

VIA LOW™

CARBON
NEUTRAL
ASPHALT.
**TAKE THE
LOW ROAD**



VIALOW reduces embodied carbon by up to **20%**

300

UK councils have declared climate emergencies

Switching to low temperature asphalt could save the UK

61,000 tonnes of CO₂ per annum

Lower mixing and paving temperatures of VIALOW can cut fume generation by **around 50%**

for approximately each 10°C reduction in temperature

Highways England estimates low temperature asphalt could save

£70 million a year

due to 20% increase in shift outputs

Less than **4%**

of all UK asphalt manufactured is low temperature vs 40% in the USA

CEMEX is proud to launch our industry-leading CarbonNeutral® asphalt.

Our VIALOW™ reduced carbon asphalt includes the option to offset residual CO₂e* to provide a CarbonNeutral product, in accordance with The CarbonNeutral Protocol.

Road infrastructure makes a crucial contribution to economic development and growth, providing important social as well as recreational benefits. Access to employment, social, health and education services makes a road network crucial in fighting against poverty. Roads open more areas and stimulate economic and social development. For those reasons, road infrastructure is the most important of all public assets.

Our purpose is to build a better future, and unsurprisingly we think asphalt is an essential part of our country's infrastructure. However, we recognise future construction needs to be balanced with the effect it is having on the environment.

It is for this reason that carbon reduction is at the heart of the government's construction strategy as it works to move the country to a low-carbon economy by 2050.

We want to help our clients to specify lower carbon asphalt solutions. With the launch of VIALOW, CEMEX aims to make it simple for clients to choose asphalts with a lower embodied carbon, offset residual emissions and help drive vital change.

VIALOW is available in all Asphalt Concrete Base, Binder and Surface courses as well as Hot Rolled Asphalt (only where pre coated chippings are not required), Stone Mastic Asphalt and our full Proprietary range. VIALOW can achieve up to a 20% reduction in embodied carbon emissions when comparing against standard conventional mixes.

CEMEX's VIALOW range of low temperature asphalt is designed to produce faster construction times, reduce road maintenance costs with the added benefit of a carbon footprint reduction.

*Carbon Dioxide equivalent (CO₂e): A unit of measurement that describes for a GHG (Greenhouse Gas) the amount of CO₂ in tonnes that would have the same global warming potential, when measured over a 100-year timescale.

VIALOW™ | zero

The remaining unavoidable emissions can be offset if you select our VIALOW zero option where we work with Natural Capital Partners, a carbon offset and carbon neutrality specialist.

Our offsets are verified by the Gold Standard or Verified Carbon Standard (VCS) and include projects focusing on the planting of trees.



TAKE THE **LOW ROAD**

VIALOW is a new range of low temperature, low carbon asphalts from CEMEX, available in all equivalent conventional and proprietary mixes enabling embodied carbon reductions of up to 20%.



**UP TO 20%
CO₂ REDUCTION**

VIALOW™

All existing mixes can be converted to **VIALOW** to achieve up to 20% CO₂ reduction

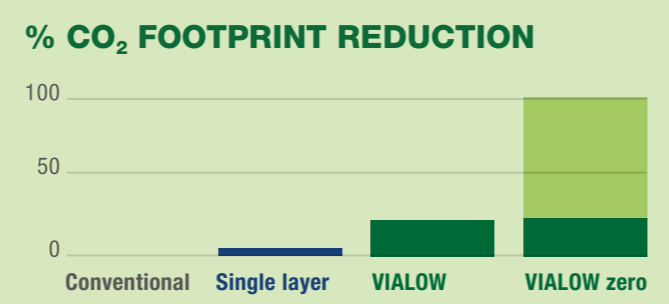
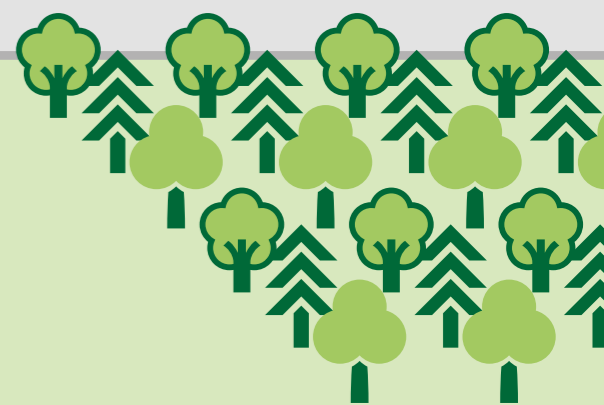
CARBON NEUTRAL ASPHALT

VIALOW™ | zero

Converting to **VIALOW zero** offsets all the remaining CO₂ to create a 100% carbon neutral asphalt

CONVENTIONAL MIXES
Standard asphalt products have a CO₂ equivalent content of 30-55kgs per tonne of asphalt (product dependent) at the point of despatch

PROPRIETARY MIXES
VIA PATH®
VIA COURSE®
Up to 5% CO₂ reduction by utilising two existing CEMEX proprietary single layer mixes



VIALOW ZERO
As technology and the industry shifts toward low carbon asphalt, the best interim way to sequester the remaining CO₂, to create a carbon neutral product, is through carbon offsetting. **VIALOW zero** achieves carbon neutrality through a verified carbon offset programme.

VIALOW ZERO CERTIFICATION
For any of your projects where these products are used you will receive this certificate to verify the offset.



'The stated subject has been made CarbonNeutral through the use of high-quality environmental instruments that meet the requirements of The CarbonNeutral Protocol.'

Go CarbonNeutral®
Introducing our innovative new **VIALOW zero** range to offset the remaining carbon percentage through a carbon offset and accredited carbon neutrality specialist.



LOWER TEMPERATURE, HIGHER PRODUCTIVITY

CEMEX's **VIALOW** range of low temperature asphalt is designed to produce faster construction times, reduce road maintenance costs with the added benefit of a carbon foot print reduction.

WHAT IS VIALOW?

VIALOW is our low temperature asphalt, that allows the re-opening of a jobsite more quickly after completion of road works, as the asphalt reaches appropriate trafficking temperatures faster than conventional hot mix asphalt. Stationary vehicles as a result of traffic caused due to road closures create 4 times as much pollutants when compared to moving vehicles.

VIALOW significantly lowers the overall carbon footprint when compared to hot mix asphalt equivalents. A reduction in fuel used during the manufacturing process makes this type of material a sustainable option for any project. Highways England estimates that an increase in shift outputs of 20% could be provided by using low temperature asphalt on its network, saving up to £70 million a year.

HOW IS VIALOW PRODUCED?

Utilising a specially formulated bitumen additive, **VIALOW** Asphalt is manufactured at up to 40°C lower than standard asphalt mixes with no compromise in performance.

HOW DOES VIALOW WORK?

The lower temperature of the manufacturing process can also help to improve the long-term performance and durability of the asphalt, as high temperatures in conventional mixes can have adverse effects to the ageing properties of the binder. Reduced temperatures also offer additional safety and environmental benefits which include a reduced risk of burns and lower odours, making a more pleasant working environment for both workers and neighbours to

the construction site. The reduced mixing and paving temperatures of low temperature asphalt can cut fume generation by around 50% for approximately each 10°C reduction in temperature.

PRODUCT AVAILABILITY

VIALOW Asphalt is available all year round, in a full range of: Asphalt Concrete; Stone Mastic Asphalt; Hot Rolled Asphalt (only where pre coated chippings are not required); and our own premium range of VIA products. This includes both standard and poly modified bitumen products. **VIALOW** Asphalt is manufactured in accordance with the Published Project Report (PPR) 666 Specification for low temperature asphalt mixtures.

BENEFITS



INCREASED PRODUCTIVITY
in restricted working windows



IMPROVED LONG-TERM
durability



AVAILABLE ALL YEAR ROUND
in most mix types including PMB



FASTER COOLING
resulting in earlier opening times



IMPROVED SAFETY
less risk of burns and
lower fumes/steam



SUPERIOR QUALITY
less hardening of bitumen
during manufacture



FASTER OVERLAY
of lower layers



SIGNIFICANT REDUCTION
in CO₂



WHAT IS CARBON OFFSETTING?

Carbon offsetting is the purchasing of carbon credits from projects that deliver immediate emission reductions through sustainable development and renewable energy projects to compensate for emissions made elsewhere.

Our VIALOW zero asphalts are certified as CarbonNeutral® products in accordance with The CarbonNeutral Protocol, the leading global framework for carbon neutrality.

This means we make sure that for every tonne of CO₂e emitted by our VIALOW zero asphalt range there is one tonne less in the atmosphere. We do this by investing in projects which physically remove CO₂ from the air such as planting more trees through an independently audited and verified project. Carbon can be offset in this way because one tonne of CO₂ has the same climate impact wherever it is emitted.

WHAT THIS MEANS FOR YOU

The fact that we're offsetting the carbon emissions from a range of products means that when you choose to pave with these asphalts, it may contribute to your company's net zero targets and carbon obligations, as well as help you meet your client's increasing sustainability requirements.

ACCREDITATION

Our VIALOW zero range includes the offset and we undertook a rigorous process in selecting a carbon offset programme. Projects are independently monitored and verified by independent third parties to ensure they are delivering emission reductions. We will only purchase carbon credits accredited under the Gold Standard or Verified Carbon Standard (VCS) – these standards are globally recognised and respected for their levels of high environmental integrity.

UN SUSTAINABLE DEVELOPMENT GOALS

Through our CarbonNeutral® programme we are focussing on tree planting projects throughout the world to deliver climate benefits but also other benefits aligned with the UN Sustainable Development Goals, such as increasing biodiversity and reducing poverty.

HOW ARE WE CARBON OFFSETTING?

We are providing carbon finance for projects that have to prove that without carbon finance they would not be viable.

To do this we are working with Natural Capital Partners (naturalcapitalpartners.com).

Natural Capital Partners is an award-winning expert on carbon neutrality and climate finance, that is harnessing the power of business to create a more sustainable world. Through a global network of projects, the company delivers the highest quality solutions which make real change possible: reducing carbon emissions, generating renewable energy, building resilience in

supply chains, conserving and restoring forests and biodiversity, and improving health and livelihoods. The company was founded 20 years ago and has more than 300 clients in 34 countries.

The CarbonNeutral Protocol was created and is managed by Natural Capital Partners. It was the first clear set of guidelines for businesses to achieve carbon neutrality back in 2002, and every year since then Natural Capital Partners has continued its commitment to providing a robust framework for credible carbon neutral action. It is reviewed annually with input from the Advisory Council to ensure it reflects the latest developments in emissions measurement and reductions.



Top: Project staff from the community are trained to verify the carbon emissions sequestered by the trees

Middle: Community members visit one of the project tree nurseries

Bottom: Project staff run tree nurseries to ensure farmers have trees to plant

Images courtesy of Natural Capital Partners

RESPONSIBLY SOURCED ASPHALT

CEMEX UK operates in a highly regulated sector and recognises its Sustainability and Environmental obligations.

We continually invest and innovate to become an environmentally friendly, sustainable leader – enabling a low-carbon and resource-efficient circular economy.



All CEMEX products have achieved BES6001 Responsible Sourcing accreditation.

BES6001 accreditation means that all our asphalt products are responsibly sourced, to an independently verified standard that addresses the social, economic and environmental impacts across the entire supply chain.

SUSTAINABILITY IN ACTION

LOAD MANAGEMENT

At CEMEX asphalt we continue to look for opportunities to minimise non-essential consumption of electricity to reduce our carbon footprint. Thermal efficiency of our bitumen tanks is a top priority and as such all tanks have been fitted with telemetry systems. These systems closely monitor temperatures and upon a tolerance breach a text alert is sent, which enables us to act promptly. In addition, all bitumen pipes have been lagged to maintain efficiency and prevent heat losses. The recent installation of modern direct drive systems within our plants has significantly reduced friction and losses associated with the use of belts and chains.

CONVERSION TO NATURAL GAS

Following a substantial investment our full network of plants now uses natural gas in the manufacturing process, moving away from the use of red diesel. Because it mixes more uniformly in the ignition chamber, natural gas causes more complete combustion and fewer pollution emissions than diesel fuel. It is also free of unwanted components such as sulphur, metals, and aromatics, making it non-toxic and therefore less harmful to the environment.

USE OF RAP IN ASPHALT PRODUCTION

Recycled Asphalt Planning's are not a waste product. Like a quarry or an oil well, roads are another source of aggregate and bitumen. Advantages to recycling asphalt is it reduces the quarrying, mining, and oil consumption required to create new asphalt. This also cuts down on emissions, use of scarce natural resources as well as materials being sent to landfill. Through sourcing high quality RAP that has been processed and treated the same way as virgin materials with respect to gradation control, CEMEX asphalt will ensure the same standards and performance of our products.

LOCAL WILDLIFE

Our sites are more than just asphalt plants and our local teams are keen to minimise our impacts to the loss of natural habitats whilst supporting biodiversity. Many of our plants have bird and bat boxes installed at various locations throughout the site, which has attracted local inhabitants. In addition to this we have created our very own bug hotels that create a safe space and shelter for minibeasts and insects.

Climate change has been a priority for CEMEX for many years. The company's efforts have brought significant progress to date, but there is a need to do more and faster. This is why CEMEX has also recently announced a more ambitious global target for CO₂ emissions by 2030: a reduction of 35% to ensure alignment with the Paris Agreement commitments. This is in addition to the ambition of delivering net zero concrete globally by 2050.

However, in the UK, we have already achieved the following:

20%
reduction in our CO₂
emissions since 2010

486
times more waste consumed
than we produce in our operations

Implemented Energy
Reduction Programmes
in all our operations
with the most energy-intensive
being certified to ISO50001

A- rated for climate
transparency and
strategy by the
Carbon Disclosure
Project (CPD) in 2019

All our operations
are certified to
the ISO14001
standard for Environmental
Management Systems

Over 1000
hectares
of priority biodiversity habitat
created and maintained

Supplied our operations with
100%
renewable electricity

Established partnerships
with organisations
such as the RSPB
to ensure we maximise all opportunities
for better and more sustainable working





As part of our wider commitment to low carbon products, the **VIALOW** range is now part of the Global Vertua portfolio and carries the relevant mark.



Go CarbonNeutral®

Our **VIALOW** zero asphalts are CarbonNeutral products in accordance with the CarbonNeutral Protocol, the leading global framework for carbon neutrality.

CEMEX UK Operations Ltd,
CEMEX House, Evreux Way,
Rugby, Warwickshire CV21 2DT
0345 155 6367
www.cemex.co.uk/vialow
asphaltukquoterequest@cemex.com

