

## PERFORMANCE IN DETAIL

### NON-FINANCIAL INFORMATION



HEALTH AND SAFETY <sup>[1]</sup>	2015	2016	2017
Total fatalities	19	20	20
Employees <sup>CSI</sup>	1	3	3
Cement	0	1	0
Ready-mix	0	2	2
Aggregates	1	0	0
Other businesses	0	0	1
Contractors <sup>CSI</sup>	10	10	7
Cement	5	7	5
Ready-mix	1	2	1
Aggregates	2	1	1
Other businesses	2	0	0
Third-parties <sup>CSI</sup>	8	7	10
Cement	5	5	3
Ready-mix	2	0	3
Aggregates	1	2	1
Other businesses	0	0	3
Employee Fatality Rate (per 10,000 employed) <sup>CSI</sup>	0.2	0.7	0.7
Cement	0.0	0.8	0.0
Ready-mix	0.0	1.4	1.4
Aggregates	2.0	0.0	0.0
Other businesses	0.0	0.0	0.9
Total Lost Time Injuries (LTIs) <sup>CSI</sup>			
Employees	67	60	50
Cement	23	19	23
Ready-mix	32	27	17



Aggregates	4	8	7
Other businesses	8	6	3
Contractors	67	53	68
Cement	28	30	28
Ready-mix	9	12	18
Aggregates	10	5	5
Other businesses	20	6	17
Employee Lost Time Injury Frequency Rate [LTI FR] (per million hours worked) <sup>CSI</sup>	0.6	0.6	0.5
Cement	0.8	0.7	0.8
Ready-mix	0.9	0.8	0.5
Aggregates	0.4	0.7	0.7
Other businesses	0.3	0.2	0.1
Contractor Lost Time Injury Frequency Rate [LTI FR] (per million hours worked)			
Cement	0.6	0.9	0.7
Employee Lost Time Injury Severity Rate [LTI SR] (lost days per million hours worked)			
Cement	46.0	47.9	66.4
Compliance with CSI Driving Safety Recommended Practices (%)	89	98	98
Compliance with CSI Contractor Safety Recommended Practices (%)	89	96	98
Sites with a Health and Safety Management System implemented (%)	100	100	100
Sites certified with OHSAS 18001 (%)	10	15	16
Cement	61	65	69
Ready-mix	8	13	13
Aggregates	13	14	16
Sickness Absence Rate (%)	2.1	1.8	1.6
Employees Occupational Illness Frequency Rate [OIFR] (per million hours worked)	0.76	0.20	0.17



<b>OUR PEOPLE</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Workforce	43,117	41,853	40,878
Mexico	9,504	9,858	9,285
United States	10,183	9,783	8,380
Europe	10,525	10,386	10,413
Asia, Middle East and Africa	3,512	3,243	3,084
South, Central America and the Caribbean	6,046	5,387	5,869
Others (including Corporate and Neoris)	3,347	3,196	3,847
Breakdown of workforce by type of contract (%)			
Full time	100	99	99
Part time	0	1	1
Breakdown of workforce by level (%)			
Executive positions	5	5	7
Non-executive positions	31	31	38
Operational positions	64	64	55
Breakdown of workforce by age (%)			
Under 30	17	15	18
31-40	30	35	31
41-50	28	26	27
51 and over	25	24	24
Breakdown of workforce by gender (%)			
Male	89	88	86
Female	11	12	14



Female employees by level (%)			
Executive positions	13	13	21
Non-executive positions	38	30	31
Operational positions	3	3	2
Male to female wage ratio	1	1	1
Employees that perceive they are enabled to perform their job effectively (PEI - Performance Enablement Index) (%) <sup>[2]</sup>	76	76	77
Employees that are engaged to the company [EEI - Employee Engagement Index] (%) <sup>[2]</sup>	76	76	76
Participation rate in engagement survey (%)	75	75	82
Employee turnover rate (%) <sup>[3]</sup>	7	9	13
Employees represented by an independent union or covered by a collective bargaining agreement (%) <sup>[4]</sup>	45	40	32
Notice to employees regarding operational changes (average days)	36	30	34
Countries with practices to promote local hiring (%)	100	73	78
Training provided by operations (average hours)			
Executive positions	18	25	26
Non-executive and Operational positions	15.24	16.00	20.00
Courses offered through CEMEX Online Training Platforms (No.)	3,155.00	262.00	1,049.00
Employees with access to CEMEX Online Training Platforms (No.)	25,656	25,266	30,513
Investment on Employee Training and Development (US million)	21	26	22



<b>RESILIENT AND EFFICIENT BUILDING SOLUTIONS</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Affordable and/or resource-efficient buildings where CEMEX is involved (No.)	2,400	4,112	9,543
Affordable and/or resource-efficient buildings where CEMEX is involved (million m <sup>2</sup> )	0.15	0.07	0.92
Installed concrete pavement area (million m <sup>2</sup> )	7.32	5.39	8.78
Green building projects under certification where CEMEX is involved (million m <sup>2</sup> )	6.42	9.73	8.67
Annual ready-mix sales derived from products with outstanding sustainable attributes (%)	33.0	33.7	31.8

<b>STRENGTHEN LOCAL COMMUNITIES <sup>[5]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Families participating in Patrimonio Hoy (No.)	525,941	572,166	586,643
Individuals positively impacted from Patrimonio Hoy (No.)	2,536,466	2,756,087	2,824,025
Livable space enabled by Patrimonio Hoy (m <sup>2</sup> )	4,115,392	4,346,968	4,498,287
Families participating in our social and inclusive businesses (No.)	627,307	685,634	715,476
Individuals positively impacted from our social and inclusive businesses (No.)	2,994,453	3,272,953	3,400,247
Community partners [i.e. individuals positively impacted from our social initiatives] (No.)	9,655,198	12,604,222	14,108,456

<b>CARBON STRATEGY <sup>[6]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Absolute gross CO <sub>2</sub> emissions (million ton) <sup>CSI</sup>	43.7	43.8	42.5
Absolute net CO <sub>2</sub> emissions (million ton) <sup>CSI</sup>	40.8	41.4	39.7
Specific gross CO <sub>2</sub> emissions (kg CO <sub>2</sub> /ton of cementitious product) <sup>CSI</sup>	672	678	677
Specific net CO <sub>2</sub> emissions (kg CO <sub>2</sub> /ton of cementitious product) <sup>CSI</sup>	630	642	636
Reduction in CO <sub>2</sub> emissions per ton of cementitious product from 1990 baseline (%)	21.6	20.1	20.7
Thermal energy efficiency of clinker production (MJ/ton clinker) <sup>CSI</sup>	3,897	3,905	3,913

<b>OTHER CARBON STRATEGY INDICATORS <sup>[6]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Alternative raw material rate, cement (%) <sup>[7]</sup> <sup>CSI</sup>	6.0	6.1	6.6
Sustainable raw material rate (%) <sup>[8]</sup>	12.7	12.9	13.5
Alternative raw material rate, concrete (%)		1.4	2.0



Alternative raw material rate, other businesses (%)		2.5	10.6
Clinker/Cement factor (%) <sup>CSI</sup>	78.6	78.4	78.4
Direct energy consumption (TJ)	202,598	202,255	197,071
Indirect energy consumption (GWh)	7,643	7,698	7,483
Specific energy consumption, cement (kWh/ton)	118.8	120.3	120.5
Specific energy consumption, ready-mix (kWh/m <sup>3</sup> )	3.2	3.2	3.1
Specific energy consumption, aggregates (kWh/ton)	5	4	5
Power from renewable energy sources, cement (%) <sup>[9]</sup>		25	26

<b>TOTAL FUEL MIX (%) <sup>[6]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Primary Fuels	73.4	76.7	73.8
Petroleum coke	39.0	45.4	39.0
Coal	23.8	25.0	28.0
Fuel oil + Diesel	7.0	2.0	3.8
Natural gas	3.7	4.3	3.0
Alternative Fuels <sup>CSI</sup>	26.6	23.3	26.2
Fossil based waste	15.7	13.7	15.9
Biomass <sup>CSI</sup>	10.9	9.6	10.3

<b>WASTE MANAGEMENT <sup>[6]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Hazardous waste disposal (ton)	104,254	95,141	95,323
Cement	101,811	93,413	93,611
Ready-mix	2,171	1,501	1,528
Aggregates	271	226	183
Others	0.35	1.25	0.04



Non-hazardous waste disposal (ton)	464,493	276,491	250,453
Cement	102,504	91,223	85,247
Ready-mix	344,958	174,365	155,411
Aggregates	13,178	7,992	5,938
Others	3,853	2,912	3,858
Secondary and recycled aggregates used as a direct replacement of primary aggregates (ton)	257,761	258,494	273,939

<b>ENVIRONMENTAL AND QUALITY MANAGEMENT <sup>[6]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Sites with CEMEX Environmental Management System (EMS) implemented (%)	76	88	88
Cement	98	98	98
Ready-mix	73	88	88
Aggregates	88	86	87
Sites with ISO 14001 Certification (%)	44	46	47
Cement	74	76	79
Ready-mix	41	43	44
Aggregates	50	53	55
Sites with ISO 9001 Certification (%)	45	45	46
Cement	79	79	82
Ready-mix	46	44	45
Aggregates	36	41	43
Environmental investment (US million)	86	80	83
Total environmental incidents (No.)	753	365	334
Major environmental incidents - Category 1	2	0	0
Moderate environmental incidents - Category 2	436	64	37
Minor environmental incidents - Category 3	227	224	216
Complaints	88	77	81



Environmental fines (No.)	453	363	11
Environmental fines (US million)	0	0	0
Number of violations of legal obligations/regulations that resulted in significant fines (>10,000 USD)	2	1	2
Amount of fines/penalties related to the above (US thousand)	139	15	81
Environmental liability accrued at year end (US million) <sup>[12]</sup>	52	63	52

<b>AIR QUALITY</b> <sup>[6]</sup>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Clinker produced with continuous monitoring of major emissions (dust, NOx and SOx) (%) <sup>CSI</sup>	84	84	92
Clinker produced with monitoring of major and minor emissions (dust, NOx, SOx, Hg, Cd, Tl, VOC, PCDD/F) (%) <sup>CSI</sup>	80	80	80
Absolute dust emissions (ton/year) <sup>CSI</sup>	4,095	2,703	2,214
Specific dust emissions (g/ton clinker) <sup>CSI</sup>	90	67	47
Absolute NOx emissions (ton/year) <sup>CSI</sup>	55,318	76,552	57,973
Specific NOx emissions (g/ton clinker) <sup>CSI</sup>	1,122	1,533	1,177
Absolute SOx emissions (ton/year) <sup>CSI</sup>	13,640	13,089	10,399
Specific SOx emissions (g/ton clinker) <sup>CSI</sup>	279	253	216
Annual reduction in dust emissions per ton of clinker from 2005 baseline (%)	70	78	84
Annual reduction in NOx emissions per ton of clinker from 2005 baseline (%)	46	26	43
Annual reduction in SOx emissions per ton of clinker from 2005 baseline (%)	57	61	67





<b>WATER MANAGEMENT</b> <sup>[6][10]</sup>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Total water withdrawals by source (million m <sup>3</sup> ) <sup>CSI</sup>	75.7	62.1	61.4
Surface water	27.2	22.5	22.3
Ground water	34.4	24.3	24.7
Municipal water	10.0	11.5	10.4
Rain water	0.5	0.4	0.4
Sea water	0.4	0.0	0.0
Other	3.3	3.4	3.7
Cement (million m <sup>3</sup> )	21.6	19.7	19.7
Surface water	7.5	6.5	5.7
Ground water	12.0	11.0	11.4
Municipal water	1.4	1.3	1.4
Rain water	0.3	0.3	0.3
Sea water	0.0	0.0	0.0
Other	0.5	0.6	0.9
Ready-mix (million m <sup>3</sup> )	12.1	12.3	12.0
Surface water	0.5	0.6	0.7
Ground water	2.0	2.3	2.5
Municipal water	6.6	6.5	6.1
Rain water	0.1	0.1	0.1
Sea water	0.0	0.0	0.0
Other	2.9	2.8	2.7
Aggregates (million m <sup>3</sup> )	42.0	30.1	29.6
Surface water	19.2	15.4	15.9
Ground water	20.4	11.0	10.8
Municipal water	1.9	3.7	2.8
Rain water	0.0	0.0	0.0



Sea water	0.4	0.0	0.0
Other	0.0	0.0	0.1
Total water discharge by destination (million m <sup>3</sup> ) <sup>CSI</sup>	31.3	18.6	22.6
Surface water	17.9	11.0	11.8
Ground water	12.0	6.8	10.2
Municipal water	0.8	0.8	0.5
Sea water	0.1	0.0	0.0
Other	0.5	0.0	0.2
Cement (million m <sup>3</sup> )	5.1	4.2	5.4
Surface water	2.6	2.0	2.8
Ground water	2.0	1.7	2.2
Municipal water	0.3	0.4	0.3
Sea water	0.1	0.0	0.0
Other	0.2	0.0	0.1
Ready-mix (million m <sup>3</sup> )	0.9	0.8	0.8
Surface water	0.3	0.3	0.6
Ground water	0.1	0.2	0.1
Municipal water	0.5	0.3	0.2
Sea water	0.0	0.0	0.0
Other	0.0	0.0	0.0
Aggregates (million m <sup>3</sup> )	25.3	13.6	16.4
Surface water	15.1	8.7	8.4
Ground water	9.9	4.9	8.0
Municipal water	0.1	0.0	0.0
Sea water	0.0	0.0	0.0
Other	0.3	0.0	0.0



Total consumption (million m <sup>3</sup> ) <sup>CSI</sup>	44	43	39
Cement	16	15	14
Ready-mix	11	12	11
Aggregates	17	16	13
Specific water consumption			
Cement (l/ton)	261	247	235
Ready-mix (l/m <sup>3</sup> )	207	222	219
Aggregates (l/ton)	134	131	107
Sites with water recycling systems (%) <sup>CSI</sup>	84	79	85
Cement	77	76	77
Ready-mix	83	80	87
Aggregates	93	76	74

<b>BIODIVERSITY MANAGEMENT <sup>[6]</sup></b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Active sites with quarry rehabilitation plans (%) <sup>CSI</sup>	94	94	97
Cement	84	90	94
Aggregates	98	96	98
Active quarries within or adjacent to high biodiversity value areas (No.) <sup>CSI</sup>	64	63	64
Cement	9	9	11
Aggregates	55	54	53
Active sites with high biodiversity value where biodiversity action plans are actively implemented (%) <sup>CSI</sup>	61	63	69
Cement	89	89	73
Aggregates	56	59	68



<b>STAKEHOLDER ENGAGEMENT</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Sites with community engagement plans (%) <sup>CSI</sup>	98	98	98
Cement	97	97	98
Aggregates	98	98	98
Countries with employee volunteering programs (%)	73	75	71
Purchases sourced from locally-based suppliers (%)	95	95	89
Countries with a process to screen suppliers in relation to social and environmental aspects (%)	86	83	71
Global procurement spend assessed under the Supplier Sustainability Program (%)	13	17	25

<b>GOVERNANCE AND ETHICS</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Executives and employees actively aware of our Code of Ethics (%) <sup>[1]</sup>	80	77	77
Reports of alleged breaches to the Code of Ethics received by local ethics committees (No.)	359	453	568
Ethics and compliance cases reported during the year that were investigated and closed (%)	74	68	73
Disciplinary actions taken as a result of reports of non-compliance with the Code of Ethics, other policies or the law (No.)	180	115	185
Target countries that participated on the Global Compliance Program (antitrust, antri-bribery and insider trading) (%)	100	100	100
Countries with local mechanisms to promote employee awareness of procedures to identify and report incidences of internal fraud, kick-backs, among others (%)	100	100	100
Investigated incidents reported and found to be true related to fraud, kick-backs among others corruption incidents to government officials (No.)	0	0	0

**Footnotes:**

<sup>[1]</sup> All H&S statistics are in accordance with the CSI Reporting Guidelines

<sup>[2]</sup> Measured every 2 years through our Global Voices into Actions Survey. Figures represent results from 2017 survey

<sup>[3]</sup> Voluntary turnover

<sup>[4]</sup> Total employees including executive and non-executive positions. Considering only operations positions coverage is 57%



<sup>[5]</sup> Accumulated figures since 1998

<sup>[6]</sup> Figures do not reflect TCL operations acquired in 2017

<sup>[7]</sup> 2015 figure reflects CEMEX's operations portfolio after assets transactions

<sup>[8]</sup> Raw materials containing the required minerals for clinker/cement production with the potential to reduce impacts from ordinary processes

<sup>[9]</sup> KPI calculated as of 2016. It includes direct supply contracts plus renewable share from the power grid

<sup>[10]</sup> Historical figures adjusted given miscalculations identified after going through our first external audit for water KPIs

<sup>[11]</sup> Measured every 3 years through our Global Ethics Survey. Figure represents result from 2016 survey

<sup>[12]</sup> Figures include future estimated costs arising from legal or constructive obligations, related to cleaning, reforestation and other remedial actions to remediate damage caused to the environment. The expected average period to settle these obligations is greater than 15 years.

<sup>CSI</sup> Indicators included within the Cement Sustainability Initiative (CSI) Charter