



## CSI Key Performance Indices – UltraTech Cement Ltd.

KPI		FY 2010-11		FY 2011-12	
A	Climate Protection (excludes Captive Power)	Without Star Cement Co. LLC	With Star Cement Co. LLC*	Without Star Cement Co. LLC	With Star Cement Co. LLC*
i	CO <sub>2</sub> emissions – Gross (tonnes)	25,740,501	27,469,355	26,187,142	28,133,152
ii	CO <sub>2</sub> emissions – Net (tonnes)	25,696,642	27,425,258	26,144,199	28,077,825
iii	Specific CO <sub>2</sub> emissions – Net (kg/tonne cementitious material)	631.22	636.59	633.87	638.65
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)	2,989	2,986	2990	2984
ii	Total Alternative Fossil Fuel Rate (% of thermal energy consumption)	1.14	1.07	1.03	1.26
a	Alternative Fuel Rate Non Biomass (% of thermal energy consumption)	0.59	0.56	0.56	0.67
b	Biomass Alternative Fuel Rate (% of thermal energy consumption)	0.55	0.51	0.47	0.59
iii	Alternative Raw Materials Rate (% total raw materials for cement production)	14.88	14.1	14.61	13.75
iv	Clinker/ Cement Ratio (%)	75.97	76.63	76.75	77.42
<b>C</b>	<b>Health and Safety</b>				
i	No. of fatalities (directly employed)	1	1	1	1
ii	No. of fatalities (indirectly employed)	6	6	2	2
iii	No. of fatalities (involving 3rd parties)	0	0	7	7
iv	No. of fatalities per 10,000 directly employed	1.26	1.18	1.3	1.36
v	Lost Time Injuries (LTIs) per 1million man-hours (directly employed)	0.95	0.9	0.82	0.79



<b>D Emissions Reduction</b>					
i	NO <sub>x</sub> emissions (tonnes/year)	42,920 ( 21 out of 21 Kilns )	43,693 ( 22 out of 22 Kilns )	48397 ( 21 out of 21 Kilns )	51553 ( 22 out of 22 Kilns )
ii	SO <sub>2</sub> emissions (tonnes/year)	4,205 ( 21 out of 21 Kilns )	4,226 ( 22 out of 22 Kilns )	4146 ( 21 out of 21 Kilns )	4246 ( 22 out of 22 Kilns )
iii	Dust emissions (tonnes/year)	6,717	6,741	6,348	6,405
iv	Specific NO <sub>x</sub> emissions (g/tonne clinker)	1,370	1,308	1519	1505
v	Specific SO <sub>2</sub> emissions (g/tonne clinker)	141	127	130	124
vi	Specific Dust emissions (g/tonne clinker)	200	187	186	175
vii	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.			
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 – as in the next row. Minor emissions – 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 – 80%	Dust – 81%	Dust – 80%	Dust – 81%
		NO <sub>x</sub> , SO <sub>2</sub> – 23%	NO <sub>x</sub> , SO <sub>2</sub> – 22%	NO <sub>x</sub> , SO <sub>2</sub> – 23%	NO <sub>x</sub> , SO <sub>2</sub> – 22%
<b>E Local Impact</b>		<b>Plants Reported</b>			
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	2	2	2	2
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.