# LAFARGEHOLCIM INTEGRATED PROFIT & LOSS STATEMENT 2017

ASSUMPTIONS USED IN THE IP&L CALCULATION

H

H

10m

AWannurall

H



LafargeHolcim

## MEASURING OUR VALUE: INTEGRATED PROFIT & LOSS STATEMENT

For the third consecutive year, the IP&L statement tool complements our traditional financial and sustainability metrics to give us an indication of the scale of our extended impacts. It provides a compass, pointing us in the direction of increasing sustainable value creation for shareholders, society, and the environment.

### CHF 2.7 billion

**RETAINED VALUE** 

CHF 2.1 billion

AND ENVIRONMENTAL IMPACTS

CHF 4.8 billion

TRIPLE BOTTOM LINE

#### The LafargeHolcim Integrated Profit & Loss Statement

This is the third consecutive year that LafargeHolcim has endeavored to establish the order of magnitude of its financial impacts across the triple bottom line. The LafargeHolcim Integrated Profit & Loss Statement (IP&L) represents our approach to the growing discipline of impact valuation. It is also a key element of our sustainability reporting tools and plays a vital role in helping us achieve our sustainability ambitions. The LafargeHolcim IP&L 2017 results are displayed in the graph on page 3.

#### Why impact valuation?

The IP&L is not intended to be a definitive statement of our financial accounts. Rather, it is a tool to allow us to understand and share with stakeholders the extent of our impacts and to track progress against the LafargeHolcim 2030 Plan. The tool enhances decision-making processes and sustains value creation in the long term, by raising awareness of risks and opportunities posed by externalities (through quantification), and enabling analysis on what the impact could be on the bottom line.

# /||||

UNDERSTAND THE EXTENT OF IMPACTS

Assess and quantify the risks of externalities on the LafargeHolcim bottom line, and translate environmental and social KPIs into a common language, understandable throughout the organization.



#### SHAPE THE MINDSET Have a comprehensive view

of company performance/ impact, track progress over time and engage, mobilize, and inform beyond sustainable development experts.



We published our first IP&L together with our subsidiary Ambuja Cement in 2014. Since then, the discipline of impact valuation<sup>1</sup> has been further developed and adopted by different companies. Currently we are working with a number of leading companies, which are in various stages of piloting, implementing, and communicating their efforts on impact valuation, as part of a roundtable to develop this discipline and share best practices with other interested companies. A white paper describing how impact valuation can be practically implemented has recently been finalized by this group and shared with the World **Business Council for Sustainable** Development (WBCSD) and other parties.

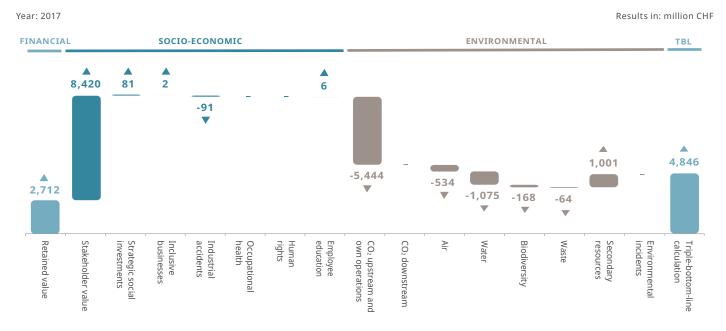
<sup>1</sup> Impact valuation refers to the application of welfare economics to determine the positive and negative value contribution of business activities to society in monetary terms.



#### ENHANCE DECISION-MAKING PROCESS

Investments lock LafargeHolcim into assets for a long period of time. The IP&L enables us to start assessing decisions from the bottom up, working with interested companies.

### MEASURING OUR VALUE INTEGRATED PROFIT & LOSS STATEMENT CONTINUED



The IP&L statement is not part of LafargeHolcim's financial reporting or projections. The IP&L is intended to raise awareness of externalities that may or may not affect LafargeHolcim's business, and to assess their relative importance. It contains preliminary considerations which may be subject to change. Furthermore, the IP&L may also change, for example as valuation techniques and methodologies evolve. It should be considered as indicative and it neither represents any final factual conclusions nor is intended to assert any factual admission by any person regarding the impact of LafargeHolcim or any of its related parties on environment or society.

#### What the IP&L tells us

The IP&L indicates that our triple-bottom-line calculation – taking into account the monetized social and environmental impacts – is 1.8 times higher than the company's retained financial earnings.

The value created in the **Socio-Economic dimension** is mainly driven by the "stakeholder value" externality, which measures our contribution to local economies through the multiplied effect of salaries, taxes, and social investment.

Sadly, and despite all our efforts, we regret that 31 employees and contractors lost their lives in 2017, down from 47 in 2016. The human cost of an occupational accident cannot be monetized, but even if only the lost capacity of a person to generate income is considered, the cost is considerable.

The impact on lives and families is immeasurable. Health and safety is a core value of the LafargeHolcim Group and we will continue to act to improve the safety and the health of employees, contractors, third parties, and communities.

In the **Environmental dimension**, the most significant externality is our  $CO_2$  emissions. These account for 74 percent of our total cost to society, and represent the largest negative impact of our operations.

The development of products and services that help end users to reduce emissions in the "use phase" will be an important lever to mitigate this impact, and a key activity in achieving our 2030 Plan ambition of generating one third of net sales from sustainabilityenhanced products and services. We are continuing our work on developing and implementing methodologies to measure CO<sub>2</sub> savings downstream. We are confident that in future years we will be able to demonstrate the positive contribution from innovative products, services, and applications.

Water usage continues to have a negative impact. However, we are confident that the plans we have in place, including the implementation of the Water Positive Impact Methodology described in the Water and nature section, will mitigate this impact.

The IP&L challenges also highlight opportunities that can help us to maximize our sustainable value creation for shareholders, society, and the environment. We are confident that as we implement the 2030 Plan, the IP&L will assist us to measure the effectiveness of our programs.

#### Where can I find more details?

This document containing all the assumptions and the calculation values used, together with a short animation explaining the IP&L statement, can be found <u>here</u>.

### ASSUMPTIONS USED IN THE IP&L CALCULATION

2017 was the second full calendar year of operation for LafargeHolcim, and the IP&L takes into account the figures and data reported in the LafargeHolcim Annual Report 2017 and the Sustainability Report 2017.

#### FINANCIAL DIMENSION

#### **Retained value (Million CHF)**

The sum of capital retained in the business is calculated by taking Recurring EBITDA and subtracting taxes, interest, and dividends. The relevant references in the LafargeHolcim Annual Report 2017 are:

- Recurring EBITDA: CHF 5, 990 Key figures LafargeHolcim Group, page 122
- Taxes: CHF 871 Consolidated Statement of Cash Flows, page 128.
- Interest: CHF 958 Financial expenses net Consolidated Statement of Cash Flows, page 128
- Dividends: CHF 1449 dividends paid on ordinary shares (CHF 1212) plus dividends paid to non-controlling interest (CHF 237) – both from Consolidated Statement of Cash Flows, page 128.

#### SOCIO-ECONOMIC DIMENSION

#### Stakeholder value – multiplied socio-economic impacts

The multiplier effect of cash transfers to employees (salaries), governments (direct and indirect taxes such as property and municipal taxes), finance cost (interests), and shareholders (dividends) has been reflected at a ratio of 1:1 on 2017 expenditure. This number has been corrected for economic inefficiencies, based on the countries in which LafargeHolcim operates based on the Corruption Perceptions Index of 2017.

The figure included for indirect taxes is the same figure as reported in the previous IP&L. This was based on data collected from the seven countries that represented around 60 percent of the total global indirect tax charge.

We assume that every dollar transferred will be spent and therefore contributes to the (local) economy. Even if not all of the money transferred is spent, the assumption of the 1:1 multiplier is justified due to secondary and tertiary socioeconomic ripple effects, caused by the cash transfers through enhanced purchasing power.

#### Strategic social investment

Here, we consider the strategic social investment in education projects, community employment projects, community shelter and infrastructure projects, community health projects, community environment projects, community development projects, and donations. For each dollar invested, an average multiplier effect is added. This multiplier effect is estimated as follows, based on independent sources:

• Education and community employment projects: Calculated by multiplying actual amount spent in 2017 on education and community employment projects by a factor of 118 percent as per CLM. This figure was derived using the assumptions below.

Investments in education generate public returns from higher income levels in the form of income taxes, increased social insurance payments, and lower social transfers. We calculated a return on investment (ROI) for education by linking the average private returns of primary, secondary, or high education to the average capita income for high, middle, and low-income (G. Psacharopoulos and H.A. Patrinos, 2004<sup>1</sup>).

We derived a formula connecting ROI for education with national incomes (GDP). The multiplier for education ROI used in the tool (118 percent) is based on the average GDP of the countries in which LafargeHolcim operates based on the income in that country.

• **Community shelter and infrastructure**: Calculated by multiplying the actual amount spent in 2017 on community shelter and infrastructure projects by a factor of 344 percent. We used the ROIs for infrastructure (250 percent based on the average factor of a BCG report<sup>2</sup>), low-income housing (231 percent) and sanitation (550 percent)<sup>3</sup>.

The multiplier for low-income housing was derived from a social ROI on low-income housing evaluated by Salman & Aslam (2009) for a case study in Pakistan<sup>4</sup>. The study evaluates the social purpose benefit flow over five years. It takes into account the economic benefits of low-income housing (savings per family household, additional income due to access to mortgage

1 Source: G. Psacharopoulos and H.A. Patrinos (2004). Returns to Investment in Education: A Further Update. Available at: <u>http://siteresources.worldbank.</u> org/INTDEBTDEPT/Resources/468980-1170954447788/3430000-1273248341332/20100426\_16.pdf

2 BCG. The cement sector: a strategic contributor to Europe's future. Available at: <u>http://www.cembureau.be/sites/default/files/documents/The Cement</u> Sector - A Strategic Contributor to Europe's Future.pdf

4 A. Salman & J. Aslam (2009). Property rights: ensuring well-being through low-income housing. Available at: <u>https://acumen.org/wp-content/</u>uploads/2013/03/Property-rights-for-low-income-housing.pdf

<sup>3</sup> G. Hutton (2012). Global costs and benefits of drinking-water supply and sanitation interventions to reach the MDG target and universal coverage. Available at: <a href="https://www.who.int/water\_sanitation\_health/publications/2012/globalcosts.pdf">www.who.int/water\_sanitation\_health/publications/2012/globalcosts.pdf</a>

finance, value of new employment generated, and potential gains from income-generation programs), but also values social benefits (savings on medical bills due to improved water access, waste management) as well as environmental benefits (cost saving by wastewater treatment). The net present value (NPV) of social and environmental benefits was compared to that of project costs (operational and capital costs) to derive the benefit cost ratio ROI of 231 percent.

For sanitation projects, a study of the WHO (2012) was used which provides insights into the costs and benefits of providing drinking-water supply and sanitation interventions.

- **Community environment:** Calculated by multiplying the actual amount spent in 2017 on community environment projects by a factor of 250 percent which is the ROI for infrastructure multiplier. This multiplier was chosen because most of the community environment projects are related to provision of infrastructure.
- Other community development projects: Calculated by multiplying the actual amount spent in 2017 on community development and other projects by a factor of 267 percent. This factor was derived using the assumptions below.

To measure the ROI for community development projects, we used the ROIs for infrastructure (250 percent), education (118 percent), low-income housing (231 percent), and sanitation (550 percent). A weighted average was calculated assuming that education and infrastructure projects account for 30 percent of community development projects. Further we assumed that sanitation and low-income housing account for 20 percent. The resulting multiplier we used for community development ROI is 267 percent.

• **Donations:** Donations (cash and in kind) has been reflected at a ratio of 1:1 on 2017 expenditure.

For these calculations, we assumed that the benefits of these investments are directly earned in the year of investment. In reality, benefits for society are distributed over several years, but if we assume that these investments occur regularly, then we believe this approach best reflects the social returns.

For future calculations, we are considering developing a methodology based on the number of direct beneficiaries as an input factor. This would allow for a more accurate reflection of efficiency gains in strategic social investments and be better aligned with the LafargeHolcim 2030 Plan (aiming to improve 75 million lives by 2030).

#### **Inclusive business**

Calculated by multiplying the actual amount spent in projects 2017 on low income housing projects by 231 percent, sanitation projects by 550 percent, and other inclusive business by 267 percent. These figures were derived using the assumptions below. For low-income housing projects and sanitation projects the same factors were used as described previously in the section on community shelter and infrastructure projects.

The multiplier for other inclusive business is based on the same multiplier and assumptions as other community development in the strategic social investment section.

For future calculations, we are considering developing a methodology based on the number of low-income customers or partners as an input factor.

#### **Occupational injuries**

Calculated by multiplying the number of fatalities by CHF 1,161,781 and lost time injuries by CHF 44,506. These figures were derived using the assumptions below.

The figure calculated reflects the economic costs due to injury or loss of life. Costs include social cost for the person affected such as loss of current and future income, and medical costs. Further, we have included the costs for community, including lost revenue, social welfare payments, and rehabilitation costs.

Costs for the employer were not taken into account, since these are already reflected in the financial section of the IP&L.

For fatalities and injuries, the data was based on an Australian research group (Safe Work Australia 2015<sup>5</sup>). The data was adjusted for GDP, based on the countries LafargeHolcim operates in.

#### **Occupational health**

This element was not quantified in 2017.

For future calculations, we aim to develop a methodology to account for lost income-generating capacity based on occupational health impacts (e.g. stress-related diseases, ergonomics).

#### Human rights

This element was not quantified in 2017.

The objective of this category is to account for any potential adverse human rights impacts. A methodology needs to be developed, taking into account the results of internal human rights assessments and reports received through processes such as an integrity line. Positive human rights impacts (e.g. human rights education for subcontractors) can also be included here.

#### **Skills out**

Calculated by multiplying the total training spend in 2017 by the annual turnover rate and the social return rate on education.

This approach enables us to estimate the wider social benefits of training (i.e. social benefits felt by our former employees). The benefits of training felt by those people who remain at LafargeHolcim will be visible internally through efficiency gains and increased revenues.

#### ENVIRONMENTAL DIMENSION

#### $\ensuremath{\text{CO}_2}$ upstream and own operations

Calculated by multiplying the tonnes of absolute gross  $\rm CO_2$  emissions by USD 31 (CHF 30). This figure was derived using the assumptions below.

The amount of  $CO_2$  considered corresponds to our absolute gross emissions (Scope 1, 2, and 3) over a full calendar year. The total tonnes (t) of  $CO_2$  are multiplied by its societal value, which we assumed to be 31 USD/tonne in 2017.

We acknowledge that there are a large range of estimates of the CO<sub>2</sub> societal value. We based our figure on a combination of reports, including the Stern report (assuming 25 USD/t in 2007), analysis made by the Environmental Protection Agency (taking the midpoint of 3 percent and 5 percent discount rates in 2017: 25 USD/t), combined with prevalent assumptions used by governments that internalize the cost of CO<sub>2</sub>.

Notably, for the purposes of comparison, we considered that, in its impact assessment of the Emission Trading Directive, the European Commission assumed a price of CO<sub>2</sub> of 30 €/t in 2020.

#### CO<sub>2</sub> downstream

Not quantified in 2017.

We aim to develop a methodology to account for  $CO_2$  savings along the value chain related to the use of our product compared to mainstream solutions.

#### Air

The damage costs of air pollutants were retrieved from studies that measure the relationship between the concentration of a pollutant and its impacts on affected receptors (social and environmental) and monetize the damages.

The social and damage costs of emissions were calculated as follows:

 Air emissions (non-metal): Calculated by multiplying the emissions in 2017 by a monetary figure derived using the assumptions below. The respective values used can be found in the annex. The damage costs of non-metal air emissions (e.g. PM, SOx, NOx, VOC, Dioxins, and furans) were based on two studies<sup>6, 7</sup>.

The TruCost study (for PM, SOx, NOx, and VOC) considers five impacts: negative health effects; reduced crop yields; material corrosion; effects on timber; and acidification of waterways. The numbers are based on global assumptions, using global averages for emission factors, without taking into account the varied dispersion of air pollutants, differences in ambient air pollution levels, or local specific factors. The damage costs of dioxins and furans were determined from a study evaluating damage costs based on national averages for 32 countries, related to health effects from ingestion and inhalation. The assumptions on this study are found in the heavy metal emissions section.

• Heavy metal emissions: Calculated by multiplying the emissions in 2017 by a monetary figure derived using the assumptions below. The respective values used can be found in the annex.

The damage costs of heavy metal emissions (Hg, Pb, Cd, As, Cr, and Ni) were determined from a study evaluating damage costs based on national averages for 32 countries, related to health effects from ingestion and inhalation (cancers but also neuro-toxic effects leading to IQ loss, as well as subsequent loss of earnings potential for Pb and Hg)<sup>8</sup>.

The analysis quantified burden, dispersion, and exposure (deposition velocities) to assess uptake by plants and animals and the impact on the human body (via consumption of tap water, agricultural crops, or animal products).

The damage costs were then calculated by multiplying physical impacts by the appropriate cost:

- The unit cost for cancer includes medical expenses, wage and productivity losses, and the willingness to pay to avoid the pain and suffering inflicted by the disease.
- The unit cost for IQ includes expenses associated with remedial learning and loss in potential lifetime earnings (costs are discounted at 3 percent but without consideration given to increases in willingness to pay with economic growth in future years).

The study does not consider the effects of groundwater contamination, adjustment of ingestion dose to account for food preparation and the implementation of remedial strategies (e.g. filtration for tap water), or the potential contribution of heavy metals and organic-micro pollutants to other impacts of fine particulate matter. Therefore, total impact attributed to these pollutants can be underestimated, but data from this study is used as an approximation to value their impacts.

#### Water

Calculated by multiplying the amount of water consumed in own operations by CHF 11.0/m<sup>3</sup> and the amount of water harvested by CHF 11.0/m<sup>3</sup>. These costs were derived using the assumptions below.

The societal cost of water is calculated based on scarcity level of the location where water is consumed or harvested. The (sitespecific) scarcity price is provided by a 2013 Trucost report and the local scarcity level is determined by the Aquastat tool from the Food and Agriculture Organization<sup>9</sup>. Since water is withdrawn and harvested in different locations, the resulting average cost per cubic meter is different.

6 Trucost Plc (2013). Natural Capital at Risk: The Top 100 externalities of business. Available at: <a href="http://www.naturalcapitalcoalition.org/js/plugins/filemanager/files/">www.naturalcapitalcoalition.org/js/plugins/filemanager/files/</a>
<u>TEEB\_Final\_Report\_v5.pdf 14</u>

- 7 EEA (2011). Revealing the cost of air pollution from industrial facilities in Europe. Available at: www.eea.europa.eu/publications/cost-of-air-pollution
- 8 EEA (2011). *Revealing the cost of air pollution from industrial facilities in Europe*. Available at: <u>www.eea.europa.eu/publications/cost-of-air-pollution</u> 9 http://naturalcapitalcoalition.org/wp-content/uploads/2016/07/Trucost-Nat-Cap-at-Risk-Final-Report-web.pdf

#### **Biodiversity**

Calculated by multiplying the net amount of hectares impacted (either disturbed or rehabilitated) by CHF 5,078/ha. These figures were derived using the assumptions below.

The net area rehabilitated or disturbed is calculated by subtracting the total hectares of rehabilitated land from the total hectares of disturbed land.

These figures do not apply to the changes observed in the reporting year, but to the total number of hectares under company responsibility. The evaluation is based on an estimated distribution of habitats: in forests; shrublands/woodlands; grasslands; ruderal habitats; bare rocks; wetlands; rivers/streams; lakes/ponds; mangroves; salt marshes; coastal zones; and cultivated land.

Based on a 2009 Economics of Ecosystems and Biodiversity (TEEB) report<sup>10</sup>, and estimated habitat distribution of impacted land, the weighted average estimated annual restoration benefits are between USD 1,010/ha and USD 73,900/ha.

#### Secondary resources and waste

The societal cost of hazardous and non-hazardous waste is calculated by multiplying the amount of non-hazardous waste which is disposed to landfill or incinerated by CHF 27/t and non-hazardous waste which is recycled or downcycled by CHF 25/t. Hazardous waste which is sent to landfill or incineration is multiplied by CHF 18/t and hazardous waste which is sent to recycling is multiplied by CHF 18/t. These multipliers are derived from an Australian study on hazardous waste<sup>11</sup>.

Costs for society include workplace injury and illnesses costs from treating the hazardous or non-hazardous waste, government and regulatory costs related to regulation of waste, and environmental costs such as climate change costs from greenhouse gas emissions, disamenity costs related to decreasing house prices from landfilling, leaching, and other air emission costs.

Both regulatory and health related costs are corrected for the countries in which LafargeHolcim operates in by GDP in those countries. Incineration and recycling costs exclude the costs for disamenity (which is assumed only applicable for landfilling) and leaching. Non-hazardous wastes are assumed to contain more organic materials and therefore contribute more to greenhouse gas emissions and therefore climate change costs. The social cost of carbon is aligned with 3.1.

Secondary resources are calculated by multiplying the amount of alternative fuels and raw materials used by CHF 27/t and industrial mineral components (MIC) and alternative aggregates by CHF 16/t. These multipliers are derived from the same Australian study on hazardous waste<sup>12</sup>.

This category includes alternative fuels and raw materials, mineral components (MIC), and reported alternative and recycled materials from ready-mix concrete (RMX) and aggregates, including asphalt.

Alternative fuels are assumed to avoid the costs of disposing non-hazardous waste to landfill or incineration. It is assumed that 80 percent of the waste would go to landfill and 20 percent would be incinerated.

Mineral components are assumed to avoid the costs of disposing non-hazardous non-organic waste to landfill. Therefore, costs related to climate change are not accounted for in the calculations. Leaching costs and disamenity costs are however included. Also, regulatory costs and injury costs are included and adjusted for by GDP in which LafargeHolcim operates.

#### Environmental incidents

These were not quantified in 2017.

The objective of this category is to account for any environmental incidents related to our operations (such as spills or fires) in the reporting year. A valuation methodology will be developed.

10 http://www.teebweb.org/media/2009/09/TEEB-Climate-Issues-Update.pdf

<sup>11</sup> Marsden Jacob Associates, SRU (2014), Estimate of the cost of hazardous waste in Australia, Available at: https://www.environment.gov.au/system/files/ resources/d1889716-2b06-44e1-a62c-3e67ff3d595f/files/cost-hazardous-waste.pdf

<sup>12</sup> Marsden Jacob Associates, SRU (2014), Estimate of the cost of hazardous waste in Australia, Available at: <u>https://www.environment.gov.au/system/files/</u> resources/d1889716-2b06-44e1-a62c-3e67ff3d595f/files/cost-hazardous-waste.pdf

## VALUES USED IN THE IP&L

SOCIO-ECONOMIC

| Торіс                   | Indicator   | Base price/<br>multiplier | Unit  | Base year | Inflation<br>factor* | Price/<br>multiplier<br>adjusted for<br>inflation | Price/<br>multiplier<br>used** |
|-------------------------|---|---------------------------|-------|-----------|----------------------|---|--------------------------------|
| Industrial<br>accidents | Number of fatalities  | 1 220 222                 |       | 2008      | 1.26                 | 1 5 20 70 2                                       | 1 1 ( 1 7 0 1                  |
|                         | Number Lost Time  | 1,220,322                 | AUD/# |           |                      | 1,538,783   | 1,161,781                      |
|                         | Injuries  | 46,748                    | AUD/# | 2008      | 1.26                 | 58,948  | 44,506                         |
| Inclusive<br>business   | Low-income housing projects   | 231%                      | %     | N/A       | 1                    | 231%  | 2.31                           |
|                         | Sanitation projects   | 550%                      | %     | N/A       | 1                    | 550%  | 5.50                           |
|                         | Other inclusive<br>business   | 267%                      | %     | N/A       | 1                    | 267%  | 2.67                           |
|                         | Education projects  | 118%                      | %     | N/A       | 1                    | 118%  | 1.18                           |
|                         | Community<br>development projects<br>(employment)                                     | 118%                      | %     | N/A       | 1                    | 118%  | 1.18                           |
|                         | Community shelter/<br>infrastructure<br>projects                                      | 344%                      | %     | N/A       | 1                    | 344%  | 3.44                           |
|                         | Community health projects   | 550%                      | %     | N/A       | 1                    | 550%  | 5.50                           |
|                         | Community<br>environment projects   | 250%                      | %     | N/A       | 1                    | 250%  | 2.50                           |
|                         | Community other<br>projects including<br>donations and<br>LafargeHolcim<br>Foundation | 267%                      | %     | N/A       | 1                    | 267%  | 2.67                           |
|                         | Donations   | 100%                      | %     | N/A       | 1                    | 100%  | 1.00                           |
| Skills out              | Trainings of<br>employees   | 17%                       | %     | N/A       | 1                    | 17%   | 0.17                           |
| Stakeholder<br>Value    | Salary  | 100%                      | %     | N/A       | 1                    | 100%  | 1                              |
|                         | Finance cost  | 100%                      | %     | N/A       | 1                    | 100%  | 1                              |
|                         | Тах   | 100%                      | %     | N/A       | 1                    | 100%  | 1                              |
|                         | Indirect tax  | 100%                      | %     | N/A       | 1                    | 100%  | 1                              |
|                         | Dividend  | 100%                      | %     | N/A       | 1                    | 100%  | 1                              |

\*\* USD converted at CHF 0.98, Euro converted at CHF 1.11 and AUD at 0.76

#### ENVIRONMENTAL

| Торіс   | Indicator   | Base price/<br>multiplier | Unit               | Base year | Inflation<br>factor* | Price/<br>multiplier<br>adjusted for<br>inflation | Price/<br>multiplier<br>used in CHF** |
|---|---|---------------------------|--------------------|-----------|----------------------|---|---------------------------------------|
| CO <sub>2</sub> upstream<br>and own<br>operations | $CO_2$ upstream and own operations                                | 25                        | USD/t              | 2007      | 1.22                 | 31  | 30                                    |
| Air   | PM  | 8,080                     | USD/t              | 2009      | 1.15                 | 9,721   | 9,131                                 |
|   | SOx   | 1,445                     | USD/t              | 2009      | 1.15                 | 1,658   | 1,633                                 |
|   | NOx   | 1,325                     | USD/t              | 2009      | 1.15                 | 1,520   | 1,497                                 |
|   | VOC   | 845                       | USD/t              | 2009      | 1.15                 | 970   | 955                                   |
|   | Dioxins and furans  | 27,000                    | €/g                | 2009      | 1.15                 | 30,981  | 30,513                                |
|   | Hg  | 1,885,000                 | €/t                | 2009      | 1.11                 | 2,097,845   | 2,331,965                             |
|   | Cd  | 29,000                    | €/t                | 2009      | 1.11                 | 32,275  | 35,876                                |
|   | As  | 349,000                   | €/t                | 2009      | 1.11                 | 388,407   | 431,754                               |
|   | Pb  | 965,000                   | €/t                | 2009      | 1.11                 | 1,073,963   | 1,193,818                             |
|   | Cr  | 38,000                    | €/t                | 2009      | 1.11                 | 42,291  | 47,010                                |
|   | Ni  | 3,800                     | €/t                | 2009      | 1.11                 | 4,229   | 4,701                                 |
| Water   | Water consumed –<br>own operations                                | 9.8                       | USD/m <sup>3</sup> | 2009      | 1.15                 | 11.2  | 11.0                                  |
|   | Water harvested   | 9.8                       | USD/m <sup>3</sup> | 2009      | 1.15                 | 11.2  | 11.0                                  |
| Biodiversity                                      | Hectares disturbed  | 4,211                     | USD/ha             | 2007      | 1.22                 | 5,156   | 5,078                                 |
|   | Hectares<br>rehabilitated   | 4,211                     | USD/ha             | 2007      | 1.22                 | 5,156   | 5,078                                 |
| Waste   | Hazardous waste<br>disposed (landfill<br>or incineration)         | 21.8                      | AUD/t              | 2012      | 1.12                 | 24.3  | 18.4                                  |
|   | Hazardous waste<br>recovered (recycling<br>or downcycling)        | 20.9                      | AUD/t              | 2012      | 1.12                 | 23.4  | 17.6                                  |
| Waste   | Non-hazardous<br>waste disposed<br>(landfill or<br>incineration)  | 32.4                      | AUD/t              | 2012      | 1.12                 | 36.2  | 27.3                                  |
|   | Non-hazardous<br>waste recovered<br>(recycling or<br>downcycling) | 30.2                      | AUD/t              | 2012      | 1.12                 | 33.8  | 25.5                                  |

\* Costs and benefits were adjusted for inflation

\*\* USD converted at CHF 0.98, Euro converted at CHF 1.11 and AUD at 0.76

#### CONTACT US AT LAFARGEHOLCIM

### Sustainable Development

Jens Diebold Phone +41 58 858 5480 groupsd@lafargeholcim.com

#### **Investor Relations**

Alessandra Girolami Phone +41 58 858 87 87 investor.relations@lafargeholcim.com