

# 1st Regional Civil Society – Industry Dialogue

## Overview of the mineral resources policy in Portugal

Raw materials management and circular economy in the Iberian Peninsula:  
The role of industry and consumers in optimizing the raw materials value chain

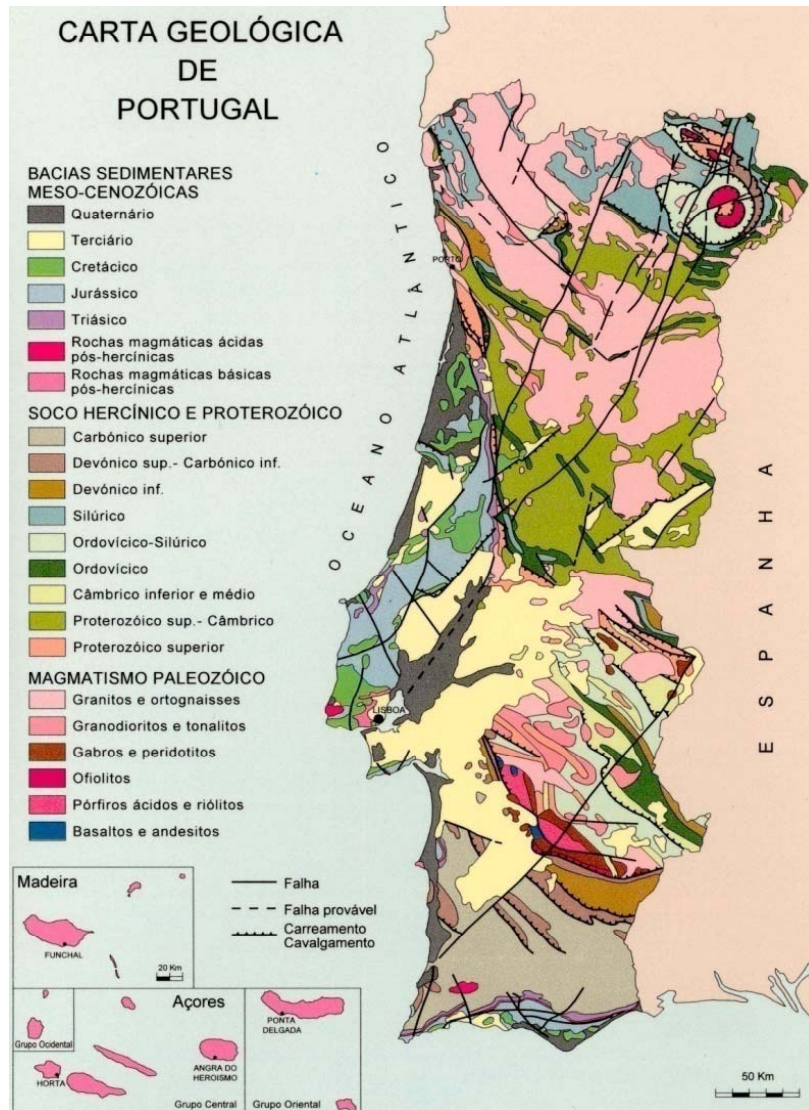
Licínia Gamito  
Madrid, 12 June 2014



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- 1. Portugal Mineral resources: an overview**
- 2. Portuguese Strategy and Networking**
- 3. Sustainability in Portuguese mining**
- 4. Conclusions**

# 1. Portugal Mineral Resources: an overview



■ Although the territorial dimension of Portugal is small, the surface geological map shows the enormous diversity of geological resources.

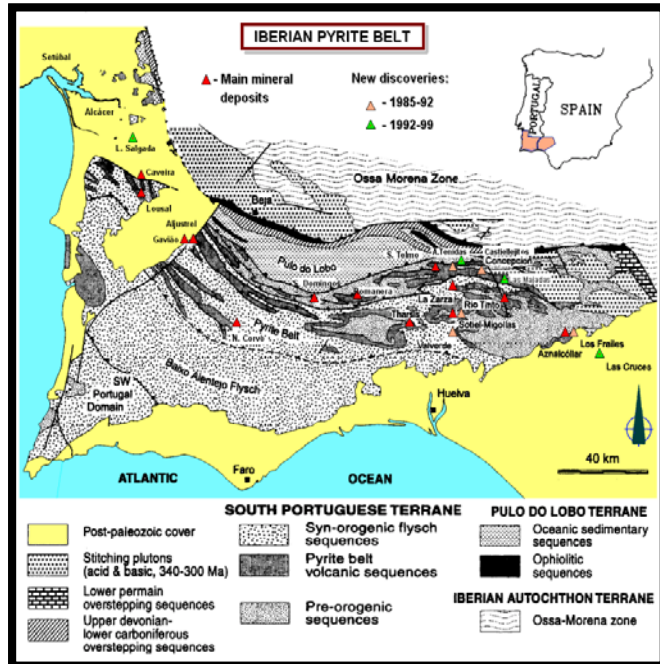
■ For its geological diversity, Portugal is very rich in mineral deposits.

# 1. Portugal Mineral Resources: an overview

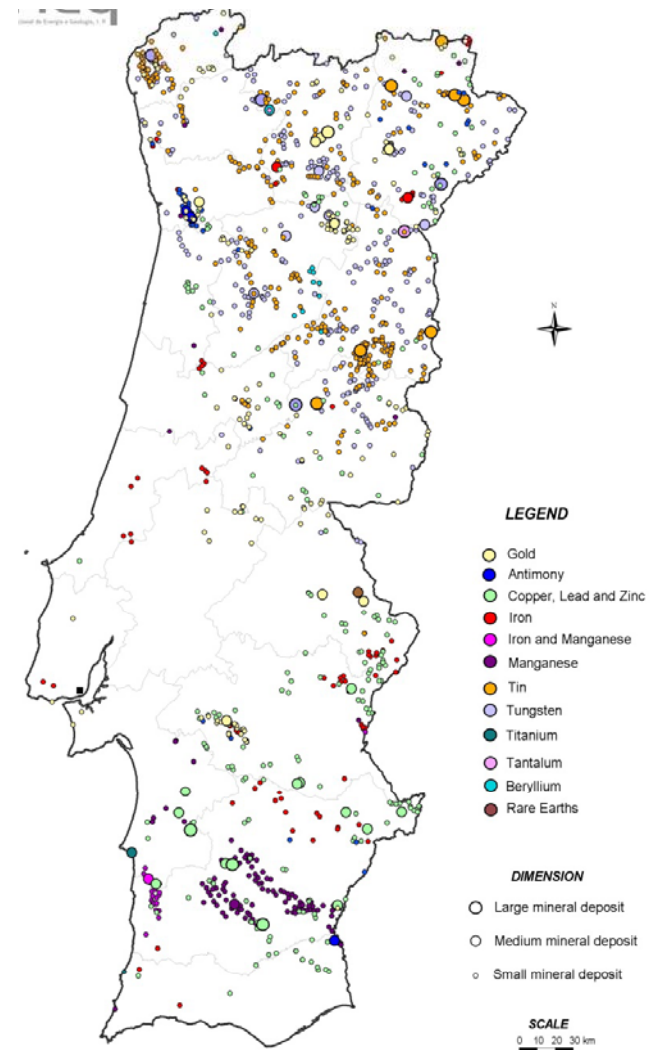
## Main primary resources in Portugal

## Metallic Minerals deposits

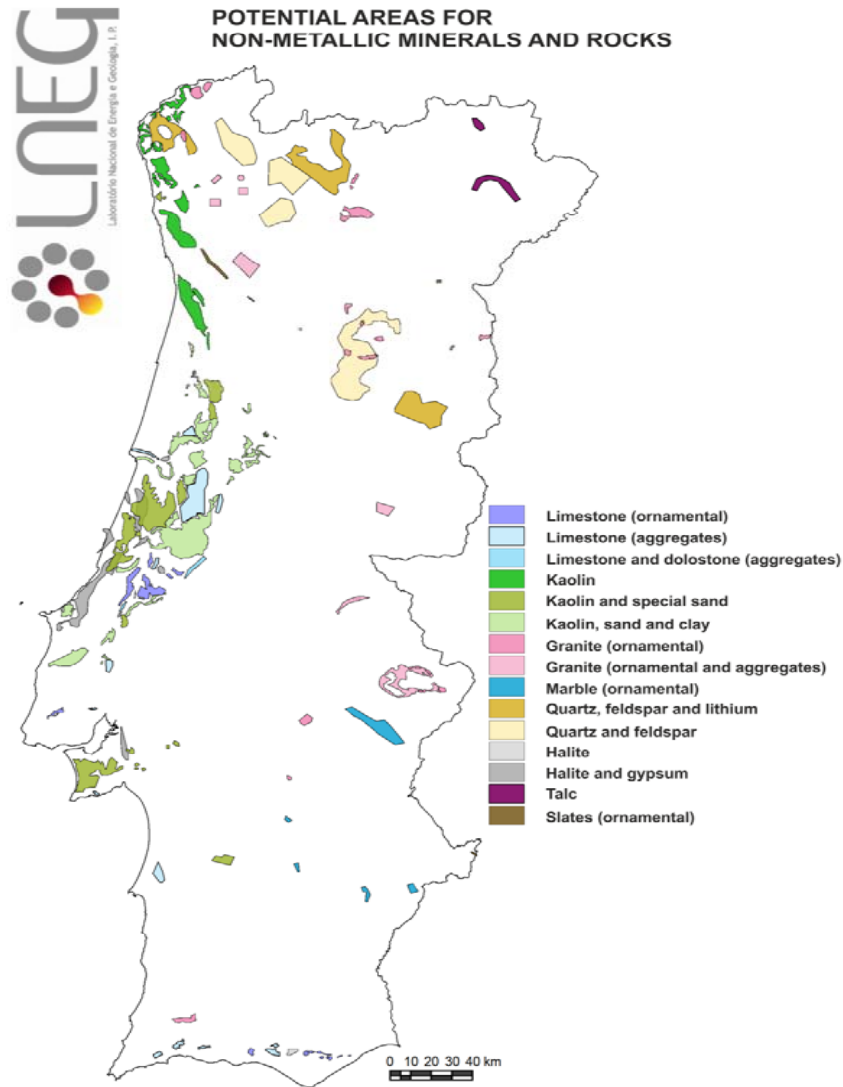
- World class: Cu, Zn, U, Fe, W, Sn.
- Critical Minerals: W, Sb, In, Nb, Ta, Be, Ge, Li.
- Other relevant deposits: Au, Ag, Mn, ...



**Iberian Pyrite Belt is one of the largest VMS provinces in the world**



# 1. Portugal Mineral Resources: an overview



## Main primary resources in Portugal Non-Metallic Minerals deposits

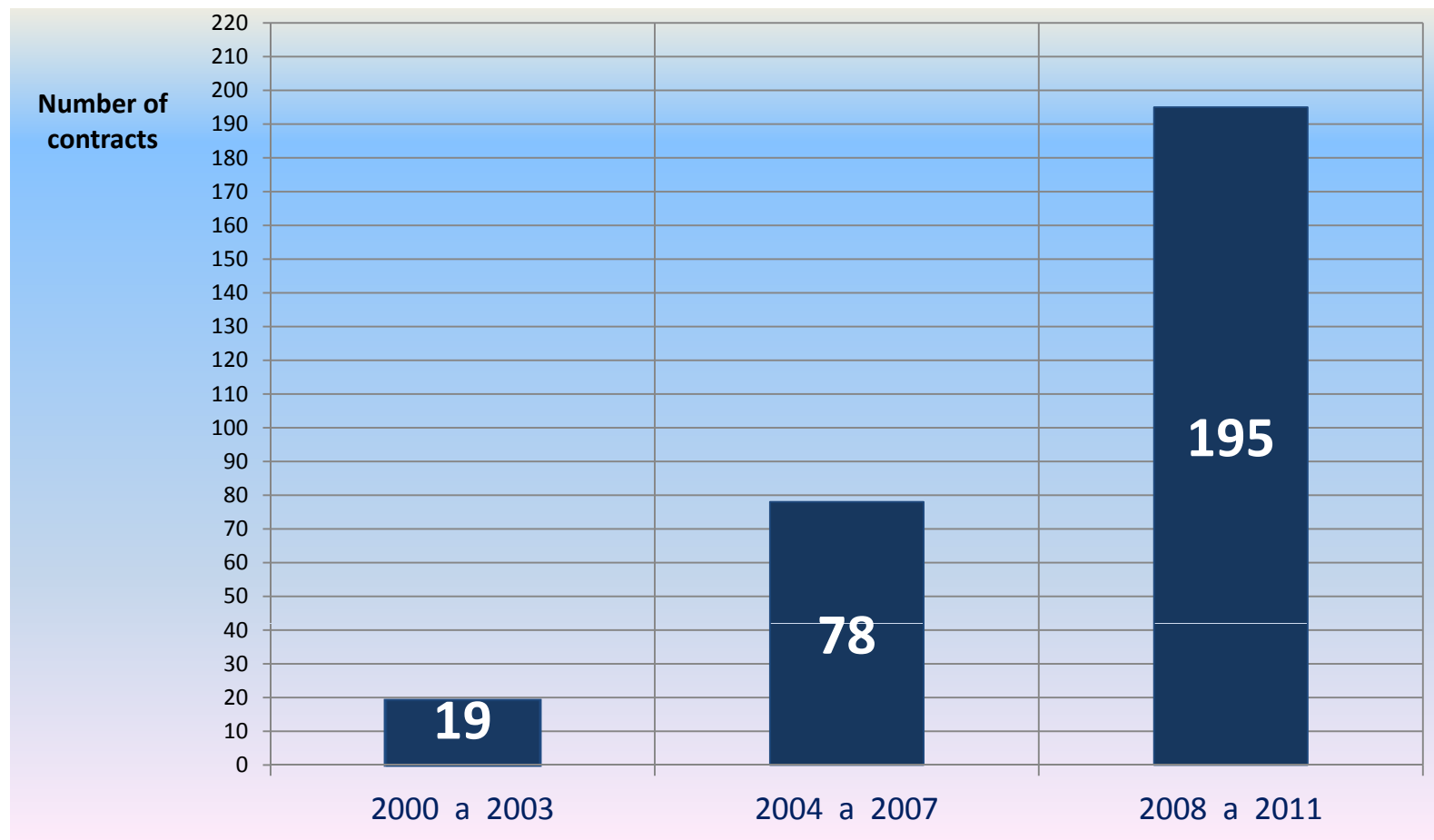
- World class: marbles, limestones.
- Other relevant deposits: kaolin, quartz, feldspar, special clays, special sands, halite, gypsum, talc, granites, slates,



**Marbles production region - Alentejo**

# 1. Portugal Mineral Resources: an overview

## Exploration contracts signed (Metallic and non metallic)

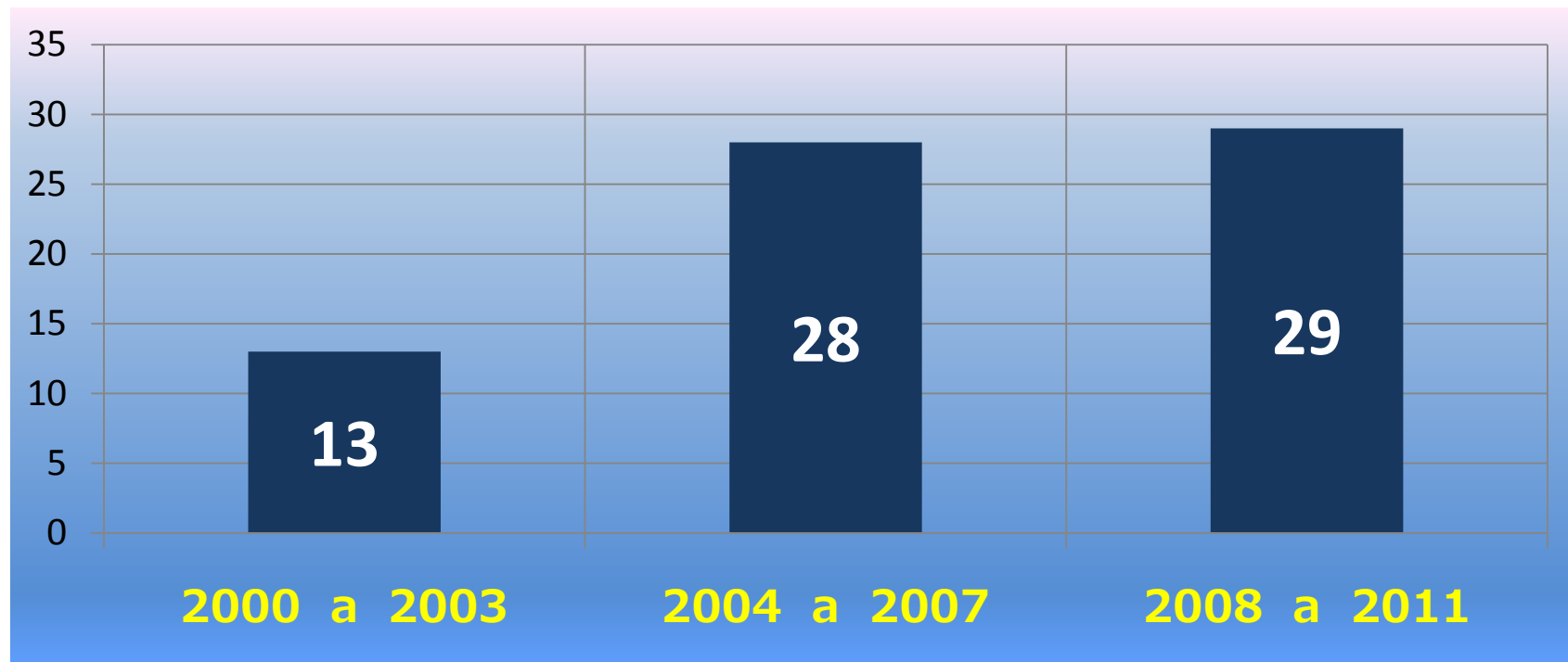


Since 2012: More **68** new exploration contracts were signed



# 1. Portugal Mineral Resources: an overview

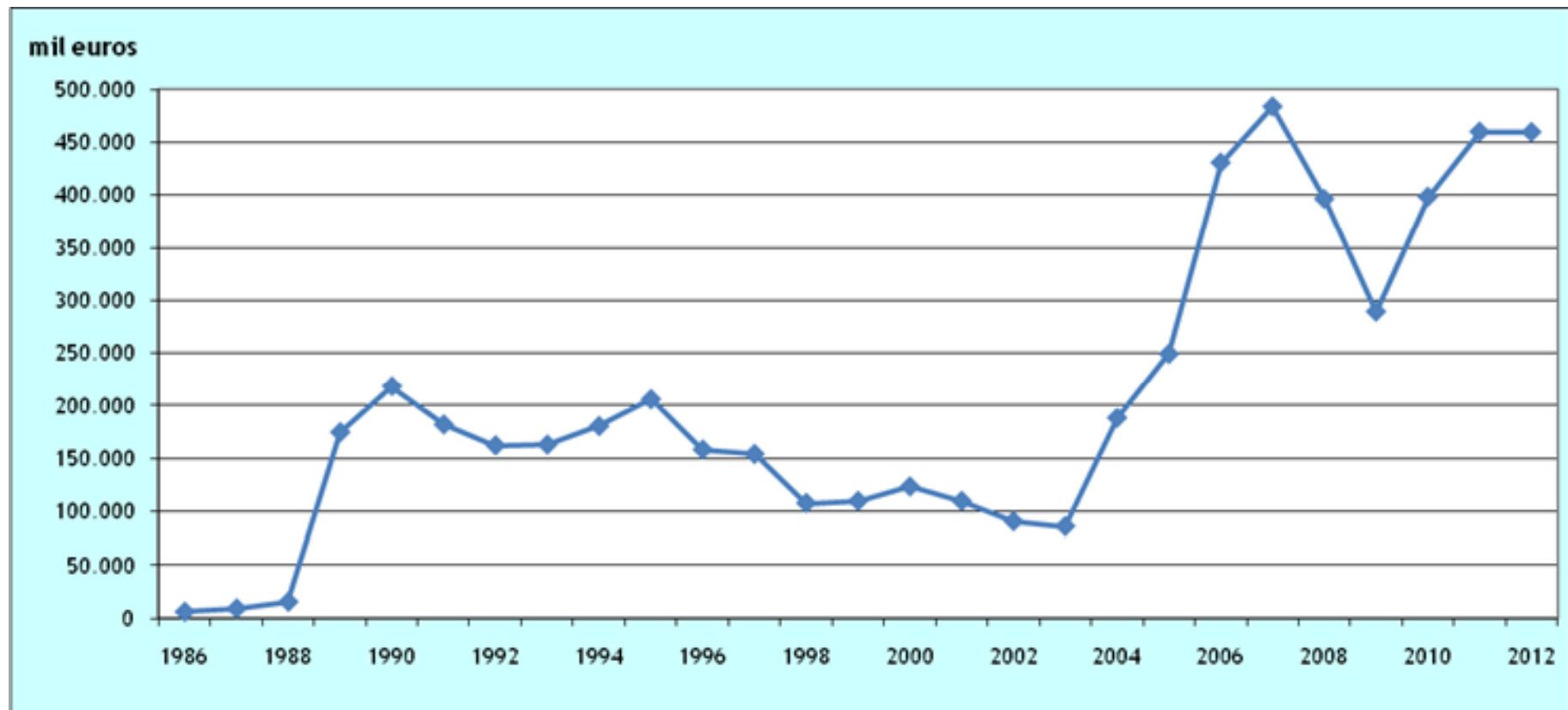
## Exploitation contracts of metallic and non metallic minerals (number of contracts)



Since 2012: 12 new contracts for metallic minerals were signed

# 1. Portugal Mineral Resources: an overview

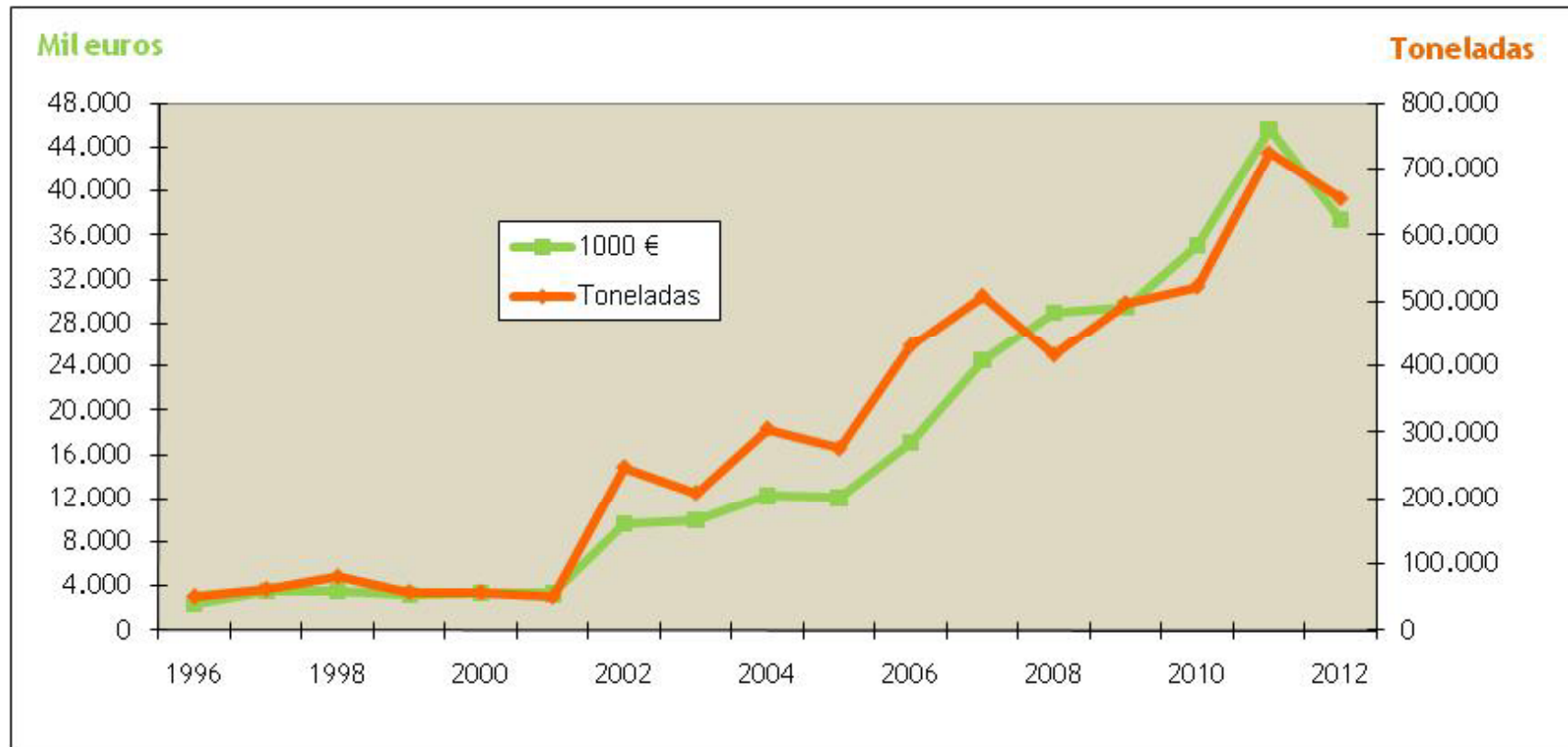
## Exports of metallic minerals (Value)





# 1. Portugal Mineral Resources: an overview

## Exports of Non-Metallic Minerals (Ton and Value)



## 2. Portuguese Strategy and Networking

As a result of the raising importance of mineral resources in Portugal, the Government launched the **National Strategy for Geological Resources – Mineral Resources** (Aug. 2012, Ministry of Economy and Employment)

DGEG has accompanied the building procedure of the **European Innovation Partnership (EIP)**, and has mobilised partners from several areas (academia, mineral associations, public entities and mining companies).

This resulted in the recent launch of a **Portuguese Partnership for Mineral Resources** (Dec.2012)



## 2. Portuguese Strategy and Networking

Axis	Measure
A – Adequacy of the mining sector bases trough the redefinition of the state role and the review of the guidelines and rules.	Redefine the role of government and other public entities with competencies on the geological resources.
	Enable the state to the correct development of its role.
	Update mining related legal instruments.
	Revision of mining law.
	Review the current system of royalties and other operating charges.
	Launch the legal framework to new realities
B - Development of the knowledge base and valuing of the mineral resources potential	Increase the mineral resources knowledge base and the assessment of exploitable mineral resources.
	Knowledge sharing and data availability.
	Specialized training and skills.
	Fostering the synergies between public and private entities.
	Fostering the geological resources inclusion in education curricula.
	Attracting investors for free potential areas.
	Fostering the exploration and exploitation permits ensuring the sustainability.
	Increase the mining activity supervision.

## 2. Portuguese Strategy and Networking

Axis	Measure
C - Dissemination and promotion of the national potential	Direct and indirect communication plans.
	Investors support and guidance.
D – Economic, environmental, social and territorial sustainability	Mineral resources protection and secure raw materials supply.
	Strengthening mining companies' production capacity.
	Strengthening the raw materials domestic market.
	Fostering mineral resources exports.
	<b>Development and engagement of local communities.</b>
	<b>Protect the health and safety of miners and local communities.</b>
	Land use planning.
	Old mining areas environmental rehabilitation.
	Resource efficiency, full use of mineral resource.
	Creation of an environmental guarantee fund for mining, closure and pos-closure periods.
	Strategic environmental assessment and environmental monitoring plans and programs.

## 2. Portuguese Strategy and Networking

### Main objective of the NSGR-MR:

Is focused on the mining industry and aims to promote a mining sector that is:

- a) **Dynamic**, ensuring the uptake and holding of investment and proper exploitation of the resources;
- b) **Sustainable** at economic, social, environmental and territorial levels;
- c) Capable to **promote the growth** of the national economy, by **ensuring supply of essential raw materials** and reinforces its contribution to the national Gross Domestic Product and exports growth;
- d) Capable to **promote regional development**, ensuring the economic revenues and employment for local people and development of the local communities.

### 3. Sustainability in Portuguese Mining

#### Until 2007:

Royalties were used to finance budget of geological resources public entities. At the end of each year the remaining amount went to the Government budget.

#### 2007-2012:

Royalties were used to finance budget of geological resources public entities **and to support the rehabilitation of abandoned mining sites.**

#### Since 2012: **New royalties policy**

### 3. Sustainability in Portuguese Mining

#### Why a new royalties policy?

*To Increase sustainability on royalties use within the 3 pillars of sustainable development (economic, social and environment):*

- By **allocating part of the money** coming from mining companies in regions where mining occurs **to improve life quality and local programs.**
- By **creating transparency conditions** for mining companies to operate **with a social “license”.**
- By increasing **public awareness, acceptance and trust on the mining sector.**



# 3. Sustainability in Portuguese Mining

## Royalties policy after 2012

### Royalties deduction and distribution:

**Up to 25% of the value of the royalties due to the Government** may be used directly on sustainable projects for the benefit of local communities.

This value may be applied to local and regional programs, plans and projects proposed by the civil society.

This principle has been considered in all mining contracts since July 2012, in a total of:

- **35 exploitation** contracts
- **12 exploration** contracts

### 3. Sustainability in Portuguese Mining

#### Rules:

**Portuguese Mining Authority** have to approve the projects programs and actions that will be developed with the use of up to 25% of the royalties.

**Portuguese Mining Authority** will keep a data base on the information spent by the mining companies in each activity/region in order to monitor this good practice.

### 3. Sustainability in Portuguese Mining

#### Royalties distribution in contrat:

*“The value of exploitation royalties may be subject to a deduction **up to 25% of the amount receivable** within the following limits:*

- *... % In local/regional social responsibility programs;*
- *... % In local, regional or national environmental programs and geological and mining heritage projects;*
- *... % To support projects proposed by local authorities (municipalities, districts) covered by the area of the mining concession;*
- *...% in R&D internal mining projects focused on mineral optimisation of metal recovery”.*

## 3. Sustainability in Portuguese Mining

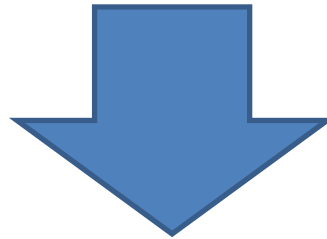
### Example of a contract

The value of exploitation royalties may be subject to a deduction up to 25% of the amount receivable within the following limits:

- 20 % In local/regional **social** responsibility programs
- 20 % In local, regional or national **environmental programs** and **geological and mining heritage projects**
- 40 % To support **projects proposed** by local authorities (**municipalities, districts**) covered by the area of the mining concession.
- 20 % in **R&D** internal mining projects focused on mineral optimisation of metal recovery.

### 3. Sustainability in Portuguese Mining

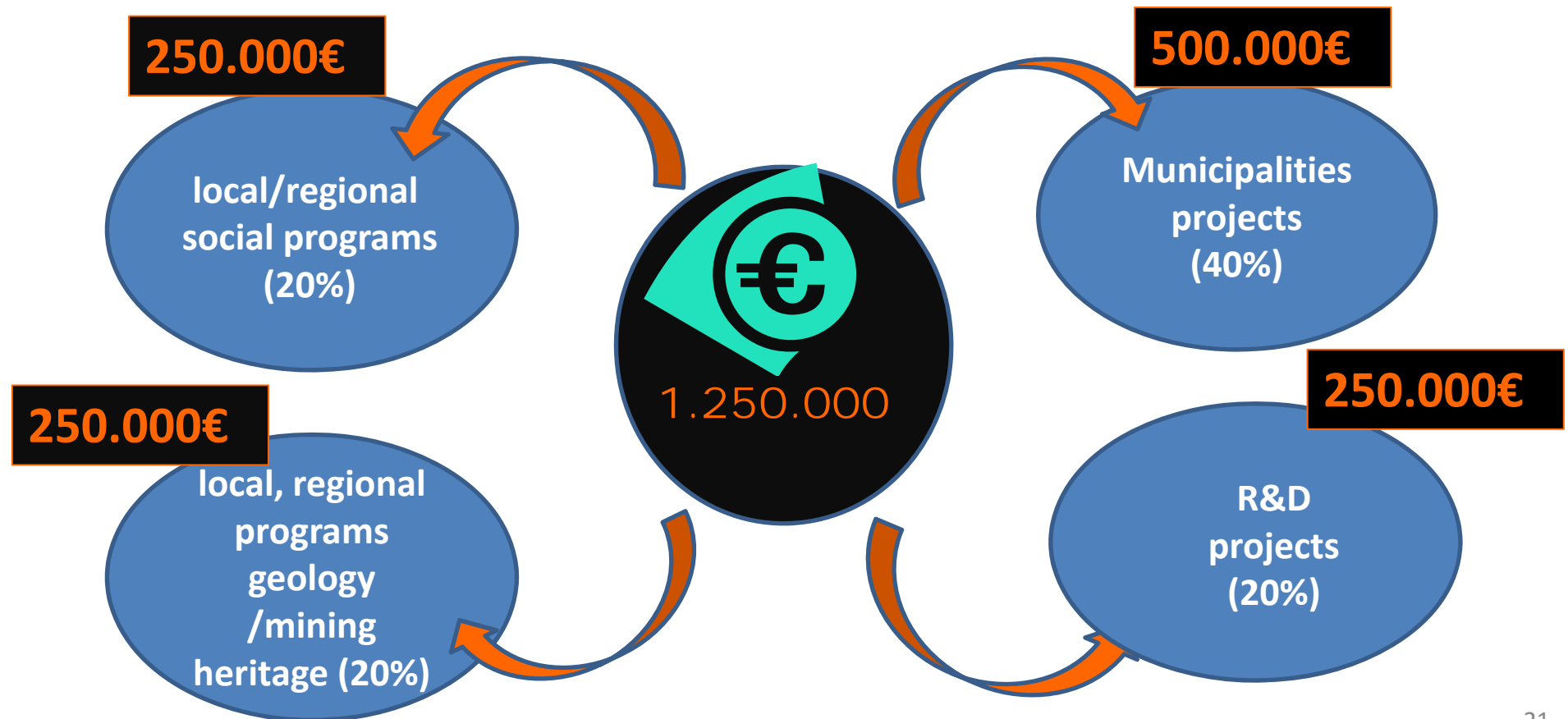
**Royalty due to the State: 5 Million €**



**Deduction up to 25%:**  
**1.250.000€**

**Royalty to be paid to the  
State 75%:**  
(finance entities budget and  
rehabilitation of mining sites)  
**3.750.000€**

### 3. Sustainability in Portuguese Mining



### **3. Sustainability in Portuguese Mining**

**We are changing...**

**This good practice is in an early stage of development so there isn't any data on the outputs of it.  
Within the next years there will be data available.**

**Our expectations are high because the Portuguese mines have payed since 2007 more than 40M€ from royalties revenues, of which 20M€ have already been applied on environmental rehabilitation of abandoned mining sites.**



### **3. Sustainability in Portuguese Mining**

#### **The recognition...**

**PORTUGAL had 3 cases of good practices selected by the EC to integrate the EC brochure with 25 cases reference:**

- 1. National Strategy for Geological Resources- Mineral Resources**
- 2. Increased sustainability from the use of royalty**
- 3. Increase the Capacity and Effectiveness of Land Use Planning**

### 3. Sustainability in Portuguese Mining

## We show you what we are doing in Portugal...

EDM is a own Portuguese State Company responsible for the Plan of Environmental Rehabilitation and Remediation works on 175 former mines exploited during the past XX<sup>th</sup> Century in this country. During the last fifteen years, EDM with the financial support of Portuguese Government and EU founding, developed specific characterization studies, designed solutions for filed works and applied monitoring systems aiming the environmental attenuation and control of most relevant impacts that relies on these old mining areas.

VALE DA ABRUTIGA - BEFORE AND AFTER



#### Old uranium mine in central Portugal

Repackaging of materials heap after previous treatment of soils

installation of the drainage system and installation of piezometers for monitoring

# 3. Sustainability in Portuguese Mining

## ARGOZELO- BEFORE AND AFTER



### Old tungsten mine in Northern Portugal

Demolition of Infrastructure and Sealing Pits and Chimneys

Confinement, Waterproofing, Drainage and Sealing heap of Ancient Mining Area Argozelo (2007)

Installation Work Unit Wastewater Treatment

# 3. Sustainability in Portuguese Mining

In line with Horizon 2020

## 1. STAND 4 MINES - Spain

Standardization of sustainable mining management systems

## 2.ADMINE - Germany

Safeguarding the mineral wealth of Europe through a regulatory framework defining and protecting mineral deposits of public importance

## 3. MINEINVEST - Áustria

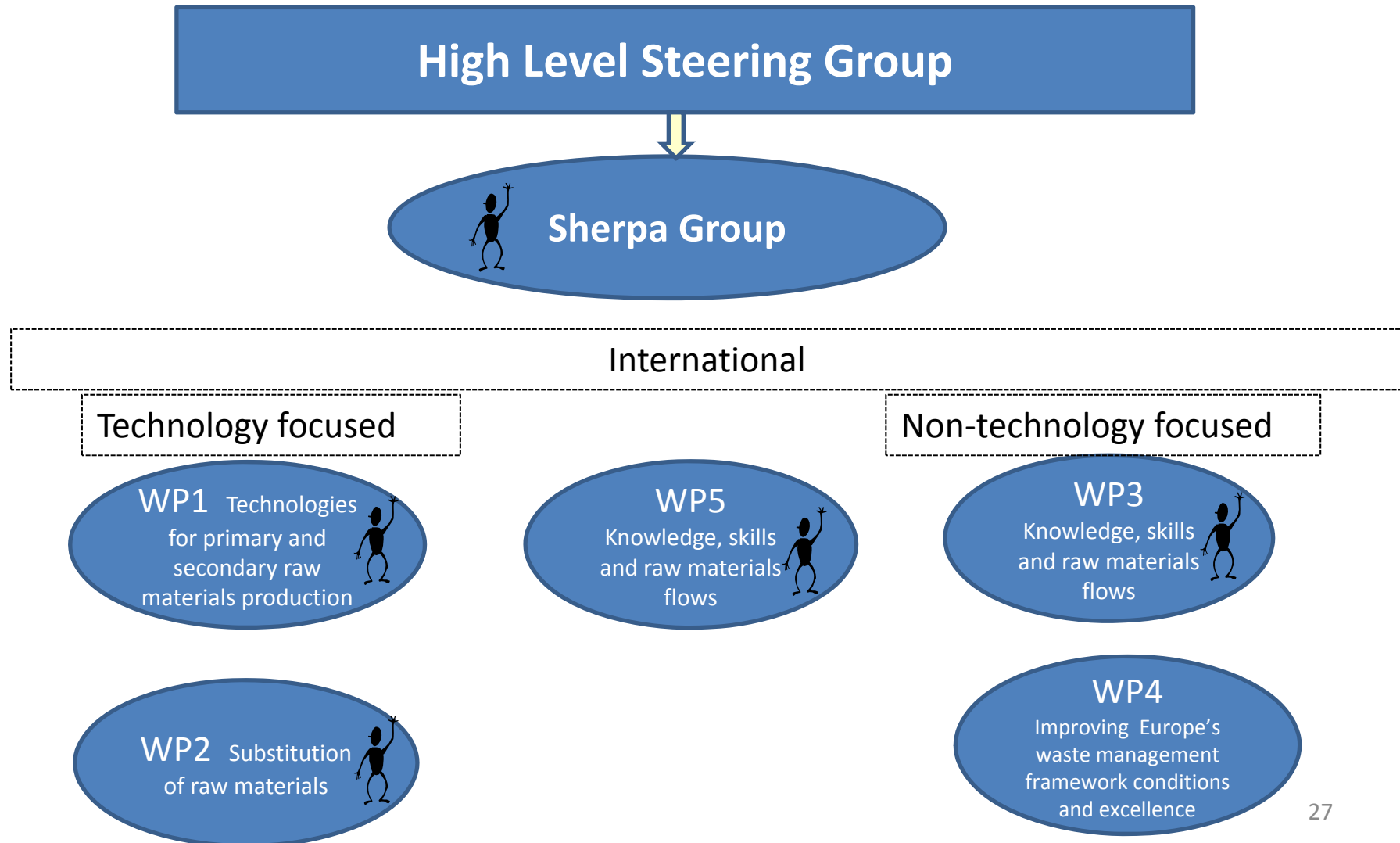
European investors guide for primary raw materials as strengthening factor of mining to the European society

## 4. RAWMATERIALS4EU - Portugal

Towards a new model of C&DW management for a circular supply chain integrating innovative solutions for a better recovery of Raw Materials



### 3. Sustainability in Portuguese Mining



## 4. Conclusions

- Portugal has political will to improve sustainability in mining, and has taken and will continue taking actions.
- Increase corporate social responsibility by encouraging actions to support local communities such as:
  - Social programs;
  - Environmental programs;
  - Valuing and promoting mining heritage;
  - Indirect employment;
- Fostering research, technical innovation and technology;
- Creation of better conditions for investors once there will be a higher social acceptance of the mining sector.

# Thank you for your attention

[www.dgeg.pt](http://www.dgeg.pt)

