GIG Instytut Badawczy

OPI-TPP 2.0 SYSTEM

EXPANSION OF THE SYSTEM FOR MANAGEMENT OF POST- MINING AREAS IN THE SILESIAN VOIVODESHIP

August 13, 2022

HR EXCELLENCE IN RESEARCH

Fundusze Europejskie Program Regionalny

Rzeczpospolita Polska

Śląskie.

Unia Europejska Europejski Fundusz Rozwoju Regionalnego

OPI TPP 2.0

January 2020 - March 2023

PARTNERSHIP

GIG Instytut Badawczy

WODGiK Katowice

Województwo Śląskie

FUNDING

The European Regional Development Fund under The Regional Programme of the Silesian Voivodeship for 2014-2020.

Measure 2.1 Support for the development of digital public services.

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THE AIM OF THE PROJECT

Development and implementation of a new e-service in the form of an open-access information system regarding post-mining areas in the Silesian Voivodeship.

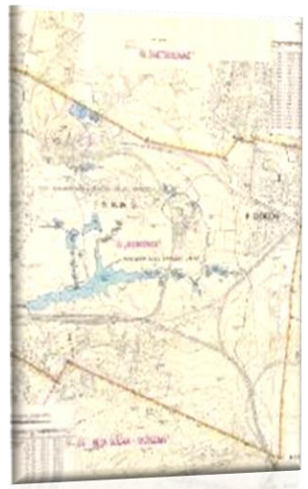
OPI-TPP 2.0 SYSTEM PROVIDES ACCESS TO:

- catalogued information about post-industrial sites with a special focus on mining areas in the form of a database, GIS information layer, individual reports.
- catalogued documents in digital form (digital repository) → scans of documents, photographs, drawings, 3D models.
- tools for assessing the attractiveness of post-mining areas (investment, ecosystem, cost):
  - attributes in the database.
  - separate tool for individual analysis.
- tool for benchmarking of post-mining areas.

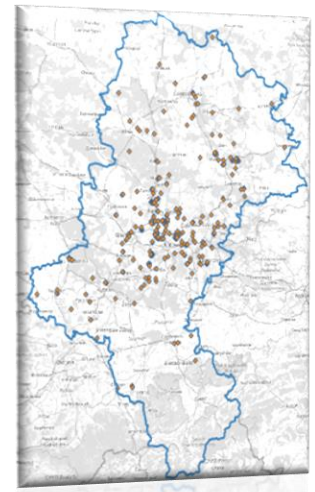
PROJECT TIMELINE

2020

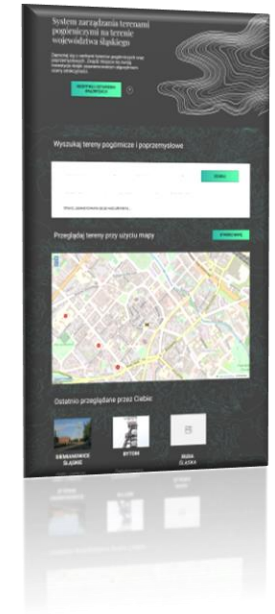
2021



2022



2023



- site data collection,
- digitalization of documents,
- meetings with stakeholders,
- database construction,
- valorisation of post-mining areas,
- developing an information system.

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DATABASES - CURRENT STATE

POST-MINING AREAS (OF HARD COAL)

- 334 post-mining areas,
- areas located within 26 districts,
- approx. 5 900 ha of areas
- site types: heaps, shafts, mine buildings, settling ponds, stockyards.

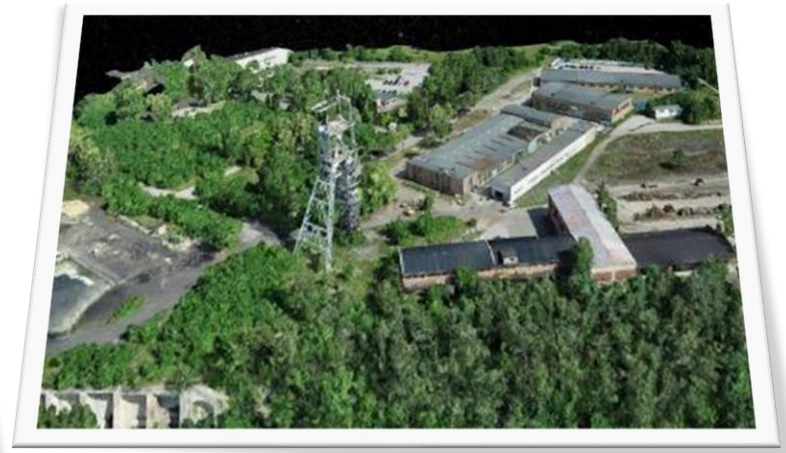
POST-INDUSTRIAL AREAS (ACTIVITIES OTHER THAN COAL MINING)

- 290 post-industrial areas,
- areas located within 32 districts,
- approx. 4 000 ha of areas

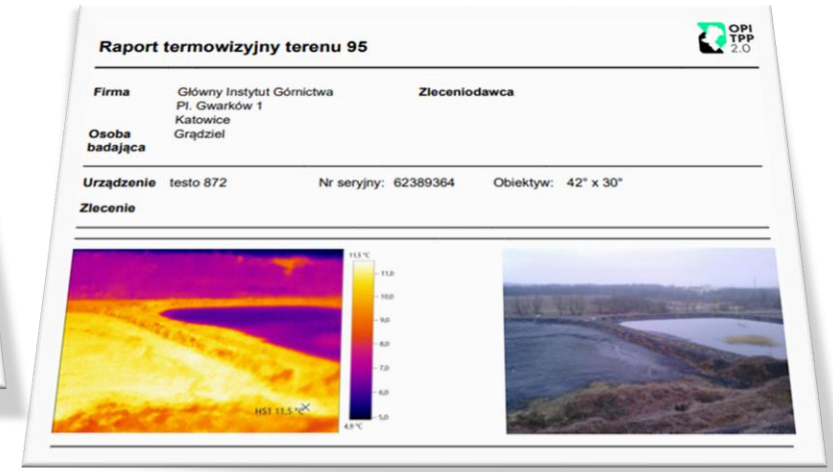
Currently, the data from the databases are in the final stages of verification and completion by city and municipal offices and areas managers.

COMPLETION OF THE DATABASE

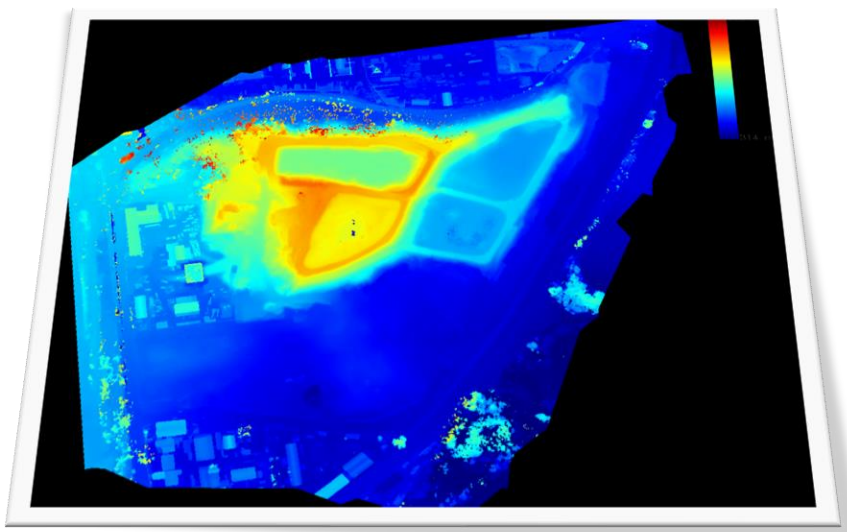
photographs



3D models



thermal analyses



numerical land models

360° spherical views

orthophoto maps

ENVIRONMENTAL STUDIES

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THE DIGITAL REPOSITORY

SCANS OF DOCUMENTS

- The main source is the documentation of closed mining plants provided by the State Mining Authority - currently about 40 GB of data have been digitalized,

PANORAMAS & PHOTOS

- Updated 360º panorama for each site,
- 4-5 individual photographs for each site,

MAP COLLAGE FOR EACH AREA

- 1 map fom each area,
- up to 700 pictures in total.

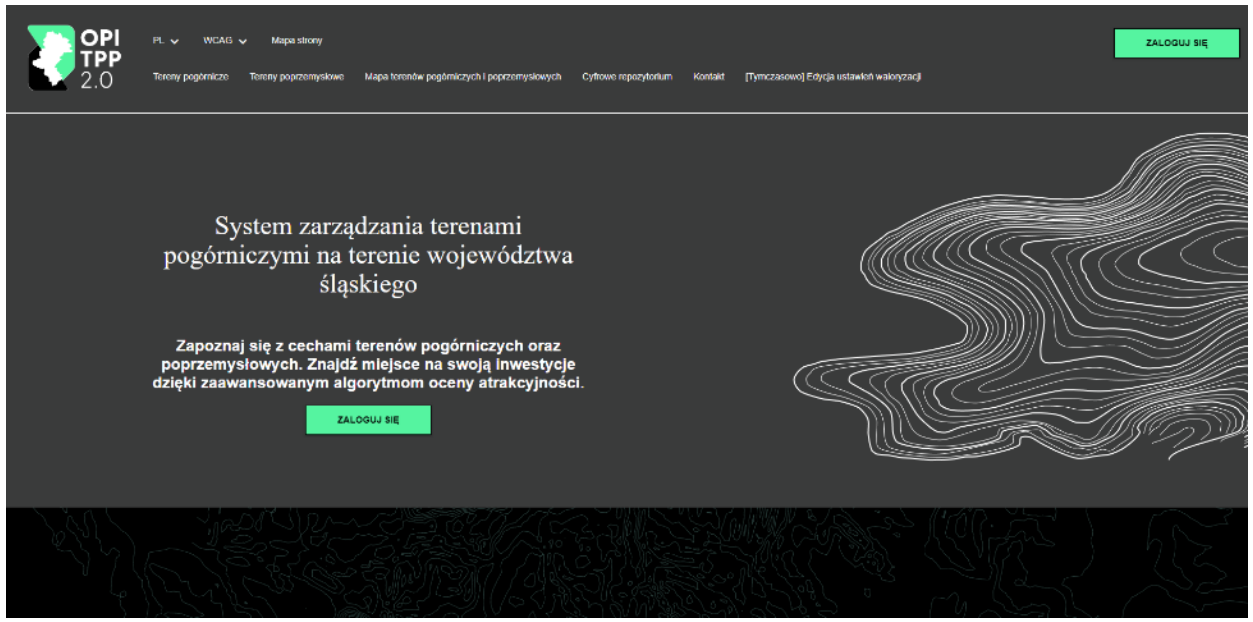
3D MODELS

- 3D models for objects with different morphologies.

INFORMATION SYSTEM

- inspired by e-commerce solutions,
- available in Polish and English,
- prepared for stationary and mobile devices,
- no geoportal elements,
- possibility of customization of services,
- intuitive and easy to use.

The information layer with data from OPI-TPP 2.0 database will be available in GIS systems published by WODGiK in Katowice



https://www.youtube.com/watch?v=0AjJbo560JE

THANK YOU FOR YOUR ATTENTION

CONTACT:
dr Adam Hamerla
Project Manager
E: ahamerla@gig.eu
T: +48 (32) 259 22 92

dr inż. Karolina Jąderko-Skubis
E: kjaderko@gig.eu
T: +48 (32) 259 22 96