

RECYCLING DEMOLITION MATERIALS

RECYCLED AGGREGATES

Environmental performance





RECYCLED AGGREGATES RECYCLING DEMOLITION MATERIALS

The drive to conserve non-renewable resources and the need to comply with regulations (French law of 13 July 1992) have prompted the recycling of demolition waste. With nearly 130 recycling facilities and over 8.7 million tonnes of recycled materials sold every year, in Europe, Eurovia has pioneered this environmental programme and become a major supplier of recycled materials for road construction. As from 1 July 2002, only ultimate waste may be landfilled, i.e. waste that under current technical and economic conditions cannot be processed to extract its recyclable content.

Recycled aggregates are obtained from selected demolition materials that are recovered, recycled and valorized.

▶ KEY BENEFITS

- ▶ Aggregates made from **recyclable products**
- ▶ **Conservation of non-renewable** raw materials
- ▶ **Reduced transport pollution and disruption**
- ▶ **Limited volumes** of materials sent to inert waste landfills

▶ KEY FIGURES

Eurovia **operates**
130 recycling facilities
worldwide

17 millions tonnes
sold in 2008 and 2009

30-year track record

Eurovia,
European n° 1
in recovery and recycling





RECYCLING: DRIVING ENVIRONMENTAL PERFORMANCE

▶ A FORWARD-LOOKING SOLUTION

The programme undertaken by Eurovia goes above and beyond compliance with the applicable regulations. It is, both technically and economically, a qualitative and innovative response to strong demand for aggregates on both new construction and renovation projects.

The process combines a number of advantages and makes “renewable” aggregates available near the places where they are needed:

- > reduction in the use of non-renewable natural aggregates,
- > flexible worksite supply,
- > limited tonnages of inert materials to be landfilled,
- > contribution to the struggle against unauthorised landfills,
- > reduced pollution due to transport (traffic, infrastructure wear and tear, GHG emissions, etc.).

▶ A PRACTICAL SOLUTION

Materials are carefully controlled at demolition sites and rigorously selected for inclusion in the waste to be recycled.

This ensures the high quality of the resulting aggregates.

Depending on the type and extent of demolition activities, the recycled material is processed either at the site where it is recovered or at a recycling facility specially fitted with permanent or temporary equipment.

HIGHLY DIVERSE SOURCES OF RECYCLABLE PRODUCTS

- > Concrete from demolition or deconstruction of civil engineering structures or buildings
- > Deconstruction of pavement base courses
- > Manufactured products from worksites (kerbs, pipes, masonry, etc.)
- > Concrete industry rejects available at prefabrication sites

EUROVIA

STAYS AHEAD OF THE CURVE

Recycled aggregates are fully-fledged materials that can be used in road construction.

The procedures for using them are spelled out in regional guides drafted by the industry in the Haute-Normandie, Ile-de-France and Rhône-Alpes areas. Eurovia also issues its own specifications, such as a ban on the use of these materials under buildings.

For earthworks and capping layers, recycled aggregates are identified and classed as F7 materials under the French P11-300 standard "Classification of materials for use in the construction of fill and road infrastructure capping layers".

These materials can also be used as trench backfill under conditions set out in the Sétra/Lcpc technical guides "Construction of fill and capping layers" (1992) and "Trench backfill" (1994).

Recycled aggregates may also be characterised according to the requirements of European aggregate standards, supplemented by the XP P 18-545 standard "Aggregates –definition, compliance and codification". According to their characteristics, they can then be used as unbound aggregates (EN 13285), hydraulically bound materials (EN 14227) or aggregates bound with foamed bitumen.

Sand and gravel from secondary installations are used in the composition of graded aggregate or hydraulically bound mixes, in compliance with the corresponding standards.

Eurovia has acquired substantial experience with the production and use of these products over a period of nearly 30 years. Based on this experience, the company fully masters their recycling and valorizing. Eurovia is working to geographically expand their use and offer increasingly effective ways to recycle them.



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