

Summer 15 | Issue 11

The magazine of the Mineral Products Association

# mineral

products today

## Seizing the opportunities

challenges for the new Parliament



Lagoon power  
great potential

Supply shortage  
planning worries

Going underground  
keyhole surgery

# WELCOME



**WITH the election now behind us, we have the opportunity to build on the momentum in the economy and boost demand to drive growth.**

For MPA members, who plan and invest long-term, this is vital if confidence is to be sustained. While good progress has been made over the past two years or so, activity still remains around 25% lower than pre-recession

levels with spare capacity poised to be turned back on.

With so much new housing and infrastructure still needed (not forgetting the need for continuing repair and maintenance and genuinely new forms of development such as the tidal barrages featured in this issue) the 'need' is clear. But as we climb from recession to recovery, we have to beat new supply challenges such as skills and resource shortages, and concerns about energy supply.

These are big-ticket issues for the manufacturing side of the economy about which much is said and too little is done. MPA will continue to set out constructive responses

to Government whilst making clear that we too have a responsibility to review our own performance and prepare for the future.

We will also need to strike the right balance in the debate about maintaining the integrity of the UK and our role in a reformed EU. Central to both debates is the need to balance 'localism' with the more strategic view. Our members' products are generally locally produced and consumed but, taken as a whole, they are also of strategic significance – locally, regionally and nationally. Our job is to make sure none of this gets lost in the populist noise.

*Bill Brett, Chairman, MPA*



**ALREADY playing a crucial role in the growth of other forms of renewable energy, the mineral products industry is lining up behind plans for a network of six tidal energy lagoons planned in Wales, Somerset and Cumbria.**

The first £1 billion lagoon at Swansea (illustrated) is already at an advanced stage in the planning process with a decision expected later this year. It promises power for over 155,000 homes for 120 years. Developer Tidal Lagoon Power has also now unveiled proposals for the second site, which would use a 22km long breakwater to enclose 70km<sup>2</sup>

of the Severn Estuary between Cardiff and Newport.

Lagoon power is seen as a big opportunity for the mineral products sector and the wider construction supply chain it supports, creating demand not just during construction but for wider regeneration of the local areas. In the case of the Cardiff Bay Barrage, the initial £200m construction investment would provide a catalyst for over £2 billion of regeneration activity, including housing, commerce, leisure and industrial development.

## Buoyant figures

**LATEST MPA sales figures confirm that the sector is continuing to contribute to the economic recovery, with all its frontline materials enjoying first-quarter growth compared with the final three months of 2014.**

While crushed rock and sand & gravel sales volumes rose by 2.2% and 3.6% respectively, ready-mixed concrete and asphalt sales were 1.3% and 1.2% up. Meanwhile, annual sales of cement grew by 7.8% through 2014.

There is still, however, a distance to go to achieve pre-recession levels, with asphalt, aggregates and concrete remaining 15%, 25% and 30% respectively below the peak. The challenge applies particularly to markets outside London and to non-housing markets.

The positive MPA figures highlight concerns about official construction statistics, which confusingly indicate that construction output has declined for two quarters.

"The figures do, however, highlight the fact that construction activity is essential to a continuing economic recovery," said MPA chief executive Nigel Jackson. "The new Government must ensure that uncertainty is minimised to boost confidence and in doing so encourage sustained public and private investment in construction."

## United move on water safety

**MPA members have thrown their weight and experience behind national campaigns which aim to tackle the issue of drownings in open water.**

In 2013, there were 381 accidental water-related fatalities across the UK, many of which occurred at inland open water sites. In April, a 13-year-old boy died in a disused quarry in Lancashire as a result of a swimming trip. Local police warned that those who consider themselves strong swimmers were particularly at risk because of their boldness in entering the icy cold waters of deep quarries.

The association's strategic partnerships with the Chief Fire Officers Association (CFOA), Royal Life Saving Society, RoSPA and other members of the Inland Water Safety group are a key feature of MPA's eight point plan to tackle the problems faced by its members in discouraging young people from treating quarries as adventure playgrounds.

The MPA campaign is targeting the cold water shock message at people aged 16 to 30 with

the slogan, "Tell a friend. Save a friend". The body's involuntary responses to the shock of cold water – inhalation of water, hyperventilating and rapidly increased heart rate – can easily result in drowning. The poster (right) has been created by Tilly Baker, a student at the University of Wales Trinity St David, to support the campaign.

The RLSS Drowning Prevention Week in June is promoting a video featuring parents who have worked with MPA to promote its Stay Safe initiative after their own children had died.

The majority of fatalities involving members of the public in disused quarries are water-related, and it is one of the key focuses for operators as they support MPA's annual push to raise awareness.



*Student Tilly Baker's dramatic poster*

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Printed on recycled paper

Cover photo (and p8):  
Iakov Kalinin/Shutterstock



## Good progress on driver skills

**DRIVER training is being given a high priority as MPA seeks to push the industry's competence and safety standards ever higher.**

While HGV safety has improved over decades with an accident rate 28% lower in 2013 than five years previously, MPA is concerned that the number of serious accidents specifically involving cyclists and lorries has increased. In both 2012 and 2014, cyclist deaths and serious injuries were 30% higher than the five year average from 2005 to 2009.

Although there is no data indicating how many of these cyclist incidents were the result of collisions with industry HGVs, research in London has indicated a high proportion of cycling fatalities resulted from collisions with construction vehicles.

"The many MPA member companies who have taken positive action to improve driver skills and training and add safety equipment to HGVs to protect other road users should be commended," says MPA chief executive Nigel Jackson. "These are really positive steps and it is essential that this momentum continues."

Having worked with the Mineral Products Qualifications Council (MPQC), to introduce and develop training specifically geared to driver safety, MPA has been heartened that over 30,000 drivers have to date been awarded its Driver Skills Card. Over recent months, MPQC has received approval for its suite of courses, including a new vulnerable road user initiative.

The MPA and its members have taken a leading role in action to improve

vulnerable road user safety and actively supports the Construction Logistics and Cyclist Safety (CLOCS) initiative, which is designed to achieve a consistent approach for construction vehicles and deliveries throughout the UK.



# App boost for health & safety

Quarry workers and other mineral products operatives in over 100 countries across the world are sharing the potentially life-saving benefits of MPA's widely applauded *Safequarry* website and the suite of "Safer by ..." initiatives that run alongside it.

But while the website attracted over 19,000 users last year, its valuable content is also now being delivered right the way to the rock face and other frontline locations via a new app that can be loaded onto a smartphone. By downloading the app rather than relying on an office internet connection, workers can get instant information wherever and whenever they want it. They will receive alerts about incidents that have occurred at other locations to which they and their colleagues may be vulnerable.

"MPA is a wellspring of good safety practice and ideas"

Development of the app comes as a response to listening to comments from *Safequarry* users who wanted not just universal connectivity but a simple "front end". As a result, the app has just four main buttons giving access in intuitive fashion to what lies beyond.

Facilities include links to a wide selection of toolbox talks, "hot topics" on issues of the moment, and advice on recommended contractors and training courses. The app is also a route to a library of 350 best practice videos amassed as a result of MPA's Health & Safety Awards.

The app was launched at the 2014 awards and conference, held at a popular new venue at 30 Euston Square in London and hosted by BBC news presenter Julian Worricker. With 150 entries from 37

different organisations of all sizes, the event was a sell-out in attracting 300 delegates who spent the first part of the day debating the conference theme "Reducing harm through leadership and workforce engagement".

Keynote speaker Tom Mullarkey, chief executive of RoSPA, described MPA as "a wellspring of good safety practice and ideas" and said it provides a first-class example of what was needed in re-energising health and safety and engaging the full potential of the workforce. Co-speaker Kevin Furniss, who was part of the strategic team that oversaw the 2012 Olympics, stressed the importance of leaders in engaging with their teams and inspiring a vital change in individual safety thinking from 'I need to' to 'I want to'.

Ian Wainwright, head of freight and fleet at Transport for London, described the industry's support for the Construction Logistics and Cycle Safety Programme (CLOCS) as "fantastic" and critical to its success.

Former frontline Tornado pilot Mandy Hickson provided a vivid insight into leadership and went on to present awards over eight categories, four of which were won by Lafarge Tarmac, and one each by the Quarries



Partnership Team, CEMEX UK, Hanson UK, and Brett Group.

The John Crabbe Memorial Trophy for overall excellence went to Hope Construction Materials, while the Sir Frank Davies Trophy for companies with fewer than 1,000 employees was won by the Kilwaughter Chemical Co. Special awards went to Albion Stone and Singleton Birch, and 19 individuals were recognised for their own input in "going the extra mile" on health and safety.

Watch a video and download the app:

[www.safequarry.com/MPAAApp-safequarry.aspx](http://www.safequarry.com/MPAAApp-safequarry.aspx)



A full house for MPA's popular Health & Safety Awards & Conference

## SUPPLY SHORTAGE WORRY

Concerns are growing over potential aggregates shortages in England and Wales, with MPA highlighting failings in the mineral planning system and the UK Minerals Forum saying that long-term availability of wider resources can no longer be taken for granted.

**THERE is increasing evidence that the planning system which keeps the nation fed with essential construction materials may struggle to cope with growing demand as the economy achieves full recovery. With few areas having complete development frameworks in place, operators lack the confidence to submit costly applications.**

MPA's latest survey of planning data across England and Wales shows that the long term "inertia" of which it has warned over recent years has not just continued but worsened in some key respects. The association believes that, without positive Government action to breathe new life into the plan-led system, future options for maintaining a steady and

adequate supply of aggregates could become seriously limited.

The association's Annual Mineral Planning Survey (AMPS) shows that very few significant aggregate producing areas have complete development frameworks in place. These include each of the big contributors to the national picture – Leicestershire, Somerset and Derbyshire. While acknowledging that operators have been nervous about submitting new applications due to the economic and political uncertainties of recent years, MPA believes the lack of completed mineral development frameworks has had a significant impact and resulted in a major decline in available reserves.

While the survey relates to data to the end of

**FACT:** Between 2006 and 2013, substantially more permissions were granted for sites that were not allocated in the development plan (92) than for sites that were (77).

**FACT:** Only 34% of the sand and gravel used in 2013 was replaced by new permissions with the ten-year average replenishment rate at less than 50%.

2013, even a year later only 24 of the 90 front line mineral planning authorities in England has a completed framework – and the majority were not in the big producing areas.

MPA chief executive Nigel Jackson says that, without such plans and allocations, the costly process of submitting a planning application is a heightened commercial risk which few operators are prepared to take unless they have no option.

"The plan-led system has always given added certainty to developers seeking to secure new aggregate reserves and the commercial

decisions that go with it," he says. "But without more commitment from planning authorities to produce up-to-date, fully functional mineral plans, there is little incentive for operators to engage in the process. It is particularly unacceptable that none of the top three aggregate producing areas has a complete plan."

The survey also indicates that, since 2006, MPA members have secured more planning permissions for sites that were not allocated in plans than for sites that were.

"That speaks volumes about the health of the plan-led system and is worrying as it weakens an already difficult situation," says Nigel Jackson. "Those who engage with the plan-led system are paying twice for gathering data and putting sites into the system only to see other sites getting permission at lower cost. Either we have a plan-led system, or we don't – some are beginning to wonder why we need plans at all."

The new survey reflects the emergence of shortages of materials in some high demand areas, notably the lack of replenishment of sand and gravel reserves over the past ten years in London and the South East. Only 34% of the sand and gravel used in 2013



was replaced by new permissions, with the ten-year replenishment rate remaining at less than 50%.

MPA says the resulting substitution of hard rock for sand and gravel is acceptable for the time being because the rock landbank is big enough to cope. But most of that material is being supplied from a relatively small number of strategically located quarries that have had no new permissions in recent years. If new sources don't come on stream, there will have to be significant changes in supply patterns to meet needs in the longer term.

MPA's director of mineral planning, Ken Hobden, believes that mineral planning authorities are "undermanned and overstretched" as a result of the resource-hungry development framework system which demands preparation of a portfolio of different planning documents. Each requires

the same time-consuming consultation, amendment and inquiry process.

Local opposition inevitably plays a considerable part in the process, with local authorities and even ministers aware that they can be taken to judicial review if they trip up on points of legal process. "The cost of defending themselves is so great that authorities can go completely overboard in trying to make themselves immune from a legal challenge," says Ken Hobden.

"The point we are trying to make to government is that we need the plan-led system to work properly for our members to supply the materials that society needs. It is government that has allowed things to become over-complicated and if that is what it wants then it has to provide the personnel and expertise to make their side of the system work."

rebalance its economy towards production and manufacturing. "With goodwill and determined effort, it is surely possible to conserve what is essential in our landscapes, habitats and cultural heritage while meeting UK demand for minerals over the 35 years to 2050," says the report.

Long-term continued access to minerals is considered crucial if the UK is to achieve sustainable economic growth and



## Facing the future

**THE UK can no longer take for granted the long-term availability of essential minerals ranging from construction aggregates to industrial and energy minerals. The warning comes from the UK Minerals Forum (UKMF) which draws together key stakeholders to debate and inform Government on prudent use, sustainable management and supply.**

A report to the CBI Minerals Group's *Living With Minerals 5* conference highlighted a series of worrying issues and says that positive action must be taken by Government as well as by statutory regulators, NGOs and the industry to ensure continuity. The Forum believes there is a need for a regulatory and fiscal framework that encourages sustainable production while balancing economic, social and environmental priorities.

### Recommendations:

- 1:** Create a national long-term vision and strategy for UK minerals supply as an integral part of the UK's future industrial strategy.
- 2:** Take concerted action to help policy makers and the public understand the importance of minerals supply to the economy and to society. The nation needs policy and legislation that responds to social, environmental and economic change through enabling the long term production and supply of minerals.
- 3:** Ensure effective review and monitoring by all parties in delivering an agreed minerals strategy and adjusting it in response to emerging events. It is important that Government and its agencies have access to high quality, impartial information in order to facilitate foresight and endorse future decision-making.



- 4:** Continue collaboration between Government and industry to deliver the vision that is developed. The industry is ready to play its part. Government in turn must develop its own capacity and expertise.
- 5:** Boost the resilience of the UK minerals industry. The strategy and subsequent policy framework needs to enhance and support the industry's resilience to adapt and survive.



## Protecting minerals

**THE safeguarding of minerals is an area of prime concern for the industry as it defends valuable reserves from other potential forms of development.**

At Quorn in Leicestershire, MPA has thrown its support behind Lafarge Tarmac and Charnwood Borough Council in opposing an appeal by a housing company on a site close to the nationally important Mountsorrel quarry. The applicant had proposed 21 homes within the 500-metre mineral safeguarding buffer zone around the quarry's permitted area. A decision is awaited on the appeal, which was heard in September.

In his evidence, MPA senior planning advisor Malcolm Ratcliff said: "It has become a test case for the safeguarding of mineral resources and infrastructure of national importance. The outcome will establish the credibility of the safeguarding regime in the planning system. If the appeal is allowed then no mineral site in the country is safe."

He told the appeal hearing that, while the industry had made huge strides over the past 30 years in reducing its environmental impact, planning and amenity constraints severely restricted the number of sites that could be worked. It was, therefore, essential that all relatively unconstrained mineral resources be safeguarded.

The concerns relate also to rail heads, depots and wharves. The marine aggregate industry

is having to defend its onshore infrastructure from new housing and other developments.

At Shoreham-on-Sea in West Sussex, Kendall Bros has been fighting to retain the use of a wharf where its activities are seen as being at odds with plans for waterside homes, leisure and retail activities and the living conditions of existing residents.

The company has been offloading sand and gravel at the wharf since 2000 and gained successive renewals of its permission until West Sussex County Council decided the use should be terminated by the end of this year. It has, however, won permission at appeal to continue until 2018.

CEMEX Marine challenged plans for housing close to its wharf at Greenwich in East London. A ten-storey block of flats is nonetheless still being built and the fear is that the long-standing aggregate operations that are essential to London's needs will ultimately be curbed by virtue of nuisance to newly arrived residents.

"It is a recurring issue," says MPA's marine aggregates director Mark Russell. "While the wharf sites themselves are often safeguarded as a consequence of national policy, they can become surrounded by residential development. It can result in restricted hours of working, both for the wharf and for the ships, which can in turn impact the viability of the site."

# SEIZING the opportunities

MPA chief executive Nigel Jackson makes a post-election assessment of what the industry needs from the new Parliament if it is to deliver its critical contribution to economic recovery.

**A NEW Parliament and Government creates new opportunities to learn the lessons from the previous administration and opportunities to test new ideas.**

After five tough years of what some would call prudence and others austerity the new Government inherits a mixed bag of positives and negatives. On the plus side, good progress has been made on reducing the deficit, but only half as much as was hoped, so continuing effort must be made to eliminate this if we are to generate a current



Nigel Jackson: Government departments need to move from 'can't do' to 'can do'

account surplus to reduce our soaring national debt. The Conservative manifesto model assumes year-on-year growth in tax revenues of 4.5%. This is very ambitious by any measure so a very positive effort will be needed to stimulate additional growth in the economy by liberating business and enterprise to generate the additional capacity required.

## REALLY CUTTING 'RED TAPE'

Industry can 'bore for Britain' on the need to reduce red tape and supply side taxes, but that is only because it is true. The previous Government made great play of 'cutting red tape' and convincing themselves that this was real and meant something. Doubtless, some of it has proved marginally helpful, but in this sector virtually nothing has been done that matters or which is recognised as genuinely lowering the burden.

A serious high level short, sharp honest dialogue with industry is needed to give a fresh look at cutting a few 'biggies' out of the system, rather than tinkering at the micro level. Industry needs to play its part and be able to answer the question 'what do

you really want to cut' and why, or else stay silent. Too often when asked we exacerbate the forensic approach rather than look strategically. Overall, however, the regulating departments at DEFRA, DECC and DCLG need a change of cultural outlook from 'can't do' to 'can do' if the Government's growth ambitions are to be realised.

## STRATEGIC VERSUS LOCAL

With the devolution agenda accelerating and intensifying and the move towards 4 separately evolving national approaches to governing and regulating, new challenges emerge. Add to this some form of shift within England to city regions or clusters and the chessboard is becoming more multi-dimensional not less. For SMEs within one administration relationships can get stronger, for those operating across borders and boundaries the problems multiply and the effort to create a 'level playing field' gets harder.

Somewhere in the inevitable evolution to a more local approach we must avoid the risk of parochialism and unnecessary complexity, which fragments our ability to apply strategic

thinking and solutions. The tussle and balance between unionism and nationalism can be raw, but hopefully it will not become self-destructive.

## INVESTMENT

There is a national consensus on the need for 'more housing and better infrastructure'. There is no equivalent clarity on 'how to deliver urgently and continuously'. Governments do not directly build houses, so guarantees of any numbers are aspirational and dependent upon limited central funding and local borrowing but mainly the private sector. Only housing companies and local authorities and housing associations build houses and new thinking may be needed to ensure the public sector does more in case the private sector chooses either not to plug the gap between demand and supply, or not on the necessary timescales.

Equally, on infrastructure, plans to improve our roads must be sustained and delivered if the efficiency of our stressed distribution network is to improve.

Assuming investment in rail and water continues, our energy capacity remains as the ever growing elephant in every room. There is no convincing evidence that any Government has gripped the obvious threat posed by long term failure to invest and renew our capacity to supply. The chase

for low carbon is obscuring the problem of ensuring secure supply. Both objectives matter, but balancing and phasing the transition means we may have to endure a higher carbon mix longer, until lower carbon solutions are established, proven and economic.

Security of supply should ascend the Government's 'first 100-day'

agenda to achieve at least equal weight to greening supply, if not greater. A return to a temporarily state owned and operated energy development agency to accelerate the building of new power plants may at least enable us to implement a national capacity building programme prior to eventual privatisation for the long term.

## DIALOGUE AND TRUST

Not only has the political mix of Government evolved, so has the personality and character of the House of Commons. It will be less experienced, more diverse, perhaps more independent in outlook and, thankfully, better gender balanced. This in itself is an opportunity, both for industry and parliament. New conversations and new relationships can yield new ideas and solutions to increasingly difficult problems.

The union of effort between public and private sector stakeholders is vital if we are to sustain our place and standing in the world. Unions within the UK and with the EU are more likely to provide stability, although existing models will require reformation to make them 'fit for purpose' for the next five and ten years, if not beyond. Industry too must evolve and reform its attitudes and how it informs Government, to ensure it can help deliver the agenda mandated by the people.

Trust in politicians has yet again been

exposed to be low and trust in business needs to improve. That can only occur if organisations set out clearly 'what they will do, do it and prove they did it'. The opportunity to refresh how both Government and industry behave and communicate must not be missed if perceptions are to become more positive.

Energy for the future: the elephant in the room



Photo: AnglianArts/Shutterstock

## 5 actions

**for Government for the next Parliament:**

- Focus on encouraging UK growth, indigenous production and investment including the delivery of the national infrastructure programme and meeting housing needs
- Ensure energy and climate change policies are consistent with the need to sustain a competitive UK mineral products sector, including Energy Intensive Industries (EIs). Withdraw the carbon price floor
- Review and reduce the cumulative cost and volume of environmental legislation. Freeze the Aggregates Levy while there is a comprehensive review of the policy
- Ensure all mineral planning authorities have sound local minerals plans in place consistent with national guidelines
- Work with industry to ensure positive outcomes in key sustainability areas such as health and safety, water, recycling, waste and biodiversity

## 5 actions

**for the mineral products and quarrying industry for the next Parliament:**

- Invest to ensure long term mineral products demands are met
- Invest in improving the skills and safety of our employees and the public
- Seek opportunities to further reduce carbon emissions
- Support efficient use of mineral and other resources
- Enhance nature conservation and biodiversity



Best in Europe for recycling



# Leading in Europe

A Euro leader – Hanson's Kings Dyke reserve in Cambridgeshire attracts kingfishers, willow warblers and many more

Europe is one of the big issues on the UK's political calendar as we move into a new Parliament. Will we ultimately pull out of the EU or will we successfully renegotiate the terms of our membership? Trade associations like MPA, with substantial input to the European scene and facing huge impacts from what is decided in Brussels, are watching with interest.

**THE sheer scale of MPA's work on behalf of its members has grown greatly over recent years – with a raft of new product groups having joined or become affiliated to the association, the pace continues to quicken into the future.**

With MPA now representing a very wide range of products, the commitment to members' interests on the Euro stage has grown greatly. It has now reached a point where it involves part-time input from a team of around 50 people and takes some 10% of the association's budget to enable participation in 12 EU trade associations.

The other major change lies in the sheer volume of legislation emanating from Brussels that is capable of impacting on even the smallest UK operator. This notably applies to environmental laws but also to issues such as resource efficiency. Ignoring it would be at the potential peril of the UK industry.

"It is undoubtedly a big cost imposition and we regularly ask ourselves whether it is

justified at that level," says Simon van der Byl who has a particular focus on public policy in Europe. "All I can say is that I believe we would regret it if we weren't involved because the risk to our members from new legislation is often significant. Our approach is to try to keep it under control from a budgetary point of view and to be vigilant so that we can comment on emerging threats from a good evidence base."

The reality of trade association life in Europe is that UK organisations start with a significant plus because English is the working language of both the Parliament and the Commission. There is, however, no doubt that the UK also has increased clout because of recognition of the universally high levels of achievement by our operators, including the multi-national companies with bases in the UK. Simon van der Byl says that the UK is certainly the European leader on health and safety issues, and on aggregates recycling where we are achieving a 29% recycling rate against an average of more like 8%.

## NOTABLE SUCCESSES

- MPA Cement's *Carbon Roadmap* to 2050 is designed to reduce greenhouse gas emissions by 81% against a 1990 baseline.
- MPA members have emerged as the European leaders on health and safety by achieving a series of tough accident reduction targets over the past 15 years and devising an innovative family of "Safer by..." initiatives.
- MPA members are consistently recognised in Europe for the leading edge quality of their work on sustainability, restoration and biodiversity. They collected a total of eight prizes in the most recent UEPG (European Aggregates Association) Sustainable Development Awards.

"Beyond that, I would suggest that we are in the top flight for the sheer quality of our restoration work, the extent of our contribution to national biodiversity targets and our approach to community relations," he says. "We have also led the way on carbon reduction in cement and lime making, and that comes quite regardless of the fact that we are more under the cosh because of our higher energy prices and the attitude of our Government to reducing levels more quickly than others."

He adds: "Looking at the longer term future, there is no doubt that the European Commission has woken up to the vulnerability of European industries to minerals imports and, indeed, also to the need to preserve access to those minerals available within its own borders.

"There will be much greater stress in the future, therefore, on member states having sound minerals policies, backed up by thorough land use planning policies. This applies to the UK as much as any other

## ISSUES TO WATCH

- 1 Waste Framework Directive**  
changes are expected. Issues remain over whether restoration of quarries is classified as a "recovery" or "disposal" operation.
- 2 Environmental Impact Assessment Directive**  
amendments have been adopted into the legislative text. There should be few impacts on the industry though implementation in UK law will have to be monitored.
- 3 Air Quality Directive**  
the possible need to measure emissions to air of particulate matter down to 2.5 microns could seriously affect operations. Exhaust controls on vehicles are also under consideration.
- 4 Regulated Dangerous Substances**  
effort is being applied to optimising the testing of substances, especially those associated with construction products.
- 5 Construction Products Regulations**  
MPA is pressing for simplification of the CE marking regulations for construction products.
- 6 Respirable Crystalline Silica**  
a long-term issue moving towards a conclusion but awaiting a decision on whether it should be managed under the Carcinogens and Mutagens at Work Directive or the Chemical Agents Directive.

member and we need to be in the decision making circle through maintaining our influence in the EU trade associations, regardless of any future decision in a UK "in-out" referendum in 2017."

# Action ON ALL FRONTS

THE mineral products industry has made big strides in its long-term drive to become more sustainable – but accepts that there are still areas that need to be addressed.

The update comes in the form of a summary sustainable development report for MPA as a whole accompanied by more detailed sector specific reports covering cement, concrete, lime and marine aggregates. All are based on 2013 figures.

In the MPA overview report, chief executive Nigel Jackson stresses the industry's commitment to transparent reporting of its performance and to maintaining the drive for improvement. "The industry sustained its commitment to sustainability throughout the recession," he says. "But we acknowledge that in a number of areas, such as emissions and engagement, performance declined in 2013 and we need to understand why this happened and take necessary action."

On the positive front, he highlights a string of significant achievements including the fact that recycled materials now represent 28% of the aggregate market – three times the European average. On the safety front, MPA members have set a challenging new five-year target towards its ultimate 'zero harm' goal.

MPA Cement's SD report highlights the challenges facing the industry in remaining competitive and contributing to a sustainable UK economy. Despite the industry's second-to-none track record on carbon reduction, it is suffering from a UK-only carbon price support tax where some competing construction materials receive Government compensation for most of the extra costs they will incur. It comes at a time when compensation is also being paid to those same industries for the indirect costs associated with the EU Emissions Trading System.

"This imbalance adds to the cumulative cost burden the industry has to bear and distorts fair competition," says MPA Cement executive director Pal Chana.

The **concrete industry** reports a series of key indicators including the fact that 91% of concrete is now certified to the responsible sourcing standard BES 6001. Meanwhile the industry is using 79 times more waste and recovered materials than are sent to landfill; and CO<sub>2</sub> emitted per tonne of concrete has reduced by 22% since 1990.

Andy Spencer, chair of the Sustainable Concrete Forum, says the industry's commitment is as strong as ever. "The debate we are involved in will shape the future of construction products and our built environment as we recognise the role of natural capital, ecosystem services and a circular economy," he says.

In its latest SD report, the **British Lime Association** highlights a series of achievements against a 2011 base year. Its members can point to a 79% reduction in SO<sub>2</sub> emissions from high calcium lime production; a 44% reduction in waste to landfill; 30% reduction in lost time injuries; 30% reduction in dust emissions from dolomite production; 15% increase in use of waste-derived alternative fuels in dolomite production; 5% reduction in water usage in lime production and 5% reduction in CO<sub>2</sub> emissions from dolomite production.

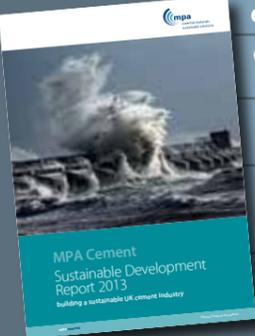
But with it comes a warning: "The coming years will be a fragile stage in the industry's recovery and we are in need of support from the UK to ensure our home-grown, historic sector recovers and flourishes."

The **British Marine Aggregate Producers Association (BMAPA)** reports signs of a welcome recovery in demand. With it comes an increase of 3.9% to 739km<sup>2</sup> in the area of seabed licensed for dredging as new marine licences were issued for historic production areas.

Alongside that, operators have introduced new best practice to support resource management and compliance with licence conditions and have continued to provide high resolution survey data in support of the development of Marine Conservation Zones.



**MPA**  
28% aggregate recycling rate leads Europe  
Challenging new safety target set  
6,700 ha for habitats and biodiversity



**CEMENT**  
CO<sub>2</sub> emissions from plants down 24.9%  
Dust emissions down 83.3%  
Oxides of nitrogen emissions down 62.6%  
\* Compared with 1998 baseline



**LIME**  
79% reduction in SO<sub>2</sub> emissions  
44% reduction in waste to landfill  
30% reduction in lost time injuries  
\* Compared with 2011 baseline



**MARINE**  
16.03mt dredged  
Area of seabed licensed increased 3.9%  
New best practice resource management



**CONCRETE**  
91% of concrete certified to BES 6001  
79 times more waste used than landfilled  
CO<sub>2</sub> per tonne reduced 22% since 1990

ECOBUILD

## Touchy feely concrete

CONCRETE has consistently challenged outdated perceptions over recent years as designers have come to recognise its uniquely sustainable strengths in conserving energy, resisting climate change and protecting from fire.

But MPA The Concrete Centre had a few surprises up its sleeve at Ecobuild 2015 when it unveiled a suite of traditional games made in concrete. From noughts and crosses using concrete, linen and velvet (pictured) through to a Chinese cube puzzle featuring four different finishes – stand visitors could play the games, but more importantly get a new aesthetic take on the material.

The games came from a selection of innovative companies who were each challenged to create something new. Their output was one of many thought-provoking elements of a new Concrete and Masonry Pavilion at Ecobuild which brought together manufacturers, solution providers and industry bodies to offer a wealth

of expert advice, seminars and practical demonstrations.

It was also, says MPA The Concrete Centre executive director Andrew Minson: "A venue to discuss some of the most pressing issues facing the built environment such as resilience in the face of the UK's changing climate and the progression towards zero-carbon homes.

The pavilion also outlined the industry's efforts to reduce its environmental impact – which have led to a 22% drop in its carbon intensity since 1990 – and its 2020 targets for the future to improve performance.



Photo: Facility Factory

## Team effort

THE Concrete and Masonry Pavilion was very much a team effort from MPA and included a mini dry-mortar silo/mixer and block-laying demo from the Mortar Industry Association.

Shown here are apprentices from the Guild of Bricklayers course at Barking and Dagenham College and expert instructors who together helped to deliver the key message that traditional building techniques deliver high quality and energy efficiency at no extra cost.



MPA also partnered a biodiversity zone with the Bumble Bee Conservation Trust with advice on making industry green spaces more bumblebee friendly.

CYCLE SAFE

## Safety drive intensifies

MPA took its Cycle Safe campaign to the 2015 London Bike Show, working alongside partners in promoting

the new Construction Logistics & Cyclist Safety Standard (CLOCS) and highlighting key safety messages.



The event came as latest figures were released showing that 690 cyclists were killed or seriously injured in the UK between January and March 2014, an increase of 27% on the previous year.

The CLOCS/Exchanging Places stand at the show featured three large goods vehicles, which the Metropolitan Police used to run a live event with visitors taking a

driver's view of cycling issues. MPA, several of its members and other CLOCS volunteers provided safety leaflets and free high visibility clothing.

MPA chief executive Nigel Jackson commented: "We work very hard to minimise incidents and injuries on site, and the same attitude should be applied to what happens on the road. It is essential that all parties (drivers, haulage companies, contractors, cyclists, police and regulators) work together to make our roads safer for all road users."

The CLOCS initiative aims to bring together all parties involved: the construction industry, truck operators and vulnerable roads users in a bid to reduce accidents.

## ROADS

## Persistent potholes

**WHILE local authorities are reporting an increase in their overall maintenance budget, one in six roads in England and Wales are still classed as being in poor condition and an estimated £12 billion is now needed to get the local network back into reasonable condition.**



Photo: stocksolutions/Shutterstock

The figures come from the Annual Local Authority Road Maintenance (ALARM) survey published by the Asphalt Industry Alliance of which MPA is a key member. Its report highlights a 33% increase in the number of potholes filled over the last year – yet the time needed to clear the backlog has grown to 13 years.

AIA chairman Alan Mackenzie says: "Essentially, the money spent on filling the 2.7 million potholes reported is wasted – it is inefficient and short term in its effectiveness."

Around 85% of respondents to the survey acknowledged the benefits of structured road maintenance programmes as part of their long-term asset management

plans and £6 billion of funding has been pledged between 2015 and 2021.

"The truth is that although it sounds like a big investment, it will only be enough for local authorities to tread water and will do nothing to tackle the backlog or prevent continuing deterioration," says Alan Mackenzie. "Moving forward, we need planned structural maintenance, resurfacing, strengthening and reconstruction."

This year's survey also shows that road user compensation claims in England (excluding London) have doubled since last year to £20.2 million and local authorities' staff costs to process these exceeded £17.8 million.

## TRAINING

## Creating a skills legacy

**SKILLS Minister, Nick Boles has welcomed the announcement of 75 new apprenticeships as part of Lafarge Tarmac's annual recruitment programme.**

The Minister said: "Apprenticeships make absolute business sense while providing life-changing opportunities for young people across the country... I would urge employers of all sizes to follow Lafarge Tarmac's lead and to consider how they can make apprenticeships part of their growth strategy."

Apprenticeships last for between one and four years and include vocational training

at a network of higher education colleges across the UK. Apprentices also receive expert technical training in their chosen discipline and are paid while they learn. Following the successful completion of the programme, recruits have the option to attend university.

Meanwhile, The British Lime Association (BLA) is launching a competition for students with the aim of rewarding originality and innovation in uses of lime in building, construction and civil engineering. Undergraduates have been asked to submit papers or projects on any topic that uses lime in a sustainability way.

## LIME

## Energy harvest

**LIME operators are coming forward with innovative projects in their drive to reduce energy costs, carbon emissions and their reliance on grid electricity.**

Singleton Birch recently commissioned a 1.5MW anaerobic digestion (AD) facility at its Melton Ross lime works on Humberside. The plant (shown below) will generate 12,000MWh per year of electricity which will provide 40% of the site's power consumption. The anaerobic digester is fed by energy crops supplied under a long-term contract by a consortium of four local farmers. The company hopes to build on its success by repeating it at other sites in the area.

Meanwhile, Steetley Dolomite has installed a £1.3m waste heat-to-power plant which produces up to 40% of the electricity needed to operate its Thrislington plant in County Durham. The facility allows excess heat in the flue gasses to be reclaimed and used to generate 3,000Mwh of electricity per year, reducing the plant's demand on the grid and maximising the use of the energy required for the calcination process. This has the added benefit of reducing CO<sub>2</sub> output by 1,600tpa.

The system takes waste heat from the gasses passing through the electrostatic precipitator and uses it to vaporise a refrigerant, which then drives a rotary generator. A similar system is now being considered for a kiln at the company's Whitwell plant in Nottinghamshire.



## BIODIVERSITY

## Beds for bugs



**TWO state-of-the-art hotels have opened at CEMEX's Hyndford Quarry near Lanark in Scotland – for visiting bugs!**

Featuring unwanted pallets, tubes and recycled materials from around the site as well as the very latest in roof design – a piece of conveyor belt topped with moss, grass and wood – the bug hotels are designed to provide luxury for insects and small wild animals. Bookings are being taken from bees, butterflies, ladybirds, earwigs, spiders and beetles, and enquiries are expected from hedgehogs and other small mammals eager to take up tenancies in the lower floors.

The work was done by a 12-strong team of employees, headed up by quarry manager, Chris Muffett, who researched the best materials.

"They are sited in a small open grassed area next to the office," he explains. "It's a great location as the area has a topsoil bund to protect them from the bad weather. We have plans to add native trees and a hedgerow which will help to attract even more wildlife, and aim to build a further three hotels in the same area over the next two months and to plant nectar-producing plants nearby."

## AGGREGATES

## Skid solution deal

**MPA member Breedon Aggregates is working side-by-side with 107-year-old Powys-based operator H V Bowen & Sons to maintain supplies of a scarce aggregate that is vital for its skid resistance.**

The acquisition of a 50% stake in the family firm gives Breedon access to an important 3.4-million tonne reserve of high polished value (PSV) stone. At +68PSV, Tan-y-Foel

quarry near Welshpool has some of the highest quality PSV stone in the UK.

The business continues to trade as H.V. Bowen and is jointly managed by Breedon Aggregates England Ltd and the Bowen family. Amongst previous PSV projects supplied by Breedon is the Mallory Park race circuit in Leicestershire (shown below).



## HERITAGE

## New posting

**AFTER standing outside a ready-mix concrete plant in Bicester, Oxfordshire for over 100 years, two original Great Western Railway gate posts are off to pastures new in Shropshire.**

The cast iron posts at the Smiths Concrete plant in the old Blackthorn railway station yard date back to before the First World War and are thought to have been in-situ since the station opened in 1910.

They were spotted on Google Earth by enthusiasts from the Severn Valley Railway, which runs steam trains between Kidderminster and Bridgnorth. The Trust's infrastructure team was on the look-out for authentic items for use in the restoration of Bewdley station and asked to buy them.

Sales manager, Malcolm Fennell says: "We had no idea that the posts were originals – the station has been closed since 1953 and we have hung a variety of gates on them

to keep the site secure." In the end, no money changed hands but new posts were provided.





# Going underground



**ON the surface, it is a typically English village cricket scene. But a few metres below the players' feet, Albion Stone manages to mine high quality Portland stone without anyone being aware of its presence.**

A few years back it was all very different on the Dorset island that gives the famous and often strikingly white stone its name. At that time, the company had planning permission to opencast quarry across the cricket field in order to maintain UK supplies of a prestigious stone that features large in buildings like St Paul's Cathedral and Buckingham Palace in London and the UN building in New York.

But then came a big change of direction as family-owned Albion decided the time had come to reduce its impact on the much quarried island by going underground. Managing director Michael Poultney (grandson of founder Harold Poultney) likens it to "keyhole surgery for the island" and has

gone on to pursue a strategy that now sees the company 100% mining below ground.

The cathedral-like spaciousness of the mine with its nine-metre high ceilings is striking, as is the orderliness and evident high standards of health and safety. With blasting not an option, a huge €500,000 diamond-tipped saw slices into the rock to create a void which is then filled with a thin steel pillowcase (hydra-bag). The bag is pumped full of water to cleanly split the rock along its rear face and minimise wastage.

Some 60% of the stone the company mines is cut, finished and shaped in its own factory using state-of-the-art machines and skilled stonemasons, many of whom are trained in-house.

Albion maintains a close focus on the environment, not just in terms of the impact of its operations but the potential to restore what has gone before. Working closely with the Dorset Wildlife Trust, it is managing the rocky environment for its substantial habitat

value recognised by SSSI and even World Heritage status.

Working closely with the Crown Estate as its landlord, the company has installed 800 solar panels on its factory roof and has plans for an on-site 3MW solar farm at the recently completed Independent Quarry site. Virtually all the power for the factory will come from sustainable sources and will result in a marked reduction in the carbon footprint.

Competition with cheap, imported stone from China and India that does not carry the extra costs which responsible safety and environmental standards generate, is a big challenge. So too are the costs and time involved in winning new permissions and meeting European legislation, areas in which MPA is championing the cause of the dimension stone producers.

"The dimension stone industry is small and fragmented and we don't really have a voice to fight it all," says Michael. "That is why MPA is so important to us."