# **Recycled Aggregates and Regulation**



# **CEMEX's POSITION**

# The Issue

The topic of recycled aggregates is becoming more and more important in the construction industry worldwide. Progressive depletion of natural resources, increasing barriers to the development of new quarries, and growing awareness of sustainable waste management gives ever-increasing relevance to the use of recycled aggregates in the construction sector. While this process has a country-specific momentum and scale, it is expected that materials coming from different types of wastes will become a substantial part of the market for construction materials in the near term.

# **CEMEX's Position**

In order to optimize the societal benefit of recycled aggregates, the following factors should be taken into consideration when developing or updating regulations covering this issue.

### **Standards**

**Mandatory standards and norms:** It is critical to develop a set of standards for the production and use of recycled aggregates that, on one hand, allows the full exploitation of the potential of recycled aggregates and, on the other hand, ensures an acceptable level of quality and transparency. A good example is a country such as Germany, where the issue of recycled materials has already been addressed. Different requirements for recycled aggregates have already become part of the most important norms regulating usage of construction materials such as DIN 4226-100: Norm for all aggregates used in concrete and mortar; DIN EN 206 & DIN 1045: European and German concrete standards; and TL Gestein-StB: Technical supply requirements for aggregates in road construction.

Voluntary standards associated with sustainable construction solutions (e.g., LEED, BREEAM): The main influence on the creation of incentives to use recycled aggregates is the eminent sustainable character of such types of materials. Waste-based materials may be considered to be privileged over natural aggregates and awarded additional points, which lead to increased interest and use by companies willing to comply with LEED / BREEAM certificates. Voluntary standards should also have an acceptable level of quality, as well as a transparency component.

#### Waste management legislation

Since recycled aggregates originate from different types of wastes, policies regarding waste management play a key role in determining which waste volumes will be redirected to the construction industry. The commonly adopted waste management hierarchy, "Reuse – Recycle – Recover – Landfill," is a cornerstone for national and multinational legislative actions toward sustainable waste management. From many tools that states have at their disposal, setting either maximal land filling quotas or minimal recovery levels on demolition wastes (or any other waste types that may be a source of aggregates) is crucial for the development of recycled aggregates. Such regulations can also be strengthened by setting high land filling taxes as a barrier, which forces waste owners to find more sustainable solutions and also positions recycled aggregates' processing cost as a favorable alternative when compared to land filling.

#### Balance between primary and recycled aggregates

While recycled aggregates could play an important role in making our societies more sustainable, we must not forget that, due to technical restrictions, as well as their relative availability, recycled aggregates will never be able to fully replace primary aggregates. The access to primary aggregates must, therefore, be guaranteed and should not be obstructed by excessive levies on extraction of minerals or unnecessarily complex permitting processes.

#### **Looking Forward**

The scope and potential for the use of recycled aggregates depends on many factors from country to country, ranging from regulatory frameworks to material availability. The most representative examples within CEMEX are our Northern Europe operations, with demolition waste recycling in Germany, Austria, and France and coal shale trading in Poland.

CEMEX is undertaking many actions across our network to increase the use of recycled aggregates and make it a substantial part of its business. This is an important lever for our company to maximize the efficient use of natural resources and deliver products that respond to our customers' growing environmental expectations.