

Carbon Reduction Plan 2024



**Building a
sustainable tomorrow**

BAM UK and Ireland | December 2024

**Making
Possible**

Contents

Introduction	3
Our business.....	3
Organisational structure	3
Commitment to achieving Net Zero	5
Proven track record.....	5
Our carbon expertise.....	6
Emissions report.....	7
Reporting scope.....	7
BAM UK & Ireland	8
BAM Nuttall.....	9
BAM Construct & Ventures UK.....	10
BAM Contractors	11
BAM FM.....	12
Data capture and carbon calculation	13
Carbon Data Assurance	13
Emissions Reduction Targets.....	16
Progress against our net zero strategy	17
BAMs position on the use of biofuels.....	17
Direct emissions reduction initiatives (scope 1 & 2).....	18
Carbon reduction projects.....	18
Hydrogen.....	18
Hybrid plant.....	19
Off-grid renewable power	19
Electric vehicle transition	19
Plant depot upgrades.....	19
BAM EV Charging Solutions.....	20
BAM Energy	20

Updated business guidance	20
Minimum standards for welfare.....	20
Scope 3 emissions reductions initiatives.....	21
Carbon reduction projects.....	21
Low carbon concrete	21
Low carbon steel.....	21
Reducing upstream transportation	21
Protec temporary protection	22
Passivhaus construction	22
Zero operational carbon assets	22
Material reuse.....	23
Carbon reduction in existing buildings.....	23
3D printed concrete.....	23
Applying PAS 2080 principles	23
Declaration	24



Introduction

Our business

BAM UK & Ireland is an operating division of Royal BAM Group nv, a construction company operating in Europe. In the UK and Ireland, BAM has established itself as a leading tier 1 contractor spanning the entire lifecycle of the built environment, comprising the design, delivery and operation of public and private infrastructure and construction projects. We deliver in excess of £2.5bn worth of work across 200+ projects each year. More about what we do can be found on our website:

<https://ukandireland.bam.com/>

Decarbonisation is one of the 6 themes in our sustainability strategy 'Building a sustainable tomorrow' (figure 1). This integrated carbon reduction plan (ICRP) details our decarbonisation pathway towards net zero including what our carbon reduction targets are and how we are progressing against them.

BAM UK & Ireland has formed a central environmental sustainability enabling service who provide overarching support to all entities on our sustainability strategy, including decarbonisation, and have a network of individuals embedded in each entity driving the sustainability strategy through every part of the organisation.

Organisational structure

The UK & Ireland division is comprised of four operating segments; BAM Nuttall, BAM Construction, BAM Ventures and BAM Ireland. Executive directors from each segment, who also sit on the boards of the various entities in the Division, are members of the BAM UK & Ireland Divisional Leadership Team ('DLT') alongside a Chief Operating Officer and a Director of each of the Enabling Services; Finance, People, Delivery Assurance, ICT, Transformation and Communications. This ICRP has been developed to satisfy the legal and statutory requirements of all BAM UK & Ireland entities, whilst also streamlining our carbon reporting and associated disclosures to all our stakeholders. The organisational structure on the next page shows all the operational companies within the BAM UK & Ireland division.

Our ICRP shows both the aggregated carbon emissions data at division level and for key operating companies which require carbon disclosures within their own right, these being; BAM Nuttall Ltd, BAM Construct & Ventures UK Ltd, BAM Contractors Ltd and BAM FM Ltd. BAM UK & Ireland has formed a central environmental sustainability enabling service who provide overarching support to all entities on our sustainability strategy, including decarbonisation, and have a network of individuals embedded in each entity driving the sustainability strategy through every part of the organisation. This central team also includes specialist leads for sustainability topics such as decarbonisation, data administrative and analysis resources operating across the entire division. Our decarbonisation strategy, commitment to delivering net zero by 2050 and associated carbon reduction projects apply to all entities within BAM UK & Ireland. Therefore, all commitments and targets (unless otherwise stated) apply equally to each legal entity in the division.

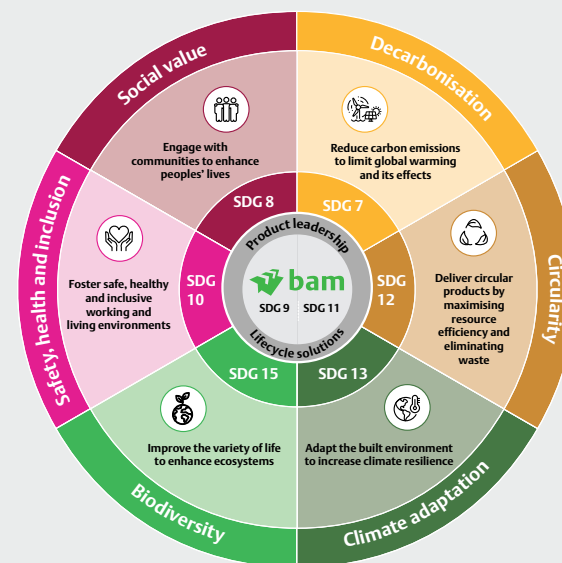


Figure 1, Decarbonisation is one of the 6 key themes in our sustainability strategy, 'Building a sustainable tomorrow'.

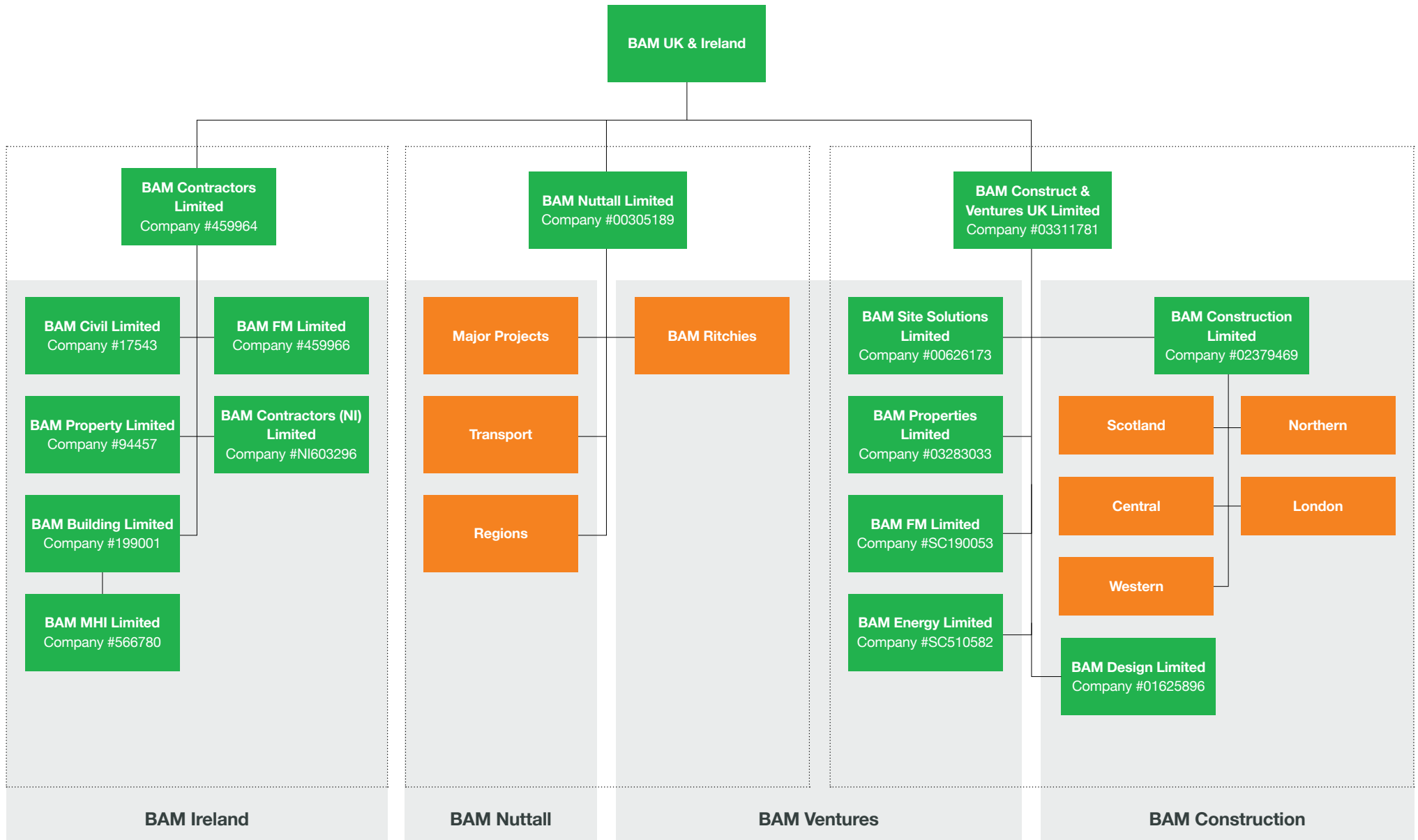


Figure 2: BAM UK & Ireland Division



Commitment to achieving Net Zero

Reducing carbon emissions is at the heart of our organisations sustainability strategy. Royal BAM Group is committed to halving scope 1 & 2 emissions intensity by 2023 from 2015 levels and 80% by 2026. Ultimately we are fully committed to **achieving net zero emissions across all scopes by 2050**.

Since 2008 we have had a mature and robust carbon measurement and reporting system which has helped us demonstrate substantial reductions year on year. Delivering low carbon solutions not only helps us reduce our clients' carbon footprint, it generates cost benefits for them and our own business as well as helping to build our brand and reputation, and to achieve our objectives against our sustainability strategy – Building a Sustainable Tomorrow. It also helps us meet Government and legal requirements, such as the Energy Savings and Opportunities Scheme (ESOS), Streamlined Energy and Carbon Reporting (SECR) and the drive globally to become net zero carbon by 2050.



Climate change is the greatest challenge of our time. As a responsible business we have a proven track record of driving out carbon from the built environment and are committed to working collaboratively with clients, peers

and our supply chain to realise a net zero carbon future. Only by working together can we achieve the required carbon emissions reductions to meet the net zero carbon goals of our UK government, industry and globally.

**John Wilkinson, Chief Operating Officer,
BAM UK & Ireland**

Proven track record

BAM UK & Ireland has been instrumental in supporting Royal BAM Group's continued CDP 'A list' status having achieved a 46% reduction in scope 1 & 2 CO₂e emissions intensity from our 2015 baseline. Royal BAM Group participates in the CDP climate program each year and has been placed in the leadership index (the 'A list') for the last seven years. It is an ongoing strategic target of Royal BAM to rank among the leading companies globally and the BAM Group CDP response can be found [here](#).

In addition to this, BAM UK & Ireland is certified to the ISO14064:2018 carbon measurement standard through the Carbon Reduce scheme operated by Achilles.

In 2019 Royal BAM Group ratified its carbon reduction targets with the Science Based Targets Initiative and was one of the first companies in the construction sector to do so. Our reduction pathway is in line with the 1.5°C scenario and demonstrates our carbon reduction efforts are sufficient to meet this key objective. More on our Science Based Targets can be found [here](#).

In order to support the drive to a net zero carbon built environment, BAM became a founding partner of the UK Green Building Council Advancing Net Zero Carbon Buildings Program in 2018. This industry leading program has created the standards which are now widely being used to define how we achieve net zero carbon buildings across their whole life. More information can be found [here](#).

Following the work with ANZ, in 2019, BAM signed the World Green Building Councils Net Zero Carbon Buildings Commitment. As a signatory, we have committed to only occupy and develop net zero carbon buildings by 2030 and to advocate and support our clients and supply chain to do the same. You can find our commitment scope [here](#).



BAM UK & Ireland has been instrumental in supporting Royal BAM Groups continued **CDP 'A list' status** having achieved a **46% reduction in direct CO₂e emissions** intensity from our 2015 baseline.

BAM is a founding signatory and creator of Contractors Declare, a voluntary initiative led by 8 founding main contractors and linked to the wider Built Environment Declares movement. The aim is to catalyse collective action to raise awareness of action on climate change and biodiversity loss, especially amongst the supply chain and smaller businesses in the sector.



The Supply Chain Sustainability School was founded to accelerate take up of sustainable practices in the construction industry and to upskill the entire supply chain. As a partner to the school BAM supports all its programs of work. In 2020 the climate action group was formed with the purpose of raising awareness of and improving data on carbon emissions within the supply chain. A free to access tool has been created to support the supply chain to measure and report their emissions, which BAM actively promotes to its key supply partners across the UK.



In 2021 BAM was accepted on to the Construction Leadership Councils (CLC) CO2nstruct Zero initiative. This initiative builds on the government's 10-point plan for the green industrial revolution set out in 2020, although its focus is across the entire built environment sector. CO2nstruct Zero sets out roadmaps to decarbonise 9 priority areas and as an accepted "business champion" for the initiative, we must demonstrate alignment to these roadmaps and report back on an annual basis.



In 2024 BAM UK & Ireland became [members of the Concrete Zero](#) which is a global initiative to drive down emissions from what is the single biggest source of embodied emissions across the sector, accounting for 8% of global carbon emissions.



Our carbon expertise

BAM UK & Ireland has a long-established environmental and sustainability culture which includes a dedicated function for managing carbon. Our Net Zero Carbon Lead, Sarah Jolliffe manages the companies interests which impact upon our decarbonisation efforts. "Climate change is the greatest existential threat we face and industries such as ours have a huge role to play to mitigate our own emissions and influence carbon reduction throughout the built environment. I am proud to be at the forefront of driving real change and setting an example in one of the most sustainable construction companies in the UK and Ireland".

To ensure our carbon accounting is robust and accurate, BAM UK & Ireland has a team of data analysts making sure our carbon data is reliable and complete. Securing highly granular and high quality data gives us a thorough understanding of our carbon impact and where the key emissions sources are. This influences where we deploy focussed carbon reduction measures in areas of our business that achieve the greatest impact. Across the business, every employee, and many of our delivery partners have carbon literacy training. Nominated individuals on each project are responsible for carbon and sustainability matters.

Across the UK and Ireland BAM works closely with institutional partners to help us collaborate with all members of our value chain. BAM was one of the founding partners to the UK and Irish Green Building Councils (UKGBC and IGBC) Advancing Net Zero programme which seeks to accelerate the drive towards net zero buildings. Our other affiliates pertinent to sustainable development and decarbonisation include the Institution of Civil Engineers (ICE), Construction Leadership Councils (CLC) CO2nstruct Zero initiative and several special interest working groups with the Supply Chain Sustainability School (SCSS) with whom we have also partnered.



"We have made considerable progress towards our 2030 targets in recent years, but challenges remain. Through collaboration across our organisation and the industry, leveraging the innovative solutions our supply chain has to offer, we will continue to drive meaningful change. Our shared commitments through industry initiatives such as ConcreteZero and the UKGBC' Net Zero Buildings Commitment will continue to drive us to play our part in the decarbonisation of the built environment"

Damien Canning, Whole Life Carbon Lead

Emissions report

Reporting scope

BAM UK & Ireland has measured its direct carbon emissions since 2008 and, since then, has developed comprehensive and efficient ways of handling the data and presenting it back to all our stakeholders. Our emissions inventory includes all GHG scope 1 & 2 emissions and additionally includes indirect emissions arising from select scope 3 emissions;

- ▶ **Staff transport in non-company owned vehicles, Air travel and Rail travel**
- ▶ **Third party procured fuels and energy** (including Well to Tank impacts)
- ▶ **Hotel stays**
- ▶ **Water use**
- ▶ **Waste arising from our operations**
- ▶ **Upstream transport of goods and services**
- ▶ **Well To Tank (WTT) emissions**

For scope 2 emissions accounting, despite the fact that 73% of our directly procured electricity utilises REGO-backed supplies, we always report the true emissions from our electricity use using the location-based methodology. We feel this is the most appropriate way to account for this emissions source.

In addition to this biofuels and bioenergy are now beginning to play a role in decarbonising our business and indeed the sector at large. We align with the GHG protocol in accounting for and disclosing these emissions and as such they fall in the 'out of scopes' emissions bucket. These are also known as Biogenic emissions which are not deemed a net contributor to global carbon emissions and therefore they are not included in BAM UK & Irelands total net emissions.

Upstream transportation data has the greatest data uncertainty as there is very limited primary data

available. However, we have been able to generate our own bespoke financial conversion factor which is based on measured bulk material purchases and is therefore more accurate than the use of the industry standard environmentally-extended input output (EEIO) conversion factors^[1]. We will continue to review this methodology over time which may result in re-baselining in the future.

We do not disclose data across all scope 3 categories yet due to the lack of reliable data. However our parent company Royal BAM Group has undertaken high level financial-based analysis which is disclosed in their integrated report. We anticipate that purchased goods and services will be the dominant source of emissions across the division since this is indicated through the high level analysis which BAM Group has undertaken. We are already implementing carbon reduction initiatives division-wide through our sustainability strategy to drive down these emissions on a project by project basis. The carbon reducing projects section of this ICRP showcases example where we have achieved significant emissions reduction. Over the course of 2024 we have continued to refine our methodologies and are working towards full scope 3 emissions disclosures from 2025.

We have selected 2015 as our baseline year, which is in line with that of our parent company and provides a robust basis for comparing performance against. The tables and charts 1 through 5 show a summary of BAM UK & Irelands total emissions for 2023 compared to the 2015 baseline and is also broken down by the the four specific legal entities cited above, namely; BAM Nuttall Ltd, BAM Construct & Ventures UK Ltd, BAM Contractors Ltd and BAM FM Ltd. Emissions performance narratives are given immediately below each table pertinent to each company's emissions inventories.



Transparent reporting

Despite the fact that over 75% of our directly procured electricity utilises REGO-backed supplies, we always report the true emissions from our electricity use using the location-based methodology.

1. [Scope3 Calculation Guidance 0.pdf \(ghgprotocol.org\)](#)

BAM UK & Ireland

The emissions from upstream transportation and diesel use dominate the total emissions footprint of the division accounting for 59% of all the categories we disclose. These emissions stem from the many thousands of HGVs and LGVs used to deliver goods and services to our sites, and the 17.4 million litres of diesel fuel used in construction plant and equipment, and the commercial fleet.

Liquid fuels (primarily Gas Oil and diesel) are by far the largest contributor to the direct emissions making up over half of the total for scope 1 and 2, they are therefore a key focus of our management and reduction. The bulk of these emissions are dictated by the amount and type of civil engineering projects being undertaken at any given time although the implementation of HVO from mid-2023 resulted in the avoidance of circa 8ktCO₂e. Moving forward into 2024, BAM UK & Ireland will use of HVO on all contracts where we have operational control which will result in a further significant fall in scope 1 emissions.

Emissions from the other sources listed in the inventory such as electricity, natural gas, third party supplied fuels and energy, waste, hotel use, water and staff transportation are all significant although tend to be more consistent each year and have been consistently falling year on year as a result of the decarbonisation of the grid, deploying more efficient construction methods and the electrification of heat and company vehicles. All of these sources are supported with excellent and granular activity data down to transaction level and backed up through our ISO14064 certification.

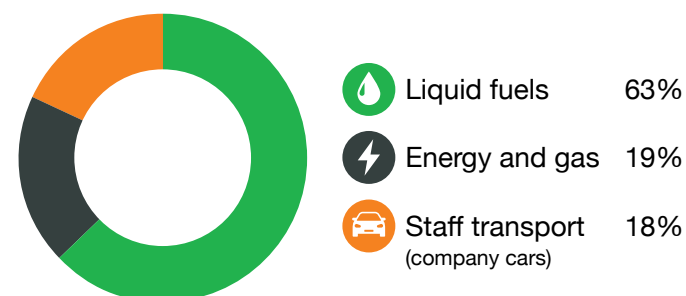


Emissions reporting and comparison to baseline

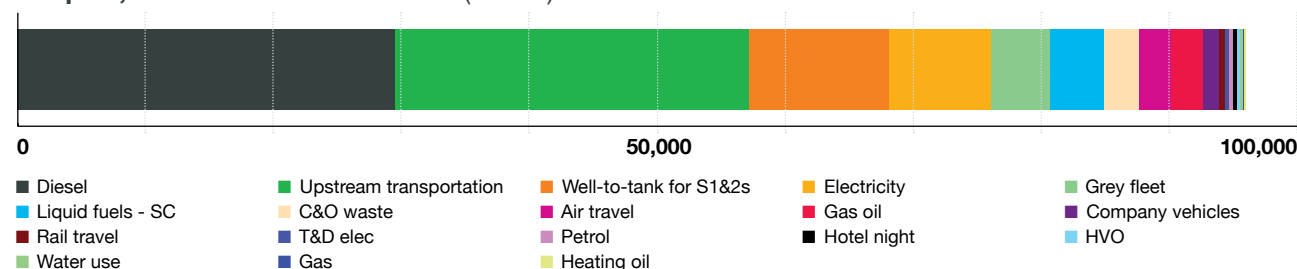
Emissions scope	Baseline emissions 2015		2023 emissions		Variance	
	ktCO ₂ e	tCO ₂ e/£M	ktCO ₂ e	tCO ₂ e/£M	Absolute	Intensity
Scope 1	47.83	23.89	35.49	12.75	➔ 26%	➔ 47%
Scope 2	10.13	5.06	7.98	2.87	➔ 21%	➔ 43%
Total S1 & 2	57.96	28.95	43.48	15.62	➔ 25%	➔ 46%
Scope 3*	53.02	26.48	52.44	18.84	➔ 2%	➔ 29%
Total S1, 2 & 3	110.97	55.43	95.92	34.46	➔ 14%	➔ 38%
<i>Out of scopes emissions</i>	-	-	6.14	2.53	-	-

Table 1, Emissions inventory 2015 and 2023, *Scope 3 excludes, purchased goods and service and use of sold product

Scope 1 & 2 emissions



Scope 1, 2 and 3 emission sources (tCO₂e)



BAM Nuttall

BAM Nuttall delivers civil engineering projects and geotechnical solutions which have a comparably higher carbon footprint compared to all other business activities across BAM UK & Ireland. This is due to the often large quantities of earthworks and bulk material installations that occur with this type of work. Not surprisingly, upstream transportation and the use of diesel in plant and equipment used on these projects is responsible for 69% of the emissions in 2023. Given their significance, in 2022 we began switching site diesel to the low carbon biodiesel alternative known as Hydrotreated Vegetable Oil (HVO) which delivers a 90%+ reduction in scope 1 emissions. In mid-2023 we mandated its use across the division with the exception of projects where we do not have operational control.

Emissions from upstream transportation are more difficult to influence although there are good examples of where we have optimised construction methodologies and opted for lower carbon modes of transport in the case study section of this ICRP.

Major projects in excess of £100M tend to dominate BAM Nuttall's emissions footprint, particularly those with significant earthworks within their scope. Therefore to aid our analysis, we also split the emissions into 'general civils' and 'heavy civils' with the latter being defined as projects with total excavation activities exceeding 500,000 tonnes over their duration. Large earth moving projects tend to have a carbon footprint more than double that of the 'general civils' activities and more than quadruple that of a commercial building project. Chart 5 illustrates the long term carbon intensity trends for each category.

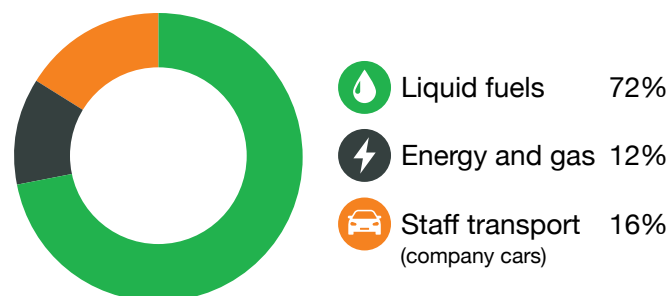
Emissions reporting and comparison to baseline



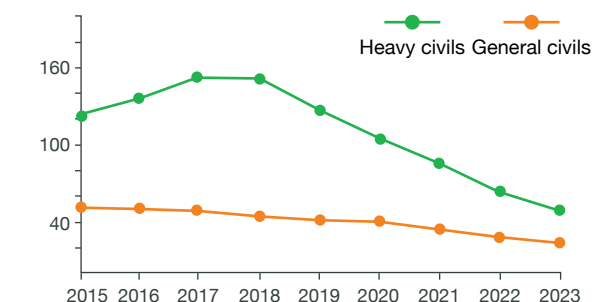
Emissions scope	Baseline emissions 2015		2023 emissions		Variance	
	ktCO ₂ e	tCO ₂ e/£M	ktCO ₂ e	tCO ₂ e/£M	Absolute	Intensity
Scope 1	35.46	45.73	25.94	20.44	⬇️ 27%	⬇️ 55%
Scope 2	3.67	4.73	3.51	2.77	⬇️ 4%	⬇️ 41%
Total S1 & 2	39.12	50.46	29.45	23.21	⬇️ 25%	⬇️ 54%
Scope 3*	24.96	32.2	28.51	22.47	⬆️ 14%	⬇️ 30%
Total S1, 2 & 3	64.08	82.66	57.96	45.68	⬇️ 10%	⬇️ 45%
<i>Out of scopes emissions</i>	-	-	5.15	4.06	-	-

Table 1, Emissions inventory 2015 and 2023, *Scope 3 excludes, purchased goods and service and use of sold product

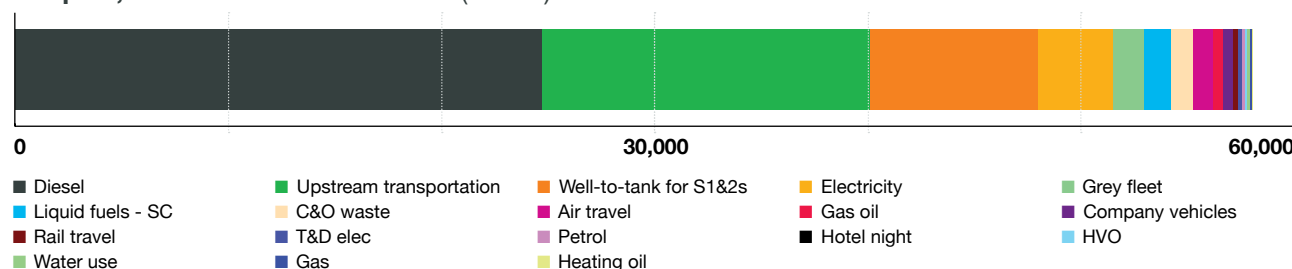
Scope 1 & 2 emissions



5 year average tCO₂e/£m turnover (inflation applied)



Scope 1, 2 and 3 emission sources (tCO₂e)



BAM Construct & Ventures UK

BAM Construct & Ventures predominantly deliver commercial building projects but also have a number of subsidiaries delivering specific services in areas such as Plant hire, FM, Design and Property services. The emissions footprint is comparably lower compared to all other business activities across BAM UK & Ireland. This is due to the fact that fewer bulk materials are required in the delivery of this type of work compared to civil engineering projects thus reducing upstream transportation impacts, and due also to the vast majority of projects being located in urban areas which typically have good availability of a grid electricity supply thus eliminating the need for diesel powered generators.

Upstream transportation and the use of gas oil and diesel used in the plant and equipment operated on these projects is responsible for 59% of emissions in 2023. We mandated the use of Hydrotreated Vegetable Oil (HVO) in 2023 which has significantly reduced scope 1 emissions. Emissions from upstream transportation are much more difficult to influence although there are good examples of where we have optimised construction methodologies and opted for lower carbon modes of transport in the case study section of this ICRP.

Within BAM Construct & Ventures is the BAM Site Solutions business which operates 4 regional depots all of which are directly controlled by BAM. The combined energy emissions from these assets is significant accounting for a fifth of the total direct scope 1 and 2 emissions in 2023 mostly as a result of electricity and natural gas usage.

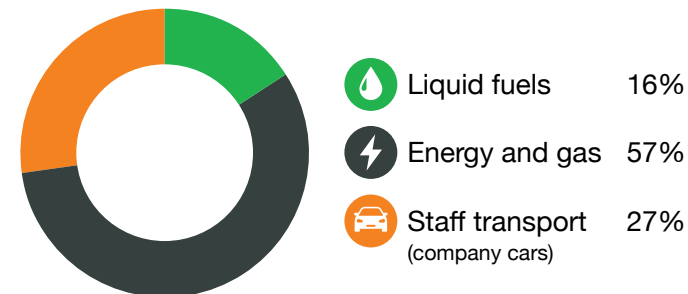


Emissions reporting and comparison to baseline

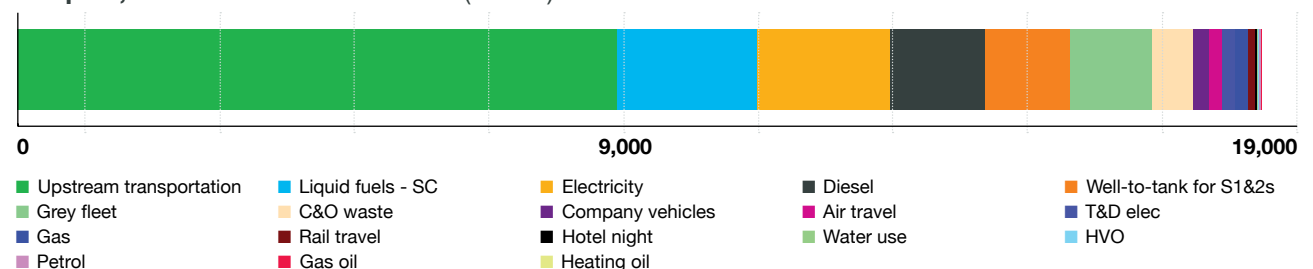
Emissions scope	Baseline emissions 2015		2023 emissions		Variance	
	ktCO ₂ e	tCO ₂ e/£M	ktCO ₂ e	tCO ₂ e/£M	Absolute	Intensity
Scope 1	5.36	5.92	1.84	1.66	➔ 66%	➔ 72%
Scope 2	4.99	5.51	1.97	1.78	➔ 60%	➔ 68%
Total S1 & 2	10.35	11.43	3.81	3.43	➔ 63%	➔ 70%
Scope 3*	19.91	22.77	14.65	13.18	➔ 29%	➔ 42%
Total S1, 2 & 3	29.01	34.21	18.46	16.61	➔ 40%	➔ 51%
<i>Out of scopes emissions</i>	-	-	0.99	0.89	-	-

Table 1, Emissions inventory 2015 and 2023, *Scope 3 excludes, purchased goods and service and use of sold product

Scope 1 & 2 emissions



Scope 1, 2 and 3 emission sources (tCO₂e)



BAM Contractors

BAM Contractors operate across the republic of Ireland and Northern Ireland and deliver a mixed portfolio of commercial building projects and civil engineering schemes but also has a number of subsidiaries as illustrated in figure 2 who deliver services such as FM, Property management, small-scale modular homes manufacture and plant operations. The emissions footprint is broadly consistent per business line with that of the UK-based operating companies of BAM Nuttall and BAM Construct & Ventures although emissions results fluctuate considerably depending on the proportion of work being delivered in either discipline.

Emissions intensity actually increased compared to the baseline in 2023 and this is as a result of the relatively low baseline in 2015. The introduction of HVO in mid-2023 has begun to significantly curtail scope 1 emissions, and going forward we expect a significant drop in emissions intensity since all projects in the portfolio will be using the fuel.

Upstream transportation and the use of gas, oil and diesel used in the plant and equipment accounted for 57% of the emissions in 2023. Upstream transportation is difficult to influence but there are examples of where the business has reduced its transport impacts by opting for more in the way of modular construction practices and optimised material handling. Implementing these ways of working also helps to reduce diesel and gas oil usage by way of an improvement in productivity.

Grid electricity has a comparatively high carbon factor when compared to the UK, however this is expected to curtail significantly in the coming years in line with regional grid decarbonisation efforts.

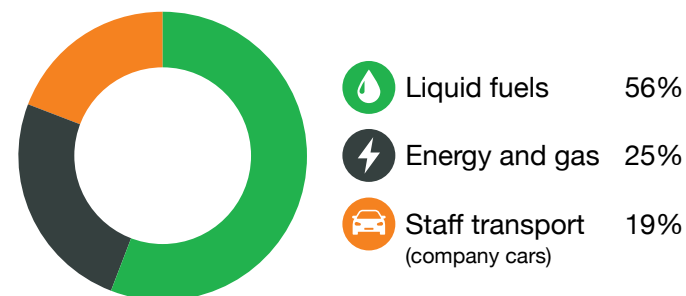
Emissions reporting and comparison to baseline



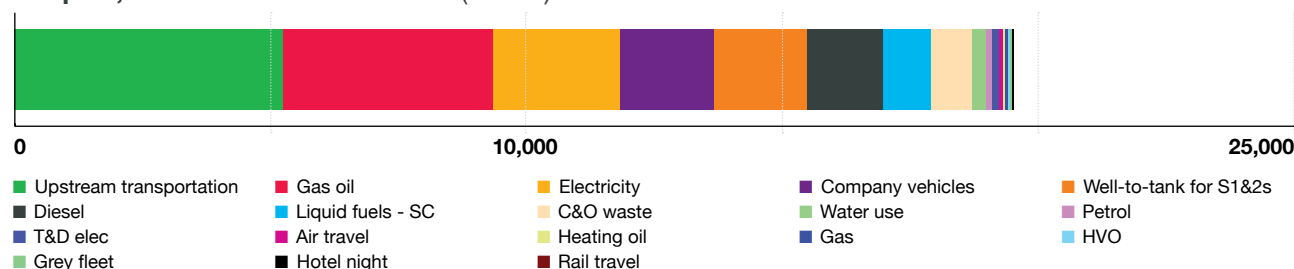
Emissions scope	Baseline emissions 2015		2023 emissions		Variance	
	ktCO ₂ e	tCO ₂ e/£M	ktCO ₂ e	tCO ₂ e/£M	Absolute	Intensity
Scope 1	7.01	20.27	7.71	19.13	+ 10%	- 6%
Scope 2	1.48	4.27	2.50	6.20	+ 69%	+ 45%
Total S1 & 2	8.48	24.55	10.21	25.34	+ 20%	+ 3%
Scope 3*	7.44	21.53	9.28	23.03	+ 25%	+ 7%
Total S1, 2 & 3	15.92	46.08	19.50	48.37	+ 22%	+ 5%
<i>Out of scopes emissions</i>	-	-	-	-	-	-

Table 1, Emissions inventory 2015 and 2023, *Scope 3 excludes, purchased goods and service and use of sold product

Scope 1 & 2 emissions



Scope 1, 2 and 3 emission sources (tCO₂e)



BAM FM

BAM FM deliver a range of facilities management services to public and private sector clients in the UK. Some of the sites managed by BAM FM are part of a BAM PPP/PFI project and therefore will operate for in excess of 20 years. BAM FM provide energy management services to sites (including schools, hospitals, police headquarters and local authority buildings).

The use of diesel in company vehicles and the commercial van fleet accounts for over 63% of the emissions in 2022. Significant reductions have been made through the switching of diesel powered vehicles over to fully electric versions and it is expected that by 2030, the entire fleet of company and commercial vehicles will be fully electric. The remainder of emissions come from various public transport sources as well as energy for some fixed premises. There were no scope 2 emissions associated with BAM FM in 2023 as they do not control the energy supplies nor have full occupation for their fixed premises. These are typically leased directly through BAM Construct & Ventures Ltd whom co-habit with other business units, therefore all scope 2 emissions are reported for these entities within BAM Construct & Ventures reporting.

Emissions from waste and energy used at BAM FM operated sites are not included in our emissions footprint as they arise from our clients activities and are therefore outside of our reporting scope at this time.

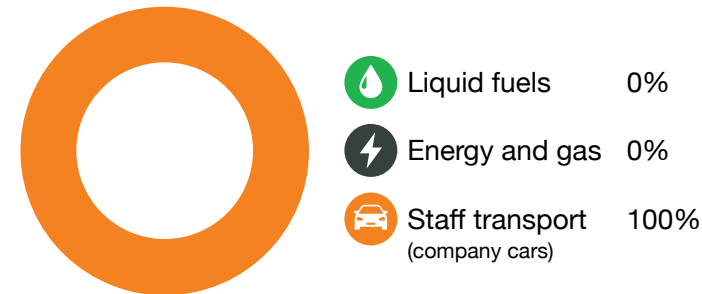


Emissions reporting and comparison to baseline

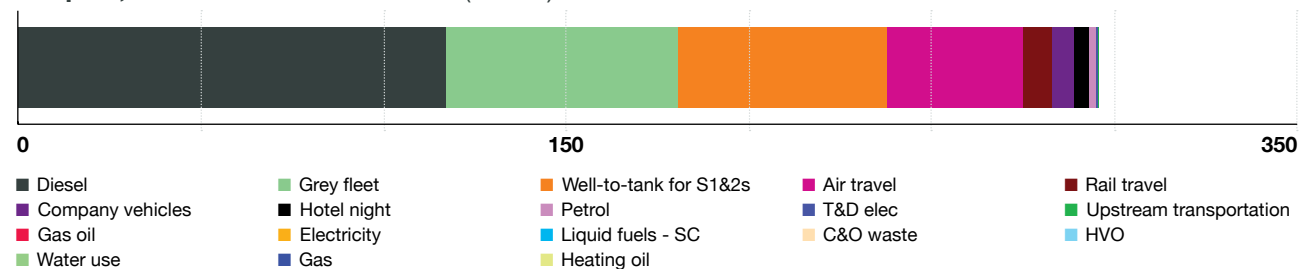
Emissions scope	Baseline emissions 2015		2023 emissions		Variance	
	ktCO ₂ e	tCO ₂ e/£M	ktCO ₂ e	tCO ₂ e/£M	Absolute	Intensity
Scope 1	0.14	3.60	0.12	1.29	➔ 13%	➔ 64%
Scope 2	0.00	0.00	0.00	0.00	NA	NA
Total S1 & 2	0.14	3.60	0.12	1.29	➔ 13%	➔ 64%
Scope 3*	0.22	5.58	0.17	1.77	➔ 23%	➔ 68%
Total S1, 2 & 3	0.37	9.81	0.30	3.06	➔ 19%	➔ 67%
<i>Out of scopes emissions</i>	-	-	-	-	-	-

Table 1, Emissions inventory 2015 and 2023, *Scope 3 excludes, purchased goods and service and use of sold product

Scope 1 & 2 emissions



Scope 1, 2 and 3 emission sources (tCO₂e)



Data capture and carbon calculation

Carbon data management is complex with emissions originating from a large number of sources, activities and processes. Table 6, on the next page, describes our approach and scope for each emissions inventory item including an indicative data uncertainty ranking (high, medium or low depending on our ISO14064 report) which applies across all BAM UK & Ireland operating companies.

Wherever possible, we collect activity data at its most granular – often from transaction level goods and services reports, to ensure we are using the best quality and most accurate sources of data. Where we are unable to obtain supplier data, nominated individuals complete data returns via the web-based SmartWaste tool. This tool enables a seamless digital interface in which users can enter their data whenever activities take place. For example, when a waste transfer or material delivery occurs, an entry is made to the tool and the data is automatically sent to the central database. Prior to the formation of BAM UK & Ireland in 2022 all entities had their own tools. In 2023 we successfully streamlined our site-based data capture tooling so that all entities across UK & Ireland use a common platform. In addition to this, we have also increased our central data analyst resources to cope with the ever increasing amount of data and dashboarding required to fulfil client, statutory and parent company reporting.

When we work in joint venture with non-BAM companies, we report the equity share of carbon emissions as given in the commercial terms for each partner. Where fuels and energy are procured directly by the joint venture, BAM records the appropriate equity

share in scope 1, all other fuels and energy are reported in scope 3 which is also equity share adjusted.

Carbon emissions are calculated in line with the most reliable and robust emissions factors for each emissions inventory item. Primarily, this entails the use of the UK and Irish governments' carbon emissions conversion tables which are published and updated annually. A portion of our emissions are calculated using bespoke methodologies. For example, for staff transport in road vehicles, we calculate emissions using the specific vehicles emissions data, therefore we are able to calculate more accurate emissions than we would if using the publicly available tables alone.

Carbon Data Assurance

Our carbon data is externally verified twice annually at corporate level in line with ISO14064:2018 under the Carbon Reduce scheme and the GHG protocol as part of our parent company's annual integrated reporting. Both our auditors, Ernst & Young and Achilles have praised our approach to carbon management and ensure that our carbon data is of high quality. At project level, we undertake energy audits which support our compliance with ESOS legislation and gives our projects targeted guidance on how they can reduce carbon specific to their situation.

Both our auditors, Ernst & Young and Achilles have praised our approach to carbon management and ensure that our carbon data is of high quality.



Our focus on capturing data at a granular level has enabled greater insights into our footprint and gives us the ability to take more meaningful and targeted actions to improve performance. We publish carbon and sustainability performance to all our stakeholders via power BI.

Emissions inventory item	Unit of measure	Carbon conversion factor source	Primary data source	Data type	Data uncertainty	Emissions scope	Comments
Liquid fuels; Gas Oil, HVO, Diesel, Petrol, LPG, Natural Gas	Litres	DEFRA <appendix link>	Supplier transaction reports	Measured	●	1	Liquid fuels are supplied via preferred suppliers from which we receive transaction reports on a monthly Fuel purchased basis. This covers direct purchases only.
Business travel in company vehicles	Miles	Based on actual vehicle CO2 emissions	Company expense returns	Measured	●	1	Staff transport in company vehicles is captured via the central expenses reporting systems. The carbon emissions are calculated based on the total distance travelled multiplied by the average carbon emission factors of our fleet vehicles as given by the manufacturer.
Electricity	kWh	DEFRA <appendix link>	Energy supplier transaction reports	Measured	●	2	Electricity data is obtained from all our electricity providers via monthly reporting and automated meter reading (AMR) devices. Energy data provided by third parties is submitted into SmartWaste.
Waste	Tonnes	DEFRA <appendix link>	Project level submissions via applications	Measured	●	3	Waste transactions are captured at site level where data is entered into the SmartWaste application for each company.
Employee commuting in private vehicles	Miles	Based on actual vehicle CO2 emissions	Company expense returns	Measured	●	3	Staff transport in private vehicles is captured via the central expenses reporting system. The carbon emissions are calculated based on the total distance travelled multiplied by the average carbon emission factors of privately owned vehicles as given by the manufacturer
Staff transport via Air, Rail and Sea	Miles	DEFRA <appendix link>	Company travel providers database	Measured	●	3	BAMs travel provider collects all data from employees using rail, air or sea travel. Reports are collected every month with additional data coming from our expenses system.
Hotel accommodation	number	DEFRA <appendix link>	Company travel providers database	Measured	●	3	BAMs travel provider collects all data from employees using accommodation services. The number of nights in Hotels is reported each month using the suppliers portal.
WTT emissions associated with Scope 1 & 2 emissions	As per emissions source	DEFRA <appendix link>	Calculation applied to primary data	Measured	●	3	WTT emissions are calculated against our measured scope 1 & 2 emissions sources using the DEFRA conversation factors.

● High ● Medium ● Low





Emissions inventory item	Unit of measure	Carbon conversion factor source	Primary data source	Data type	Data Uncertainty	Emissions Scope	Comments
Upstream transport of purchased goods and services	Financial indicator	Bespoke	Bespoke	Calculated		3	Upstream transport of goods and services is calculated by applying average haul distances to existing procurement data and supplier transaction reports to determine a total haulage distance from which carbon emissions can be determined. This is then converted into a bespoke financial conversion factor and applied to each entity. The updated methodology has been applied retrospectively to our previous years.
Downstream transport of purchased goods and services	n/a	n/a	n/a	n/a	n/a	3	Our business does not have any emissions for this category and as such is exempt from our inventory.
Third party procured fuels	Litres	DEFRA <appendix link>	Calculation applied to partial Project level submissions	Calculated		3	Third party procured fuels are reported in the BAM Construct and Ventures business via the BAM Smart application. Using this data, a calculation has been derived to estimate the total emissions from this category across all BAM UK & Ireland companies.
Water	m³	DEFRA <appendix link>	Project level submissions via applications	Measured		3	Water data is captured via meter readings and entries made to our above mentioned applications.
Biogenic emissions	Litres	DEFRA <appendix link>	Supplier transaction reports	Measured		‘out of scopes’	Biogenic emissions from the use of biofuels (HVO) are disclosed but not deemed a net contribution to GHG emissions as per the definition given in the GHG protocol.
Purchased goods and services							For these remaining scope 3 emissions categories, we are in the process of refining a methodology, and whilst we have secured many of the primary data sets, they are not yet robust enough to enable a confident disclosure. BAM UK & Ireland and its subsidiaries intends to include insights on these categories in future years.
Capital goods							
Investments							
Franchises							
Home working							
Cloud computing							

Table 6, Emissions sources data collection, exclusions and calculation rationale

Emissions Reduction Targets

BAM UK & Ireland is committed to achieving net zero carbon by the end of 2030 from activities arising from its own operations, and inclusive of all scope 1 & 2 emissions. Underneath this overarching objective, we have several targets which are listed in table 7 and apply equally to all operating companies within the division.

Carbon reduction target



Reduce scope 1 and 2 GHG emissions intensity by **50%** by 2023.

Reduce scope 1 and 2 GHG emissions intensity by **73%** by 2026.

Performance in 2023



We reduced our scope 1 & 2 CO₂e emissions intensity by **47%** compared to 2015 levels.



Reduce absolute scope 3 GHG emissions by **50%** by 2030.



Compared to 2015, we have seen a decrease in our disclosed scope 3 emissions of **-13%**. However, this doesn't yet include all scope 3 categories (such as purchased goods and services) and are highly correlated to the type of work BAM undertakes year to year. On an intensity basis however, the reduction in disclosed scope 3 emissions is -39%.



Reduce GHG emissions intensity from commercial fleet and staff transport by **30%** by 2023.



Commercial fleet and staff transport intensity was **56%** lower than 2015 levels as a result of less air travel and the significant electrification of the company car fleet, which at the end of 2023 stood at 62%. From 2024 we are targeting a 100% decarbonisation of commercial fleet by 2030, and a 90% reduction in staff travel related emissions.

Table 7, Schedule of carbon reduction targets

Progress against our net zero strategy

During 2024 Royal BAM Group is working towards revising its 2030 and 2050 carbon targets building on the existing targets which are; 80% intensity reduction compared to 2015 levels and 50% in scope 3 by 2030 compared to 2019. As a result of this work, BAM UK & Ireland has chosen to revise its existing 2026 Net Zero commitment to the following new targets.

- ▶ **Net zero in direct scope 1 & 2 emissions by 2030**
- ▶ **Net zero in all scope 1, 2 & 3 emissions by 2050**

The revision of this target does not affect our existing decarbonisation activities and we continue to move

forward at pace to decarbonise our operations, many such activities are shown in the carbon reduction projects chapter.

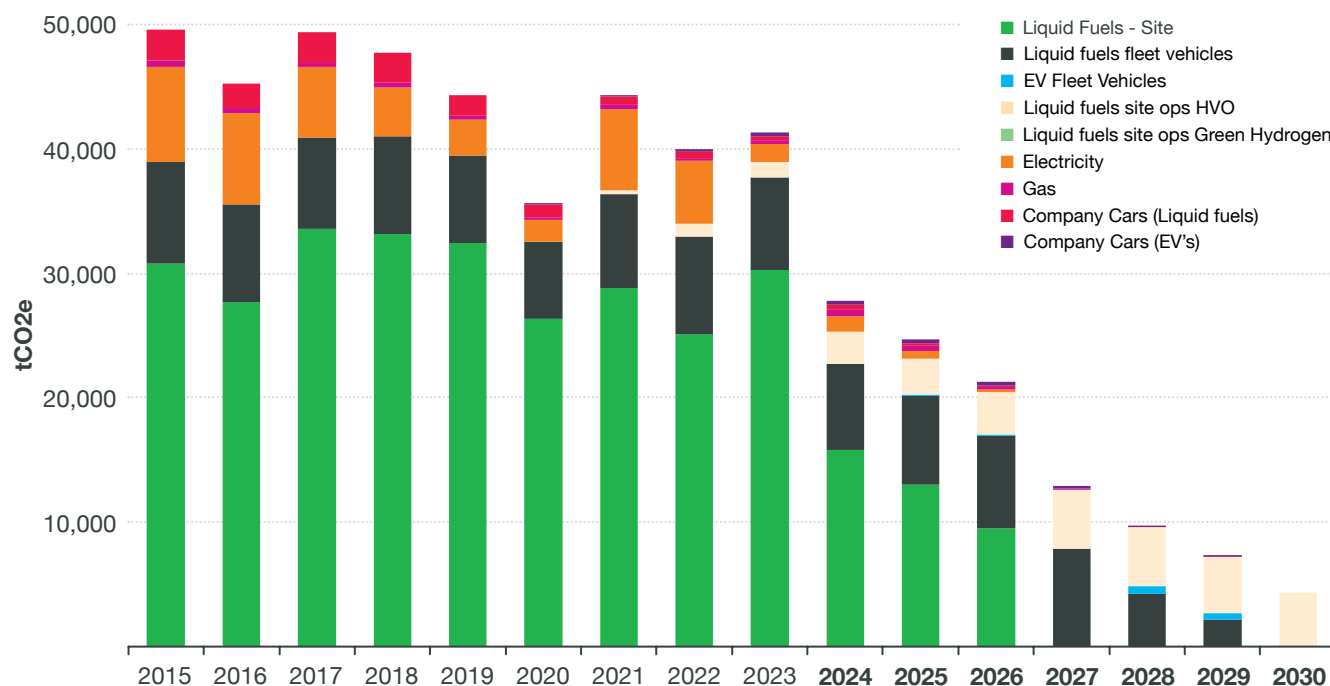
Our net zero decarbonisation pathway shown in figure 2 illustrates how we plan to decarbonise our direct scope 1 & 2 emissions out to 2030. We align with our parent company's emissions accounting methodology for grid electricity use which utilises the market-based method. The location-based emissions from grid electricity use are disclosed for each business in the emissions report chapter. Residual emissions from 2030 will be offset utilising robust and credible carbon offsetting programmes, for example, carbon removal type offsets.

2023 saw direct emissions increase slightly from 2022 levels owing mainly to our involvement with HS2.

However some 8,000tCO₂e has been avoided in 2023 thanks to the division-wide mandate to replace diesel fuel with HVO. Moving forward we expect HVO to result in a substantial reduction in our emissions, and as the works at HS2 tail off into 2026, 100% of the business will have moved away from diesel fuel in to HVO, with the exception of a small amount used in the commercial fleet, which is being decarbonised to zero emissions by 2030. Longer term we expect hydrogen-based plant and equipment to become more widely available and we will seek to adopt those technologies at the earliest opportunity. BAM is leading a significant research and development project in relation to the governments Red Diesel Replacement competition phase 2, details of which are set out in the carbon reduction projects chapter.

The spike in emissions from electricity in 2021 was from electricity used on our tunnelling project in Brisbane (Australia) but has since reduced owing to the tunnelling phase of that project coming to an end.

BAM UK&I Net Zero Roadmap



BAMs position on the use of biofuels

Since mid 2021, BAM declared that it would begin to switch the use of diesel and gas oil in favour of the biofuel Hydrotreated Vegetable Oil (HVO) as a transitional step towards hydrogen and electric driven equipment, and in mid-2023 we took the decision to mandate its use on all BAM controlled projects. We have undertaken continuous reviews of its suitability and remain satisfied that the fuel does not result in greater adverse environmental effect than that of fossil fuels. This position paper outlines BAM's reasoning in more detail for using biofuels as part of its decarbonisation strategy making it clear that the role of biofuels will be carefully monitored and treated as a transitional fuel towards fully electric and hydrogen-based solutions to power our operations.

Direct emissions reduction initiatives (scope 1 & 2)

Carbon reduction projects

We have taken consistent action to decarbonise our activities over the past decade and always strive to execute our work using low carbon solutions. Each intervention we make to reduce carbon is captured via a central application and in 2023, we documented over 50 individual actions that led to an absolute carbon reduction in excess of 25,000tCO₂e.

This first section showcases examples of what we are doing to reduce our direct carbon emissions.



Prototype dual fuel Hydrogen / Diesel 20t excavator



Ecosmart Zero hydrogen welfare unit at the Glasgow BGS project



Geopura HPU delivery to the EKFB joint venture

Hydrogen

Hydrogen has long been promoted as a fuel for the future and in recent years there have been many positive developments supporting the use of this energy vector both from government policies and private sector investments making it even more tangible than before. In 2020 BAM used its first hydrogen powered welfare unit known as the Ecosmart Zero. This unit comprised of a small hydrogen fuel cell, solar PV and batteries to provide a complete and portable energy solution for small welfare set ups. The use of this was successful and resulted in a reduction of tens of tonnes of carbon emissions, but scaling these has been challenging due to market factors.

In 2023, BAM in conjunction with its JV partners for the HS2 C2/3 main works project, implemented two 250kVa

Hydrogen Power Units (HPU's) from Geopura which will be operational at two of the 6 main compounds for the project. This has led to the avoidance of approximately 600tCO₂e emissions).

To further drive the adoption of hydrogen, In 2022, BAM was successful in securing government match funding under the Red Diesel Replacement competition (RDR) to undertake a feasibility study into how BAM could generate its own supply of green hydrogen. This first phase of the scheme concluded in early 2023, and due to the limitations on installing on-shore wind in England, we concluded that the case to make our own hydrogen at this time was not viable.

However, in 2023 we were successful in our application for 2nd phase of the RDR competition which focuses on the logistical aspects of using hydrogen

considering the transport, storage and on-site application of hydrogen in all non-road mobile machinery (NRRM). An image of a prototype 20t dual fuel (diesel/hydrogen) excavator can be seen in the image above and is being trialled on a BAM project towards the end of 2024.

The RDR phase 2 project, also known as the Element 1 consortium for which BAM is the lead partner, will conclude in 2025. To read more about the Element 1 project, follow this [link](#).

BAM has been successful for both of phases of the governments RDR scheme which aims to accelerate decarbonisation of the construction industry.



22t Hybrid excavator in action at the M8 footbridge scheme



45kVa solar pod at the Stubbington Bypass project



BAM FM EV fleet



Solar pv installation at our newly redeveloped Kilsyth depot

Hybrid plant

Earthworks are a common activity to many of our projects and by virtue of this the carbon impact is high. Large excavators are commonly employed to undertake this activity and can use upwards of 25 litres of diesel per hour. In 2022, we deployed hybrid excavators on several projects which incorporate a combined battery and kinetic energy recovery system resulting in fuel savings. Across their use and coupled with HVO fuel use we estimated a carbon reduction of 100tCO₂e has been achieved over the course of the year.

Off-grid renewable power

Each project we undertake requires varying levels of welfare facilities and office space to enable safe places for staff to rest, eat, wash, store equipment and work from. The aim on every project is to power these temporary buildings with grid electricity, avoiding the use of diesel generators. Where grid connections are not practical, we turn to off-grid alternatives such as solar, battery storage and even hydrogen to deliver low or zero carbon power solutions. In 2023, we utilised over 25 Solarpods or their equivalents across the business mitigating emissions by using solar panels and batteries. The combined use of these solar solutions in 2023 has resulted in a carbon reduction in excess of 1,000tCO₂e.

Electric vehicle transition

In 2021, BAM made changes to its company car policy and eliminated combustion engine only vehicles from the list entirely. Since the introduction of this policy, over 700 EVs have been brought into the BAM UK & Ireland fleet which has resulted in a carbon reduction of approximately 400tCO₂e in 2023 with reductions expected to accelerate further out to 2026 when the entire company car fleet will be fully electric.

Within our commercial fleet of LGV's, in 2023 the FM business unit has begun its transition towards full battery electric alternatives with 27 being deployed, representing 30% of their fleet. The implementation of these in 2023 saved approximately 65tCO₂e. A wider project is now underway to fully transition all commercial vehicles towards electric alternatives by 2030.

Plant depot upgrades

During the course of 2023, our plant division has been hard at work upgrading our 4 major plant yards. The biggest of these projects was the construction of a brand new office at Kilsyth. This new fully electric office (image above,) will mean the end of natural gas use at the site and makes the depot operationally net zero, something we are striving to enable across all of our portfolio by 2030.

In addition to this new office, some 200kW of new solar PV is being installed on our workshop roofs at Kilsyth and Wellingborough depots, which will further reduce the carbon emissions of our estates.



BAM EV Charging Solutions range of temporary site-based EV chargers



Solar pv installation at our newly redeveloped Kilsyth depot



Guidance document helping the business to make lower carbon choices for site plant and equipment



GenFree welfare cabin

BAM EV Charging Solutions

Within the BAM Construct and Ventures business, they have established an EV charging business known as BAM Charging Solutions and are working hard to ensure every project and office has the facility for EV users to recharge their vehicles. The company also supports staff opting for an EV with a financial subsidy to install charge points at their home.

In addition to this the BAM Charging Solutions business unit is supporting much wider EV adoption through the provision of EV charging infrastructure services to the open market and to date have installed over 50,000 charge points across the UK. Please use the link [here](#) if you are interested to find out more about their services.

BAM Energy

For many years our BAM FM business unit has provided full turnkey solutions delivering managed services for a diverse range of clients. Their services extend to the installation and operation of renewable energy installations – predominately solar PV. They have delivered a number of installations within BAM's own estates, an example of which is for the new Kilsyth depot car park where they installed a modest 4kW solar canopy over 2 of the disabled bays. This will not only contribute to the zero carbon operation of the depot but also help to deliver zero carbon energy to the vehicles which recharge here.

If you would like to understand more about BAM FM's capabilities, please use the link [here](#).

Updated business guidance

In 2024 we launched our new and most comprehensive guidance to help steer our business away from liquid fuel usage. This document directly supports our net zero target and also sends a clear message that we need to pursue electric and hydrogen alternatives wherever possible, and more importantly ensure these options are considered at the earliest stage in the pre-construction phases.

The guidance also includes analysis for our people highlighting which items of plant contribute the largest emissions helping to guide their decision making processes. The guidance also sets out how the business will transition away from combustion only power generation, and in 2025 we expect to set a mandate for hybrid and/or renewable variants only.

Minimum standards for welfare

In 2023 there have been further developments to decarbonise site accommodation including the aforementioned hydrogen variants, but we have also seen more innovative uses of solar PV solutions. One such example is shown in the image above. These 'Genfree' units have solar PV panelling on the vertical walls as well as the roof giving them enough energy (coupled with an onboard battery) to avoid the use of diesel power generation entirely.

In 2024 our plant and accommodation team are developing proposals to set these types of accommodation and welfare solutions as a minimum standard, and has the potential to reduce our total emissions by as much as 5% moving forward.

Scope 3 emissions reductions initiatives

Carbon reduction projects

The creation, maintenance and renewable nature of the built environment accounts for some 40% of global GHG emissions. Therefore BAM has a key role to play in minimising emissions not only from its direct impacts, but its indirect impacts as well. BAM UK & Ireland has long supported clients to reduce the carbon impact of their buildings and infrastructure and is committed to supporting them to achieve whole life net zero carbon assets in the future. In this chapter are several examples of where BAM has made substantial carbon reductions in this area across its portfolio.



Ultra low-carbon concrete being placed at the Dawlish sea wall project

Low carbon concrete

BAM has championed the use of low carbon concrete and was instrumental in supporting the Environment Agency's 2022 mandate to use low carbon concrete. Throughout 2023, use of Low carbon and ultra-low carbon concretes has begun to increase, and we are now able to benchmark our progress using the ICE's low carbon concrete roadmap. We also signed up to Concrete Zero in 2024 which is explained in the introduction of this document.

One of BAM's largest uses for ultra-low carbon recently was the Dawlish Sea Wall project in Devon. The project involved mass fill of concrete between the new and old walls, with the project team opting for in excess of 20,000M³ of ultra-low carbon concrete delivering a carbon saving of over 2,000tCO₂e.



Plaza Cinema steel recycled locally from demolition work into new steel

Low carbon steel

In 2022 the grade II listed and derelict Plaza Cinema in Port Talbot was renovated by BAM after being disused since 1999. The scheme involved the demolition and renewal of a large steel trussed roof which ordinarily would involve the removal of the steel and the procurement of new steel trusses from abroad. However, BAM identified an opportunity to work with the Celsa steel works also located in Port Talbot, to receive the scrap steel trusses and remanufacture the steel into new reinforcement bar to be used on the scheme. In doing this, the project was able to demonstrate a 32tCO₂e saving and also demonstrate key principles of PAS 2080 concerning the use of lower carbon alternatives and collaboration with the supply chain.



Trains used to transport aggregate of the HS2 C2/3 joint venture

Reducing upstream transportation

Upstream transportation is one of the largest component to our total disclosed emissions in 2023 and it is one of the most challenging to influence. None the less, our efforts to reduce this impact consider many aspects such as; using local supply chains, reducing overall material consumption and opting for alternative modes of transport. For example, movement of steel piling on our marine projects often utilises barges instead of trucks which is more efficient and much lower in emissions. Movement of spoil and aggregates are also a key focus in the pursuit of lowering transport emissions.

In 2023 the HS2 C2/3 main works project saved over 15ktCO₂e emissions and avoided 150,000 truck movements using rail transport.



Protec temporary protect, Plot 9A First Street, Manchester



Southam College



3D render of Woodmill High School, Dunfermline



Wharfedale hospital

Protec temporary protection

Typically a disposable rigid plastic sheeting is applied to final floor and wall finishes within buildings to protect them from damage occurring whilst other trades undertake works. This sheeting is then typically discarded at the end of the project.

In 2023 BAM construct & Ventures introduced a more circular approach to this process whilst also reducing the carbon and waste impact. The solution involves our supplier Protec who retain ownership of the material after it's been used and take it back to their facility for recycling into new sheeting. This approach avoids this waste going to landfill, and by virtue of this has saved an estimated 10tCO₂e in 2023 associated with mitigating landfill waste and virgin material extraction emissions.

Passivhaus construction

In 2023 BAM commenced the construction of Southam College for the Department for Education (DfE). This project is being delivered as a pathfinder project, which will be used to set the standard for how schools are built in the future. The college is designed to use minimal energy in operation and achieve net zero carbon in use, as well as adopting passive and biophilic design elements. It will also be designed for climate resilience and to support end user health and wellbeing. Going beyond DfE's target to measure embodied carbon at RIBA Stage 4 and 6, BAM assessed embodied carbon from RIBA Stage 3 and has targeted an as built impact of 550kgCO₂e/m², aiming to save 831 tCO₂e from the assessed baseline.

Besides the Southam College scheme, BAM is also delivering a number of schools in Scotland to the Passivhaus standard. The most advanced of these projects is the Woodmill High School which is due to complete at the end of 2024 and will be the largest and most efficient school in the region. It has achieved an embodied carbon impact of 625kgCO₂e/m² and when complete will serve around 2,700 students.

Passivhaus construction is also being adopted in other areas of our buildings businesses as the standard is seen as an enabler to achieving the ultimate goal of all buildings being operationally net zero.

Zero operational carbon assets

In 2023 BAM completed the Stourton Park and Ride scheme in Leeds, a new park and ride facility that incorporates a 1.2MW solar PV array and 500kW battery storage system. This flagship scheme is the first fully solar-powered and thus zero operational carbon park and ride in the UK and will mitigate at least 471tCO₂e annually.

A similar venture which BAM has had a long term involvement with is the Wharfedale Hospital also in Leeds. BAM constructed the hospital in 2004 and have been managing the asset for the NHS ever since. In 2023, BAM was successful in delivering a substantial solar PV solution to decarbonise the hospital towards fully net zero in operation. BAM installed 464kWp PV array on car parking canopies similar to the approach used at the Stourton Park and Ride scheme. This will generate a carbon reduction of 169tCO₂e/annum displacing the use of gas boilers.



Foundation works, Greystones Community College



Cheshire police HQ



3D printed steps at M8 footbridge



Wendover viaduct works, EKFB joint venture

Material reuse

In 2024 BAM began construction of the Greystones Community College in Wicklow, Ireland. Part of the construction process involved the excavation of unsuitable soils and replacement with imported stone. However the site team questioned the design specification and were able to repurpose around 10,000m³ of site-won excavation material thereby avoiding approximately 500 lorry movements, and 50tCO₂e in transport and virgin material related emissions.

Similar to the low carbon concrete example above, this is a great example of how our teams on the ground, despite all the design-led carbon reduction initiatives, still challenge the design to achieve the more positive outcomes, both in terms of carbon and cost reduction.

Carbon reduction in existing buildings

Our BAM FM business manages energy and building services for a growing number of clients. As standard, all BAM FM sites install BAM's own digital energy monitoring and targeting systems, providing real time data on energy consumption. Each site has a sustainability management plan, and our energy managers assess opportunities for improvement. Lighting has been a key area of focus and over the past 5 years, we have retrofitted client buildings with modern LED lighting and controls. For example, at our Cheshire Police HQ, we have saved 1,000MWh's per annum (20% of site total energy consumption), at Redcar Council Offices we saved 85,000kWh's per annum (30% of site total) and at Redcar Seaford House, we saved 70,000kWh's per annum (40% of site total).

3D printed concrete

Also in relation to the M8 footbridge scheme was the installation of the UK's largest use of 3D printed concrete. BAM has been heavily involved in the development of 3D printed concrete over the past few years and has taken the opportunity to utilise it on some projects for applications such as access stairs and culvert head walls. The latest example at the M8 footbridge scheme used 28 sections each weighing 1.5t which is 40% less than traditional pre-cast alternatives. This in turn saved approximately 3tCO₂e and further reduced emissions for the installation team as they were lighter thus requiring smaller lifting equipment.

Applying PAS 2080 principles

Whilst we are working towards organisational-level verification to PAS2080, we apply the principles of the standard throughout the project lifecycle, everything from the project brief and supplier engagement through to project delivery.

At HS2 the Wendover viaduct is the first of many bridges on the scheme which have been completely redesigned adopting an innovative 'double composite' type structure. This cuts the embodied carbon by 66% compared to the original design and will amount to several hundred's of tonnes of carbon across the scheme.

Another example is Waterford North Quays Public Infrastructure Project in Ireland. The project has mitigated approximately 9.7ktCO₂e thanks to the use of low carbon concrete and incorporation of temporary works into the main works.

Declaration

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

This plan applies to BAM UK & Ireland including; BAM Nuttall Ltd and its subsidiaries, BAM Construct & Ventures UK Ltd and its subsidiaries, BAM Contractors Ltd and its subsidiaries.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard^[2] and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.^[3]

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements along with a subset of Scope 3 emissions as required by the reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.^[4]

This Carbon Reduction Plan has been reviewed and signed off by the BAM UK & Ireland Divisional Leadership Team and will be reviewed annually.

Signed on behalf of BAM UK & Ireland Ltd

John Wilkinson
Chief Operating Officer
BAM UK & Ireland

December 2024

2. <https://ghgprotocol.org/corporate-standard>

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

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