Mineral Products Association

Engagement and delivery

. . . a continuing commitment

Summary Sustainable Development Report 2013

HIGHLIGHTS

MPA Cement is the first national cement association to produce a 2050 greenhouse gas strategy

Industry volumes decline by an average of 10% in 2012, with some recovery during 2013

MPA launches the first stage of a National Nature Park comprising sites with public access and significant biodiversity and nature conservation value

The mineral products industry continues to lead the way in Responsible Sourcing certification

29% of aggregates supply is from recycled and secondary sources, three times higher than the European average

MPA produces for the first time quantified data on the creation of 4,666ha of priority habitats by the industry

MPA hosts the first summit on improving public safety at former quarries and 40 organisations participate

MPA implements a policy to improve vulnerable road user and cyclist safety through specific driver training and the fitting of additional delivery vehicle safety equipment

Independent research finds that the mineral products industry has a turnover of £9 billion, GVA of £4 billion and supplies industries with a combined turnover of £400 billion

Resource Efficiency Action Plans are published covering the pre cast concrete and ready-mixed concrete industries

MPA Asphalt, the Refined Bitumen Association and Highways Agency jointly commission research on reduced emission asphalts

40% of fuel used for cement manufacture comes from waste-derived sources

FOREWORD

This latest summary of the industry's sustainable development performance in 2012 is supplemented by commentaries which provide an indication of activities in 2013 and examples of areas where further action and progress is required. I believe that this information and the work which lies behind all of these data and issues, highlights the industry's continuing commitment to sustainability.

This commitment has been sustained during a period of recession which saw industry sales volumes decline by up to 40% and 2012 was a particularly difficult year for the industry. Following more stable markets in 2010 and 2011 demand for construction and mineral products plunged by some 10% in 2012, putting huge pressure on member companies and their staff. But in spite of this backdrop there remains a real focus on seeking performance improvements in areas such as health and safety for employees, contractors and the public, carbon reduction, resource use, biodiversity and nature conservation and the development and delivery of products and services which support our clients and customers. The research commissioned from Capital Economics in 2012 highlighted the significant economic contribution of the mineral products sector and it is worth repeating some of those metrics – a £9 billion turnover, £4 billion GVA, productivity twice as high as the national average and a customer base contributing £400 billion to the economy.

Since the first quarter of 2013 markets have shown signs of improvement. Housing has picked up significantly from the depths of 2012 and there are early indications of other construction improvements. It remains a frustration that many commentators seem to think that the fortunes of the construction industry and supply chain are based solely on housing activity and price increases in South East England whereas there will be a need for significant improvements across the UK in all construction sectors before we get back to levels of activity which could be regarded as normal and consistent with a successful economy.

Such economic and market improvement will bring future sustainability challenges and questions. How can we sustain industrial activity in the UK if we impose excessive energy related costs on industry? Can we develop a more strategic approach to minerals policy which supports domestic supply and a planning and regulatory system which enables appropriate development? Will it be possible to develop a market in biodiversity offsetting? How can the industry sustain and improve the health and safety of those involved in our industry and those we impact on through our product deliveries? These are big questions – and there are many others – with which MPA will be engaged. As always we will welcome any feedback on our data and issues and look forward to further debate and progress.

Nigel Jackson – Chief executive

PRIORITIES

Health and Safety

Achievements: Further progress was made in health and safety performance in 2012 and during 2013 the MPA has already met the five year (2009 to 2014) target of halving the Lost Time Injury Frequency Rate computed from MPA members' direct employee incident data. MPA has introduced a framework of initiatives to help members and the industry in general to maintain and further enhance health and safety performance. Under the umbrella of "Safer by Competence", these include "Safer by Design"; Safer by Sharing"; Safer by Partnership" and "Safer by Association". Together, these address the whole workforce and involve the

supply chain, particularly contractors. MPA makes many of its resources available to non-members as well as members and has launched an updated website www.safequarry.com, the industry portal on sharing good practice.

MPA has also continued to work with members and partners to highlight the dangers to the public of quarry trespass, both at currently operating sites and at disused sites and held a public safety summit with 40 concerned organisations to consider future action.

MPA introduced a 'vulnerable road user' safety policy in 2012 to extend driver training and the fitting of additional safety equipment to industry delivery vehicles and has continued to work closely with a range of interested parties to improve awareness and road safety.

Action needed: We need to continue efforts to demonstrate a fully competent workforce and, in particular, to find ways of improving further the health & safety performance of contractors working in our operations. On the roads, we need to help ensure that there is a consistent and effective approach to improving vulnerable road user and cycle safety throughout the minerals and construction industries.

Sustainable Products

Achievements: The supply of sustainable products remains a priority for MPA members. Our 2012 results indicate that the proportion of surveyed sites with certified environmental management systems was over 90% for aggregates, asphalt, cement and ready-mixed concrete sites. The proportions of reported sales volumes achieving "very good" or "excellent" ratings within the Responsible Sourcing Standard BES 6001 for aggregates, asphalt and ready-mixed concrete were 92%, 80% and 98% respectively. The performance of the cement and lime industries in reducing (non carbon) emissions continues to be significant.

Domestic aggregates and cement markets remain highly resource efficient. Recycled and secondary materials account for 29% of the GB aggregates market, three times higher than the European average, and other cementitious materials account for at least 15% of the total cement/cementitious market.

Per capita production of aggregates in GB is 40% below the European average and cement production nearly 60% below the European average.

During 2013 MPA worked with WRAP and other stakeholders to produce Resource Efficiency Action Plans covering the pre-cast and ready-mixed concrete sectors and the MPA has continued to publish both sustainability information for the sector as a whole and more detailed information for cement, concrete, Lime and marine-dredged aggregates. MPA Asphalt, the Highways Agency and Refined Bitumen Association commissioned the Transport Research Laboratory to report on fuel economy, recycling and durability in asphalt surfaces and a new research programme on reduced emission asphalts has started.

MPA The Concrete Centre continues to promote sustainable solutions and provide technical support to designers and specifiers in the housing and construction sectors. Key outputs include the annual concrete industry performance report, conferences, seminars, training events and practice visits as well as the publication of web based and hard copy resources.

Action needed: As construction markets recover we believe requirements for information on the sustainability of supply chains will increase, highlighting the significance of Responsible Sourcing certification. MPA needs to ensure that the quality of sector information is sustained and improved and that clients and customers are informed about the sustainable use of industry products. MPA will increase its focus on water to generate better information on water use, opportunities for reducing consumption and how the industry can support adaptation to climate change.

Climate Change

Achievements: Carbon dioxide emissions associated with the overall production of aggregates, asphalt and concrete declined in 2012 while there was a slight increase in carbon emissions from cement manufacture at cement kiln sites compared to 2011. This reflected relatively higher production of more carbon intensive cement at cement plants with production of less carbon intensive cements being moved to other sites, for example to specialised grinding and blending plants that are located closer to the markets they serve. When the grinding and blending site production is included emissions relating to the production of cement are 25% lower than in 1998.

During 2013 MPA has been engaged in the development of new climate change agreements for the cement and lime industries and has also been working with Government on the implementation of the climate change levy exemption available for mineralogical industries through a provision in the EU Taxation of Energy Products Directive.

MPA Cement became the first national cement association in the world to produce a 2050 Greenhouse Gas Strategy, which sets out how the sector could achieve an 81% reduction in emissions by 2050 compared with a 1990 baseline. The cement industry has reduced reliance on fossil fuels significantly in recent years and the proportion of fuel comprising waste materials rose slightly to just over 40% in 2012.

The industry is one of the main users of rail freight, with 10% of aggregates and 17% of cement transported by rail in 2012 – nearly 15 million tonnes in total.

MPA The Concrete Centre has continued to highlight opportunities to design buildings with lower whole life carbon dioxide emissions and to help provide construction solutions for the development of deep water offshore wind farms.

Action needed: While Government has taken steps to reduce the cost of some climate change measures on energy intensive industries there remains a significant upward trend in the costs of measures from the UK Government and EU and therefore concerns about the long term international competitiveness of industries such as cement and lime. With forecasts of more general increases in construction activity the industry will need to work with more clients, designers and contractors to improve the whole life performance of buildings and structures. The development of low carbon energy generation and UK adaptation to climate change will place significant demands on the UK mineral products industry.

Biodiversity

Achievements: MPA has started to collect better data on biodiversity and this is the first report to include information on the priority habitats created through industry action, notably the restoration of quarries. The figures identify some 4,666ha of priority habitats created to date and 4,785ha of priority habitats in the process of development. These are not yet comprehensive MPA figures as we have not yet completed the collection of data from all members, therefore the total figures will be higher than those so far published. We have continued to work with organisations involved with nature conservation and biodiversity and both the MPA and member companies have valuable partnerships with organisations such as Natural England, the RSPB, Wildlife Trusts, The Freshwater Habitats Trust and the Bumblebee Conservation Trust. We also support the work of Nature after Minerals and the valuable contribution it is making to habitat creation.

In October 2013 MPA held its biennial Restoration and Biodiversity awards with the support of Natural England, an event notable for the very impressive quality of the entries and the number of members who provided examples of action. MPA has used data from

Photo: Bumblebee Conservation Trust

continued overleaf

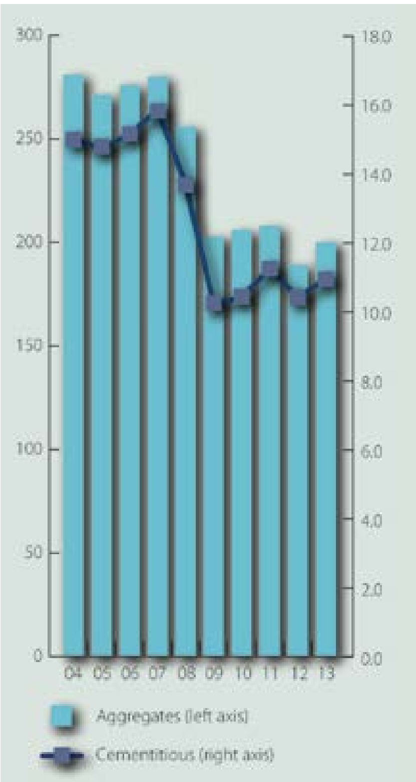
Biodiversity (cont'd)

members to produce an industry National Nature Park on the MPA website, identifying 50 former industry sites which have been returned to nature and have public access.

Issues with increasing profiles throughout 2012 and 2013 have been the valuation of ecosystems services and biodiversity offsetting and MPA is engaged with these issues.

Action needed: We need to develop the data collection on habitat creation from member companies to provide a more comprehensive picture of the industry's contribution to biodiversity and habitat creation and to link this information with Government's objectives. MPA needs to continue to work with members and partners to highlight opportunities to maximise the biodiversity outcomes of industry activities. To this end we will continue to seek a new Aggregates Levy Sustainability Fund in England with a focus on local community benefits and nature conservation and biodiversity improvements.

Aggregates and Cementitious sales 2004-2013 (GB) – million tonnes p.a.



Summary results 2013 (2012 data)

Sustainable consumption & production	**2012**	**2011**
Aggregates production (primary) GB	135mt	147mt
Recycled/secondary materials GB	54mt	60.0mt
Asphalt sales GB	18.5mt	22.4mt
Ready-mixed concrete sales GB	13.9m^3	15.3m^3
Cement – domestic sales GB	7.8mt	8.4mt
Cementitious materials GB	10.5mt	11.3mt
Quicklime and Dolomite (GB)	1.71mt	1.67mt
Per capita production aggregates (GB/Europe)	3.11/na	3.4/5.8t
Per capita production cement (UK/Europe)	128kg/310kg	138kg/389kg
Aggregate sites with certified EMS (% of survey)	91%	81%
Cement sites with certified EMS	100%	100%
Climate change & energy		
CO_2 emissions directly from cement works (kg/tonne)	730	719
CO_2 emissions from crushed rock (kg/tonne)	4.4	4.3
CO_2 emissions from sand and gravel – land won (kg/tonne)	3.7	5.2
CO_2 emissions from asphalt production (kg/tonne)	22.4	22.1
CO_2 emissions from ready-mixed concrete prod (kg/tonne)	0.80	0.88
Share of sales moved by rail (aggregates)	9.9%	9.6%
Share of sales moved by rail (cement)	17.8%	17.5%
Average road delivery distance (aggregates)	44.2km	43.3km
Average road load (aggregates)	21.8t	20.0t
Marine dredged aggregates landings for construction use	10.3mt	11.2mt
Natural resources & enhancing the environment		
Priority Habitats created to date by MPA members	4,666ha	
Priority Habitats planned by MPA members	4,785ha	
Waste recovered as raw materials and fuels by cement industry	1.38mt	1.48mt
Archaeology – land investigated pre-planning permission	120ha	98ha
Archaeology – land investigated post-planning permission	154ha	151ha
Proportion of UK land area being quarried (aggregates)	0.10%	0.10%
Ratio of land restored to land prepared for quarrying	1:1.3	1:0.4
Area of seabed dredged	97km^2	114km^2
Creating sustainable communities		
Number of reportable injuries (aggregates)	113	101
Lost Time Incidents: employees, contractors, third parties	142	157
Employment – direct by MPA members (aggregates)	19,399	20,309
Employment – direct by MPA members (cement)	2,548	2,488
Number of recorded complaints (aggregates)	338	520
Number of community liaison groups (aggregates)	224	266
Liaison group meetings (cement)	34	37
Recorded visitors to aggregates sites, cement kiln sites	38,528	38,045

Printed on paper from responsible sources, FSC C015473

Front cover: The Coldstones Cut sculpture at Hanson UK's Pateley Bridge quarry, in the Nidderdale AONB, North Yorkshire. Photo: Paul Harris Photography. Other images – thanks to Cemex, Lafarge Tarmac and MOU partner The Bumblebee Conservation Trust.

The Mineral Products Association is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

For further MPA information visit www.mineralproducts.org

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mpa
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sustainable solutions