o. specializes in modern energy solutions for homes, focusing on photovoltaics, heat pumps, and air conditioning systems. We focus on ecological and energy independence, offering comprehensive support from design to installation and maintenance, providing smart, clean, and maintenance-free solutions. Based in Poznań, Poland, the company operates within a 150 km radius, aiming to enhance the investment value of homes with reliable equipment with a guarantee up to 25 years.

OTTO Engineering Polska

https://ottoindustries.com.pl/; rzeszow@ottoindustries.com.pl

Areas of activity

Air quality

OTTO Engineering Polska Sp. z o.o. is a leader in air purification, clean rooms, air-conditioning and industrial ventilation, heating, cooling and specialized installations for industrial needs, not only in Poland but also in Europe. It offers a comprehensive service from consultancy through professional advice, design to the installation and maintenance of modern systems and technologies.
The company has created a unique, tailor-made clean air technology to serve industrial clients in their daily operations, contributing to higher production quality, increased productivity, and efficiency. OTTO is celebrating its 20th anniversary in 2024.

OZEOS

https://www.ozeos.pl; kontakt@ozeos.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Bioenergy, Energy efficiency

Ozeos has revolutionized the green energy market by facilitating the purchase of energy for companies directly from renewable energy sources, in the cPPA formula. The Ozeos platform eliminates inefficient energy purchases, selects and prices an optimal mix of renewable energy sources. By analyzing energy production and consumption, we guarantee tailored energy solutions. The platform is not only an analytical tool but also a marketplace connecting green energy producers and buyers. The system helps companies build energy strategies and supports those who invest in their own renewable energy sources and look for energy buyers. Join the platform and benefit from green energy!

Park Naukowo-Technologiczny Euro-Centrum

http://pnt.euro-centrum.com.pl/; a.ziecina@euro-centrum.com.pl

Areas of activity

Solar energy, Energy efficiency, Circular economy,
Production and implementation space

The Euro-Centrum Science and Technology Park is a green space for innovation. It focuses on the development of energy-saving technologies and energy conservation in buildings. The Park provides favorable conditions for high-tech and innovation businesses. It offers office, production and implementation space as well as laboratories and research equipment for testing energy efficiency and renewables, e.g. efficiency tests of solar panels or quality tests of construction materials. Euro-Centrum cooperates with regional and international partners, carrying out energy efficiency, energy transition, RES and circular economy projects.

Plast-Farb

https://www.plast-farb.com; sales@plast-farb.com

Areas of activity

Plastic packaging manufacturer

Plast-Farb has been present on plastic packaging market since 1987. Currently our company is among the leading Polish plastic manufacturers. Our offer includes a wide range of security products – envelopes, bags, security tamper-evident bags (STEB), security tape, and security seal tape and carrier bags. Medical envelopes are another important element of our offer. We can customize every product to our customers' requirements. We choose environmentally friendly materials and optimize the use of raw materials and resources.

POL-EKO

https://www.pol-eko.com.pl/; info@pol-eko.com.pl

Areas of activity

Energy efficiency, Water resources management,
Smart laboratory, Wastewater management

Pol-Eko, in operation for over 30 years, is a fully domestically owned firm located in Wodzisław Śląski, where we have four production halls covering 7,500 square meters. Holding the ISO 9001 quality management certificate, we adhere strictly to Polish and European standards in manufacturing of professional equipment. Our range includes -86°C freezers, pharmaceutical refrigerators, incubators, laboratory drying ovens, and sterilizers up to 300°C, along with CO2 incubators, climate chambers, and phytotron chambers. With modern technology and commitment to excellence, we also provide fume cupboards and cutting-edge equipment for water and wastewater management.

Polish Passive House Institute (PIBP)

https://pibp.pl/; info@pibp.pl

Areas of activity

Energy efficiency, Education

PIBP is an independent non-profit institute that has played a crucial role in the development of the Passive House concept in Poland - the only internationally recognized, performance-based energy standard in construction. PIBP is the only entity in Poland responsible for certification of buildings in the passive house standard. It is also the oldest institution in Poland responsible for training architects and construction craftsmen in the field of zero-energy construction.

Polska Energia Odnawialna

https://peo24.pl/; biuro@peo24.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Bioenergy

Polska Energia Odnawialna Sp. z o. o. designs and develops modern, environmentally friendly renewable energy sources. It particularly strives for the development of distributed energy using natural energy of water, sun and wind that can be processed into clean and ecological electricity. We have several wind power plants built between 2013 and 2015 in Wielkopolska. Currently, in line with the plans of the Ministry of Energy, we are preparing a portfolio to build approximately 500 MW of solar power plants across Poland.

Polskie Eko Grunty

https://www.peg-pv.pl/farmy-fotowoltaiczne/; biuro@peg-pv.pl

Areas of activity

Solar energy, Energy efficiency, Air quality, The storage of energy, Heat pump

Polskie Eko Grunty is a company specializing in leasing land for photovoltaic farms and developing projects in this area. The company brings together a team of experienced engineers, designers, and installers who possess extensive knowledge in the energy and construction sectors. Thanks to specialized expertise, the enterprise successfully operates in the dynamically growing market of renewable energy sources. The mission of Polskie Eko Grunty is to ensure sustainable, efficient, and stable renewable energy sources. The company also a retailer of photovoltaic installations, heat pumps, and energy storage solutions.

Polskie Towarzystwo Fotowoltaiki

https://www.pv-polska.pl; szkolenia@pv-polska.pl

Areas of activity

Solar energy, Energy efficiency, Air quality, Smart city, Education, Training

PV Poland - Polskie Towarzystwo Fotowoltaiki established in 2005 promotes solar energy as a reliable and economically viable energy source by conducting and stimulating research and demonstration activities; educating students; organizing technical meetings, workshops, symposia and conferences; disseminating information and addressing environmental issues. Our goal is to improve the quality of photovoltaic systems at all stages of their installation and operation. We perform audits, periodic inspections, installation quality verification, photovoltaic system diagnostics. We also provide expert opinions in tender and court proceedings.

Power Maize

https://www.power-maize.pl; biuro@powercob.com

Areas of activity

Bioenergy, Energy efficiency, Circular economy

Power Maize is a Polish company that addresses two of the world's biggest challenges, namely energy security and sustainable agriculture. The company's innovative 'Power Maize Collector' system harvests corncobs, a previously discarded agricultural by-product, and transforms them into a valuable energy source. This biomass can be used for electricity and heat generation, biofuel production, and even as animal feed. Power Maize's approach aligns with regenerative agriculture principles, as the corncobs are harvested without depleting the soil. The company produces biochar, a byproduct of the energy conversion process, which can be used as a soil amendment to improve its quality.

Poznań-Ławica Airport

https://Poznanairport.pl/en/homepage/; bz@airport-Poznan.com.pl

Areas of activity

Solar energy, Hydrogen technologies, Smart city, Aviation sector

Poznań Airport is the second most popular regional airport in Poland in terms of charter outbound traffic. However, our mission extends far beyond providing aviation services. With the recently constructed 4 MW solar farm, we are focused on improving energy efficiency and reducing airport's adverse environmental impact by switching to renewable energy sources. In the near future, we plan to install a large-scale photovoltaic farm combined with an electrolyzer generating green hydrogen, storing it and distributing in a local hydrogen refueling station. Poznań Airport is committed to sustainable development by investing in innovative technologies and environmentally friendly solutions.

PROTE Technologies for our Environment

https://www.prote.pl; prote@prote.pl

Areas of activity

Circular economy, Water resources management

A clean, healthy, and sustainable environment requires special care and protection. By means of appropriate tools and advanced technologies, Prote combats ecological threats and effectively tackles pollution. For three decades, we have been striving to improve the state of the soil and water environment in Poland and worldwide. Our mission is to restore degraded land and water environment. We restore usable properties to terrestrial areas and water bodies. We also guarantee safe and good-quality drinking water for over 10 million consumers. The need to build a compromise between the development of civilization and the necessity to protect the natural environment is what inspires us.

PROZAP

https://www.prozap.com.pl; prozap@prozap.com.pl

Areas of activity

Solar energy, Energy efficiency, Hydrogen technologies, Circular economy, Water resources management, Air quality, Comprehensive design and engineering services

Prozap, based in Puławy, Poland, is a multi-discipline, specialty engineering company that has since 1970 been designing new and revamping existing industrial plants, specifically fertilizer and chemical facilities, and now also focusing on green technologies, environmental protection and renewable energy sources. We offer a full scope of comprehensive services from a concept, through feasibility studies, technology selection and transfer, to design, procurement, start-up, commissioning, supervision, personnel training and as-build documentation. The company is experienced in project execution as a PMC and EPC, turn-key contractor. It employs 120 professionals with average experience of over 10 years.

Quest® Profile

https://www.questprofile.com; shop@questprofile.com

Areas of activity

PVC profile production

At Quest®, we have long been focusing on the circular economy - we try to reuse the waste we produce to create new products. We also recover cardboard, processing it into filling material for subsequent orders. We obtain energy from photovoltaic panels, and we plan deliveries and broadly understood transport (to the customer) to reduce the carbon footprint.

QZ Solutions

https://qzsolutions.eu/; hello@qzsolutions.pl

Areas of activity

Agtech, Eco farming, CO2 reduction, „Green deal"

Making farming more productive and sustainable with new technologies. We are a technology company that aims to make agriculture more efficient and sustainable. We know that food production is one of the most important challenges for our society, but we must not neglect the environment and soil in the process. Therefore, we want to take a step forward and bring modern technological solutions to the agricultural sector. Our solutions are based on hyperspectral, multispectral, and artificial intelligence technology that helps increase yields while protecting the environment and soil. Smart agriculture is the future, and our products and services provide modern solutions for farmers.

R3 Poland

https://www.r3polska.pl; biuro@r3polska.pl

Areas of activity

Circular economy, Smart city

The main mission of R3 is to build a Smart RVM system supporting the beverage packaging recovery process, to motivate its return and to build pro-ecological awareness in the society. We produce the Smart Reverse Vending Machine for aluminum cans and PET packaging. To that end, we entered into cooperation with the leaders on the Polish market. The result of this collaboration is the completion of the design work and production of a new Smart RVM model prototype in August 2020.

Recykl Organizacja Odzysku

https://recykl.pl/; recykl@recykl.pl

Areas of activity

Circular economy, Smart city

Recykl Group collects and recycles nearly 5% of end-of-life Tires in Europe which translates into 140,000 tons of tires per year. The tire collection service and the mechanical recycling of tires is a basis for the preparation of quality feedstock for numerous applications including iron casting, pyrolysis, rubber regeneration, rubber products for sport applications, smart city, plastic industries including automotive applications, asphalt modification and road construction. As the first company in the industry, we closed the tire recycling circle, demonstrating the innovative application of tire-derived textile reducing carbon footprint in road construction.

ScanTheSun

https://www.scanthesun.com; contact@scanthesun.com

Areas of activity

Solar energy, Energy efficiency

ScanTheSun is a software that will transform the photovoltaic industry. It is a fantastic combination of science and business that streamlines the design of your PV installation and saves you time and money. The app's new functionality allows you to increase the efficiency of your PV installation by up to 35%! The app significantly streamlines the entire process of creating photovoltaic installation designs and allows for precise calculation of the number of PV panels needed by means of a special algorithm. It helps minimize energy loss due to improper panel placement or surrounding trees or buildings blocking sun rays. On average, the whole process takes about 1 minute!

Scieki Polskie

https://wastewater.cloud/; contact@wastewater.cloud

Areas of activity

Wastewater management

We are a provider of modern IT solutions for all entities involved in the wastewater circulation - from its generation through transport to purification. We offer software dedicated to municipal and commune offices, wastewater treatment plants, septic tanker companies, as well as users of septic tanks and domestic sewage treatment plants. We also offer modern control cabinets based on cloud data and the most advanced wastewater discharge point stations. Our IT tools address the growing needs to establish an effective model of wastewater circulation control and sealing.

SEEDiA

https://seedia.city/; piotr@seedia.city

Areas of activity

Smart city

SEEDiA specializes in delivering smart city solutions that address such issues as urban services management, public transportation optimization, urban scooter management, and urban information management. These solutions are based on proprietary hardware and software created by SEEDiA engineers. Our offerings include solar benches, info kiosks, solar bus shelters, and electric scooters and bicycles charging stations. Solar benches are equipped with solar panels and Wi-Fi hotspots. Optional installation features may include smog sensors, audio modules, and LED lighting. Our devices can be remotely managed through cloud services and their owners have access to their statistics.

SENSE Software

https://www.sensesoft.eu/; info@sensesoft.eu

Areas of activity

Solar energy, Energy efficiency

SENSE Software develops solutions supporting commercial use of thermal imaging in such sectors as energy, construction, and healthcare. Our flagship product, Thermal Studio, supports over 75k FLIR camera users globally by providing a complete suite for editing, analyzing, processing and reporting thermal images. Our latest solution, PV SENSE, is a revolutionary platform that automates the processing of solar panel inspections based on our trained neural networks utilizing thermal images and radiometric data. By drastically reducing the time and effort required for inspection analysis and report preparation, it streamlines a process that typically takes days into minutes.

SES Hydrogen Energy

https://seshydrogen.com/; hello@seshydrogen.com

Areas of activity

Hydrogen technologies

SES Hydrogen Energy is a Polish technology which pursues a mission initiated more than 10 years ago and focuses on the development of hydrogen technologies that go hand in hand with current trends and market needs. Recognizing the growing demand for alternatives and the potential for the use of emission-free hydrogen in all sectors of the economy, the company is developing proprietary alkaline (AWE) and anion exchange electrolyzer (AEM) technologies and an emission-free hydrogen-oxygen boiler for medium- and large-scale applications. We are implementing our infrastructure project in the areas of production, storage, and distribution of green hydrogen, green energy, and green heat.

Sipeko Group

https://www.sipeko.pl; sipeko@sipeko.pl

Areas of activity

Circular economy, Recycled and BIO garbage bags

Sipeko Group has been on the market for 20 years and manufactures garbage bags with materials that are either recycled or made from renewable plant polymers and modified starch. Our production plant is located in the south-eastern part of Poland. We are ISO9001:2015 and ISO 14001:2015 certified and our fully biodegradable compostable bags comply with the EN-13432 standard.

SolarSpot

https://solarspot.com.pll; biuro@solarspot.com.pl

Areas of activity

Solar energy, Energy efficiency

SolarSpot offers innovative energy solutions for homes, businesses, and communities across the nation, specializing in energy consultancy and end-to-end renewable energy system services, including PV panels, heat pumps, energy storage, and smart management systems. We are passionate about modern technologies and have a proven track record in the Polish market. We believe in everyone's role in ensuring our planet's sustainable future for the next generations. Join us in creating a greener future.

Soltech

https://www.trasntech-eco.pl; soltech@post.pl

Areas of activity

Bioenergy, Circular economy, Water resources management, Maintenance of wastewater and water piping at WWTP

We have been present on the Polish environmental and biogas market since 2000 especially at food industrial operations - wastewater treatment and water remediation activity. Our experience covers biotechnology implementation in wastewater treatment plants, biogas digesters and in lake/river water remediation. We specialize in biological reduction of COD, BOD, TSS, ammonia (Anammox) and phosphorous with archaea biotechnology, improvement of the AS, SBR, ATSO, MBR, MMBR, UASB, EGSB bioreactors ongoing process, implementation of biodegradable anti-scaling agents and in green farming.

SYGNIS

https://sygnis.pl/; kontakt@sygnis.pl

Areas of activity

Innovative manufacturing methods

Sygnis SA is a manufacturer of DeepTech hardware in additive technologies, successfully marketing its proprietary products on the global market. Thanks to its unique business model, SYGNIS skillfully combines the implementation of new R&D projects with the development of technologically advanced proprietary products, such as the DIW technology line, DEPO technology or SYGLASS technology. All of them save time, material, waste and energy in the production of cutting-edge electronic and industrial components. Sygnis is a pioneer in the commercialization of modern hardware solutions in the high-tech industry - photonics and material engineering.

SYMBIONA

https://www.symbiona.com; box@symbiona.com

Areas of activity

Bioenergy, Circular economy, Water resources management, Wastewater treatment and reuse

Symbiona offers circular economy solutions for wastewater treatment and reuse, and the production of biogas from waste and wastewater for the industry and municipalities. We design and build/deliver the technology, we retrofit or optimize existing treatment plants, guarantee treatment parameters. Our technologies include our proprietary AnMBR (with up to 40% more biogas yield than classical AD solutions), DIGEFLO, an economical game-changer in anaerobic wastewater treatment, membrane reactors, zero liquid discharge with ultrapure water recovery, aerobic solutions - all with a short ROI and a low OPEX. Our clients include manufacturers of food, drinks and beverages, dairy, biofuels, the automotive and aviation sector, pharmaceuticals, household chemicals and many more.

TAURON Green Energy

https://tze.tauron.pl/; tze.sekretariat@tauron.pl

Areas of activity

Solar energy, Wind energy

TAURON Green Energy is a part of the TAURON Capital Group. Its primary mission revolves around consolidating competencies in the development of Renewable Energy Sources (RES). The company is fully committed to spearheading projects related to renewable energy, overseeing the preparation of investments, acquiring projects in the ready-to-build status, and ensuring diligent investment supervision in photovoltaics farms and onshore wind farms. Its main goal is to increase the share of RES in the TAURON Group's energy mix to fulfill the objectives of the Group's green return strategy.

Technika Nova

https://www.technikanova.pl; biuro@technikanova.pl

Areas of activity

Solar energy, Energy efficiency, Hydrogen technologies, Energy storage

Technika Nova Sp. z o.o. is a company that unites designers, engineers, technicians but foremostly people passionate about green energy. Solutions provided aim to increase power efficiency of businesses including renewable sources of energy along with photovoltaics. The offer includes a detailed formal and legal analysis, spatial management, and third-party interest. We prepare, submit and process all necessary applications, namely environmental approval, land development decision, technical conditions of power connections, building permit and detailed design documentation. We focus on providing the highest quality service and products.

Technokabel

https://www.technokabel.com.pl; sprzedaz@technokabel.com.pl

Areas of activity

Solar energy

The company specializes in analog and digital data transmission cables, as well as low-voltage cables and solar cables that have recently been added to our offer. Our single-core flexible SOLARTECH-4 cables with a rated voltage of 0.6/1 kV are intended for operation in modern photovoltaic installations. They are used for direct connection of individual photovoltaic cells and for wiring in junction boxes and connecting to the inverter. The use of double insulation ensures high mechanical resistance, protects against adverse weather conditions, ozone, and UV rays, and provides increased resistance to short circuits, ensuring the expected service life of at least 25 years.

Telematics Technologies

https://www.telematicstechnologies.com; bok@naviexpert.pl

Areas of activity

IT/software development

Telematics Technologies offers mobility services, such as GPS navigation, vehicle fleet management, and InsurTech solutions, aimed at improving driver safety and reducing environmental impact. The NaviExpert navigation system, available for 18 years, allows users to avoid traffic jams, choose eco-friendly routes, and receive personalized driving tips. The NaviExpert Telematics service for vehicle fleets helps fleet managers analyze and manage fuel consumption and detect abuses. It also supports electric vehicles and pool vehicle management. Gamification mechanisms within this service motivate drivers to improve their driving habits, leading to more efficient vehicle use.

ThreeRE

https://threere.pl/en/; office@threere.pl

Areas of activity

Circular economy

Our company's name refers directly to our philosophy and way of thinking. 3xRe means Repair, Rebuild and Refurbish. We have long understood that our planet's resources are slowly running out, and we want to address this problem. We have launched a professional service for repairing large-sized light alloy castings and restoring them to their intended functionality. We rescue new defective parts and worn ones. For our customers, this means less production waste, which translates into time and money savings. We are looking forward to cooperating with you – We grow. You grow. Better together!

Tixon Technology

https://www.tixon.pl; tixon@tixon.pl

Areas of activity

Air quality

Tixon Technology is engaged in innovative R&D projects focusing on climate change adaptation or digital transformation of healthcare. We combine the potential of IoT or mobile technologies with ML/AI. The company is currently developing AeroLung, a digital lung assistant solution, focused on monitoring air quality and exposure to environmental conditions, addressing pulmonary and cardiovascular challenges. AeroLung uses the mobile personal sensor technology with a proprietary IoT measurement device, harnessing the potential of the AI technology, among other things, to address the health stress of exposure to environmental factors.

T-Master

https://www.t-master.pl; sprzedaz@t-master.pl

Areas of activity

Circular economy

T-Master is an innovative technology start-up specializing in the design and manufacture of intelligent containers for selective municipal waste collection and the development of advanced IT solutions for waste infrastructure management. Established in 2017, driven by a passion for technology and environmental concerns, our team of engineers concentrates on creating comprehensive technological solutions. Our goal is to simplify waste sorting for residents of multi-family housing complexes in compliance with legal requirements, aiming to facilitate informed waste management decisions for all stakeholders - residents, businesses and local authorities. We believe in #lesswaste.

Torpol Oil&Gas

https://www.torpoloilgas.pl; info@torpoloilgas.pl

Areas of activity

Energy efficiency, Hydrogen technologies

Torpol Oil & Gas competencies include engineering and construction of complete power-to-gas installations and green, gray and blue hydrogen production installations. We offer complete power-to-gas installations, green hydrogen generation plants based on electrolysis, installations for the production of gray and blue hydrogen from natural synthesis gas, hydrogen storage systems, hydrogen compression systems, hydrogen pressure reduction systems, hydrogen dosing systems, flow measurement systems, interconnection pipelines, hydrogen refueling stations.

Transition Technologies-Control Solutions

https://www.tt-cs.com.pl/en/; sekretariat@tt-cs.com.pl

Areas of activity

Solar energy, Wind energy, Hydropower, Bioenergy, Energy efficiency, Hydrogen technologies

We offer comprehensive solutions for automation, including SCADA and EMS management systems, focusing on cybersecurity for renewable energy installations and energy storage facilities. We offer OT/IT systems that enable installation connection to the power grid so that they can serve additional functions in the system. We specialize in biomass power plants and biomass burner control, enabling sustainable use of organic waste. We focus on innovation and sustainable development, providing customers with modern renewable energy solutions. With us, you will transform your business into one that is more ecological, economical and in line with global development trends.

UFraction8 PL

http://ufraction8.pl/; info@ufraction8.com

Areas of activity

Energy efficiency, Circular economy, Water resources management, Biotech

uFraction8 is a technology provider, pioneering scalable microfluidics-based bio-separation systems as a solution to help anyone producing living cells to harvest more product from their existing infrastructure, with less energy – drastically reducing production costs. We have developed the most efficient and scalable bio-separation solution that has ever existed to address the problems with harvesting and processing cell cultures, starting with cultivated meat and microalgae and developing into biopharmaceutical applications. The technology is ready for commercial demonstrations.

Union of Producers and Employers of the Biogas and Biomethane Industry

https://www.upebi.pl; upebi@upebi.pl

Areas of activity

Bioenergy

The Union of Producers and Employers of Biogas Industry associates manufacturers of agricultural, sewage or landfill biogas. It ensures a strong representation of interests of the entrepreneurs operating in the biogas business before central and local authorities and other entities. Our motto is TOGETHER FOR BIOGAS because only by acting together, we make sure that the potential of biogas is appropriately utilized. The more members we have, the more our opinion matters. So, learn more about our activity and join our organization.

VELUX Polska

https://www.velux.pl; kontakt@velux.pl

Areas of activity

Energy efficiency, Healthy and efficient buildings

For more than 80 years, the VELUX Group has created better indoor environments by bringing daylight and fresh air into buildings all over the world. VELUX offers a wide range of attic windows, flat roof windows, as well as various types of internal and external blinds and shutters, insulation and remote-control sets. VELUX helps create bright, healthy and energy-efficient places to live, work, learn and play in. The VELUX Group has been present in Poland since 1990. From the beginning, it has been actively participating in the economic and social life of the country and local communities. VELUX constantly limits its impact on the environment with a target of carbon neutrality by 2030.

Veolia EKOZEC

https://ekozec.pl; ekozec@veolia.com

Areas of activity

Circular economy

VEOLIA EKOZEC has been putting the idea of a circular economy into practice for almost 30 years. The company manages industrial waste, transforming it into valuable raw materials for re-use in the economy and creating new products based on it. The company targets industries such as energy (management of by-products of combustion), construction, automotive, logistics, food production and industry. Veolia EKOZEC is developing a new offer on the Polish market: Total Waste Management, aimed at entrepreneurs in the manufacturing industries, consisting of a comprehensive solution to waste and waste treatment challenges.

VIRTUD

https://www.virtud.pl; info@virtud.pl

Areas of activity

Solar energy, Wind energy, Energy efficiency, Hydrogen technologies

Since 2015 VIRTUD Sp. z o.o. has been involved in distributed energy, in particular in renewable energy sources. Over that time, we have completed over 10,000 kWp of renewable energy installations, annually reducing 7,818 tons of CO2 emissions. We have developed our original concept of an energy-independent building, powered by renewable energy sources in the spring-autumn months and using summer surplus energy to produce hydrogen through an AEM electrolyzer.

WANAS

https://www.en.wanas.pl; export@wanas.pl

Areas of activity

Geothermal energy, Energy efficiency, Circular economy, Air quality, HVAC / MVHR / HEAT PUMPs

WANAS is a leader of the recuperator market, a dynamically growing company that has been specializing in the production of high-quality recuperators for many years, providing efficient ventilation and heat recovery solutions. Thanks to innovative technological solutions, our products provide optimal living and working conditions while minimizing environmental impact. Among many products offered on the market, our units are one of the most silent and efficient. We are expanding our range of products with heat pumps also assembled in Rzeszów. All our products are proudly made in Poland.

Waste Management and Recycling Cluster - National Key Cluster

https://www.klasterodpadowy.com; biuro@klasterodpadowy.com

Areas of activity

Circular economy

The Cluster creates raw material base for the industry, integrating its players and strengthening competitiveness of member companies in accordance with the circular economy model. We have jointly created a modern, dynamically operating organization of companies and institutions representing the green economy sector. WMRC is the industry's information, communication and cooperation platform supporting the innovative environment with funds, knowledge and resources, developing the competences of Cluster members.

Wastes Service Group

https://wastesservice.com; biuro@wastesservice.com

Areas of activity

Circular economy, Battery & E-scrap Recycling Park

Wastes Service is a capital group whose goal is to provide comprehensive services to our partners in the field of waste management. By focusing on achieving our goals, we place particular emphasis on the recovery and recycling of metals that are key to the economy. The development of the electromobility (EV) and electronics (E-scrap) market shows that it is possible to recover and recycle to achieve independence from mining raw materials. Recycling of lithium-ion (Li-ion) batteries, waste electrical and electronic equipment, and recovery of key metals play an important role in promoting sustainable management of raw materials and achieving circular economy goals.

Wawrzynowicz&Wspólnicy

https://wawrzynowicz.eu/en/; poznan@wawrzynowicz.eu

Areas of activity

Solar energy, Wind energy, Hydropower, Geothermal energy, Bioenergy, Energy efficiency, Hydrogen technologies, Circular economy, Water resources management, Air quality, Smart city, Competition law, Public procurement law

W&W is one of the leading Polish law firms providing legal advice to businesses operating in regulated sectors of the economy. The firm focuses on legal and commercial advice in the gas, electricity, heating, renewable energy, and telecommunications sectors. Our dynamic team of lawyers with years of industry experience provides highly specialized services in gas and energy regulatory affairs, public procurement law, competition law and infrastructure investment processes. W&W has for years been providing legal advice to the largest Polish energy groups.

Wektor

http://www.briquetting-pelleting.com; wektor@wektortorun.com

Areas of activity

Bioenergy, Briquetting machines

We offer briquette and pellet production lines. The BT-60 briquetting press is used to produce fuel in the form of pressed fuel without binder: briquettes with a diameter of 40, 50, 60, 70 mm option, large pellets with a diameter of 16 - 22 mm, pellets with a diameter of 10 - 13 mm, small pellets with a diameter of 6-8 mm, new briquette cubes 48x48 mm, or other dimensions. Our technology can be used to produce: ecological fuel, briquettes and pellets: pellets –> food for domestic and farm animals and fish, pellets from 5 to 22 mm, pellets –> bedding for poultry farms and cattle, briquettes or large pellets from various waste, MDF, brown coal, and other.

Wind Industry Hub Foundation

https://www.windindustry.pl/; biuro@windindustry.pl

Areas of activity

Wind energy

To support the growth of the wind sector and its service base, the Polish Wind Energy Association established the Wind Industry Hub Foundation, aiming to improve energy and economic security by ensuring an appropriate industrial base in Poland and by strengthening the role of Polish companies in the supply chain.

Wind Turbine Recycling

https://www.windturbinerecycling.eu/; k.glinka@windturbinerecycling.eu

Areas of activity

Wind energy, Circular economy, Concrete production, Recycling

Wind Turbine Recycling Sp. z o.o. specializes in the recycling of end-of-life wind turbine blades. The company has developed an innovative technology for producing concrete from fiberglass and resin. This new form has the potential to significantly reduce environmental impact compared to traditional concrete, positioning the Wind Turbine Recycling product as a potential breakthrough in the recycling industry. By focusing on an eco-friendlier solution, namely Wind Turbine Recycling, the company is addressing the challenges of wind turbine blade disposal, contributing to sustainability of construction materials.

WindTAK

https://www.windtak.pl/en; contact@windtak.pl

Areas of activity

Wind energy, Energy efficiency, Circular economy

We design and deliver professional solutions for the wind energy industry related to the operation of wind turbines and the improvement of their efficiency and reliability. Our flagship product is the 5GVG system, which combines innovative condition monitoring and a predictive maintenance system with aerodynamic efficiency improvement. WindTAK's 5GVG is a revolutionary system that combines improved efficiency and reduced costs of wind turbine operation. It increases the annual energy production (AEP) by up to 24%, thanks to our aerodynamic upgrades and measurement system based on IoT devices, 5G-ready wireless communication coupled with cloud computing.

WizzDev

https://wizzdev.com/; bizdev@wizzdev.pl

Areas of activity

Energy efficiency, Air quality, Smart city

WizzDev leads the way in developing energy-efficient devices, boasting unmatched expertise in IoT solutions. Our skills go further than just development; we specialize in activating complex hardware, creating intelligent, efficient solutions that lead to technological progress, all while maintaining a focus on being environmentally friendly and energy efficiency.

WKM-Energia

https://www.wkm-energia.pl/; mikolaj.kubicz@wkm-energia.pl

Areas of activity

Circular economy, BIOECO-B - ecological concrete release agent

WKM-Energia Sp. z o.o. (soon to be transformed into BIOECO OIL SA) is a Polish company established in 2011. It has a manufacturing plant headquarters and R&D center with its own laboratory near Lublin, and a sales and marketing branch in Warsaw. The company works with top industry scientists and is dedicated to implementing new pro-environmental technologies for everyday life and to manufacturing environmentally safe products. We use natural raw plant chemically treated ingredients that are completely biodegradable and safe for the environment. Our flagship product BIOECO-B® (anti-adhesion concrete release form) isECOLABEL-certified.

WOFIL Robert Muszański

https://www.wofil.pl; wofil@wofil.pl

Areas of activity

Water resources management, Water industry

WOFIL has been specializing in the use of innovative technologies for water and wastewater treatment for 25 years. It designs, constructs and assembles complete ozone systems, providing consulting, equipment and software production, remote monitoring, post-warranty service. We also run R&D activities aiming at boosting the effectiveness of technical solutions we offer. The company offers the SPID system for production of OWWO, an ecological solution of degassed highly ozonated water, which can be customized to our customers' needs ensure quick and effective disinfection, safe for people, the infrastructure, and the natural environment.

WPIP Green Energy

https://wpip.pl/greenenergy/; zapytania@wpip.pl

Areas of activity

Solar energy, Bioenergy, Circular economy, Air quality, Energy storage, Industrial heat pumps

WPIP Green Energy specializes in green energy projects (biogas plants, photovoltaic installations, energy storage, industrial heat pumps). WPIP Green Energy is a team of professionals who gained their experience while working for WPIP Construction - a general contractor and designer of construction investments, which has been consistently implementing sustainable and energy-saving solutions for years. As a socially responsible company, we want to make a significant contribution to the development of environmentally friendly energy.

WTT

https://wttpolska.pl/; wtt@wttpolska.pl

Areas of activity

Bioenergy, Energy efficiency, Hydrogen technologies, Circular economy, Waste management

WTT S.A. was established in 1998. Our goal is to synergize activities for business development and ecological support systems, creating a closed-loop economy. We act in the interest of society and for the environment. We have completed 75 major investments on 4 continents in over 25 years. The know-how we have gained allows us to grow the company and set new trends in the technology industry. Our investments are worth nearly PLN 520 million. We design and supply of turnkey solutions for the chemical, energy and waste management industries, and conduct research on innovative technologies. WTT S.A. is a company from the SME sector operating in the area of green and clean technologies.

ZAMECH

https://www.zamech-czeladz.pl; zamech@zamech-czeladz.pl

Areas of activity

Solid biofuel equipment

Our mission is to revolutionize the field of heating by providing innovative, ecological and economical solutions that contribute to improving the quality of our customers' life and protecting the environment. We have a team of highly qualified specialists, with whom we can face any challenge. Cooperation with renowned companies and institutions is an important element of our development strategy and enables us to achieve success at the highest level. Our passion for modern and ecological solutions has helped us create a unique Eko Balance boiler for three types of pellets, which meets all restrictive legal standards.

ZNIKA

https://znika.pl/; kontakt@znika.pl

Areas of activity

Compostable materials

At ZNIKA, we believe that single-use packaging should not remain on the earth indefinitely. Our team consists of sustainability and ecology experts, including individuals with backgrounds in materials engineering and biotechnology.
We specialize in developing biopolymer materials that make our packaging compostable. We use the latest packaging technologies backed by scientific evidence and market research to help our partners reduce their environmental footprint. We think it is possible to replace plastic with environmentally friendly alternatives. Our range of products includes compostable mailers, compostable product pouches, natural tapes, eco-boxes, and eco-labels.

Zonifero

https://zonifero.com/pl/; hello@zonifero.com

Areas of activity

Energy efficiency, Smart city

Zonifero is an integrated system and a mobile application that is designed to enhance key office processes and provide businesses with a more efficient workspace. Our platform optimizes space utilization, streamlines office operations, and enhances the overall workplace environment.

Infographics Poland in figures (2023)
Source: Statistics Poland, World Bank, Eurostat

//Data from the infographics are presented in the tables.//

Population		**37.6 million**
Foreign trade turnover	Import EUR	**340.5 bn** (7.0% decrease, yoy)
	Export EUR	**351.0 bn** (1.4% increase, yoy)
Unemployment rate		**2.8%** (as of November 2023) The 3rd lowest in the EU
GDP	Total – USD	**808.6 bn**
	per capita USD	**20 681**

World Economy Rank by GDP 21st (2022) The 6th largest economy in the EU	
2021	**5.9%**
2022	**5.1%**
2023	**0.2%**
2024 (predicted)	**2.8%**
2025 (predicted)	**3.4%**

Green house gas emissions	
4th quarter, yoy, while increasing GDP	**-2.4%**

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Infographics

//Data from the infographics are presented in the table.//

9,56 GW	Installed capacity of wind farms in Poland in 2023
14%	Wind energy in electricity production in the entire energy mix
1400	Onshore wind installations

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Infographics

//Data from the infographics are presented in the table.//

25%	Solar energy in electric production from RES
7%	Solar energy in whole energy mix
17 GW	Solar photovoltaic capacity in 2023
113 000	Jobs in PV sector (2021)

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Infographics

//Data from the infographics are presented in the table.//

6th	The Polish ground source heat pump market rank in Europe (2022)

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Infographics

//Data from the infographics are presented in the table.//

1.2 GW	Total capacity of 45 solid biomass-burning installations
90%	Renewable heat generated by solid biofuels in Poland
12%	Total heat generated by solid biofuels in Poland

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Infographics

//Data from the infographics are presented in the table.//

3rd	Rank of Poland in production of hydrogen in the EU
785 000 tons	National hydrogen production in 2022
11	Number of hydrogen valleys operating in Poland

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Infographics **Polish waste management sector**

//Data from the infographics are presented in the table.//

Value	**9,2 bn PLN**
Recycling rate	**34,3%**

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