

MORE FROM LESS

News from the UK precast concrete sustainability project

ISSUE 1

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Introduction

This newsletter has been produced in support of the four-year Engineering Doctorate project being undertaken with Loughborough University dedicated to developing a sector sustainability strategy for the UK precast concrete and masonry industry. The project and this newsletter are sponsored by the British Precast Concrete Federation over the four years to September 2008.

The purpose of the newsletter is to inform both the precast industry and other stakeholders of developments resulting from the project, ways in which contributions can be made and where further information can be obtained. I look forward to working with as many of you as possible during this project – please feel free to pass *More from Less* to colleagues. Your contributions to future issues are very welcome.

Ian Holton – Editor

Message from Miles Watkins, Chairman, British Precast Sustainability Committee

Sustainability is about society, the environment and, importantly, the economy. It is clear that on a world-scale the issues are of a significant magnitude and require serious attention if we are to maintain the planet in a condition worthy of passing on to future generations. In our own businesses there is much we can do to contribute to this agenda, ensuring that we continue to prosper but at the same time protect our workforce, reduce our reliance on non-renewable resources and ensure that our materials are the most desirable when developing sustainable communities.

Our new sector sustainability project offers great opportunities for every company in the precast concrete and masonry industry to directly benefit. By learning and sharing how we can make *More from Less* you can each benefit on the bottom line and create a better future for your customers and employees alike. By understanding how to make your products more competitive in the arena of sustainable construction you can ensure that you have access to all available markets.

As part of the project we will be benchmarking our progress against other sectors as well as measuring our own performance and setting targets for improvement. Through promoting both openness and competition we will drive the sustainability performance of the precast sector forward to be the envy of all others. I invite you all to work closely with Ian Holton and his colleagues at British Precast and at Loughborough University. I guarantee it will be worth your while.



Dr Miles Watkins
Group Environment Manager
Aggregate Industries plc

Project summary

Context/Background

The UK Government believes that a sector wide approach to sustainability is of increasing importance to the efficient, effective and responsible operation of business. It provides a focussed way of addressing a range of economic, social and environmental issues. (DTI Sustainable Construction Brief, July 2003). To support this view, the Dept. of Trade and Industry (DTI) has published a strategy for sustainable construction and encouraged the development of sector strategies across the construction industry.

The UK cement and concrete sector has acknowledged for some time that it has a responsibility to improve the sustainable performance of its products and has identified two ways in which this can be achieved:

- Promoting and assisting the sustainable design and construction of concrete structures and infrastructure.
- Ensuring responsible concrete product manufacture by developing measurements of sustainability and targets to improve performance.

The UK precast concrete industry produces a wide range of products for the construction industry, worth around £2.2 billion annually. On behalf of the sector, British Precast joined the DTI/DEFRA sponsored 'Pioneers Group' in November 2002 to signal its willingness to develop a sector sustainability strategy applicable to the precast concrete industry. This Engineering Doctorate project, supported by the British Precast National Council, will help to develop and deliver that strategy.

Aims and objectives

The overall project aim is the development of a sector sustainability strategy for the UK precast concrete industry.

Objectives identified towards achieving that aim are expected to include:

- Understanding and mapping the processes involved in precast concrete production;
- Developing an appreciation of the precast supply chain and the sustainability issues associated with it;
- Assessing other sector sustainability strategies;
- Investigating a range of 'triple bottom line' issues;
- Establishing useful indicators and targets for the sector;
- Developing consensus with industry stakeholders; and
- Drafting the strategy documentation.

Method and current status

The research will be of broad application because it will address a number of key issues that are vital to developing a sustainability strategy for this type of industrial sector. For example, it will address how to:

- Identify an appropriate balance between the triple bottom line issues (economic, environmental and social aspects);
- Establish useful indicators and targets for the sector;
- Compile meaningful sector-wide data in a very diverse industry;
- Map what sustainability means and what it looks like; and
- Develop consensus with industry stakeholders up and down the supply chain.

The project started in October 2004 and is currently in its initial data-gathering phase.

Research Engineer, Ian Holton

The Research Engineer appointed to undertake the project is Ian Holton. Previously, Ian worked for the Building Research Establishment (BRE) in their Centre for Concrete Construction. His work there covered a range of scientific and business process orientated issues relating to concrete and concrete construction, for clients such as DTI, Highways Agency and WRAP. His investigations into the thaumasite form of sulfate attack, self-compacting concrete and more recently alongside Dr Ranjit Bassi from the BRE on the application of e-tagging into the construction industry, have already given him some exposure to the precast concrete industry and he is looking forward to working more closely with the industry through this project.



Ian will be working from the BPCF offices at 60 Charles Street, Leicester. His contact details there are:

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Message from Martin Clarke, Chief Executive, British Precast

I am delighted to welcome Ian Holton to the team at British Precast. Ian joins the project after a long career at BRE where we came to know him well. His projects encompassed many facets of precast concrete – durability, materials technology and IT in particular – and he has acquired a genuine interest in the sector and the people that make it work. The joint project management team comprises Stuart Bell, Technical Director of Marshalls plc, Dr Jacqui Glass and Professor Andrew Price of Loughborough University plus myself. All four of us are looking forward to the project.

We will be working very closely with related sector organisations – for example BCA, UKQAA and CSMA on cementitious products; QPA on aggregates and readymix; CAA on admixtures and BAR and UKSA on steel reinforcement. Crucially we will be also linking in strongly with growing team at The Concrete Centre who have a major responsibility to promote the sustainability credentials of all forms of concrete to contractors, clients and designers.

The first public report of *More from Less* project progress will be given by Ian at the BIBM2005 Congress in Amsterdam, 11 to 14 May 2005. We hope to see many of you there – www.bibm2005.com

Our project faces complex challenges with our very wide spread of technologies, materials issues and supply chain drivers. In coming weeks we will be approaching you for nominations of company champions to work with us through the project. Please think who that might be – the job title and department are less important than enthusiasm for the subject. I guarantee benefits to the business.

Martin Clarke
Chief Executive, British Precast

Project news and industry headlines

Project news will also be available on the Sustainable Precast website www.sustainableprecast.com

'Minimising Waste' Conference

Stuart Bell and Martin Clarke made a well-received presentation on the contribution of the precast industry to waste minimisation to this conference organised by the ICE and EMAP in October 2004. Copies of the PowerPoint presentation are available to members on CD only from mac@britishprecast.org

'Sustainability – Steel and the Environment' Conference

This conference was organised by the Steel Division of the Institute of Materials, Mining and Metallurgy (IOM³) in November 2004. The 85 delegates heard 27 presentations over the two days from steel producers, technologists, regulators and market analysts, on sustainability in the UK and global steel industry. The principal message from the conference was that the steel industry recognised the importance of sustainability several years ago, made a commitment and allocated resources to it and now believes it is starting to see the benefits in terms of increased market share. Papers are available to browse at Leicester.

British Precast Environment Alerts

The first four BPCF Environment Alerts have been published for members only. These cover silo over-pressurisation, cement spills, oil leaks and asbestos cement. They will be followed by regular outputs in areas vital to all precast and masonry producers. Contact Clive Budge (cjb@britishprecast.org) for further details.

Eco-serve

ECO-SERVE, a network of cement, concrete and aggregate producers and research organisations, has produced a Baseline Report for the Aggregate and Concrete Industries in Europe www.eco-serve.net/uploads/479998_baseline_report_final.pdf. This report includes a state-of-the-art summary covering ongoing European and national research, as well as the economic, environmental, political and societal issues for optimum management of aggregate resources and production of concrete with limited environmental impact. It covers aggregate and concrete production, construction and demolition waste, standardisation and future research needs in these sectors. Main website: www.eco-serve.net

Cement sector report

Performance, a corporate responsibility report from the UK cement industry produced by the British Cement Association, is now available from www.cementindustry.co.uk

National Precast Concrete Day – 4 May 2005

The British Precast Annual Conference and AGM will be held at the National Space Centre, Leicester, on 4 May 2005, further details are available at www.britishprecast.org. The Conference will include a presentation on the sustainability strategy project.