

British Precast Targets 2012

Fourteen proposed sustainability indicator targets were discussed at a British Precast Council meeting in December 2009 and were approved and signed by President Steve Parker. British Precast members are 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% ✓ Achieved

Increasing the proportion of recycled / secondary aggregates (as a % of total aggregates) to 25%

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 production 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

With an influx of small members from the Concrete Block Association the Council of British Precast decided that the mandatory requirement to sign up to the Sustainability Charter would be postponed to 2013. During 2012 one member left the Federation after refusing to sign the Concrete Targets 2015 pledge on health & safety.

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



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

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 production

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

SUSTAINABLE CONCRETE ROADMAP 2020

A new sustainability strategy and roadmap to 2020 for the concrete sector was launched in February 2012 by the Sustainable Concrete Forum. The new strategy aims to establish the UK concrete industry as leaders in sustainable construction, by taking a dynamic role in delivering a sustainable, zero carbon built environment. The main objectives include committing the sector to its role in achieving a sustainable built environment, engage with the broader supply chain to inform good practice and continue to explore new ways of improving sustainable production performance.

The industry will contribute to the delivery of a **zero carbon built environment**, provide **Life Cycle Assessment data** compliant with recognized codes and standards and develop a **Material and Resource Efficiency Programme**, a **low Carbon Freight initiative**, a **Water Strategy** and will target continuous improvement of sustainable production performance and report performance annually.

Targets for 2020 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

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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BRITISH PRECAST

SUSTAINABILITY MATTERS

PRECAST 2012 update May 2012

SUSTAINABILITY MATTERS UPDATE MAY 2012

We are pleased to report the precast industry KPI data for 2011 set against our targets to 2012 and our figures for the last three years. Despite the difficult times for our industry, results from last year show that we have already achieved 13 out of our 14 targets for 2012, including our targets for water use, waste reduction, carbon and energy reduction, and management systems. Next year we will report on our final year but already we are now looking forward to 2020. In February 2012, British Precast committed to a new concrete industry sustainability strategy and vision for 2020. Collectively we are looking to reduce our embodied carbon by 30% and we have plans for a material and resource efficiency programme, a low carbon freight initiative and a comprehensive water strategy by 2020. Our Best Practice award winners are featured at www.britishprecast.org and I congratulate all those who took part. The data will be pooled with that from the other sectors making up the Sustainable Concrete Forum and published later this year as part of the concrete sustainability performance report for 2011.

Martin Clarke, Chief Executive, British Precast
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By April 2012, the following 28 companies are currently signed up to the Sustainability Charter:

Acheson & Glover Precast | 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 Explore Manufacturing | F P McCann | H&H UK | Hanson Building Products | Litecast | Longley Floors | Marshalls | Milton Precast Monier | Quinn Building Products | Roger Bullivant | SCC | Solway Precast | Stanton Bonna | Sterling Services Townscape Products | Trueform Precast

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, the following companies have also provided KPI data for 2011:

Forticrete | Morgan Est. By 2013 it is indeed 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 the environment, and how that impact is managed. The figures reported here relate to the 2009 to 2011 calendar years, and notes are included to indicate how performance has changed since 2008.



COVERAGE

Data for 2011 has been provided by 24 companies relating to 122 production units and approximately 10.1 m tonnes of production; there are believed to be in the region of 700 precast production units in the UK and the total production output for the industry in 2011, was similar to 2009 and 2010, at an estimated 20m tonnes. Taking account of the continued contraction in the industry, it is estimated that data has been reported for approximately 51% of the year's production, compared with 48.4% in 2008 and 53.3% in 2009 and 51% in 2010. The following statistics have been calculated from the data supplied.

PRODUCTIVITY

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

1,748 tonnes of concrete was produced per employee in 2011, compared with 1,589 tonne in 2008, 1,602 tonne in 2009 and 1,516 tonne in 2010.

RESPECT FOR PEOPLE AND THEIR LOCAL ENVIRONMENT

Eight factories operated formal local liaison schemes during the year, compared with eight in 2008 and 2009 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

33.29 kg of waste was produced per tonne of concrete in 2011, of which 4.27% was disposed of to landfill, 44.64% was recycled on site and 51.02% recycled off site. The overall waste figure was slightly better compared with 39.7 kg of waste per tonne of concrete produced in 2008, 37.6 kg in 2009 and 36.0 kg in 2010. This resulted in 1.42kg waste / tonne product being disposed of to landfill in 2011, compared with 5.6kg in 2008

Note: 2012 target of reducing waste to landfill by 10% is already being achieved.

QUALITY AND SATISFACTION

9.45 m tonnes, or 93.4% of reported production was covered by an ISO 9001 UKAS certified quality management system or a recognised Manufacturers Quality Assurance Scheme in 2010. This compares favourably with 80.0% coverage in 2008 and 89.7% in 2009 and 93.1% in 2010.

Note: 2012 target of 85% is already being achieved.

ENERGY, INCLUDING CLIMATE CHANGE

49.51 kWh of energy was used per tonne of concrete produced in 2011, of which 48.3% was gas, 24.4 % was electricity and 20.06% was gas-oil or diesel. This is equivalent to 14.0 kg of CO₂ per tonne of concrete produced. These figures are better than the data reported in 2008 (57.13 kWh) and 2009 (61.13 kWh) and 2010 (71.39kwh) .

Note: 2012 target of 10% reduction in energy usage and CO₂ per tonne is currently being achieved.

POLLUTION/EMISSIONS, INCLUDING TRANSPORT

9.25 m tonnes, or 91.68% of reported production, was covered by an ISO 14001 or EMAS UKAS certified environmental management system in 2011, comparing favourably with 83.9% of reported production in 2008, 81.3% in 2009 and 90.3% in 2010.

Note: 2012 target to increase coverage to 85% is already being achieved.

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

Note: 2012 target to maintain convictions to "o" is currently being achieved.

Transport data coverage in 2011 remained good, with 19 companies supplying data, showing the average lorry carried 21.1 tonnes concrete product per delivery, compared with 17 companies reporting an average of 18.6 tonnes in 2008. The average delivery distance in 2011 was 96 km, compared with 203 km reported in 2008. Transport data was provided for 9.3 m tonne product in 2011, compared with 7.3 m tonnes in 2008

Note: 2012 target to increase capture of data is already being achieved.

7.66 m tonnes, or 75.8% of reported production, was covered by a BES 6001 Responsible Sourcing system in 2011, comparing favourably with 39.8% of reported production in 2009 and 67.4% in 2010.

Note: Although no target was set for 2012, coverage by BES 6001 now exceeds 75% of reported tonnage and over 90% of BES 6001 certified products are rated "Very Good or Excellent"

RESOURCE USE - MATERIALS

0.147 Tonne of cementitious materials were used per tonne of concrete produced in 2011, consisting of 10.3% fly ash, 4.7% ground granulated blast-furnace slag, 4.9% quicklime, 4.9% limestone and 73.9% CEM1. These figures are slightly worse than those reported in 2008 and 2009 due to changes in the product mix and improved accuracy of reporting.

Note: 2012 target of 25% alternative cement use is being achieved, at 26.1%.

Aggregates usage in 2011 showed little change from 2008, 2009 and 2010 with 0.800 tonnes of aggregates being used per tonne of concrete produced. The use of secondary aggregate remained similar to the 20.2% in 2008 at 19.7% in 2011.

Note: 2012 target of 25% recycled aggregate use is not quite being achieved, but close at 19.7%.

HEALTH & SAFETY

6.34 m tonnes or 62.74% of reported production was covered by an OHSAS 18001 UKAS certified health and safety management system in 2011, which 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 industry.

Over 7,785 employees in the industry were covered by the CT 2015 scheme in 2011. The estimated RIDDOR rate was 1,143 per 100,000 employees compared with 1423 in 2010, 1305 in 2009, 1343 in 2008, 1466 in 2007 and 3,920 for the base year of 2000.

EMPLOYMENT POLICIES INCLUDING TRAINING

5,757 or 99.08% of reported employees were covered by formal training and development policies in 2011, and an average of 12.17 hours of training was provided per employee. The coverage is higher than the 89.7% figure reported for 2008, the hours per person are similar to the 12.6hr reported in 2008.