### **British Precast Targets 2012**

British Precast is pleased to announce that analysis of industry data from 2012 shows that 12 of our original 14 Sustainability indicator targets approved by Council in 2009 have been achieved. British Precast members had committed to achieving the following targets by 2012 compared with the baseline year of 2008:

Reducing overall kWh / tonne of energy used in production by 10% ✓ Achieved

Reducing CO2 emissions from production by 10% ✓ Achieved

Reducing kg / tonne waste to landfill by 10% ✓ Achieved

Increasing the proportion of alternative cement additions (as a % of total cement) to 25% X Failed at 23.8%

Increasing the proportion of recycled / secondaryaggregates (as a % of total aggregates) to 25% X Failed at 21.3%

Reducing mains water consumption by 5% ✓ Achieved

Reducing ground water consumption by 5% 

✓ Achieved

Reducing reportable injuries per 100,000 direct employees by 10% per year Achieved

Increasing the % of production sites covered by an EMS (e.g. ISO 14001) to 85% Achieved

Increasing the % of prod uction sites covered by a Quality system (e.g. ISO 9001) to 85% ✓ Achieved

Reducing the convictions for air and water emissions to zero Achieved

Improving the capture of Transport data Achieved

Increasing the % of employees covered by a certified management system (e.g. ISO 9001 / ISO 14001 / OHSAS 18001) to 85% ✓ Achieved

Maintaining the % of relevant production sites that have community liaison activities at 100% ✓ Achieved

For further information, please contact
Dr Hafiz Elhag, British Precast Sustainability Manager,
hafiz.elhag@britishprecast.org

or refer to the British Precast website:

www.britishprecast.org www.sustainableprecast.com www.sustainableconcrete.org.uk

#### **RAISING THE BAR INITIATIVE**

It is now a mandatory requirement for all companies joining British Precast to sign up to the Precast Sustainability Charter.

In order to help members keep track of their status under the Raising the Bar scheme and to highlight to clients, specifiers and customers the various management system credentials of members, British Precast maintains a microsite www.bpcfcharter.com

2012/13 saw a considerable rise in the number of companies joining the initiative, committing to our Sustainability Charter and reporting on KPIs. Our figures show that members of British Precast and their supply chain have collectively managed to save up to 0.14 Million tonnes of CO2 last year (2008 baseline).



This year, our initiative was recognised by one of the most prestigious and credible sustainability initiatives in the UK. Raising the Bar was the only business initiative to be shortlisted for this year's ClimateWeek Awards, best campaign category.

#### PRECAST SUSTAINABILITY CHARTER

The Sustainability Charter was launched on the 29th November 2007. Members were originally asked to make a voluntary commitment to the following requirements:

Develop products that improve the quality and sustainability of the built environment

Liaise effectively with local communities to foster mutual understanding and respect

Manage all waste streams effectively and minimise waste disposal to landfill

Measure, report and improve performance on sustainability issues

 $\label{thm:misepollution} \textbf{Minimise pollution and emissions associated with production and transportation}$ 

Operate in a responsible manner to protect employees, contractors and visitors

Operate in an efficient and financially sustainable manner without compromising legal, quality or sustainability principles

Operate to the highest ethical standards necessary to develop a skilled and competent workforce

Operate to the highest quality standards necessary to satisfy customers and consumers

Protect and enhance the natural environment adjacent to or affected by precast

Recognise that competition encourages the development of more sustainable products and practices

Use energy more effectively and reduce carbon footprints

Use primary materials more efficiently and promote the use of secondary materials

Use water more efficiently and minimise demands on mains water supplies

Work constructively with other organisations to deliver sustainable policies and practices

## PRECAST RESOURCE EFFICIENCY ACTION PLAN (REAP) AND ROADMAP 2020

A Resource Efficiency Action Plan (REAP) for the precast concrete industry is currently being developed with funding from WRAP/ DEFRA. The project looks at the entire supply chain of precast concrete and will help the industry assess its performance across six main product streams and set up KPI targets for the industry for 2020.

A number of subgroup workshops have already been organized to discuss resource efficiency aspects associated manufacturing, Construction, Design, End-of-life/demolition, Logistics and Packaging. A list of actions' and benchmarks is currently being developed and refined by the contracted researchers.

The precast sector is also part of two wider strategies and roadmaps: these are the concrete industry Sustainability Strategy and Roadmap to 2020, developed by the Sustainable Concrete Forum, and the Low Carbon Routemap for Built Environment, developed by the Green Construction Board (GCB).

A number of targets have already been set within the concrete industry for 2020 and 2050. These include the following:

- 90% reduction in waste to landfill by 2020 (from 2008 baseline)
- 30% reduction in CO2 emissions from concrete production by 2020 (from 1990 baseline)
- 95% of production certified to responsible sourcing standard BES 6001 by 2020.

The precast industry targets should also link up with a number of other recent targets:

- GCB routemap target for Capital carbon reduction by 21% in 2022 (2010 baseline)
- 62 to 81% reduction in cement greenhouse gas emissions by 2050

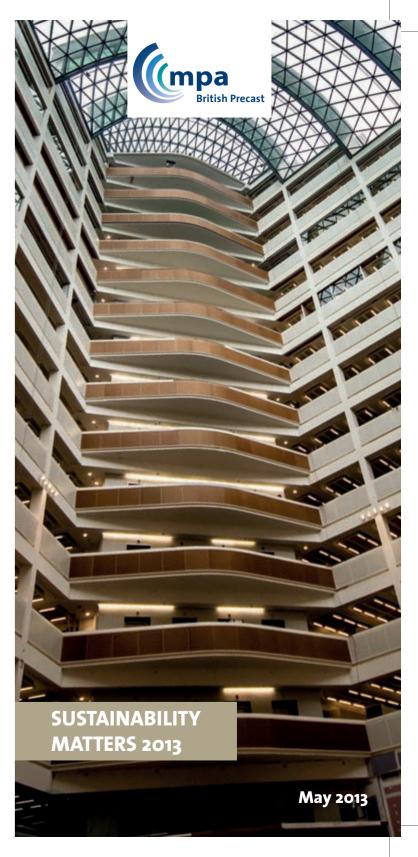
The precast REAP and industry routemap will be completed and launched later this year.

For more information on the strategy and the concrete sustainability roadmap for 2020 visit www.sustainableconcrete.org.uk, information can also be found at: www.bpcfcharter.com

British Precast will set new sector targets for 2013-2020 once 2012 data is received next year.

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## SUSTAINABILITY MATTERS UPDATE MAY 2013

We are pleased to report that the precast industry has been successful in achieving most of its targets for 2012. Results from last year show that we have achieved 12 out of our 14 targets for 2012. These include our targets for water use, waste reduction, carbon and energy reductions and quality and environmental, H&S and management systems. I would like to congratulate all our member companies for their hard work and commitment to sustainable development. Despite the difficult times our sector continues to lead on sustainability... We are now looking forward to 2020. WRAP has kindly funded a Resource Efficiency Action Plan for our sector and later this year we will announce that plan and our targets/objectives for 2020.

Martin Clarke, Chief Executive, British Precast martin.clarke@britishprecast.org

By April 2013, the following 36 companies are currently signed up to the Sustainability Charter

Acheson & Glover Precast | ACP Concrete | Aggregate Industries |
Barcon Precast | Bell & Webster Concrete | Brett Landscaping |
Buchan Concrete Products | Cemex UK | Cornish Concrete Products |
CPM Group | Creagh Concrete Products | Delta Bloc UK | Ebor
Concretes | Elite Precast | Evans Concrete Products Ltd | Forticrete Ltd |
Foxon Bros Ltd | F P McCann | H&H UK | Hanson Building Products |
Litecast | Longley Floors | Marshalls | Milton Precast | Monier | Plasmor
Concrete Products | Quinn Building Products | Roger Bullivant |
Robeslee Concrete Ltd | SCC | Stanton Bonna | Sterling Services |
Stowell Concrete | Techrete Ltd | Townscape Products | Trueform
Precast | Sandtoft Roof Tiles

As part of the requirements of the Charter, all signatory companies must provide Key Performance Indicator data on an annual frequency. In addition to the above companies being signed up to the Sustainability Charter and supplying KPI data, Morgan Sindall have also provided KPI data for 2012. By 2013 it is intended that all member companies will be signatories.

Please note that companies who gain independent certification to the Responsible Sourcing of Materials standard, can use this data capture exercise and the targets set by British Precast to help demonstrate conformance to BES 6001 with regards to stakeholder engagement etc.

It is also important to note that third party certification auditors are at liberty to make contact with British Precast to gain confirmation that annual KPI data has been supplied.

#### **KEY PERFORMANCE INDICATORS**

These indicators provide an overview of the impact of the precast industry on society and environment, and how that impact is managed. The figures reported here relate to 2009 to 2012. Notes are included to indicate how performance has changed since 2008 and whether 2012 targets were achieved.









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#### COVERAGE

Data for 2012 has been provided by 36 companies related to 121 production units and approximately 10.03 million tonnes of product. There are believed to be in the region of 650 – 700 precast production units in the UK and the total production output for the industry in 2012 is estimated to be around 18M tonnes It is estimated that data has been reported for approximately 55.2% of the year's production, compared with 48.4% in 2008. The following statistics have been calculated from the data supplied.

#### **PRODUCTIVITY**

The companies reporting data in 2012 employed 6,585 full time equivalent staff, continuing the downward trend from 8,681, 6,902, 6,732 and 5,785 in 2008, 2009, 2010, and 2011 respectively.

1,524 tonnes of concrete was produced per employee in 2012, compared to 1,748 tonnes last year and 1,589 tonnes in 2008.

#### RESPECT FOR PEOPLE AND THEIR LOCAL ENVIRONMENT

49 sites operated formal local liaison schemes during the year, compared with eight in 2008, 2009 and 2011 and nine in 2010.

#### RESOURCE USE - WATER

87.1 litres of mains water was used per tonne of concrete produced in 2011, comparing favourably with 108.5 litres of mains water in 2008, 115.8 litres mains water in 2009 and 99.4 litres of mains water, in 2010 per tonne of concrete produced. Ground water used per tonne of concrete was around 40.8 litres – compared to 61.1 litres per tonne in 2008.

Water from other sources such as harvesting and recycling is not included in these figures.

Note: 2012 targets of reducing mains and ground water use by 5% is already being achieved.

#### RESOURCE USE - WASTE

84.5 litres of mains water were used per tonne of concrete produced in 2012, compared with 108.5 litres of mains water in 2008, 115.8 litres in 2009, 99.4 litres in 2010, and 87.1 litres in 2011. Ground water use per tonne of concrete was around 47.7 litres compared to 69.5 litres in 2008.

Water from other sources such as harvesting and recycling is not included in these figures.

Note: 2012 targets of reducing mains and ground water use by 5% has been achieved

#### OUALITY AND SATISFACTION

9.1M tonnes, or 90.7% of reported production was covered by an ISO 9001 UKAS accredited quality management system or a recognised Manufacturer Quality Assurance Scheme in 2012, compared to 80%, 89.7%, 93.1% and 93.4% in 2008, 2009, 2010 and 2011 respectively.

Note: 2012 target of 85% has been achieved

#### ENERGY, INCLUDING CLIMATE CHANGE

50.21 kWh of energy was used per tonne of concrete produced in 2012, of which 50.4% was gas, 24.3% was electricity and 18.5% was gas oil/ diesel. This is the equivalent of 14.22 kg CO2 per tonne of concrete produced. This figure was better than the data reported (and corrected) for 2008 (62.7 kWh/t)

Note: 2012 target of 10% reduction in energy usage per tonne has been achieved.

Note: 2012 target of 10% reduction in CO2 emissions per tonne has been achieved.

#### POLLUTION/EMISSIONS, INCLUDING TRANSPORT

8.86 M tonnes, or 88.3% of reported production, was covered by an ISO 14001 or EMAS UKAS certified environmental management system in 2012, comparing favourably with 83.9% of reported production in 2008.

Note: 2012 target to increase coverage to 85% has been achieved

No environmental incidents were recorded or reported to external regulatory authorities in 2009, 2010, 2011, or 2012 compared with a single incident reported in 2008

Note: 2012 target to maintain convictions to "o" has been achieved

Transport data coverage in 2012 remained good, with most companies supplying data, showing that the average lorry carried 17.45 tonnes of precast product per delivery, compared with an average of 18.6 tonnes in 2008. The average delivery distance in 2012 was 148.1 km in 2012, compared with 203 km reported in 2008. Transport data was provided for 5.26 M tonnes of product in 2012, compared with 7.3 M tonnes in 2008.

Note: 2012 target to increase capture of data has been achieved NO

6.99 M tonnes, or 69.6% of reported production, was covered by a BES 6001 Responsible Sourcing system in 2012, comparing favourably with 39.8% of reported production in 2009.

Note: Although no target was set for Responsible Sourcing, almost two thirds of production was covered by BES 6001. Most BES 6001 certified products are rated "Very Good or Excellent" with 28% (by mass) rated as "Excellent".

#### RESOURCE USE - MATERIALS

oo.142 tonnes of cementitious materials were used per tonne of precast produced in 2012, roughly consisting of 9.1% fly ash, 4.9% ground granulated blast furnace slag, 3.7% limestone. Overall replacement of Portland cement is around 23.85% compared to 20.2% in 2008.

Note: 2012 target of 25% alternative cement use has been narrowly missed.

Aggregates usage increased slightly in 2012, at 0.83 tonnes per tonne. 21.3% of aggregates used in 2012 were of recycled or secondary origin.

Note: 2012 target of 25% recycled aggregates has not been quite achieved.

#### HEALTH & SAFETY

6.34 M tonnes, or 56.7%, of reported production was covered by an OHSAS 18001 UKAS certified health & safety management system in 2012. This is significantly better than the 25.4% reported in 2008.

Health and Safety data is collected separately through the Concrete Targets 2015 scheme operated by British Precast; this HSE recognised scheme promotes improvement activities and sharing of information, both within companies and across the construction industry.

Over 7,702 employees in the industry were covered by the CT 2015 scheme in 2012. The estimated RIDDOR rate was 792 per 100,000 employees compared with 1,143 last year, 1,343 in 2008 and 3,920 for the scheme's baseline year 2000.

#### EMPLOYMENT POLICIES INCLUDING TRAINING

6,273, or 98.51% of reported employees were covered by formal training and development policies in 2012. An average of 11.9 hours of training was provided per employee. The coverage is higher than the 89.7% rate reported in 2008. However, the number of hours reported are slightly lower than the 12.6 hours reported in 2008.