<u>Session title:</u> Green scenarios – responsible in action

Date: 12/04/2019

Venue of the thematic session – MCK Katowice

Opening hours: 9.00 - 18.00

Expected time of papers presentation -15 minutes

Person in charge – Jerzy Majchrzak, email: jmajchrzak@jsw.pl, tel. + 4832756461

Session leader – Prof. dr hab. Gabriela Woźniak, University of Silesia

Dr. Eng. Radosław Pomykała AGH University of Science and Technology in Krakow.

The session consists of four segments:

- 1. Environment in post-industrial areas
- 2. Habitat re-creation as a possibility for advanced reclamation
- 3. The potential of water resources
- 4. Evolution of methods for assessing the state of the environment

During these sessions, 22 presentations about various themes of environmental impact will be presented, both in Poland and in other European countries:

- 1. JSW Action for Environmental JSW;
- 2. IBA project an interdisciplinary approach to management of post-industrial areas 20 years of success;
- 3. Management of water resources in areas transformed by man (especially post-industrial areas);
- 4. The importance of ecosystem services in urban and post-industrial areas;
- 5. Theory and practice of management of post-industrial areas experience from the Czech Republic;
- 6. Geothermal projects as a method of development of post-mining areas;
- 7. The carbon budget of the organization and product as an element of the sustainable business model JSW;
- 8. Mining waste management facilities at JSW S.A. state, prospects, opportunities;
- 9. Investment project "Port Jastrzębie" Logistic Center;
- 10. Let us rescue bees they can live among us;
- 11. Post-industrial area management as centers of biodiversity;
- 12. New methods and techniques of phytoremediation of degraded areas;
- 13. Organisms of post-industrial substrates as habitat restoration resources and potential for CO₂;

- 14. Post-mining land reclamation as a restoration of natural values and potential;
- 15. Water full of resources, no more sewage;
- 16. The natural potential of post-mining subsidences;
- 17. A low-waste and low-volume utilization of saline mine water;
- 18. The design of the German underground pumped storage power plant as an opportunity to stabilize electricity production and transmission in the EU and the method of development of areas post-mining;
- 19. Assessment of the environmental potential of post-industrial sites use of IT tools Business–Science co-operation as an innovation prerequisite;
- 20. Effective regeneration of landfill areas new methods and support tools;
- 21. Evaluation and valuation of ecosystem services new opportunities for post-mining areas:
- 22. New opportunities for post-mining sites and development of housing construction in areas affected by mining damage;

Session will be summarized during a discussion panel in which, the possible environmental friendly scenarios of postindustrial sites management, will be listed. All of the listed scenarios can be considered by JSW S.A for implementation.

Introduction to the discussion panel will be lead made by Professor Jörg Dettmar from the University of Darmstadt on "How can the IBA project experience be improved? and use them in the current approach to environmental management in post-industrial areas "and Professor Jon P McCalmont from Aberystwyth University on" Biomass of spontaneous vegetation of post-industrial areas and its role in shaping habitats".

A green scenario - the only responsible action

8.30-9.00 registration, coffee available

A green scenario – the only responsible action

8.30-9.00 registration, coffee available

Environment of post-industrial areas

		Name and affiliation	Presentation topic
	9.00-9.05		Welcome
Ī	9.05-9.20	Mgr inż. Jerzy Majchrzak JSW S.A.	Action for Environmental JSW

9.20-9.35	Prof. Jorg Dettmar University of Darmstadt	IBA Project – An interdisciplinary approach to environmental management of postindustrial sites - 20 years of success
9.35-9.50	Dr Anne Wheeler – Severn Rivers Trust, UK	Water resource management in anthropogenically changed landscape (including the postindustrial sites)
9.50-10.05	Prof. Philip James University of Salfort (Manchester); Dr hab. Edyta Sierka UŚl.	Ecosystem services in urban and postindustrial sites
10.05-10.20	Prof. Barbara Stelmachova University of Ostrava	The theory and practice of environmental management of postindustrial sites – Czech experiences
10.20-10.35	Noel Canto Toimil, Grupo SEPI	Geothermal projects as a method of developing post-mining areas
10.35-10.50	Mgr Bartosz Kulig Atmoterm	The carbon footprint of the organization and product as an element of the JSW sustainable business model
		Discussion and summary

10.50-11.00 coffee break

Habitat re-creation as a possibility for advanced reclamation

	Name and affiliation	Presentation topic
11.00-11.15	Prof. dr hab. Gabriela Woźniak U. Śl. Dr hab. inż. Radosław Pomykała AGH	Mining waste facilities at JSW S.A. condition, prospects, chances
11.15-11.30	Mgr inż. Radosław Wardas Ltd	Investment project – The Logistics Center "Jastrzębie Port "
11.30-11.45	Mgr Agnieszka Brejdak JSW Innowacje S.A.	Save the bees - they can live among us
11.45-12.00	Prof. Ian Trueman - University of Wolverhampton	Management of post-industrial sites as the centers of biodiversity
12.00-12.15	Dr inż. Małgorzata Śliwka AGH	New methods and techniques for fitoremediation of degraded areas
12.15-12.30	Dr Franco Magurno Centre of Mountain Environmental Technologis	Living microorganisms of post-industrial substrates as resources for habitat restoration and potential for CO2 storage
12.30-12.45	Dr hab. inż. Anna Ostręga, prof. AGH, Prof. dr hab. inż. Marek Cała, Mgr inż. Katarzyna Pawełczyk WGiG AGH	Post-mining land reclamation as a restoration of natural values and potential
		Discussion and summary

12.45-13.00 coffee break

The potential of water resources

	Name and affiliation	Presentation topic
13.00-13.1	Dr inż. Andras Polik, Mgr inż. Karel Vratny,	Water full of resources-not wastewater any more.
	Mgr inż. Tomasz Vorreiter SUEZ	

13.15-13.30	Dr Anne Wheeler – Severn Rivers Trust	Natural potential of post-mining floodplains
13.30-13.45	Prof. dr hab. inż. Marian Turek Pol. Śl.	Low-waste and low-energy utilization of saline mine water
13.45-14.00	Prof. DrIng. Andre Niemann University of Duisburg-Essen, Ruben Schauer, M.Sc. RUHR- UNIVERSITÄT BOCHUM	German underground pumped storage power plant project (energy storage) as an opportunity for stabilizing the production and transmission of electricity in EU, and a method of developing post-mining areas".
		Discussion and summary

lunch 14.00-15.00

Evolution of methods for assessing the state of the environment

15.00-15.15	Mgr Katarzyna Papież-Pawełczak SPIN-US, Mgr inż. Remigiusz Gałka U. Śl.	Assessment of the environmental potential of post-industrial sites - use of IT tools Business–Science co-operation as an innovation prerequisite
15.15-15.30	Dr inż. Jan Bondaruk GIG	Effective revitalization of post-mining areas - new methods and supporting tools
15.30-15.45	Dr inż. Alicja Krzemień GIG	Evaluation and valuation of ecosystem services new opportunities for post-mining areas
15.45-16.00	Adam Gorol, President of The Board, Top House 1000 Ltd	New Possibilities For Post-mining Sites And Housing Development In Mining Damaged Areas
		Discussion and summary

Green Scenarios for Mining

16.15 Discussion panel

1. Introduction

- a. Prof. Jorg Dettmar, University of Darmstadt How to improve the IBA project experience and use it in the current approach for the environmental management in post-industrial areas
- b. Professor Jon P McCalmont, Aberystwyth University The biomass of spontaneous vegetation of post-industrial areas and its role in shaping habitats
- 2. Panel discussion
- 3. Scenario proposals