



ArcelorMittal

news release

University of Science and Technology (AGH) and ArcelorMittal Poland are starting works on the management of iron-bearing waste

Kraków, September 15, 2021

University of Science and Technology (AGH) in Kraków and ArcelorMittal Poland have signed an agreement on cooperation with regards to management of iron-bearing waste for the needs of the economy.

Within the framework of the concluded agreement, AGH and ArcelorMittal Poland shall cooperate primarily in the field of researching the possibilities of iron-bearing waste management for the needs of the economy, including the needs of ArcelorMittal. The agreement assumes developing technological solutions enabling the management of iron-bearing material waste collected in landfills located south of ul. Igołomska in Krakow in an economically justified and environmentally safe manner. Moreover, the cooperation involves implementation and development of the worked-out solutions into the industrial phase. It is also important that a method is developed of closing the landfills in a manner that is as neutral as possible for the natural environment.

The cooperation will consist in, i.a. joint completion of R&D and implementation projects. The AGH team, represented by Prof. Mirosław Karbowiczek, aims for developing solutions which will enable the management of waste produced during a few dozen years of steelmaking activity.

Rector of AGH Prof. Jerzy Lis emphasizes: - *AGH since the beginning of its activity has had strong connection with the industry. Our greatest pride and success are solutions which we provide for the economy and companies. Those from the area of environmental engineering which help to neutralize various challenges are of special importance. It is in the interest of all of us and future generations to care for local natural resources. I am convinced that solutions concerning management of materials deposited at the landfills will improve the quality of this land and the recultivation will increase the comfort of living of the neighbouring community. I am glad that this agreement maps out another area of cooperation of AGH with our important partner - ArcelorMittal Poland.*

Professor Mirosław Karbowiczek explains: - *As part of the signed contract, developing an innovative method of processing materials collected in the form of post-production waste into charge material for the steelmaking process is being planned. The first results of conducted laboratory tests show the effective possibility of using hydrogen as a reducing agent in the processing of this waste. Firstly, conducting detailed laboratory tests of the metallurgical reactions taking place is being planned in order to design the technological guidelines. Then, building a pilot line to verify the adopted technical and technological assumptions is planned for. The results of the pilot verification will be used to design and build an industrial line for processing waste materials. The aim of the project is both environmental, i.e. waste recycling and land recovery from metallurgical landfills, as well as scientific, meaning the development and implementation of an innovative "green steel" production process using hydrogen.*"

- *The agreement signed with AGH is definitely a step in the right direction. Circular economy is on everyone's lips and the actions planned by us is circular economy in practice – they are aimed at managing waste which may be successfully recycled and used in steelmaking processes or by other branches of the economy, e.g. construction or cement industry – says Sanjay Samaddar, chairman of the board of directors and CEO of ArcelorMittal Poland. – Our plan assumes gradual removal of this waste and land clearing so that within 5-10 years this area can be changed completely and given a new functionality, in line with the city's urbanistic vision. The cooperation with AGH not only fits in the concept of the circular economy but also assumes the application of new technologies, based on the use of hydrogen. The production of "green", carbon neutral steel, is currently the most important strategic objective of the entire ArcelorMittal Group – he adds.*

- *In the context of this cooperation one needs to bear in mind that the iron-bearing waste was deposited on these landfills for a few dozen years of steelmaking activity, prior to the privatization process. As ArcelorMittal Poland we endeavoured to evacuate it on an ongoing basis, however, this is not an easy task due to relatively small scope of its applications. It is also important to note that due to the shutdown of the blast furnace in our unit in Krakow no new waste is being deposited there – comments Tomasz Ślęzak, member of the board of directors, head of Energy and Environmental Protection at ArcelorMittal Poland, while adding: - The engagement in the process of developing ways of managing this waste of AGH, with its significant R&D potential, creates real possibilities for the development of break-through solutions in this scope.*

Contact / additional information:

Sylwia Winiarek-Erdoğan, spokesperson, ArcelorMittal Poland

tel. +48 32 776 76 30

e-mail: sylwia.winiarek-erdogan@arcelormittal.com

About ArcelorMittal Poland

ArcelorMittal Poland is the biggest steel producer on the Polish market with almost 50% of production capacity of the Polish steel industry. The company consists of five steel plants located in Krakow, Dabrowa Gornicza, Sosnowiec, Swietochlowice and Chorzow.

It also owns the largest coke plant in Europe – ZK Zdzieszowice. ArcelorMittal Poland employs over 10,000 people and over 14,000 if subsidiaries are taken into account. The company produces a wide range of long, flat, special and semi products for construction, transport and white goods industries.

The company has transformed Polish steelmaking. It has invested PLN 7 bn in modernizing every stage of the production process. Thanks to increasing H&S standards, the company has reduced its accident frequency rate by more than 90 percent. It has decreased the CO2 emissions by 37 percent, thanks to which it has become more environmentally friendly. The company is 1 of 3 companies worldwide able to produce 120 meter rails.

ArcelorMittal Poland is consistently engaged in supporting local communities by carrying out educational, health and safety programmes. The company has invested over PLN 21 m in these projects.

For more information visit poland.arcelormittal.com

ArcelorMittal is the world's leading steel and mining company, with a presence in 60 countries and an industrial footprint in 18 countries. Guided by a philosophy to produce safe, sustainable steel, we are the leading supplier of quality steel in the major global steel markets including automotive, construction, household appliances and packaging, with world-class research and development and outstanding distribution networks.

Through our core values of sustainability, quality and leadership, we operate responsibly with respect to the health, safety and wellbeing of our employees, contractors and the communities in which we operate.

For us, steel is the fabric of life, as it is at the heart of the modern world from railways to cars and washing machines. We are actively researching and producing steel-based technologies and solutions that make many of the products and components people use in their everyday lives more energy efficient.

We are one of the world's five largest producers of iron ore and metallurgical coal. With a geographically diversified portfolio of iron ore and coal assets, we are strategically positioned to serve our network of steel plants and the external global market. While our steel operations are important customers, our supply to the external market is increasing as we grow.

In 2020, ArcelorMittal had revenues of \$ 53,3 billion and crude steel production of 71,5 million metric tons, while own iron ore production reached 58 million metric tonnes.

ArcelorMittal is listed on the stock exchanges of New York (MT), Amsterdam (MT), Paris (MT), Luxembourg (MT) and on the Spanish stock exchanges of Barcelona, Bilbao, Madrid and Valencia (MTS).

For more information about ArcelorMittal please visit: <http://corporate.arcelormittal.com/>