

# Glossary

## **Absolute gross emissions**

The total amount of CO<sub>2</sub> emitted from cement production activities.

## **Absolute net emissions**

Gross emissions minus credits for indirect savings, such as use of waste as fuel.

## **Aggregates**

Quarried materials (crushed stone, gravel and sand) are the main component by volume of concrete. Aggregates are mainly used in the following construction sectors: manufacture of ready-mix concrete, concrete goods and asphalt as well as for roadbeds and railway fundaments.

## **Alternative fuels and raw materials (AFR)**

Inputs to clinker production derived from waste streams contributing energy and/or raw material.

## **Cement**

Cement is a building material made by grinding calcined limestone and clay to a fine powder. It acts as the binding agent when mixed with sand, gravel or crushed stone and water to make concrete.

## **Cementitious material or product**

A substance which when mixed with water forms a paste that subsequently sets and hardens at room temperature.

## **Clinker**

An intermediate product in cement manufacturing produced by decarbonizing, sintering, and fast-cooling ground limestone.

## **Clinker factor**

The percentage of clinker in cement (according to the WBCSD Carbon Dioxide Protocol).

## **Composite cement**

Cement with a fixed percentage of secondary cementitious materials, such as slag and fly ash, replacing the clinker portion of the cement.

## **Concrete**

A material produced by mixing cement, water and aggregates. The cement acts as a binder, and the average cement content in concrete is about 15 %.

## **Co-processing**

Using the cement manufacturing process to recycle, re-use or treat waste while simultaneously manufacturing cement in a single combined operation.

## **Corporate social responsibility (CSR)**

The commitment of business to contribute to sustainable development, working with employees, their families, the local community, and society at large to improve their quality of life.

## **Eco-efficiency**

Reduction in the resource intensity of production, i.e. the input of materials, natural resources and energy compared with the output: essentially, doing more with less.

## **Fossil fuels**

Non-renewable carbon-based fuels traditionally used by the cement industry, including coal and oil.

## **Industrial ecology**

Framework for improvement in the efficiency of industrial systems by imitating aspects of natural ecosystems, including the transformation of wastes to input materials.

## **Kiln**

Large industrial oven for producing clinker used in the manufacture of cement. In this report, "kiln" always refers to a rotary kiln.

## **Lost time injury**

A work-related injury after which the injured person cannot work for at least one full shift/full working day.

## **Mineral components**

Cement constituents which are not derived from clinker production. They include blast furnace slag, fly ash, natural pozzolan and limestone.

### Occupational health and safety (OH&S)

Policies and activities to promote and secure the health and safety of all employees, subcontractors, third parties and visitors.

### Ordinary Portland cement

Cement that consists of approximately 95 % ground clinker and 5 % gypsum.

### Ready-mix concrete

Concrete is a well-dosed mix of cement, aggregates, water and admixtures. It is one of the most widely-used building materials in the world.

### Secondary cementitious materials

Industrial by-products, such as blast furnace slag and fly ash, that have cementitious properties and are used to substitute clinker in cement.

### Specific gross emissions

The gross amount of CO<sub>2</sub> emitted per tonne of cement.

### Specific net emissions

The net CO<sub>2</sub> emissions per tonne of cement.

### Stakeholder

A group or an individual who can affect or is affected by an organization or its activities.

### Stakeholder dialogue

The engagement of stakeholders in a formal and/or informal process of consultation to explore specific stakeholder needs and perceptions.

### Subcontractors

Full-time equivalent personnel working for the company but not on its payroll.

### Waste

A substance or object whose owner discards it, wants to discard it, or has an obligation to discard it.

### WBCSD Carbon Dioxide Protocol

Internationally accepted standard methodology for monitoring and reporting CO<sub>2</sub> emissions from cement production.

### Acronyms and formulae:

AFR	Alternative fuels and raw materials
ArCli	Architectural Clinic
CAP	Community advisory panel
CECAF	Centro de Capacitación Agropecuaria y Forestal
CEO	Chief Executive Officer
CKD	Cement kiln dust
CO <sub>2</sub>	Carbon dioxide
CSDR	Corporate Sustainable Development Report
CSI	Cement Sustainability Initiative
CSR	Corporate social responsibility
EMR	Emissions monitoring and reporting
EMS	Environmental management system
EUETS	European Union's Emissions Trading System
GJ	Gigajoule
GRI	Global Reporting Initiative
GTZ	Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
GWh	Gigawatt hour
ISO	International Organization for Standardization
ISO9001	Quality standard
ISO14001	Environmental standard
kWh	Kilowatt hour
LTIFR	Lost time injury frequency rate
M	Million
MJ	Megajoule
NGO	Non-governmental organization
NO <sub>x</sub>	Nitrogen oxides
OH&S	Occupational health and safety
OHSAS18000	Occupational health and safety management standard
PEP	Plant environmental profile
SD	Sustainable Development
SO <sub>2</sub>	Sulfur dioxide
TJ	Terajoule
UN	United Nations
UNEP	United Nations Environment Programme
WBCSD	World Business Council for Sustainable Development
WRI	World Resource Institute