Carbon Reduction Commitment

We are dedicated to creating a sustainable future for our communities and the environment. As a leading civil engineering company specialising in highways, we recognise the significant impact our industry can have on carbon emissions.

We are committed to taking meaningful steps to reduce our carbon footprint and contribute to a greener, more sustainable world. We understand the particular importance of this given the critical risk of slope failure in many townships. We collaborate with our clients to deliver a plan that is specific to communities needs and in line with Climate Change Strategies and Delivery Plans, helping to protect the planet for our people and places.

Current Initiatives

Within our operational control, we are continually implementing various measures to minimise our environmental impact with achievable target dates. These include:

Current Initiatives	Summer 2026 Target	End 2026 Target	End 2027 Target
Local Resourcing	Switching all office and Yard Lighting to low energy LED or PIR Lighting	Use of electric plant	Switching waggons to Biofuels, providing a carbon reduction of around 90%
Establish de-carbonisation committee	Replacement programme of diesel vans with electric vehicles	Decommission of all non-Euro 6 Engines vehicles and use of AdBlue additive	Use of Solar Powered welfare facilities to harness renewable energy
Using low carbon alternatives (5% of materials)	Using low carbon alternatives (10% of materials)	Using low carbon alternatives (15% of materials)	Using low carbon alternatives (25% of materials)
Cycle to work scheme and vehicle sharing	10% of commuting journeys reduced	15% of commuting journeys reduced	20% of commuting journeys reduced

Comprehensive Carbon Costing System

In line with our commitment to transparency and accountability, we are actively working towards implementing a comprehensive carbon costing system. This system will enable us to measure our baseline usage accurately, distinguishing between different scopes of emissions.

Scope 1 (Direct Emissions): This includes emissions from our office operations and vehicles, among other direct sources. We will measure this by:

Vehicle Emissions

- Track fuel consumption for each vehicle
- Assess the type and amount of fuel used
- Consider emissions factors for different types of fuels

Construction Equipment

- Monitor fuel consumption of construction machinery
- Evaluate the efficiency of equipment to identify opportunities for improvement

Scope 2 (Indirect Emissions): Encompassing the energy consumed in site operations. We aim to gain a thorough understanding of our indirect emissions. We will measure this by:

Material Usage

- Consider transportation emissions associated with the delivery of materials.
- Explore alternatives with lower carbon intensity.

Office Operations

- Collect utility bills (gas and electricity consumption)
- Consider the energy efficiency of office appliances

Scope 3: Encompassing operational aspects, such as the materials used in our projects.

Material Usage

Assess the embedded carbon footprint of materials used in construction projects. We will prioritise suppliers that provide details of embedded carbon in their products and are taking steps to reduce it.

Accurately measuring our carbon footprint will allow us to determine our greatest sources of carbon emissions, and highlight how we can achieve realistic reductions, using a SMART targets approach such as:

1. Specific: Reduce Scope 1 carbon emissions by 20% compared to the previous year.
   Measurable: Measure Scope 1 emissions annually using carbon accounting software.
   Achievable: Implement energy-efficient technologies and practices to achieve the reduction target.
   Relevant: Aligns with company sustainability goals and environmental commitments.
   Time-bound: Achieve the reduction within the next three years.

2. Specific: Decrease Scope 2 carbon emissions intensity by 15% per unit of production.
   Measurable: Calculate Scope 2 emissions quarterly using production data.
   Achievable: Invest in renewable energy sources to power operations and reduce emissions.
   Relevant: Supports the company's commitment to renewable energy and sustainability.
   Time-bound: Achieve the intensity reduction within the next two years.

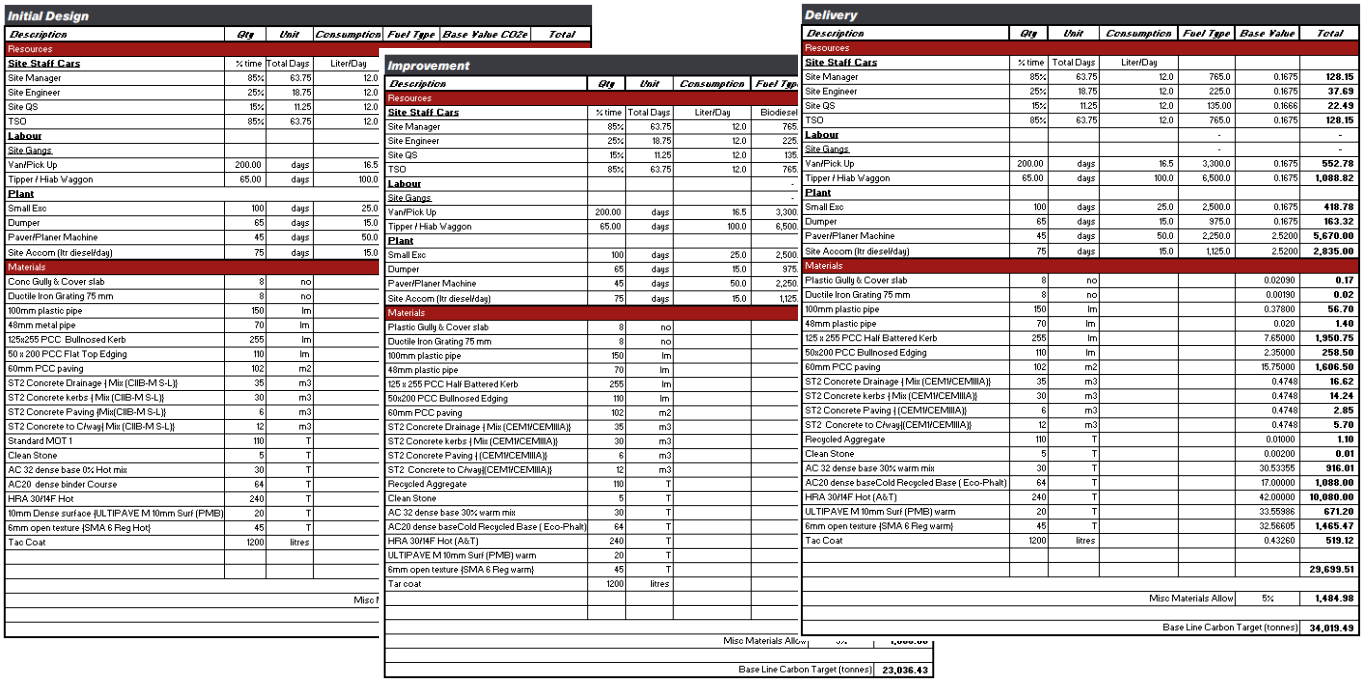
3. Specific: Retrofit office buildings with energy-efficient lighting and HVAC systems to achieve a 30% reduction in building-related emissions.
   Measurable: Monitor building energy consumption and emissions monthly post-retrofit.
   Achievable: Partner with energy service companies to identify and implement cost-effective retrofits.

Relevant: Targets emissions from building operations, a major source of carbon emissions.
Time-bound: Complete retrofits and achieve emission reduction within the next 6 months.

Client-Led Challenges

While we actively promote and advise our clients on sustainable practices, it is important to note that some carbon reduction initiatives are inherently client-led. Our commitment to environmentally friendly practices extends to offering guidance on the selection of better-sourced materials, such as eco-friendly concrete (e.g. Vertua Lower Carbon Concrete or CEVO) and tarmacadam (e.g. Ultilow by Tarmac). We understand that, at times, the cost implications of these choices may present challenges for our clients in terms of cost-effectiveness. Therefore, we provide all the information to our clients so that they can make an informed decision on their available budgets and current priorities using our Carbon Management Plan.

Our bespoke Carbon Management Plan is a comprehensive tool which focuses on the initial design, improvement, and delivery of schemes, ensuring carbon reduction is embedded at every stage. The plan is instrumental in supporting clients by providing robust case studies and business cases for funding applications, while also being actively used on live schemes to monitor and manage carbon throughout delivery. During tendering, the Bill of Quantities is converted into a carbon cost with the support of our supply chain, enabling the identification of key opportunities for improvement, particularly in high-impact areas such as asphalt and concrete. These improvements are tracked by our commercial team to ensure alignment with sustainability goals. To monitor progress, we track emissions in real time using standardised frameworks like PAS 2080, with regular reporting provided. Upon project completion, detailed carbon reports are shared to support clients' broader sustainability objectives.



Initial Design

Description	Qty	Unit	Consumption	Fuel Type	Base Value CO2e	Total
Resources						
Site Staff Cars	% time	Total Days	Liter/Day			
Site Manager	85%	63.75	12.0			
Site Engineer	25%	18.75	12.0			
Site QS	15%	11.25	12.0			
TSO	85%	63.75	12.0			
Labour						
Site Gangs						
Van/Pick Up	200.00	days	16.5			
Tipper / Hiab Waggon	65.00	days	100.0			
Plant						
Small Exc	100	days	25.0			
Dumper	65	days	15.0			
Paver/Planer Machine	45	days	50.0			
Site Accom (ltr diesel/day)	75	days	15.0			
Materials						
Conc Gully & Cover slab	8	no				
Ductile Iron Grating 75 mm	8	no				
100mm plastic pipe	150	lm				
48mm metal pipe	70	lm				
125x255 PCC Bullnosed Kerb	255	lm				
50 x 200 PCC Flat Top Edging	110	lm				
60mm PCC paving	102	m2				
ST2 Concrete Drainage (Mix (CIIB-M S-L))	35	m3				
ST2 Concrete kerbs (Mix (CIIB-M S-L))	30	m3				
ST2 Concrete Paving (Mix(CIIB-M S-L))	6	m3				
ST2 Concrete to C/wag(Mix (CIIB-M S-L))	12	m3				
Standard MOT 1	110	T				
Clean Stone	5	T				
AC 32 dense base 0% Hot mix	30	T				
AC20 dense binder Course	64	T				
HRA 30/14F Hot	240	T				
10mm Dense surface (ULTIPAVE M 10mm Surf (PMB))	20	T				
6mm open texture (SMA 6 Reg Hot)	45	T				
Tac Coat	1200	litres				
					Misc I	

Improvement

Description	Qty	Unit	Consumption	Fuel Typ
Resources				
Site Staff Cars	% time	Total Days	Liter/Day	Biodiesel
Site Manager	85%	63.75	12.0	765
Site Engineer	25%	18.75	12.0	225
Site QS	15%	11.25	12.0	135
TSO	85%	63.75	12.0	765
Labour				-
Site Gangs				-
Van/Pick Up	200.00	days	16.5	3,300
Tipper / Hiab Waggon	65.00	days	100.0	6,500
Plant				
Small Exc	100	days	25.0	2,500
Dumper	65	days	15.0	975
Paver/Planer Machine	45	days	50.0	2,250
Site Accom (ltr diesel/day)	75	days	15.0	1,125
Materials				
Plastic Gully & Cover slab	8	no		
Ductile Iron Grating 75 mm	8	no		
100mm plastic pipe	150	lm		
48mm plastic pipe	70	lm		
125 x 255 PCC Half Battered Kerb	255	lm		
50x200 PCC Bullnosed Edging	110	lm		
60mm PCC paving	102	m2		
ST2 Concrete Drainage (Mix (CEMI/CEMIIIA))	35	m3		
ST2 Concrete kerbs (Mix (CEMI/CEMIIIA))	30	m3		
ST2 Concrete Paving ((CEMI/CEMIIIA))	6	m3		
ST2 Concrete to C/wag((CEMI/CEMIIIA))	12	m3		
Recycled Aggregate	110	T		
Clean Stone	5	T		
AC 32 dense base 30% warm mix	30	T		
AC20 dense baseCold Recycled Base (Eco-Phalt)	64	T		
HRA 30/14F Hot (A&T)	240	T		
ULTIPAVE M 10mm Surf (PMB) warm	20	T		
6mm open texture (SMA 6 Reg warm)	45	T		
Tar coat	1200	litres		
			Misc Materials Allow	
			Base Line Carbon Target (tonnes)	23,036.43

Delivery

Description	Qty	Unit	Consumption	Fuel Type	Base Value	Total
Resources						
Site Staff Cars	% time	Total Days	Liter/Day			
Site Manager	85%	63.75	12.0	765.0	0.1675	**128.15**
Site Engineer	25%	18.75	12.0	225.0	0.1675	**37.69**
Site QS	15%	11.25	12.0	135.00	0.1666	**22.49**
TSO	85%	63.75	12.0	765.0	0.1675	**128.15**
Labour				-		-
Site Gangs				-		-
Van/Pick Up	200.00	days	16.5	3,300.0	0.1675	**552.78**
Tipper / Hiab Waggon	65.00	days	100.0	6,500.0	0.1675	**1,088.82**
Plant						
Small Exc	100	days	25.0	2,500.0	0.1675	**418.78**
Dumper	65	days	15.0	975.0	0.1675	**163.32**
Paver/Planer Machine	45	days	50.0	2,250.0	2.5200	**5,670.00**
Site Accom (ltr diesel/day)	75	days	15.0	1,125.0	2.5200	**2,835.00**
Materials						
Plastic Gully & Cover slab	8	no			0.02090	**0.17**
Ductile Iron Grating 75 mm	8	no			0.00190	**0.02**
100mm plastic pipe	150	lm			0.37800	**56.70**
48mm plastic pipe	70	lm			0.020	**1.40**
125 x 255 PCC Half Battered Kerb	255	lm			7.65000	**1,950.75**
50x200 PCC Bullnosed Edging	110	lm			2.35000	**258.50**
60mm PCC paving	102	m2			15.75000	**1,606.50**
ST2 Concrete Drainage (Mix (CEMI/CEMIIIA))	35	m3			0.4748	**16.62**
ST2 Concrete kerbs (Mix (CEMI/CEMIIIA))	30	m3			0.4748	**14.24**
ST2 Concrete Paving ((CEMI/CEMIIIA))	6	m3			0.4748	**2.85**
ST2 Concrete to C/wag((CEMI/CEMIIIA))	12	m3			0.4748	**5.70**
Recycled Aggregate	110	T			0.01000	**1.10**
Clean Stone	5	T			0.00200	**0.01**
AC 32 dense base 30% warm mix	30	T			30.53355	**916.01**
AC20 dense baseCold Recycled Base (Eco-Phalt)	64	T			17.00000	**1,088.00**
HRA 30/14F Hot (A&T)	240	T			42.00000	**10,080.00**
ULTIPAVE M 10mm Surf (PMB) warm	20	T			33.55986	**671.20**
6mm open texture (SMA 6 Reg warm)	45	T			32.56605	**1,465.47**
Tac Coat	1200	litres			0.43260	**519.12**
						29,699.51
				Misc Materials Allow	5%	**1,484.98**
				Base Line Carbon Target (tonnes)		**34,019.49**

Balancing Sustainability and Cost-Effectiveness

We acknowledge the delicate balance between sustainability and cost-effectiveness. In instances where the use of more environmentally friendly materials may incur higher costs, we work closely with our clients to explore viable alternatives that align with their budget constraints. Our goal is to find innovative solutions that meet both environmental and financial objectives.

Continuous Improvement

We view our carbon reduction efforts as an ongoing journey. As technology advances and sustainable practices evolve, we remain committed to staying at the forefront of innovation. This commitment extends to developing and implementing new, cost-effective solutions and a comprehensive carbon costing system to accurately measure our carbon usage.

Transparency and Collaboration

Open communication and collaboration are integral to achieving our sustainability goals. We are transparent with our clients, stakeholders, and team members about our initiatives, challenges, and progress in reducing carbon emissions. Together, we can work towards a future where infrastructure development and environmental stewardship go hand in hand.

Carbon offsetting

While the most impactful change in carbon reduction occurs at the source, the construction industry still has a considerable journey ahead to curtail its carbon outputs. In response, we have pledged to offset a percentage of our emissions through various avenues, with tree planting being our main initiative.

In recent years, we have encouraged and supported tree planting initiatives within local authorities in the Northwest. Notably, our most successful project took place in Penny Lane, where, in collaboration with Stockport Council and City of Trees, we transformed a previously derelict piece of land in Stockport by planting 7,500 trees.