



# Annex 1 - Action plan template

# Action Plan for the region of Śląskie Voivodeship









#### Part I - General information

Project: LINDANET

Partner organisation(s)concerned: Główny Instytut Górnictwa (Central Mining Institute); PP5

Country: Poland

NUTS2 region: Śląskie Voivodeship

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### Part II - Policy context

The Action Plan aims to impact:	Investment for Growth and Jobs programme
	European Territorial Cooperation programme
	Other regional development policy instrument

# Further details on the policy context and the way the action plan should contribute to improve the policy instrument:

Action Plan for the region of Śląskie Voivodeship was elaborated within LINDANET project as a response to contamination problem (ecological bomb) in Wąwolnica Valley in Jaworzno dealing with a problem of HCH contaminations as results of the Chemical Plant Organika-Azot S.A. activity in years 1965-1989 (described in details in Part III).

Action Plan for the region of Śląskie Voivodeship has contributed to improvement of the following policy instruments:

#### Development Strategy of the Silesian Voivodeship "Slaskie 2030"

The key strategic document guiding the further work of the Silesian Voivodeship is the Development Strategy of the Silesian Voivodeship "Śląskie 2030". Thanks to the work of Marshal's Office of the Silesian Voivodeship, the issue of degraded, contaminated and post-industrial areas has been raised in the strategic objective *C. the Silesian Voivodeship as a region of high quality environment and space* in the field of the operational objective: *C.1. High quality of the environment* mentioning, among others, about improving the quality of water and rational management of water resources, including supporting the implementation of solutions for integrated and sustainable management of water resources in the catchment area.

Moreover, the operational objective: C.3. Attractive living conditions, comprehensive revitalization, prevention and adaptation to climate change partially has raised the issue of post-industrial areas by reclamation and revitalization of degraded areas as well as development of post-industrial areas

and facilities, among others for environmental, economic, cultural and recreational purposes.

# Regional Revitalization Policy of the Śląskie Voivodeship

Other regional document, in which the complexity of problems of post-industrial areas is presented, is the Regional Revitalization Policy of the Śląskie Voivodeship. Central Mining Institute raised the issue of existing ecological bomb in Wawolnica Valley in Jaworzno in the policy document.

In 2020, the Board of the Śląskie Voivodeship announced consultations on the project of the Regional Revitalization Policy of the Śląskie Voivodeship, which last till the 18<sup>th</sup> of December, 2020.

Regional Revitalization Policy of the Śląskie Voivodeship has presented the threat "Occurrence of historical hazardous waste landfills" in the section *SWOT analysis*. The problem of hazardous waste landfills located in the Wąwolnica stream valley in Jaworzno is a threat on the global scale. The landfill is among the industrial hot spots of the Baltic Sea Environment Action Program under the Helsinki Commission, which are particularly dangerous for the Baltic Sea.

The landfill has an inventory of 195,000 tonnes of hazardous waste, including compounds classified as persistent organic pollutants, including pesticides and their intermediates, the production and use of which is currently prohibited by the Stockholm Convention problem of hazardous waste landfills).

In the section *Identified specific problems of the revitalization process in the region* "Occurrence of post-industrial areas in the Voivodeship with historic hazardous waste dumps, posing a threat to the health and life of the inhabitants" has been highlighted.

### **European Funds for Silesia 2021-2027**

The most important documents regarding the implementation of European Funds in the Śląskie Voivodeship in the perspective of EU funding for 2021-2027 will be European Funds for Silesia 2021-2027.

The series of meetings organized on-line aims to collect comments, comments and opinions on the preliminary projects of the regional program and the Just Transition Plan took place.

On April 14, workshop in the series was held on the consultation of draft regional program "European Funds for Silesia for the years 2021-2027" and the Regional Just Transition Plan 2030.

During the workshop, the first draft of the program "European Funds for Silesia for the years 2021-2027" (FE SL 2021-2027) and the Regional Just Transition Plan 2030 were presented. The Voivodeship's priorities for 2021-2027 were created on the basis of the objectives of the EU Cohesion Policy, and the proposed amount of allocation for individual areas and specific support objectives from the Just Transition Fund (JTF). The participants discussed the most important issues related to the design of the new regional program and the individual priorities of the Voivodeship in the new financial perspective 2021-2027.

- Priority I. Smart Silesia
- Priority II. Ecological Silesia
- Priority III. Mobile Silesia
- Priority IV. Social Silesia ESF +
- Priority V. Silesia for the resident

The priority *II. Ecological Silesia, the CS 9 (vi) Supporting the transition to a circular economy, 2.14 Reclamation of degraded business areas investments in the field of land reclamation includes restoring utility or natural values, removing waste, remediation and re-shaping or preparing to perform new functions (projects will be implemented on areas not belonging to the State Treasury). The amount planned for interventions is 19,4 mln euro.* 

During workshop it was also raised that intervention towards entities owned by the State Treasury will take place from the national programme, and towards other entities from the regional level.

On April 16, another workshop in the series on consultations on the draft regional program

"European Funds for Silesia for the years 2021-2027" and the Regional Just Transition Plan 2030 took place.

During the workshop, participants of the meeting commented and asked questions about various issues related to the projects of both documents. Central Mining Institute highlighted the need to emphasize the problem of heavily polluted areas (ecological bomb in Jaworzno) in the Voivodeship in the draft documents, which would open the door to monitoring such areas, and finally to cleaning and revitalizing them. The representatives of Marshal's Office indicated that the demarcation line indicates that the problem of ecological bomb in Jaworzno will be solved mainly at the national level, e.g. under the National Reconstruction Plan and Increasing Resilience (KPO).

# The National Plan for Reconstruction and Increasing Resilience (KPO)

The National Plan for Reconstruction and Increasing Resilience (KPO) was approved by the Council of Ministers. The KPO is a program document setting out the goals related to the reconstruction and creation of socio-economic resilience of Poland after the crisis caused by the COVID-19 pandemic, as well as proposed reforms and investments. The document is the basis for applying for support from the European Recovery and Resilience Facility (RRF). The time horizon for the implementation of the document ends at the end of August 2026.

The strategic goal of KPO is to rebuild the development potential of the economy lost as a result of the pandemic (recovery) and to support the construction of sustainable competitiveness of the economy and to increase the standard of living of the society in the long term (resilience), which will take place, among others, circular economy that uses environmental resources responsibly (green growth).

The implementation of the KPO was focused on the components, which constitute the areas of concentration of reforms and investments. Within the component *B. Green energy and reduction of energy consumption* the investment: *B3.2.1. Investments in the neutralization of threats and the renovation of large-scale degraded areas and the Baltic Sea* will be carried out.

The challenge is to prevent uncontrolled emissions of pollutants into the air, surface waters and groundwater, including Polish sea areas, during inventory, neutralization and reclamation activities, and ensuring the durability of the effects.

Within this policy instrument, the Chemical Plant Organika-Azot S.A. in Jaworzno is selected as one of large-scale degraded areas to be adapted. The other examples of areas are: the former "Zachem" Chemical Plant in Bydgoszcz, the former "Tarnowskie Góry" Chemical Plant in Tarnowskie Góry, the "Boruta" Dye Industry Plant in Zgierz. Implementation of a pilot program for the revitalization of a post-industrial area is planned for Huta im. T. Sendzimir in Krakow.

The planned timeline is Q1 2021 - Q3 2026. The planned cost are 200 million euro.

In the Silesian Voivodehsip the implementation of the KPO is going to be a backbone of regional policy in programming period 2021-2027. The KPO will among the others support actions aimed at preventing uncontrolled emissions of pollutants into the air, surface waters and groundwater, such as inventory, neutralization and reclamation activities.

## The initial assumptions for the draft of legal act on large-scale degraded areas

The draft of legal act on large-scale degraded areas is in the preparation process led by the Ministry of Climate and Environment. The experience related to the application of national regulations in the field of waste management shows that problems related to the presence of hazardous waste, accumulated in the past, are signalled in the country in a way that creates threat to human life or health. There are cases when the waste was deposited a long time ago, and over many years the areas where the waste is owned by many private entities - land was divided and their properties. The problem concerns mainly waste collected in the past on large-scale areas of state-owned industrial plants, in the times before the specific regulations governing waste management in a manner ensuring an appropriate level of environmental protection were in force. Examples of areas where the occurrence of the discussed problems have been found are, among others the areas of the former "Zachem" Chemical Plant in Bydgoszcz, the "Organika-Azot"

Chemical Plant in Jaworzno, the former "Tarnowskie Góry" Chemical Plant in Tarnowskie Góry, the "Boruta" Dye Industry Plant in Zgierz.

The act will include the procedure for preparing, managing, documenting and assessing the effects of the processes of eliminating the environmental impact of large-scale post-industrial areas and the restoration of these areas for socio-economic use, if possible. The priority of the reform is, above all, to remove the threat to human health and life posed by large-scale post-industrial areas and, if possible, to recover these areas for reuse, in some cases by giving them new functions.

The new regulations should constitute a lex specialis in relation to the currently applicable acts on environmental protection and, if necessary, provide for relevant rules of conflict with the provisions on the storage of waste and the removal of waste from places not intended for this purpose, protection of surface and ground waters, and historical contamination of the earth's surface.

#### Part III - Details of the actions envisaged

# ACTION 1: Establishing the regional task-force group for solving the HCH problem at Wąwolnica Valley in Jaworzno

# 1. Relevance to the project

### Context of the action and inspiration from the project:

The Chemical Plant Organika-Azot S.A. has operated since 1921. The lindane production of consequently HCH waste generation have been performed predominantly from 1965 till 1982 in Jaworzno (production of technical HCH amounted to 4 000 tons/year and γ-HCH amounted to 300 tons/year). For years, a large number of these compounds were deposited at the Rudna Góra Central Landfill and in the surrounding areas. Unfortunately, this landfill together with the nearby areas where persistent organic pollutants (POPs) were also found, does not have any protection against groundwater pollution. The areas listed above are located in the valley of the Wąwolnica stream, which connects with the Przemsza River, which in turn connects with the Vistula River flowing into the Baltic Sea. It is estimated that there are over 200 000 ton of hazardous waste in these areas, including a minimum of 31 300 ton of HCH waste.

The Chemical Plant Organika-Azot has been producing pesticides for decades. For most of its existence, it was a plant whose scope of activity depended directly on the instructions received from the communist government functioning in Poland at that time. After the period of political transformation in Poland, the plant was privatized and ownership shares were transferred to the employees. As a result, responsibility for the contamination has been assumed by the employees. After the privatization period, it is not possible for the private company to finance the cost of implementing this programme from its own resources. Even after the private company responsible for contamination collapses, a bankruptcy trustee sells out the partition of the land to various private users for the same reason (e.g. the case of Zachem Chemical Plant in Bydgoszcz).

According to the Act of 13 April 2007 on the prevention and repair of environmental damage (hereinafter referred to as the Damage Act), the Damage Act does not apply when there is historical pollution. It is not possible to carry out a damage proceeding for pollution occurring before April 30, 2007. In the case of historical pollution, the owner of the earth's surface is obliged to report this fact to the Regional Director of Environmental Protection, the information on the potential historical pollution of the earth's surface is entered in the register of historical pollution of the earth's surface. Remediation is carried out by those who control the earth's surface in accordance with the agreed remediation plan.

The cost of remediation has exceeded by far the financial possibilities of the private entity responsible for contamination Chemical Plan Organika-Azot S.A. The plant does not have sufficient financial resources to solve the problem. The implementation of the contaminated area remediation programme, which was developed as part of the FOKS project, was estimated to be few hundred times higher than the share capital of the company responsible for the contamination. **However**, the HCH contamination poses a threat to the environment and public health of Silesia region

5

## and whole Baltic Sea area according to EU perspective (e.g. Helsinki Conventions).

Attempts to solve the problem of lindane and HCH pollution in Jaworzno city areas have already been made under the FOKS (2008-2012) and AMIIGA (2016-2019) projects under the Interreg Central Europe Programme. In these projects, e.g. the existing hazards were identified and a programme for remediation of the contaminated area was developed. The tasks envisaged in this work for the location of Rudna Góra will be based on the results of the mentioned projects. Unfortunately, the problem of POPs contamination in the Jaworzno area is so complicated that the implementation of above mentioned projects was not sufficient to solve the problem. Currently, the Wetland+ method to treat the HCH contamination in Wąwolnica Valley in Jaworzno is also tested within LIFEPOPWAT (2020-2023) project under LIFE programme.

Joined efforts of the Government of Aragon (Spain), the General Directorate of Climate Change and Environmental Quality of the Xunta de Galicia (Spain), the Regional Development Agency of South Bohemia (Czech Republic), the State Office for Contaminated sites of Sachsen Anhalt (Germany), the Experimental Zooprofilactic Institute of Lazio and Toscana M. Aleandri (Italia), the Central Mining Institute (Poland) have leaded to launching the **LINDANET** project under Interreg Europe. The project under leadership of the Government of Aragon aims to join efforts among European regions to work together towards the improvement of the HCH (Iindane) contaminated sites. The intention of the LINDANET project is to advance in the direction of improve the knowledge and solution of this problem, starting from a regional point of view and reaching a European level. To that aim, the Interregional Thematic Workshops (ITW) are bi-annual events whose main objective is to gather relevant stakeholders, policy-makers and peers in order to share experience across Europe's regions affected by lindane or POPs in general.

During the series of ITW events partners shared their thoughts and they agreed that in Poland, analyzing the case of HCH contaminated area in Wawolnica Valley in Jaworzno, the fact that legal matters block proper action is the main problem to eliminate the contamination of HCH.

Simultaneously, within the LINDANET project regional meetings (the Regional Thematic Workshop - RTW) have been organized as the periodic events with different group of stakeholders. During the RTWs, organized in January 2020, December 2020 and in October 2021 in Silesia region, legal limitations to eliminate lindane contamination in Jaworzno were discussed. The meetings were attended by research institutions, National Water Management Polish Waters (PGW WP), PGW WP Regional Water Management Authority in Gliwice, Regional Directorate for Environmental Protection, Provincial Inspectorate for Environmental Protection, Municipal Office in Jaworzno, Marshal's Office of the Silesian Voivodeship. The workshops revealed how deep the competencies are fragmented between different institutions, therefore the possibility of taking effective actions related to the elimination of lindane contamination is limited.

On the last physical meeting in October 2021, in which the representatives of regional authorities and other regional bodies participated, the only solution proposed for solving the HCH contamination problem in Jaworzno was to appoint a body which coordinate the process of Wąwolnica Valley remediation. The Action Plan for the region of Śląskie Voivodeship directly responds to this need.

During the meeting it was also emphasized that Chemical Plan Organika-Azot S.A. has the poor financial condition. Currently, Chemical Plan Organika-Azot S.A. run a leachate treatment plant from the contaminated wastes left after the former plants owned by the State Treasury. The lack of the treatment plant operation will cause pollution and an uncontrolled increase of HCH concentrations in Wawolnica, Przemsza, Vistula, and then it will go to the Baltic Sea.

In Poland, a common practice of contaminated mega-site is the fragmentation of the land by private owners and selling the contaminated land part by part in order to keep financial fluidity. The private companies liable of contamination derived from 20<sup>th</sup> century industrial activities of then - public companies are usually in very bad economical status currently.

It was also emphasized that within the area contaminated by Chemical Plant Organika-Azot S.A. there is a drinking water intake called "Jarosław Dąbrowski" (in the district of Jeleń). The team of the Central Mining Institute calculated the time when pollutants zones of inflow to the intake and zone of potential migration of groundwater contaminated by pesticides. These zones almost overlap.

The main dialogue between the parties involved in the elimination of lindane contamination came to conclusion that **legal matters block the elimination of HCH contamination in Poland** and declarations on further cooperation have been made. It was also highlighted that a **common practice of contaminated mega-site located in Poland is the fragmentation of the land by** 

owners and selling the contaminated land part by part in order to keep financial fluidity. Representatives of stakeholders, local, regional and national authorities, research institutions that attended the meeting came to agreement that this tendency need to be reversed.

Taking into account the draft of the legal act on large-scale degraded areas, which is in the preparation process led by the Ministry of Climate and Environment there are two possible scenarios starting from 2022:

- the first scenario, when new act on large-scale degraded areas will be implemented there
  will be a possibility of taking an action by the public side on the areas currently owned by
  private entities (the draft legal act on large-scale degraded areas would enable
  expropriation of private plots, wherever necessary for remediation),
- the second one, when the new act on large-scale degraded areas will not be implemented, then we will have the status quo situation when any financial intervention from public side is excluded but needed.

## Addressed Policy Instrument:

Action Plan for the region of Śląskie Voivodeship (hereinafter: Action Plan) addressed the National Plan for Reconstruction and Increasing Resilience (hereinafter: KPO) described in details in Part I. The KPO is a program document setting out the goals related to the reconstruction and creation of socio-economic resilience of Poland after the crisis caused by the COVID-19 pandemic, as well as proposed reforms and investments. The document is the basis for applying for support from the European Recovery and Resilience Facility (RRF). In the KPO the dedicated investment line focusing on the neutralization of threats and the renovation of large-scale degraded areas and the Baltic Sea is indicated. The five examples of large-scale degraded areas are selected to be financed within the Recovery and Resilience Facility. One of them is the Chemical Plant Organika-Azot S.A. in Jaworzno. The full implementation of the revitalization program with waste disposal and neutralization is predicated only for one post-industrial area located in Krakow ie. Huta im. T. Sendzimir. In case of other degraded areas, mentioned in KPO, the comprehensive diagnosis of the state of the environment is planned.

The implementation of the KPO in Silesian Voivodeship is going to be a backbone of regional policy in programming period 2021-2027. The KPO will support actions aimed at preventing uncontrolled emissions of pollutants into the air, surface waters and groundwater, such as inventory, neutralization and reclamation activities.

# Objectives for the improvement of the policy instrument:

Action 1. Establishing the regional task-force group for solving the HCH problem at Wąwolnica Valley in Jaworzno which will be implemented within Action Plan for the region of Śląskie Voivodeship will improve the KPO on different levels. The main topics the regional task - force group will focus on the legal, financial and management issues of planned remediation activities in Wąwolnica Valley in Jaworzno.

The KPO is a response to large-scale environmental pollution caused in the past by human activities, which threaten the environment and human health and life. The regional task-force group for solving the HCH problem at Wąwolnica Valley in Jaworzno appointed within Action Plan in the region:

- 1) will support the comprehensive diagnosis, which need to be carried out within KPO, in the part of unregulated legal status of a part of the site, distribution of contaminated plots, etc. Currently, the private company Chemical Plant Organika-Azot S.A, which has been assumed the responsibility for contamination left by the company belonging to State Treasury is endangered by collapses. The company has started the process of selling out the plots causing the partition of the contaminated land. The lack of the treatment plant operation run currently by Chemical Plant Organika-Azot S.A will cause pollution and an uncontrolled increase of HCH concentrations in Wawolnica, Przemsza, Vistula, and then the Baltic Sea.
- 2) will examine and revised the conditions of implementation of the draft of the legal act on large-scale degraded areas, which is in the preparation process led by the Ministry of Climate and

Environment and is expected to start from 2022 and would enable expropriation of private plots on large-scale degraded areas, wherever necessary for remediation,

- 3) will elaborate a roadmap for new financial possibilities of funding the control and remediation of HCH contamination within national, European or other sources, making possible to improve the policy instrument and act for receiving funding resources for a control and remediation of HCH in Jaworzno.
- 4) will coordinate the activities of all regional institution in Silesian Voivodeship responsible for the implementation of the KPO within the component B. Green energy and reduction of energy consumption, investment: B3.2.1. Investments in the neutralization of threats and the renovation of large-scale degraded areas and the Baltic Sea.

Establishing the regional task-force group for solving the HCH problem at Wąwolnica Valley in Jaworzno within Action Plan is a structural change. It will share out responsibilities among the competent authorities in Silesian Voivodeship. Establishing the task-force will allow for coordination the decisions for progressing towards the HCH remediation within the KPO. In Poland, no remediation action at Wąwolnica Valley in Jaworzno can be made, due to absence of a structure related to the HCH pollution responsibilities. Thanks to implementation of Action Plan the increase of national projects for the HCH control and remediation is also expected. The roadmap being a result of the activity no. 7 carried out within this Action Plan make it possible.

## 2. Nature of the action

Within the Action 1. Establishing the regional task-force group for solving the HCH problem at Wąwolnica Valley in Jaworzno eight activities are going to be implemented. Some of them were already completed.

All activities constituting Action 1 are presented in the below table.

Activity No.	Activity Description	Timing
1.	Inclusion of the revitalization issue in the key strategic document guiding the further work of the region is the Development Strategy of the Silesian Voivodeship "Śląskie 2030".	19.10.2020 (completed)
2.	Notification of remarks in consultation process of the project of the Regional Revitalization Policy of the Śląskie Voivodeship announced by the Board of the Śląskie Voivodeship.	18.12.2020 (completed)
3.	Notification of remarks in consultation process on the draft regional program "European Funds for Silesia for the years 2021-2027" and the Regional Just Transition Plan 2030 by the member of the RIS Steering Committee.	16.03.2021 (completed)
4.	Organization of theHCH task-force group meeting concerning the ownership structure of the contaminated mega-site in Wąwolnica Valley in Jaworzno	March 2022
5.	Elaboration of the proposed ownership structure necessary for performing planned remediation activities in Wąwolnica Valley in Jaworzno.	July 2022

6.	Organization of the HCH task-force group meetingconcerning the legal, financial and management issuesof planned remediation activities in Wąwolnica Valley in Jaworzno.	September 2022
7.	Elaboration of the task-force group recommendations for solving HCH problems at regional level with roadmap of new financial possibilities of funding remediation process in Jaworzno.	November 2022
8.	Presentation of the recommendation regarding solving HCH problems at regional level on the Board of the Marshal's Office of the Silesian Voivodeship.	December 2022

## 3. Stakeholders involved

<u>Marshal's Office of the Silesian Voivodeship</u> has a mission to ensure effective and efficient implementation of regional activities as well as initiate private-public partnership initiatives stimulating regional development and for the benefits of inhabitants. More recently the focus has been also on the preparation and launch of support measures within the European Funds for Silesia 2021-2027.

Central Mining Institute is experienced in field of wastewater treatment, purification of mining waters, radium removal from waters, drinking water monitoring. GIG has best knowledge about HCH and other POPs contamination in Jaworzno. In frame of Interreg CE projects: FOKS(CE 2007-2013) and AMIIGA (CE 2014-2020). GIG has been leading works for characterization of groundwater and surface contamination with HCH and other POPs in Jaworzno.GIG was also author of remediation concepts and feasibility studies for remediation works including passive treatment by engineered wetland system for contaminated areas done for Municipality of Jaworzno. GIG acts as expert institution for many other municipalities of Silesia and outside region concerning water and soil pollution, air quality, urban areas development, education and rising of public awareness.

Jaworzno City is being conscious of its environmental problem in the valley of brook Wawolnica since 2003. Mayor of the city, responsible for environmental protection aspects, quality management of groundwater, establishing rules for operation and interaction of users of water in area assigned to its competence - conducted a lot of activities to get better knowledge about historical and post-industrial contamination. Apart from administrative experience and knowledge about environmental protection law in Poland, Jaworzno competences in project are built on experience gained in participation in other projects (regional, national as well as EU level). Jaworzno was a project partner in FOKS project (2008-2012, Interreg CE) that helped to describe key sources for contamination in the valley of brook Wawolnica, specified proper geological knowledge about area, and finally brought development of remediation concept for the site. Further (2013-2016), Jaworzno took some activities (co-financed by the national funds) aimed at solving problem of hazardous waste accumulated in the valley of Wawolnica stream in Jaworzno, finalized with technical documentation of remediation. From 2016 till 2019 Jaworzno was a project partner in AMIIGA project (Interreg CE), in which passive GW treatment by bioreactive wall is tested in Jaworzno and management strategy on groundwater contamination on FUA of Central Europe is being developed.

Regional Directorate for the Environmental Protection in Katowice is regional organizational unit of General Directorate for the Environmental Protection responsible for managing information about the environment.

<u>Voivodeship Inspectorate for Environmental Protection in Katowice</u> is regional organizational unit of General Inspectorate for Environmental Protection responsible for monitoring and assessment of the state of the environment and providing the public and public authorities with information on the environment.

4. Timeframe of action 1
The 1stof February 2022 - the 31stof December 2022
5. Indicative costs of action 1
5000 EUR
6. Indicative funding sources of action 1
National Funds
Date:
Name of the organisation(s):
Signature(s)of representative of the relevant organisation(s):