DIVERSIFICATION OF PGG SA ACTIVITIES.

THE WAY TO WASTE-FREE MINING.
Development of the high-efficiency heating sector, Renewable Energy Sources and its storage

Development of the raw materials reuse sector as well as the alternative use of waste and solid fuels

Development of the automation and robotization sector using IT solutions

Creation of a passive building - a laboratory using the energy resources of mining areas
Strategic areas

The development of new, technologically advanced business lines requires the development of knowledge and competence. In Polish Mining Group, we create scientific and expert communities in the areas in which we plan to develop. Low-carbon energy and renewable energy, the closed circuit economy and modern industrial technologies are new development areas for which we plan to build construction offices and knowledge centers.

Already in the environment of PGG S.A. employees created multidisciplinary project teams working as the nucleus of future new structures. We run recruitment processes at universities and the labor market looking for specialists to build engineering teams that will be dedicated to specific development projects.
Polish Mining Group has experience in the management of generating units as part of the functioning Elektrociepłownia Plant in Rybnik. This specialized organizational unit PGG uses gas from demethanation of mines and coke oven gas in the production of heat and electricity in cogeneration systems.

At the same time, competences are being built within the Photovoltaic Project Team, which initiated the assembly of 0.41 MWp of installations on the roofs of the Company’s facilities. The installed capacity in renewable energy is the same as covering the energy demand of 177 single-family houses and annual production at the level of 390 MWh of electricity.

~ 400 Employees
Qualified specialists from the energy and heating sector

~ 50,5 MW Power sources of electricity
Allowing annual electricity production at almost 70 GWh

~ 1,6 PJ Annual production of heat
Delivered from own sources to households and enterprises in the region
Construction of photovoltaic farms in Upper Silesia

Need
Increasing energy efficiency and reducing electricity costs, as well as developing post-industrial areas

Solution
Renewable energy structure extension

Action
Assembly of PV installations with a total capacity of 95 MWp in the PGG business area

Effect
Development of brownfield and post-mining areas along with the increase of the company’s energy independence, as well as reduction of approx. 60,000 tonnes of CO2 emissions
Construction of photovoltaic farms in Upper Silesia – PGG areas

- Pre-pilotage - roofs of KWK Halemba - Installed power 0.41 MWp
- Pilotage – ground and dumping ground of Sośnica and PV on the roofs of KWK Piast-Ziemowit
- Stage I - grounds for reclaimed dumping ground ROW Rybnik/Chwałówice
- Stage II – other PGG coliers

Total POWER 35 MWp
Polish Mining Group is still improving the quality and competitiveness of its products by reducing waste generation and reuse. The Closed Circuit Economy enables the implementation of new development paths and the Company’s operations. Diversification in the area of aggregates and new products from post-production materials is the way to a zero-emission and waste-free mining industry.

In addition, work is ongoing, along with leading research institutes, on the alternative use of solid fuels in the gasification process with by-products.

We are also developing the competences of the future thinking about recycling of solar installations and re-use of rare earth minerals, silicon and assembly elements. In this way, ensuring the lowest life cycle cost of the product.
Gasification to methanol

Need
Ecological increase in the use of coal

Solution
Application of methanol gasification installation

Action
Assembly of coal gasification installation on the area of KWK Piast Ziemowit. The use of about 1 million tons of coal

Effect
Increasing the use of own resources and developing competencies in carbochemistry. Poland’s independence from methanol imports ~ 600 000 ton
Raw material processing installation

MINRESCE
GRANT 2019
RFCS – 899518

RESEARCH ON PRODUCT DEVELOPMENT FROM WASTE HAS BEGUN. THEN CERTIFICATION PRODUCTS
PGG S.A. carries out activities aimed at increasing competence in the development of technological lines. PGG S.A. Repair and Production Plant carries out specialized tasks in three manufacturing departments equipped with modern machinery. Among others, welding works are carried out by qualified production workers with dozens of comprehensively equipped workstations, supervised by welding supervision staff.

In addition, an interdisciplinary team is being built that has the skills to develop and implement new technologies in the production process and technological improvements in the field of robotization, materials science, metallurgy and process technology.
Wagon Production and Repair Plant

Need
Increasing production and renovation capabilities and development of engineering competences of employees. Diversification of the Company’s business

Solution
Creating a new, future-oriented business line

Action
Construction of a Wagon Production and Repair Plant using the KWK Sośnica Makoszowy hall and KWK Sośnica hall – Pole Bojków

Effect
Providing stable, high-paying 200 new jobs and reducing the outflow of engineering staff
New competences

Creation of a passive plus Energy buildings is planned, which will constitute a research laboratory for the possibly of using the Energy resources.
THANK YOU