









Big Society conflict? new fund proposed

Cool concrete beats overheating

Raising the bar precasters' bold move



THIS new issue comes at a time when there is a debate going on within our industry over the direction of Government policy. While we certainly don't underestimate the scale of the challenge facing the nation as we get our finances back in order, we feel that the growth that is needed to drive recovery must be stimulated by a willingness to invest in housing, infrastructure and road repairs.

I make no apology for quoting again the highly significant statistic that every pound invested in construction generates nearly £3 in total economic activity. As a sector that underpins construction, we are very much in the engine room of recovery.

It also seems to us entirely at odds with the Government's Big Society beliefs to abandon the Aggregates Levy Sustainability Fund which has enjoyed great success in helping communities to improve local facilities. Our feature starting on page 5 demonstrates very amply that the modest portion of the substantial tax we collect that has gone into the fund has been put to excellent use to help people living close to quarries.

We have now proposed an alternative fund that will help Government to deliver localism.

Patrick O'Shea Chairman, MPA

WELCOME United front

THE Mineral Products Association and leading conservation organisations have united to urge the Government to re-think its decision to scrap the **Aggregates Levy Sustainability Fund**

The RSPB and the Wildlife Trust are amongst organisations warning that the considerable impetus achieved over recent years through ALSF-funded cooperation between the industry and conservation groups will be lost with the withdrawal of the fund.

The ALSF was set up at the time of the introduction of the aggregates levy in 2002 to provide funding to reduce the environmental impacts of quarrying and deliver benefits to

areas involved. It is the route by which about six per cent of levy revenue has been recycled into communities.

The levy generates more than £300 million annually, rising by £15 million when the rate is increased in April 2012. Total ALSF spending has averaged £20 million pa.

Defra said it was scrapping the fund because it "did not represent a core activity". Yet an independent assessment it commissioned last year concluded: "Overall, the value for money assessment is good and many areas offer evidence of excellent potential value for money, particularly in the medium term."

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Cover pic: The emerging Shard building will redefine London's skyline and include offices, a hotel, bars, restaurants and luxury apartments.



THE minerals industry has unique potential to drive achievement of the UK's biodiversity targets under a new strategy now formally launched by MPA.

Buoyed by RSPB research showing that mineral sites could meet 100 per cent of the targets for nine out of 11 priority habitats in the UK Biodiversity Action Plan, the industry has set out an ambitious plan to accelerate its involvement.

Its strategy includes a comprehensive field study as a basis for unlocking the potential, sharing of best practice, developing partnerships with conservation groups, promoting educational initiatives and running annual awards in partnership with Natural England.

The strategy was welcomed by Environment Minister Richard Benyon (pictured above) at a well attended House of Commons reception. MPA chief executive Nigel Jackson stressed to him that policy makers must respond to the industry's growing contribution through the planning system and by supporting initiatives like Nature After Minerals.

"Our industry has a proven legacy of high quality restoration and still has further significant potential to protect and enhance biodiversity including common as well as rare and threatened species and habitats," he said.

Poul Christensen, chairman of Natural England, was enthusiastic. "The contribution MPA members make to the natural environment hasn't always received the recognition it deserves," he said.

Former RSPB conservation director, Dr Mark Avery, added: "It is still a surprise to some members of the public when they hear that places where minerals have been dug out, can be fantastic places for nature afterwards."

FACT

To date, MPA has identified two nature reserves, 15 field study and educational centres and 13 nature

View the document in full at www.mineralproducts.org/sustainability

sustainable

THE concrete industry has won **Government praise for its commitment** to sustainability.

Speaking at the launch of the new Concrete Sustainability Performance Report, Business and Innovation Minister Mark Prisk said: "I am really impressed by how the concrete industry has taken positive action and initiative not only to reduce carbon emissions but also to produce cleaner products and reduce waste."

The Government's chief construction advisor, Paul Morrell, similarly applauded the industry's vision of leadership for sustainable construction. But he observed that the construction sector as a whole needed to integrate its work in order to solve carbon reduction issues.

CO₂ emissions are down almost 18 per cent since 1990

The industry has gone beyond a number of environmental targets including reduction of greenhouse gases - CO₂ emissions are down almost 18 per cent since 1990.

The report can be viewed at www.sustainableconcrete.org.uk.

FACT

The concrete industry generates 0.2 million tonnes of waste annually but uses over four million tonnes otherwise destined for landfill.

Lobbying intensifies on localism

MPA has intensified its campaign to ensure that the drive towards localism does not stand in the way of providing England with a steady and adequate supply of materials.

The association has closely tracked the emergence of the localism agenda from its inception in pre-election Tory policy statements. It has warned from the outset of the difficulties in persuading communities

to make adequate provision for mineral extraction in the absence of some form of "push" from the centre.

The battle for the industry's future intensified following publication of the Localism Bill and in January MPA made a written submission to the House of Commons Public Bill Committee in which it expressed its support for exclusion of mineral working from neighbourhood planning. It also expressed support for

the suggested presumption in favour of development that is sustainable.

Pivotal to the MPA case is the assertion that some form of managed aggregates supply system (which has worked reasonably well for 30 years) is essential, albeit in a more localist context.

It believes joint working between planning authorities is vital to maintain supplies to all areas

Going for growth

MPA chief executive Nigel Jackson assesses how the mineral products industry can contribute to the UK's growth agenda.

THERE is now general agreement that a deficit-cutting agenda alone won't put Britain on the road to sustainable recovery. The big question centres on how growth can be achieved.

It is not surprising that the Mineral Products Association throws its weight behind a strategy that wants to see growth and development of the built environment (buildings and infrastructure) as a prime catalyst to boost the economy.

The Government's own *Plan for Growth* highlights the criticality of the construction industry, which represents some seven per cent of GDP and £110 billion to the economy - more if the whole supply chain is taken into account.

As the major material supplier to the construction industry, the mineral products sector is essential to the economy and makes a significant contribution to other key aspects of government policy such as carbon reduction and biodiversity.

But with the full impact of public investment cuts still to bite and a continuing huge shortfall in housing and funding for much-needed road repairs, it is hard to see where the need for growth is likely to come from in the short term.

"We understand where the Government is going on the deficit but that doesn't appear to be working as quickly or as significantly as it would have hoped," says Nigel Jackson. "It has got the message that there is also a need for a growth agenda but the words now need to be matched by action.

"If you accept that construction is one route to growth, you have to look in particular at whether the planning system can deliver the permissions upon which all built development depends.

"Everything hangs on a system that is in flux and in particular on the emerging National Planning Policy Framework and the much talked about "presumption in favour of sustainable development". Get it right and it may boost investor confidence; get it wrong and inertia and uncertainty will act as a drag on growth."

MPA doesn't see construction lifting off again until 2013 and even then expects growth to be at a low, though hopefully sustainable, level.

"Government has got the message that there is also a need for a growth agenda but the words now need to be matched by action"

One big hope for the future rests on reviving the nation's ailing energy supply infrastructure via a major phase of new nuclear, clean coal and renewables technology.

"Whilst we also support the need to upgrade and modernise our transport infrastructure, the big here and now issue is the £10 billion needed to put our roads in good order and whether we can afford to divert scarce money into new long term rail," says Jackson.

"On housing, we continue to under-build and are dogged by uncertainties created by the reshaping of the planning system and mortgage financing at the lower end of the market."

A further way in which MPA says Government can help kick start construction is by releasing the brakes that are applied by the sheer weight of legislation. Some encouragement



can be drawn from David Cameron's recent pledge to "take on the enemies of enterprise".

"The words from Government are always well intentioned," says Jackson. "But it is a fact that, because Government itself is not always joined up, it doesn't fully understand the cumulative impact of all its regulatory and fiscal policy. The only people who understand are generally those at the sharp end of the various measures.

"Our sector is affected by a raft of measures increasingly related to carbon and energy whose combined impact is to impose greater taxes on the sector. The effect of the conversion of the carbon reduction commitment from an incentive-based to a purely cost-based approach is only just beginning to be calculated, but the costs will fall not just on large businesses but on

"We need a comprehensive review of the cumulative impact of all these measures, otherwise some companies will increasingly export not just their emissions, but their production, to less hostile operating environments overseas. That would be of no benefit to the planet and of huge disbenefit to the UK economy."

Jackson is emphatic that the industry is in constructive mode. "Our aim is to point out problems where they exist but also to offer solutions," he says. "We want to work with Government because we have a common interest in long term economic growth delivered in a sustainable manner."

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HAMPSTEAD NORREYS COMMUNITY SHUP

VILLAGE halls have been built with it, youth clubs set up, cycle routes and playing fields created, and nature reserves established the length and breadth of the nation. There is no argument that the portion of funding channelled into local communities from the nine-year-old tax on aggregates has been put to good uses.

Small wonder then that Defra's softly, softly website announcement of the decision to scrap the fund and so pull approaching £20 million a year more into Government coffers, has been greeted with widespread frustration at grass roots level.

The money given direct from the ALSF is, however, only part of the story. In the three

years to 2011 the £65 million it dispensed also leveraged over £47 million in third party funding. While much of the value of the actual projects is not quantifiable, a Government-commissioned review says that funding devoted to carbon reduction in the industry achieved savings worth £58 million. The value of waste reduction programmes is put at £123 million. And more fuel-efficient driving by well-trained truckers saved over £10 million in diesel and carbon.

COMMUNITIES

The wildlife successes are legion. The ALSF is helping to meet Government biodiversity targets. More than 3,000 hectares (20 times the size of Hyde Park) have been improved and seven miles of footpaths upgraded. Meanwhile, heritage assets of national

"We are appalled that this Government, having vowed to empower local communities, is actually doing the opposite." ALSF grant recipient

continued overleaf

Big Society conflict? > continued from page 5

Research Dissemination Capital grants for reprocessing Local community project Quarry site project Carbon business solutions

FUNDING BY ACTIVITY 2008-2011

significance have been preserved using ALSF money distributed by English Heritage.

The Government review was undertaken by its own authoritative In House Policy Research unit. Its conclusion is that ALSF would, between 2008 and 2011, "make an important contribution to its over-arching objective to reduce the environmental footprint of aggregates extraction". The report described it as a "mature programme with considerable momentum, a good reputation and a wide community of interest". It also said that there remained a strong

Work has been undertaken under five distinct themes and has included substantial research designed to reduce the impact of quarries. There have been programmes to encourage more sustainable use of MPA's Virtual Quarry resources and to divert

case for further funding.

aggregates from road to rail and waterways. Meanwhile, the Marine ALSF has delivered work judged to be of international significance in understanding the impact of dredging.

In just three years ...

More than 3,000 hectares (20 times the size of Hyde Park) have been improved and seven miles of footpaths upgraded

MPA itself has made the industry more meaningful to children by using ALSF funding to create an award-winning Virtual Quarry (www.virtualquarry.co.uk) as well as pursuing vital safety initiatives designed to protect both the public and its own employees (www.safequarry.com).

> But it is the workstream devoted specifically to helping communities that provides the most easily appreciated human benefits. A total of £10.6 million has been distributed over three years, some of it going direct to local authorities in key quarrying areas. While a third of the money going to councils has been controversially diverted to other areas of activity, the report says there is no doubt that considerable community benefits have been achieved including improvement to the natural and built environments.

MPA has proposed to Defra and other government departments

that a new form of ALSF should be introduced in April 2012 and is in discussion about how this might be progressed.

- £65 million dispensed from ALSF also leveraged over £47 million in third party
- Waste reduction programmes saved an estimated £123 million

THEY SAY ...

"ALSF funding has strongly supported national biodiversity objectives. It is vital that aggregates levy revenue continues to

the decline in biodiversity by 2020."

Darren Moorcroft, head of countryside

local organisations are growing and the

in order to carry on with this important

"Small charities will not be able to marshal

Matt Shardlow, chief executive, Buglife

our green spaces and green infrastructure

of England

- Funding devoted to carbon reduction in the industry achieved savings worth £58 million
- Fuel-efficient driving saved over £10 million in diesel and carbon.



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can harness

local effort and

fundraising"

Marilyn Cox at Shilton Village Hall: "We are appalled

GRASS ROOTS BENEFIT

AS an ALSF delivery partner distributing funds at community level, Action with Communities in Rural England (ACRE), was deluged with nearly 300 applications for 2010-11 and ultimately awarded over £437,000 to 57 community organisations through what is known as the COMMA fund.

In total, since its inception in 2007, the COMMA fund has attracted over 900 applications and has awarded grants, totalling £1.8 million to 190 community projects. They have provided genuine and lasting benefit in "... relatively

communities affected by aggregates extraction or transportation. Awards have been spread equitably across the counties covered by the scheme.

The successful projects - all undertaken by local people

- received grants of between £3,000 and £20,000. Amongst the more recent have been a local food initiative, installation of solar panels in a community building, playing fields improvements, elderly/disabled access and the construction of a composting toilet.

At Hampstead Norreys in Berkshire, the fund has (with a £7,000 grant) facilitated the launch of a community shop which is owned and operated by local people who will share any profits. It serves nearly 450 people, not just as a corner store and coffee shop but with services such as dry cleaning, key cutting, shoe repairs and prescription drop-offs.

Locals set up an industrial and provident society after the demand for a shop was revealed in a parish survey. The new shop is open seven days a week and is staffed mainly by volunteers.

Frustration is strong in David Cameron's own Witney constituency in Oxfordshire where the COMMA fund delivered £8,500 to enable villagers in Shilton to repair an increasingly dangerous dry stone wall that surrounds their much loved village hall. In a parish with under 100 homes, they are by no means

> reliant on handouts and raised a matching sum to landscape the overgrown surrounds of the hall.

Says fundraiser Marilyn Cox: "We are an active community but it's hard to raise all that we need to maintain our hall. We are appalled that

this Government, having vowed to empower local communities, is actually doing the opposite by actions such as this."

ACRE chief executive, Sylvia Brown, says: "Projects like these clearly demonstrate how relatively small amounts of investment can harness local effort and fundraising to produce genuine and lasting benefit for communities.

"It also shows how, given an appropriate impetus, England's rural communities can and do respond positively to the Big Society principles of self reliance and community action."

HELP FOR HABITATS

OVER the lifetime of the ALSF, the Shropshire Wildlife Trust has received ome £600,000 towards its work.



In 2009, a £90,000 grant made it possible to buy the 527-acre Catherton Common near Cleobury Mortimer to add to existing land Clee Hill quarry and its long industrial

attracts over 700 primary age children each £65,000 "Shifting Sands" project brought

Hughes: "ALSF has strengthened the



Only found at two Shropshire sites the bog bush cricket



IT'S quite literally buried in the Cotswolds but Helen and Chris Seymour-Smith's new home offers some significant pointers for the future of housing in England. Their new subterranean home with office above takes the cause of cutting carbon to a new level and ably demonstrates that concrete is very much the construction material of the future for reasons that go way beyond its strength and durability.

Underhill House is the first English home to achieve a standard of energy efficiency evolved in Germany in the 1990s and now widely used across Europe. A "Passivhaus" is 90 per cent more energy efficient than a normal home and achieves that by applying strict building standards that conserve warmth using heat sources and solar gains. Passivhaus is all too often used as shorthand for timber construction in the UK. This project destroys that myth and demonstrates that heavyweight solutions exist to meet the exacting standard.

The significance of Underhill House is that all new homes in England must be carbon neutral by 2016 as Government gets to grips with the fact that the UK's 21 million homes are responsible for 27 per cent of our CO₂ emissions. It's a drive that is being reinforced by new building and planning rules and by a star rating system to help

Concrete and masonry are well placed to help designers win credits in most of the nine categories of the *Code For Sustainable Homes*, and to potentially high levels. On the energy front, concrete scores because of its thermal mass, staying cool in summer and holding on to warmth in winter. Expert

analysis shows that if global warming continues, as temperatures gradually rise, concrete buildings will be the last to need air conditioning.

But sustainability encompasses much more than energy and concrete is equally out in front in terms of its durability, sound insulation and capacity to resist fire and flood.

Sustainability demands that you dig a bit further back and establish whether any construction material has been responsibly sourced. Take concrete apart and you have a story that stands up well to such scrutiny.

In volume terms, aggregates are the biggest component in concrete and are inherently low carbon by nature. Most are naturally occurring and require minimal processing. They are also essentially local products that generate jobs for local people and are usually delivered over short distances.

ROUTE TO ZERO

For those in the know, revisions to Part L of the building regulations represent an important milestone on the road to zero carbon new homes in 2016. MPA The Concrete Centre has produced a new guide to help architects and specifiers understand how concrete and masonry housing will achieve the requirements. Download a copy from www.concretecentre.com.

LOOK CLOSER AT CONCRETE

- Aggregates inherently low carbon, local product, minimal processing
- Recycled and secondary aggregates made from demolition wastes and industrial by-products
- Cement carbon emissions much reduced using wastederived fuels and industrial by-products

MPA The Concrete Centre brochure *Specifying Sustainable Concrete* is available from www.concretecentre.com



A "Passivhaus" is 90 per cent more energy efficient than a normal home

But concrete is also increasingly made using recycled aggregates (a sector in which the UK leads Europe); and from secondary materials such as blast furnace slag, foundry sand, slate and china clay sand.

Cement is the other major partner in concrete. Because of the intense heat involved in its manufacture, the cement sector has had to work hard on its carbon credentials. The substantial progress that has been achieved in the UK is down to the still growing use of waste-derived fuels that are diverted from landfill disposal.

The carbon footprint of cement (and, therefore, concrete made from it) is further reduced by blending with by-products from other industries which would also otherwise have to be dumped. These include ggbs and fly ash from the iron-making industry and power stations respectively. The result is that the UK cement industry is nowadays a net consumer of waste.

By 2009, emissions from CO₂ in each cubic metre of concrete were 18 per cent below 1990 levels.

Two-faced triumph

The public face of Underhill House is a beautifully restored old barn sitting on a

gentle hillside in glorious countryside in Shakespeare country. It is only when you look more closely that you discover its great secret – an ultra modern home hidden beneath and to one side of the barn.

Others had tried and failed to win permission to convert the previously derelict barn (pictured below left) in an Area of Outstanding Natural Beauty. It took a large slice of imagination from architect Helen Seymour-Smith and husband Chris to convince the local planners that this was a ground-breaking scheme worthy of treating as an exception under little used planning law.

Inspired by the potential of the Passivhaus standard for energy efficiency, they turned to concrete as the basis for an underground house that is dug into the hill and so is invisible from surrounding countryside. The structure is made entirely from concrete supplied by project partner and MPA member Aggregate Industries. Much of the concrete is left exposed internally to exploit the benefits of its thermal mass. The basement, walls, floors and roof are all then foam-insulated.

The concrete was made using both ground granulated blast furnace slag and pulverised fuel ash as cement substitutes.

The external paving was made using china clay waste, the screed employs sand from crushed glass bottles and the internal blockwork utilises recycled sawdust.

Most of the electricity is provided by pholtovotaics while a mechanical ventilation system with heat recovery connects to the hot water store. One side of the barn roof is covered in glass slates with solar hot water collectors beneath and there is also a back-up wood stove. There is no boiler because it doesn't need one – this property will stay a comfortable 20°C all year round because of the way it was built.

BEATING OVERHEATING

Heavyweight homes built using concrete and masonry can exploit their inherent thermal mass on a year-round basis. During the summer, heat is absorbed on hot days, helping to cool the internal temperature. The stored heat is then removed by night ventilation. During the winter, the thermal mass absorbs solar heat gains through south-facing windows and slowly releases the heat at night.

Research shows that a typical masonry house has four per cent more embodied CO_2 than an equivalent lightweight frame construction. However, the additional CO_2 could be offset in as little as 11 years due to the increased energy savings provided by the masonry thermal mass.



Going for growth how to help the nation



1 Boost construction

New forecasts predict declining construction output in 2011 and 2012, but we have to invest in more housebuilding if we are to secure sustainable growth.

New research by the IPPR warns that if nothing is done there will be a shortfall of 750,000 homes by 2025.

Our infrastructure is badly in need of renewal and we particularly need to secure our future sources of energy.

Missing opportunities to develop major schemes and not pushing ahead with nuclear and other energy projects would be very short-sighted. Projects like these have long lead-in times and time is running out. We support the work of Infrastructure UK and the development of a Green Investment Bank, but these initiatives must be backed up by action on the ground and project delivery.



Dear Prime Minister

You have placed a great deal of emphasis over recent weeks on the imperative of achieving growth. You have rightly insisted that, without it, nothing is possible. We want you to be aware that, as the industry that provides the single biggest material flow into the economy, we are ready and willing to play our part.

Although aggregates, asphalt, cement and concrete sales volumes all improved in the first quarter, this followed a poor final quarter of 2010 and any improvements are from a very low base. Underlying construction markets are likely to remain depressed throughout 2011 and 2012 as the cuts to public investment have yet to impact fully and private sector growth is patchy. The resulting uncertainty and consequent lack of investment could act as a serious brake on

We appreciate that the poor state of public finances set a sobering context for the Chancellor's recent budget and we were encouraged by some of the specific measures that he took. Postponement of the planned increase in the aggregates levy, the additional £100 million for road repairs and the increase in the Climate Change Agreement discount are all to be applauded. So too are the more general reductions in fuel duties and corporation tax.

They are a start – but no more than that. There is a big difference between saying that you want growth and enabling it. One problem lies with policy. If the Government is really serious about growth then it has to understand what really inhibits us – tax, regulation and the planning system.

But beyond all else, we are concerned that the growth you are seeking cannot possibly be achieved without recognition of the need to boost construction.

We hope it is helpful to set out our agenda to help deliver the growth that the nation needs – and to assure you of our best endeavours.

Yours sincerely

Mineral Products Association

2 Really improve the planning system



While recognising the principles of localism, we are far from convinced that its realities can be squared with growth. The instinct of those impacted upon by the industry will always be to oppose change and it is unlikely that national need will ever persuade them otherwise.

The current planning system has underdelivered for a long time and the current impetus to reform it needs to deliver. The nation desperately needs an effective, more consistent and faster overall planning system, and one that also delivers a long term supply of essential minerals to make growth possible.

3 Repair our roads

The fact that emergency funding for road repairs has been required three times in 15 months highlights a major structural problem with the condition of our roads which urgently need a sustained improvement in investment. It is illogical to focus on future investment in major projects without an associated focus on repairing our existing public infrastructure. Good roads are not just good for the economy, they improve safety for all road users and are also good for carbon reduction



David Cameron has promised a "massive rebalancing" of the UK economy in an effort to promote growth. He has asked the private sector for ideas on how Government can remove the barriers that stand in the way. We take a wholly positive view of what the Government has set out to achieve and are setting out here our response to the Prime Minister and our agenda for growth.

4 Limit regulation to what is essential



While welcoming well-considered regulation as the basis for a well-run industry, simplicity is highly desirable and should be achievable. Individual Government departments often seem unable to join up their thinking with the result that the cumulative impact of streams of new regulation - much of it emanating from the EU - is excessive. The real pain of endless regulation is often not seen within Government and is felt only by those who have to react to it.

5 Review carbon and energy taxation

We are very concerned about the cumulative burden of taxation. We are especially worried about the implications of higher carbon and energy costs for industry, particularly on the international competitiveness of energy-intensive industries. A comprehensive review of all carbon taxation and market mechanisms is justified, rather than the piecemeal approach that has developed in the dash to "outgreen" our competitors. We are committed to the Government's carbonreduction targets, but the reality is that if

energy-intensive industries move offshore and export not just our carbon but our jobs and trade, this will not reduce global carbon emissions or our carbon consumption.



6 Help us to help local communities

The demise of the Aggregates Levy Sustainability Fund is a tragedy at a time when localism is such a big part of the agenda. As demonstrated in our feature on pages 5 – 7, it has delivered real value to communities at grass roots level. For a Government that is committed to the Big Society, it is a massive own goal and needs to be restored or replaced with some new mechanism that allows our industry to help the communities that it impacts upon.





STRETCHING BOUNDARIES

Ashley Bryan, cement works manager

ASHLEY Bryan (above) started his cement industry career as an apprentice fitter and turner. Twenty five years on, he manages the UK's largest cement plant and works hard to ensure that it maintains harmony with its neighbours in the beautiful surroundings of the Peak District National Park.

At 80 years of age, Lafarge Cement's Hope Works is one of the oldest in the country but still produces up to 1.3 million tonnes a year and supplies a wide area of the UK from its central position, thanks mainly to major investment in the site's rail infrastructure.

For Ashley, the big challenge is continually to stretch its boundaries in terms of issues like safety (currently two years with no lost time injuries, LTIs) and the use of waste-derived fuels. A substantial proportion of its energy needs come from tyre chips and meat and bone meal and he is about to evaluate a third fuel, processed sewage pellets.

"When I started, issues like climate change and carbon were nowhere on the horizon," he says. "Now, the drive to reduce our carbon

footprint is fundamental. There are limits to what you can achieve with an older plant but we will do better yet."

It is also significant that Hope has recently hit a major performance milestone with over 2,000 hours running of one of its two kilns without the need for any maintenance stoppage. Ashley is proud of the team work that has gone into that and of the 'plant mastery' vision that helped to achieve it.

"Plant mastery is a programme that has created a new culture of spreading the ownership of performance. The people who now 'own' production and report on it at our morning meetings are the supervisors who understand how to get the best from the

"We have applied the same approach to relationships with our external stakeholders - from local parish councils through to the Peak District National Park Authority. We hold regular, constructive meetings with our community liaison committee. Between meetings, they know they can talk to me - but my environment manager is more likely to have the information they need and there are no barriers to them doing so.

"Works managers come and go but the rest of the team is much more likely to stay in place and you have to empower them."

SLEEVES ROLLED UP

Steve Parker, precast business managing director

STEVE Parker (below) has a simple formula for getting the best out of the team of 500 people who support him as a director of the Roger Bullivant Group and managing director of its Buchans Concrete Solutions subsidiary - he treats them as equals and doesn't think of himself as the boss.

"For me, the key to good management is understanding your people and rolling up your sleeves and working alongside them. We work on a flat structure and they know we are all in it together to get jobs done. Its not everyone's culture but it works for me," says Steve who also somehow manages to find the time to be president of British Precast.



OLYMPIC FEAT

Gary Power, concrete production manager

WHEN the eyes of the world beam down on London next summer, Gary Power (right) is one man who can look back with particular pride on the part he has played in setting the Olympic stage.

As one of two production managers with London Concrete, Gary has helped to mastermind the delivery of massive quantities of concrete that are at the heart of the Olympic Park, the aquatic centre, the velodrome and the basketball arena plus other temporary structures.

Of all the records that will be broken at those and other venues, none will involve

Based in Burton-on-Trent, Bullivant is one of

the largest specialist foundation engineering

companies in the UK and turns over more

progressed with it as the company began

making precast concrete piles and concrete

structures. Today, it has a name for products

ranging from classroom extensions to hotels,

It was Steve who took the driving seat when

Bullivants bought Buchans four years ago

as a vehicle through which to accelerate its

six months and good profits in three years.

"I don't put that down to me but to simply

things out," says Steve. "It's been a fabulous

challenging times to come given the fact that

a lot of our work is in the public sector. We will

knuckle down and work it through together."

Like most senior managers, Steve never quite

has enough time. His remit embraces sales,

manufacturing, finance, health and safety,

environment and quality assurance. He is

also in his third year as president of British

"It's a great industry and we need to build its

forward the industry's reputation.

reputation and sell its benefits."

time but we also recognise that there are

being there amongst them and working

growth. It moved from losses to break-even in

24 years ago as a works manager and

prisons and medical centres.

than £70m a year. Steve joined the business

quite such a team effort as has gone into satisfying the needs of not one but a whole series of contractors hungry for concrete. It is an achievement that stretches from Bardon Hill Quarry in Leicestershire as the main feed for crushed rock to the North Sea (via Dagenham) as the source of marine sand - with a large helping of sand sourced as a secondary aggregate from Cornwall.

For Gary, getting the concrete where it was needed on time sometimes presented a big logistical challenge. "The day that stands out was when we had to supply 1,300 cubic metres to the aquatic centre," he recalls. "While we were more than capable of doing that, we were also busy with other customers and actually delivered 1,900 cubic metres over the day. It was a question of having the right people in the right places, not least in

the batching cabin."

He has also had to manage the day-to-day requirement of the package of accreditations and responsible sourcing commitments that helped Aggregates Industries get the Olympics contract. "We have to be very careful about our environmental performance - everything from water management to oil storage and energy," he says. "All these issues are now routine in my job where ten years ago they didn't exist.

"It does mean long days and even when I finish at night my phone has to stay on to deal with any problems that arise. But I can honestly say that I enjoy every aspect of it."

OFFICE AFLOAT Peter Maclean, ship captain

PETER Maclean (below) never wanted a nine-to-five job - and he certainly hasn't got one! When he says goodbye to his family and heads off for work, they know he won't be back for a fortnight. In the

As master of Tarmac Marine Dredging's City of London, his job is to take charge of a ship especially in London and the south east.

worked about the world before joining Tarmac 15 years ago. Gaining his master's ticket five years ago was the fulfilment of a boyhood dream.

"From the day I started I always wanted to be a captain," he says. "I love managing and manoeuvring the vessel and the teamwork that goes into it. Sea life is good, though it has changed a lot over the years. In areas like safety and environment. Our accreditation to ISO14001 demonstrates the scale of our commitment.

He adds: "At the end of the day you carry quite a responsibility – first and foremost for people's lives and the environment but also for a vessel that represents a big investment. If you damage the dredging gear, for example, you can't just pop into a supermarket and pick up another one – it costs big money and you will also lose valuable dredging time."

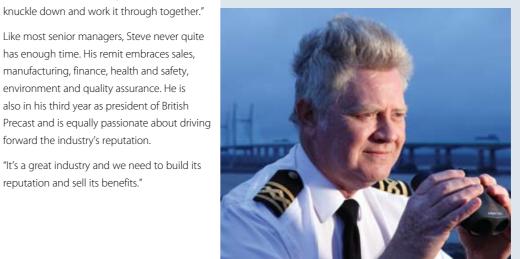
> "Working as a team is a very important part of the job. I don't really do stress but there are certainly times when I have concerns.

"If the weather is good, everything is fine, but if the weather gets bad in winter it can be challenging. But I certainly wouldn't swap it for anything else."

meantime, his "office" and the "factory" he manages will travel with him.

that cost £10 million when it was launched 20 years ago, the lives of 12 crew members and the delivery of much-needed aggregate into the heart of the capital. Marine aggregate is an often unseen industry but its contribution to the overall cause of construction is substantial,

Peter went to sea as a cadet in 1980 and



Representing an industry worth an estimated £2 billion a year and producing more than 25 million tonnes of products, British Precast is the most recent trade organisation to become a member of MPA. Bringing it into the fold represents a further major boost for MPA as a body that continues to grow in size, stature and influence.



ASK any athlete. In the face of serious competition, you have to push your performance to ever higher levels. In the case of British Precast, that means not just driving up standards amongst its 48 full members but making the achievement of them compulsory.

But what's significant about the new British Precast Charter is not just that it demands that members constantly do better, but that it also throws down a challenge to customers, specifiers and contractors to recognise that lowest price does not necessarily represent best value.

Faced with low-price competition from less committed operators in the UK and abroad, British Precast has recognised that the only way to go is up – by "raising the bar" with compulsory standards on quality, safety and sustainability. The message is loud and clear: "If you buy from our members you have a cast iron guarantee that you are going to the best, most sustainable sources even if it costs a little more".



Targets

British Precast targets for 2012 include:

- Reduce energy used in production by 10%
- 10% cut in CO₂ emissions from production
- Cut waste to landfill by 10%
- Substitute 25% of cement used in production with alternatives
- Increase use of recycled or secondary aggregates to 25% of total
- Reduce mains water consumption by 5%
- Reduce ground water consumption by 5%
- 10% reduction each year in reportable injuries



"Locally and responsibly sourced precasters will be major players in the new era of construction that lies ahead.

The precast operators share MPA's overall commitment to minimising harm to employees with a targeted 50 per cent reduction in lost time injuries between 2010 and 2015. On wider sustainability issues, it publishes its key performance indicators and its targets for improvement.

The new Raising The Bar initiative is one that British Precast chief executive Martin Clarke recognises will be difficult. "If it wasn't difficult it wouldn't be worthwhile," he insists. "We are the only precast body operating such a scheme anywhere in the world.

"A lot of other construction sectors have made claims about their environmental credentials, safety and sustainability. We are actually demonstrating that our industry is leading the way with a set of mandatory pledges and collective, measureable targets that are audited for all to see."

But British Precast also recognises that operating responsibly impacts on the bottom line. "There will be some great opportunities as we come out of the recession and the current Government spending cutbacks," says Martin Clarke. "Locally and responsibly sourced

precasters will be major players in the new era of construction that lies ahead."

His vision is that in time customers will recognise the new British Precast charter mark as a sign of a company that delivers its products to the highest standards of sustainability, health and safety and quality.

The reaction from members has been enthusiastic. As Richard Hartley, head of marketing at Monier puts it: "As a company, we have an ongoing programme to improve our environmental performance, but we are only one company. We need our industry representatives to set targets, provide benchmarks and to monitor progress in order to ensure the whole industry moves forward at the speed of the best."

Firms wishing to join British Precast will be given a 12-month period of grace to comply with the charter scheme.



INNOVATION

Hanson Formpave won a British Precast award for innovation in 2010 with a unique, combined renewable energy and water harvesting system. While its sustainable urban drainage system allows rain to filter through permeable concrete block paved surfaces, a ground source heat pump then converts existing natural heat energy stored in the earth into energy to heat and cool buildings. The secret of the Aquaflow system is that the heat pump's "slinky pipes" are immersed in the water-filled sub-base of the paving system.



HEALTH AND SAFETY

Jorge Dorrego Ortiz is production manager at Brett Landscaping's Poole plant. He was recognised by British Precast in 2010 for his outstanding contribution to health and safety. Under his leadership, the plant recorded zero lost-time accidents over a two year period and also reduced minor accidents from 14 to two in 2009. He also achieved 91 safety talks through 2009 when his target was one a week.

ENERGY

H+H UK was recognised by British Precast in its 2009 awards for becoming the first UK aircrete and precast concrete manufacturer to achieve accreditation under the Carbon Trust's Energy Efficiency Accreditation Scheme. H+H provided 38 pieces of evidence to the scheme assessor, who awarded the company a final mark of over 80 per cent for energy efficiency. Systems installed to achieve the carbon reduction include re-use of waste steam and heat, invertors on electrical motors, and the use of captured rain and canal water in place of mains water.

Raising awareness

MPA Scotland has completed a series of successful training events designed to raise planners' understanding of the industry.

The initiative came as a result of collaboration with the Scottish Government when the industry raised concerns over lack of minerals knowledge amongst those who have a key role in its future. The sessions were coordinated by Improvement Service and run at local

quarries with close support from Tarmac, CEMEX and Aggregate Industries.

The response from planners was enthusiastic. Says Glyn Jones from Al: "it was an excellent opportunity to showcase our operations and enabled planning officers to gain a more practical understanding of quarry operations and how potential impacts can be successfully mitigated."

CONCRETE

Flood resilient

MPA The Concrete Centre has welcomed a report which warns that homes in high flood risk areas should be sufficiently resilient to be back in action within 24 hours of suffering a foot-deep deluge of water.

The report commissioned by Defra from engineering consultants WSP predicts that major flooding could become a regular event due to more frequent storms and rising sea levels. The Concrete Centre points out that masonry and concrete homes are inherently robust and their structures do not absorb water or warp. Flooding will not harm their structural integrity.



NATURE

ONE of the UK's rarest and most secretive bird species has successfully established itself in the reed beds at Tarmac's Nosterfield quarry, in North Yorkshire.

The bittern, on both RSPB and international lists of endangered species, has been at Nosterfield since 2009. Nosterfield's biodiversity action plan includes an

extensive reed bed area planted by volunteers which has played a fundamental part in creating the right conditions.

Volunteer observer David Greaves says: "It is very significant to have bittern in this area – particularly as the site is so far inland. The reed beds were planted with the specific objective of attracting this species, and it has worked"

COMMUNITY

Quarry fun

THE quarry-based Somerset Earth Science Centre at Wainwright's Moons Hill Quarry near Frome was the venue for 38 families who attended a hands-on nature day to celebrate the biodiversity and wide ranging habitats created by the industry.

The event was run in partnership with the Somerset Wildlife Trust. Activities included story telling, pond dipping and woodland trails. Visitors also looked at the geological history of the Mendips and built their own volcano sculptures. "Everyone had a great time and said that they enjoyed doing hands-on activities outdoors with their families," said organiser Gill Odolphie. Another session is planned for the autumn.



CARBON

Portal launched

YEARS of work between the industry and the Carbon Trust have been distilled into a website that promises to help operators of all sizes to cut their carbon footprint.

The carbon portal uses an innovative "journey navigator" to replicate the process of saving energy and reducing CO₂. It includes toolbox talks with energy saving ideas, an assessment tool to identify opportunities and a database to log and track achievement. The portal can be found at www.aggregatescarbonreduction.com and www.mineralproducts.org.



SAFETY

Audit opportunity

Booming bittern

MPA is rolling out a new site audit tool to help MPA members audit their own health and safety systems.

Trials of the Safer by Association tool have been undertaken at quarry sites and have benefited from critical review by experienced auditors within the industry. It has already been taken up by five MPA member companies ranging from small sand and gravel producers to a large hard rock quarry.

Members are being encouraged to take up Safer by Association's third party auditing option in order to benefit from independent reviews of health and safety systems and identify priority areas on which to focus. There are two third party options offering either a one day sample audit to identify key areas that require improvements or a full multi-day audit to identify shortcomings more comprehensively and provide a detailed action plan. The project is one of a suite of new health and safety tools being developed by MPA.



ROADS

More potholes

THE number of potholes blighting the roads of England and Wales has for the first time topped the two million mark – a 59 per cent increase over the previous year.

The Asphalt Alliance's latest local authority road maintenance (ALARM) Survey confirms a marked deterioration in local road condition.

AIA chairman, Colin Loveday, is increasingly concerned. "Local authorities are doing what they can, but reactive maintenance – such as simply filling potholes when they appear – is at least 20 times more expensive than planned preventative maintenance," he says.

"The additional £200 million announced this year is welcome but if the Government wants to save the country money it should be investing in local roads now to save a massive repair bill later on."

NATURE

New reserve

OXFORDSHIRE-based Smiths
Bletchington has opened a new nature reserve to the public as part of its ongoing restoration along the Lower Windrush Valley. The Rushy Common Nature Reserve with its open water, ponds and scrapes was worked for

gravel and then restored in just four vears.

The current phase of the Gill Mill operation near Witney involves further nature lakes and ponds with winding footpaths designed for wheelchair access.



FUELS

All the way

CEMEX UK's South Ferriby cement plant in North Lincolnshire has achieved a major industry landmark by stretching its use of alternative waste-derived fuels to 100 per cent over a three-day trial period in March. The small UK works now leads the way in Europe and within

CEMEX's global network of more than 60 cement plants.

Further good news is that emissions, such as oxides of nitrogen and sulphur, have declined by 20 per cent and 43 per cent respectively since alternative fuels were introduced there in 2002.



LANDSCAPE



SILICA sand supplier, Bathgate, has further enhanced the natural habitat at its Arclid quarry in Cheshire with an ambitious planting programme involving 1,000 trees.

The company has created an artificial badger sett to compensate for one closed down under a Natural England licence, and has installed bird and bat boxes. It has introduced a strict 'throw back' fishing policy for its on-site lake, which has helped boost fish stocks there while also helping to populate other lakes in the area.

SUSTAINABILITY

"THINK again about concrete as your first choice building material for sustainability" was the overriding message from the mineral products industry at Ecobuild 2011. MPA The Concrete Centre was joined by several members, each pressing the case for heavyweight materials in the long term fight back against climate change.

Concrete case at Ecobuild

Concrete Cernie

MPA The Concrete Centre

The sheer range of environmental benefits and the fact that several are unrivalled by other materials was the theme on the MPA The Concrete Centre stand and in its various presentations. The key message was that, for true sustainability, you have to consider the whole life environmental impact. Concrete has a head start because it is an essentially local material and is responsibly sourced. Buildings constructed with it are thermally efficient, resist fire and flood and can be recycled.

Lafarge

Lafarge unveiled a series of new eco products including a cement that is low in embodied carbon and is made using 50 per cent ground granulated blast furnace slag, a by-product of iron and steel making. Also on show was a permeable concrete described as an important innovation in sustainable urban drainage systems. Meanwhile Lafarge Plasterboard introduced a new multi-purpose board containing eight per cent mass of responsibly-sourced wood particles.



Benefit to the function of function of the fun

Brett Landscaping

Brett Landscaping unveiled new software introduced as a design aid for planning sub-bases in permeable paving systems. The aim is to offer a tool that assists landscaping specifiers and is part of a suite of RIBA-approved seminars covering a range of design issues. Other features at *Ecobuild* included kerbs with a 65 per cent recycled content, plus a system that allows bus drivers to confidently position their vehicle close to the kerb without tyre damage. The stand also featured a 'Love Your Landscape' initiative which supports local communities looking to improve their environment.



Hanson set out to "explode the myth" by using its stand to demonstrate the ways in which balance can be achieved between the materials used on construction and the natural environment. Its "cradle to grave" theme spanned biodiversity being achieved at a typical quarry, alternative fuels as a means of reducing CO₂ during manufacture, innovative products, meeting latest standards for sustainable housing and final reuse of recycled materials.







Above: Cycle Safe launch in Oxford

Below: deliverina the message in Yorkshire



With over 2.5 million trips every day now being made by bike, and many more cyclists now weaving their way through heavy urban traffic, there is growing concern over the particular risk of accidents involving lorries. Statistics show that, over recent years, an average of 24 cyclist fatalities in the UK involved a lorry.

As an industry that operates some 30,000 lorries, mineral products is particularly aware of the need to take action. The launch of MPA's *Cycle Safe* pilot initiative marks the start of an emerging campaign designed to raise awareness.

For cyclists, the key message is to recognise the dangers in "undertaking" – entering what is for most drivers of large lorries a blind spot. Accidents occur when the vehicle then

turns left, often swinging first to the right in order to do so.

The essential message for drivers is one of heightened awareness of the cyclists and of fitting signs, mirrors, sensors and audible warning devices. To date, over 26,000 industry drivers have attended training courses where cyclists are a prominent issue.

The Cycle Safe pilot was launched in Oxford with support from local member Smiths Bletchington. Says transport manager Paul Needle: "As an operator regularly running lorries in a city that is heavily used by cyclists,

we recognise the risk. The simple act of meeting and talking to cyclists is the best possible way of getting across our safety message."

Cycle Safe builds on the impetus gained by CEMEX UK whose concern goes back to 2003 when a cyclist died in an incident with a truck working on the company's behalf. Since then, CEMEX have worked tirelessly to raise awareness of cycle safety including working in partnership with the police and other stakeholders and by implementing a range of internal training initiatives.

over 26,000 industry drivers have attended training courses where cyclists are a prominent issue

MPA will extend its Cycle Safe initiative into London during June in partnership with the Metropolitan Police who regard the issue as a serious one where good communication can make a difference. It

will also be liaising with cycling groups and representatives from Transport for London and the freight transport industry who are implementing similar initiatives.

Meanwhile, the Huddersfield based Myers Group has run a series of "exchanging places" events in partnership with Kirklees Bike User Group and volunteers from Sustrans.

The aim is simply to talk to cyclists about the "danger zone" and invite them into the cab to take a truck driver's perspective. In June, the company will take a lorry to a rally that attracts over 25,000 cycling enthusiasts.