



CEMEX UK CLIMAFUEL CASE STUDY

Neville Roberts
Technical Director
CEMEX UK
October 2008



- 0 -



A GLOBAL LEADER



Global Cement Ranking
(2007 pro-forma, M metric tonnes)

Company	Capacity
Lafarge	186
Holcim	180
CEMEX	97
Anhui Conch	95
Heidelbergcement	90
China Nat Bldg Mat	67
Italcementi	65
Taiheiyu	40
Buzzi-Unicem	35
Votorantim	32
Eurocement	31
Cimpor	26
Siam Cement	24



Global Ready-Mix Ranking
(2007 pro-forma, M cubic meters)

Company	Sales
CEMEX	90
Heidelberg	47
Lafarge	46
Holcim	45
Italcementi	23
CRH	23
Buzzi	17
Votorantim	11
Vicat	8.8
Tarmac	8.6
Cimpor	6.9
Valderrivas	6.8
Titan	5.9



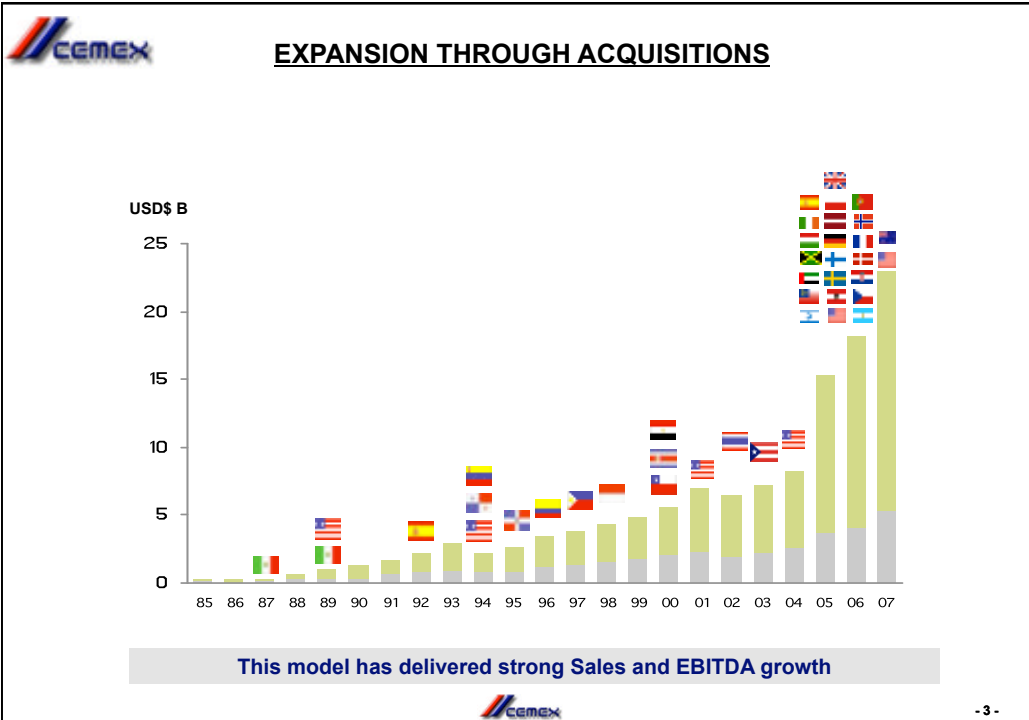
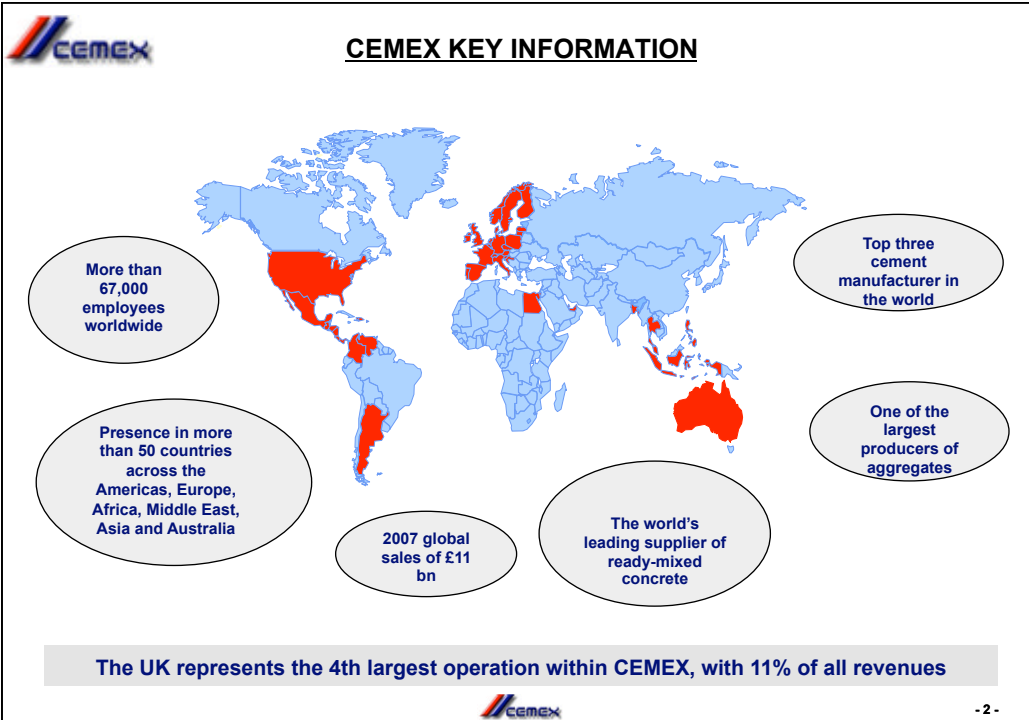
Global Aggregates Ranking
(2007 pro-forma, M metric tonnes)

Company	Sales
Heidelbergcement	336
CEMEX	277
Lafarge	264
CRH	262
Vulcan	228
Holcim	188
Martin Marietta	165
Colas	113
Tarmac	91
Vinci	76
Italcementi	58
MDU	33
Siam Cement	27

Source: Company publications, Comp Intel databases, CXcso analysis



- 1 -





SPECIFICATIONS OF CLIMAFUEL

SPECIFICATIONS: Climafuel

Parameter Typical Values

Calorific Content* (LHV = Lower Heating Value)
20 MJ/kg - +/- 2 MJ/KG
Moisture <15 % w/w - + 0
Bulk Density 180 kg/m3 working range 100 - 300 kg/m3
Particle size <30mm in any two dimensions
Ashes <15% w/w
Biomass Content >50%
Sulphur* 1% w/w
Chlorine* 0.8% w/w
Flourine* 0.5% w/w
Bromine* 0.25% w/w
Iodine* 0.25% w/w

Metals mg/kg (max)

Mercury* 10
Cadmium* 20
Thallium* 20
Total Group II Metals* 30
Antimony* 150
Arsenic* 100
Chromium* 150
Cobalt* 75
Copper* 500
Lead* 100
Manganese* 150
Nickel* 150
Tin* 50
Vanadium* 100
Total Group III Metals* 800



- 4 -



SOUTH FERRIBY RECEPTION FACILITY



- 5 -



BARRINGTON RECEPTION & FEEDER SYSTEM



- 6 -



GRIMSBY DEBALER



- 7 -



MYTHS SURROUNDING THE BURNING OF ALTERNATIVE FUELS IN THE CEMENT INDUSTRY

1. Cement kilns cannot burn pure MSW derived RDF. (Untrue)
2. The cement industry specification for RDF is too difficult to produce. (Untrue)
3. Cement kiln production reduces when burning RDF. (Untrue)
4. The EA are difficult to deal with when the cement companies want to burn RDF. (Untrue)
5. Emissions are adversely effected by burning RDF. (Untrue)
6. There are not sufficient producers of RDF in the UK. (Untrue)
7. This is not a serious, sustainable initiative on the part of the cement industry. (Untrue)
8. It is difficult to burn RDF on a cement kiln. (True and untrue)



- 8 -



CEMEX UK OVERALL ALTERNATIVE FUELS PERFORMANCE?

<u>YEAR</u>	<u>TOTAL WASTE FUELS BURNT (kt)</u>
05	40
06	60
07	90
08 (Forecast)	225
09	?

IN 2008 WE WILL DISPLACE OVER 150Kt OF PRIMARY FUEL & DIVERT ABOUT 300 Kt OF WASTE FROM LANDFILL.



- 9 -



WHAT NEXT FOR WASTE FUELS IN CEMEX UK?

1.0 CLIMAFUEL REPLACEMENT RATE

- Achieve 60% thermal replacement on all sites.

2.0 RUGBY MBT PLANT

- Two planning applications submitted for an MBT plant in the Rugby area which will supply all of Rugby Works' needs.

ALTERNATIVE FUELS ARE A CORNERSTONE OF CEMEX OPERATIONS STRATEGY IN THE UK AND IN THE REST OF EUROPE.

