

Autumn 14 | Issue 10

The magazine of the Mineral Products Association

# mineral

products today

## Delivering for the UK

growth in the next Parliament



Under strain  
can trains cope?

Prime people  
new recognition

Cool asphalt  
greener roads

# WELCOME



**What a refreshing change it is to be fronting an issue that reflects a substantial uplift in fortunes for the industry.**

Several of our features refer to new challenges as we respond to deliver the growth that is now so evident and work to ensure it can be sustained. As the rail freight feature on pages 10-11 demonstrates, growth is in itself

making fresh and substantial demands; but it also reflects the fact that we are working together to overcome them.

It is in the same spirit of partnership that we set out ten key points that we believe will, given Government support, enable us to deliver substantial benefits to the economy into the next Parliament and beyond. There is now real momentum in this industry and our members can build on that given the confidence to invest.

The launch of the Prime initiative (page 12) addresses another challenge of the moment in ensuring that we have the skilled people we need to take us into the future. We are in

many ways fortunate in enjoying a loyal and experienced workforce, but many of our best people will retire in the next ten years and it is critical that we attract bright minds to fill the gaps.

To do so, we must raise awareness that this is a great industry to work in and set high standards in terms of training. The reality for those of us who have been around mineral products for a while is that it offers a huge diversity of career routes and genuine satisfaction in working as part of a team that makes a real difference to the world around us. It will undoubtedly be a good time to join.

*Bill Brett, Chairman, MPA*

## Rising sales pose planning challenges

**THE industry has enjoyed another good quarter for sales volumes which are showing significant improvement over the same stage last year. Crushed rock was the fastest growing market with a 9% increase, while both asphalt and sand & gravel were 4% higher. Ready-mixed concrete sales fell 3.2% over the same period but that needs to be seen in the context of exceptional volumes last year – the overall trend remains upwards.**

While last year's results were stronger than anticipated, MPA data indicates further growth through 2014, though of a more modest and stabilising nature. However, even with 3% growth trends, markets would not regain pre-recession levels until after 2020.

"We believe our figures indicate that the second quarter reduction in construction activity highlighted in the recent GDP announcement is a blip and construction will be positive for the year," says MPA chief executive Nigel Jackson. "If the necessary

increase in housing starts can be delivered and promised infrastructure investments are implemented, we should see further improvements in industry markets."

MPA members are, however, beginning to raise concerns – notably in the growing sand and gravel market in the south east – over

whether the planning system will deliver sufficient permissions over the next few years to meet demand. "The industry and government will have to monitor and manage carefully if supply constraints which could impact on growth are to be avoided," said Nigel Jackson.



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## Ahead on cyclist safety

**MPA and its members are ahead of the game in the quest to make the roads of Britain a safer place for cyclists. While accepting that more still needs to be done, the association has the distinction of having already taken significant action on a key recommendation contained in a newly published report from the House of Commons Transport Committee on cycling safety.**

The committee calls on the freight industry to "create a culture of safety among HGVs" and requests the establishment of a timetable for the development of an industry-wide code of conduct. In fact, MPA launched its Vulnerable Road User Safety Policy back in 2012 setting out driver training and additional vehicle equipment requirements for industry HGVs delivering

materials such as aggregates, asphalt, cement and concrete.

It has also been a leading contributor to, and strongly supports, the new Construction Logistics and Cyclist Safety (CLOCS) standard. The Transport for London (TfL) facilitated initiative recently created a single unified vulnerable road user safety standard for construction clients, contractors and the supply chain to work to, which is now being rolled out across the UK.

The implementation of the CLOCS standards is seen as the dawn of a "cycling revolution" in London and follows a spate of six cyclist fatalities involving trucks or buses during November last year. The standard is now increasingly being required by national contractors for all site deliveries and sets

out driver training, vehicle equipment, fleet management and contractor / client requirements for all types of delivery vehicles from 3.5 tonnes gross vehicle weight upwards.



## Cold water warning

**OPERATORS across the UK threw their weight behind MPA's 2014 Stay Safe campaign as the industry set out to reduce fatalities resulting from quarry trespass.**

Amongst members taking decisive action was Sibelco which called in a 24-hour team of safety advisors to discourage people from swimming in a lake near Kings Lynn in Norfolk where two men drowned on the same day last year. The former sand pit lake is part of a designated country park where public access is otherwise permitted.

The company immediately took a positive approach and consulted with the community on what they want from the site. The response was way beyond expectations with more than 600 questionnaires returned.

A "futures group" was formed with community representatives and a variety of uses are being considered including water sports, fishing

and some form of commercial development. Meanwhile, the trespass on the water bodies and anti-social problem was greatly reduced this summer.

Other elements of an MPA campaign that attracted extensive national television coverage included a dummy rescue from deep water (pictured) by a Kent Fire and Rescue team at a Lafarge Tarmac site at Sevenoaks.

A spokesman said: "Failure to appreciate the low water temperatures that exist in quarries, lakes and rivers even in summer, causes difficulties for people and all too often results in the worst possible outcome."

Lisa Skone, the mother of a youngster who was killed in recent years whilst riding a quad bike in a disused quarry in Kent (and who has backed the campaign for several years) told media: "Teenagers think they are invincible and do not appreciate the potential consequences of their actions."

## Into the future

**THE drive to ensure that the UK heads into the future with the benefit of a sustainable mineral strategy steps up a gear on 17 November when 300 delegates come together for the CBI's Living With Minerals 5 event at the QEII Conference Centre in London.**

Highlights of a busy day will include a report back from the UK Minerals Forum on its thinking on future mineral scenarios. Its extensive work has included an examination of the potential impacts of alternative futures on UK mineral supply. The big question is whether future supplies can be achieved without a greater input from Government policy.

A facilitated panel session will look at new developments in the UK including tungsten, potash, unconventional oil and gas and the Tellus South West geophysical project designed to expand knowledge of geology, landscape and ecosystems.

Key speakers will include government chief scientific adviser Sir Mark Walport, CBI director general Sir John Cridland, and geologist and leading TV presenter on geosciences Professor Iain Stewart.

More info from:  
[www.cbi.org.uk/events/living-with-minerals-5](http://www.cbi.org.uk/events/living-with-minerals-5)



# Devolution and cross-border trading

As each visit to the polls delivers its own surprises and with a General Election just months away, MPA chief executive Nigel Jackson looks at what may be in store for the industry.

**GEOLOGY and politics seem to be increasingly linked. The recent local and European election results were widely described as 'seismic shocks' to the political systems in both the UK and the EU. Some months later, it is hard to see any real changes yet – the water in the political balloon may have shifted somewhat but the shape and volume remain pretty much the same.**

The result of the referendum on independence in Scotland is now similarly described as earth-moving; and so it may prove to be, though with world events and the party conference season taking centre stage it is probably too soon to predict. Meanwhile, the pre-election hubbub intensifies.

Of all three recent electoral moments to date, the Scotland issue has the most potential to 'change things forever'. Irrespective of the final constitutional settlement north of the border, the tectonic plates in England, Wales and Northern Ireland are now more active.

At the margins (or borders) there will be friction of some sort. Within the English plate, new stresses, strains and possible fractures may appear. No one really knows. At this stage we can safely conjecture, but something will surely change the

current fragile equilibrium of the UK, with either reinvigorated regions or city regions emerging in some form over the next few years.

Add to all this the forthcoming General Election and it is hard to see how all these forces will not collide and create the worst business risk of all - uncertainty. At a time when companies are experiencing the first reasonably sustained period of increased demand for years, and the challenges of lack of demand are replaced by the challenges of ensuring supply, the last thing anyone needs is for the current Government and any future incumbent to take its eyes off the real issue of maintaining growth.

**"Devolution carries risks of fragmenting the bigger picture and weakening a more strategic approach"**

Businesses will be prepared to participate in debates about constitutional issues provided they offer certainty and sustainable futures. Growth funds the luxury of political debate; lose it and the positive 'can do' support of business will reduce.



In this issue, MPA suggests five actions for Government for the next Parliament and five for the quarrying and mineral products sector which would enable us to be best placed to support delivery of sustained growth until 2020 and beyond. Critical to this remains creating the economic conditions that encourage investment in indigenous production throughout the UK.

Many companies trade not just within our four nations but across the borders. Whatever political changes emerge from the constitutional debate, we must ensure that they are not seismic in business terms and that they enable fair competition based on reasonable and proportionate regulation and taxation.

Devolution is here to stay and, whilst it rightly enables better decision-making closer to the local community, it carries risks of fragmenting the bigger picture and weakening a more strategic approach. For the mineral products industry, which is dependent upon the extraction of mineral resources, the need for a UK minerals strategy has never been greater.

The MPA is not only supportive of developing an industry-led strategy but is an active leader in doing so. It is a simple fact that we can only dig minerals where they lie, and that is a local issue. But the reality is that minerals are not evenly distributed, either in terms of quality or quantity and can be moved long distances in all directions using a wide range of logistical models. That is a serious strategic issue for the nation as a whole and needs to be treated as such.

I hope that in the next Parliament we will have resolved the constitutional questions in a way that balances both the local and strategic issues of this essential industry and that we can then enjoy a period of seismic inactivity and stable and level playing fields!

*The need to sometimes move minerals long distances makes them a strategic as well as a local issue*



Photos: John Sturrock

## From derelict to des res

**IT'S a story that comes to fruition in one of London's most desirable new business and residential communities. But like all other landmark construction projects, the roots of the totally transformed King's Cross district of London reach out all the way to quarries, wharves, rail depots, ready-mix and precast manufacturing plants.**

Aggregates for the development have to date typically come from quarries in Somerset and Derbyshire but also from the seabed in the English Channel. Much of the cement has come from plants in Rutland, Warwickshire and Essex.

And the dramatic concrete cladding that makes up much of the public face of buildings in the celebrated Pancras Square can be tracked to state-of-the-art factories and the local quarries that support them.

The mineral products industry has undoubtedly played its part in an amazing about-face for what was previously a rundown railway wilderness. What's more, the UK's biggest building site is now recognised as

a particular triumph for concrete and an exemplar for all that it can contribute in a sustainable world.

In Victorian times, the site was an industrial heartland but by the end of the last century it had become a largely derelict, and in some places contaminated, mess of disused buildings, railway sidings and warehouses. It stayed that way until the mid-1990s when its owners, London & Continental Railways and Excel, decided to develop and selected Argent as their development partner.

Work started in earnest in 2008, and today the 67-acre development features no fewer than 50 new buildings, 2,000 homes, 20 new streets and ten public squares. Sustainability



is evident in every direction – from its own combined heat and power plant through to "brown" building roofs featuring lawns, trees and flowers to sustain local biodiversity.

There is even a gasholder built in the 1850s, which has been restored and encloses a small park with paths that runs down to the Regent's Canal.

Even more remarkable to those in the know is the sustainability performance of the new buildings against the world-respected BREEAM environmental assessment system. While "Excellent" is the base standard for this development, most buildings here go up a notch to achieve "Outstanding".



Ready-mixed concrete trucks at the heart of the busy King's Cross site

The use of concrete and the benefits of thermal mass have played a significant role in this achievement.

"It's in the groundworks, big retaining structures, basements, embankments and roadways," says Argent's senior projects director, Phil Sullivan.

"Engineers and architects are really pushing the boundaries and showing what can be done with concrete"

"But I have been privileged to work with some very talented engineers and architects who are really pushing the boundaries and showing what can be done with concrete. I've learned a lot about the way the material can be used – especially within buildings from a sustainability point of view."

Amongst the achievements is the converted Granary building which now houses Central Saint Martin's College of Art and Design which features a concrete frame and spectacular areas of exposed interior concrete.

Other much acclaimed achievements include the ten-storey Two Pancras Square which is clad in sparkling white precast panels from British Precast member Techrete. The deep reveals provided by the panels have a practical benefit in reducing solar gain and include gold metal alloy plates which reflect a rich light onto the white dolomite aggregate. The panels also incorporate a bespoke system to collect and divert rainwater for use within the building.

Across the road at One Pancras Square, 400 black cast-iron pillar units are the front face of a building that has an in-situ concrete frame with post-tensioned concrete floor slabs. The exposed concrete ceiling soffits enable the building to benefit from the energy-efficient thermal mass characteristics of concrete. Techrete also supplied 36 non-



Two Pancras Square: concrete panels incorporate a system to collect and divert rainwater for use within the building



Five Pancras Square: concrete in the frame and floors cools the building in summer and stores daytime warmth in winter

structural panels to form a stunning feature for the building's reception area which combines concrete with black marble.

Meanwhile, a new headquarters for Camden Council at Five Pancras Square will include two swimming pools and a library plus nine floors of offices. Railway station noise around the site means that the building cannot vent via windows during the day. Instead, it uses a ventilation system which means that the concrete in the frame and floors is cooled overnight to a point where it can keep the building at the right temperature through the following day. In winter, heat from the daily activity is stored by the concrete, so minimising the need to re-heat the building every morning.

Back at Techrete's factory near Brigg in North Lincolnshire, the production line tackles the issues of sustainability in a variety of ways – from using local aggregate wherever it can through to re-useable steel casting tables with adjustable shutters meaning that large quantities can be produced from just a few



A listed canalside gasholder now acts as a park

moulds. Where bespoke shapes are required, timber formwork is typically re-used up to 20 times before being recycled and 70% of water used to wash down the precast panels is recycled.

CEMEX's input came from plants across London and included cement from Rugby and cement from Tilbury which incorporates pulverised fuel ash from Drax power station in North Yorkshire. Crushed rock has come from Dove Holes quarry at Buxton and

marine aggregates via plants at Northfleet and Greenwich.

The Concrete Centre has worked with the project teams at King's Cross in an advisory capacity over the past six years and regards the emerging development as a substantial endorsement for concrete. It ran a standing room only seminar to share best practice with other specifiers.

The message that King's Cross is a particularly fine

example of sustainable concrete has gone out far and wide via a variety of media, including a Tweet which enthused: "Strong materials gives solidity, achieving a long sustainable life for our built environment and for tenants and local communities."

More info from: [www.concretecentre.com](http://www.concretecentre.com)



Cement from Tilbury incorporates pulverised fuel ash

Hanson and CEMEX have together supplied thousands of cubic metres of ready-mixed concrete. In Hanson's case, the bulk of it has come from a neighbouring concrete plant which is supplied with raw materials by rail – cement from Ketton works in Rutland, limestone from Whatley quarry in Somerset and marine sand and gravel from Dagenham.

# TEN KEY STEPS FOR UK GROWTH

MPA's pre-election message to politicians is a simple one:

**"support indigenous production and investment and we will be able to play our crucial role in the growth that is essential to the next Parliament."**

For its part, MPA wants to see its members given Government encouragement in terms of pressing ahead with major infrastructure projects while tempering penal energy policies; cutting back on cumulative legislation, and permitting new reserves. In return, they will invest in the necessary production capacity and in recruitment and skills while also exploring new ways to cut carbon, deliver sustainable products and boost nature conservation and biodiversity on a huge scale.

Coming just months ahead of the next election, MPA's action plan is designed to appeal to each of the major parties as they look for formulae that will unlock sustained economic growth. To put the promises into perspective you need to appreciate the scale of the key figures that demonstrate the industry's pivotal role in the economy:

- Produces 250m tonnes a year
- Worth £9 billion pa
- Provides 70,000 jobs and supports 2.5m more
- Supports industries valued at £400bn pa
- Biggest supplier to the £120bn construction industry

"The industry is an essential, indigenous and major primary material producer in its own right and is locked into the DNA of a whole host of other important industries," says MPA chief executive Nigel Jackson. "We are the largest supplier to the construction industry, and sectors such as housing, transport, energy and water all rely upon the supply

of mineral products, as do many other industries and activities. In short, we are critical to the development and maintenance of UK infrastructure and to improving the quality of people's everyday lives."

## Economic recovery and competitiveness

Beyond all else, operators need a level of confidence before they will invest at the levels required to support growth. They want reassurance that the Government will press ahead with over £375 billion of infrastructure investment that is currently in the pipeline across transport, energy, water and sewerage



Investing in its people: operators are also putting renewed energy into attracting young people at all levels and developing their skills and competences. The industry has also pledged to continue its successful drive to reduce injuries to employees, contractors and the public – the latter with a notable commitment to cyclist safety in major cities.

## ... by Government

- Focus on encouraging UK growth via indigenous production and investment
- Ensure energy and climate change policies sustain the industry
- Reduce the cumulative cost and volume of environmental legislation.
- Ensure mineral planning authorities have sound local minerals plans in place
- Work with the industry on key sustainability issues

projects. They are also cautious because, in spite of the housing recovery, only 135,000 homes were built in 2013 at a time when more like 200,000 a year are needed. Meanwhile, there is a £12 billion shortfall in the maintenance of our roads.

## ... by industry

- Invest to ensure long term demand is met
- Invest in improving skills and safety
- Seek opportunities to further reduce carbon emissions
- Support efficient use of mineral and other resources
- Enhance nature conservation and biodiversity

Increasing demand is, however, only attractive if UK business can compete on a level playing field with foreign competitors. The issue is of particular concern to energy intensive industries such as cement and lime that have globally traded products and are highly vulnerable to international competition. The cumulative impact of UK energy costs plus climate change measures is forcing some operators to consider moving their operations offshore.

While supporting reasonable, proportionate and consistent regulation and fair taxation, the industry is looking for a commitment to ensure that European Directives don't become "gold plated" when transposed into UK law. It points in particular to the spiralling cost of planning and environmental taxes – costing £400m in 2012 and likely to exceed £660m by 2020.

## Secure, affordable and sustainable energy supply

While seeking to minimise energy costs operators are also looking for certainty and

reliability of supply. Loss of continuous power supplies would, MPA points out, not just stop its own members' production but would also slow down operations of customers ranging from house builders to glass manufacturers. A lack of confidence in power supplies is another issue that could result in some operators moving offshore.

Meanwhile, mineral products are essential in the construction of new power generation facilities, both the new generation of conventional and nuclear stations and renewable energy such as bases for offshore wind farms. MPA wants the next Government to maintain a resource management system that ensures indigenous materials are used in construction.

## Resource security, efficiency and management

Planning permissions are the industry's lifeblood and are, therefore, essential to economic recovery.

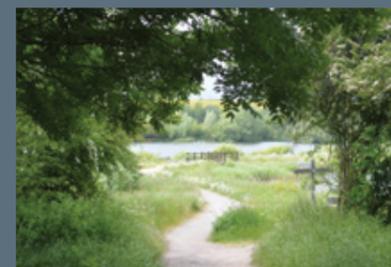
MPA wants the Government to ensure that the plan-led system is implemented more effectively using the provisions set out in the National Planning Policy Framework introduced two years ago so that access to minerals is not unreasonably compromised.

For their part, companies will continue to support efforts to increase resource efficiency with continued emphasis on recycled and secondary materials and on waste-derived fuels. Recycling is now virtually maximised and meets approaching a third of total aggregates demand, but new extraction must remain the major source of supply for the foreseeable future.

MPA is also pressing Government to define the beneficial use of inert waste for land restoration as recovery rather than disposal, so helping the industry sustain high quality quarry restoration.

## Environmental improvement

MPA has to date identified 10,000 hectares of priority habitats created by its members or in process. With DEFRA and Natural England enthusiastic and the RSPB having confirmed that the industry can in itself satisfy nine



The industry's restoration and biodiversity work has resulted in the creation of a National Nature Park consisting of 50 publicly accessible sites totalling 4,000 hectares. Yet the Aggregates Levy assumes that biodiversity and habitat creation through quarry restoration has zero environmental value. The levy adds £300m a year to the costs of supplying aggregates for publicly beneficial projects.

of 11 key habitat targets nationally, the association is looking for due recognition.

Likewise it is seeking tangible acknowledgement of the substantial steps made in site management and responsible sourcing via a more reasonable and proportionate approach to environmental regulation.

Operators also need confidence in essential water supplies and in being able to de-water otherwise flooded working areas. The industry will ensure that its consumption of water is kept to a minimum and ask in return for certainty of transfer licences to maintain essential minerals supply.



# Can the train take the strain?

With the outlook for construction more positive than at any time in the past seven years, there is scope for a substantial increase in the rail freight movement of mineral products. There are, however, now serious questions about the rail industry's capacity to cope with the surge in demand.

**THE speed at which the construction industry came out of recession was a surprise for a lot of people - not least for rail freight operators who find themselves struggling to meet the needs of the mineral products sector as it accelerates to keep up with its busy customers.**

Without rail deliveries from the Mendips and East Midlands, London would not be able to meet its need for crushed rock aggregate. Sand and gravel also travels into the capital from rail-linked marine aggregate wharves

along the Thames. Cement is produced at fewer locations but rail-linked works deliver over long distances.

The capacity issue is one in which MPA is playing a key role in a promising interface between members and the rail industry. Director of economics and public affairs, Jerry McLaughlin, says that the industry's growth in rail freight demand could exceed general market growth and that manufacturers are keen to maximise the use of rail-linked operations.

At the Rail Freight Group, executive director Maggie Simpson says that the market for moving construction materials by rail increased by 17% last year to hit the highest level since 2002.

"The rail network is as busy as it has ever been," she says. With both passenger and freight growth all coming together on the core trunk routes, it is inevitably getting harder to find new capacity but there are still paths and it certainly isn't closed to business. If you look forward and project the kind of growth that we expect, it is clear there are some areas where we are going to need investment."

She adds: "Construction has been a bit of a Cinderella sector for a few years. It had some very good early gains from privatisation but in recent years we have had corporate restructuring, mergers, and an economic downturn which have distracted everyone's attention. Over that period there has been a big rail focus on deep sea intermodal traffic. But now construction materials are coming right up the growth curve and it's starting to highlight some challenges."

The Day Group is one company struggling with rail capacity. At least half its annual aggregates deliveries of approaching four million tonnes are rail imported to the London area from Somerset, Leicestershire and Kent. It receives around 50 trains a week and is currently working at least 25% above recession levels.

Operations director Nick Sadler says that in the first six months of this year rail operators could not satisfy at least 25% of its requests for trains. At one depot in the Crawley area, the company has turned down many thousands of tonnes of orders.

"It has been totally debilitating," he says. "We have got to a point where we have a third party that is dictating our level of business in certain aspects of what we do. The ultimate is that we either let our customers down or we are offered work and have to turn it down

because we know we cannot fulfil the order."

He is, however, not without sympathy for rail freight companies in recognising that it takes time to turn on new capacity and recruit new drivers - and with no guarantees that the heavy investment will be met by sustained business from an habitually cyclical industry.

Aggregate Industries delivers up to five million tonnes-a-year by rail and also receives some from third parties. Simon Blake, general manager of its Midlands Rail operation, says that the national shortage of rail freight resources became apparent as the construction industry came out of recession

as it ships some nine million tonnes a year around an extensive network. Senior manager for rail and shipping, Chris Swan shares the view that the capacity issue has arisen because the rapid economic uplift was not generally foreseen.

"There is no doubt that the tonnage that could have moved by rail was greater than that which did," he says. "Things are improving though maybe not as quickly as anyone would ideally like. The challenge of trying to organise deliveries has been huge and we have had to seek alternative expensive support because of the lack of capacity."

He echoes a key message from Maggie Simpson that the industry can help itself by running longer and heavier trains that make better use of available capacity.

DB Schenker Rail UK is one of the big names in the rail freight business. It has seen a 25% increase in demand from the aggregates industry and says it is running 1,500 more trains than in 2013. It has recruited 104 new drivers in the last 12 months and is investing in new hopper and box wagons and in train planning systems that create more capacity.

"The increase in demand from the construction industry has been significant and is fast

approaching pre-2008 levels," says head of sales Neil McDonald. "The market expected growth, but the rate of it has presented challenges throughout the supply chain and shows little sign of slowing down. Similar levels of growth are expected in 2015 and we will continue to invest in people, facilities and equipment to meet the challenge."

As Maggie Simpson says: "Although there are challenges, all parties are now working together to raise awareness and to try to address them. This is an issue where we have a constructive air of cooperation for mutual benefit."

in the second half of 2012. While the shortage of drivers has been "critical", locomotives and wagons have also been constrained at times. He described network access and timing issues as "progressively more difficult".

"The growth of rail freight with its environmental benefits and decongesting effect on the UK road network needs to be incentivised by government," he says. "Government policy would do well to recognise the importance of rail freight and provide encouragement for progression."

Rail deliveries are responsible for between 10 and 15% of Lafarge Tarmac's logistics spend



Photo: DB Schenker Rail (UK) Ltd

**FACT:** Each freight train removes up to 76 HGVs from the roads and reduces CO<sub>2</sub> emissions by 76% compared to road delivery



Dannika Bannon TMIQ    Andy Blow TMIQ    Dan Green TMIQ    John Morgan TMIQ

# PRIME People

**THEY** are the ones who fire up asphalt plants at 4am, sometimes toil through the night to repair critical machinery and generally work outdoors in all weathers.

Yet the industry's backbone people have, leaders admit, gone unrecognised for far too long. A sea change is, however, now underway with the launch of the "PRIME" (Professional Recognition In Mineral Extraction) initiative.

There is now a solid commitment not just to give recognition but to provide new levels of career opportunity by opening up continuous professional development (CPD) to men and women on every rung of the industry's ladder stretching all the way from NVQ through to honours degree.

The initiative is sponsored by MPA and part funded by the UK Commission for Employment & Skills. It is being delivered by the Institute of Quarrying (IoQ) and the Mineral Products Qualifications Council (MPQC), supported by a cross-industry steering group.

"We want a culture that gives everyone both personal and shared pride in what they do and what we do collectively"

## LETTERS AFTER THEIR NAMES

A few of the 140 people who have already become Technical Members of the Institute of Quarrying:

**DANNIKA BANNON TMIQ** progressed from sales office assistant to weighbridge supervisor at Lafarge Tarmac's Ballidon quarry in Derbyshire and qualified as an explosives supervisor. She has been seconded to manage two sand and gravel units and is doing a diploma in quarry technology. "I owe a lot to the motivation I have gained from PRIME and through becoming a TMIQ," she says.

**ANDY BLOW TMIQ** provides engineering technical support to the Volvo CE customers. In 25 years with the company he has previously been a workshop and field service engineer. "Being a TMIQ means a lot to me," he says. "It recognises my efforts and demonstrates that I am working in a professional manner."

**DAN GREEN TMIQ** is a team leader with plant solutions specialists Rema Tip Top, having originally joined in 2003 as a trainee vulcaniser. He was promoted to Midland region sales manager in 2012. Dan joined the IoQ as an associate and has now upgraded to become a TMIQ. "It has given me more confidence, especially when dealing with other members," he says.

**JOHN MORGAN TMIQ** works as an explosives supervisor with EPC-UK. He started in the business washing coal and then became a shotfirer and profiler. John is always looking to push himself to the next level. "I think TMIQ is a great way to achieve recognition for the work we do," he says.

Project manager Cedric Hollinsworth told guests at the Hillhead launch that PRIME was "unashamedly about people". "We all have some very expensive pieces of equipment but at the end of the day it's people that make our operations work profitably and safely," he said.

MPA chief executive Nigel Jackson said that PRIME was "an important industry asset". "We want a culture that gives everyone recognition for what they do individually and what we do collectively," he said.

While built around the concept of CPD, PRIME also encompasses the creation of a new technical grade for the IoQ (TMIQ) which for the first time gives professional status to key people.

## RESTORATION

### Returned to productivity

**THE** site of a former inert landfill site at Ryarsh, near West Malling in Kent has been successfully reinstated to productive farmland, with silage harvested already this year and a bumper harvest last year.

Gallagher Aggregates operated the inert landfill site following many years of sand extraction by a local brick company, which had left a large void. The infill was completed in July 2011 and the area was restored to its original landform for agricultural use.



The land was prepared and seeded and a water feature added as part of the site drainage requirements, which has now become a well-established and permanent wildlife feature of the restored site.

## CHARITY

### Stepping out

**CEMEX UK employees have been burning calories galore this year, raising money for charity while keeping fit.**

To mark World Day for Safety and Health at Work, over a quarter of the CEMEX workforce took up the Pedometer Challenge, walking 210 million steps between them in a month – the equivalent of walking around the world. Each of the 760 participants was equipped with a pedometer and reported their steps each week, raising a total of over £6,000 which will go to 12 different charities, with the promise of match-funding from the company.



Meanwhile in June, two super-fit employees – Stuart Keighley from Stratford and Al Lavery from Birmingham – cycled over 600 miles to raise money for the charity RoadPeace, the national charity for road crash victims and awareness of cycle safety issues. Their route took them from the CEMEX Uddingston office near Glasgow to the Thorpe head office where they were welcomed (see above) by company president Jesus Gonzalez.

RoadPeace is chaired by Cynthia Barlow who has been involved with the charity since 2000, when her daughter was killed in a road collision involving a ready-mixed concrete truck. "I continue to be grateful for all the work that CEMEX has done to improve working practices in the management of their vehicles and to set higher good practice standards," she says.

## COMMUNITY

### Quarry for tourists

**A £300,000 PROJECT** to create a quarries trail through the Black Mountains of Wales has come to fruition with an official opening by John Griffiths, Welsh Government minister for Natural Resources, Culture and Sport.

Among the supporters was the Aggregates Levy Fund for Wales which donated £100,000 for the restoration of magnificent limestone kilns and interpretation boards at the former Herberts Quarry which was worked for agricultural lime for over 200 years until 1958. Throughout the 19th century, farmers travelled by horse and cart to collect the lime but punitive tolls on turnpike roads eventually led to the famous Rebecca Riots, when mobs disguised in women's clothing rose up to destroy the toll gates.

The trail project is a partnership between The Brecon Beacons National Park, Dyfed Archaeological Trust, the Museum of Wales and

The Black Mountain Trail Centre. One of the key aims is to attract more tourists to the western side of the Brecon Beacons, which is less popular with visitors.

John Griffiths told guests at the opening of the trail: "The industrial heritage of this area for many is associated solely with coal mining. The vital role that lime has played in creating the landscapes of Wales and helping other industries in Wales is often overlooked."



## ASPHALT

## Post Olympic feat



**A READY-MIX plant which supplied more than 300,000 cubic metres of ready-mixed concrete for the 2012 Olympics site in London has been given a new lease of life 200 miles away in Manchester.**

The Liebherr wet batch plant was taken down and put into storage by owners Hanson UK after completion of the Olympic Park and the neighbouring Stratford City retail development. Earlier this year, work began on a project to rebuild it at Miles Platting, about two miles from Manchester city centre.

"The original plant at Miles Platting had been running for nearly 40 years before it was shut down and demolished last year," said Hanson's area general manager Sean Colley. "This new facility will give us a boost in the Manchester market, which is improving all the time as the economy grows."

Pictured above are operations manager Justin Johnston (centre) with plant supervisors Frank Reynolds and Ged Lynch.

## COMMUNITY

## Steam celebration



**OVER 2,000 people braved heavy rain to join in the 85th birthday celebrations at Hope Valley cement works in Derbyshire, which is operated by Hope Construction Materials.**

The open day enabled visitors to get a closer look at the works and to experience a unique steam train ride up and down the branch line which connects Hope Valley with the mainline. Also popular on the day were quarry tours, a historical exhibition and musical entertainment while the younger visitors enjoyed a range of fun

activities including stilt walkers, donkey rides and face painting.

Industrial director Ashley Bryan says: "We were not lucky with the weather but despite this, the event was a big success and we are delighted that so many people came along to help celebrate this milestone.

"We had lots of very positive feedback from visitors who were fascinated to learn more about quarrying and how cement is made."

## OBITUARY

## Goodbye to a big character



**THE industry has lost one of its great characters with the death after a long illness of Robert Hill, retired chairman of the Wiltshire-based Hills Group.**

Robert, 74, was at the helm of the independent, family-owned business for 43 years. His leadership and charismatic personality will forever be associated with a significant part of the group's history during which he oversaw both difficult and hugely successful times. Robert was a member of the first National Council of the Quarry Products Association and the company has been a member of the association ever since.

By the time Robert relinquished the chairmanship of Hills in 2008 and his son Michael became chief executive, the group had grown to become a multi-million pound business. With its interests in quarrying, waste management, recycling and house building the company has extended its operations to cover Wiltshire, Berkshire, Gloucestershire, Oxfordshire and Dorset.

Nigel Jackson, chief executive MPA, said: "Robert was always an active contributor to industry thinking and brought smiles to everyone's faces. He built Hills into a major force in the south west with very diverse and successful business interests. I am sure the whole industry will be saddened at his passing."

## WILDLIFE

## Plight of the bumblebee



**OVER the past two years MPA and the Bumblebee Conservation Trust (BBCT) have been working together to ensure the protection, creation and restoration of flower-rich habitats in quarry sites to help fight the decline of the bumblebee population.**

The BBCT has visited five very different quarries so far, providing advice on what practical measures can be taken to promote the well-being of bumblebees on each site. These include leaving

areas of undisturbed rough grassland as nesting sites, ensuring a wide variety of wildflowers, flowering shrubs, trees and hedgerows are planted to provide pollen and nectar from the early spring until October and providing bare cliffs which are excellent for burrowing solitary bees.

Earlier this year MPA member, Wainwright played host to the BBCT at its Moons Hill quarry in Somerset when the Trust gave a presentation on the plight of the bumblebee and its vital importance as a pollinator, generating a lot of local interest and enthusiasm. The BBC was back at Moons Hill for an open day in September, encouraging more people to plant flowers for bees.

The BBCT is keen to gather hard evidence as to the quality of habitat quarries are providing and is encouraging quarry workers to take up this challenge and start monitoring bees in their workplace as part of the BBCT's national BeeWalk scheme.

## PLANNING

## A vital permission

**SURREY-based quarry and waste solutions company, J & J Franks has secured planning consent for a new quarry at Nutfield, near Redhill, that will provide over four million tonnes of much needed soft sand with potential for additional reserves and permission for back-filling of the site with inert waste.**

This positive outcome comes after years of working closely with the local community and authorities, including promoting the case throughout Surrey County Council's eight-year process to formally adopt a mineral plan. This safeguarded the Nutfield site and an adjacent farm, which is also owned by the company. A further piece of land has since been purchased to enable them to build 900m of new road which will link the quarry site directly to the A25, thus removing traffic issues.

Managing director Peter Crate says: "This is the single largest site that Surrey has consented in many years. It is badly needed as the county is running desperately short of sand and the demand is huge."

"We are delighted to have secured consent to work the first major area of what will be a completely new quarry at Nutfield," says Peter. "This will be a 0.25 million tonne plus-a-year site and a natural successor for our existing site in Betchworth, which only has a few years left in it. We will be looking to take two to three times more sand out of this site than at Betchworth because the demand is so great. It is unusual for an independent to come forward with such a large new site and it puts us in a very strong position in the south east."

## RESTORATION

## Reeds are right

**LAFARGE TARMAC, in partnership with the RSPB, has completed the first phase of an extensive restoration project at its Langford Lowfields Quarry in Nottinghamshire, opening trails through 50 hectares of restored reedbed wetland which is already attracting a diverse range of bird species.**



Although part of the site is still an active quarry, the new trails provide visitor access to the reserve for the first time and offer views across a landscape set to change as further areas of the working quarry are restored to create a unique 180-hectare wetland habitat.

Work began to create large expanses of reedbed when quarrying was completed on the phase one area around ten years ago. Lafarge Tarmac monitored water levels and sculpted the ground into islands and channels to form the right environment to support reed growth, while the RSPB oversaw the process of growing new reeds from seed.

Neil Beards, estates manager at Lafarge Tarmac says: "These restoration plans have always been central to our vision of the site's future. Our partnership with the RSPB has enabled us to create a superb wetlands habitat where rare birds such as the breeding marsh harrier have been sighted. We look forward to continuing our work with the RSPB on this significant conservation site to further enhance the biodiversity benefits of the reserve."



# Cool asphalt

Think of road surfacing and most of us have an image of hot asphalt – and probably of traffic delays as we wait for the new surface to be restored to normal use. The carbon emission consequences of idling engines and of putting heat into the material are, however, on the change as innovative new low temperature asphalts make their mark.

**ONE of the best bits of news in the world of roads is that asphalt no longer has to be hot to be effective. It cuts carbon but it also saves precious construction time which means that roads can be back in use much more quickly. Welcome to the world of low temperature asphalt (LTA).**

While the concept of LTAs has been around for a good few years, the reality is that their evolution in the UK has been thus far constrained by cost during the years of recession. Meanwhile, countries like the USA and France have made more rapid progress.

The UK industry is, however, very aware of the potential sustainability benefits. MPA and the Refined Bitumen Association in collaboration with the Highways Agency have funded a Transport Research Laboratory study based on a demonstration site on the A5 which it is hoped will help to break down the remaining barriers.

While conventional hot mix asphalt is made by mixing aggregates with bitumen at a temperature of up to 190 degrees C, trials have proved that mixing and working at about half that temperature is possible without compromising quality.

The total UK carbon footprint associated with asphalt manufacture has been estimated at over three quarters of a million tonnes of CO<sub>2</sub> a year - roughly equivalent to 5,000km driven by a million family cars. It is estimated that if LTAs replaced around 20% of the total UK asphalt market over the next ten years, the total saving could add up to over £46m and around a quarter of a million tonnes of CO<sub>2</sub>.

Paul Phillips, chairman of MPA Asphalt's technical panel, says that there is no doubt about the benefits of LTA but to succeed there has to be an acceptance amongst public sector customers of added cost resulting from industry investment but also from the inefficiency of switching of plants between traditional asphalts and LTA.

"These technologies aren't simply plucked off a tree – they have to be developed to a level of performance which gives clients the confidence to specify them," he says. "It all has a cost and that has to be paid for."