

3.2.1.2.02 Raw Materials

Change Release Communication May 2019
Valid from Jan 1, 2020 for all reporting events

Definition

Costs (including inbound freight) and revenues (net of inbound freight) relating to the consumption of raw materials acquired from other parties (including other LafargeHolcim Group companies) for use in the production process.

Note that the costs relating to the consumption of clinker purchased (within the clinker and cement sub-segment) always has to be reflected as finished goods purchased.

The cost of water consumed for the production of ready-mix concrete (within the product sub-segment ready-mix concrete) is not considered a raw material. These costs are included within the type of cost '[Production and Distribution Material](#)'.

Examples

- Sand and gravel and crushed stone (for sub-segment Ready-Mix Concrete and Asphalt)
- Cement (for sub-segment Ready-Mix Concrete)
- Fly ash, where purchased for blending
- Pozzolane
- Slag (GGBFS, GBFS, BFS and ACBFS), where purchased for blending
- Alternative raw materials (see list below)
- Slurry additives
- Cement additives
- Colored additives
- Gypsum, where used as additive
- Clinker correctives (iron oxide, sand / silica)
- All raw materials purchased for blending
- Clay
- Limestone
- Lecca
- Styrofoam
- Barrit

- Chemical admixtures (e.g. Chromium reducer for cement, chemicals used for RMX production)

The cost of chemical admixtures which add volume to, and/or influence the physical and/or chemical properties of the manufactured product are included. These are typically part of the recipe and must not be confused with the 'Chemical materials and products' (which do not add volume nor influencing the physical and/or chemical properties of the manufactured product) listed under the type of cost 'Production and distribution material'. The second are typically added in the distribution process.

Compulsory Sub-Types of Cost

- **Aggregates**
Costs (including inbound freight) relating to the consumption of aggregates purchased from other parties (including other LafargeHolcim Group companies) for use in the ready-mix concrete and asphalt production process. This normally also includes recycled asphalt consumed in asphalt production as per the [Business Segment Model boundaries](#).
- **Cement**
Costs (including inbound freight) relating to the consumption of cement purchased from other parties (including other LafargeHolcim Group companies) for use in the ready-mix concrete production process.
- **Fly Ash**
Costs (including inbound freight) relating to the consumption of fly ash purchased from other parties (including other LafargeHolcim Group companies) for use in the clinker and cement production process.
- **Pozzolane**
Costs (including inbound freight) relating to the consumption of pozzolane purchased from other parties (including other LafargeHolcim Group companies) for use in the clinker and cement production process.
- **Slag**
Costs (including inbound freight) relating to the consumption of slag purchased from other parties (including other LafargeHolcim Group companies) for use in the clinker and cement production process.
- **Alternative raw materials**
Materials that are derived from waste streams, either non-hazardous or hazardous, and are used as substitution materials to traditional raw materials for material recovery.
Costs (including inbound freight) and revenues (net of inbound freight) relating to the consumption of alternative raw materials acquired from other parties (including other LafargeHolcim Group companies) for use in the sub-segment clinker and cement. Revenue received from waste producers for the consumption of alternative raw materials is recorded as cost reduction within this compulsory sub-type of cost.

- Bitumen / Asphalt cement
Costs (including inbound freight) relating to the consumption of bitumen (asphalt cement or liquid asphalt) purchased from other parties (including other LafargeHolcim Group companies) for use in the asphalt production process.
- Gypsum
Costs (including inbound freight) relating to the consumption of gypsum (both traditional and alternative) purchased from other parties (including other LafargeHolcim Group companies) for use in the cement production process.
- RMX chemicals / admixtures
Costs (including inbound freight) relating to the consumption of chemicals / admixtures purchased from other parties (including other LafargeHolcim Group companies) for use in the RMX (and S&P) production to improve the quality of concrete during mixing, transporting, placement and curing. The following can be included: air entrainers, water reducers, set retarders, set accelerators, superplasticizers, specialty admixtures: which include corrosion inhibitors, shrinkage control, alkali-silica reactivity inhibitors, and coloring.

The following lists the most commonly used alternative raw materials in the LafargeHolcim Group:

- Lime containing sewage sludge
- Foundry sands
- Fly ashes
- Bottom ashes
- Contaminated soils
- Spent catalysts
- Industrial sludges
- Mechanical industry sludges
- Steel industry sludges
- Synthetic gypsum
- Industrial sewage sludges

Note that these materials, when consumed after the kiln, are treated in an identical manner to mineral components.

For the distinction between alternative raw materials and alternative fuels, see [Distinction between Alternative Raw Materials and Fuels](#)

3.2.1.2.02 Raw Materials

Change Release Communication May 2019
Valid until December 31, 2019

Definition

Costs (including inbound freight) and revenues (net of inbound freight) relating to the consumption of raw materials acquired from other parties (including other LafargeHolcim Group companies) for use in the production process.

Note that the costs relating to the consumption of clinker purchased (within the clinker and cement sub-segment) always has to be reflected as finished goods purchased.

The cost of water consumed for the production of ready-mix concrete (within the product sub-segment ready-mix concrete) is not considered a raw material. These costs are included within the type of cost '[Production and Distribution Material](#)'.

Examples

- Sand and gravel and crushed stone (for sub-segment Ready-Mix Concrete and Asphalt)
- Cement (for sub-segment Ready-Mix Concrete)
- Fly ash, where purchased for blending
- Pozzolane
- Slag (GGBFS, GBFS, BFS and ACBFS), where purchased for blending
- Alternative raw materials (see list below)
- Slurry additives
- Cement additives
- Colored additives
- Gypsum, where used as additive
- Clinker correctives (iron oxide, sand / silica)
- All raw materials purchased for blending
- Clay
- Limestone
- Lecca
- Styrofoam
- Barrit

- Chemical admixtures (e.g. Chromium reducer for cement, chemicals used for RMX production)

The cost of chemical admixtures which add volume to, and/or influence the physical and/or chemical properties of the manufactured product are included. These are typically part of the recipe and must not be confused with the 'Chemical materials and products' (which do not add volume nor influencing the physical and/or chemical properties of the manufactured product) listed under the type of cost 'Production and distribution material'. The second are typically added in the distribution process.

Compulsory Sub-Types of Cost

- **Aggregates**
Costs (including inbound freight) relating to the consumption of aggregates purchased from other parties (including other LafargeHolcim Group companies) for use in the ready-mix concrete and asphalt production process. This normally also includes recycled asphalt consumed in asphalt production as per the [Business Segment Model boundaries](#).
- **Cement**
Costs (including inbound freight) relating to the consumption of cement purchased from other parties (including other LafargeHolcim Group companies) for use in the ready-mix concrete production process.
- **Fly Ash**
Costs (including inbound freight) relating to the consumption of fly ash purchased from other parties (including other LafargeHolcim Group companies) for use in the clinker and cement production process.
- **Pozzolane**
Costs (including inbound freight) relating to the consumption of pozzolane purchased from other parties (including other LafargeHolcim Group companies) for use in the clinker and cement production process.
- **Slag**
Costs (including inbound freight) relating to the consumption of slag purchased from other parties (including other LafargeHolcim Group companies) for use in the clinker and cement production process.
- **Alternative raw materials**
Materials that are derived from waste streams, either non-hazardous or hazardous, and are used as substitution materials to traditional raw materials for material recovery.
Costs (including inbound freight) and revenues (net of inbound freight) relating to the consumption of alternative raw materials acquired from other parties (including other LafargeHolcim Group companies) for use in the sub-segment clinker and cement. Revenue received from waste producers for the consumption of alternative raw materials is recorded as cost reduction within this compulsory sub-type of cost.

- Bitumen / Asphalt cement
Costs (including inbound freight) relating to the consumption of bitumen (asphalt cement or liquid asphalt) purchased from other parties (including other LafargeHolcim Group companies) for use in the asphalt production process.

The following lists the most commonly used alternative raw materials in the LafargeHolcim Group:

- Lime containing sewage sludge
- Foundry sands
- Fly ashes
- Bottom ashes
- Contaminated soils
- Spent catalysts
- Industrial sludges
- Mechanical industry sludges
- Steel industry sludges
- Synthetic gypsum
- Industrial sewage sludges

Note that these materials, when consumed after the kiln, are treated in an identical manner to mineral components.

For the distinction between alternative raw materials and alternative fuels, see [Distinction between Alternative Raw Materials and Fuels](#)