

**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](http://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)



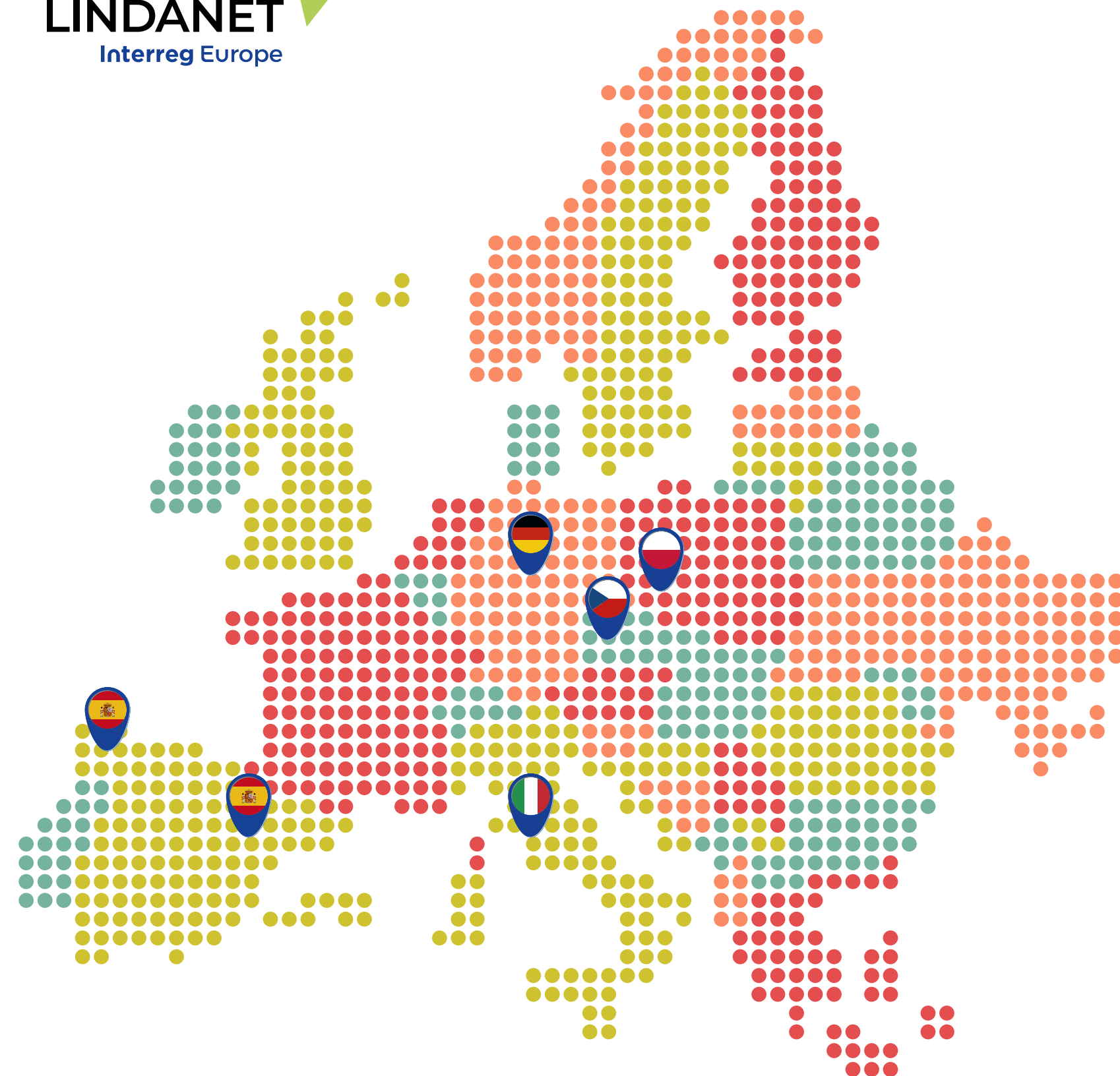
Government of Galicia - General Directorate of Environmental Quality and Climate Change (ES)



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



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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

#### Objetives:

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](http://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](http://www.stoplindano.es)



## 02

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



## 03

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



## 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

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

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

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

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, Sabiñánigo Town Council, remediation companies

Development period

6 months

Indicative cost

€ 50,000

**ACTION**

**ACTION**

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# 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



## 02

### Treatment and remediation methodology for POPs contamination



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

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**



# 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.

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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**

**02**

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

**03**

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



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

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

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**

**ACTION**

**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





## 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



ACTION



[www.interregauurope.eu/lindane](http://www.interregauurope.eu/lindane)



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