SUSTAINABILITY GLOSSARY

Unit key		
NR – Not reported	Mt – million tons	Mm^3 – million cubic meters
kg CO_2/t – kilograms of carbon dioxide per ton	ton – metric ton	L/t – liters per ton
M GJ – million gigajoules	g – grams	L/m^3 – liters per cubic meter
MJ/t – million joules per ton	g/t – grams per ton	ha – hectares
CHF – Swiss francs	mg/t – milligrams per ton	km – kilometers
CHF m – million Swiss francs	# – number	% – percentage

GENERAL

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

To reduce the carbon intensity of our cement, alternative fuels are used to replace fossil fuels. Alternative fuels include biomass and other sources of non-recyclable waste.

Alternative raw materials

Materials, usually from industrial sources such as wastes or by-products of other industries, to substitute quarried natural raw materials.

Calcined clay

Calcined clay is natural clay that has been heated to make it reactive with cement. The calcined clay production process is much less CO_2 intensive than clinker production.

CCUS (Carbon Capture Utilization and Storage)

Carbon capture, utilization and storage (CCUS), describes processes that capture CO_2 emissions from industrial sources and either reuses or stores it so it will not enter the atmosphere.

Cement

Cement is a hydraulic binder, i.e. a finely ground inorganic material that sets and hardens by chemical interaction with water. It acts as the binding agent when mixed with aggregates and water to make concrete.

Cementitious materials

A substance which when mixed with water forms a paste that subsequently sets and hardens at room temperature. Cementitious materials is calculated as the sum of clinker production volumes, mineral components consumed in cement production, and mineral components processed and sold externally.

Clinker

Clinker is a intermediate material produced by mixing raw materials, primarily limestone and clay, in a kiln at a temperature of approximately 1450 °C. It is the basic ingredient of cement, the one which confers hydraulic properties to cement.

Clinker factor

The percentage of clinker in cement.

Concrete

Concrete is a building material, the most man-made used substance after water. Concrete is made of cement, sand, aggregates, water and admixtures.

Fossil fuels

Non-renewable carbon-based fuels traditionally used by the cement industry.

Kiln

Large industrial oven for producing clinker used in the manufacture of cement.

Mineral components (MIC)

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

Ordinary Portland cement (OPC)

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

Ready-mix concrete (RMX)

Concrete that is produced in a ready-mix concrete site and transported to the building site using ready-mix trucks.

Recycled aggregates

Recycled aggregates come from reprocessing materials that have previously been used in construction.

Sustainable procurement

A purchasing process that looks beyond the traditional economic parameters (price, quality, availability, functionality) and includes the life cycle of products, environmental aspects and social aspects, as an integral part of sourcing decisions.

Thermal substitution rate (TSR)

Thermal substitution rate (TSR) corresponds to the relation of thermal energy consumption of alternative fuels to the total amount of thermal energy consumption in the cement kiln system.

CLIMATE AND ENERGY

Gross Scope 1 CO_2 emissions

These are the CO_2 emissions from the raw material calcination process and the combustion of kiln and non-kiln fuels, excluding emissions from pure biomass and biogenic CO_2 content of mixed fuels.

Net Scope 1 CO_2 emissions

Net emissions equal gross emissions minus emissions from alternative fuels and non-biogenic CO_2 content of mixed fuels.

Energy attribute certificates

Energy Attribute Certificates (EACs) are instruments used to track and claim the environmental attributes of power generation. Each EAC represents 1 MWh of clean energy produced and added to the grid.

Power purchase agreements (PPAs)

PPAs are long-term electricity supply contracts between Holcim, as a corporate buyer, and renewable power suppliers. They typically specify pricing, electricity quantities, and renewable sources.

POLLUTION

NOx

A generic term for the nitrogen oxides that are most relevant for air pollution, namely nitric oxide (NO) and nitrogen dioxide (NO_2). NOx is formed in the combustion of nitrogen contained in the fuels as well as in conditions where nitrogen and oxygen are present at high temperatures as is the case in cement kilns.

SO_2

Sulfur dioxide. It is released naturally by volcanic activity and is also produced as a by-product of the burning of fossil fuels or natural raw materials containing sulfur compounds.

VOC

Volatile Organic Compounds. These are organic chemicals that have a high vapor pressure at ordinary room temperature. Their high vapor pressure results from a low boiling point, which causes large numbers of molecules to evaporate or sublimate from the liquid or solid form of the compound and enter the surrounding air, a trait known as volatility.

NATURE

Freshwater withdrawal

This is the total volume of Surface water, Groundwater, Municipal or third party freshwater and quarry freshwater withdrawn by the site.The constituent content of freshwater shall be defined by local regulations.

In the absence of local regulations, a limit of 1000 mg/l of Total Dissolved Solids (TDS) recommended by the World Health Organisation is the gauge for categorising fresh and non-fresh water.

Water risk areas

We measure and report on the percentage of sites located in medium-high to extremely high water risk areas according to the WRI Aqueduct tool. The concept of water risk includes not only water stress but also water quality, regulatory, and reputational risks.

Biodiversity indicator reporting system (BIRS)

Holcim worked in partnership with the International Union for the Conservation of Nature (IUCN) to develop a methodology to measure our biodiversity level. This tool is called the Biodiversity Indicator Reporting System (BIRS).

Biodiversity importance

Quarries with biodiversity importance are defined according to categorizations introduced in 2018 following Fauna & Flora recommendations.

RESOURCE USE AND CIRCULAR ECONOMY

Construction demolition materials (CDM)

Construction demolition materials (CDM) are generated from the construction industry, renovation, repair, maintenance and demolition of houses, large building structures, roads, bridges, piers, dams and alike. This comprises alternative raw materials, recycled aggregates, recycled asphalt and return concrete reused in cement, aggregates, ready-mix concrete, asphalt and concrete products. CDM includes, but is not limited to, Construction and Demolition Waste (CDW) as defined by the EU construction & demolition waste management protocol

Waste derived resources

Waste derived resources is the sum of all waste raw materials and fuels consumed in the production processes as well as recycled materials processed sold externally. This includes alternative raw materials, alternative fuels, industrial mineral components, returned concrete, recycled aggregates and asphalt. Construction demolition materials are included in waste derived resources.

Hazardous waste

Hazardous waste comprises all forms of solid or liquid waste (excluding wastewater) as defined by the legislation in the country in which a site operates.

Non-hazardous waste

Non-hazardous waste comprises all forms of solid or liquid waste (excluding wastewater) as defined by the legislation in the country in which a site operates.

SUSTAINABLE CONSTRUCTION

Sustainable construction

Sustainable construction refers to the practice of designing, constructing, operating, maintaining and demolishing buildings and infrastructure in a way that minimises negative environmental impact.

Sustainable construction also aims to create a positive impact by regenerating the environment, conserving natural resources and enhancing the well-being of people and communities.

Environmental product declaration (EPD)

EPDs are 3rd party verified sustainability report cards for products and materials providing life cycle information on environmental impact categories.

Green building label

A rating scheme which assesses a construction's performance against environmental, social and economic criteria. Typically, the holistic performance is aggregated in rating like 'Gold', 'Silver', 'Bronze'.

Leading Green Building Labels include LEED, Green Star, BREEA , IGBC, EDGE .

ECOPact

ECOPact is Holcim's low-carbon concrete product range that delivers equal or better performance than conventional concrete and has at least 30% lower CO_2 emissions compared to a local concrete using Ordinary Portland Cement (OPC, alternatively known as CEM I) in the same strength class.

ECOPlanet

ECOPlanet is Holcim's range of low-carbon cement that delivers equal or better performance than conventional cement and has at least at 30% lower CO_2 emissions compared to Ordinary Portland Cement (OPC, alternatively known as CEM I).

ECOCycle

ECOCycle is Holcim's proprietary circular technology. ECOCycle solutions guarantee a content of minimum 10% up to 100% recycled construction demolition materials – with no compromise on quality and performance, cutting across applications from filler for road construction to replacing virgin aggregates in concrete all the way to serving as a decarbonized formulation in cement.

HEALTH AND SAFETY

Lost time injury (LTI)

A work-related injury, after which the affected person cannot work for at least one full shift or full working day any time after the shift or day on which the incident causing the work-related injury occurred, regardless of whether such person is scheduled to work.

Lost time injury frequency rate (LTIFR)

The number of lost time injuries (LTI) per million hours worked.

Occupational illness

A condition or disorder not resulting from an injury, but caused by exposure to environmental factors associated with a person's job or employment.

Occupational illness frequency rate (OIFR)

The number of Occupational Illnesses (OI) per million hours worked.

Occupational injury

Injury resulting from a work-related accident/incident or from a single exposure occurring within, and attributable to the work environment.

Total injury frequency rate (TIFR)

The number of injuries per million hours worked.

It includes any injuries causing death, lost time, modified work duty and injuries resulting in medical treatment. TIFR doesn't include first aid.

HUMAN RIGHTS AND SOCIAL IMPACT

Contribution to create positive social impact

Any initiatives Holcim puts in place to address social issues and to contribute to society that are not primarily motivated by generating a direct financial return to the Group's business such as but not limited to housing & infrastructure, health, education & skills, environment, cultural and recreational.

Human rights impact assessment (HRIA)

A HRIA is conducted with a risk mapping workshop for the full local Exco team. This is followed by consultations at sites with a broad range of stakeholders, including employees, contractors, trades unions, community members, local authorities, and NGOs. The prioritized recommendations are presented to the country CEO and a detailed local action plan is developed.

Human rights self-assessment (HRSA)

An internal process undertaken by a Group company to identify social risks and opportunities. These risks are prioritized and action plans developed and monitored to address any issues arising.

Stakeholder engagement plan (SEP)

A SEP is a structured plan typically developed in collaboration with local stakeholders, which include representatives from local government, associations, schools, and local NGOs. It aims to build and maintain constructive relationships at operational sites.

These stakeholders normally also participate in our Community Advisory Panels (CAPs), local platforms for dialogue provided by Holcim where community representatives discuss project ideas, address conflicts, or voice concerns

OWN WORKFORCE

Employees (FTE)

Employees (FTE) is the number of full-time equivalent personnel employed by the company.

Employees (headcount)

Employees (headcount) refers to the number of individuals on Holcim's payroll with an active employment contract during the reference time period, irrespective of employment contract type (full-time, part-time, student contracts, trainees, apprentices, and interns), as well as employees on garden leave, maternity/parental leave and sick leave.

Employee turnover

The number of employees leaving the organization in the reporting period as a percentage of employees at year end.