Post-Mining Multi-Hazards evaluation for land-planning

PoMHaz

WP1: Coordination and dissemination

D4: Deliverable 1.4 - Peer reviewed publications, conferences and final workshop

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Acronyms

DSS	Decision Support System
GIS	Geographic Information System
POMHAZ	Post-Mining Multi-Hazards evaluation for land-planning
RFCS	Research Fund for Coal and Steel
sDSS	Spatial Decision Support System
WP	Work Package

Executive Summary

This deliverable is part of the POMHAZ project, Post-Mining Multi-Hazards evaluation for land-planning. The main objective of POMHAZ is to identify the interaction between the post-mining hazards for coalmines in Europe and to develop tools for facilitate the management of the post-mining hazards in coal region.

In the POMHAZ project, the present deliverable is part of the WP1 that is dedicated to the project coordination and dissemination to disseminate the findings of the project. Therefore, Deliverable 1.4, is directly related to Task 1.4 “Results dissemination”.

The dissemination of the PoMHaz project results was a continuous and strategic process carried out by all consortium partners throughout the project’s duration. Its main objective was to ensure that the knowledge, methodologies, and tools developed—particularly the GIS-based Spatial Decision Support System (sDSS) for assessing multi-hazards in post-mining regions—were effectively communicated to diverse audiences, from the scientific community to industry stakeholders and public authorities.

Dissemination activities combined traditional and modern communication methods, including publications, conference presentations, workshops, and outreach via digital and social media. The partners committed to publishing in high-impact international journals, contributing to national industry magazines, and actively engaging in European and international conferences to maximize visibility and impact.

As deliverable 1.5 presents the global strategy related to disseminate project results, deliverable 1.4 focuses only on the dissemination of the PoMHaz project results through publications, conferences and a final workshop.

In September 2025, eight peer-reviewed articles were published in recognized international journals, several with high impact factors exceeding 10 (e.g., Journal of Rock Mechanics and Geotechnical Engineering). Additional papers with impact factors around 3.0 appeared in other leading scientific journals. Three national-level articles (two Polish, one German) further supported dissemination within the mining sector and local administration circles, where practical application of the project’s outcomes—particularly the GIS DSS tool—is most relevant. One chapter was also included in an international monograph published by CRC Press / Taylor & Francis Group.Project results were presented at over 25 national and international conferences across 10 countries (Australia, Austria, Belgium, Canada, Czech Republic, Germany, Greece, Poland, Romania, and the USA). These included major scientific events such as the European Geosciences Union (EGU) General Assembly, ISRM Congress, RawMat Conferences, and the International Mine Closure series. Such participation ensured widespread dissemination among scientists, engineers, policymakers, and industrial representatives. National conferences in partner countries—Poland, Germany, Greece, and France—were complemented by lectures and seminars aimed at students, postgraduate participants, and scientific committees.

Dedicated workshops were organized to demonstrate and discuss the novel methodologies and the sDSS tool, promoting its adoption beyond the project’s lifetime (Deliverable 5.4). The project’s final dissemination event took place during the 32nd International Scientific and Technical Conference on Mining Natural Hazards (November 2025, Jaworze, Poland), where project achievements and applications were presented to an international audience of researchers and practitioners.

The dissemination strategy effectively reached both scientific and applied user groups. Publications in high-impact journals established scientific credibility, while engagement in professional and national media facilitated knowledge transfer to end-users. Conference participation fostered international collaboration and dialogue, leading to potential applications of the developed tools in various European post-mining regions. Overall, the PoMHaz project achieved a broad and lasting impact by tailoring dissemination activities to diverse audiences and ensuring continuous visibility across academic, industrial, and policy-making environments.

1. Dissemination of the project

1.1.Description of the task 1.4 Results dissemination

The coordinator and the partners disseminate the results of the project in accordance with the relevant requirements. The dissemination covers the communication, the publication and the participation to different events related to the topic of the project. Results are disseminated through traditional and new communication tools.

Partners have paid important effort to share the main results through the most effective ways and to communicate the results into a large audience(s) e.g. social media, websites (national and project websites) conferences, traditional media, scientific and professional journals, also through workshops and through technical papers and articles published during and after completion of the project.

The partners have engaged to publish the results of the project in scientific and professional journals. They have also planned to participate in regional and European conferences

The partners have organised workshops to disseminate the novel methodologies and techniques developed through the POMHAZ project in order to ensure the future and widespread dissemination and adoption of the proposed schemes.

1.2.Publications

One way of disseminating the project's achievements is through publications. These publications vary in nature and are not only related to journals, but also accompany various types of events. Each form of publication reaches a slightly different audience, which constitutes their specific added value to dissemination in the broad sense.

Below are presented publications that have appeared in indexed journals with wide reach, in national journals, and in post-conference materials, both national and international. Abstracts and posters presented at various conferences, workshops, and seminars are a separate form of dissemination.

1.3. Journals

The Table 1 lists peer reviewed publications that have appeared in journals. It should be emphasised that the authors selected journals with wide circulation and a large readership. This is evidenced by the so-called impact factor (IF) of each of the selected journals.

The impact factor of a journal is a measure that reflects the average number of citations received per article published in that journal during a specific period, usually two years. It is often used as an indicator of the journal's influence or importance within its academic field. Journals with higher impact factors are generally considered more prestigious. The Journal of Rock Mechanics and Geotechnical Engineering has an impact factor of over 10, which is why publishing an article presenting issues related to the implementation of the project in it is a particular success. Other journals, despite their bit lower IF, belong to the group of the most widely read and recognised in the field of technical sciences. Examples of publications in high rank journals is presented in Figure 1. In 2023, one article was published, followed by four in the next year, and three in 2025. It

can be assumed that articles currently in the publishing process will be published this year or next year.

Figure 1: Examples of publications in high rank journals

Table 1: Publications in journals

N°	Authors	Title	Journal	Year of publication
1	Al Heib, M.M., Franck, C., Djizanne, H., Degas M.	Post-Mining Multi-Hazard Assessment for Sustainable Development.	Sustainability, 15, 8139. https://doi.org/10.3390/ su15108139	2023
2	Papagiannis A., Theocharis, A.I., Koukouzas N.C., Zevgolis I.E.	Effect of Ground Improvement on Settlement Problems of Lignite Spoil Heaps Using Numerical Modelling.	International Journal of GeosyntheticsG and Ground Engineering, DOI: 10.1007/s40891-024-00586-8	2024
3	Theocharis, A.I., Zevgolis, I.E., Roumpos, C. Koukouzas, N.C.	Probability distributions of geotechnical properties for heterogeneous lignite mine spoils.	International Journal of Geotechnical Engineering, 18(5), 528-536, https://doi.org/10.1080/ 19386362.2024.2398328	2024
4	Mikroutsikos, A., Theocharis, A.I., Koukouzas, N.C., Zevgolis, I.E.	Slope stability of reclaimed coal mines through a new water filling index.	Journal of Rock Mechanics and Geotechnical Engineering, 16(3): 828-839, https://doi.org/10.1016/ j.jrmge.2023.08.022	2024
5	Al Heib, M.M., Franck, C.,	A methodology for multi-hazard interaction assessment of abandoned mines.	Journal of Industrial Safety. Volume 1, Issue 2, https://doi.org/10.1016/ j.jinse.2024.100018	2024
6	Nalmpant-Sarikaki D.M., Theocharis A.I., Koukouzas N.C., Zevgolis I.E.	A Framework for Effective Multi-Hazard Risk Assessment in Post-Mining Areas	Safety https://doi.org/10.3390/ safety11010018	2025
7	Nalmpant-Sarikaki D.M., Theocharis, A.I., Koukouzas N.C., Zevgolis I.E.	A comparative analysis of semi-quantitative multi-hazard methodologies with an application to a post-mining area.	Natural Hazards, 121(10):12327-12352, DOI: 10.1007/s11069-025-07282-4.	2025
8	Haske B., Al Heib M., Inojosa V. Bouaziz M.	Spatial Decision Support System for Multi-Risk Assessment of Post-Mining Hazards.	Mining. Mining 5(1), 17 https://doi.org/10.3390/ mining5010017	2025

Two of the publications appeared in a monograph (Table 2).

Table 2: Publications in monographs

Authors	Title	Monograph	Year of publication
Apanowicz B., Wysocka M., Niedbalska K., . Gruchlik P., Kura K., Bonczyk M., Kowalski A.	POMHAZ Project – spatial Decision Support System for support of the development of towns in post-mining areas in Poland.	In book: Mine Surveying and Mining Area Protection, Sokoła-Szwioła and Jarczyk (Eds) Publishing House CRC Press / Balkema / Taylor & Francis Group	2025
Kowalski A.	Zagrożenia powierzchni terenu pogórniczego w Wałbrzychu (Hazards of the post-mining area in Wałbrzych)	In book: Deformacje powierzchni spowodowane podziemną eksploatacją górniczą (Surface deformations caused by underground mining operations), GIG-PIB	2025

1.4.National magazines and journals

The publications also appeared in national magazines. Such publications reach domestic readers, often more closely associated with industry. This is an important audience, as they are often managers. Their interest in the project's achievements may result in the practical use of the GIS DSS tool in the future. In Poland's case, contact with the mining industry is all the more important as there are still over 20 mining plants operating here. The development of adverse phenomena, hazards and their interactions are observed differently in areas that have calmed down, where mines were closed decades ago, and differently where mining is still ongoing or mines are in the process of being flooded. Table 3 presents publications that appeared in Polish and German journals.

Table 3: Publications in the national journals

N°	Authors	Title	Journal	Year of publication
1	Sandra Nowak, Małgorzata Wysocka, Stefan Czerwiński, Andrzej Chmiela	Wielokryterialna analiza czynników kształtujących ryzyko radonowe na terenach górniczych (Multi-criteria analysis of factors forming radon risk in mining areas)	Systemy Wspomagania w Inżynierii Produkcji (Scientific Journal Support Systems in Production Engineering), vol.13(2), pp:135-144, abstract in English.	2024
2	Chmielewska I., Czerwiński S., Chmiela A.	Nuklidy promieniotwórcze w wodach pochodzących z podziemnych zakładów górniczych (Radionuclides in waters from underground coal mines)	Systemy Wspomagania w Inżynierii Produkcji, (Scientific Journal Support Systems in Production Engineering) vol.13(2), pp:145-153, abstract in English	2024
3	Haske, B., Inojosa, V.	Development and evaluation of an interactive tool for multi-hazard analysis in European post-mining regions.	MINING REPORT Glückauf	2025

1.5.Planned publications

N°	Authors	Title	Journal	Year of publication
1	Małgorzata Wysocka, Sandra Nowak, Andrzej Chmiela, Piotr Gruchlik	Factors influencing radon risk in mining areas, in situ verification of the multi-criteria tool	Sensors	2026

1.6.Conferences

The partners also work in the different kinds of publications through local, national, European and international conferences. Participation in conferences provides an opportunity for discussion and conversation with people interested in various aspects of the project's achievements. These are often experts and representatives of local authorities who influence public opinion and decisions made in industry and its environment.

1.7.National conferences

The partners participated in national conferences in Germany, Greece, France, and Poland. Below is a summary of national events during which the PoMHaz project and its main achievements were presented.

2023

- Uncertainty of geotechnical parameters in heterogeneous spoil deposits of fine grained soil materials from lignite mines" (https://zenodo.org/doi/10.5281/zenodo.10007297). 9th Panhellenic Conference on Geotechnical Engineering, 4-6 October 2023. Athens, Greece.
- 17th Days of Mining Surveying and Protection of Mining Areas, 11-13 October 2023, Jaworze, Poland.
- 21st Altberbaukolloquium (Post-Mining Conference), 9-10 November 2023, UNESCO World Heritage Site Zollverein Essen, Germany. Presentation (Haske): „Ganzheitliches Risikomanagement für europäische Nachbergbauregionen – Das Projekt PoMHaZ“.
- Wiessenschaft FZN 2/2023 THGA, Bochum, Germany.

2024

- 4th International Symposium on Applied Geoinformatics on 9-10 May 2024. Bouaziz M., Haske B., Al Heib M., Benndorf J. Geographic Information System-Driven Decision Support System for Assessing Multiple Hazards in Post-Mining.
- Inojosa, V. Framework Combining Remote Sensing Analysis with Prototype Spatial Decision Support System to Address Multi-Hazard Challenges in Post-Mining Sites. Case

of Study: Southern Ruhr Area. Master Thesis, University of Stuttgart, Stuttgart, Germany, 2024

- Wissenschaftstag FZN 2/2024, 21 October 2024 at THGA, Bochum, Germany. Presentation (Inojosa): „POMHAZ -Development of Spatial Decision Support System“
- Surface hazard assessment 25 years after the end of mining exploitation in post-mining areas in Wałbrzych, 14 November 2024, Wałbrzych, Poland
- Committee of Geology and Mining of the Silesian Union of Municipalities and Districts, 28 November 2024, Katowice, Poland

2025

- Nachbergbauzeit 2025, in Bochum, Germany, on 20 March 2025. Presentation (Haske): „Entwicklung und Evaluierung eines interaktiven Tools zur Multigefahrenanalyse in europäischen Nachbergbau-Regionen“ and poster (Inojosa): „Framework combining Prototype SpatialDecisionSupport System withRemote Sensing analysis“.

1.8.European conferences

The project's achievements were presented at numerous European conferences, ensuring that knowledge about the sDSS tool remained in the scientific community's consciousness.

2023

- Final project conference "The potential of abandoned mine workings in the EU"., 11-12 May 2023, Ostrava, Czech Republi. Wysocka M.; Bonczyk M.; Chmiela A.; Gajdzik M.; Morawski A.: The POMHAZ project – new ideas for the development of towns in post-mining areas.
- 4th International Symposium on Applied Geoinformatics on 9-10 May 2024, Wrocław Poland.
- 2nd International Conference on Raw Materials and Circular Economy” (RawMat2023), 28 Aug. - 2 Sept. 2023, Athens, Greece. Nalmpant-Sarikaki, D.M.; Theocharis, A.I.; Koukouzas, N.C.; Benardos, A.G.; Zevgolis, I.E. Multi-Risk Assessment Post-Mining Lignite https://doi.org/10.3390/materproc2023015065.
- 15th ISRM International Congress on Challenges in Rock Mechanics and Rock Engineering, 9-14 October 2023, Salzburg, Austria
- 11th Edition of the International Symposium on Occupational Health and Safety (SESAM 2023), 18-25 October 2023, Bucharest, Romania

- 9th Panhellenic Conference on Geotechnical Engineering, 4-6 October 2023. Athens, Greece. https://thracegroup.com/li/en/events/9th-hellenic-conference-on-geotechnical-engineering-athens-greece-4-6-october-2023/
- 17th Days of Mining Surveying and Protection of Mining Areas, 11-13 October 2023, Jaworze, Poland.
- 2nd International Conference on Raw Materials and Circular Economy" (RawMat2023), 28 Aug. - 2 Sept. 2023, Athens, Greece

2024

- 15th ISRM International Congress on Challenges in Rock Mechanics and Rock Engineering, 9-14 October 2023, Salzburg, Austria
- 11th Edition of the International Symposium on Occupational Health and Safety (SESAM 2023), 18-25 October 2023, Bucharest, Romania
- EGU General Assembly 2024 on 14-19 April 2024
- XVII International Science and Technology Conference "New challenges for engineering surveying in civil engineering and environmental monitoring", May 22-23 2025, Warsaw - Józefosław, Poland. Presentation (Inojosa): "Framework combining Prototype Spatial Decision Support System with Remote Sensing analysis".
- A GIS-Based Decision Support System for Multi-Hazard Assessment in Post-Mining Regions. https://doi.org/10.5194/egusphere-egu24-3065
- "Reliability analysis of bearing capacity of a shallow foundation using Monte Carlo simulation" (https://zenodo.org/doi/10.5281/zenodo.10016314)
- "Slope stability assessment of reclaimed lignite mines for the creation of pit-lakes_ The case of Lake Most, Czech Republic" (https://zenodo.org/doi/10.5281/zenodo.10016321)
- "Numerical Analyses for the Investigation of Soil Improvement Methods in Settlement Issues of Spoil Materials from Lignite Mines" (https://zenodo.org/doi/10.5281/zenodo.1000713)

1.9.International conferences

The project partners participated in international conferences held in European countries, North America and Australia. This enabled the project to achieve a non-European impact. Figure 2 shows examples of partner participations in national and international conferences.

2023

- 16th International Conference on Mine Closure, 2023, 3-6 October 2023, Reno, Nevada, USA
- European Geosciences Union General Assembly 2023, 19-21 April 2023, Vienna, Austria
- 2nd International Conference on Raw Materials and Circular Economy" (RawMat2023), 28 Aug. - 2 Sept. 2023, Athens, Greece
- 15th ISRM International Congress on Challenges in Rock Mechanics and Rock Engineering, 9-14 October 2023, Salzburg, Austria
- 11th Edition of the International Symposium on Occupational Health and Safety (SESAM 2023), 18-25 October 2023, Bucharest, Romania

2024

- European Geosciences Union General Assembly 2024, 14-19 April 2024, Austria
- 4th International Symposium on Applied Geo-Informatics, 9-10 May 2024, Poland
- Mine Closure 2024, 26-28 November 2024, Perth, Australia Multi-hazard index for assessing the interaction of post mining hazards

2025

- International conference „VisionZero". Bohum, Germany, 13 – 15 October 2025

In the Table 4 are presented titles of presentations or posters and proceedings from listed above conferences and other events.

Table 4: Titles of presentations, posters and lectures

N°1	Authors	Title	The form of dissemination	Year of the event
NATIONAL CONFERENCES AND EVENTS				
1	Theocharis, A.I.; Zevgolis, I.E Roumpos C., Koukouzas, N.C.	Uncertainty of geotechnical parameters in heterogeneous spoil deposits of fine grained soil materials from lignite mines	Presentation + conference paper. 9th Panhellenic Conference on Geotechnical Engineering, Athens, Greece.	2023
2	Kontopidios O., Theocharis, A.I.; Koukouzas, N.C., Burda J., Zevgolis, I.E .	Slope stability assessment of reclaimed lignite mines for the creation of pit-lakes_ The case of Lake Most, Czech Republic"	Presentation + conference paper. 9th Panhellenic Conference on Geotechnical Engineering, Athens, Greece.	2023
3	Papagiannis A., Theocharis, Tsiagkas D., A.I.; Koukouzas, N.C, Zevgolis, I.E.	Numerical Analyses for the Investigation of soil improvement methods insettlement issues of spoil materials from lignite mines	Presentation + conference paper. 9th Panhellenic Conference on Geotechnical Engineering, Athens, Greece.	2023
4	Nalmpant-Sarikaki D.M, Theocharis, A.I.; Koukouzas,N.C., Zevgolis, I.E	Reliability analysis of bearing capacity of a shallow foundation using Monte Carlo simulation	Presentation + conference paper. 9th Panhellenic Conference on Geotechnical Engineering, Athens, Greece.	2023
5	Wysocka M.	The main objectives of the project PoMHaz	Presentation for the members of the branch of Polish Academy of Sciences	2023
6	Haske B.	Ganzheitliches, interdisziplinäres Risikomanagement für europäische Nachbergbauregionen – Das Projekt PoMHaZ	Presentation on Wissenschaftstag FZN 2/2023 at THGA, Bochum, Germany	2023
7	Wysocka M.	Comprehensive assessment of risks in post-mining areas for the purposes of spatial planning	Presentation for stake holders in Wałbrzych	2024

N°	Authors	Title	The form of dissemination	Year of the event
8	Gruchlik P., Wysocka M.	Comprehensive assessment of hazards in post-mining areas in the context of spatial planning	Presentation for geologists and urban planners, the members of Silesian Union of Municipalities and Districts	2024
9	Niedbalska K.	The progress of POMHAZ project and the GSS tool	Presentation for the members of the branch of Polish Academy of Sciences	2025
10	Niedbalska K.	Groundwater and mine water management in active and closing mines	Lecture for post graduate students	2025
11	Haske B. Inojosa V.	Entwicklung und Evaluierung eines interaktiven Tools zur Multigefahrenanalyse in europäischen Nachbergbau-Regionen Framework combining Prototype Spatial Decision Support System withRemote Sensing analysis	Presentation + Poster Nachbergbauzeit 2025, in Bochum, Germany,	2025
INTERNATIONAL CONFERENCES				
1	Al Heib M.	Multi-hazard analysis of abandoned coal-mines	Presentation during EGU General Assembly, Vienna Austria	2023
2	Nalmpant-Sarikaki D.M, Theocharis, A.I.; Koukouzas,N.C., Benardos A.G., Zevgolis, I.E	Multi-Risk Assessment in Post Mining Lignite Areas	Presentation + Proceedings of The 2nd International Conference on Raw Materials and Circular Economy (“RawMat2023”), *Mater. Proc.* 2023, *15*(1),	2023
3	Al Heib M., Degas M., Franck C.	Post-mining risk management and Multi-Hazard approaches for coal mines	Presentation Int. Conf. Mine Closure	2023
4	Nalmpant-Sarikaki, D.M.; Theocharis, A.I.; Koukouzas, N.C.; Benardos, A.G.; Zevgolis, I.E.	Multi-Risk Assessment in Post-Mining Lignite Areas.	Presentation + Mater. Proc. 2023, 15, 65.	2023

N°	Authors	Title	The form of dissemination	Year of the event
5	Al Heib M., Degas M.,, Lecomte A., Franck C.	Post-mining risk management and Multi-Hazard approaches, methodology and application.	MATEC Web Conf. 389(2)	2024
6	Al Heib M., Velly N.	Multi -hazards index for assessing the interaction of post-mining hazards	Presentation + Proceedings of Int. Conf. Mine Closure 2024	2024
7	Bouaziz M., Haske B., Al Heib M., Bendor J.	Geographic Information System-Driven Decision Support System for Assessing Multiple Hazards in Post-Mining.	Presentation + Proceedings 4th International Symposium on Applied Geoinformatics on 9-10	2024.
8	Haske B. Inojosa V.	Entwicklung und Evaluierung eines interaktiven Tools zur Multigefahrenanalyse in europäischen Nachbergbau-Regionen Framework combining Prototype Spatial Decision Support System withRemote Sensing analysis	Presentation Poster Nachbergbauzeit 2025, in Bochum, Germany,	2025
9	Inojosa V.	From Concept to Capability: Framework for combining Remote Sensing techniques and spatial Decision Support System for multi-risk assessment	Poster, Int. Conf. „VisionZero“.	2025

Figure 2: Conference activity of project partners

2. Final Workshop

The final workshop and closing session of the PoMHaz project took place as part of the 32nd International Scientific and Technical Conference on Mining Natural Hazards 2025 (GZN2025). The conference was held in Jaworze resort, Poland on 05 – 07 November 2025 (see Annex 1).

The conference is a regular scientific event organised by GIG-PIB, aimed at exchanging knowledge and experience on safe mining operations. The GZN conferences are attended by mine workers, scientists, experts and representatives of mining authorities.

During this year's edition of the GZN conference, part of the session was devoted to the problems of transformation in mining and hazards in post-mining areas. The issues presented in PoMHaz project perfectly matched the topics discussed during sessions focused on the transformation and revitalisation of post-mining areas, because it is good to be aware of the hazards, risks and multi-hazards occuring in the analysed post-mining areas.

The PoMHaz project and its main achievements were presented during session VI of the conference on 6 November between 4:15 p.m. and 6:15 p.m. The session program is presented below in Annex 2, in connection with the invitation for the session (Annex 1).

The session was opened by Dr Jan Bondaruk, Director of Environmental Engineering at GIG-PIB. The meeting was attended by the conference participants. The substantive part was led by representatives of the project partners – Nathalie Velly (INERIS project leader), Benjamin Haske from THGA University in Bochum, and the GIG-PIB team involved in the project. Marwan Al Heib (INERIS), Vinicius Inojosa (THGA) and representatives of the Greek institute CERTH participated in the session remotely.

During the meeting, the main objectives of the project and its most important achievements were presented. The session ended with a presentation of the operation and joint testing of the GIS-DSS tool, which met with interest from the conference participants. During and after the session, participants emphasised that the developed GIS-DSS (Decision Support System) is a modern tool that can effectively support local authorities and other entities in the process of spatial planning in post-mining areas. The participants liked the idea that the system was designed to support multi-risk assessment and analysis of interactions between hazards, which should ultimately promote more informed planning decisions.

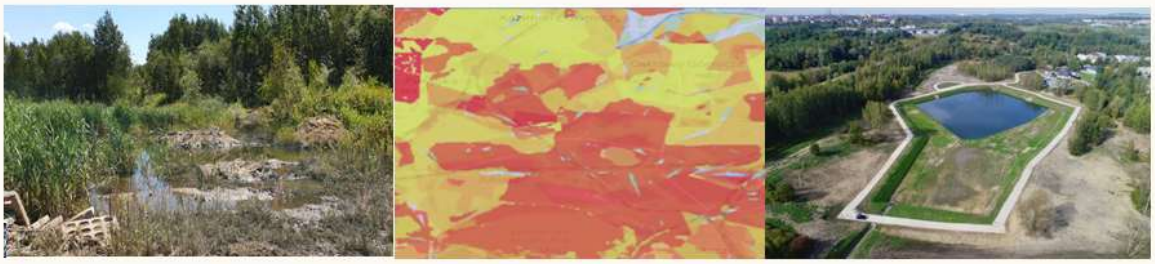
Figure 3: Final workshop activity of project partners

3. Annexes

List of annexes:

- Annex 1: Invitation to the 6th session of the XXXII International Scientific and Technical Conference on Mining Natural Hazards 2025 related to PoMHaz project
- Annex 2: The session programme related to the 6th session of the XXXII International Scientific and Technical Conference on Mining Natural Hazards 2025 related to PoMHaz project

Annex 1: Invitation



INVITATION

We cordially invite you to participate in the 6th session of the **XXXII International Scientific and Technical Conference on Mining Natural Hazards 2025**, which will be held on 6 November 2025 at the SPA-Hotel Jawor in Jaworze. We will present the achievements of the PoMHaz project '**Post-Mining Multi-Hazards evaluation for land-planning**'.

During the exercises, we will present the sDSS GIS tool, which enables the analysing and visualisation of multi-risks caused by hazards such as subsidence, floodplains, sinkholes, Ionizing radiation emissions.

We invite you to participate!

Małgorzata Wysocka
(coordinator on behalf GIG-PIB)

Annex 2: The session programme

Agenda

Lp.	Godziny	Temat wykładu	Prowadzący
1	16:15 – 16:25	Welcome and introduction to the session	Jarosław Zagórowski Director of GIG-PIB, Marwan Al Heib, (INERIS) Deputy Director GIG-PIB Jan Bondaruk moderation
2	16:25 – 16:35	Overall presentation of the PoMHaz project	Nathalie Velly, French National Institute for Industrial Environment and Risk (INERIS)
3	16:35 – 17:05	Methodology and application on real case studies	Marwan Al Heib, (INERIS)
4	17:05 –17:35	From Concept to Capability: Development, Testing and Updates of the sDSS for Post-Mining Multi-Hazards	Benjamin Haske, Vinicius Inojosa, Technische Hochschule Georg Agricola (THGA)
5	17:35 – 17:45	Factors influencing radon risk in mining areas, in situ verification of the multi-criteria tool	Małgorzata Wysocka (GIG-PIB)
5	17:45 – 18:10	sDSS tool exercises	Bartosz Apanowicz, Katarzyna Niedbalska, Piotr Gruchlik, Karol Kura, Wojciech Galios (GIG-PIB)
6	18:15	End of the session	

What is PoMHaz?

The goal of PoMHaz is to improve methodological and practical knowledge for the assessment and management of multi-hazards, at the scale of a coal mining basin, through the active and continuous engagement of key stakeholders involved in or affected by post-mining activities.

PoMHaz is a project funded by the Research Fund for Coal and Steel programme.

Further information can be found under https://www.pomhaz-rfcs.eu.

For feedback on the PoMHaz project or the published deliverables, please contact contact@pomhaz-rfcs.eu.

The PoMHaz Consortium

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