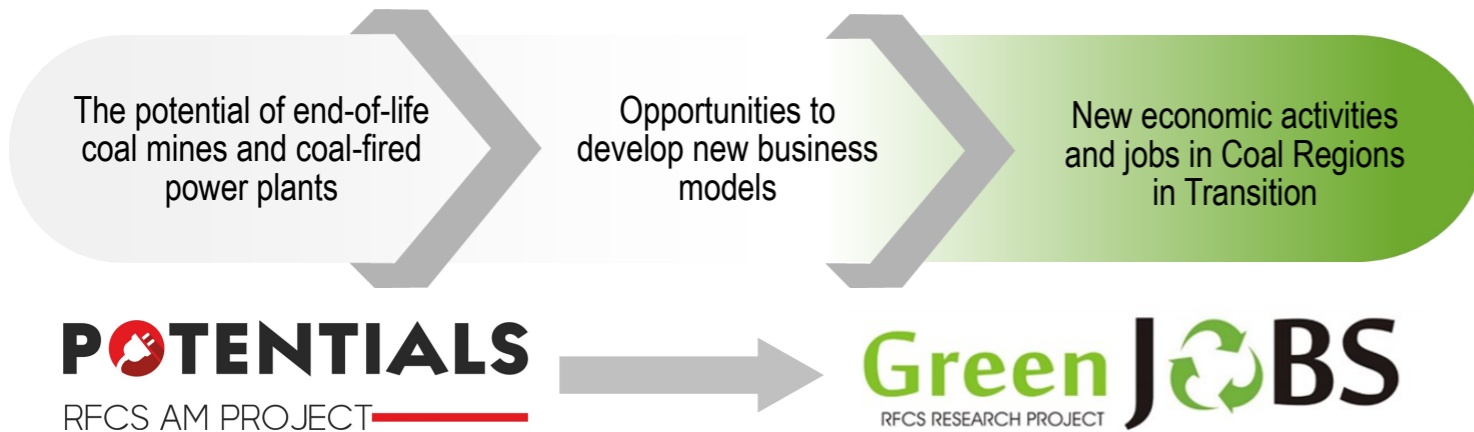


POTENTIALS project
SUPPORT FOR TERRITORIAL JUST TRANSITION PLANS



POTENTIALS

RFCS AM PROJECT

Synergistic POTENTIALS of end-of-life coal mines and coal-fired power plants, along with closely related neighbouring industries:
 Update and re-adoption of territorial just transition plans.

PROJECT CONSORTIUM



LET'S BE IN TOUCH



www.potentialsproject.eu

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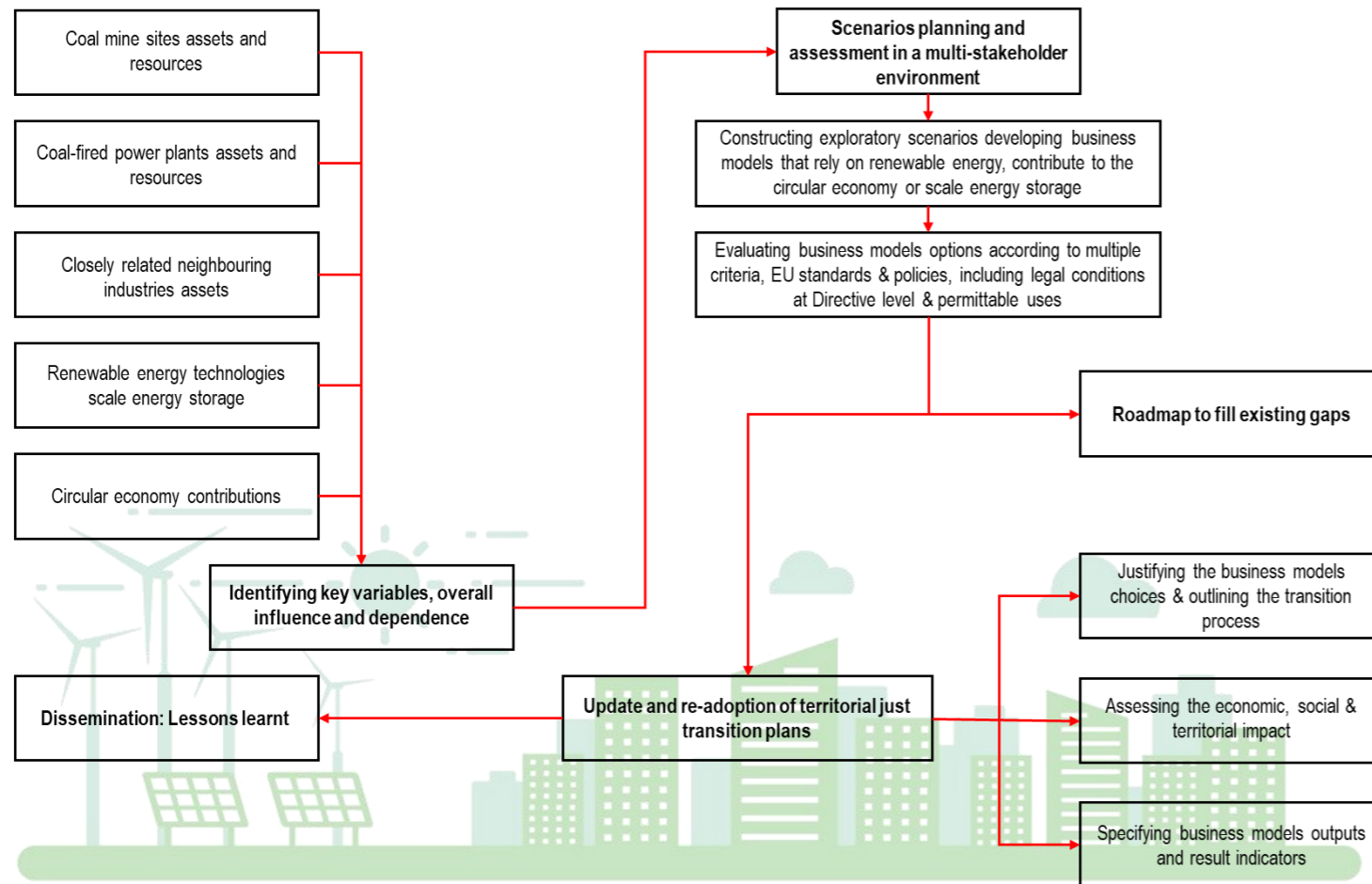
Research Fund for Coal & Steel

PROJECT INFORMATION

The POTENTIALS project is an international initiative financed by the Research Fund for Coal and Steel (RFCS), whose main goal was to identify and assess the opportunities (prospects) associated with exploiting the potential of decommissioned coal mines and connected coal-fired power plants to stimulate new economic activity and job creation, particularly for coal mining regions in transition.

METHODOLOGY

The first step was identifying critical criteria for developing potential scenarios for the synergistic use of resources and infrastructure of coal mines and/or coal-fired power plants being closed. These criteria were defined based on expert research and structural analysis (MICMAC) results. The second stage was the development, using the Delphi method, of scenarios (defined as actions and micro-actions) and their evaluation using morphological analysis (MORPHOL). In the following research stage, a multi-criteria analysis of shares and micro-actions (MULTIPOL) was performed, resulting in the development of business models. The results of this research and analysis were the basis for the developing a roadmap (MoSCoW technique), indicating the directions of a possible update of fair transformation plans for the Silesia region.



SCHEME OF IMPLEMENTATION OF INDIVIDUAL TASKS UNDER THE POTENTIALS PROJECT

The implementation of the POTENTIALS project is based on the assumption that the stimulation of new economic activity and the creation of jobs in mining regions in the transition period requires appropriate decisions regarding the management of these assets and regions. They should result from a long-term analysis of business models based on the development of renewable energy, circular economy and energy storage technologies.

OUR ACTIVITIES

MULTI-CRITERION ANALYSIS results: evaluation of actions and micro-actions related to policies European Green Deal

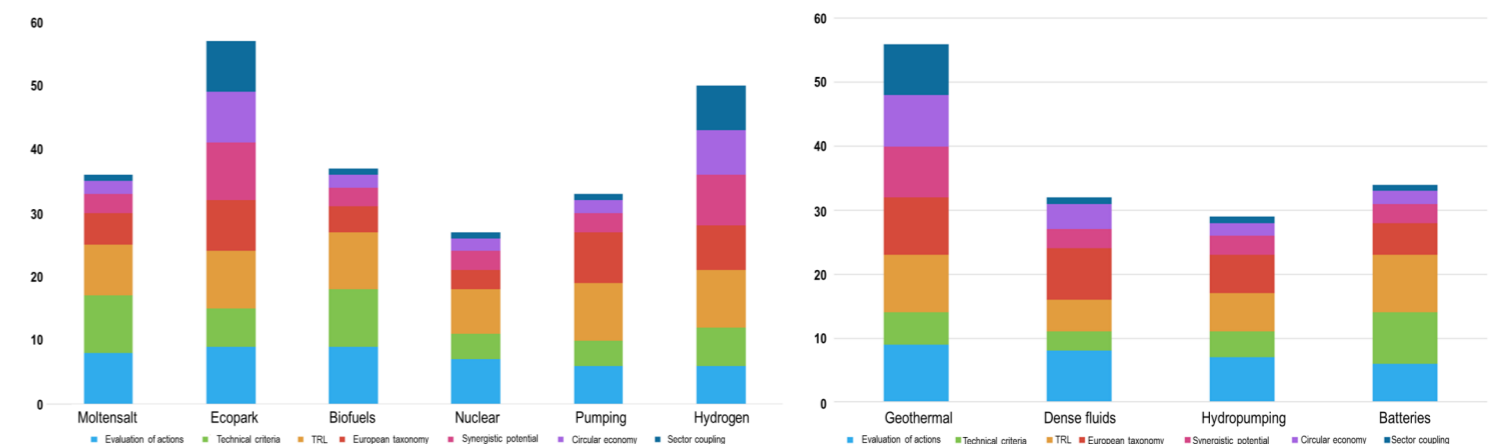
Actions	Policies		
	Climate	Growth	People
Virtual power plant	13.3	9.4	7.4
Green hydrogen plant	16.4	10.5	10.9
Eco-industrial park	12.5	12.9	15.9
Tourism and Recreation	10	8	9.2
Floating PV panels (open-pit)	12.5	9.6	8.5
Hydroelectric plant(open-pit)	17.2	11.5	9.6
Fisheries(open-pit)	5.6	7.8	8.1
CGGT power plant	10.8	11	9.7
Methane (heat and energy)	6.4	6.4	5.3
Small modular reactors (SMRs)	14.2	11.7	15.1
Biofuels	15	13.2	12.4
Molten salt plant	18.1	13.8	10.9
Agrophotovoltaics	15.3	11.4	10.1

Micro-actions	Policies		
	Climate	Growth	People
Batteries	13.8	10.8	5.8
Waste heap recovery	5.8	6.3	7.1
Mine methane usage	8.5	7.8	7.8
Recovery of materials from mining water	7.5	6.2	6.4
Forest restoration (open-pit)	7.5	7.2	7.2
Large-scale IT infrastructure	4	6	2.8
Geothermal energy	19.6	14.5	12.4
Energy storage - gravitricity	12.2	8	7.6
Energy storage - dense fluids	18.5	10.8	8.8
Energy storage - mine shafts	18.2	10.5	9.3

* Results obtained based on experts' answers - the higher the value, the better the given action/micro-action was assessed (concerning individual policies)

SELECTION OF BUSINESS MODELS

Multidirectional model: **Eco-industrial park (with a virtual power plant) + hydrogen production and/or energy storage in dense fluids and/or batteries and/or biofuels (production) and/or biofuels (combustion)**



ROAD MAP for updating the just transition plans for the Silesia Voivodeship (where business model categories: M – must; S – should; C – could; W – want)

