Minerals planning as essential as minerals themselves

The essentiality of both minerals and minerals planners was a recurring theme at the year’s Minerals Planning Conference, hosted by MPA and the Royal Town Planning Institute (RTPI).

Over 300 delegates attended the June event, entitled ‘Minerals Planning at a Crossroads’, to hear from a range of expert speakers about the challenges facing minerals planning and how these may be met.

Common themes were the essentiality of all minerals for the economy and society, a planning system that enables need to be met sustainably, and the importance of the role of minerals planners, coupled with how to train and attract people into the profession.

Mark Russell, MPA Executive Director for Planning and Mineral Resources said: “Mineral planning plays a crucial role supporting the delivery of Government ambitions around housing and green growth.

“Minerals supply has been dominated by concerns around the availability of ‘critical’ minerals like lithium, cobalt and nickel, but we must not lose sight of the fact that delivering a steady and adequate supply of ‘essential’ minerals for UK construction and manufacturing involves many of the same issues.”

Marine economy

The British Marine Aggregates Producers Association (BMAPA) was among the UK sectors represented at the recent Seabed User & Developer Group (SUDG) parliamentary reception.

The event was aimed at highlighting the breadth and scale of UK marine industries that are vital to the UK’s prosperity – as well as marine aggregates that includes renewable energy, oil and gas, ports, subsea cables, recreational boating and carbon capture & storage (CCS).

Collectively employing more than 900,000 people, these industries play a key role in areas like energy security, delivery of net zero carbon, levelling up of coastal economies, securing logistics and supply chains, telecommunications and connectivity.

Infrastructure review overdue

The MPA has welcomed news that an urgent review of national planning policy for major projects is to be carried out.

Chancellor Jeremy Hunt asked the National Infrastructure Commission (NIC) to identify how the planning system could create greater certainty for infrastructure stakeholders – including the supply chain – ahead of an action plan on the UK’s Nationally Significant Infrastructure Projects (NSIPs).

MPA has made repeated calls for greater clarity on planning and delivery of infrastructure projects to give its members certainty to invest in sites, equipment and people to ensure an adequate supply of aggregates, concrete, asphalt and other mineral products that make all construction possible.

At the same time, local mineral planning authorities need greater visibility of the construction material demands of infrastructure projects.

Call for concrete action

MPA was one of the organisations participating in the recent Global Cement & Concrete Association leaders conference, with CEOs from across the concrete and cement industry worldwide gathering to collaborate on the transition to net zero carbon.

Guests were honoured to be joined by United Nations General Secretary António Guterres who acknowledged the essential role concrete plays in society and supported the call for maximum action to reach net zero.

The UK’s concrete and cement industry has reduced carbon emissions by more than 50% since 1990 and has a detailed and viable roadmap to go beyond net zero by 2050.

AS AN INDUSTRY we work hard to supply mineral products for housing and regeneration, improving transport infrastructure, flood defences and energy security – all critical end uses.

To deliver this, the operational standards to which we hold ourselves to account are recognised as being among the best in the world. So one would hope that society might appreciate the production of these essential materials, and that Government – who are, after all, the largest consumer of mineral products – would ensure that access to them was fairly straightforward.

That’s not to say the minerals industry wants an easy ride, but for too long there’s been inexorable friction in the systems that we have to engage with, whether that’s planning, environmental regulation or product specification. As Government has continued to thin out in the post-Covid era the inertia companies face is only getting worse. Important systems that MPA members rely upon have become dysfunctional, with diminishing resources struggling to keep them going or, in some cases, eliminated altogether.

The message I’m hearing loudly from producers, is that systems are becoming increasingly fractured, exacerbating policy conflicts between different parts of national and local Government.

This inevitably adds delay and cost to the already complex processes required to secure and retain our ‘licence to operate’.

For example, refusing a planning application for a new quarry doesn’t make the demand go away, it just displaces the future supply, putting extra pressure on others to meet that demand, in turn accelerating the consumption of already permitted reserves. The irony is that the UK is blessed with an abundance of high-quality mineral resources to meet the
needs of society, which deliver social and economic benefits while assuring our potential to supply.

This friction, and the uncertainty it creates, is one of the key reasons why mineral replenishment rates are at an all-time low. Despite the widespread existence of Local Authority Mineral Plans, the planning and permitting system is hindering access to replacement reserves without any regard for how forecast demand can be met.

“Important systems that MPA members rely upon have become dysfunctional”

But it doesn’t have to be like this. No industrial or societal system operates in isolation; we are all dependent on other systems to play our part, whether we like it or not. What’s critical is that systems are synthesised as far as possible to make things work efficiently, creating an integrated ‘system of systems’.

This requires collective awareness amongst all system ‘owners’ of the role and importance of other systems and how they work together. Understanding the bigger picture would help to ensure that resources are applied at the right point to the right systems, enabling better decisions to be made to engineer change on the big issues that affect us all. The more harmonious the interface between systems, the more efficiently things can be driven forwards to ring the changes.

One example is MPA’s support – along with 80 other organisations – in a new global initiative, Our Shared Understanding: a circular economy in the built environment, launched at the World Circular Economy Forum in June. This is about enabling people and nature to flourish within our planet’s capacity, to provide resources and minimise wastes.

Our Shared Understanding calls on all parts of the built environment sector to pull together and accelerate towards a circular economy, which will be increasingly demanded by society and rightly so. It recognises the need for responsible sourcing and consumption of essential materials, maximising their value through use and reuse, and working with nature to restore and enhance biodiversity – activities that our sector already does and, in many cases, leads the way in.

Achieving circularity will require better integration of the numerous different systems, not least because today’s global economic model supports a whole host of unsustainable systems that result in the limits of our finite planet being exceeded. Recognition that something needs to change is growing so the transition to a circular economy, to minimise use of virgin resources, is both necessary and inevitable.

However, there is evidence of insufficient understanding of systems, resulting in flawed decisions being taken that are short-termist and convenient, serving to avoid or exacerbate the big issues rather than address them. We see this in the mineral products sector. – What the industry achieves every day is remarkable but frictions in other systems overshadow our ability to deliver.

Despite this relative gloom, I maintain that a circular economy in the built environment presents tremendous opportunity for our sector. Britain’s mineral products industry has long embraced the recovery of wastes to produce recycled aggregates and use of industrial by-products to make secondary aggregates. This part of our system is close to the maximum achievable today, with recycled and secondary materials accounting for almost one third of all construction aggregates consumed – ranking Britain above every other major European economy in aggregate recycling.

And whilst a material like concrete can be recycled again and again, the most effective way to sustain its use – and maximise value – is by promoting its long service life through the reuse of existing concrete structures, thereby encouraging greater take up of concrete as the material of choice for new resilient and versatile future structures. That would help to ease the long-term demand for new materials and reduce the embodied carbon associated with new builds.

The construction industry has started the circularity journey, and it can and will go further in delivering a circular economy – through innovations and understanding materials at a molecular level and applying that knowledge at scale. It’s really coming home to me now that the route to greater circularity is with better molecular understanding.

Even small changes at a molecular level can make a massive difference when they are scaled up and applied to the hundreds of millions of tonnes of mineral products made and consumed each year.

 Needless to say, we are reliant on many other systems to make the transition. Frankly, today we don’t know yet what there is to unpack in this space and although the work across the sector to date is impressive, we’re going to need more bright minds coming into our industry with fresh thinking (not to mention investors with ambition for change).

“Now is the time to be educating the next generation to effect the changes”

For this to happen we rely on the education system which itself needs to adapt to place issues like circularity at the core. Given that 25% of the country’s workforce retires every ten years, now is the time to be educating the next generation to effect the changes - we have no time to lose.

And so we come full circle – every system relies on every other system – and it is critical for policy-makers to understand which systems truly underpin the economy and society – such as where raw materials come from and what they are used for. If we can align our collective understanding around issues of circularity through Our Shared Understanding then there’s room for optimism that other systems in Government and industry can synchronize too.

Jon Prichard
Chief Executive