

asphalt now



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Reporting on the asphalt industry

Issue 49 | Autumn/Winter 2022

SHARING BEST PRACTICE

Record attendance for industry event

AUTUMN STATEMENT

What does it mean for local roads?

INNOVATION

Lower carbon asphalts
trialled on the UK's roads





WORKING TOGETHER TOWARDS SUSTAINABILITY

Local authorities need our support in achieving their demanding net zero goals

It is becoming increasingly important that, as an industry, we support local authorities as they work towards their sustainability goals.

The vast majority have a net zero pledge in place – many with a 2030 target – which is a tall order, especially when faced with the challenge of rising costs due to inflation and potential real terms cuts in funding, which may impact on making the best whole-life decisions when it comes to road maintenance.

If we are to make significant progress, working together will be key and events such as our online Sharing Best Practice event ([pages 6 and 7](#)) are a good opportunity to share knowledge and experience.

The themes for this year's event were Decarbonisation and Resilience, topics which

should be inextricably linked. It included presentations and discussions on the route to net zero strategies; approaches to measurement; the increasing specification of Warm Mix Asphalts; and defining resilience in the asphalt sector. Those unable to attend on the day can find the presentations [here](#).

Other materials innovation, such as 'biogenic' asphalt for example, may also help reduce carbon emissions and increase resilience and there are several case studies in this issue that highlight the good work being trialled.

While it was promising that Chancellor Jeremy Hunt's Autumn spending review recognised the importance of sustained investment in infrastructure, the level of support for maintaining existing assets remains to be seen ([page 9](#)). Ongoing

underfunding of our local roads is well recognised and documented, with the latest RAC report ([page 4](#)) demonstrating the level of public frustration with declining conditions.

The AIA will continue to make sure policymakers get the message that our local roads need sustained funding – even more so given net zero ambitions – if we are to keep the country connected, drive economic prosperity and support levelling-up.

We appreciate spending choices are difficult to make, but not investing in local network maintenance funding will lead to worsening road conditions, which impact on other locally provided public services, and only lead to a rising bill to fix the problem.

Rick Green

Chair, Asphalt Industry Alliance

MAKING WARM THE NORM

■ **Two of** the UK's leading asphalt suppliers have made bold moves to increase the use of Warm Mix Asphalts (WMAs) by making them the default for the majority of material supplied.

Aggregate Industries has switched to WMA as standard across its product range while Tarmac now supplies all its base and surface course asphalts as WMA, with the exception of modified binder materials and HRA with 35% or lower stone content.

The move follows the announcement by National Highways last year that WMAs are encouraged by default on the strategic road network (SRN) and it is hoped that local authorities, which are responsible for 97% of the total road network, will also progress in this direction.

Faster completion of works

Using WMAs reduces the carbon emissions associated with asphalt production by up to 15% compared with standard hot mixed products due to the reduction in energy required. It also offers a range of other benefits including faster completion of works, enhanced durability and improved



Using WMAs reduces the carbon emissions associated with asphalt production

health and safety for the workforce. Commenting on the transition to WMAs, Vicky Smith, Managing Director of Asphalt and Aggregates at Aggregate Industries, said: "This is an important step in our carbon reduction journey and a vital move for the sector. If all production in the UK switched to WMAs it could save around 61,000 tonnes of CO₂ a year and up to £70 million through increased shift outputs."

Brian Kent, National Technical Director at Tarmac, added: "Our stance on WMA means

we can help local authorities overcome some of the barriers that are obstructing routine use, helping them reduce the carbon footprint of their operations with no reduction in the integrity or lifespan of their asphalt surfaces.

"This is great news for our industry and a significant step to helping our clients achieve their net zero targets in years to come. It also demonstrates that, collaboratively, we can reduce carbon and progress climate emergency action plans."

NATIONAL AWARD IN RECOGNITION OF LOW CARBON STRATEGY



■ **Lancashire County** Council has received a national award in recognition of its Highways Decarbonisation Strategy (see page 6).

It won the Chartered Institute of Highways and Transportation (CIHT) Climate Action Award – which recognises



WINNER
CIHT & Ringway Climate
Action Award

highways and transportation projects, schemes, products or strategies that demonstrate a contribution to sustainable

working practices – for its commitment to sustainable working practices and carbon reduction in maintaining the county's roads.

The mission statement for Lancashire's strategy is to achieve *Sustainability through Durability* and part of this is using lower carbon materials and techniques.

It will support the county council's corporate priorities, in particular the need to protect the environment by establishing realistic carbon reduction from highways maintenance and related activities.

CIHT President Neil Johnstone said: "The CIHT Awards recognise and celebrate the remarkable achievements of those working in our highways and transportation sector.

"These awards demonstrate real evidence of how, through hard work, our sector is delivering professional standards and best in class solutions."

Trade association Eurobitume, which represents the bitumen supply industry, is welcoming four new members.

UK infrastructure company **FM Conway**, German bitumen and bituminous binders supplier company **GBS** and **Irish Tar & Bitumen Suppliers** have all joined as core members, while global bitumen distributor **Rubis Energie** becomes a new associate member.

"Their membership demonstrates the value that organisations continue to place on being part of Eurobitume and the new companies bring their expertise, insights and experiences to add value to the association," said Eurobitume Chief Executive Siobhan McKelvey.

Eurobitume is the first reference for bitumen in Europe and is involved with ongoing industry debates regarding the future development of standards and regulations, particularly on environmental and sustainability issues.

ASPHALT INDUSTRY PEOPLE

■ **The Mineral** Products Association (MPA) has appointed Jon Prichard as its new Chief Executive following Nigel Jackson's decision to step down from the role after 13 years.



Jon, a Chartered Civil Engineer, was previously Chief Executive at the Institution of Chemical Engineers. Simon Willis, MPA Chairman, said: "I am delighted to announce Jon as MPA's new Chief Executive.

"He brings a wealth of senior leadership experience managing membership organisations as well as working with wider stakeholders. He is ideally placed to lead the Association over the coming years, as the voice of the mineral and mineral products sector.

"Jon will build on the tremendous work Nigel has undertaken during his tenure, building, growing and unifying the MPA into the respected sectoral trade association it has become."

Jon added: "I am very much looking

forward to engaging with the wide range of MPA members and stakeholders that this role will involve."

■ **Joanne Conway** has been appointed as Chair of the FM Conway Group.



She has worked in the business for 21 years, including as a member of the board since 2011, and is the daughter of late Chairman and owner Michael Conway MBE.

Over the past three years Joanne has been responsible for the manufacturing arm of the business as the Managing Director of the Aggregates and Asphalt (A&A) division. This role will now be taken by Rhia Morgan, who joined the business in 2016.

"I am honoured and privileged to take on the role of Chair," said Joanne. "I have had the pleasure of watching our great business evolve and adapt over the past 40 years under my father's vision and I am proud of the business that we are today.

"We are a family business with family values working towards delivering the best solutions for all by using the safest, innovative and most sustainable methods. And most importantly, with a workforce of people that care."

■ **Will Britain**, who founded the Local Council Roads Innovation Group (LCRIG) in 2013, received the Lifetime Achievement Award at the *Highways Awards 2022* in recognition of the contribution he has made to the sector over his 43-year career.



"I am extremely honoured and proud to have received this award, but I wouldn't have received it without the assistance of many people in the highway sector who have collaborated with me along the way," said Will, who retired from his role as Head of Highways and Traffic Management Services at Blackpool Council earlier this year.

FUNDING AWARDED FOR CARBON-CUTTING RESEARCH

■ **BEIS** is providing almost £400,000 in funding to investigate the feasibility of using low carbon hydrogen as an alternative source of heat energy at Hanson's asphalt plants.

The funding, from the Industrial Hydrogen Accelerator Programme, part of the Government's Net Zero Innovation Portfolio, has been awarded through the EDF R&D Centre to the *Bay Hydrogen Hub – Hydrogen4Hanson* project.

The project will look at the feasibility of developing nuclear hydrogen production and investigating technologies to deliver it to industrial sites. It could underpin the development of a hydrogen hub at EDF's Heynsham nuclear power station in

Morecambe, Lancashire, and the use of hydrogen to decarbonise multiple Hanson sites in the UK.

Marian Garfield, Hanson UK Sustainability Director, said: "The use of hydrogen as a fuel at asphalt sites has not yet been physically demonstrated anywhere in the world, so we are delighted to once again be leading the way with new technologies that have the potential to significantly cut carbon emissions across our industry."

It is hoped that the project will demonstrate a key step forward towards the decarbonisation of both the asphalt and cement industries and has the potential to be upscaled to more than 250 sites in the UK alone.



“...we are delighted once again to be leading the way with new technologies that have the potential to significantly cut carbon emissions...”

Marian Garfield,
Hanson UK Sustainability Director

LATEST RAC REPORT ON LOCAL ROADS

■ **Public perception** is that the condition of local roads is getting worse, according to research conducted with more than 3,100 drivers for the *2022 RAC Report on Motoring*.

Sixty per cent of drivers believe the condition of local roads they use regularly is worse than a year ago with only 4% thinking they have improved in the past 12 months, down from 6% for the last two years.

Respondents also think the condition of motorways and dual carriageways is worse this year than last, but the proportion is much lower than for local roads – 38%, up from 32% in 2021.

Issues with surface quality are the main reason drivers say the state of their local roads has deteriorated (98%), with 86% saying they have had to steer to avoid potholes on several occasions.

Potholes are not the only problem with other issues listed including faded road markings, worse signage visibility,

roadside litter and lack of grass and foliage maintenance. While the cost of fuel is the number-one concern for 55% of drivers in this year's report, 45% still said that poor condition and maintenance of the UK's local roads was their top motoring gripe.

RAC Head of Roads Policy Nicholas Lyes, below right, said: "Given the sharp rise in concern about fuel prices this year, the fact local road maintenance remains such a prominent issue is a reflection of just how deep-seated this problem has become."

"Unfortunately, we do still have a widespread funding shortfall meaning that many councils can't afford to maintain and improve roads as they would like to. The RAC continues to believe the local road network needs some form of ringfenced funding to allow councils to maintain their roads properly and regularly."



Ten local authority-led projects have been shortlisted to take part in the next stage of the £30 million Live Labs 2 programme.

Organised by the Association of Directors of Environment, Economy, Planning and Transport (ADEPT), the three-year programme has the strapline Decarbonising Local Roads in the UK and is funded by the Department for Transport (DfT).

ADEPT

Association of Directors of
Environment, Economy, Planning & Transport

ADEPT received 30 bids for funding with 10 of these shortlisted to take part in the Dragon's Den style pitch to a panel of independent sector experts. They include projects led by:

- Cambridgeshire County Council;
- East Riding of Yorkshire Council;
- Liverpool City Council (in partnership with Aberdeen City Council, Royal Borough of Kensington and Chelsea, and Newcastle City Council);
- North Lanarkshire Council;
- South Gloucestershire Council and West Sussex County Council;
- Transport for West Midlands; and
- Wessex partnership (Somerset County Council, Cornwall Council and Hampshire County Council).

The successful projects will move forward to test new technologies and solutions to develop resilient, net zero carbon local roads and address decarbonisation in terms of the whole life cycle of local roads as well as broader considerations such as the community.

Mark Kemp, president of ADEPT, said: "We have been overwhelmed by the innovations and commitment to achieving net zero across local roads evidenced by all the applications."

"The final 10 are a truly exciting set of projects that each demonstrate the ambitions and scope of local authority leadership across the highways and transportation sector."



Eurovia apprentices are the first to have completed a new road surfacing apprenticeship programme

APPRENTICES QUALIFY ON NEW SURFACING SCHEME

■ **Four apprentices** have become the first to complete the Road Surfacing Operative Apprenticeship Scheme.

The level 2 apprenticeship programme, supported by Eurovia, is the first of its kind in the UK and its goal is to establish a common way of working in road surfacing and attract younger people into the industry.

The 18-month apprenticeship gives learners an understanding of the theory

around road surfacing with learning materials approved by the Institute of Asphalt Technology (IAT). Practical training also takes place in a safe and controlled environment, allowing the apprentices to get a familiarisation and working knowledge of the plant and machinery required.

Paul Goosey, Eurovia Managing Director, said: "The need to train and develop apprentices has never been so important in our

A new study has been launched into minimising the impact of street and road works on climate change.

Transport for London (TfL) has teamed up with the Highway Authorities and Utilities Committee (HAUC(UK)) on the project funded from money paid to TfL's Lane Rental scheme, which charges utility companies for digging up roads at the busiest times and locations.

The University of Birmingham and EA Technology will undertake a comprehensive study entitled *Road to Net Zero*.

The research will look at reducing congestion from roadworks, zero emissions machinery, and what changes to business models and legislation might be needed to support more sustainable streetworks. It will also produce an action plan to help implement the changes needed to achieve net zero.

Glynn Barton, TfL's Director of Network Management, said: "This major study will ensure that future roadworks are as sustainable as possible, helping to reduce carbon emissions, clean up air quality and reduce congestion on our roads.

We're looking forward to seeing the results of the study and to working with the sector to help put its recommendations in place."

The research findings are expected to be presented in March 2023.

industry. This new Road Surfacing Operative Apprenticeship is essential to ensure a professional and sustainable workforce for the future of our surfacing business."

THE DIGITAL FUTURE FOR LOCAL ROADS

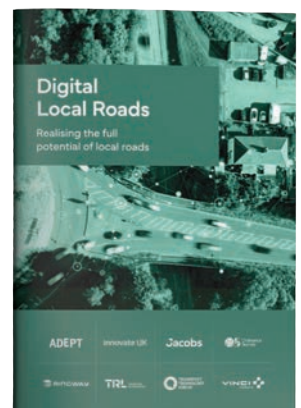
■ **A new** report has been published looking at the potential benefits of increasing connectivity and use of digital technology on local roads in England to create 'digital roads'.

Digital roads is a broad concept where increasing use of information technology, data and connectivity allows step-changes to the way roads are designed, built, managed and used.

The *Digital Local Roads* report provides a view of what a digital local road network in England could look like by 2030 and how local authorities can

begin this journey. It sets out the wider benefits of digitally-enabled roads for various stakeholders including users, residents, local businesses and the wider communities, considering potential needs and opportunities for the future.

The report is authored by TRL, with contributions from Ringway, Vinci Highways, Jacobs and Ordnance Survey. The team worked with Government, specifically the Department for Transport through the Transport Technology Forum, as well as ADEPT and Innovate UK.





PRAISE FOR ONLINE INDUSTRY EVENT

Over 220 delegates from more than 100 local authorities across England, Wales and Scotland, as well as industry representatives, signed up for this year's **Sharing Best Practice (SBP)** virtual conference.

ORGANISED BY the Asphalt Industry Alliance (AIA), the programme for the half-day event, which was the third held online, focused on decarbonisation and network resilience.

AIA Chair, **Rick Green**, opened the event and emphasised that industry is increasingly focused on supporting local authorities achieve their sustainability goals and that increased collaboration is key to making significant progress.

Rick then introduced **Ben Clatworthy**, Transport Correspondent of The Times, who provided delegates with an informed outside view of the local highway sector. Ben set out that, following some intensive research into the sector on behalf of the newspaper, he was acutely aware of the funding challenges local authorities face, especially as most DfT sources of funding are not ringfenced.

He also encouraged local authorities to do more to promote their successes among their local stakeholders.

The route to net zero

MPA Asphalt Director **Malcolm Simms** facilitated the first session under the theme of *The Route to Net Zero Strategies*.

Ed Evans, Director and Secretary of The Civil Engineering Contractors Association (CECA) Wales, provided details of a country-wide approach which formed the basis of CECA's submission to the ADEPT Live Labs 2: Decarbonising Local Roads in the UK project (see page 4). Although its bid has been unsuccessful, Ed set out how it was based on his belief that making changes at scale is the only way substantive and lasting change be achieved. "It's about thinking big, finding the step-change that becomes the new norm," he said.

Paul Binks, Highway Asset Manager at Lancashire County Council, echoed the need for ambition in setting out how Lancashire developed its highway decarbonisation strategy, which won the Climate Action Award at CIHT's awards earlier this year (see page 3). A whole-life approach to carbon accounting underpins the county's strategy, which aims to achieve sustainability through durability.

The need for consistent industry-wide guidance to measuring carbon and product-

specific footprints was core to both of the next two items: a discussion between Malcolm Simms and **Matthew Wayman**, National Highways Senior Pavements Advisor, and a presentation from **Victoria Walsh**, Highway Systems Manager at Devon County Council, on the county's Carbon Reduction Model For Highway Construction



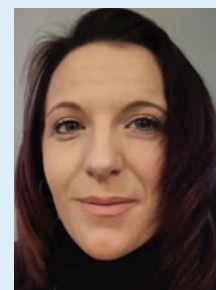
Ed Evans



Paul Binks



Matthew Wayman



Victoria Walsh

Works. The *Approaches to Measurement* session sparked many questions from delegates and the lively Q&A session stressed the need for a 'whole-life' standardised approach covering both costs and carbon.

Both also addressed the issue of offsetting and how best to balance this with the goal to drive down emissions: "Offsetting is absolutely a last resort for us, and our primary goal is to get to Net Zero," said Matt. "But we recognise that we have yet to identify all the steps and innovations that could help us achieve this." Victoria added that, while Devon's carbon calculator features offsetting, it was included more as a means of encouraging behaviour change by highlighting the impact of decisions – including the carbon and financial costs of offsetting.

Warm mix asphalts

The next session was hosted by **Dr Ian Lancaster**, General Manager Eurobitume UK, who facilitated a discussion on Warm Mix Asphalts (WMAs) with the aim of addressing some of the barriers to its use.

He was joined by **Diane Ware**, Highways Asset Planning Manager at North Somerset Council, and industry experts **Brian Kent**, Chair, MPA Asphalt Committee, and **Rick Ashton**, Market Development Manager, TotalEnergies. Ian set the scene by describing

how the adoption of WMAs took a big step forward when National Highways announced in summer 2021 that it was encouraging its use as standard on the Strategic Road Network (SRN).

"The AIA's latest ALARM survey reports that over 60% of local authorities already include WMAs on their asphalt specification

list, with many more looking to adopt it in the future," he said. "But its use in the UK lags behind that of other countries with industry data showing that only between 5 and 10% of total production volumes are produced as WMAs."

Resilience in the asphalt sector

The final session looked at what resilience means in the asphalt sector. **Dr Breixo Gómez Meijide**, Technical Director, European Asphalt Pavement Association (EAPA), set out the challenges for maintaining and enhancing network resilience – including the impact of climate change, increased and heavier traffic loads, regulatory requirements and shifts to the circular economy, digitalisation and vehicle electrification.

Breixo emphasised that highway professionals will increasingly have to adapt ways of working: "It's not just what can be achieved in the asphalt plant; we all need to be involved in this," he said. "Solutions will need to be collaboratively developed and delivered and I believe the starting point needs to be thinking about net resilience gains, not just impact reduction."

Feedback received from delegates after the event was overwhelmingly positive with 100% of respondents ranking it 'good', 'very good' or 'excellent' and all saying they would recommend future SBP events to their colleagues.

PANEL ADDRESSES WARM MIX ASPHALT CONCERNS



Our expert panel responded to several questions on the use of WMAs, including addressing reservations about specifying WMAs due to the lack of long-term performance data.

Our experts said:

I've been involved with WMAs projects for around 20 years and as far as I am aware there have been no remedial actions works on any of them.

Rick Ashton Market Development Manager, TotalEnergies

We should look to Europe and the US where the take up of WMAs is much more and there is over 20 years of data. I would add that the same bitumen is being used at the asphalt plant, the only difference is the temperature. It's the same base bitumens, bitumen content, fillers and we have to achieve the same grading targets and in situ voids. There is no reason to think it won't perform as well or even better than hot mix.

Brian Kent, Chair, MPA Asphalt Committee

Due to its compaction ability WMAs can be laid thicker in high trafficked areas, and when this is achieved, it can help aid durability.

Diane Ware, Highways Asset Planning Manager, North Somerset Council

The full WMA discussion, videos of all the presentations and slides – where available – can be viewed at: www.asphaltuk.org/events



DIARY DATES 2023-24

Some planned dates for your diary
(subject to change):

17-18 May 2023:
IAT Annual Conference,
Courtyard by Marriott, Heathrow
www.iatconference.co.uk

6-8 June 2023:
Traffex Parkex 2023,
NEC, Birmingham
www.traffex.com

3-5 October 2023:
LCRIG Strictly Highways,
Winter Gardens, Blackpool. Provisional
date. Details TBA.

18-19 October 2023:
Highways UK,
Hall 5, NEC, Birmingham
www.terrapinn.com/exhibition/highways-uk

19-21 June 2024:
8th E&E Congress,
Budapest, Hungary. Details TBA.
www.eeevent2022.org/congress-2024

25-27 June 2024:
Hillhead 2024,
Hillhead Quarry, Buxton
www.hillhead.com

E&E EVENT FOCUSES ON SUSTAINABILITY



OVER 300 bitumen and asphalt specialists from all over the world attended the second Eurasphalt & Eurobitume Event in Vienna.

The event, organised jointly by EAPA and Eurobitume, included presentations and discussions on sustainability, health and safety, and digitalisation, as well as an exhibition.

Dr Ian Lancaster, Eurobitume UK General Manager and Eurobitume

Technical Lead, spoke on the *Safe Handling of Bitumen guidance material*. Dr Breixo Gómez Meijide (pictured), Technical Director of the European Asphalt Pavement Association (EAPA), was also one of the key speakers with a presentation entitled *How will changed mobility influence the future of asphalt pavements?* Both also participated in the AIA's Sharing Best Practice event (see page 6 and above).

COVENTRY PIONEERS QUICK AND COST EFFICIENT RESURFACING METHOD



COVENTRY HAS become the first city in the UK to use new road reconstruction and recycling technique, *Recycol*.

The process involves using specialist equipment to reuse and regenerate the top surfaces of roads in a single pass, which means roads can be quickly repaired. Developed by Colas, the in-situ recycling technique has been used in France for several years but is the first time it has been used in the UK.

Cllr Patricia Hetherington, Cabinet Member for City Services at Coventry City Council, pictured, said: "We're very excited to be the first city trying out the *Recycol* technique and hope that it will mean we can tackle resurfacing in a more economic way.

"Not only should *Recycol* mean we can fix road surfaces faster, but it's also more cost-effective to use this technique rather than the traditional method.

"Additionally, it's better for the environment as it makes use of recycled materials, which helps reduce carbon emissions. It really is a win-win situation."



RESEARCH ALLIANCE TO LEAD INNOVATIVE PROJECTS

A NEW research group has been launched to help shape innovation in the highways sector over the next five years.

National Highways and 20 companies from its supply chain have joined forces in the *Roads Research Alliance*, which will lead a programme to define and develop a portfolio of innovative projects for the roads sector.

Research already under way includes using robots and semi-automation to carry out roadside tasks and protect the safety of workers; and maximising the use of secondary materials in road construction.

Working in partnership with the University of Cambridge and Costain, National Highways has been given some £5.5m funding for a five-year programme to support research in such areas as Digital Roads, sustainability, automation and carbon reduction.

Funding has been provided by both the Engineering and Physical Sciences Research Council (EPSRC) and the EU Marie Skłodowska Curie Actions (MSCA), which provides funding for advancing research projects.


The partners will share their real-world experience and knowledge as well as

identifying the areas where innovation is needed – to drive research in that direction. Additional contributions from alliance partners brings the research fund total to £14.5m.

A more joined-up approach

National Highways Chief Executive, Nick Harris, said: "We were already committed to delivering the research project and had funding in place but, rather than simply go forward alone, we wanted to work collaboratively with our supply chain and deliver a more joined-up approach to better address the challenges our sector faces.

"Together we can develop ideas that will increase safety on our network as well as improving how we design, maintain, operate and build roads. This is the first time National Highways has formed an alliance like this to deliver research and we are looking forward to seeing the exciting results."

 Together we can develop ideas that will increase safety on our network as well as improving how we design, maintain, operate and build roads."

Nick Harris, Chief Executive, National Highways



CHANCELLOR BACKS FUNDING PLEDGES

THE CHANCELLOR has confirmed that commitments made to support capital spending on infrastructure will be honoured.

In the Autumn Statement Jeremy Hunt announced that capital budgets would be protected with £600 billion to be invested in roads, rail and communities over the next five years.

Rick Green, Chair of the Asphalt Industry Alliance (AIA), said: "It's promising that the Chancellor's speech recognised the importance of sustained investment in infrastructure. What remains to be seen is the level of funding that maintaining existing assets, including our vital local road network will receive as, due to inflation, a real-term cut still appears inevitable."

The expectation is that Local Highway Authorities will continue to see the freeze in funding for local road maintenance that was announced by the DfT for the 2022/23 financial year into further financial years. "Everyone relies on local roads, they

Jeremy Hunt announced that capital budgets would be protected with £600 billion invested in roads, rail and communities over the next five years



underpin our communities and support delivery of goods and services, but our Annual Local Authority Road Maintenance (ALARM) survey 2022 highlighted that there was a funding gap of £1 billion last year to stop local road conditions from further decline and £12 billion is still needed to bring them up to scratch," added Rick Green.

Difficult choices

"The ongoing underfunding of roads maintenance is recognised by the public – with recent reports from both the AA and RAC highlighting increasing concern about declining conditions. We appreciate the Chancellor has difficult choices to make, but not investing in local road maintenance funding will lead to worsening conditions, which impact on

other locally provided public services, and only lead to a rising bill to fix the problem.

"What would help in these challenging times is a longer-term stable and sustained funding horizon for maintenance budgets, as this would help local authority engineers plan effectively and be able to implement more efficient works to enhance the resilience of the local road network."

This is a view shared by The Chartered Institution of Highways & Transportation (CIHT) which states that: "...the CIHT has called for a significant inflation-proofed fund to be created and for the network to be refocused to meet the wide range of benefits it can deliver. We believe an opportunity has been missed."

CHANGE IN ROADS RESPONSIBILITIES

After months of Government and Ministerial turnover, **Mark Harper**, MP for Forest of Dean, is confirmed as the new Secretary of State for Transport while three new Department for Transport (DfT) Ministers have been appointed.

Richard Holden, right, MP for North West Durham, is the new Parliamentary Under Secretary of State for



Roads, while former Chair of the Transport Select Committee, MP for Bexhill and Battle Huw Merriman gains the rail and HS2 brief in his new role as Minister of State.

Jesse Norman, MP for Hereford and South Herefordshire and a previous Roads Minister in the DfT, again has the active travel portfolio in his role as Minister of State for decarbonisation.

Baroness **Charlotte Vere** has retained her responsibilities for aviation and maritime awarded in the September reshuffle.

CROSS PARTY FORUM IS REFORMED



The All-Party Parliamentary Group (APPG) for Better

Roads was reformed earlier this year with the remit to promote an understanding of the importance of the highway network as well as promote the safety, environmental, economic and social case for a properly maintained sustainable network across the UK.

Now its website has been updated to better reflect its aims. As well as details on the Group's membership and meetings, it also contains information on highways funding, plus links to useful road-related resources: www.appg-betterroads.org

NEW TRANSPORT COMMITTEE CHAIR



Iain Stewart, MP for Milton Keynes South, has been appointed Chair of the Transport Select Committee, winning the vote of MPs against five other candidates.

"I am delighted to have been entrusted by the House to Chair this vital Committee and thank all who supported me," he said. "I have a real passion for, and experience in, transport issues and I am very much looking forward to working with colleagues on the Committee

to complete the existing programme of work and establish fresh inquiries.

"I want the Committee both to scrutinise and hold to account Government, agencies and operators, but also to do important horizon-scanning proactive work into future opportunities and challenges."



INNOVATIVE ASPHALTS SEEK CARBON AND DURABILITY IMPROVEMENTS

'BIOGENIC' ASPHALT has been used on both the strategic and local road networks as industry, National Highways and local authorities look to meet their net zero carbon targets.

Asphalt producers Aggregate Industries and Hanson have both partnered with Shell Construction and Road to develop their innovative products which target carbon emissions reductions and improved durability.

A590 Cross-A-Moor project

Aggregate Industries has used more than 1,170 tonnes of its *SuperLow-Carbon* asphalt in the base and binder courses of its project with National Highways to improve the A590 in Ulverston, Cumbria (pictured above). The work included the construction of a new roundabout and link roads to connect into the existing local road network.

"The A590 Cross-A-Moor project was the first time we have used *SuperLow-Carbon*,

which was selected for both its innovative carbon-saving technology, as well as its speed of construction – a vital aspect to ensure minimal disruption to local traffic," said Neil Leake, National Technical Manager at Aggregate Industries.

SuperLow-Carbon uses Shell Bitumen *CarbonSink*, which contains a biogenic material that effectively 'locks' CO₂ within the asphalt rather than releasing it back into the atmosphere. The product is a warm mix asphalt, manufactured at lower temperatures, which means it requires less energy to produce than its hot-mix equivalent, without compromising on performance, while also reducing fumes, odour and steam to create better working conditions for operatives.

In addition, lower asphalt temperatures during production can reduce initial binder ageing, while the product remains compactable for longer – allowing more

time for full compaction, delivering enhanced durability performance, and ultimately life-expectancy. It also reaches trafficking temperatures quicker than hot mix products, allowing for earlier reopening of carriageways to the travelling public, resulting in less disruption and reduced build costs.

Meanwhile, in Dorset, Hanson has laid almost 900 tonnes of its biogenic asphalt as part of a programme of road maintenance schemes carried out with Dorset Council ahead of the Tour of Britain.

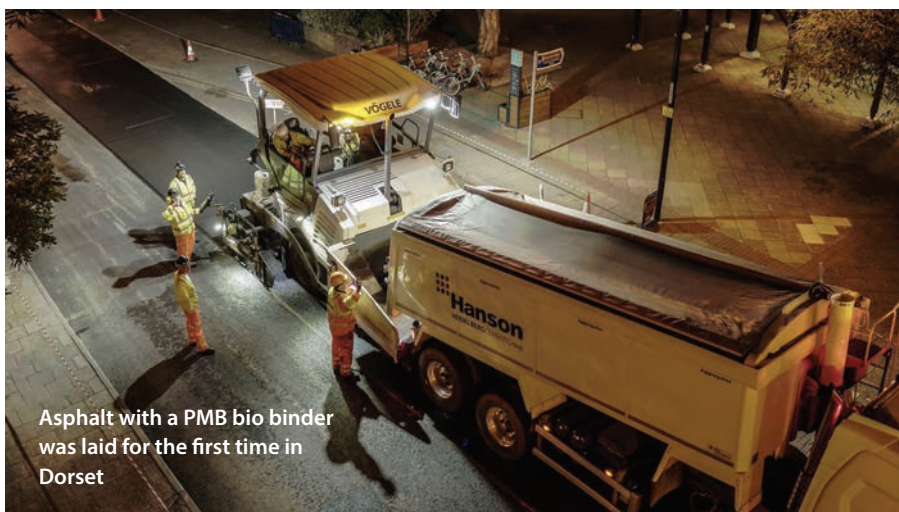
Enhanced durability

For the first time on a road project in the UK, the asphalt includes a PMB (polymer modified bitumen) bio binder – Shell *Cariphthal CarbonSink*, which offers additional durability benefits over its standard *CarbonSink* product, seeking to extend further the life of the asphalt and reduce the need for maintenance interventions.

The work was completed through the Dorset Highways Strategic Partnership, an ongoing agreement between Hanson and Dorset Council, and the asphalt was produced using Hanson's ERA warm mix process.

Ian Price, Managing Director of Hanson Contracting, said: "We successfully trialled the use of HVO (hydrotreated vegetable oil), a fossil-free alternative to diesel, to power the plant used to produce and lay the asphalt, reducing CO₂ emissions from fuel by up to 90%.

"As a result, the asphalt used delivered a 55% reduction in CO₂ emissions compared with using a standard hot mix asphalt."



Asphalt with a PMB bio binder was laid for the first time in Dorset

SITE-MIXED cold mix asphalt suitable for base and binder courses is being used by Aggregate Industries.

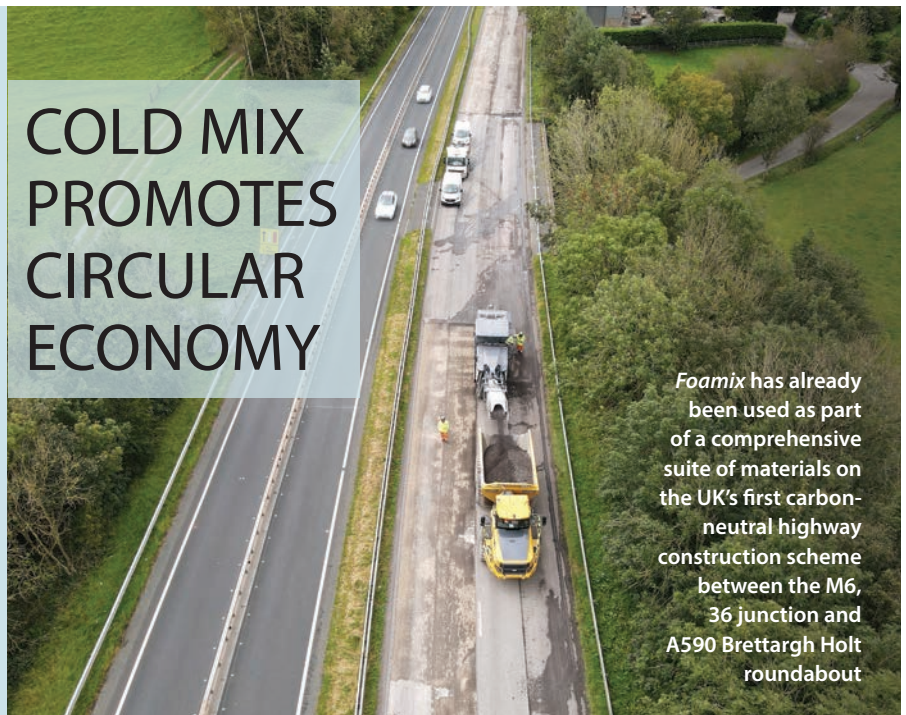
Foamix contains 92% recycled materials, including 85% reclaimed asphalt (RA), helping reduce CO₂ emissions.

The product can be used in the construction, repair and maintenance of new or existing highways and performs in line with standard asphalt mixes.

Cost effective and sustainable

Foamix can be manufactured on site using planings taken from the existing road, ensuring it can be placed, compacted and put into use immediately. This minimises HGV movements, construction times and road user disruption as well as carbon emissions.

Thomas Edgcumbe, Managing Director for Surfacing Solutions at Aggregate Industries, said: "*Foamix* provides a cost-effective and highly



Foamix has already been used as part of a comprehensive suite of materials on the UK's first carbon-neutral highway construction scheme between the M6, 36 junction and A590 Brettargh Holt roundabout

sustainable solution that promotes a circular economy approach to road and pavement construction.

"It can significantly lower the carbon

footprint of schemes and can be laid in a single pass up to 150mm thick using conventional surfacing equipment and laying techniques."

TRIAL HOPES FOR LONGER-LASTING ROADS

A TRIAL is being carried out in Chelmsford, Essex, that seeks to increase the lifespan of roads, reducing the carbon footprint of works.

It is the first time *Gipave*, a strengthening compound, has been added to traditional hot rolled asphalt (HRA) in the UK. The technology, developed by Italian

company Iterchimica, contains graphene, which is 200 times stronger than steel but extremely flexible. Its inclusion seeks to make the asphalt less susceptible to hardening and cracking in cold temperatures and softening in warm temperatures. It also increases the elasticity and

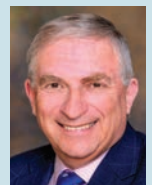
strength of the asphalt to reduce wear, particularly under high loading. In addition, *Gipave* contains a specific type of selected hard plastic, which is usually considered non-reusable.

As a result, it is hoped the use of *Gipave* might double the service life of roads, greatly reducing future maintenance and associated traffic delays, and cutting related carbon emissions. The work is being undertaken by Essex County Council and Ringway Jacobs, whose shareholding company Eurovia UK produced the material at one of its east London asphalt plants.

Cllr Lee Scott, above right, Essex County Council Cabinet Member for Highways Maintenance and Sustainable Transport, said: "This is potentially a game

changer in road and footway surfacing as increasing the expected life of the surface would drastically reduce maintenance costs and halve the carbon footprint typically associated with such surfacing.

"Less maintenance also means less disruption for road users, so this trial has really positive potential for the travelling public, for council taxpayers and for all those who want to see the council provide its services in the most sustainable way possible. We look forward to seeing what the results of trial and what potential benefits the graphene solution might bring to the county – and indeed the rest of the UK."



A Yorkshire council is using a resurfacing process with a bio-based binder to support its commitment to a greener local environment.

ROTHERHAM CLAIMS WORLD'S FIRST 'CARBON NEGATIVE' ASPHALT



▼ The award-winning asphalt was laid on the A6021

THE WORLD'S first 'carbon negative' asphalt has been laid in Rotherham as part of its '£24m to 2024' Roads Programme.

The asphalt, which contains 95% secondary aggregates from the steel making industry within Rotherham as well as a bio-based natural binder, was laid on the A6021 Broom Road, just outside the town centre, in collaboration with SteelPhalt.

The use of such materials in resurfacing works supports the council's commitment to a cleaner, greener local environment, targeting the reduction of carbon emissions.

Carbon negative asphalt

The natural binder contains lignin, which is found within the cell walls of trees. It provides the second biggest source of renewable carbon on the planet and is being identified as a responsible alternative to many fossil-based materials.

Combining the locally sourced carbon-neutral slag aggregate with the bio-based binder created SteelPhalt's *SteelSurf ECO+*, which has a reduced mixing temperature and is supplied direct from the company's local Rotherham-based plant. *SteelSurf ECO+* not only offsets the carbon used in manufacture but produces a carbon negative asphalt due to the biogenic nature of lignin, which allows it to lock-in carbon (see page 10 for more on biogenic asphalt).

The success of the trial has been recognised at the Risk Management



Association's 2022 ALARM Risk Awards where it claimed the Innovation Award, presented to the organisation or team that demonstrates how, with the use of innovation, risks are identified, measured and managed; with positive impacts to business and operational objectives.

Less effect on the environment

Rotherham Council's Cabinet Member for Transport and Environment, Cllr Dominic Beck, said: "This is fantastic news for the council and its partner, SteelPhalt, whose teams have done excellent work over the last few months. The new asphalt is truly an



inventive product which will help Rotherham residents to lower their carbon footprint and have less effect on the environment. This award acknowledges the steps that local authorities across the UK are taking to become more eco-friendly and the innovations they are welcoming to make their areas greener places to live."

◀ Cllr Dominic Beck, front centre, with the team that developed the innovative asphalt



The new asphalt... will help Rotherham residents to lower their carbon footprint and have less effect on the environment."

Cllr Dominic Beck,
Cabinet Member for
Transport and Environment,
Rotherham Council



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