



## **CARBON REDUCTION PLAN GUIDANCE**

### **Notes for Completion**

Where an In-Scope Organisation has determined that the measure applies to the procurement, suppliers wishing to bid for that contract are required at the selection stage to submit a Carbon Reduction Plan which details their organisational carbon footprint and confirms their commitment to achieving Net Zero by 2050.

Carbon Reduction Plans are to be completed by the bidding supplier entity and must meet the reporting requirements set out in supporting guidance, and include the supplier's current carbon footprint and its commitment to reducing emissions to achieve Net Zero emissions by 2050.

The Carbon Reduction Plan should be updated regularly (at least annually) and published and clearly signposted on the supplier's UK website. It should be approved by a director (or equivalent senior leadership) within the supplier's organisation to demonstrate a clear commitment to emissions reduction at the highest level. Suppliers may wish to adopt the key objectives of the Carbon Reduction Plan within their strategic plans.

A template for the Carbon Reduction Plan is set out below. Please complete and publish your Carbon Reduction Plan in accordance with the reporting standard published alongside this PPN.

# Carbon Reduction Plan Template

Supplier name: Tarmac Trading Limited.....

Publication date: 30 September 2023.....

## Commitment to achieving Net Zero

Tarmac Trading Limited is committed to achieving Net Zero CO<sub>2</sub> before 2050.

## Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

<b>Baseline Year: 1990</b>	
<b>Additional Details relating to the Baseline Emissions calculations.</b>	
<p>This Carbon Reduction Plan covers the activities carried out by Tarmac Trading Limited. As a business, Tarmac has been monitoring its operational carbon emissions (Scope 1 and 2) since 1990 and reporting publicly since 2008. Tarmac has adopted a 1990 baseline, to align with UK Government's commitments under the Climate Change Act.</p> <p>Tarmac's process for Scope 3 CO<sub>2</sub> emissions continues to evolve and the business is working closely with its supply chain to ensure robust data is provided in the future. As a result, the Scope 3 emissions outlined in this report are against a 2020 baseline.</p> <p>Tarmac Trading Limited also operates wholly-owned subsidiaries Alun Griffiths (Contractors) Limited and J.B. Riney &amp; Co. Limited. As accurate 1990 baseline data is unavailable for these organisations, a 2020 performance baseline has been used.</p> <p>All data captured and reported in this plan is in line with UK Government Environmental reporting guidelines (March 2019) and the Greenhouse Gas Protocol, <i>Technical Guidance for Reporting Scope 3 Emissions (v.1.0)</i>.</p>	
<b>Baseline year emissions: 1990</b>	
<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
<b>Scope 1</b>	680,021 tCO <sub>2</sub> e
<b>Scope 2</b>	289,456 tCO <sub>2</sub> e

<b>Scope 3</b> <b>(Included Sources)</b>	285,773 tCO <sub>2</sub> e (2020 baseline)  (Includes: upstream transportation & distribution (excluding capital goods transport), waste generated in operations, business travel, employee commuting, downstream transportation & distribution)
<b>Total Emissions</b>	1,255,250 tCO <sub>2</sub> e

## Current Emissions Reporting

Reporting Year: 2022	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
<b>Scope 1</b>	267,816 tCO <sub>2</sub> e
<b>Scope 2</b>	Location-based (using UK average emission factor): 30,637 tCO <sub>2</sub> e Market-based (taking account of REGO certified electricity use): 14 tCO <sub>2</sub> e
<b>Scope 3</b> <b>(Included Sources)</b>	328,690 tCO <sub>2</sub> e  (Includes: upstream transportation & distribution (excluding capital goods transport), waste generated in operations, business travel, employee commuting, downstream transportation & distribution)
<b>Total Emissions</b>	596,520 tCO <sub>2</sub> e  (market-based)

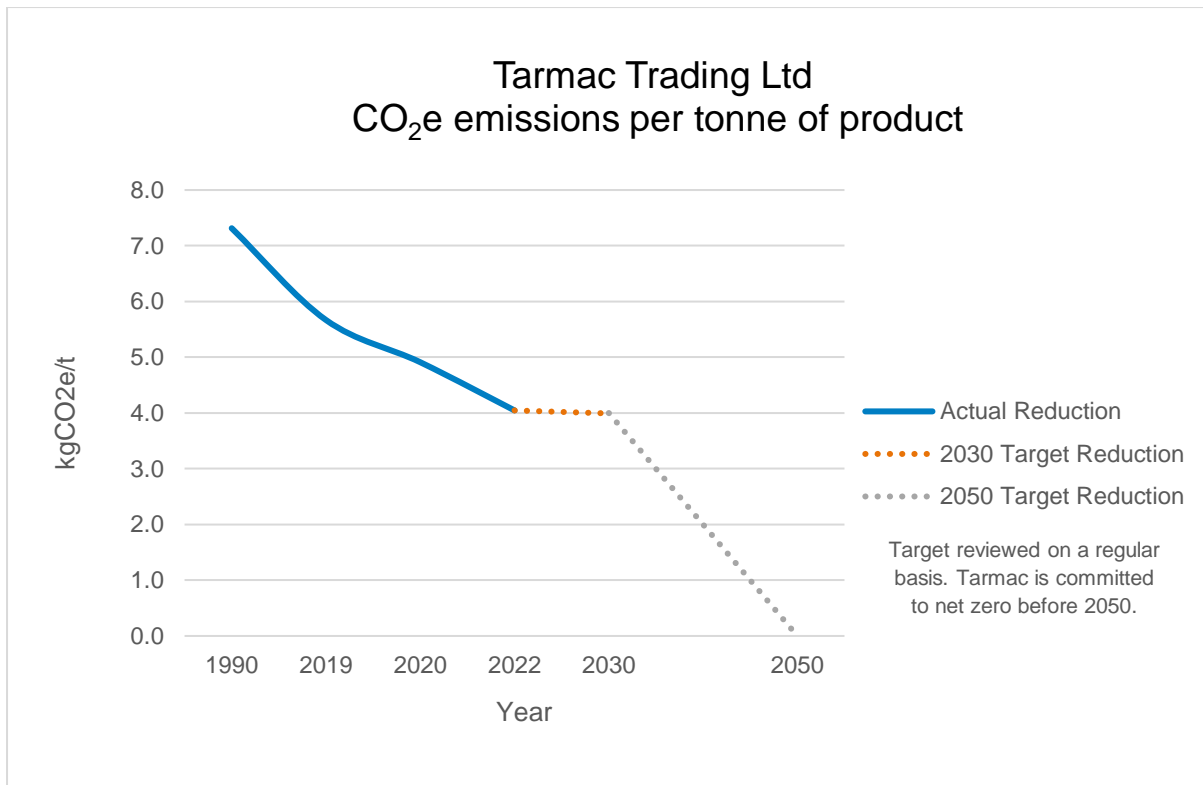
## Emissions reduction targets

In order to continue our progress towards achieving Net Zero CO<sub>2</sub>, Tarmac has adopted the following CO<sub>2</sub> reduction target for its overall business:

Achieve a 30% reduction in CO<sub>2</sub>e per tonne of product by 2030 (from 1990).

Tarmac project that absolute Scope 1 and 2 carbon emissions will be 275,000 tCO<sub>2</sub>e by 2030. The business is working towards including Scope 3 emissions in its 2030 target.

Progress against these targets can be seen in the graph below:



## Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented. The absolute Scope 1 and 2 carbon emission reduction achieved by these schemes equates to 700,000 tCO<sub>2</sub>e, a 44% reduction in CO<sub>2</sub>e per tonne of product against the 1990 baseline and the measures will be in effect when performing the contract.

- The processes and procedures that form our ISO 50001-certified Energy Management System (EMS) ensure we operate at a high standard, and drive continuous improvement (CI) in our energy usage. Specific energy consumption and CO<sub>2</sub> targets are set for all of our manufacturing sites, enabling us to monitor performance and make these targets more stringent each year to support CI efforts and the investment behind these. Tarmac's ISO 50001 system is independently assessed to help ensure that all operations are compliant with regulatory requirements, including the UK Government's Energy Savings Opportunity Scheme (ESOS) and Streamlined Energy and Carbon Reporting (SECR).
- Tarmac's EMS is also independently assessed and certified to ISO 14001, which is embedded at all operational sites and implemented through site policies, procedures and processes to manage the environmental impacts of activities and ensure a high standard of environmental management and control.
- Throughout 2022, we continued to source 100% clean electricity, supplied entirely through clean UK-based wind and solar, fully traceable to source through REGO certificates. This makes us a leader of our parent company CRH's 100% club, which encourages our sister companies to also make the transition to ensuring 100% of their electricity is from renewable sources.

- Our Sustainability team are delivering business-wide training on how to work in line with our Sustainability strategy, including ways to run our sites more energy efficiently. With materials targeted for specific audiences, in 2022, 573 members of Tarmac staff underwent this training.
- Tarmac has continued to invest in Environmental Product Declaration (EPD) and carbon footprinting, delivering 1530 carbon footprints for clients in 2022. This improves our customers' understanding of the embodied carbon and environmental impact of our products, enabling them to make informed decisions around material use, development and trialling of bespoke low-carbon solutions, and the selection of the lowest carbon option.
- As part of our continued commitment to the EV100 initiative, we have been installing further electric vehicle (EV) charging points at our sites and offices, and updated our company car policy to reflect this commitment. In 2022, electric vehicles made up around 80% of all orders for company cars, meaning our fleet has increased to around 20% electric as we phase out non-electric cars and vans.
- As a key partner to Align, the joint venture delivering the Central 1 (C1) section of HS2 Phase One, Tarmac announced in 2022 that we had demonstrated an innovative new low carbon concrete solution. Align enabled early demonstration and testing at full scale using one of three Tarmac concrete batch plants at a Chalfont Lane construction site in Hertfordshire.

The new low carbon concrete has a carbon footprint following industry BSI PAS2050 calculation rules that gives a 62% reduction in CO<sub>2</sub>e per cubic metre of concrete, compared to a standard CEM I concrete, meeting the same specification in the same raw materials. The footprint covers all aspects of the concrete production and supply with no carbon off-setting applied, delivering an actual footprint of 133kg/m<sup>3</sup> CO<sub>2</sub>e. This represents a saving of 220 tonnes CO<sub>2</sub>e for every 1000m<sup>3</sup> produced.

- On the A452 Chester Road scheme carried out in 2022, our client and principal contractor were keen to explore ways of reducing carbon emissions and contributing towards their net zero strategy. Tarmac proposed the use of a biogenic binder course, which replaces some of the fossil fuel derived binder with biogenic or plant-based alternatives. In total, 530 tonnes of biogenic binder asphalt were supplied to the site, which saved 3.45 tonnes of CO<sub>2</sub>e compared to the original warm mix asphalt binder specified.
- In 2022, subsidiary company Griffiths introduced the paperless ticketing system PODFather into its daily operations. The increased visibility PODFather gives all staff means vehicle routes can be optimised, and realtime changes made as needed, reducing wasted journey times and the associated fuel use.
- Tarmac continued to make further progress on our Washwood Heath asphalt plant, opened in 2021 and built with sustainability in mind. In 2022, as part of our commitment to procuring 100% of our power supply from renewable energy sources, we installed around 430 solar photovoltaic (PV) panels at the plant, which will supply around 10% of the site's electricity demand. Washwood Heath is now also home to the UK's first battery electric mixer truck, specially developed with Renault Trucks and TVSI.
- In 2022, we replaced the existing dryer at our Parkstone asphalt plant in Dorset, investing in new equipment to reduce downtime, minimise impact on our busy collect trade, and improve fuel efficiency and emissions. This has reduced our carbon footprint, as well as

enhancing the life of the filter bags used to minimise dust emissions. There has been a 36% reduction in gas usage of 3.7 m<sup>3</sup> per tonne since the new dryer was installed.

- Tarmac sites were encouraged to take part in "energy waste walks" in 2022 to evaluate any areas where they might be wasting energy and identify any changes that could be made to mitigate this. As a result of these walks, our Cross Green site reduced electricity consumption by 650,000kWh by making repairs to equipment, fitting inverters to control motor speed, and installing automated controls to switch off equipment when not in use, and an artificial intelligence and automation system was implemented at our Barrasford Asphalt plant, which involved fitting multiple transducers to equipment around the plant to assist in improving energy efficiency by monitoring and providing operating data on the equipment used.

In the future we hope to implement further measures such as:

- In 2023 we will launch Tarmac's 'Roadmap to net zero', which details the levers we will use to achieve net zero by 2050, and assist our stakeholders to understand the ways in which Tarmac will reach this goal.
- Tarmac will continue to explore innovative product solutions that we can offer our customers to reduce the carbon emissions of their projects. We will continue to collaborate with partners such as Align, and Skanska and National Highways, with whom we worked on materials trials in 2022, to identify further opportunities to use new solutions and deliver the next generation of low carbon solutions.
- In 2022, it was announced that Tarmac, Skanska and National Highways' low carbon concrete trial would be extended to permanent roads. The results show that the solution has led to a reduction of more than 50% in carbon emissions. It has also proven to be equally resilient as conventional reinforced concrete using steel. The success of the trial means Skanska is now working collaboratively with National Highways and High Speed 2 Ltd (HS2) on the next phase, with a plan to trial the low carbon combination on a permanent road and capture all the data and analysis for future publication. The ultimate aim is to roll out the low carbon solution across the UK's strategic road network.
- Following the rollout of recycled hydrotreated vegetable oil (HVO) to over 20 of our sites which is already delivering significant carbon savings, we will continue to encourage HVO as a fuel option across further sites. HVO can reduce CO<sub>2</sub> emissions by up to 90-96% compared to the diesel that it replaces.
- Subsidiary company J.B. Riney is now ahead of the 2030 EV100 target and has started to focus on EV100+, as the whole business focuses on installing further EV infrastructure and increasing the number of EVs in our fleet of vehicles, plant and equipment.
- To maximise the benefits Tarmac derives from sourcing all of our electricity from renewable sources, in 2022, several of our sites, such as Clitheroe and Halecombe, replaced their diesel water pumps with electric in 2022; wherever possible to do so, will be aiming to implement this at all of our quarries in the future.

## Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard<sup>1</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>2</sup>.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard<sup>3</sup>.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

### Signed on behalf of the Supplier:



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Date: 30<sup>th</sup> September 2023.....

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<sup>1</sup> <https://ghgprotocol.org/corporate-standard>

<sup>2</sup> <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

<sup>3</sup> <https://ghgprotocol.org/standards/scope-3-standard>