

**An interregional cooperation project
for improving resource-efficient
economy policies.**

Project Partners:

Government of Aragon (ES)

Regional Development Agency of South Bohemia -
RERA a.s. (CZ)

State office for contaminated sites, Saxony-Anhalt (DE)

Government of Galicia - General Directorate of
Environmental Quality and Climate Change (ES)

Experimental Zooprofilactic Institute of Lazio and
Toscana M. Aleandri - IZSLT (IT)

Central Mining Institute - GIG (PL)

LINDANET will create a network of
European regions with the objective
of improving decontamination
policies for the persistent organic
pollutant, lindane.

www.interregeurope.eu/lindanet



European Union
European Regional
Development Fund

PROJECT DURATION

Phase 1: 1 August 2019 – 31 January 2022

Phase 2: 1 February 2022 – 31 January 2023

BUDGET

Total budget: 1.348.635,00 €

EU financing: 1.146.339,45€

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State office for contaminated sites, Saxony-Anhalt (DE)



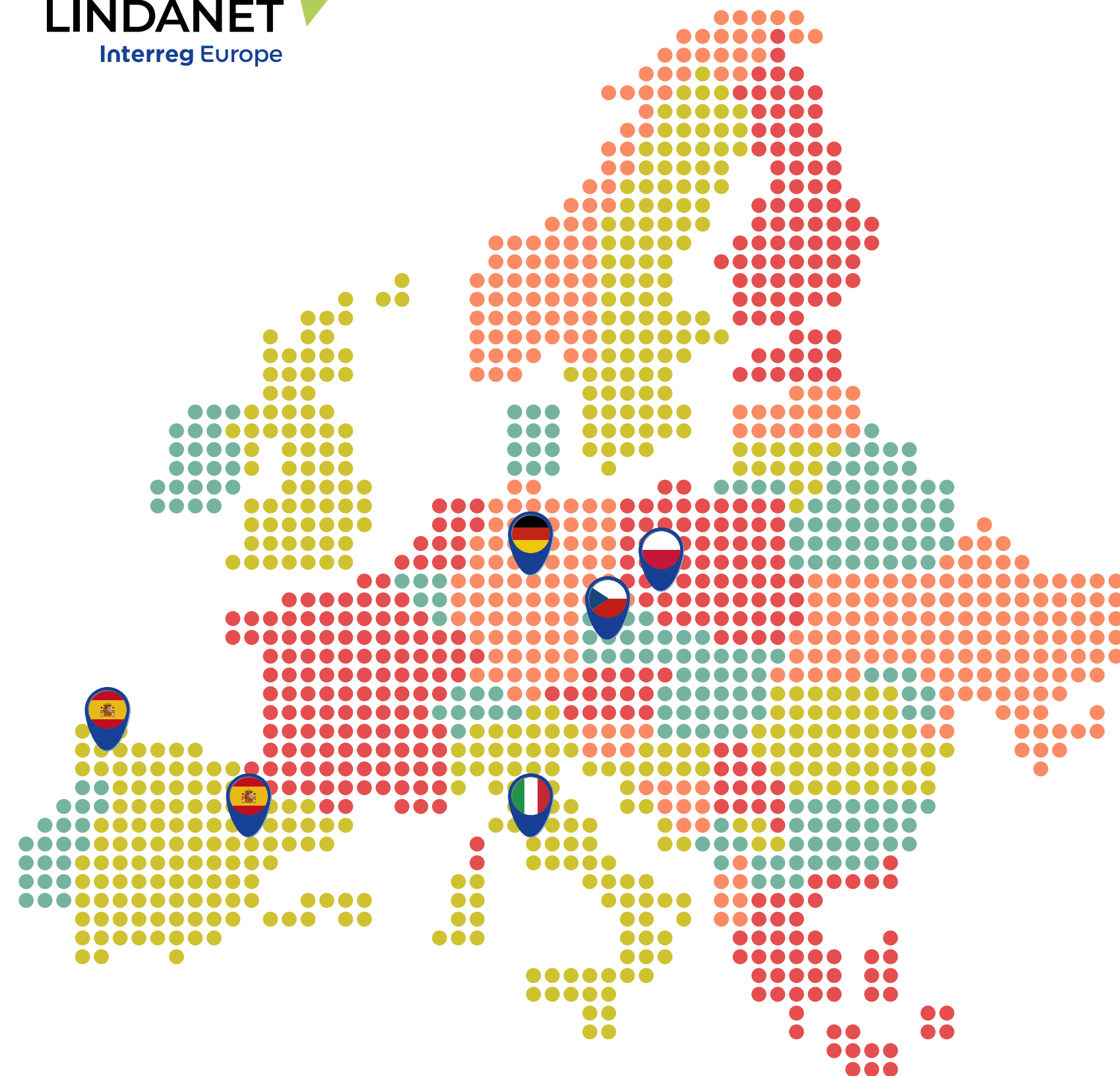
Government of Galicia - General Directorate of
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PROJECT STRUCTURED IN TWO PHASES:

Phase 1: INTERCHANGE OF EXPERIENCES

Objectives:

1. Interchange of experiences at interregional level (workshops among partners) and at regional level (stakeholder meetings)
2. Exploitation of lessons learnt from this cooperation by means of the elaboration of action plans.

Phase 2: IMPLEMENTATION OF ACTION PLANS

Objectives:

Implementation and monitorization of regional action plans.



INTERCHANGE OF EXPERIENCES

THEMATIC WORKSHOPS:

Governance, regulation and public policies on HCH contamination

Technical aspects on HCH contamination

Social and Health aspects on HCH contamination

Action Plans elaboration

RESULTS:

Learning from actions carried out in other regions

Assessment of the situation in each region: brainstorming sessions

Identification of 15 Good Practices

PROJECT GOOD PRACTICES:



SACHSEN-ANHALT,
GERMANY

Soil Management Concept
Bitterfeld megasite



SACHSEN-ANHALT,
GERMANY

Exemption of the reliability
of contaminated sites caused
by state owned industries during the existence
of the German Democratic Republic.



ŚLĄSKIE,
POLAND

AMIIGA Interreg CE pilot
Permeable Reactive Barrier
for groundwater in situ
passive HCH treatment



LAZIO,
ITALY

Regional monitoring plan
on residues of B-HCH in
animal feed and milk



LAZIO,
ITALY

Human Biomonitoring of
the exposure of population
to chemical contaminants



ARAGÓN,
SPAIN

Visits to the lindane contaminated sites and remediation facilities for the general



ARAGÓN,
SPAIN

Demonstrative project to analyse the feasibility of ISCO technique in dissolved POPs



ARAGÓN,
SPAIN

Publication of daily water analytics of the river Gallego in www.stoplindano



ARAGÓN,
SPAIN

HCH air monitoring in Aragon sites



ARAGÓN,
SPAIN

Committees for the monitoring of the lindane waste management



ARAGÓN,
SPAIN

Bioremediation of HCH using autochthonous bacteria



ARAGÓN,
SPAIN

Strategic Environmental Action Plan against lindane waste contamination in Aragon



SOUTH BOHEMIA,
CZECH REPUBLIC

Phytoscreening of HCH contamination by broad-leaf trees



SOUTH BOHEMIA,
CZECH REPUBLIC

Elimination of HCH and its products from drain water by PRB on ZVI



SOUTH BOHEMIA,
CZECH REPUBLIC

Use of non-combustion technology for remediation of obsolete pesticides



ACTION PLANS



ACTION PLAN ARAGON (SPAIN):

Addressed Policy Instrument:

Aragón ERDF OP 2014-2020 Priority axis 6: Conservation and protection of the environment and efficiency of resources. Investment priority 6E, Specific Objective SO.6.5.1. Improvement of the urban environment, revitalization of cities, regeneration and decontamination of abandoned industrial areas and reduction of air pollution.

01

**Redesign
lindane website**
www.stoplindano.es



Changes in the policy instrument

Boosting the implementation of projects, improvement on the communication of project results

Responsible for the implementation

Government of Aragon

Stakeholders

Public and private companies, research organizations, general public

Development period

7 months

Indicative cost

€ 10,000

ACTION

02

**Study of alternatives
of management of the
forest mass of the old
Bailin landfill**



Changes in the policy instrument

Minimizing risks in all actions of the policy instrument

Responsible for the implementation

Government of Aragon

Stakeholders

Site employees, civilian protection citizens

Development period

6 months

Indicative cost

€ 5,000

ACTION

03

**Health and Safety APP,
for the control of the
Individual Protection
Equipment and the
Health surveillance**



Changes in the policy instrument

Improvement in all current and future projects

Responsible for the implementation

Government of Aragon

Stakeholders

Technical H&S staff, site employees, labour inspection

Development period

9 months

Indicative cost

€ 10,000

ACTION

04

**Creation of a
documentary collection
on HCH, that will be
hosted in the "Reference
Centre of Persistent
Organic Pollutants"
of Pirenarium**



Changes in the policy instrument

Improvement the efficiency and performance of current and future projects

Responsible for the implementation

Government of Aragon

Stakeholders

Research centers, Universities, Sabinánigo Town Council, remediation companies

Development period

6 months

Indicative cost

€ 50,000

ACTION

ACTION PLAN GALICIA (SPAIN):

Addressed Policy Instrument:

Galicia ERDF 2014-2020 Operational Programme, Priority Axis 6: Preserving and Protecting the Environment and Promoting Resource Efficiency

01

An Improved
governance
Structure for Lindane
Management
in Galicia



Changes in the policy instrument	It allows to involve all interested parties in the decision-making process and coordinate political actions
Responsible for the implementation	Xunta de Galicia
Stakeholders	Public administrations, neighbourhood associations and environmental groups
Development period	12 months
Indicative cost	€ 49.050



ACTION

ACTION PLAN SOUTH BOHEMIA (CZECH REPUBLIC):

Addressed Policy Instrument:

Strategy on Waste Management of South Bohemian Region

01

Increasing capacity and professional knowledge of involved staff



Changes in the policy instrument	Series of educational workshops that will deepen the POPs and HCH related knowledge of relevant public admin staff
Responsible for the implementation	RERA - Regional Development Agency of South Bohemia
Stakeholders	RERA, ARNIKA, regional authorities of South Bohemia and Pilsen Region
Development period	10 months
Indicative cost	€ 3600

ACTION

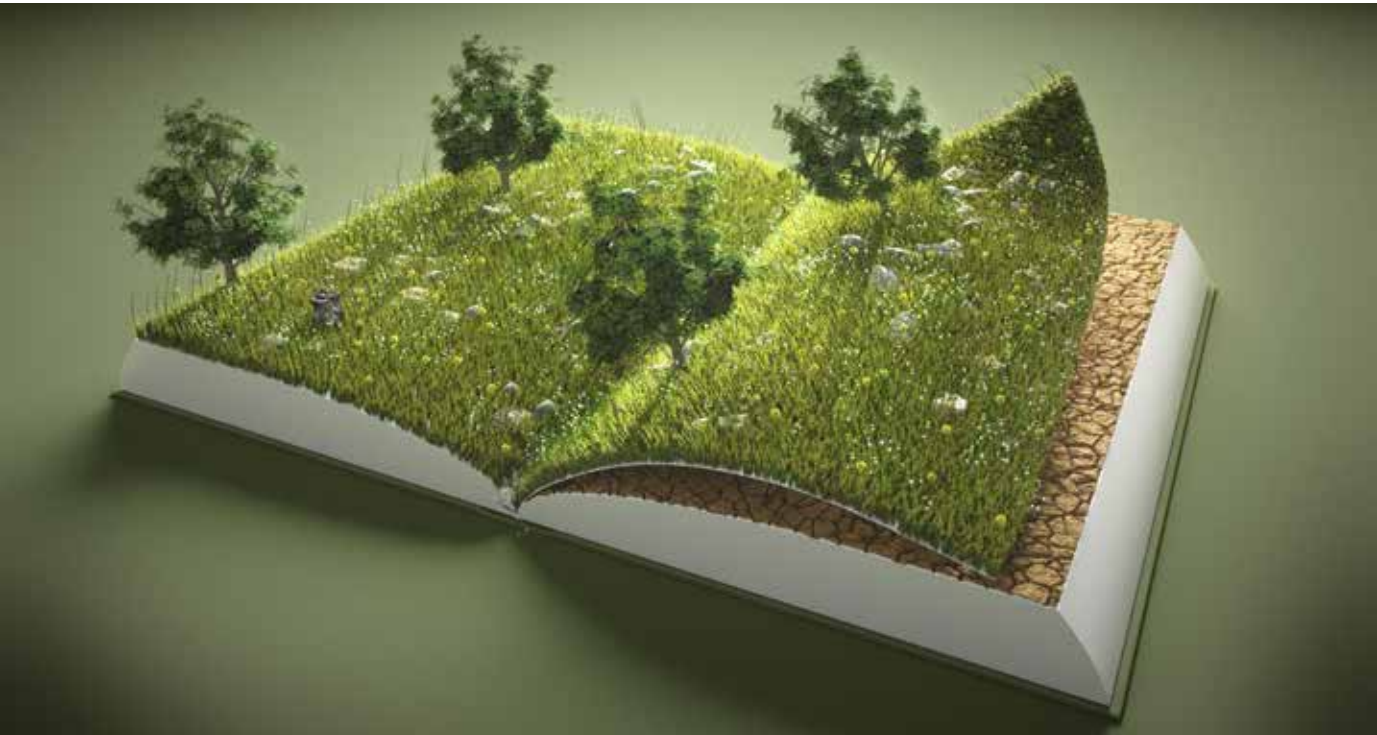
02

Treatment and remediation methodology for POPs contamination



Changes in the policy instrument	Comprehensive methodology gathering relevant information on POPs gained through the project
Responsible for the implementation	RERA - Regional Development Agency of South Bohemia
Stakeholders	RERA, ISES, ARNIKA, Regional Authority of South Bohemia
Development period	9 months
Indicative cost	€ 2500

ACTION



ACTION PLAN SAXONY-ANHALT (GERMANY):

Addressed Policy Instrument:

OP ERDF Saxony-Anhalt 2014-2020. Priority axis 4: Preserving and Protecting the Environment and Promoting Resource Efficiency. Investment priority 6E. Specific objective 11: Reduction of land use by supporting the inner-city development and by improving the use of brownfields and conversion areas in urban areas.

&

Rural Development Programmes 2014-2020 (EAFRD). FOCUS AREA 4B: Improving water management, including fertiliser and pesticide management.

01

Next steps on the way to an integral Mulde Floodplain Management



Changes in the policy instrument	Next steps are the tendering and implementation of an investigation concept for the Mulde floodplain financed out of EAFRD funds.
Responsible for the implementation	State Office for Contaminated Sites (LAF)
Stakeholders	Stakeholder network of Saxony-Anhalt
Development period	12 months
Indicative cost	Up to € 471,009.14

ACTION

02

Establishment of 3 committees for ensuring the long-term goal: The joint development of an integral Mulde Floodplain Management



Changes in the policy instrument	Committees boost cooperation and thus usage of structural funds for financing upcoming measures in the Mulde Floodplain.
Responsible for the implementation	State Office for Contaminated Sites (LAF)
Stakeholders	Stakeholder network of Saxony-Anhalt
Development period	12 months
Indicative cost	No expenses expected

ACTION

03

Preparation of a technical report on the Lindane heritage of the Bitterfeld-Wolfen region



Changes in the policy instrument	The technical report preserves knowledge of the regional Lindane heritage and supports future HCH related funding applications.
Responsible for the implementation	State Office for Contaminated Sites (LAF)
Stakeholders	Stakeholder network of Saxony-Anhalt
Development period	8 months
Indicative cost	No expenses expected

ACTION

Addressed Policy Instrument:

The National Plan for Reconstruction and Increasing Resilience

01

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



Changes in the policy instrument

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.

Responsible for the implementation

Central Mining Institute in cooperation with Marshal's Office of the Silesian Voivodeship

Stakeholders

Marshal's Office of the Silesian Voivodeship
Central Mining Institute
Jaworzno City Regional Directorate for the Environmental Protection in Katowice
Voivodeship Inspectorate for Environmental Protection in Katowice

Development period

February 2022 - December 2022

Indicative cost

€ 5000

ACTION



Addressed Policy Instrument:

Characterization Plan of riparian agricultural areas (derived from the former Regional Monitoring Plan on Chemical Residuals)

01

Study on the absorption
of HCH by fruit crops in
polluted areas



Changes in the policy instrument	Support the Authorities in taking decisions about removing the ban to some agricultural activities
Responsible for the implementation	IZSLT researchers, farmers
Stakeholders	mayors, farmers, researchers, regional authorities
Development period	12 months
Indicative cost	€ 10,000





www.interregauurope.eu/lindane



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