

The potential and perspectives to promote and develop policies in order to achieve sustainable aggregates planning in Greece (**SNAP-Greece**)

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SUBJECT:

The **SustaiN**Able **P**lanning of aggregates (**SNAP**) in **Greece**,
namely:

- ✓ To estimate the medium- and long-term needs for aggregates in local/regional and national levels;
- ✓ To plan the way that the estimated needs will be covered by considering both primary aggregates and secondary resources;
- ✓ To include extractive waste, waste from civil works, C&DW and industrial waste (e.g. slag) in the planning.

GOAL:

In other words.....

To supply the market with a **balanced mix** of primary aggregates and secondary products from waste management processes, or/and by-products

By applying the principle of “**resource efficiency**”

*“A practice in which the primary consideration of material use begins with the concept of ‘**reduce-reuse-recycle-repair**’ stated in descending order of priority”*

Issues concerning Greece:

1. Are there strong written policies stating the will to achieve such goals??
2. Is there sufficient legislative framework??
3. Which are the competent authorities implementing the legislation?
4. Which are the competent authorities responsible for the planning?
5. Is the administrative structure of Greece capable of pursuing this goal??

Main findings - 1:

Currently, there are policies but.....

- 1) The national Sustainable Development document needs to be updated in order to include also the concept of “**resource efficiency**”
- 2) The Mineral Policy needs to be more specific and more official.....

Policies:

- 1) **“National Strategy for Sustainable Development - Greece”** (NSSD), Ministry for the Environment, Physical Planning and Public Works, 2002
 - 2) **“Greek policy for the exploitation of mineral resources”**, Ministry of Environment, Energy & Climate Change (YPEKA, 2012)
- 1) ‘minerals’ are addressed only indirectly within the statement *“rational use of natural resources”*
 - 2) Main goal: The sufficient and constant supply of Mineral Raw Materials (MRM) to the society in a sustainable financial way that is harmonized with the national sectorial development policies of other activities

Main findings - 2:

- 3) There is legislative framework for the exploitation and spatial planning of aggregates. However there are land use conflicts.
- 4) The legislative framework for Quarrying in general, including primary aggregates' production is currently under updating.

Production of primary aggregates

1. **Plenty of** (mainly limestone) **raw materials** suitable for production of primary aggregates, in accordance with L1428/1984, as amended by L2115/1993.
2. From ~100Mt in 2007, currently: 38Mt (2012)
3. Permitted only within **“Quarrying Areas”** (QAs), with some exceptions (special uses, civil works, islands, e.t.c). A bit over 50% of the country's aggregates quarries are located in QAs.
4. Permit duration: 20 years with the possibility to extend it for another 5 + 5 (in total 10) years.

Main findings - 3:

- 5) Besides primary aggregates' resources there are inert wastes and by-products that may be used as raw materials for the production of aggregates.
- 6) There is legislative framework for the management of [extractive waste](#), construction & demolition waste ([C&DW](#)) and [industrial waste](#).
- 7) The above waste streams and the primary aggregates stream follow completely separate [paths](#). There is no connection between them regarding **supply mix**.

Extractive waste

Their management **is regulated by the J.M.D.**

39624/2209/E103/2009 *“Measures and regulations for the management of waste from the extractive industry in compliance with the provisions of Directive 2006/21/EC and the amendment of the Directive 2004/35/EC”*

Inert extractive waste may become resource for the production of ***aggregates***. Based on the L. 2115/1993 amending the L. 1428/1984, any mineral producer has the right to produce also aggregates provided that the relevant fiscal obligations are ***fulfilled***.

C&DW - 1

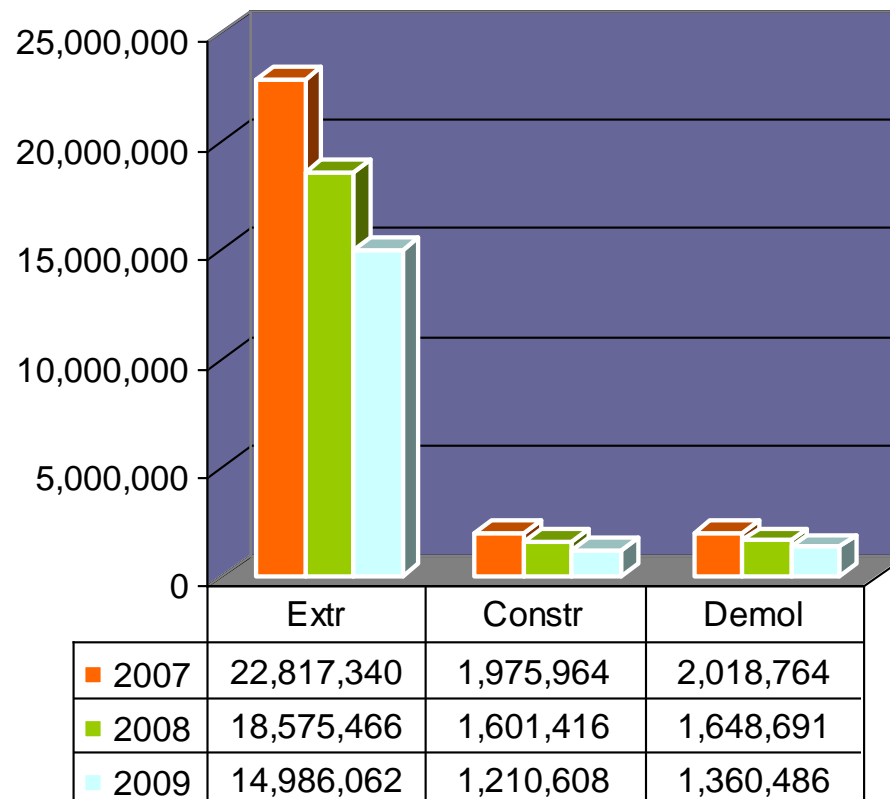
1. **J.M.D. 36259/1757/E103/2010** on *“Measures, terms and programmes for the alternative management of waste from excavations, constructions and demolitions”* (part of the L2939/2001 on “Packaging and the Alternative Management of Packaging and other Materials”).
2. **Directive 2008/98/EC** which was transposed into the Greek National Legislation with the **L4042/2012**.

Producers and importers have to organize their own or participate in collective systems of alternative waste management (return, collection, transportation and recovery), including C&DW.

C&DW - 2

- ❖ Hellenic Recycling Organization (**EOAN**).
- ❖ Office for the Alternative Management of Packaging Materials and Other Products (**YPEKA**)
- ❖ Five Collective Systems for the Alternative Management of C&DW have been approved by EOAN so far.

Production of C&DW in Greece, in tones (2007-2009)



Average [2007-2009]: Excavation=1,669 g/capita, Construction= 142 g/capita, Demolition=149 g/capita

Industrial waste (e.g. slag)

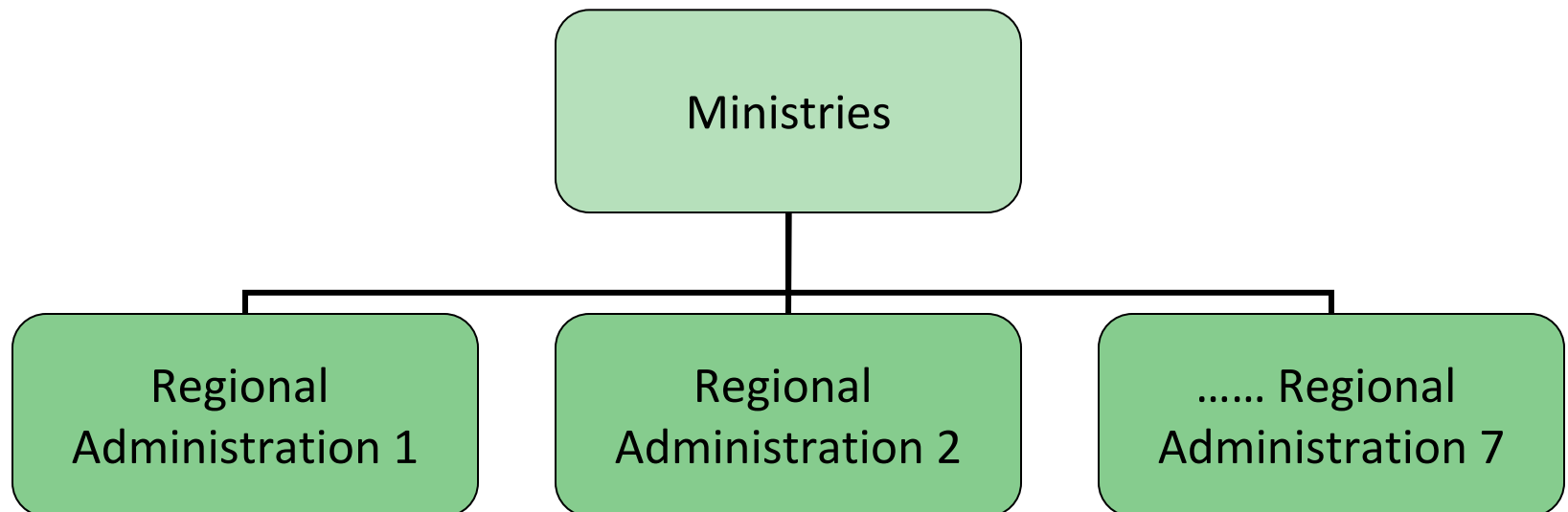
1. Inert industrial waste may be used for the production of aggregates (e.g. slag).
2. Their management is described in the E.I.A. study submitted for the permit.
3. Regulated by the directive **2008/98/EC** which was transposed into the Greek National Legislation with the **L4042/2012**.

- *Steel Slag (~0,5x10⁶ t/y) may be used for anti-slippery road surface construction*
- *2Mt of Electric Furnace Slag are produced annually by LARCO SA (one of the 5 largest ferronickel producers in the world).*

Main findings - 4:

- 8) According to current organizational structure of the Greek State, the general planning takes place at ministerial level, but the local governments have significant responsibilities in spatial planning and planning in general.
- 9) From the administrative point, the emphasis put in natural resources and resource efficiency is not sufficient for sustainable planning.
- 10) There are not bridges established yet between the competent offices for the efficient implementation of the waste legislation.

Organizational structure of the Greek State (L3852/2010 Programme Kallikratis”)



Regional administrations undertake responsibilities in close collaboration and under the supervision of the competent ministry...

Ministry

**Regional
Administration**

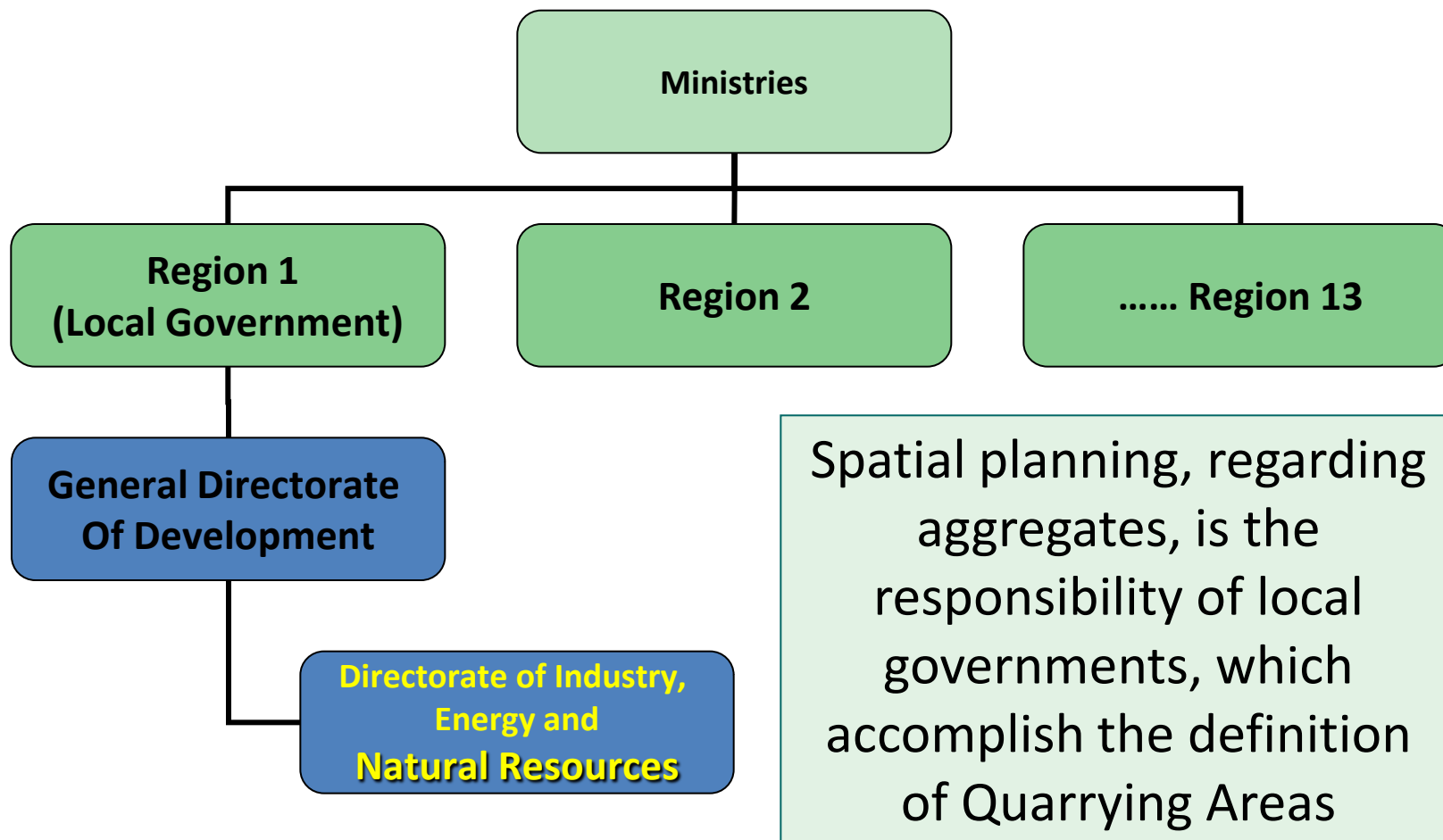
**General Directorate (GD) of
Spatial and Environmental Policies**

- 1. Directorate of Environment and land Use Planning,**
- 2. Directorate for Water, and**

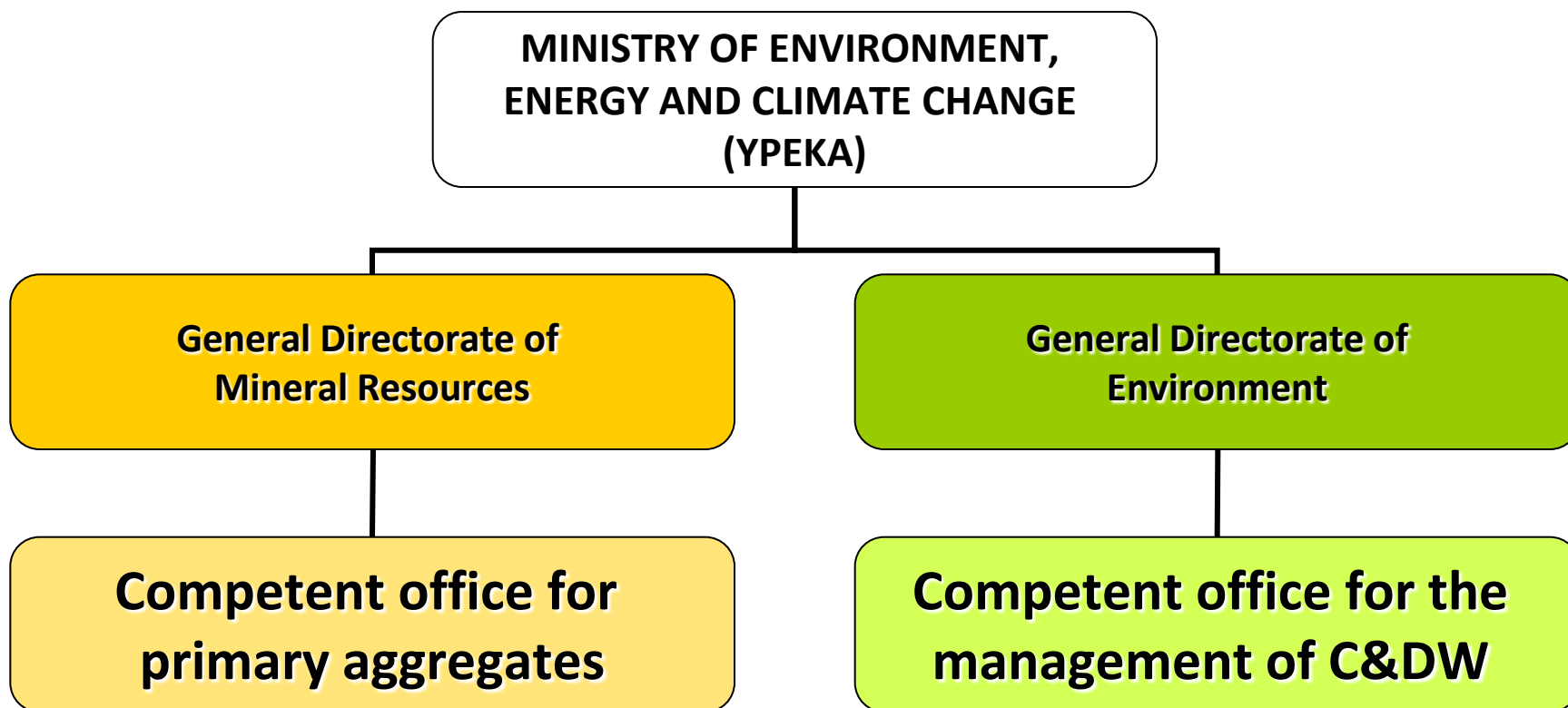
3. Directorate for Technical Control

**Department for Natural Resources
(part of the third Directorate)**

Organizational structure of the Greek State



Organizational structure of YPEKA



- Competent authorities for the **extractive waste**: The General Directorate of Environment of YPEKA or the corresponding division of Regions
- **Industrial waste**: YPEKA is responsible for the development of waste management plans per stream or number of streams (L4042/2012)
- **C&DW**: the [same](#)

Proposals - 1:

*The National Strategy
for Sustainable
Development (NSSD)
of Greece must be
updated taking
into serious
consideration the
concept of
“Resource Efficiency”.*

The clause “*rational use of natural resources*” in the 2002 document is proposed to be replaced with “*use of natural and any type of secondary resources by applying the principles of resource efficiency*”.

Proposals - 2:

The new law which will be issued expelling L669/77, 1428/84, 2115/93 e.t.c. (Quarrying legislation of Greece) must mention the possibility to cover market needs from secondary resources

It is proposed to include a responsibility for the local government and a suggestion to the committee which is involved in the spatial planning of Quarrying Areas, such as:

“The identification of needs in aggregates in regional level will be estimated after taking into consideration the extractive waste, the industrial waste, as well as the C&DW that exist or may be produced in the region”

Proposals - 3:

***Efficient enforcement
of Law 4042/2012,
article 22 on the
development of
Waste Management
Plans***

Establishment of the appropriate tools – mechanisms by YPEKA, that will allow the synergy between the separate authorities, regarding the mixed supply to the market (primary + secondary).

SNAP-SEE will contribute towards this direction.

Thank you for your attention!