



## CSI Key Performance Indices – UltraTech Cement Ltd.

A	KPI	FY 2012-13		FY 2013-14	
		Ultratech	Ultratech + Star Cement Co. LLC*	Ultratech	Ultratech + Star Cement Co. LLC*
i	CO <sub>2</sub> emissions – Gross (million tonnes)	26.40	28.40	26.27	28.34
ii	CO <sub>2</sub> emissions – Net (million tonnes)	26.33	28.33	26.17	28.23
iii	Specific CO <sub>2</sub> emissions – Net (kg/tonne cementitious material)	627.78	634.65	626.88	633.54
iv	Target reduction for CO <sub>2</sub>	Reduction in CO <sub>2</sub> emission intensity @ 0.5% annually up to 2015 – 16 with baseline year as 2009 – 10 resulting in the reduction of 2.96% over 6 years. This will also include CO <sub>2</sub> emissions from Star Cement Co. LLC and upcoming projects.			
v	Independently verified CO <sub>2</sub> data	Externally verified	Externally verified	Externally verified	Externally verified
<b>B</b>	<b>Fuels and Raw Materials</b>				
i	Specific heat consumption of clinker production (MJ/tonne clinker)	2,979	2,985	3,015	3,018
ii	Total Alternative Fossil Fuel Rate (% of thermal energy consumption)	1.41	1.65	2.1	2.2
a	Alternative Fuel Rate Non Biomass (% of thermal energy consumption)	0.84	0.83	1.4	1.3
b	Biomass Alternative Fuel Rate (% of thermal energy consumption)	0.57	0.82	0.7	0.9
iii	Alternative Raw Materials Rate (% total raw materials for cement production)	14.60	13.71	14.56	13.72
iv	Clinker/ Cement Ratio (%)	76.65	77.34	77	77.8
<b>C</b>	<b>Health and Safety</b>				
i	No. of fatalities (directly employed)	1	1	1	1
ii	No. of fatalities (indirectly employed)	4	4	3	3
iii	No. of fatalities (involving 3rd parties)	2	2	2	2
iv	No. of fatalities per 10,000 directly employed	0.99	0.94	1.01	0.97



v	Lost Time Injuries (LTIs) per 1 million man-hours (directly employed)	0.69	0.74	0.68	0.89
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D		Emissions Reduction			
i	NO <sub>x</sub> emissions (tonnes/year)	46,589 (14 out of 22 kilns)	48,954 (14 out of 23 kilns)	50,834 (18 out of 22 kilns)	54,038 (19 out of 23 kilns)
ii	SO <sub>2</sub> emissions (tonnes/year)	5,073 (14 out of 22 kilns)	5,073 (14 out of 23 kilns)	4,022 (18 out of 22 kilns)	4,163 (19 out of 23 kilns)
iii	Dust emissions (tonnes/year)	5,371	5,436	5,824	5,835
iv	Specific NO <sub>x</sub> emissions (g/tonne clinker)	1,441	1,409	1,583	1,562
v	Specific SO <sub>2</sub> emissions (g/tonne clinker)	157	146	125	120
vi	Specific Dust emissions (g/tonne clinker)	166	156	181	169
1	Target reduction for NO <sub>x</sub>	To be fixed after the installation of continuous monitoring system in all Kilns and the release of SO <sub>2</sub> / NO <sub>x</sub> emission limits by regulatory authorities.		To be fixed after the installation of continuous monitoring system in all Kilns	
viii	Target reduction for SO <sub>2</sub>				
ix	Target reduction for Dust				
x	% Clinker produced with monitoring of major and minor emissions	Major emissions are provided in the next row. Minor emissions are measured only on sample basis if hazardous wastes are used as fuel.			
xi	% Clinker produced with continuous monitoring of major emissions - NO <sub>x</sub> , SO <sub>2</sub> , Dust	Dust – 99.02%	Dust – 99.09%	Dust – 99.9%	Dust – 98.9%
		NO <sub>x</sub> , SO <sub>2</sub> – 86.04	NO <sub>x</sub> , SO <sub>2</sub> – 80.06%	NO <sub>x</sub> , SO <sub>2</sub> – 84.7%	NO <sub>x</sub> , SO <sub>2</sub> – 82.6%
E		Local Impact			
i	% of sites with quarry rehabilitation plans in place	100% Integrated sites	92.30% Integrated sites	100% Integrated sites	92.30% Integrated sites
ii	% of sites with community engagement plans in place	100% Integrated sites	92.30% Integrated sites	100% Integrated sites	92.30% Integrated sites
iii	No. of active sites where biodiversity; issues are addressed	12	12	12	12
iv	No. of active quarries within, containing or adjacent to areas designated for their high biodiversity value	Nil	Nil	Nil	Nil

\* Data of Star Cement Co. LLC includes the operations at Ras Al Khaimah, Ajman and Abu Dhabi in UAE, Bahrain and Bangladesh.