



ENVIRONMENTAL TECHNOLOGY
INNOVATION POTENTIAL OF THE MALOPOLSKA REGION



Klaster
LifeScience
Kraków

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METHODOLOGY

This catalog comprises profiles of companies, which are active in the widely-defined bioeconomy. Entities were classified based on the following categories: monitoring and environmental protection, waste management, production and processing of biomass, biofuel and bioenergy (except photovoltaics and wind energy).

The below-mentioned entities were identified by means of research in: sector catalogs, websites of businesses environment institutions, a Klaster Life Science proprietary database, press publications and business fair catalogs.

Each of the entities operating within the sector was characterized based on their area of expertise. And each of them was assigned certain key words, which correspond with their basic business activity. The glossary of key words was created based on how the various market segments are grouped in specialized magazines and other sector sources.

This catalog comprises companies active in the Malopolska region as well as members of the Klaster LifeScience, even if seated outside of the voivodeship.

The presentation of the academic background revolves mainly around the study programs: Bachelor, Master and doctoral studies, as well as postgraduate programs. Only those programs were included, which provide its graduates with the necessary educational credentials to find employment in the bioeconomy or support technologies sector.

The category of business environment includes, in turn, entities, which can support the food industry in, among others, obtaining external funds, integrating the sector actors, liaising and providing market and competition analysis.

Entities presented in the section "Key Projects" were identified through researching financial institutions and by accessing the official websites of higher education institutions, research facilities and private businesses. The projects are presented in alphabetical order (by title).

The following were excluded: solar panels producers, photovoltaic panels producers, and businesses, which are only the sellers or distributors (unless their activity contributes to the sector's innovativeness).

Statistical data contained in this report were retrieved from the Central Statistical Office of Poland, the European Statistical Office (Eurostat) or from own calculations based on collected data.



THE MALOPOLSKA REGION

The Małopolska Voivodeship is a region located in the south of Poland. Its central point is Cracow and its metropolitan area.



Area: 15,183 km²
Number of cities: 61
GDP per capita:
39 834 mln



Population: 3.371 mln
Unemployment rate:
6.6 %
Population density:
222/km²

source: Bank Danych Lokalnych GUS
Data for 2015

The Małopolska Voivodeship is a region where both scientific and business entities grow rapidly.

13.5%

13.5% of all companies operating in the Małopolska Voivodeship in 2014 were innovative.

1.44%

1.44% of all employees in the Małopolska Voivodeship in 2014 were R&D employees, and it was the 2nd best score in the country.

source: Bank Danych Lokalnych GUS



397 research institutions



29 universities



368,522 business entities



15,543 R&D employees



PLN 1,543.1 mln R&D expenditure



PLN 3,667 is the average monthly gross salary



134,200 agricultural farms



1,195 eco-friendly producers



164 Traditional Products registered

source: Bank Danych Lokalnych GUS
Data for 2016



ENVIRONMENTAL TECHNOLOGY

This catalog comprises companies, which are involved in environmental monitoring and protection, waste management, production and processing of biomass, biofuel and bioenergy as well as biomaterials and materials technology.



15 companies involved in environmental monitoring and reclamation



35 waste management companies



8 biomass production and processing companies



19 companies active in environmental protection and cleaning



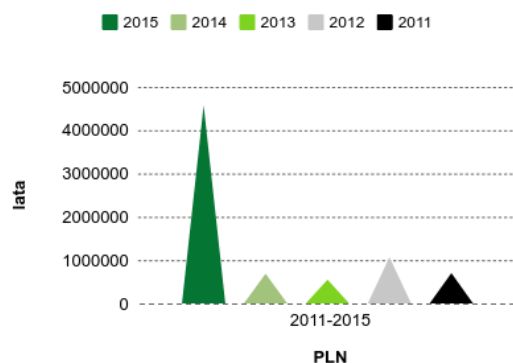
22 bioenergy and biorefining companies



5 biomaterials and materials technology companies

Outlays on waste management-related intangible assets

The improvement of the state of environmental protection in the Malopolska region is confirmed by the rapid increase in the related outlays on intangible assets. In the area of waste management, in 2015 their total value amounted to approx. PLN 457 mln, which is almost eight times more than in the previous year. The largest sum was allocated for the disposal of non-hazardous waste.



source: Bank Danych Lokalnych GUS



In 2015 there were 681 people working in enterprises employing up to 49 people and involved in the production and supply of electricity, gas, steam, hot water and air for AC systems departments. As for the departments of water supply, sewage and waste management, and reclamation, this number amounted to 3,843 employees.

source: Bank Danych Lokalnych GUS



In 2015, emissions of particulate air pollutants from particularly heavily polluting plants decreased to 2,830 tonnes per year (down from 3,032 t/y in 2014).



In 2015, over 680,000 t/y of dust pollution was stopped or neutralized in pollution reduction devices.

source: Bank Danych Lokalnych GUS

MARKET PLAYERS

ENVIRONMENTAL MONITORING AND RECULTIVATION

ANALYTICS LTD (<http://www.analyticspl.eu/>)

Company profile: The company is active in the design of gas emission measurement systems and combustion optimization.

Key words: gas emission measurement

ANDEL POLSKA SP. Z O.O. (<http://www.andel-polska.pl/>)

Company profile: The company is involved in the design and distribution of leakage monitoring systems and environmental protection systems.

Key words: leakage monitoring

ARKADIUSZ RYBKA AKUSOFT (<http://akusoft.pl/>)

Company profile: The company's business activity is centered around the protection against noise and vibrations. The company designs measuring equipment on request.

Key words: noise measurement

BIOSYSTEM SA (<http://www.biosystem.pl>)

Company profile: The company is a consortium of several entities operating in the sector of environmental protection and waste management. Biosystem deals with the collection, processing and disposal of used-up electrical and electronic equipment (UEEE). The company operates the most modern UEEE processing plant in Poland with a special line for the disposal of refrigerating appliances.

Key words: recycling, waste treatment.

**EKO-LABOR LABORATORIUM OCHRONY ŚRODOWISKA I HIGIENY PRACY
SPÓŁDZIELNIA PRACY**(<http://www.ekolabor.krakow.pl>)

Company profile: The laboratory conducts investigations of harmful factors at workplaces and in the environment, among others, dustiness tests, moderate micro climate, as well as monitoring and emission of suspended PM10 fraction.

Key words: environmental research, monitoring of air quality

EMIPRO SP. Z O.O. (<http://emipro.eu/>)

Company profile: The company specializes in the collection of samples for the determination of concentrations and emissions of dioxins and furans. It runs the Environmental Research Laboratory.

Key words: environmental research, pollution measurement, noise measurement

EQM SYSTEM I ŚRODOWISKO EWA NICGÓRSKA – DZIERKO (<http://eqm.com.pl/>)

Company profile: The company carries out analyzes and tests to assess whether the given working conditions meet the requirements of environmental protection regulations. It measures, among others, the effectiveness of acoustic screens and the noise generated by various devices.

Key words: environmental research, noise measurement

INTHERSOFT SP. Z O.O. (<http://www.inthersoft.pl/>)

Company profile: The company offers a measuring system for industrial plants, which allows the determination of the transitional temperature of the liquid flowing through key elements of industrial facilities.

Key words: measuring system

KRAK-EKOB AU SP. J. (<http://www.eko-rekultywacja.pl/>)

Company profile: The company specializes in land and water decontamination in the locations of petrol stations contaminated with petroleum derivatives and neutralization of vegetable and animal fats, which are waste generated in the processing and food industries.

Key words: land decontamination

LABORATORIUM BADAŃ ŚRODOWISKOWYCH SMC (<http://smc-bhp.pl/>)

Company profile: The laboratory conducts environmental research and occupational health and safety measurements of harmful and nuisance factors at workplaces.

Key words: environmental research, noise measurement

MARCIN PYLA LEFTBRAIN (<http://www.leftbrain.pl/>)

Company profile: The company is responsible for the creation of the Cracow Smog application, which shows current air pollution levels in and around Cracow.

Key words: smog applications, monitoring of air quality

PE BESKIDY SP. Z O.O. SP. K. (<http://pebeskidy.pl/>)

Company profile: The company carries out research and development works and develops technological solutions for the pulp, paper and printing industry. The company has developed the Eco-Besc technology, which allows the production of highly refined paper pulp as a result of recycling multi-material packaging from liquid food.

Key words: recycling

PERKINELMER POLSKA SP. Z O.O. (<http://www.perkinelmer.com>)

Company profile: The company operates in the field of natural science technology. It is a supplier of systems dedicated to improving human health and the quality of the environment. It offers, among others, technology for monitoring water quality, and the air and food pollution levels.

Key words: monitoring systems

PRZEDSIĘBIORSTWO TELETRANS - ELCOMP SP. Z O.O.

(<http://www.teletrans.com.pl/index.php>)

Company profile: The company conducts design, assembly, installation and production activities in the field of industrial automation and control and measurement equipment. It also specializes in automatic systems used in environmental protection.

Key words: automation systems, monitoring systems

WESSLING GROUP (<http://pl.wessling-group.com/pl/>)

Company profile: An international company dealing in research and consultancy in the field of environmental and food quality. Its laboratories are seated in Cracow. The company provides services in the field of land analytics, water analytics and research in the field of microbiological food safety. Wessling also conducts research on the composition and secondary use of waste in the form of alternative fuels.

Key words: land survey, water testing

ZAKŁAD NAUKOWO BADAWCZY ECO-HERA (<http://ecohera.pl>)

Company profile: The company provides environmental protection services. It runs its own air pollution measurement laboratory.

Key words: research lab

ENVIRONMENTAL PROTECTION AND PURIFICATION

AIR LIQUIDE POLSKA SP. Z O.O. (<https://przemysl.air-liquide.pl/>)

Company profile: An enterprise that manufactures and supplies technical and medical gases. In the field of environmental protection, the company offers products, equipment and services for water treatment and wastewater treatment as well as solutions for recycling and recovery of solid waste. Among other things, Air Liquide Polska provides calibration gases, zero gases and instrumentation to meet the requirements of environmental protection regulations.

Key words: technical gases, environmental protection, water treatment

AMRECO - TECHNOLOGIA DLA NATURY (<http://www.amreco.pl>)

Company profile: The company offers Eco-Counter measuring systems (sensors and recorders), ecological toilets, technology for protection and monitoring of animal movement, and pedagogical radars.

Key words: pro-ecological technology, counting sensors, ecological toilets

AVITECH (<http://www.avitech.lap.pl/>)

Company profile: The company provides services in the field of design, sale, assembly and construction of biological wastewater treatment plants.

Key words: biological purification

BIODAR DOROTA FLAGA (<http://www.biodar.com.pl>)

Company profile: The company collects crop plants with high biological value and carries out research on insects used for biological warfare against pests.

Key words: environmental protection, bees, plant breeding

BIOSPEKT BADANIA I EDUKACJA SP. Z O.O. (<http://biospekt.pl/>)

Company profile: The company provides services in the field of environmental analytics, education as well as research and scientific consulting. It specializes in chemical analytics, consultancy for wastewater treatment plants, expert opinions and mycological analyzes, and nature assessments.

Key words: environmental analytics, water quality tests, air quality tests

BIOSYSTEM S.A. (<http://www.biosystem.pl>)

Company profile: A mother company consolidating a group of companies operating in the sector of environmental protection and waste management. It has its own plant for the processing of used electrical and electronic equipment.

Key words: environmental protection, waste recovery, electrowaste processing

"CHEMKOP" SP. Z O.O. (<http://chemkop.pl/>)

Company profile: The company is involved in the management of various ventures, such as, among others, ventures aiming at creating underground gas storage facilities and environmental protection issues, including: safe storage of waste, elimination of underground and groundwater contamination as well as environmentally friendly chlorine production facilities. Underground Oil and Fuels Warehouse "Góra" – the only Polish underground oil and fuel warehouse located on the upside salt deposit "Góra" near Inowrocław.

Key words: liquidation of water contamination, waste storage

EKOSERVISPOL SP. Z O.O. (<http://www.ekoservis.pl/>)

Company profile: The company designs and manufactures sewage treatment plants, including container and home treatment as well as biological wastewater treatment. The offer also includes containers, separators and pumps.

Key words: wastewater treatment

ELSTA SP. Z O.O. (<https://www.elsta.pl>)

Company profile: The company provides comprehensive services in the field of environmental protection and mining. It implements installations including in waste incineration plants, sewage treatment plants, and is active in the water treatment segment.

Key words: water treatment, installations for environmental protection

INSTYTUT NAFTY I GAZU W KRAKOWIE (<http://www.inig.pl/>)

Company profile: The unit works for the needs of the oil and gas industry, it also operates in the refining and petrochemical industries. It conducts activities in the field of improving and monitoring the quality of petroleum products, environmental protection in the oil and gas industry.

Key words: environmental protection in the oil and gas industry, renewable energy sources

ITEMS POLSKA SP. Z O.O. (<http://ekoseparator.pl/>)

Company profile: Manufacturer of mobile sewage filters for rainwater and snowmelt treatment.

Key words: sewer filters, water treatment

JOACHIM: PLANT THE PLANET™ (<http://joachimtime.com>)

Company profile: Manufacturer of wall clocks made of raw materials collected from forests managed in a sustainable manner. Its motto is: "We will plant 100 trees for every clock we sell."

Key words: ecology, planting forests

LABORATORIUM KATALIZY STOSOWANEJ SWINGTHERM

(<http://www.swingtherm.com.pl>)

Company profile: The laboratory deals with the development and implementation of technologies in the field of purification of waste gases from organic pollutants and utilization of toxic industrial waste.

Key words: utilization of industrial waste, purification of waste gases

PETROSTER SP. J. (<http://petroster.pl>)

Company profile: The manufacturer of solutions for the safety of operation of fuel facilities, including the Safe Container system, a family of products and services ensuring the safe operation of storage containers for liquid fuels. The company provides services in the field of bioremediation.

Key words: bioremediation

REMONDIS POŁUDNIE SP. Z O.O. (<http://www.vangansewinkel.pl/>)

Company profile: The company deals in the transport of municipal waste, debris and construction waste as well as hazardous waste.

Key words: utilization, waste management

TERRA TRADE SP. Z O.O. (<http://terratrade.pl/>)

Company profile: The company produces specialized wax products as well as standard candle and candle paraffins. It has a bleaching earth recovery technology that would allow the use of waste generated in the refining of paraffins, but also of oils, plants and minerals.

Key words: soil cleaning, waste recovery

VEOLIA WATER TECHNOLOGIES SP. Z O.O. - BRANCH IN CRACOW

(<http://www.veoliawaterst.pl/>)

Company profile: The company belongs to the international group Veolia Water. The company offers a complete range of services related to the construction or modernization of water treatment plants and industrial and municipal wastewater treatment plants.

Key words: water treatment, wastewater treatment

ZAMUSZAŃSKI (www.wofil.pl)

Company profile: The company is the only Polish manufacturer of ozonators for industrial applications and the only manufacturer of hybrid ozonators in Europe. The company's facilities are fully computerized and monitored over the Internet. Mobile Ozonation System – OZODES – SPiD, dedicated to both the food and water supply industries.

Key words: water ozonation systems, water treatment

ZAKŁAD REALIZACYJNO – PROJEKTOWY OBIEKTÓW OCHRONY EKOLOGICZNEJ

"EKO-PAR" SP. Z O.O. (<http://www.ekopar.krakow.pl/>)

Company profile: The company implements environmental protection facilities and equipment. The plant owns a number of patents, including one for: a method of collection of dust and its loading onto road transport containers, and an ecological soundproof screen adapted to the development of vegetation.

Key words: ecological industrial facilities

BIOREFINING AND BIOENERGY

BIOGAZOWNIE POLSKIE SP. Z O.O. I WSPÓLNICY S.K

(<http://www.biogazownie.pl>)

Company profile: The company designs and builds biogas plants.

Key words: biogas plant

CRB ENERGIA SP. Z O.O. (www.crbenergia.pl)

Company profile: The companies are involved in the design of cogeneration plants, i.e. Combined electricity and heat generation plants, which are fueled with biomass, natural gas, biogas and synthesis gas from the biomass gasification plant or with utilized waste from the plasma reactor.

Key words: biogas plant, biomass, cogeneration, waste utilization

ECO-TECHNIKA PIOTR DUNAS (www.eco-technika.com.pl)

Company profile: The company specializes in installations based on technologies using renewable energy sources.

The offer includes air and ground heat pumps, photovoltaic cells, and recuperation systems.

Key words: recuperation, heat pumps

FIRMA HANDLOWA WITOSPOL WIERZCHOSŁAWICE JÓZEF SZWIEC

(<http://www.witospol.pl>)

Company profile: The company produces biofuels and imports fuels containing bio-components.

Key words: biofuel

INSTYTUT GOSPODARKI SUROWCAMI MINERALNYMI I ENERGIAŁ POLSKIEJ

AKADEMII NAUK (<https://min-pan.krakow.pl/>)

Company profile: Scientific and research facility. The Institute is a pioneer of the use of geothermal energy for heating. The first experimental geothermal plant in Bańska – Biały Dunajec was designed and built.

Key words: geothermal energy, management of mineral resources, environmental protection, energy policy

MAŁOPOLSKIE CENTRUM ODNAWIALNYCH ŹRÓDEŁ ENERGII „BIOENERGIA”

(<http://www.bioenergia.cba.pl>)

Company profile: The Center mainly deals with the creation of technology and production of devices for generating electricity and Biodiesel biofuels. It has its own laboratory where quality analysis of fuels is performed. The Center has created BioHydrogen – an innovative device for the production of electricity from fuels and biofuels with no CO₂ emissions.

Key words: biofuel, manufacture of equipment for the production of biofuels

M.B. ENERGY SP. Z O.O. (<http://mbenergy.pl/>)

Company profile: The company conducts research on the economic process of biomass gasification and the use of such gas for energy purposes, including cogeneration.

Key words: biomass, hydroelectric power plant

MIEJSKIE PRZEDSIĘBIORSTWO WODOCIĄGÓW I KANALIZACJI S.A.

(<http://wodociagi.krakow.pl/>)

Company profile: The company deals with the supply of water, sewage disposal and liquid waste as well as their treatment and utilization. The company also operates biogas plants.

Key words: biogas, wastewater treatment, sludge disposal, water treatment

MIKI RECYKLING SP. Z O. O. (<http://recykling.miki.krakow.pl>)

Company profile: The company deals in waste treatment and purification, and is involved in the production of alternative fuel, which is delivered to the largest Polish cement plants. The company has a specialized line for manual and mechanical waste sorting as part of the waste recovery installation.

Key words: biofuel, waste recovery, waste treatment

ORLEN POŁUDNIE SA (<http://www.ornenpoludnie.pl>)

Company profile: The ORLEN Południe company is a pioneer in the domestic biofuels and biocomponents market. In the production process, the company uses vegetable oils: rape, soy, palm oils, as well as oil mixtures. Orlen Południe offers biocomponents designed, for example, for combining with traditional petroleum oils and biocomponents, which may be an intrinsic fuel.

Key words: biofuel

PRZEDSIĘBIORSTWA USŁUG KOMUNALNYCH „EMPOL” SP. Z O.O.

(<http://pukempol.pl/>)

Company profile: The company collects and utilizes waste of various types. In addition, it deals with the segregation of municipal waste components suitable for recovery.

Key words: alternative fuel, utilization, segregation, waste management

PRZEDSIĘBIORSTWO ENERGETYKI CIEPLNEJ GEOTERMIA PODHALAŃSKA S.A

(<http://geotermia.pl>)

Company profile: Producer and distributor of thermal energy. The company uses renewable energy sources contained in geothermal waters for central heating, air conditioning, tourism and recreation, or balneology.

Key words: geothermal energy, bioenergy

SIGA-TECH S.C. (<http://www.sigatech.pl/>)

Company profile: The company designs biogas and biomethane installations and manufactures, supplies and installs technological equipment. The company is one of the few producers in the world that provide all equipment in the technological installation of recovery and use of biogas.

Key words: biomethane, biogas installations, sludge management

SYNTHOS DWORY 7 SPÓŁKA Z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ SP. J

(<http://synthosgroup.com/>)

Company profile: The company is part of the Synthos SA Capital Group. It manufactures, among others, synthetic rubber and latex, polystyrene (PS) and expandable polystyrene (EPS). In addition, it produces electricity from a renewable source of energy in a biogas power plant located in a municipal waste storage facility in Tarnów.

Key words: alternative energy, biogas plant

ZAKŁAD GOSPODARKI KOMUNALNEJ BOLESŁAW SP. Z O.O.

(<http://www.zgkboleslaw.com/>)

Company profile: The plant deals in waste neutralization and recovery of recyclable materials. It has its own landfill for municipal and inert waste (waste which does not pose a threat to the environment, for example building waste, gravel). The plant produces electricity, which is created as a result of biogas combustion.

Key words: biogas plant, recycling, landfilling, waste disposal

ZESPÓŁ ELEKTROWNI WODNYCH NIEDZICA S.A (<http://www.zew-niedzica.com.pl/>)

Company profile: A pumped-storage power plant that transfers electricity to the grid during the hours of greatest demand.

Key words: hydroelectric power plant

WASTE MANAGEMENT

AGENCJA KOMUNALNA SP. Z O.O. (<http://agencjakomunalna.brzeszcze.pl>)

Company profile: The company provides cleaning services within Cracow, disposes, stores and segregates municipal waste, and performs wastewater treatment services. It administers a municipal waste landfill, deals in the storage and management of solid waste.

Key words: segregation, storage, wastewater treatment

ASEO RECYKLING SYSTEM SP. Z O.O. (<http://www.aseosystem.pl>)

Company profile: The company deals in the recycling and production of plastic regranulates and regrinds.

Key words: plastics

BRANŻOWA ORGANIZACJA ODZYSKU S.A (<http://boosa.pl/>)

Company profile: The company offers the recovery and recycling of packaging and post-consumer waste, provides legal services related to the Packaging Act, and collects packaging waste. It also implements projects in the field of environmental education and conducts environmental audits.

Key words: ecological education, waste paper, packaging recovery, recycling

CENTRUM TECHNOLOGII SP. Z O.O. (<http://www.ctre.pl>)

Company profile: The Center develops technical and technological solutions in the area of waste and energy management, allowing for the rationalization of resource consumption, primarily in the area of energy, waste, water and sewage management.

Key words: smart solutions, smart city, rain management

CHEMICZNA SPÓŁDZIELNIA INWALIDÓW „HEJNAŁ” (<http://www.hejnal.pl/>)

Company profile: The cooperative deals in the processing of plastic waste.

Key words: plastics

CP RECYCLING ORGANIZACJA ODZYSKU OPAKOWAŃ S.A.

(<http://www.cprecycling.eu>)

Company profile: The company deals in the recovery of packaging waste. The company produces the so-called Reverse Vending Machines – can collection containers placed in stores and used for the collection of aluminum cans.

Key words: recycling, waste management

EKO-KONTENER (<http://www.odpady-utylizacja.pl>)

Company profile: The company deals with the collection of waste in containers and their utilization.

Key words: waste disposal

EURO-SORT SP. Z O.O. SP.K.A. (<http://euro-sort.pl/>)

Company profile: The company deals in the purchase of recyclable materials, in particular waste paper, film, plastics and non-ferrous metals (aluminum cans). It prepares waste paper for further processing in paper mills.

Key words: waste segregation, waste paper, recycling

FABRYKA PAPIERU I TEKSTURY „BESKIDY” S.A. (<http://paper.com.pl/>)

Company profile: Manufacturer of recycled paper products: towels and textures. It provides services in the field of comprehensive waste management for corporates, including the destruction of documents. The company has a patented technology for the preparation of highly refined pulp.

Key words: waste paper, recycling

FIRMA PRODUKCYJNO-HANDLOWA „EKOPOLDEX” TOMASZ PODŁODOWSKI
(<http://ekopoldex.pl>)

Company profile: The company recycles plastic waste and sells machinery and equipment used for the grinding, sorting and feeding of waste. Producer of color sorters, i.e. a device which permits the separation of mixed colors in crushed materials or granules.

Key words: recycling, sorting plastic waste

GAL SP. Z O.O. (<http://mpphgal.pl/>)

Company profile: The company deals in the design and construction of equipment for the production of biocomponents as well as the deep processing of mineral oil fractions.

It also conducts research in the field of hydrotreating, catalytic cracking and Visbreaking.

Key words: biodegradable waste

„Sulo” Sp. z o.o. (<http://www.katalizator.net.pl/>)

Company profile: An innovation and implementation company which produces catalysts licensed by the Institute of Catalysis and Surface Chemistry of the Polish Academy of Sciences in Cracow, and equipment for the purification of industrial waste and process gases from organic pollutants.

Key words: production of catalysts, purification of waste gases

K&K RECYKLING SYSTEM (<http://www.kkr.biz.pl/>)

Company profile: The company deals in materials recycling and the production of washing lines for plastics. In addition, it produces regranulates from both own raw materials and materials supplied by customers. It has patented equipment and processing lines for grinding plastics.

Key words: recycling, waste recovery

KOMPOSTOWNIA EKOKONSORCJUM EFEKT SP. Z O.O.

(<http://www.zb.eco.pl>)

Company profile: The company uses the technology of composting in bioreactors, called Kyberferm, whose advantage is the fact that no waste is produced as a result of the production process.

Key words: composting, recycling, waste management

KOMPOSTOWNIA PRYZMOWA PPHU "KOMART" SP. Z O.O.

(<http://www.komart.pl/>)

Company profile: The company deals with the biological treatment of waste, sorting and recovery of secondary raw materials, disposal of municipal and asbestos waste and transport of waste.

Key words: composting, recycling, sorting and recovery of waste

KOMPOSTOWNIA FIRMA USŁUGOWO-HANDLOWA „TUŚ” HELENY HOŁY

Company profile: Transportation and collection of municipal solid waste and composting of biodegradable waste.

Key words: composting, recycling, waste management

KOMPOSTECH SP. Z O.O. (<http://kompostech.pl>)

Company profile: The company deals in the management of organic waste. It has its own composting plant, in which biomass is transformed for the production of organic fertilizer by means of organic fertilizers.

Key words: composting, recycling, waste management

KOMPOSTOWNIA PRYZMOWA FIRMA USŁUGOWO – HANDLOWA „KOP-EKO”
(<http://www.kop-eko.pl>)

Company profile: The company deals with the collection and processing of sewage sludge. It has its own biodegradable waste processing line.

Key words: composting, recycling, waste management

KOMPOSTOWNIA – SKŁADOWISKO ODPADÓW PUK-TARNÓW
(<http://www.puk.tarnow.pl>)

Company profile: The composting plant produces natural compost from raw materials such as grass, leaves and shredded wood chips, which it then sells to private and corporate customers. The landfill, in turn, collects non-hazardous and non-inert waste. These include mainly sorting residues that are not recyclable.

Key words: composting, recycling, storage, waste management

KRAKOWSKI HOLDING KOMUNALNY S. A. (<http://www.spalarnia.krakow.pl/>)

Company profile: The owner of the Thermal Waste Treatment Plant (*Ekospalarnia*) in Cracow, which is an environmentally friendly investment. The plant ensures the recovery of energy contained in waste and its production in cogeneration.

Key words: eco-refinery, biofuel, waste recovery, waste treatment

MO-BRUK S.A. (<http://mobruk.pl>)

Company profile: The company conducts activities related to waste management, including: storage, utilization and recycling. The company has developed new, mechanically trimmed and textured concrete pavements obtained through the disposal of dusts, slags and ashes from incineration plants.

Key words: recycling, waste management

OLIMAR SPÓŁKA Z O.O. (<http://www.olimar.pl/>)

Company profile: An enterprise from the plastics processing industry. Its basic activity is focused on the production of LDPE and HDPE films, garbage bags and packaging bags. In addition, the company is an authorized recycler and conducts selective waste collection.

Key words: recycling

"PRUMAR" P.H.U. DARIUSZ PRUCHNICKI (<http://www.prumar.pl>)

Company profile: The company specializes in the recycling of catalysts, electronics, cables and other multi-material waste. The company has an innovative technology for grinding PCBs in the metal recovery process.

Key words: electro waste, recycling, waste management

REGIONALNY ZAKŁAD PRZETWARZANIA ODPADÓW W SUCHEJ BESKIDZKIEJ

Company profile: A budgetary entity whose mission is related to waste management, including waste processing, recovery, production, collection, transport and disposal.

Key words: recycling, waste management

SKŁADOWISKO ODPADÓW KOMUNALNYCH SP. Z O.O. OŚWIĘCIM

(www.sok.serwisy.net.pl/)

Company profile: The company deals in waste neutralization and sewage disposal. It also has its own municipal waste sorting plant and a composting plant for biodegradable waste, where it uses the BIODEGMA process.

Key words: composting, waste management

SUEZ MAŁOPOLSKA SP. Z O.O. (FORMERLY SITA MAŁOPOLSKA SP. Z O.O.)

(<http://www.sitamalopolska.pl>)

Company profile: The company offers comprehensive collection and management services for various types of waste, including specialist and hazardous waste. It has a composting plant for biodegradable waste.

Key words: utilization, composting, waste management, compost soil

F.H.U. RECYKLER SKUP I SPRZEDAŻ SUROWCÓW WTÓRNYCH

(<http://www.odbiormakulatury-malopolska.pl/>)

Company profile: The company sells recyclables and recycles paper.

Key words: recycling, waste management

FUH ZOLTAR WIESŁAW ZELEK (<http://www.makulatura-zoltar.pl/>)

Company profile: The company is a waste paper purchasing center.

Key words: recycling, waste paper

TESKO TATRZAŃSKA KOMUNALNA GRUPA KAPITAŁOWA SP. Z O.O.

(<http://www.tesko.pl>)

Company profile: The company manages the municipal waste neutralization plant "Zoniówka" in Zakopane.

Key words: recycling, waste management

TOMAD. COLLECTION OF USED-UP ELECTRIC AND ELECTRICAL EQUIPMENT.

DZIODZIO ARTUR (<http://www.tomad.com.pl>)

Company profile: The company collects, purchases and recycles electro waste.

Key words: electro waste, recycling, purchasing center

ZAKŁAD GOSPODARKI ODPADAMI KOMUNALNYMI SP. Z O.O.

(<http://www.mzgk.chrzanow.pl/zgok>)

Company profile: The company manages the municipal waste management plant, servicing several municipalities. Its modernized plant has sorting and composting facilities.

Key words: composting plant, utilization

ZAKŁAD ODZYSKU SUROWCÓW "MADROHUT" SP. Z O.O.

(<http://www.madrohut.pl>)

Company profile: The company acquires and purchases scrap that it melts and sells to the metallurgy and foundry industries. The plant has created an iron-bearing product for the production of cement based on mixing of metallurgical waste with a high content of iron oxides and heap slag.

Key words: production of slag aggregates, recycling

ZAKŁAD UTYLIZACJI ODPADÓW IB SP. Z O.O. (<http://www.sortownia.ib.biz.pl>)

Company profile: The plant is equipped with a sorting plant for mixed municipal waste collected in the sectors of households and enterprises. It also has facilities suited for mechanical and biological waste treatment.

Key words: waste management

ZAKŁAD UTYLIZACJI ODPADÓW PRZEMYSŁOWYCH (<http://www.zuop.com.pl/>)

Company profile: The plant is equipped with a sorting plant for mixed municipal waste collected from households and enterprises. It also has facilities suited for mechanical and biological waste treatment.

Key words: waste management

BIOMATERIALS AND MATERIALS TECHNOLOGIES

AQUER MACIEJ DYBA, JAROSŁAW KRAM SP. J. (<http://aquer.pl>)

Company profile: Manufacturer of products for sanitary installations made of plastics (injection molding, extrusion), rubber and sheet metal. The company owns the AQUER patent, which is currently being implemented into the production process and which is an innovative system of air recuperation with the use of nanosilver.

Key words: air recuperation, nanosilver

CELPAP SP. Z O.O. (<http://www.celpap.pl/>)

Company profile: The company specializes in the acquisition, processing and distribution of mineral raw materials, multi-ingredient mineral mixtures and zoological gravels.

The company has developed an innovative formula for gravel Basil Ag+, which contains silver ions.

Key words: distribution of mineral resources, nanosilver

DR GREEN SP. Z O.O. (<http://www.dr-green.pl>)

Company profile: Producer of fertilizers with a high concentration of micronutrients. The offer includes ecological fertilizers for vegetable, agricultural and fruit cultivation as well as universal fertilizers. The company has developed the MicroActive formula, which contains carefully selected organic compounds.

Key words: production of fertilizers, organic fertilizers

EDF PALIWA (<http://edfpaliwa.pl>)

Company profile: The company deals with the supply of production fuels – both coal and biomass. The main client of the company are entities from the EDF group as well as power and heating companies, industrial customers and coal and biomass intermediaries located throughout Poland.

The company belongs to the EDF Capital Group.

Key words: biomass

INTERMAG SP. Z O.O. (<http://intermag.pl>)

Company profile: Producer of fertilizers and biostimulants, as well as pro-health products for animals in Central and Eastern Europe.

Key words: biostimulators, mineral fertilizers

PRZEDSIĘBIORSTWO „ARKOP” SP. Z O.O. (<http://www.arkop.pl>)

Company profile: The company sells fertilizers and feed additives and produces chemical compounds, including high-class chelates.

Key words: biotechnology, chelates

PRODUCTION AND PROCESSING OF BIOMASS

AGROBIOENERGIA KAROLINA I KRZYSZTOF WASA SPÓŁKA Jawna

(<http://agrobioenergia.com.pl/>)

Company profile: The company is a biomass intermediary.

Key words: biomass distribution

AdAc Sp. z o.o. SK (<http://eddi.com.pl/ekoeddi/>)

Company profile: The company is involved in the production of pellets and biomass collected from forests, sunflower husks and rape straw.

Key words: biomass production, pellet production

FIRMA HANDLOWO-USŁUGOWA "EKSPORT IMPORT" MARIA STABRAWA

(<http://www.pelletstabrawa.eu>)

Company profile: Producer of pellet.

Key words: biomass production, pellet production

KOWA USŁUGI RÓŻNE WACŁAW KONIUCH (<http://www.kowa-kotly.pl>)

Company profile: Manufacturer of heating systems for biomass combustion. It sells its own container with a movable floor, which allows to accumulate approx. 400 - 600 liters of biomass at a time.

Key words: biomass burning

PRZEDSIĘBIORSTWO WIELOBRANŻOWE EKOPOL MARZANNA KOWALSKA MAREK KOWALSKI SP. J. (<http://www.ekopol.com.pl>)

Company profile: The company manufactures wood heating and scalding chambers, and it offers consulting services and designs and builds biomass boiler rooms.

Key words: biomass, production of chamber dryers

ZAKŁAD PRODUKCYJNO USŁUGOWO HANDLOWY BUKATI RAFAŁ BURZYCA

(<http://www.bukati.pl>)

Company profile: The company manufactures and distributes pellets.

Key words : biomass, pellets

**FIRMA PRODUKCYJNO USŁUGOWO-HANDLOWA DREWNEX MGR. CZESŁAW
RUSNAK** (<http://www.eco-pellets.pl>)

Company profile: The company manufactures and distributes pellets.

Key words : biomass, pellets

MAŁOPOLSKIE PRZEDSIĘBIORSTWO GOSPODARKI ODPADAMI SP. Z O.O.
(<http://www.mpo.krakow.pl/>)

Company profile: The company operates waste management facilities, such as a selectively collected waste sorting facility, the Barycz composting plant and municipal waste landfill, a mechanical and biological municipal waste treatment plant, a large disassembly facility used for the disassembly of large electrical and electronic equipment waste. It also operates Points of Selective Municipal Waste Collection – THE LAMOUSING HOUSE.

Key words: production of heating devices

OTHER

BBTB GROUP SP. Z O. O. (<http://www.bbtbgroup.com>)

Company profile: Producer of eko-ognisko™ – an environmentally friendly kindling that serves to light a boiler with mechanical blowing, fireplace, grill and bonfire.

Key words: kindling

ELTECO SP. Z O.O. (<http://www.elteco.pl>)

Company profile: Manufacturer of cogeneration units intended for the permanent production of both electricity and heat using gas internal combustion engines powered by, for example, biogas.

Key words: devices for biogas plants

IGENIC SP. Z O.O. (<http://www.igenic.pl/pl/>)

Business area: Laboratory analysis

Company profile: The company offers laboratory analyzes in the field of microbiological testing, GMO detection and nutritional testing.

Key words: laboratory analyzes, microbiological tests

OŚMALOPOLSKA CENTER FOR BIOTECHNOLOGY OF THE JAGIELLONIAN UNIVERSITY (<http://www.mcb.uj.edu.pl>)

Company profile: The center specializes in the use of microorganisms in organic farming and phytoremediation of areas contaminated with heavy metals.

Key words: research on microorganisms, bioremediation, phytoremediation, microbiology

SPÓŁDZIELNIA METALOWO-ODLEWNICZA "OGNIWO" W BIECZU
(<http://www.ogniwobiecz.com.pl/>)

Company profile: Producer of the OGNIWO EKO boiler. It is a central heating water boiler with "ecological safety sign" certification.

Key words: production of heating devices

BUSINESS ENVIRONMENT

"AEGM" ADAM FLAGA (<http://www.aegm.pl/>)

Business area: Consulting and marketing

Company profile: The company deals with acquiring EU funds for projects in the field of ecological installations.

Key words: obtaining funds from the European Union, solar collectors, photovoltaic panels

CENTRUM TRANSFERU TECHNOLOGII AGH (<http://www.ctt.agh.edu.pl/>)

Business area: Transfer of technology

Company profile: An extra-faculty organizational unit of the AGH University of Science and Technology. The task is to support the processes of commercialization and transfer of innovative technologies and knowledge, including from the areas of the bioeconomy.

Key words: intelligent solutions, technology transfer, innovation support

COBICO SP. Z O. O. (<http://www.cobico.pl/>)

Business area: Certification

Company profile: The company conducts research and development in the domestic metal packaging sector and runs a Certification Bureau in the field of organic farming, packaging and packaging waste, regional and traditional products as well as QAFP.

Key words: certification, organic farming

DESIGNA SP. Z O.O. (<http://www.designa.com.pl/>)

Business area: Consulting and marketing

Company profile: The company is implementing research and development projects in the field of life science, including environmental protection and food production.

Key words: environmental protection, R&D projects

EUROKREATOR T&C SP. Z O.O. (<http://www.eurokreator.eu/>)

Business area: Consulting and marketing

Company profile: The company provides consulting services and assesses the R&D potential of business entities. The company provides funds for the implementation of business projects also in the area of bioeconomy and ecology.

Key words: consulting, analysis, development of companies

GAEU (<http://www.gaeu.pl/>)

Business area: Recruitment and training

Company profile: Advisory services on obtaining EU subsidies for companies. The company specializes in the Horizon 2020 program for the life science and clean tech industries.

Key words: pharmacy, consultancy, pharmaceutical industry

INTECH PK SP. Z O.O. (<http://www.intechpk.pl>)

Business area: Transfer of Technology

Company profile: A special-purpose company of the Cracow University of Technology dealing with the transfer of knowledge and cooperation between science and commerce. The key activities are the commercialization of the results of scientific research and development work in the field of technology, industry and ecology.

Key words: innovative technologies

INFOBROKERSKA (www.infobrokerska.pl)

Business area: Consulting and marketing

Company profile: Business support in the field of market analysis, market potential research, identification of business partners. The company deals with pro-innovation analyzes for industrial companies, including bioeconomy.

Key words: competitive analysis, marketing strategy, market intelligence

INSTYTUT DORADZTWA SP.ZO.O. (<http://www.instytutdoradztwa.com/>)

Business area: Consulting and marketing

Company profile: The company deals with obtaining EU subsidies and completing documentation and organizing training. The company manages the Sustainable Energy Cluster and provides consultancy in the field of low energy construction.

Key words: design consulting, training, innovation support

INSTYTUT ZRÓWNOWAŻONEJ ENERGETYKI (<http://www.ize.org.pl>)

Business area: Consulting and marketing

Company profile: The Institutes's activity is focused on the issues of sustainable development in the area of energy, construction, transport and environmental protection.

Key words: organization of conferences, trainings

JAGIELLOŃSKIE CENTRUM INNOWACJI SP. Z O.O. (<http://www.jci.pl>)

Business area: Life Science infrastructure

Company profile: Laboratories and research services. The JCI Quality Institute - for cosmetics manufacturers, dietary supplements and healthy food. Conducting clinical trials and research and development projects in the field of medicine and related sciences. Research services in the field of biological analysis, chemical analysis, structural analysis and drug forms, surface analysis, medical diagnostics and tissue engineering.

Key words: life science, clinical trials, biological analysis, chemical analysis

JCI VENCURE Sp. z o.o. (<http://jciventure.pl/>)

Business area: Venture Capital / Seed Fund

Company profile: The company invests in projects and start-ups from the life science industry.

Key words: investor, seed fund, seed fund

KANCELARIA TRAPLE KONARSKI PODRECKI I WSPÓLNICY SP. J. (www.traple.pl)

Business area: Legal services

Company profile: The law firm provides legal services to Polish and foreign entrepreneurs as well as to public entities. It specializes primarily in such areas as: intellectual property law, pharmaceutical law, competition law, advertising law, corporate services for enterprises, public procurement.

Key words: law office, consultancy, law

KG LEGAL KANCELARIA RADCÓW PRAWNYCH I TŁUMACZY PRZYSIĘGLYCH (www.kg-legal.pl/)

Business area: Consulting and marketing

Company profile: The law firm specializes in language and legal services. It provides professional language and translation support. The company specializes in the life science industry, including ecology and bioeconomy.

Key words: translations, consultancy, law office

KPPM DORADZTWO SP. Z O.O. (<http://kppmd.pl/>)

Business area: Consulting and marketing

Company profile: A consulting company specializing in comprehensive project services and obtaining subsidies from the European Union and other available sources. The company specializes in Eco Investments.

Key words: consulting services, co-financing

KRAKOWSKI PARK TECHNOLOGICZNY SP. Z O.O. (www.kpt.krakow.pl/)

Business area: Life Science infrastructure

Company profile: A business environment institution that supports the economic development and entrepreneurship in the Malopolska region. It builds coalitions and cooperation platforms.

Key words: business support, development strategies

MAŁOPOLSKA REGIONAL DEVELOPMENT AGENCY (MARR S.A.) (www.marr.pl/)

Business area: Consulting and advisory

Company profile: A regional institution, which supports the regional development and assists governmental and regional authorities in shaping the policy of innovative development of the region. It provides services in the area of obtaining EU funds and helps to effectively invest in the Malopolska region.

Key words: investments, EU subsidies, financial support

PMR CONSULTING & RESEARCH SP. Z O.O. (<http://www.pmrconsulting.com>)

Business area: Consulting and marketing

Company profile: The company implements consulting projects aimed at the optimization of distribution and the analysis of the economic potential of selected countries and markets, which may be used in the recycling and ecological industries.

Key words: consulting, market intelligence

PNO CONSULTANTS SP. Z O.O. (<http://pnoconsultants.com/>)

Business area: Consulting and marketing

Company profile: The company provides consulting services relating to subsidies and fund raising, including to companies associated with bioeconomy.

Key words: consulting, fund raising

SAVONA PROJECT SP. Z O.O. (<http://savonaproject.eu>)

Business area: Consulting and marketing

Company profile: A consulting and engineering company operating in the field of environmental protection, renewable energy and energy conservation.

Key words: investment projects planning, consulting services

SADECKA AGENCJA ROZWOJU REGIONALNEGO (<http://sarr.com.pl>)

Business area: Consulting and advisory

Company profile: The basic objective of the Agency is to conduct activities aimed at developing the Nowy Sącz region and the entities operating within that area.

Key words: innovation support

SCHOLAGENE (<http://scholagene.com.pl/>)

Business area: Consulting and marketing

Company profile: The company conducts training, consulting and translation activities for the life science industry. It is also involved in the distribution of semi-finished products for laboratories. It conducts trainings and advisory services related to the acquisition of highly qualified employees.

Key words: consulting, know-how, training, recruitment, translations

SOUTH POLAND CLEAN TECH CLUSTER (<http://spcleantech.pl/>)

Business area: Consulting and advisory

Company profile: A cluster initiative that supports innovation in southern Poland by increasing the commercialization of new products and technologies.

Key words: innovation support

THE MALOPOLSKA KNOW-HOW TRANSFER CENTERS SPIN

(<http://www.spin.malopolska.pl/>)

Business area: Consulting and advisory

Company profile: The company's goal is to increase the intensity of knowledge transfer and the use of the universities' potential by enterprises within the smart specialization of the Malopolska region; innovative services for entrepreneurs by business environment institutions operating at universities.

Key words: Transfer of know-how, smart specializations

TARGI W KRAKOWIE SP. Z O.O. (<https://www.targi.krakow.pl/>)

Business area: Organization of industry events

Company profile: The company deals in organizing fairs and congresses, including the Kompozyt Expo industry congress.

Key words: organization of conferences, fairs, congresses

**REGIONAL FUND FOR ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT
IN CRACOW** (<https://www.wfos.krakow.pl/>)

Company profile: The fund provides financial assistance in the field of environmental protection and water management in the Malopolska region.

Key words: financing

NGOs

CZYSTA WISŁOKA FOUNDATION (<http://www.wisloka.tarnow.pl/>)

Description: The foundation's goal is to protect the waters of Wisłoka and help in to rationally solve water management problems in its basin.

Key words: environmental protection

CLUSTER LIFE SCIENCE FOUNDATION (<http://lifescience.pl/>)

Description: The foundation's aim is to make the best use of the potential of the Cluster LifeScience initiative, to take up the challenges faced by the Malopolska bio-region, and to effectively use the development opportunities in the field of life science and biotechnology.

Key words: regional development

ENVIRONMENTAL PARTNERSHIP FOUNDATION (<http://www.fpds.pl/>)

Description: The Foundation's mission is to support sustainable development by building partnerships, civil society and promoting environmentally friendly activities.

Key words: environmental protection

FOUNDATION FOR THE SUPPORT OF ECOLOGICAL INITIATIVES (<http://www.fwie.eco.pl/>)

Description: Non-governmental organization operating in the field of environmental protection.

Key words: environmental protection

POLISH ECOLOGICAL CLUB IN KRYNICA

Description: The club's mission is to save and improve the state of the environment through information, didactic, educational and research activities. **Key words:** environmental protection

POLISH SOCIETY OF COMPOSITE MATERIALS (<http://www.ptmk.net/>)

Description: The association was founded on the initiative of people involved in the production and testing of materials for the needs of medicine. It realizes its goals through scientific, research and educational activities. It publishes the quarterly "The Engineering of biomaterials" and participates in many scientific conferences.

Key words: biomaterials

IDEATECHFORUM ASSOCIATION (<http://ideatech.org.pl/>)

Description: The association acts in favor of ecology. The aim of the Association is to commercialize scientific research.

Key words: ecology, innovation support

ASSOCIATION OF POLISH ENGINEERS AND MECHANICAL TECHNICIANS (SIMP)

(<http://www.krakow.simp.pl>)

Description: The association aims to bring together engineers and mechanical technicians of all specialties and related professions. Its mission is to work for science, technology and the economy, including implementation projects, raising the professional qualifications of engineers and technicians, promoting employment, professional reorientation and job search assistance, and creating a forum for the exchange of information in the fields of science, technology and economic as well as social issues.

Key words: association, engineers, technicians

EDUCATION

AGH UNIVERSITY OF SCIENCE AND TECHNOLOGY IN CRACOW http://www.agh.edu.pl/			
Organizational unit	Field of study	Degree	www
Faculty of Geology, Geophysics and Environmental Protection	Environmental protection	1st and 2nd cycle degree	<u>www</u>
	Environmental Engineering	1st and 2nd cycle degree	
	Ecological sources of energy	1st and 2nd cycle degree	
Faculty of Mining Surveying and Environmental Engineering	Environmental Engineering	1st and 2nd cycle and doctoral degree	<u>www</u>
Faculty of Mining and Geoengineering	Environmental Engineering	1st and 2nd cycle and doctoral degree	<u>www</u>
	Waste management	Postgraduate studies	
	Waste in mines – law, technology, environment	Postgraduate studies	
Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering	Efficient use of electrical energy	Postgraduate studies	<u>www</u>
Walery Goetel's School of Environmental Protection and Engineering	Logistics in waste management	Postgraduate studies	<u>www</u>
	Environmental protection and engineering	Postgraduate studies	
	Renewable resources and sources of energy	Postgraduate studies	
Faculty of Materials Science and Ceramics	Analytical chemistry in industry and environmental	Postgraduate studies	<u>www</u>

Faculty of Mechanical Engineering and Robotics	Energy auditing in the construction sector: thermal modernization and energy performance certification of buildings	Postgraduate studies	<u>www</u>
Faculty of Energy and Fuels	Energy audit, energy assessment of buildings and efficient energy use	Postgraduate studies	<u>www</u>
	Modern management methods and technologies in coke making	Postgraduate studies	
	Postgraduate studies for eco advisors	Postgraduate studies	
Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering	Efficient use of electrical energy	Postgraduate studies	<u>www</u>

CRACOW UNIVERSITY OF TECHNOLOGY http://www.pk.edu.pl			
Organizational unit	Field of study	Degree	www
Faculty of Environmental Engineering	Renewable energy sources and municipal infrastructure	1st cycle degree	<u>www</u>
	Environmental Engineering	1st and 2nd cycle and doctoral degree	
Faculty of Architecture (studies conducted jointly with the Polish Green Building Council PLGBC)	Sustainable architecture and construction	Postgraduate studies	<u>www</u>
Faculty of Civil Engineering	Energy-saving construction, auditing and energy assessment of buildings	Postgraduate studies	<u>www</u>
Faculty of Mechanics	Inter-faculty post-graduate studies in environmental protection and occupational health and safety	Postgraduate studies	<u>www</u>
Centrum Szkolenia i Organizacji Systemów Jakości	Environmental Management	Postgraduate studies	<u>www</u>
	Management of waste and hazardous substances	Postgraduate studies	

JAGIELLONIAN UNIVERSITY IN CRACOW http://www.uj.edu.pl/			
Organizational unit	Field of study	Degree	www
Faculty of Chemistry	Environmental protection	1st and 2nd cycle degree	<u>www</u>
	Ecology and evolution (lectured in English)	2nd cycle degree	
	Natural resources management	2nd cycle degree	

PEDAGOGICAL UNIVERSITY OF CRACOW http://www.up.krakow.pl/			
Organizational unit	Field of study	Degree	www
Faculty of Geography and Biology	Environmental monitoring	1st cycle degree	<u>www</u>
	Environmental protection	1st and 2nd cycle degree	
	Renewable sources of energy	Postgraduate studies	

UNIVERSITY OF AGRICULTURE IN KRAKOW https://urk.edu.pl/			
Organizational unit	Field of study	Degree	www
Faculty of Agriculture and Economics	Environmental protection	1st cycle degree	<u>www</u>
	Environmental quality and safety	1st cycle degree	
	Bioeconomy	1st cycle degree	
Faculty of Production and Energy Engineering	Engineering of biosystems	1st cycle degree	<u>www</u>
	Renewable sources of energy and waste management	1st and 2nd cycle degree	
Faculty of Environmental Engineering and Surveying	Environmental Engineering	1st and 2nd cycle degree	<u>www</u>
	Engineering and management of water resources	1st and 2nd cycle degree	
All faculties	Environmental protection and development	Doctoral studies	
Faculty of Production and Energy Engineering	Quality systems of biofuels	Postgraduate studies	<u>www</u>
	Use of plants in energy recovery	Postgraduate studies	
	Auditing and energy performance certification of buildings	Postgraduate studies	
	Local energy management and planning	Postgraduate studies	

STATE HIGHER VOCATIONAL SCHOOL IN TARNOW http://pwsztar.edu.pl/			
Organizational unit	Field of study	Degree	www
Institute of Mathematical and Natural Science	Environmental protection	1st cycle degree	<u>www</u>

PODHALE STATE COLLEGE OF APPLIED SCIENCES IN NOWY TARG http://www.ppwsz.edu.pl/			
Organizational unit	Field of study	Degree	www
Institute of Technical Sciences	Environmental Engineering	1st cycle degree	<u>www</u>

PRIVATE UNIVERSITY OF ENVIRONMENTAL SCIENCES IN RADOM http://www.pwsos.pl/			
Organizational unit	Field of study	Degree	www
Off-site Faculty of Environmental Protection in Miechow	Environmental protection	1st cycle degree	<u>www</u>

SZKOŁA GŁÓWNA POLITECHNICZNA Z SIEDZIBĄ W NOWYM SĄCZU http://www.fuaw.pl/uczelnie/szkola-glowna-politechniczna			
Organizational unit	Field of study	Degree	www
Intercollegiate Institute of Surveying and Cartography and Construction Economics of the Main Polytechnic School with headquarters in Nowy Sącz and Zygmunt Gloger's College of International and Regional Cooperation in Wołomin	Environmental Engineering	1st cycle degree	<u>www</u>

KEY PROJECTS

Project title	Construction of a modern headquarters of the Marshal's Office and its subordinate units in Cracow.
Project description	The Regional Administrative Center "Małopolska" sp. z o. o., appointed for this purpose by the Małopolska Regional Development Agency, is responsible for the implementation of the project. The project has been evaluated by the British organization BRE and received the BREEAM Excellent ecological certificate, which confirms that international high standards of green building have been met.
Project value	An estimated PLN 160 million (the Regional Administrative Center "Małopolska" will pay PLN 4,913,850 gross for the design, construction permit and tender)
Source of financing	Funding from MARR S.A. and funds obtained by the company through a bank loan
Project duration	2012-2018
Website	https://www.marr.pl/wpw/companies/346/details

Project title	Municipal waste management program in Cracow
Project description	Implemented as part of the Operational Program Infrastructure and Environment (OPI&E). One of the project's goal includes the construction of a Thermal Waste Treatment Plant (<i>Ekospalarnia</i>) in Cracow, with an annual capacity of 220,000 tons of waste, readiness to work 8,000 h/year and the possibility of energy production in cogeneration.
Project value	PLN 826,905,444.43 [own contribution by KHK S.A. (ca. PLN 301 mln); loan from NFOŚiGW (PLN 298,230,000)]
Total subsidized	PLN 371,728,053
Source of financing	Cohesion Fund under the Infrastructure and Environment Programme 2007-2013
Project duration	2008-2015
Website	https://khk.krakow.pl/pl/ekospalarnia/informacja-o-projekcie/

Project title	Sewage treatment plant - Płaszów II in Cracow
Project description	The aim of the project was, among others, to create the possibility of full mechanical and biological treatment of all sewage discharged from the central districts of Cracow. The scope of the project included: modernization and extension of the Sewage Treatment Plant in Płaszów, recultivation of sedimentary lagoons and construction of the Lower Vistula River collector.
Project value	PLN 366,117,671.96
Total subsidized	PLN 233,206,196.95
Source of financing	Cohesion Fund 2004-2006
Project duration	2000-2010
Website	http://wodociagi.krakow.pl/o-firmie/projekty-unijne/oczyszczalnia-sciekow-plaszow-ii-w-krakowie.html

Project title	Expansion and reconstruction of the technological line at the Bochnia wastewater treatment plant with the use of renewable energy sources and streamlining the management of network assets
Project description	The project includes the development of a technological line for the processing of sewage sludge, the construction of a solar drying plant for sewage sludge, facilities for the production and processing of biogas for electricity and heating needs, along with the assembly and commissioning of a cogeneration unit. In addition, the second investment task is the construction of intelligent control and supervision systems over the water supply and sewage systems.
Project value	PLN 93,763,318.63
Wysokość dofinansowania	PLN 46,210,223.12
Source of financing	Cohesion Fund under the Infrastructure and Environment Programme 2014-2020
Project duration	2017-2020
Website	http://mpwikbochnia.pl/index.php/rozbudowa-i-przebudowa-ciagu-technologicznego-na-oczyszczalni-sciekow-w-bochni-wraz-z-wykorzystaniem-odnawialnych-zrodel-energii-i-usprawnieniem-zarzadzania-majatkami-sieciowym

Project title	Construction of a flue gas denitrification system for boilers No. 3 and 4 at EDF Polska S.A. Branch No. 1 in Cracow
Project description	The project covered the design, construction and commissioning of complete modern flue gas denitrification systems for hard coal- and biomass-fired boilers at Elektrociepłownia Kraków (municipal heat and power plant in Cracow). The equipment is to ensure reduction of nitrogen oxides during the combustion of primary fuel and co-firing of biomass.
Project value	PLN 178,799,503.50
Total subsidized	PLN 20,000,000
Source of financing	European Regional Development Fund under the Operational Program Infrastructure and Environment 2007-2013
Project duration	2013-2016
Website	http://mapadotacji.gov.pl/projekt/1273673

Project title	Construction of a mechanical and biological processing of mixed municipal waste facility in the Boleśław commune
Project description	The undertaking implemented in Zakład Gospodarki Komunalnej "Boleśław" Sp. z o. o. (public utility company) in Boleśław. The basic goal is to extend and modernize environmental protection infrastructure in the field of waste management. The project covered the construction of a process hall, a composting plant and the accompanying infrastructure.
Project value	PLN 28,616,000.42
Total subsidized	PLN 16,253,579.27
Source of financing	Cohesion Fund under the Operational Program Infrastructure and Environment 2007-2013
Project duration	2014-2015
Website	http://www.zgkboleslaw.com/index.php/jrp/zadania-kontrakty

Project title	Adaptation of the Pavilion at Polana Lea in Cracow to the center of ecological education
Project description	As part of the project, necessary adaptation works will be carried out with use of pro-ecological technologies. The Pawilon Okocimski building will be renovated with use of passive technology; the so-called green roof is to be constructed, and a number of permaculture crops will be seeded in the pavillion's garden. There will be a program of activities addressed to both children and the elderly.
Project value	PLN 4,936,904.17
Total subsidized	PLN 2,988,548.24
Source of financing	Regional Operational Programme 2014-2020
Project duration	2017
Website	http://ue.krakow.pl/aktualnosci/208559,229,komunikat,przystosowanie_pawilonu przy polanie lea w krakowie na osrodek edukacji ekologicznej.html

KEY SECTOR EVENTS

EVENT NAME	ORGANIZER	DATE
KOMPOZYT-EXPO	Targi w Krakowie ul. Galicyjska 9 31-586 Kraków http://www.eurobiotech.krakow.pl	October
MAŁOPOLSKA INNOVATION FESTIWAL	Urząd Marszałkowski Województwa Małopolskiego ul. 30-017 Kraków http://www.festiwalinnowacji.malopolska.pl	May
DNI ZIEMI W KRAKOWIE	Wydział Kształtowania Środowiska UMK Osiedle Zgody 2, 31-949 Kraków https://www.bip.krakow.pl/	April
KRAKOWSKI FESTIWAL RECYKLINGU	Wydział Gospodarki Komunalnej i Ochrony Środowiska UMK Osiedle Zgody 2, 31-949 Kraków https://www.bip.krakow.pl/	May
GALA EKOLIDERZY	Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej w Krakowie Kanonicza 12, 31-002 Kraków https://www.wfos.krakow.pl/	June
RODZINNY PIKNIK EKOLOGICZNY	Wojewódzki Fundusz Ochrony Środowiska i Gospodarki Wodnej w Krakowie Kanonicza 12, 31-002 Kraków https://www.wfos.krakow.pl/	June
EUROPEJSKI TYDZIEŃ ZRÓWNOWAŻONEGO TRANSPORTU I EUROPEJSKI DZIEŃ BEZ SAMOCHODU W KRAKOWIE	Wydział Kształtowania Środowiska UMK Osiedle Zgody 2, 31-949 Kraków https://www.bip.krakow.pl/	September
POLISH CONFERENCE ON BIOCYBERNETICS AND BIOMEDICAL ENGINEERING	Akademia Górniczo-Hutnicza im. St. Staszica w Krakowie ul. Mickiewicza 30, 30-059 Kraków http://www.mim.krakow.pl/	September
TARGI EUROBIOTECH	Wydział Nauk Biologicznych i Rolniczych PAN pl. Defilad 1, 00-901 Warszawa http://www.eurobiotech.krakow.pl/	September
KONFERENCJA - SUROWCE I ENERGIA A GOSPODARKA O OBIEGU ZAMKNIĘTYM I NISKOEMISYJNA	Muzeum Inżynierii Miejskiej ul. Wawrzyńca 15, 33-332 Kraków http://www.mim.krakow.pl/	September
MIĘDZYNARODOWE FORUM LIFE SCIENCE OPEN SPACE (LSOS) W ICE KRAKÓW	Klaster LifeScience Kraków ul. Bobrzyńskiego 14 30-348 Kraków http://www.lsos.info/	October
KONFERENCJA MIĘDZYNARODOWA I TARGI WATERCOOLERS EUROPE W ICE KRAKÓW	Watercoolers 1 Place des Barricades – 1000 Brussels, Belgium www.watercoolerseurope.eu	October
INTERNATIONAL CONFERENCE ON THE SUSTAINABLE ENERGY AND ENVIROMENTAL DEVELOPMENT	Centrum Energetyki AGH Czarnowiejska 30, 33-332 Kraków http://www.agh.edu.pl/centrum-energetyki/	December

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Ul. prof. Michała Bobrzyńskiego 14

30-348 Kraków

NIP: 6762464304

REGON 122838510

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COMPILED BY:

Infobrokerska.pl

ul. 14112438

30-415 Kraków

www.infobrokerska.pl

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