

# **Tour de Table Poland**

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# **Industrial degradation of land in Poland (1)**

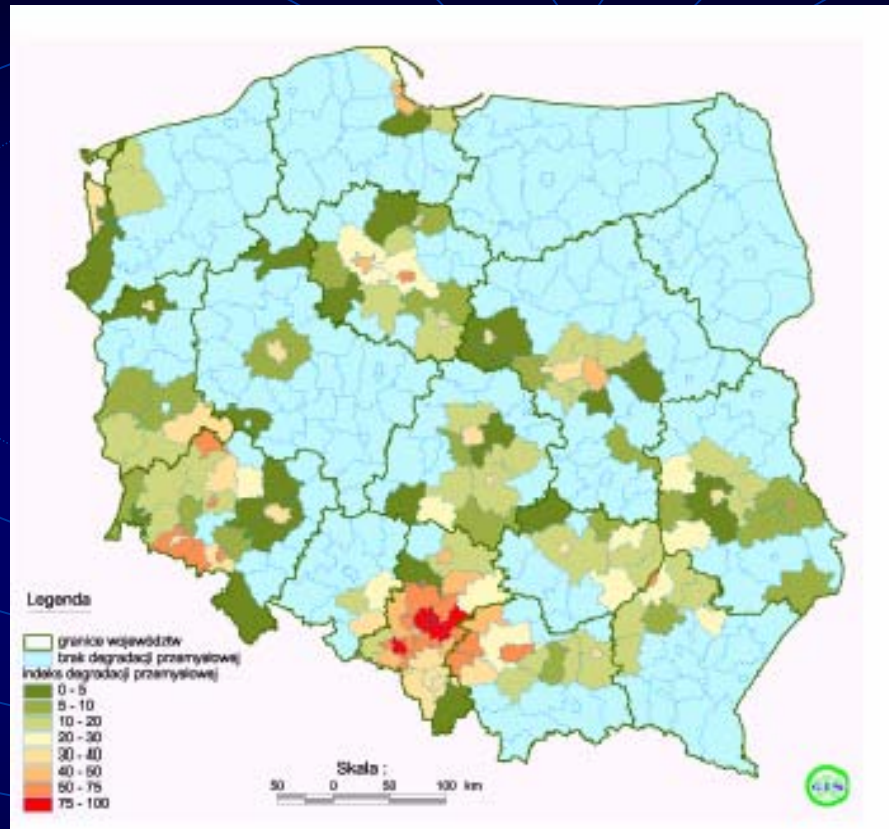
- **Macro-scale degradation**
- **Micro-scale degradation (related to object – points)**
- **No full estimation of the number of degraded objects**
- **Several thousands of objects requiring urgent corrective actions** (assumed based on land use structure)

# Industrial degradation of land in Poland (2)

Number of anthropogenic grounds in Poland according to numerical map of land use CORINE (calculated by IETU)

Voivodship	Industry and services	Roads and railways	Harbours	Airports	Quarries	Dumping sites	Construction sites	Total
Dolnośląskie	112	34	3	9	97	19	15	289
Kujawsko - Pomorskie	73	30	3	5	18	1	8	138
Lubelskie	68	34	0	10	15	1	15	143
Lubuskie	34	14	0	8	24	0	6	86
Łódzkie	86	32	0	7	39	5	29	198
Małopolskie	120	22	1	3	63	16	16	241
Mazowieckie	167	44	5	11	49	5	27	308
Opolskie	69	16	7	4	28	1	4	129
Podkarpackie	84	17	0	5	23	5	10	144
Podlaskie	64	19	0	1	14	0	2	100
Pomorskie	52	41	17	11	22	2	8	153
Śląskie	336	66	1	8	62	93	48	614
Świętokrzyskie	64	19	0	1	58	1	10	153
Warmińsko - Mazurskie	67	14	0	5	32	5	15	138
Wielkopolskie	119	25	0	13	40	11	24	232
Zachodniopomorskie	44	55	11	16	27	2	9	164
<b>Poland - total</b>	<b>1559</b>	<b>482</b>	<b>48</b>	<b>117</b>	<b>611</b>	<b>167</b>	<b>246</b>	<b>3230</b>

# Industrial degradation of land in Poland (3)



**Index of industrial degradation (IDI) in counties (Korcz et al., 2000, 2000a)**  
**Source: Calculations by IETU basing on a map „Poland – Multi-factor Environmental Degradation” (Siuta et al., 1996)**

**IDI – percentage of the surface area of all degradation forms (after weighting) in administrative unit**

# **Industrial degradation of land in Poland (4)**

**The highest contamination with multi-factorial degradation:**

- **the lower Silesian region (614 objects)**
- **the Silesian region (289 objects)**

# **Actions**

- **Policy measures (REWITARE program)**
- **Legislation (soil, groundwater, wastes)**
- **Risk driven priority actions (industrial, military sites)**
- **Regional inventories (Silesia, Małopolskie voivodship, PECOMINES)**
- **Commercially driven remediation and revitalisation**
- **International projects (Interreg, 5th and 6th EU RT&D)**

# Legal settings

- **Act on Environmental Protection Law (AEPA), 27 April 2001 (liability for land contamination)**
- **Act on Water Law (WA), 18 July 2001 with further amendments (groundwater quality requirements)**
- **Act on Waste Law 27 of April 2001 and the implementation acts (defines requirements on operating and past landfills)**

# Soil regulations – AEPA, 2001

- **Act on Environmental Protection Law (AEPA), 27 April 2001- the main Polish legal regulation referring to contaminated land**
  - **any holder of land on which soil contamination or damage of natural land's lay-out exist, is liable for its reclamation**
  - **soil remediation means bringing soil back to conditions which meet soil quality standards (Article 103)**



# **Soil regulations - OSQS, 2002**

- **Ordinance of the Ministry of Environment on Soil Quality Standards (OSQS) issued on 9 September 2002, pursuant to Article 105 of AEPA**

# OSQS, 2002

- **assessment of contaminated sites was designed as three-phase process but in fact this process is not described in the regulation**

# **OSQS, 2002**

- **land is regarded as contaminated when concentration of at least one substance exceeds the soil quality standards**
- **soil quality standards established for three categories of land**

# OSQS, 2002

## Land categories

### Group A

- a) land located in areas under protection pursuant to the Water Act 2001
  
- b) land located in areas under protection pursuant to the nature protection laws; unless the contamination constitutes a threat to human health or to the environment, no special action is required - such land will however also fall under Group B or C and will be subject to the provisions thereof

# OSQS, 2002

## Land categories

### Group B

agricultural land except land under water in ponds and ditches, forest land and tree-covered or shrub-covered, wasteland, and developed and urbanised land except industrial land, mining land and land used for transportation

### Group C

industrial, mining and transportation land

# OSQS, 2002

- **SQS can be defined as "cut off values"**
- **corrective actions are needed wherever values are exceeded**
- **if soil quality standards are exceeded as a result of naturally occurring substances, it is considered that standards are not exceeded**

# Groundwater regulations

- **Act on Water Law (WA), 18 July 2001**
- **Ordinance of the Ministry of Environment including limit values for groundwater quality indicators in groundwater classes (OGQS) issued on 11 February 2004, pursuant to WA (2001)**

# Future groundwater regulations

- a draft of a new Ordinance of the Ministry of Environment including a new limit values for groundwater quality indicators prepared for consultation (its current status - after intrasectoral and before intersectoral agreements)
- the new Ordinance will be adjusted to the requirements of Framework Groundwater Directive (FGD 2000) and the proposal of a Groundwater Daughter Directive (GDD 2003)



# **Environmental liability regulation**

- **Transposition of the Liability Directive into Polish Environmental Law (Act on Prevention of Environmental Damage and Remediation of 13 April 2007)**
  - **changes in competences of regional authorities concerning abandoned sites**
  - **established responsibilities for the installation operators for land contamination**

# REWITARE

- **Framework of the Governmental Programme for Post-industrial Areas (REWITARE) approved by the Council of Ministries on 8 April of 2003 (developed by IETU)**

**[http://www.mos.gov.pl/1materialy\\_informacyjne/raporty\\_opracowania/zalozenia.pdf](http://www.mos.gov.pl/1materialy_informacyjne/raporty_opracowania/zalozenia.pdf)**

- **“REWITARE” signed by the Council of Ministries in April, 2004**

# **REWITARE**

## **Strategic objective**

**set up conditions and mechanisms  
to developed post-industrial areas  
according to the principles of  
sustainable development**

# **REWITARE**

## **Direct objectives**

- **limit decreasing green areas**
- **remediate brownfields and bring it back to economic market**
- **develop and promote the best available technologies and techniques for remediation and redevelopment**
- **develop remediation enterprises/firms**
- **increase places of employment and stimulate investing in capital expenditure at the post-industrial areas**

# **Soil Framework Directive, EC 2006**

## **Implementation of the Framework Soil Directive in Poland will required:**

- **amendments to the Act on Environmental Protection Law (AEPA), 27 April 2001**
- **establish a national Inventory of Contaminated Sites**
- **identify the contaminated sites which may pose a significant risk to human health or the environment**
- **establish a National Remediation Strategy**

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**Thank you for attention !**