

EUROPEAN PRECAST CONCRETE



FACTBOOK

2012



BIBM - European Federation for Precast Concrete

Industry figures

- **164,000** employees
- **~ 8,000** production plants
- **5,500** companies
- **21** employees/plant on average
- **24** billion euros of production in 2011
- **2%** increase in production in 2011

Introduction

- The downturn in the world economy as a result of the financial and economic crisis has had a profound impact on most sectors, and the precast concrete industry is no exception. Although the situation varies from country to country, the precast concrete industry is facing very difficult times, especially as a result of the credit crunch affecting the construction sector.
- The crisis originated in the financial system and housing market has rapidly spread its negative effects over the real economy, via shrinking global demand and trade flows. The consequences of such a deteriorating scenario were contractions in growth. Following decreasing activity levels in the construction sector, precast concrete production volumes have declined or suffered from lower growth rates in most of the European countries.
- EU precast concrete production in 2011 is estimated at 24 b€, increasing 2% in 2011 compared with 2010.

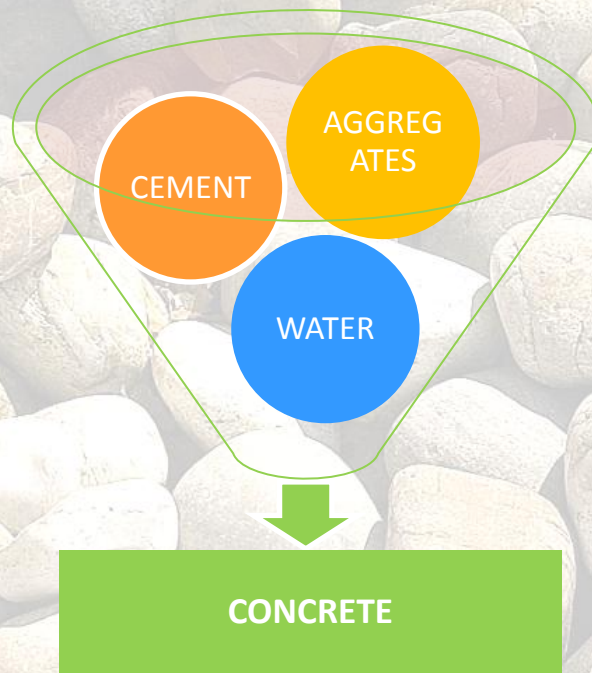


Façade



Pavement

What is precast concrete?



Being the second most consumed substance on Earth after water, concrete is a vital material.

A **precast concrete** product is a factory-made element manufactured with concrete and which, later, together with other pieces, will become part of a larger structure. Precast concrete elements are prepared, cast and hardened at specially equipped plants with a permanent location. The main advantages of such a process are

- ❖ **Safety and quality control:** properties of the hardened concrete and position of reinforcement can all be checked before inclusion of an element in the final work. The intrinsic quality of an industrial product, manufactured in a controlled environment and with accurate methods
- ❖ **Affordability:** precast concrete combines the excellent quality of factory production with a relatively inexpensive material. The costs to repair and maintain concrete structures are low.
- ❖ **Sustainability:** made of natural local raw materials, available almost everywhere, precast concrete minimises the whole life cycle impact on the environment.
- ❖ **Rapidity:** factory-made products are independent of weather conditions and can be preceded separately from construction work on site. The use of precast concrete elements can shorten by disruption times caused by construction on site

Precast concrete offers a wide range of colours, finishes and unlimited design possibilities difficult to match with any other material, while creating structures that can provide excellent energy performance from a life cycle perspective.

Precast concrete solutions provide:

- Highly energy-efficient commercial, residential, educational and healthcare facilities
- Drinking water, drainage, water sewage and sanitation systems
- Communication and transport infrastructure
- Shelter and protection against the forces of nature

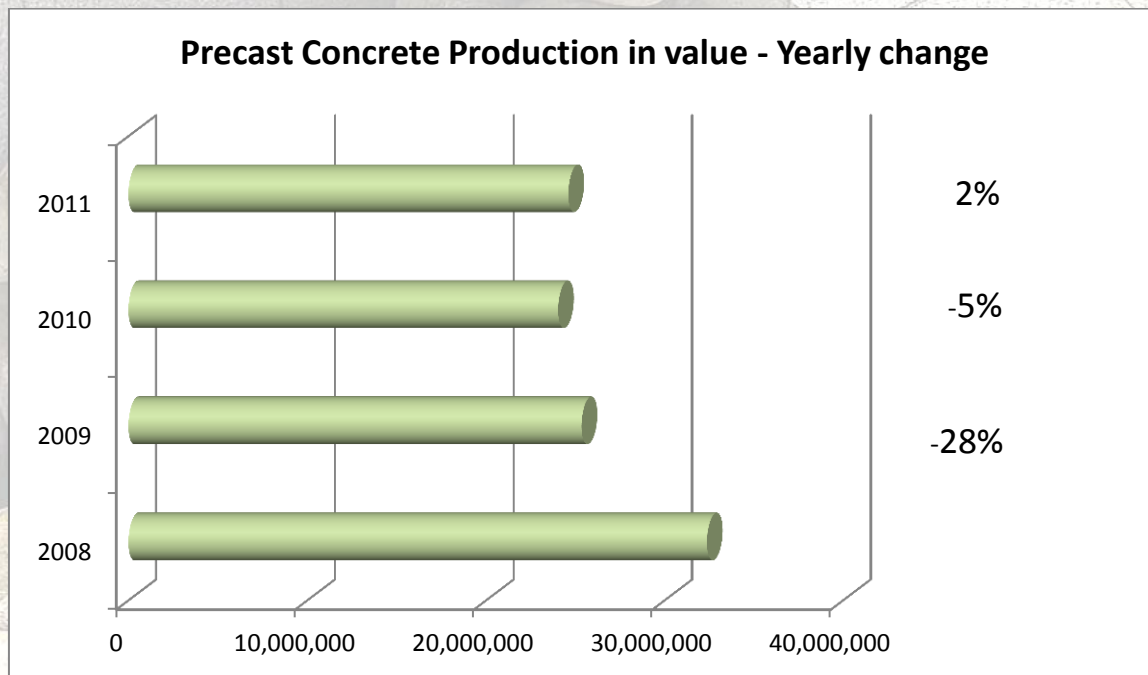


1. The state of the European precast concrete industry

A. Precast concrete production in value 2008-2011 (in k€)

	2011	2010	2009	2008
Belgium	1,287,810	1,158,764	1,104,059	1,247,124
Bulgaria	74,140	65,135	79,711	114,989
Czech Republic	601,193	547,056	598,832	794,313
Denmark	596,090	414,244	469,876	811,967
Germany	4,713,781	4,451,116	4,436,402	4,516,826
Estonia	75,517	51,462	44,871	96,131
Ireland	209,809	301,565	329,737	626,504
Greece	37,633	67,235	63,405	139,762
Spain	1,491,437	1,860,915	2,495,138	3,623,201
France	3,001,647	2,783,654	2,945,788	3,586,453
Italy	3,250,456	3,779,600	4,246,742	5,444,541
Latvia	53,126	37,558	32,599	93,881
Lithuania	82,089	68,705	62,248	143,865
Hungary	168,536	185,680	260,090	358,869
The Netherlands	1,705,788	1,536,714	1,823,000	2,072,591
Austria	723,262	719,660	721,023	826,259
Poland	1,525,548	1,353,543	1,280,945	1,741,673
Portugal	299,480	300,364	317,945	383,933
Romania	225,507	212,434	233,579	374,478
Slovenia	60,069	66,847	87,348	98,887
Slovakia	185,603	183,630	187,685	274,549
Finland	679,233	548,234	452,966	718,965
Sweden	937,832	796,279	643,457	896,037
The United Kingdom	1,900,406	1,988,205	1,945,902	2,708,137
Croatia	62,169	59,198	105,280	130,124
Norway	665,144	500,768	383,028	552,205
Total	24,613,306	24,038,566	25,351,655	32,376,267

Source: Eurostat



Source: Eurostat

B. Impact of the crisis on the precast concrete production (value) per EU Member States, 2008-2009

Belgium	-11%
Bulgaria	-31%
Czech Republic	-25%
Denmark	-42%
Germany	-2%
Estonia	-53%
Ireland	-47%
Greece	-55%
Spain	-31%
France	-18%
Italy	-22%
Latvia	-65%
Lithuania	-57%
Hungary	-28%

The Netherlands	-12%
Austria	-13%
Poland	-26%
Portugal	-17%
Romania	-38%
Slovenia	-12%
Slovakia	-32%
Finland	-37%
Sweden	-28%
The United Kingdom	-28%
Croatia	-19%
Norway	-31%
Total	-28%

Source: Eurostat

Precast concrete, tomorrow's construction material

❖ Energy efficiency in housing is the key answer to the climate change challenge

The European Union committed to reducing greenhouse gas emissions by 20% as compared to 1990 levels and to reducing by 20% our energy consumption through by improved energy efficiency by 2020.

Buildings account for the largest share of total EU energy consumption (40%) and 36% of EU CO₂ emissions. Therefore the construction sector represents a huge potential in the area of reducing energy consumption and mitigate climate change. Broad policy guidelines are already in place, policy makers have to ensure their implementation at national level through appropriate legislation.

The thermal mass of concrete helps improve the energy performance of a house or a building which reduces the effect of the initial CO₂ footprint.

❖ Provides high standard of living and safety

Concrete possesses all the advantages of a sustainable material with a low maintenance cost. It has excellent and proven fire resistance properties and it is earthquake-proof, with acoustic and thermal insulation qualities. All in all, it protects life, property and environment.

In addition, precast concrete is produced in a controlled environment which is closely monitored by plant employees, which allows great control of the quality of materials and the technicality. Since precast concrete plants are situated locally, concrete is transported only over short distances. Consequently it has a very favourable ecological footprint.

❖ Social solution to demographic changes

Residential buildings must be adapted to two distinct demographic trends. First, the aging population requires an in-depth adaptation of existing infrastructures. Precast concrete is able to respond to the growing demand for independent living, assisted living and nursing homes.

Second, the increase of young people requires affordable and enjoyable new buildings. Precast concrete offers cost effective and quick solutions with high performance to owners and residents.

❖ **Smart investment in infrastructures**

Infrastructure is the lifeline of any business activity, proper infrastructure increases business efficiency. A leading economy therefore needs excellent infrastructure including roads, power, highways, airports, ports and railways. Precast concrete offers solutions for many challenges such as noise protection, safety as well as sewage systems. Investing in upgrading existing infrastructure is a way to contribute to economic recovery with both short-term and long-term benefits.

❖ **Use of recycled and re-useable precast**

At the end of the life cycle, after end of service, concrete can be recycled and reused in other construction applications, e.g. smaller pieces of concrete are used as gravel for new construction projects. Furthermore, the concrete rubble will carbonate and absorb CO₂ from the atmosphere. 10% of total aggregate may be replaced by good quality crushed concrete e.g. in road construction.

To maintain a competitive sector, we need...

❖ **A coherent EU level housing policy**

There is an important interrelation between housing and sustainable development especially in terms of urban development, energy saving and the reduction of CO₂. Despite the increased need for housing policies in Europe, the EU has no specific legislation on housing. Europe needs a common policy on social housing in order to solve growing social problems.

❖ **An integrated policy on raw materials**

Keeping an innovative and sustainable manufacturing industry is of strategic importance for achieving the objectives of the European Union. The principal industry need is the access to quality primary and secondary raw materials in a constant and affordable way; policies on mineral materials, locally available in large quantities, should favour this accessibility in a sustainable manner.

❖ **A stable and coherent policy framework with medium and long-term objectives**

Policy setting should be driven by a long term strategy shared by decision makers at the EU and national levels. Industrial development and innovation is possible only in a stable framework, where policies covering the construction sector are well coordinated between the different actors involved.

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BIBM

BIBM (an acronym of Bureau International du Béton Manufacturé) is the European Federation for Precast Concrete. It represents 18 national associations of precast concrete, regional and product associations and companies.

The federation acts as spokesman for the precast industry to the European Union institutions and other public authorities, and communicates the industry's views on all issues and policy developments with regard to technical, environmental, energy and promotional issues. Permanent dialogue is maintained with EU institutions, international authorities and associations.

BIBM plays a significant role in the promotion of concrete and construction materials industries in cooperation with other relevant European organizations. The federation regularly co-hosts conferences on specific issues aimed at improving the market perception of the industry.

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Think Concrete, Go Precast!

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