

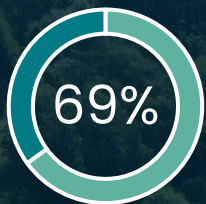


# Climate Report FY24

Kier Group plc

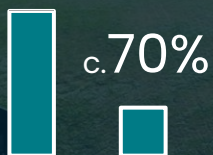
September 2024

## FY24 Highlights



of our revenue was generated from green projects

See page 4



reduction in our absolute scope 1 & 2 emissions since our base year

See page 12



Science Based Targets Initiative validation achieved

See page 6

Persons responsible for this report:  
Kier Group Carbon Manager

Supported by:  
Energise Ltd

# Introduction

This report documents Kier’s processes, targets, and performance with regards to scope 1, 2, and 3 greenhouse gas emissions and has been prepared in line with the requirements outlined in ISO 14064:2018.

This report is updated annually to reflect our most recent reporting year, which runs in accordance with the tax year (April–March inclusive). In this report, data is presented for the April–March full year, abbreviated to FY. As this report is for FY24, the most recent year of data presented here is for full year ending March 2024.

### Our business

- 3 Company overview
- 4 Green revenues

### Targets & Strategy

- 6 Our targets and strategy
- 8 Commitments & memberships
- 9 Milestone plan

### Initiatives & Incentives

- 11 Initiatives & incentives
- 13 GHG reduction initiatives
- 14 Incentives and recognition
- 15 Certifications & disclosures

### GHG Inventory

- 17 Scope 1 & 2 performance
- 18 Scope 3 performance
- 19 GHG inventory

### Appendix A: Technical Detail

- 21 Boundaries
- 22 Sources & sinks
- 23 Quantification methodology
- 24 Assurance, base year, changes
- 25 Exclusions
- 26 Uncertainty

### Appendix B: Additional GHG Reports

- 28 Absolute emissions (GHG breakdown) / Emission intensity
- 29 Energy

### Appendix C: Conversion Factors

- 31 Conversion factor sources
- 32 Conversion factors

### Appendix D: Verification Opinion Statement

- 37 Verification opinion statement

# Our business

Our purpose is to sustainably deliver infrastructure which is vital to the UK. We are a leading provider of infrastructure services, construction, and property developments, and committed to delivering for communities and leaving lasting legacies through our work. Our business divisions are:

## Infrastructure Services

### Natural Resources, Nuclear & Networks



Delivers long-term contracts in maintenance and capital projects to the water, nuclear and energy sectors; and protection of habitats and communities in our natural environment and waterways.

### Transportation



Designs, builds and maintains infrastructure for the highways, rail, aviation, and ports sectors and delivers work for National Highways, Network Rail, Transport for London and HS2, as well as a number of local and combined authorities.

## Construction



Comprises of our Regional Building, Strategic Projects, Kier Places (workplace solutions, residential solutions and building solutions), and International businesses. Kier is a leading UK national contractor, providing project delivery for the public and private sectors across a number of sectors including education, healthcare, defence, justice and borders, and commercial.

## Property



Invests in and develops schemes and sites across the UK and concentrates on mixed-use commercial and residential development delivered through joint venture partnerships.

### Changes in the reporting year

In FY24, Kier acquired the rail division of Buckingham Group, inheriting 180 colleagues and 11 rail projects. The impacts of this acquisition on our carbon footprint are detailed on page 24.

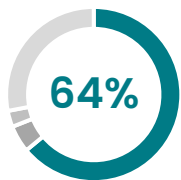
# Contributing to a global green economy

Kier’s purpose is to sustainably deliver infrastructure which is vital to the UK, and this includes providing products and services which contribute to a global green economy. To identify the proportion of our projects which deliver on this purpose, we have identified qualifying green revenue from each of our divisions in three tiers as defined by the FTSE Russell Green Revenue Classification System.

The qualifying revenue is broken down by tier and relevant micro-sector on the following page. To calculate these totals, we identify the relevant micro-sector for each project or contract and sum the total revenues within each micro-sector.

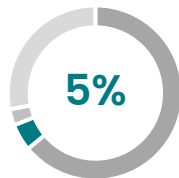
We also conduct activities within micro-sectors which are not within a green tier, but which may contribute towards positive environmental impacts. For example, we operate within multiple highways contracts which are not within a green tier classification, however within these contracts we may be upgrading street lighting to improve energy efficiency. Such activities are not included in the totals presented.

## Tier 1: clear and significant environmental benefits



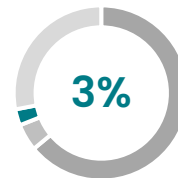
For Kier, this includes projects relating to energy and resource efficient buildings and property, energy efficient lighting, solar, rail infrastructure, water infrastructure, and smart and efficient grids.

## Tier 2: limited but net positive environmental benefits



For Kier, this includes projects relating to smart city design and engineering, waste management, water treatment, and flood control.

## Tier 3: some environmental benefits but overall net neutral or negative



For Kier, this includes projects relating nuclear power generation.

### Tier 2 project: Arne Moors

Kier is working with the Environment Agency, the Royal Society for the Protection of Birds and Natural England on a 150 hectare parcel of land on the Isle of Purbeck in Dorset, to create compensatory intertidal habitat. This will replace habitat protected under 2017 conservation regulations which is being lost in other areas of Poole Harbour due to rising sea levels pressing against fixed sea defences.

The project team at Arne Moors is working to adapt low-lying grasslands into diverse wetlands through constructing 4,200 metres of new embankments which will be 500 metres further inland, creating 78 hectares of new intertidal habitat, a new 15 hectare freshwater habitat area and two shallow saline lagoons of 35 hectare.



Code	Green Tier	Micro-Sector & Description	Revenue (000's)			
			Construction	Infrastructure Services	Property	Total
ES.03.0	2	<b>Smart City Design &amp; Engineering (General)</b> Revenue generating activities related specifically to the design, development, manufacture or installation of products and services that allow cities to use IT and communication technologies to operate at a significantly higher resource efficiency level.	£0	£43,545	£0	£43,545
EM.01.0	1	<b>Buildings &amp; Property (Integrated) (General)</b> Revenue generating activities related specifically to the design, development, manufacture or installation of energy and other resource efficient products and services for use in residential, commercial and municipal buildings. Products include those that contribute to international certification standards such as LEED and BREEAM and can include entire buildings.	£1,405,459	£0	£55,469	£1,460,928
EM.06.0	1	<b>Lighting (General)</b> Revenue generating activities related specifically to the design, development, manufacture or installation of energy efficient lighting.	£9,836	£0	£0	£9,836
EQ.07.0	3	<b>Nuclear (General)</b> Revenue generating activities related specifically to the development, processing, production and distribution of equipment and plants engaged in the supply of power generation that harnesses the energy present within atomic nuclei or their components.	£0	£132,150	£0	£132,150
TE.02.1	1	<b>Railway (Infrastructure)</b> Revenue generating activities related specifically to the design, construction or management of rolling stock and rail infrastructure. Activities include locomotives, rolling stock, railway infrastructure, systems and equipment (excluding infrastructure where the primary good transported is coal)	£0	£709,704	£0	£709,704
WI.06.0	1	<b>Water Infrastructure (General)</b> Revenue generating activities related specifically to the design, development, manufacture, operation or installation of products and services that enhance water infrastructure systems. This includes specialty pipes, pumps, valves, actuators, hydrants and meters activities and the development and construction of water infrastructure.	£0	£263,173	£0	£263,173
WP.07.0	2	<b>Waste Management (General)</b> Revenue generating activities related specifically to the design, development, manufacture, installation or operation of equipment and services for the collection, management and treatment of waste.	£6,823	£0	£0	£6,823
EM.08.0	1	<b>Smart &amp; Efficient Grids (General)</b> Revenue generating activities related specifically to the design, development, manufacture or installation of equipment and services that enhance the efficiency of operation of the electrical power network. This includes advanced meters, distributed generation, "smart grid" technologies, high efficiency power generation, transmission and distribution technologies.	£303	£93,363	£0	£93,666
WI.03.0	2	<b>Flood Control (General)</b> Revenue generating activities related specifically to the design, development, manufacture, operation or installation of products and services that prevent or reduce the impact of flood waters.	£0	£124,837	£0	£124,837
WI.07.0	2	<b>Water Treatment (General)</b> Revenue generating activities related specifically to the design, development, manufacture or installation of technologies or facilities for the separation and purification of water to meet environmental standards. This includes membranes, ultra-violet, desalination, filtration, ion exchange, biological treatment, chemical and environmental treatment.	£0	£30,019	£0	£30,019
<b>Green Tier 1 revenue</b>		<b>Clear and significant environmental benefits</b>	<b>£1,415,598</b>	<b>£1,066,241</b>	<b>£55,469</b>	<b>£2,537,308 (64%)</b>
<b>Green Tier 2 revenue</b>		<b>Limited but net positive environmental benefits</b>	<b>£6,823</b>	<b>£198,400</b>	<b>£0</b>	<b>£205,224 (5%)</b>
<b>Green Tier 3 revenue</b>		<b>Some environmental benefits but are overall net neutral or negative</b>	<b>£0</b>	<b>£132,150</b>	<b>£0</b>	<b>£132,150 (3%)</b>

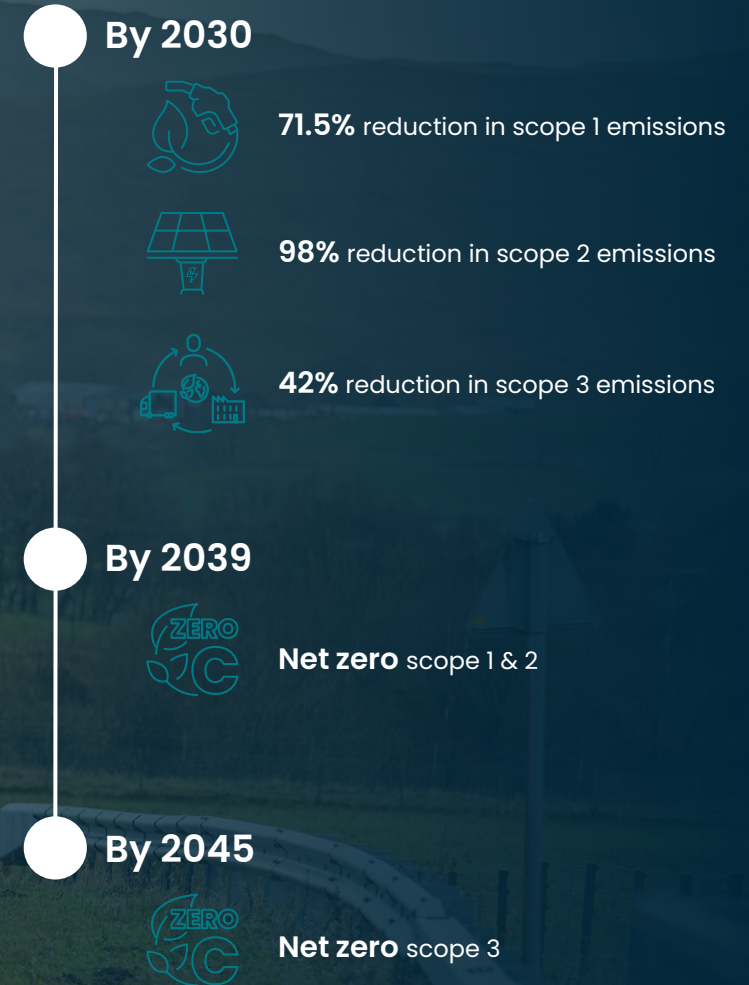
# Targets & strategy

As a responsible business, it is our duty to avoid and reduce the impact we have on the climate. With the diverse range of public sector and blue-chip customers we work with and sectors that we work in, we also have a unique opportunity to change the landscape of the UK-built environment for the better.

It therefore remains a strategic objective for us to deliver on our net zero commitments and support our clients in doing the same.

This section details:

- Our science-based targets
- Our commitments and memberships
- Our carbon milestone plan.



# A science-based approach

In 2023, our near-term and net zero targets were validated by the Science Based Targets Initiative (SBTi) ensuring that our targets are in alignment with the aim of the Paris Climate Agreement to limit global warming to 1.5°C.

- Our reduction targets are based on absolute emissions (not normalised by revenue or any other metric) to help us better track our actual impact on the climate.
- Our scope 2 targets are market-based (using the emissions figures of the tariffs we source) to help us understand the impacts of our renewable electricity consumption.
- Our net zero targets require a minimum reduction of 90% from the base year with a maximum of 10% being neutralised through offsetting to ensure we prioritise actions to reduce our impact.
- For our scope 1 & 2 targets, we apply a base year of FY19, and for scope 3, FY22.

In line with the requirements of SBTi and the development of a climate transition plan, we will ensure policy engagement activities are consistent with a 1.5°C world.

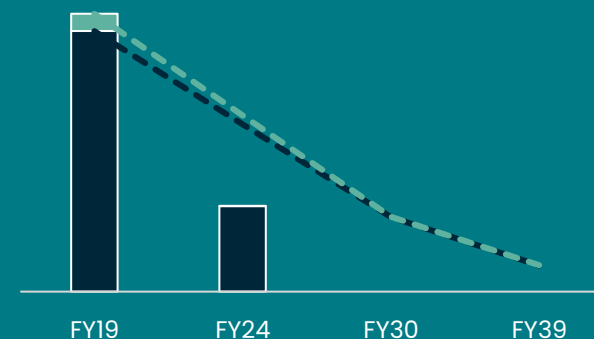


SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

## Our targets in graphs

Scopes 1 & 2



- 71.5% reduction in scope 1 by FY30
- 98% reduction in scope 2 by FY30
- 90% reduction in scope 1 by FY39

Scope 3



- 42% reduction in scope 3 by FY30
- 90% reduction in scope 3 by FY45

# Our commitments & memberships

Our commitments and memberships help us stay on track with our own targets, whilst also helping to support and inform positive industry-wide change.

We are members and signatories to various industry commitments with outcomes aligned with our targets and strategy. This helps us to hold ourselves to account, provide platforms for cross-industry collaboration to accelerate carbon reduction.

## Supply Chain Sustainability School

An industry-led organisation for driving the improvement of sustainability knowledge and skills throughout the whole value chain.

## EV100

A global initiative aiming to accelerate a transition to electric vehicles.

Under this initiative, by 2030 we have committed to transition 100% of vehicles up to 3.5t and 50% of vehicles between 3.5 and 7.5t to electric\*. This commitment includes our company car fleet and commercial vehicle fleet.

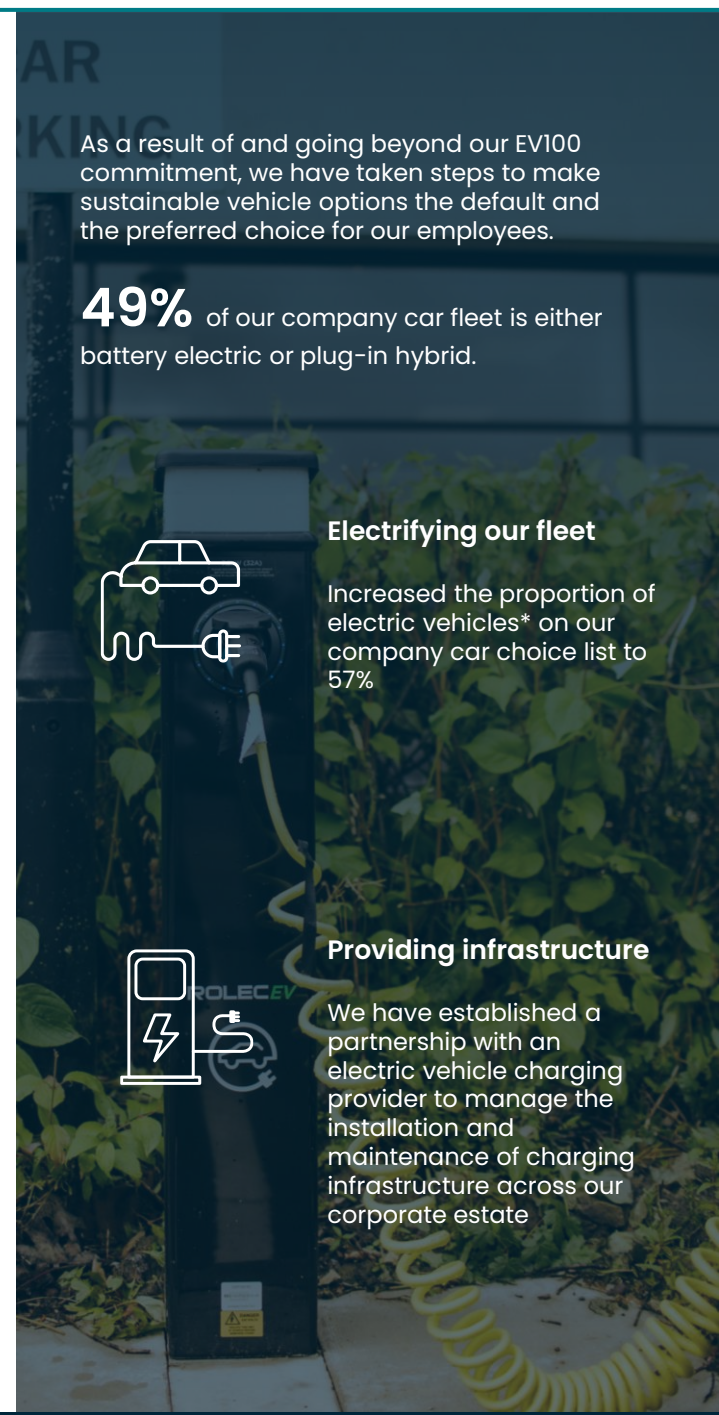
## Race to Zero

A campaign to build momentum towards a decarbonised economy.

## Contractors Declare

A public declaration of our climate and ecological crises and a commitment to take positive action.

\*In line with the requirements of EV100, 'electric' here includes battery electric vehicles, plug-in hybrid vehicles, fuel cell vehicles, and extended range vehicles.



As a result of and going beyond our EV100 commitment, we have taken steps to make sustainable vehicle options the default and the preferred choice for our employees.

**49%** of our company car fleet is either battery electric or plug-in hybrid.



### Electrifying our fleet

Increased the proportion of electric vehicles\* on our company car choice list to 57%



### Providing infrastructure

We have established a partnership with an electric vehicle charging provider to manage the installation and maintenance of charging infrastructure across our corporate estate



# Our milestone plan

To achieve our near-term and net zero targets, we have developed a milestone plan, setting out our strategic actions to achieve our targets and our commitments over the next few years.

Our milestone plan for scope 3 is in development as data quality continues to improve.

With support from Energise, our carbon consultant, we use scenario modelling to help us understand whether our commitments and milestone plan are sufficient to achieve our targets.

These models are projections of our emissions mapped against our SBTi reduction pathway, with the projections taking into account:

- > Our growth projections
- > External decarbonisation scenarios, e.g., increase of renewable electricity in UK grid
- > Our internal decarbonisation initiatives, e.g., electrification of our fleet

As such, these models give us clearer insight into what we need to do to make sure we are playing our part and not relying solely on indirect carbon reductions.



## 2024

A focus on transparency and efficiency

### Certification and disclosures

Obtain SBTi validation and ISO 14064 verification.

### Decarbonise our operations

Enhanced strategy for our fleet and operational locations.

### Renewable energy and alternative fuels

Explore opportunities for renewable energy self-generation and contribute to the HVO sustainability investigation.

## 2025

A focus on long-term strategy

### Internal carbon pricing

Strategy for internal carbon pricing.

### Land use change

Measure and understand land use change.

## 2026

A focus on achieving our near-term targets

### Energy procedures

Set targets for renewable electricity self-generation and impactful sourcing (power purchase agreements).

### Electrified fleet

EVI00 compliant company car fleet and commercial fleet strategy.

# Our milestone plan: 2024 update

In 2024, our milestone plan focused on transparency and efficiency, improving confidence in our reported performance and tackling the “low hanging fruit” of GHG reduction.

We have successfully achieved our three key milestones as detailed below.

## Certifications and disclosures

Obtain SBTi validation and ISO 14604 verification

- Our near-term and net zero targets were validated by the Science Based Targets Initiative (SBTi). See page 7 for further information.
- We achieved third-party verification to ISO 14064 with “reasonable assurance” for our published GHG emissions data (see appendix D for further information)

Achieved



## Decarbonise our operations

Enhanced strategy for our fleet and operational locations

- We have reviewed our corporate estate strategy, prioritising energy efficient offices.
- Our site accommodation minimum standards have been revised to enhance energy efficiency requirements.
- We have supported the electrification of our company car fleet (see page 8)

Achieved



## Renewable energy and alternative fuels

Explore opportunities for renewable energy self-generation and contribute to HVO investigation

- We co-funded and contributed to the development of two procurement guidance documents delivered by the SCSS:
- Addressing Modern Slavery and Labour Exploitation in Solar PV Supply Chains Procurement Guidance
  - Responsible Sourcing of HVO – A Comprehensive Guide

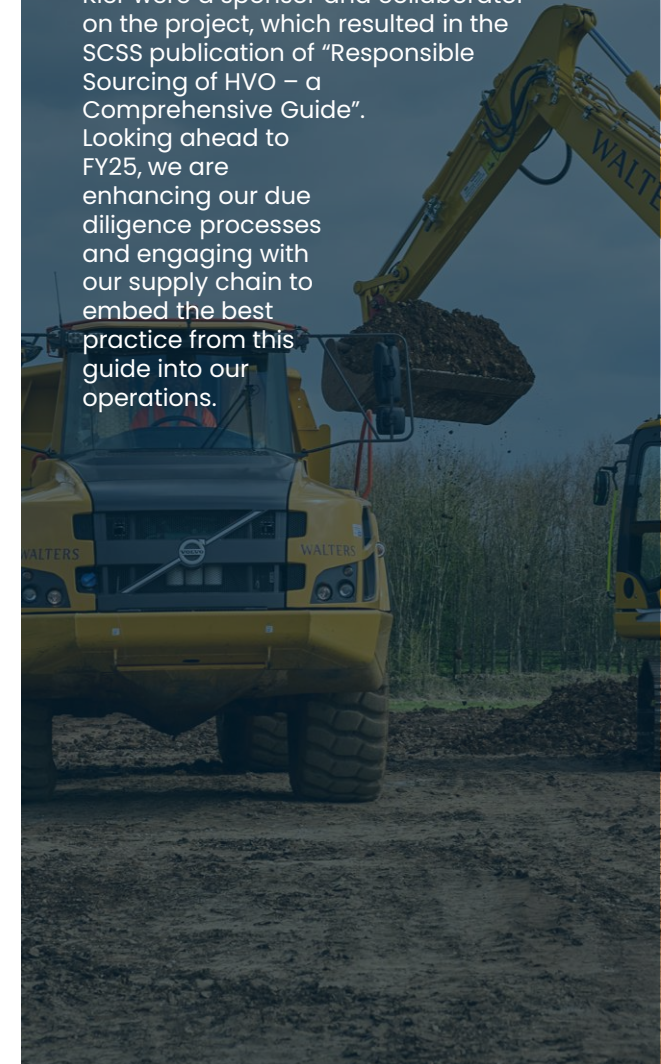
Achieved



## Supply Chain Sustainability School (SCSS) HVO Investigation

After identifying potential social and environmental risks within the HVO supply chain, we approached the SCSS to propose a collaborative approach to investigate the extent of these risks.

Kier were a sponsor and collaborator on the project, which resulted in the SCSS publication of “Responsible Sourcing of HVO – a Comprehensive Guide”. Looking ahead to FY25, we are enhancing our due diligence processes and engaging with our supply chain to embed the best practice from this guide into our operations.



# Initiatives & incentives

Achieving our targets is dependent upon collaboration and innovation, developing and integrating best practice into our operations. To accelerate positive action within Kier, we engage, support and incentivise our people.

This section details:

- Our carbon reduction initiatives
- Our employee incentivisation schemes
- Our certification and disclosure schemes



# Initiatives

When implementing initiatives to contribute to our near-term and net zero targets, we apply a hierarchy of control. This hierarchy ensures that we prioritise actions that will deliver a meaningful difference, offsetting only the emissions we can't avoid.

## Reduction initiatives

Our carbon reduction hierarchy is shown opposite, and a list of some of our key initiatives is shown on the following page.

## Offsetting

We reserve offsetting for unavoidable emissions only, limiting the total quantity of GHG emissions which can be offset to 10% of our base year for each emission scope. This approach aligns with our Science Based Targets commitment and ensures that we reduce our emissions in line with limiting global warming to 1.5°C above pre-industrial levels.

Where offsetting is used for unavoidable emissions, we will use only certified offsetting schemes, prioritising the use of our sites and owned land to ensure longevity and locality. We will seek to implement offsetting which also provides valuable enhancements to nature and the local community.

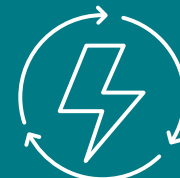
During FY24, Kier did not undertake any offsetting initiatives.



### Using less

Implement efficiency measures to reduce our use of energy and materials, reduce our generation of waste, reduce transportation mileage, etc.

Example: Energy Excellence Scheme (see page 13)



### Transitioning to renewable electricity

Transition to renewable electricity to meet as far as possible our unavoidable energy demand.

Example: EV Charger partnership



### Transitioning to lower carbon energy

Where electrification isn't possible, transition to lower carbon alternative fuels to meet our unavoidable energy demand.

Example: Sustainable HVO sourcing (see page 13)



### Neutralise unavoidable emissions

For emissions which cannot be avoided, use a credible and certified offsetting scheme to neutralise.

# Greenhouse gas reduction initiatives

The table below details some of the greenhouse gas reduction initiatives at various stages of implementation across the business during FY24.

Title	Description	Focus	Duration	Estimated CO <sub>2</sub> e reduction	Explanation of CO <sub>2</sub> e calculation	Status
Carbon Circuit	Develop the "carbon circuit", a process map to support the delivery of low whole life carbon buildings with clearly defined roles to support collaboration internally and externally	Efficiency (energy reduction)	Complete	-	CO <sub>2</sub> e reductions will be variable by project as the carbon circuit is implemented.	Complete
EV Charger partnership	Introduce partnership with an electric vehicle charging infrastructure provider to support the roll out of charging points across our corporate estate	Electrification	Ongoing	-	CO <sub>2</sub> e reduction from this initiative will be achieved indirectly, i.e., more charging points allows for more electric vehicles. There are therefore no direct CO <sub>2</sub> e emission reductions for this initiative	Ongoing
Carbon Literacy Programme	Development and launch of a carbon literacy programme to upskill employees in Kier Construction on our climate targets, strategy, and processes	Awareness	Ongoing	-	Reduction cannot be quantified	Ongoing
"Energy Excellence" Initiative	Development of an initiative to monitor compliance, best practice, and innovation with regards to energy sourcing and energy efficiency across our offices, depots and sites.	Efficiency / Renewable energy	Ongoing	-	The potential impacts of this initiative are currently being assessed	In progress
Internal Carbon Pricing	Investigate opportunities to use an internal carbon pricing mechanism to inform decision making and drive behaviour change	Strategic	Ongoing	-	The potential impacts of this initiative are currently being assessed	In progress
Sustainable HVO sourcing	Contribute to the Supply Chain Sustainability School (SCSS) research project to investigate sustainability risks within the supply chain of HVO fuel and embed the recommendations of the report into our procurement standards	Alternative fuels	1 year (end Oct 24)	-	The quantity of diesel we expect to replace with HVO is currently being reviewed. Until this is known, a CO <sub>2</sub> e reduction cannot be estimated	In progress

# Incentivising and recognising our people

To encourage and reward innovation and best practice in support of our climate strategy, we undertake multiple forms of incentivisation and recognition.

## Sustainable Travel Schemes

To support our employees in opting for sustainable transport, we offer two employee benefits:

- Green car scheme:

Employees can lease electric or hybrid cars via salary sacrifice.

- Cycle to work scheme:

Employees can benefit from discounts on bicycles to use as part of their commute to and from work.

## Pride of Kier Awards

The Pride of Kier Awards celebrate the incredible work carried out by our people and encourages them to take pride in their achievements.

There are nine award categories, including sustainability. Within the sustainability category, the winner will be someone who has played a crucial role in a project or initiative that has clearly benefitted our people, places, or planet, or helped a customer toward a sustainability goal.

[Find out more](#)





Construction



Transportation






























Property



Natural Resources,  
Nuclear & Networks

# Certification & disclosure initiatives

To check that our strategy and activities are aligned with industry best practice, we regularly participate in voluntary and mandatory certification and disclosure initiatives.

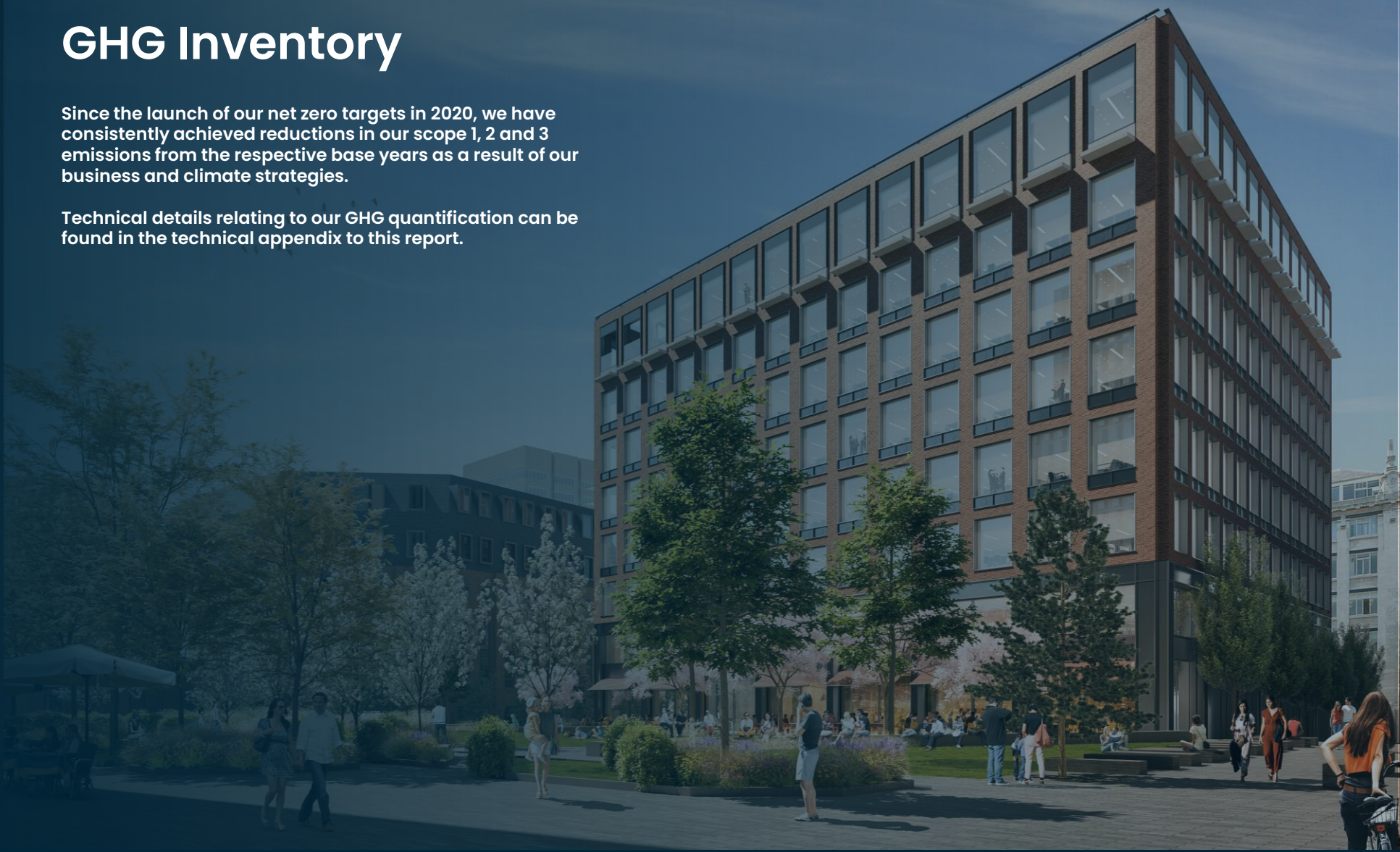
	ISO 14001	ISO 14064-1	PAS 2080	CDP	Science Based Targets Initiative	Energy Savings Opportunities Scheme (ESOS)	Carbon Trust Standard	Taskforce for Climate-related Financial Disclosure (TCFD)
What it is	Our environmental management system, used to identify and reduce impacts, including GHG emissions.	Certification for GHG quantification and management.	Certification for carbon management in buildings and infrastructure.	Annual disclosure of climate-related matters, including strategy, targets, and performance.	Validation of our climate targets to demonstrate alignment to a 1.5°C trajectory.	Compliance through undertaking regular energy audits of our sites, offices, and fleet.	Certified reductions in environmental impact of operations and supply chain.	Disclosure of our processes to mitigate climate-related risks and realise climate-related opportunities
First achieved	2005	2024	2024	2010	2023	2015	2013	
Who it applies to	  	   	  	   	   	   		   

See our website for more details on our memberships and disclosures →

# GHG Inventory

Since the launch of our net zero targets in 2020, we have consistently achieved reductions in our scope 1, 2 and 3 emissions from the respective base years as a result of our business and climate strategies.

Technical details relating to our GHG quantification can be found in the technical appendix to this report.





# Our scope 1 & 2 performance

Since the launch of our net zero targets in 2020, we have consistently achieved reductions in our scope 1 and 2 emissions from an FY19 base year as a result of our business and climate strategies. We remain on track with our near-term and net zero scope 1 & 2 targets.

## Headline statistics for FY24

Absolute scope 1 & 2 emissions:

**28,968** tCO<sub>2</sub>e

Scope 1 & 2 emissions intensity:

**7.4** tCO<sub>2</sub>e/£m revenue

Absolute reduction since FY23:

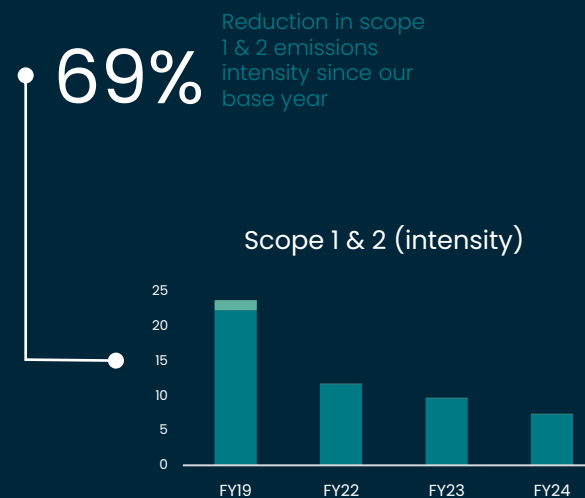
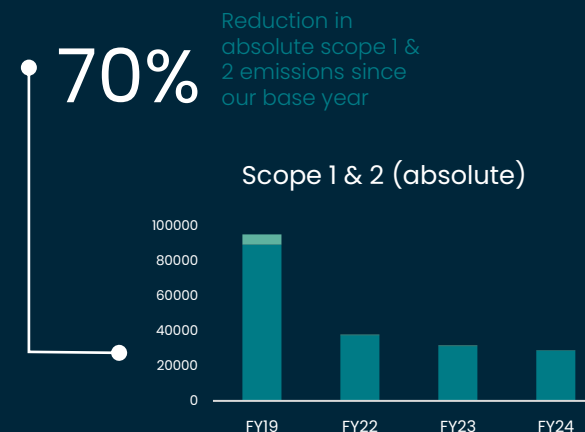
**c.9%**

Absolute reduction since base year:

**c.70%**

The reduction we have achieved has been as a result of:

- > Reduction in carbon intensive projects, such as those involving major earthworks
- > Electrification of our company car fleet, including our green car scheme
- > Transitioning to renewable electricity sources for directly sourced electricity
- > Transitioning to alternative fuels, such as green hydrogen, LPG, and HVO
- > Application of innovative solutions to improve energy efficiency, such as battery storage units



# Our scope 3 performance

Since setting our scope 3 base year in FY22, we have achieved a reduction in our scope 3 emissions. We continue to review opportunities, in collaboration with our supply chain, to improve our calculation methodology for scope 3. This includes a goal to move from spend-based methods to hybrid inventory-based methods.

## Headline statistics for FY24

Absolute scope 3 emissions:  
**787,008 tCO<sub>2</sub>e**

Scope 3 emissions intensity:  
**201 tCO<sub>2</sub>e /£m revenue**

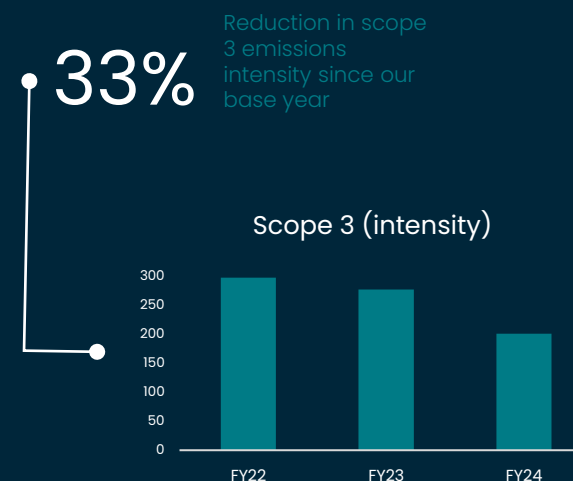
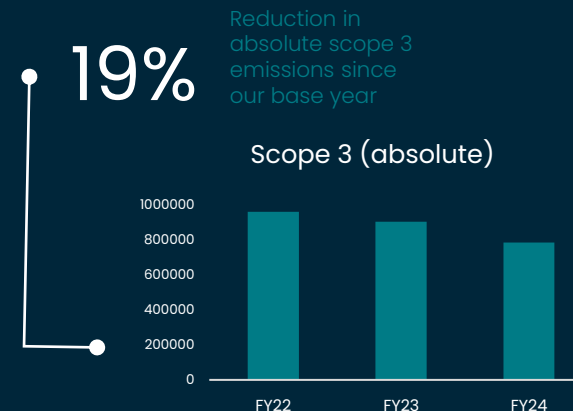
Absolute reduction since FY23:  
**c.13%**

Absolute reduction since base year:  
**c.19%**

Our scope 3 GHG reduction is largely due to a reduction in purchased goods and services emissions. We apply a spend-based quantification methodology, based on categorisation to Standard Industrial Classification (SIC) codes and using conversion factors published by the UK Government (see appendix A for further information). This reduction is subject to uncertainty as described in Appendix A. We continue to review opportunities to transition towards inventory-based methods to limit this uncertainty.

Other activities contributing towards the reduction in scope 3 emissions include:

- > Reducing our spend on materials
- > Efficient design practices to deliver more with less
- > Designing and delivering more energy efficient buildings
- > Improving our waste management practices, sending less waste to landfill and taking reuse opportunities



# GHG Inventory

The table opposite details our absolute GHG emissions for our base years (FY19 for scope 1 & 2; FY22 for scope 3), our most recent year (FY24), and one previous year (FY23). Emissions here are presented in tonnes Carbon Dioxide equivalent (tCO<sub>2</sub>e).

No GHG removals (offsetting) have occurred in FY24, therefore removals are not reported.

The reporting methodology for calculating these emissions can be found in Appendix A.

Other versions of this inventory can be found in Appendix B.

Category	Greenhouse gas emissions (tCO <sub>2</sub> e)			
	FY19 Apr 18 – Mar 19	FY22 Apr 21 – Mar 22	FY23 Apr 22 – Mar 23	FY24 Apr 23 – Mar 24
<b>Scope 1: Direct GHG Emissions</b>	<b>89,490</b>	<b>38,643</b>	<b>31,342*</b>	<b>28,853*</b>
> Stationary combustion	84,070	17,237	12,212*	12,408*
> Mobile combustion	5,420	20,424	19,130*	16,445*
> Biogenic emissions	0	3	4,387	3,405
<b>Scope 2: Indirect GHG emissions from imported energy</b>	<b>5,970</b>	<b>324</b>	<b>328</b>	<b>115</b>
> Purchased electricity (location based)	7,170	4,589	3,601*	2,521*
> Purchased electricity (market based)	5,970	324	328	115
<b>Scope 3: Indirect GHG emissions from value chain</b>	<b>-</b>	<b>971,314</b>	<b>905,529*</b>	<b>787,008</b>
> Transportation	-	35,422	54,771	39,585*
> Upstream transportation & distribution	-	23,740	32,056*	19,108*
> Business travel	-	3,817	4,767*	5,329*
> Employee commuting	-	7,865	17,948*	15,148*
> Products purchased	-	867,722	813,785	708,370*
> Purchased goods and services	-	832,152	790,384*	697,937*
> Capital goods	-	Incl. in above	Incl. in above	Incl. in above
> Fuel & energy related activities	-	12,137	9,246*	8,242*
> Waste generated in operations	-	23,433	14,155*	2,191*
> Associated with the use of products	-	59,349	36,973	39,053
> Use of sold products	-	49,059	16,129*	16,389*
> Downstream leased assets	-	794	695*	358*
> Investments	-	9,496	20,149*	22,306*
<b>Total scope 1 &amp; 2 (market based)</b>	<b>95,460</b>	<b>38,967</b>	<b>31,670</b>	<b>28,968</b>
<b>Total scope 1, 2 &amp; 3 (market based)</b>	<b>-</b>	<b>1,010,281</b>	<b>937,199</b>	<b>815,976</b>

\*these emissions have been third-party verified to ISO 14064 in line with the Verification Opinion Statement in appendix E.

# Appendix A

Technical reporting detail



# Reporting methodology

**Our approach to GHG reporting is aligned to the Greenhouse Gas Protocol Corporate Accounting Standard, including direct emissions (scope 1), indirect emissions through purchased or acquired electricity (scope 2), and indirect emissions (scope 3).**

## Organisational boundary

### Consolidation approach

We apply a financial control consolidation approach when calculating and reporting our GHG emissions. This means that we account for 100% of the emissions from the assets and activities over which we have financial control.

We have selected this approach as it best reflects the emissions within our control and influence.

### Joint ventures

For joint ventures we account for our share, as determined by percentage total revenue, of total GHG emissions from the joint venture project or contract.

Where Kier's equity share is greater than 50%, we have financial control. We therefore report our equity share of emissions under scopes 1, 2 and 3 in the relevant categories.

Where Kier's equity share is less than or equal to 50%, we do not have financial control. We therefore report our equity share of the scope 1 & 2 emissions of the contract only under scope 3, category 15 (investments).

## Reporting boundaries

### Significance of emissions

As all CO<sub>2</sub>e emissions contribute towards climate change, Kier aims to account for as much of its total carbon footprint as possible, limiting exclusions to categories which contribute minimally to our overall carbon footprint. To determine whether an exclusion is acceptable, we consider its significance.

Significance is determined primarily based on the exclusion limits set out by the Science Based Targets Initiative (SBTi), whereby at least 95% of scope 1 & 2 and at least 67% of scope 3 must be accounted for within Kier's reported GHG emissions.

Therefore, if any emission source or combination of emission sources within the relevant emission scope contribute to greater than 5% of scope 1 & 2 and/or 33% of scope 3, these are deemed significant and are therefore included within the reporting boundary.

If an emission source does not exceed the significance boundary, we may still include this source within our reporting boundary for completeness.

With the exceptions of the exclusions detailed on page 25, Kier accounts for all emissions within the organisational boundary. This represents c.99.9% of our scope 1 & 2 emissions and c.96% of our scope 3 emissions.

Reporting boundaries continued

Greenhouse gases (GHGs)

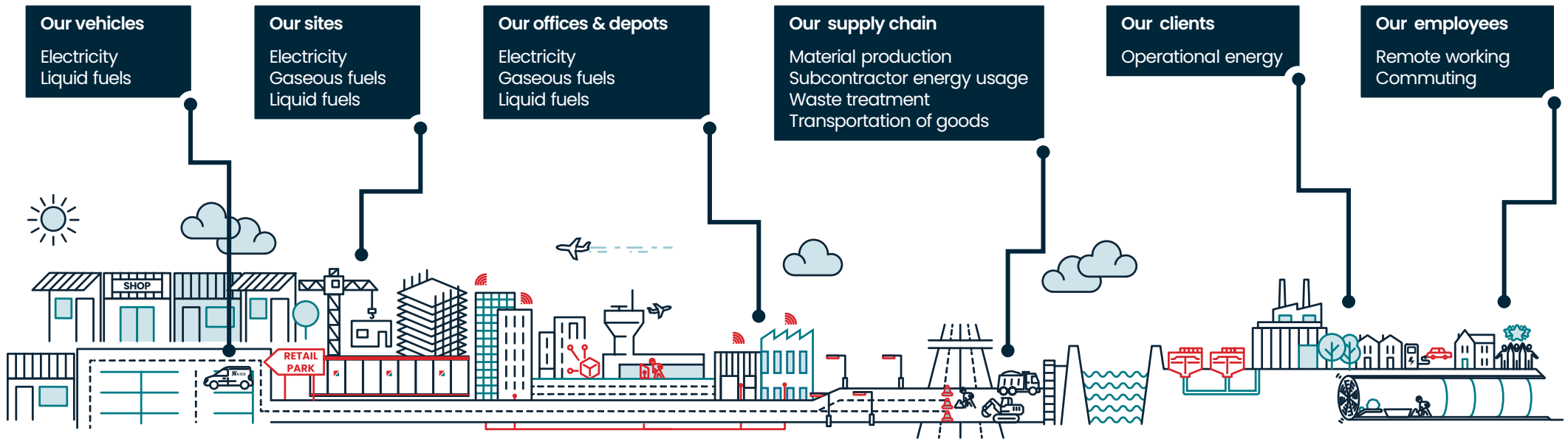
Emissions are reported for all categories in carbon dioxide equivalent (CO<sub>2</sub>e). For direct (scope 1) emissions only, subdivided into GHGs (carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (NO<sub>2</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>), and nitrogen trifluoride (NF<sub>3</sub>)).

Emission sources

Kier operates at c.400 locations at any one time across the UK, with some operations in the Middle East. A summary of our emission sources is detailed below.

Reporting cycle

Our GHG emissions and removals are reported in alignment with the financial year April-March. The data presented in this report covers the period April 2023 – March 2024 inclusive.



## Quantification methodology

The quantification of GHG emissions is carried out by Kier's carbon consultant, Energinet. To aim for maximum accuracy, our methodology prioritises supplier-specific, physical unit data where possible. Where such data is unavailable, a spend-based methodology or estimation approach is applied. These approaches are detailed below in order of priority. In these examples, the 'unit' refers to the quantitative value of the emission source (e.g., litre of fuel, kWh of electricity), and the 'factor' refers to the GHG emissions associated with one unit (e.g., tCO<sub>2</sub>e per litre).

- Physical unit, supplier specific: Unit x supplier-specific emission factor
- Physical unit, generic factor: Unit x generic factor
- Spend, generic factor: Spend unit x generic factor
- Estimation, generic factor: Estimated unit x generic factor

Where generic units are used, we use publicly available datasets to ensure consistency with our peers, auditability, and to limit uncertainty. The following datasets are used:

- UK Government Conversion Factors: used in all cases except Purchased Goods & Services and Upstream Transportation & Distribution
- UK Government EEIO factors, adjusted for inflation using the average CPI rates published by the ONS: used for Purchased Goods & Services and Upstream Transportation & Distribution

Details of the conversion factors used are shown in Appendix C.

\*see page 25 for details on excluded categories.

Category	Unit type	Factor type
<b>Combustion (scope 1)</b> Liquid and gaseous fuels used for energy generation, e.g., office heating, plant operation	Physical	Generic
<b>Operation of facility (scope 1)</b> Fugitive emissions, i.e., losses from air conditioning systems	Excluded*	Excluded*
<b>Business travel (scope 1, 2, 3)</b> Fuels (scope 1) & electricity (scope 2) for business travel in vehicles and public transport (scope 3)	Physical	Generic
<b>Imported electricity (scope 2)</b> Electricity purchased for direct use, e.g., site, office, and depot operation	Physical	Supplier / Generic
<b>Purchased goods and services (scope 3)</b> Production emissions of materials we purchased, and energy consumption of our subcontractors	Spend	Generic
<b>Capital goods (scope 3)</b> Production emissions of goods purchased and retained by Kier, e.g., plant, vehicles, offices	Spend	Generic
<b>Fuel &amp; energy related activities (scope 3)</b> Well-to-tank emissions of fuels and transmission and distribution emissions of electricity	Physical	Generic
<b>Upstream transportation &amp; distribution (scope 3)</b> Transportation of materials to our sites	Spend / estimation	Generic
<b>Waste generated in operations (scope 3)</b> Treatment and disposal of waste generated at our sites, depots, and offices	Physical	Generic
<b>Employee commuting (scope 3)</b> Fuel and electricity used for commuting mileage and energy consumption from remote working	Estimation	Generic
<b>Upstream leased assets (scope 3)</b> Fuel and electricity used by Kier but supplied by our client or landlord	Excluded*	Excluded*
<b>Downstream transportation &amp; distribution (scope 3)</b> Transportation of goods produced by Kier	N/A*	N/A*
<b>Processing of sold products (scope 3)</b> This emission source is not relevant to Kier	N/A*	N/A*
<b>Use of sold products (scope 3)</b> Direct, regulated energy use of assets Kier has designed and delivered	Physical	Generic
<b>End of life treatment of sold products (scope 3)</b> Demolition, waste treatment/disposal at the end-of-life of assets Kier has designed and delivered	Excluded*	Excluded*
<b>Downstream leased assets (scope 3)</b> Energy used by lessees at locations owned by Kier	Physical	Generic
<b>Franchises (scope 3)</b> This emission source is not relevant to Kier	N/A*	N/A*
<b>Investments (scope 3)</b> Scope 1 & 2 emissions of joint ventures over which Kier does not have financial control	Physical	Generic

## Quantification of biogenic emissions

The only current source of biogenic emissions within our inventory is biofuels, specifically HVO. Quantification of emissions from HVO aligns with the UK Gov GHG Conversion Factors for Company Reporting: Methodology Paper, whereby only CH<sub>4</sub> and N<sub>2</sub>O emissions contribute to the CO<sub>2</sub>e. CO<sub>2</sub> expelled during the burning of the fuel is cancelled out by the CO<sub>2</sub> absorbed by the feedstock, and this is reported separately for applicable scopes. The conversion factors set out in the methodology paper are applied to HVO volumes to calculate emissions.

## Assurance

We run a three lines of assurance process on our carbon data each quarter as follows:

1. Consultant analysis of raw data, including anomaly and variance reporting
2. Group-level review of GHG reports
3. Divisional-level review of GHG reports

Annually, we work towards third party verification in line with ISO 14064-1, targeting reasonable assurance and a 10% materiality level. The data presented in this report for FY24 has been verified in line with this standard.

## Base year selection

Kier currently use a base year of Fiscal Year (FY) 19 (April 2018 – March 2019 inclusive) for scope 1 & 2, and a base year of FY22 (April 2021 – March 2022 inclusive) or scope 3.

FY19 has been selected as the base year for scope 1 & 2 because, at the time of setting our net zero targets, it was the most recent complete reporting year which would not have been skewed by any impacts of the COVID-19 pandemic.

FY22 has been selected as the base year for scope 3 as it was the first year in which Kier calculated and reported scope 3 emissions. The reporting methodology for certain scope 3 categories could not be backdated to FY19, therefore separate base years have been used.

To support consistency and simplicity, we are planning to re-set our baseline in the next three years. This will also reflect the planned improvements to our quantification methodology.

## Ongoing improvement

Kier is committed to ongoing improvements in data quality. This includes removing exclusions, transitioning to physical unit methodologies, and using supplier-specific factors.

In FY22, improvements in data quality included the reporting of the 'investments' category and the 'use of sold products' category which had previously been excluded.

## Changes in the reporting year

In FY24, Kier acquired the rail division of Buckingham Group, inheriting ~180 colleagues and 11 rail projects across the UK.

Kier's restatement approach states that we apply a significance threshold of 5%. This means that our historic and most recent reporting years will be restated if our total emissions change by +/- 5% as a result of structural or organisational boundary changes.

In line with this approach, we have assessed the percentage change in emissions as a result of this acquisition using the most recent year of published Buckingham data (2022 SECR disclosure). Taking a proportional split for the division acquired based on turnover, the total emissions for the period was 18,524 CO<sub>2</sub>e for scopes 1, 2 and 3. When compared to our FY22 data, this accounts for a ~2% percentage uplift, therefore not meeting our significance threshold.

As such, this year we have reported the emissions as part of the combined total for Kier Group within our Transportation division.



## Exclusions

To ensure our reported emissions is reflective of our true performance and impact, we aim to report all emissions within our organisational and reporting boundaries (see page 21). In line with our criteria for assessing significance (see page 21), we have limited exclusions to categories which are within the Science Based Targets Initiative (SBTi) exclusion limits.

This table details emission categories which have been excluded and categories which are not relevant to Kier's operations.

In total, we report on c.99.9% of our scope 1 & 2 emissions and c.96% of our scope 3 emissions.

Category	Excluded/ Not relevant	Estimated % of emissions	Justification
Fugitive emissions (scope 1)	Excluded	<0.1%	Emissions from this category are negligible when compared to Kier's total GHG emissions. Fugitive emissions are assessed annually to ensure this remains the case.
Process emissions (scope 1)	Not relevant	-	-
Imported heat (scope 1)	Not relevant	-	-
Upstream leased assets (scope 3)	Excluded	c.0.1%	Based on an estimation of materiality using scope 1 & 2 energy use and number of leased assets, this category is expected to account for less than 2% of Kier Group's scope 3. A reporting methodology for this category is in development.
Downstream transportation and distribution (scope 3)	Not relevant	-	-
Processing of sold products (scope 3)	Not relevant	-	-
End-of-life treatment of sold products (scope 3)	Excluded	c.0.2%	Based on the LETI Climate Emergency Design Guide, it has been estimated that this category represents c.2% of an asset's lifecycle emissions.
Franchises (scope 3)	Not relevant	-	-

## Uncertainty

While every effort has been made to provide an accurate reflection of our GHG footprint through our quantification and assurance methodologies, there is some uncertainty due to the emission factors used, the activity data used, and the quantification methodologies.

### Emission factors

The emission factors used come from third parties and are therefore out of Kier's direct control. As official sources are used (see page 23), the uncertainty is considered negligible, however we aim to increase accuracy by prioritising the use of supplier-specific factors and adjusting spend-based factors for inflation (see Appendix C: conversion factors).

### Activity data

Scope 1 and 2 emissions are quantified with a physical unit methodology, using invoices, monitoring equipment (e.g., electricity meters), and financial processes (e.g., expense reports). As this data is managed through robust management and administration processes, the uncertainty is considered to be low.

### Quantification methodologies

For scope 3, uncertainties originate from the quantification methodologies as detailed opposite.

Category	Justification
Purchased goods and services	A spend based methodology is used, therefore this may not be completely reflective of the physical unit of the goods and services. This is mitigated through inflationary adjustment of factors and plans to transition to a physical unit or hybrid methodology.
Capital goods	A spend based methodology is used, therefore this may not be completely reflective of the physical unit of the goods and services. This is mitigated through inflationary adjustment of factors and plans to transition to a physical unit or hybrid methodology.
Fuel & energy related activities	Uncertainty due to emission factors and activity data only as described opposite.
Business travel	For business travel where exact distances are not known, for example seasonal railcard data, a spend based methodology is used, therefore this may not be completely reflective of the physical unit of distance travelled. This is mitigated through inflationary adjustment of factors. Uncertainty of other data where distance is known is due to emission factors and activity data only as described opposite.
Upstream transportation & distribution	A spend based methodology is used, therefore this may not be completely reflective of the physical unit of the goods and services. This is mitigated through inflationary adjustment of factors and plans to transition to a physical unit or hybrid methodology.
Waste generated in operations	Reporting relies on manual data entry and is therefore open to uncertainty. This is mitigated through providing training to those entering data and plans to transition to automated data entry processes.
Employee commuting	Our methodology uses average distances and teleworking information as calculated through an annual employee survey. There is a high level of uncertainty due to reflectiveness of survey responses.
Use of sold products	Uncertainty due to emission factors only as described opposite.
Downstream leased assets	Uncertainty due to activity data only as described opposite.
Investments	Uncertainty due to emission factors and activity data only as described opposite.

# Appendix B

## Additional GHG inventories



## Absolute emissions, GHG breakdown

The table opposite details our absolute GHG emissions for FY24, broken down by greenhouse gas for direct (scope 1) emissions only.

Category	Greenhouse gas emissions (tCO <sub>2</sub> e)							
	CO <sub>2</sub> e	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	NF <sub>3</sub>
<b>Scope 1: Direct GHG Emissions</b>	<b>28,853*</b>	<b>28,437</b>	<b>9</b>	<b>404</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
> Stationary combustion	12,408*	12,199	3	207	0	0	0	0
> Mobile combustion	16,445*	16,238	6	197	0	0	0	0
> Biogenic emissions	3,405	3,405	0	0	0	0	0	0
<b>Scope 2: Indirect GHG emissions from imported energy</b>	<b>115</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
> Purchased electricity (location based)	2,521*	-	-	-	-	-	-	-
> Purchased electricity (market based)	115	-	-	-	-	-	-	-
<b>Scope 3: Indirect GHG emissions from value chain</b>	<b>787,008*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
> <b>Transportation</b>	<b>39,585*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
> Upstream transportation & distribution	19,108*	-	-	-	-	-	-	-
> Business travel	5,329*	-	-	-	-	-	-	-
> Employee commuting	15,148*	-	-	-	-	-	-	-
> <b>Products purchased</b>	<b>708,370*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
> Purchased goods and services	697,937*	-	-	-	-	-	-	-
> Capital goods	Incl. in above	-	-	-	-	-	-	-
> Fuel & energy related activities	8,242*	-	-	-	-	-	-	-
> Waste generated in operations	2,191*	-	-	-	-	-	-	-
> <b>Associated with the use of products</b>	<b>39,053*</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
> Use of sold products	16,389*	-	-	-	-	-	-	-
> Downstream leased assets	358*	-	-	-	-	-	-	-
> Investments	22,306*	-	-	-	-	-	-	-
<b>Total scope 1 &amp; 2 (market based)</b>	<b>28,968</b>	<b>28,893</b>	<b>9</b>	<b>411</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total scope 1, 2 &amp; 3 (market based)</b>	<b>815,976</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## Normalised Data

The table opposite details our normalised scope 1, 2 & 3 GHG data.

Tonnes CO <sub>2</sub> e per normalisation metric	Scope 1	Scope 2 (MB)	Scope 2 (LB)	Scope 3
Per £ million revenue	7.4	0.0	0.6	200.5
Per employee	2.8	0.0	0.2	76.6

# Energy

The table opposite details our scope 1 & 2 energy consumption for FY24 on a UK and global basis.

## Fuel consumption applications:

Consumption of fuel for the generation of electricity (excluding fleet applications)

## Sustainable biomass evidencing:

HVO has been deemed 'sustainable' where compliant with the requirements of the certification system ISCC EU, the requirements of RED II, and Kier-specific procurement standards based on industry best practice.

## Renewable electricity evidencing:

The renewable origin of purchased or acquired electricity is evidenced by REGO certificates. We aim to transition to PPA-based evidencing however are currently restricted as suppliers prioritise customers with larger electricity consumption.

	UK MWh	UK % of total energy	Global MWh	Global % of total energy
<b>Consumption of fuel</b>	<b>126573</b>	<b>91%</b>	<b>126,588</b>	<b>91%</b>
> Sustainable biomass	13,874	10%	13,874	10%
> Other biomass	0	0%	0	0%
> Other renewable fuels	0	0%	0	0%
> Coal	0	0%	0	0%
> Oil	111,553	80%	111,568	80%
> Natural gas	1,123	1%	1,123	1%
> Other non-renewable fuels	23	0%	23	0%
<b>Consumption of purchased or acquired electricity</b>	<b>12,141</b>	<b>9%</b>	<b>12,159</b>	<b>9%</b>
> Renewable electricity	11,396	8%	11,396	8%
> Non-renewable electricity	746	1%	763	1%
<b>Consumption of purchased or acquired heat</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
<b>Consumption of purchased or acquired steam</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
<b>Consumption of purchased or acquired cooling</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
<b>Consumption of self-generated renewable energy</b>	<b>0</b>	<b>0%</b>	<b>0</b>	<b>0%</b>
<b>Total</b>	<b>138474</b>	<b>-</b>	<b>138,746</b>	<b>-</b>

# Appendix C

## GHG conversion factors



# Conversion factors

The conversion factors used for the quantification of our GHG performance are detailed on the following pages.

The conversion factors are shown in tCO<sub>2</sub>e per the defined unit and are relevant for the reporting period shown. The sources for these conversion factors are shown opposite and listed for each factor with a source reference.

For factors sourced from DEFRA, the GWPs used in the calculation of CO<sub>2</sub>e are based on the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) over a 100-year period so that the Conversion Factors are consistent with current national and international reporting requirements.

Source Reference	Source	Link
1	Greenhouse gas reporting: conversion factors 2023. DEFRA (2023). Online.	<a href="https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023">https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023</a>
2	Conversion factors KgCO <sub>2</sub> per £ spent, by SIC code 2021. Online. Note: conversion factors from this source have been adjusted for inflation according to the relevant CPI annual rate as set out in the factor title.	<a href="https://www.gov.uk/government/statistics/uks-carbon-footprint">https://www.gov.uk/government/statistics/uks-carbon-footprint</a>
3	Pre-calculated by BRE SmartWaste using Greenhouse Gas Reporting Conversion Factors 2023. DEFRA (2023). Online.	<a href="https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023">https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023</a>
4	EPC certificate data	<a href="https://www.gov.uk/find-energy-certificate">https://www.gov.uk/find-energy-certificate</a>

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Biodiesel HVO (Gross CV)	L	0.00003558	FY24	1
Burning Oil (Gross CV)	L	0.00254016	FY24	1
Diesel (average biofuel blend) (Gross CV)	L	0.00251206	FY24	1
Diesel (average biofuel blend) (Gross CV)	kWh	0.00023908	FY24	1
Gas Oil (Gross CV)	L	0.00275541	FY24	1
LPG (Gross CV)	L	0.00155713	FY24	1
Petrol (Gross CV)	L	0.00209747	FY24	1
Natural Gas (Gross CV)	kWh	0.00018293	FY24	1
Cars (by size) - Large Car - Diesel	Miles	0.0003357	FY24	1
Cars (by size) - Medium Car - Diesel	Miles	0.00026902	FY24	1
Cars (by size) - Small Car - Diesel	Miles	0.0002242	FY24	1
Cars (by size) - Large Car - Petrol	Miles	0.00043812	FY24	1
Cars (by size) - Medium Car - Petrol	Miles	0.00028676	FY24	1
Cars (by size) - Small Car - Petrol	Miles	0.0002266	FY24	1
Cars (by size) - Large Car - Hybrid	Miles	0.0002453	FY24	1
Cars (by size) - Medium Car - Hybrid	Miles	0.00017549	FY24	1
Cars (by size) - Small Car - Hybrid	Miles	0.00016336	FY24	1
UK electricity for EVs - Cars (by size) - Average Car - Battery Electric	Miles	0.0000812	FY24	1
Electricity: UK	kWh	0.00020707	FY24	1
Electricity: United Arab Emirates	kWh	0.000433	FY24	1
Accommodation services (CPI ANNUAL RATE 11.2 : ACCOMMODATION SERVICES 2021=100)	£	0.0002689	FY24	2
Accounting, bookkeeping and auditing services; tax consulting services (CPI ANNUAL RATE: Services 2021=100)	£	0.00012148	FY24	2
Advertising and market research services (CPI ANNUAL RATE: Services 2021=100)	£	0.00010968	FY24	2
Agriculture products (CPI ANNUAL RATE 01 : FOOD AND NON-ALCOHOLIC BEVERAGES 2021=100)	£	0.00176323	FY24	2
Air and spacecraft and related machinery (CPI ANNUAL RATE: Goods 2021=100)	£	0.00034641	FY24	2
Air transport (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00128805	FY24	2
Alcoholic beverages (CPI ANNUAL RATE: Goods 2021=100)	£	0.00059124	FY24	2
Architectural and engineering services; technical testing and analysis services (CPI ANNUAL RATE: Services 2021=100)	£	0.00017465	FY24	2
Bakery and farinaceous products (CPI ANNUAL RATE: Goods 2021=100)	£	0.0004602	FY24	2
Basic iron and steel (CPI ANNUAL RATE: Goods 2021=100)	£	0.00145547	FY24	2
Basic pharmaceutical products and pharmaceutical preparations (CPI ANNUAL RATE: Goods 2021=100)	£	0.00047208	FY24	2
Coal, lignite, peat (CPI ANNUAL RATE: Goods 2021=100)	£	0.00129749	FY24	2
Coke and refined petroleum products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00151553	FY24	2

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Computer programming, consultancy and related services (CPI ANNUAL RATE 08 : COMMUNICATION 2021=100)	£	0.00013913	FY24	2
Computer, electronic and optical products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00032798	FY24	2
Construction (CPI ANNUAL RATE 04.3.1 : Materials for maintenance and repair 2021=100)	£	0.00028612	FY24	2
Creative, arts and entertainment services (CPI ANNUAL RATE 11.2 : ACCOMMODATION SERVICES 2021=100)	£	0.00025997	FY24	2
Crude petroleum and natural gas & Metal ores (CPI ANNUAL RATE: Goods 2021=100)	£	0.00119475	FY24	2
Dairy products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00078699	FY24	2
Dyestuffs, agro-chemicals (CPI ANNUAL RATE: Goods 2021=100)	£	0.00100043	FY24	2
Education services (CPI ANNUAL RATE: Services 2021=100)	£	0.00016644	FY24	2
Electrical equipment (CPI ANNUAL RATE: Goods 2021=100)	£	0.00035559	FY24	2
Electricity, transmission and distribution (CPI ANNUAL RATE 04.5 : ELECTRICITY, GAS AND OTHER FUELS 2021=100)	£	0.00058071	FY24	2
Employment services (CPI ANNUAL RATE: Services 2021=100)	£	0.00011164	FY24	2
Fabricated metal products, excl. machinery and equipment and weapons & ammunition (CPI ANNUAL RATE: Goods 2021=100)	£	0.00046729	FY24	2
Financial services, except insurance and pension funding (CPI ANNUAL RATE: Services 2021=100)	£	0.00010539	FY24	2
Fish products (CPI ANNUAL RATE 01 : FOOD AND NON-ALCOHOLIC BEVERAGES 2021=100)	£	0.00057864	FY24	2
Food and beverage serving services (CPI ANNUAL RATE 11.2 : ACCOMMODATION SERVICES 2021=100)	£	0.00024951	FY24	2
Forestry products (CPI ANNUAL RATE 01 : FOOD AND NON-ALCOHOLIC BEVERAGES 2021=100)	£	0.00024974	FY24	2
Furniture (CPI ANNUAL RATE: Goods 2021=100)	£	0.00037101	FY24	2
Gambling and betting services (CPI ANNUAL RATE 11.2 : ACCOMMODATION SERVICES 2021=100)	£	0.00011112	FY24	2
Gas distribution (CPI ANNUAL RATE 04.5 : ELECTRICITY, GAS AND OTHER FUELS 2021=100)	£	0.00047855	FY24	2
Glass, refractory, clay, other porcelain and ceramic, stone and abrasive products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00106419	FY24	2
Grain mill products, starches and starch products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00076292	FY24	2
Human health services (CPI ANNUAL RATE: Services 2021=100)	£	0.000283	FY24	2
Industrial gases, inorganics and fertilisers (all inorganic chemicals) (CPI ANNUAL RATE: Goods 2021=100)	£	0.00112953	FY24	2
Information services (CPI ANNUAL RATE 08 : COMMUNICATION 2021=100)	£	0.00018122	FY24	2



Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Insurance, reinsurance and pension funding services, except compulsory social security & Pensions (CPI ANNUAL RATE: Services 2021=100)	£	7.7922E-05	FY24	2
Leather products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00057801	FY24	2
Legal services (CPI ANNUAL RATE: Services 2021=100)	£	6.013E-05	FY24	2
Libraries, archives, museums and other cultural services (CPI ANNUAL RATE 11.2 : ACCOMMODATION SERVICES 2021=100)	£	0.00019784	FY24	2
Machinery and equipment n.e.c. (CPI ANNUAL RATE: Goods 2021=100)	£	0.00036164	FY24	2
Manufacture of cement, lime, plaster and articles of concrete, cement and plaster (CPI ANNUAL RATE: Goods 2021=100)	£	0.00079752	FY24	2
Mining support services (CPI ANNUAL RATE: Goods 2021=100)	£	0.00154683	FY24	2
Motion picture, video and TV programme production services, sound recording & music publishing & programming and broadcasting services (CPI ANNUAL RATE 08 : COMMUNICATION 2021=100)	£	0.00012261	FY24	2
Motor vehicles, trailers and semi-trailers (CPI ANNUAL RATE: Goods 2021=100)	£	0.0003382	FY24	2
Natural water; water treatment and supply services (CPI ANNUAL RATE 04.4 : Water supply and misc. services for the dwelling 2021=100)	£	0.0002617	FY24	2
Office administrative, office support and other business support services (CPI ANNUAL RATE: Services 2021=100)	£	0.00016717	FY24	2
Other basic metals and casting (CPI ANNUAL RATE: Goods 2021=100)	£	8.9172E-05	FY24	2
Other chemical products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00108656	FY24	2
Other food products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00058914	FY24	2
Other manufactured goods (CPI ANNUAL RATE: Goods 2021=100)	£	0.000501	FY24	2
Other mining and quarrying products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00061438	FY24	2
Other personal services (CPI ANNUAL RATE: Services 2021=100)	£	8.1979E-05	FY24	2
Other professional, scientific and technical services (CPI ANNUAL RATE: Services 2021=100)	£	0.00014403	FY24	2
Other transport equipment (CPI ANNUAL RATE: Goods 2021=100)	£	0.00027295	FY24	2
Owner-Occupiers' Housing Services (CPI ANNUAL RATE: Services 2021=100)	£	3.8975E-05	FY24	2
Paints, varnishes and similar coatings, printing ink and mastics (CPI ANNUAL RATE: Goods 2021=100)	£	0.0008515	FY24	2
Paper and paper products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00061368	FY24	2
Petrochemicals (CPI ANNUAL RATE: Goods 2021=100)	£	0.00121846	FY24	2
Postal and courier services (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00022689	FY24	2

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Postal and courier services (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00022689	FY24	2
Prepared animal feeds (CPI ANNUAL RATE: Goods 2021=100)	£	0.00075118	FY24	2
Preserved meat and meat products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00066351	FY24	2
Printing and recording services (CPI ANNUAL RATE: Goods 2021=100)	£	0.00035226	FY24	2
Processed and preserved fish, crustaceans, molluscs, fruit and vegetables (CPI ANNUAL RATE: Goods 2021=100)	£	0.00060542	FY24	2
Public administration and defence services; compulsory social security services (CPI ANNUAL RATE: Services 2021=100)	£	0.0002207	FY24	2
Publishing services (CPI ANNUAL RATE 08 : COMMUNICATION 2021=100)	£	9.2773E-05	FY24	2
Railway transport (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00068321	FY24	2
Real estate services on a fee or contract basis (CPI ANNUAL RATE: Services 2021=100)	£	9.1887E-05	FY24	2
Real estate services, excluding on a fee or contract basis and imputed rent (CPI ANNUAL RATE: Services 2021=100)	£	0.00013359	FY24	2
Remediation services and other waste management services (CPI ANNUAL RATE 04.4 : Water supply and misc. services for the dwelling 2021=100)	£	0.00308661	FY24	2
Rental and leasing services (CPI ANNUAL RATE: Services 2021=100)	£	0.00015678	FY24	2
Repair and maintenance of aircraft and spacecraft (CPI ANNUAL RATE: Goods 2021=100)	£	0.00036577	FY24	2
Repair and maintenance of ships and boats (CPI ANNUAL RATE: Goods 2021=100)	£	0.000244	FY24	2
Repair services of computers and personal and household goods (CPI ANNUAL RATE: Services 2021=100)	£	0.00010869	FY24	2
Rest of repair; installation (CPI ANNUAL RATE: Goods 2021=100)	£	0.00016689	FY24	2
Retail trade services, except of motor vehicles and motorcycles (CPI ANNUAL RATE 07.1.1A : NEW CARS 2021=100)	£	0.00017281	FY24	2
Road transport (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00053391	FY24	2
Rubber and plastic products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00051474	FY24	2
Scientific research and development services (CPI ANNUAL RATE: Services 2021=100)	£	0.00019582	FY24	2
Security and investigation services (CPI ANNUAL RATE: Services 2021=100)	£	9.9037E-05	FY24	2
Services auxiliary to financial services and insurance services (CPI ANNUAL RATE: Services 2021=100)	£	8.5609E-05	FY24	2
Services furnished by membership organisations (CPI ANNUAL RATE: Services 2021=100)	£	0.00019019	FY24	2
Services of head offices; management consulting services (CPI ANNUAL RATE: Services 2021=100)	£	0.00014192	FY24	2

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Services of households as employers of domestic personnel (CPI ANNUAL RATE: Services 2021=100)	£	1.1277E-05	FY24	2
Services to buildings and landscape (CPI ANNUAL RATE: Services 2021=100)	£	0.00017045	FY24	2
Sewerage services; sewage sludge (CPI ANNUAL RATE 04.4 : Water supply and misc. services for the dwelling 2021=100)	£	0.00035559	FY24	2
Ships and boats (CPI ANNUAL RATE: Goods 2021=100)	£	0.00024578	FY24	2
Soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations (CPI ANNUAL RATE: Goods 2021=100)	£	0.00067947	FY24	2
Social care services (CPI ANNUAL RATE: Services 2021=100)	£	0.00020174	FY24	2
Soft drinks (CPI ANNUAL RATE: Goods 2021=100)	£	0.00034221	FY24	2
Sports services and amusement and recreation services (CPI ANNUAL RATE 11.2 : ACCOMMODATION SERVICES 2021=100)	£	0.00022989	FY24	2
Telecommunications services (CPI ANNUAL RATE 08 : COMMUNICATION 2021=100)	£	0.00015721	FY24	2
Textiles (CPI ANNUAL RATE: Goods 2021=100)	£	0.00065376	FY24	2
Tobacco products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00084164	FY24	2
Travel agency, tour operator and other reservation services and related services (CPI ANNUAL RATE: Services 2021=100)	£	0.0001523	FY24	2
Vegetable and animal oils and fats (CPI ANNUAL RATE: Goods 2021=100)	£	0.00077951	FY24	2
Veterinary services (CPI ANNUAL RATE: Services 2021=100)	£	9.4466E-05	FY24	2
Warehousing and support services for transportation (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00029164	FY24	2
Waste collection, treatment and disposal services; materials recovery services (CPI ANNUAL RATE 04.4 : Water supply and misc. services for the dwelling 2021=100)	£	0.00124808	FY24	2
Water transport (CPI ANNUAL RATE 07.3 : TRANSPORT SERVICES 2021=100)	£	0.00207024	FY24	2
Weapons and ammunition (CPI ANNUAL RATE: Goods 2021=100)	£	0.00038068	FY24	2
Wearing apparel (CPI ANNUAL RATE: Goods 2021=100)	£	0.00059978	FY24	2
Wholesale and retail trade and repair services of motor vehicles and motorcycles (CPI ANNUAL RATE 07.1.1A : NEW CARS 2021=100)	£	0.00026592	FY24	2
Wholesale trade services, except of motor vehicles and motorcycles (CPI ANNUAL RATE 07.1.1A : NEW CARS 2021=100)	£	1.9993E-05	FY24	2
Wood and wood products (CPI ANNUAL RATE: Goods 2021=100)	£	0.00044226	FY24	2

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Waste treatment route: Recycled. Waste types: Bricks (17 01 02), Tiles & Ceramics (17 01 03), Concrete (17 01 01) , Inert (17 01 07), Insulation materials (17 06 04), Metals (17 04 07), Metal containers (15 01 04), Metal strapping (15 01 04), Composite packaging (15 01 05), Mixed packaging (15 01 06), Binders (17 01 01), Floor coverings (soft) (20 01 11), Soil and stones other than those mentioned in 17 05 03 (17 05 04), Bituminous mixtures (non hazardous e.g. asphalt) (17 03 02), Mixed construction and/or demolition waste (17 09 04)	tonne	0.985	FY24	3
Waste treatment route: Recycled. Waste type: Glass (17 02 02), Cardboard (15 01 01), Cardboard and paper packaging (15 01 01), Plastic sheet (15 01 02), Plastic fill (15 01 02), Plastic containers (15 01 02), Plastic strapping (15 01 02), Other plastic packaging (15 01 02), Pallets (15 01 03), Other timber packaging (15 01 03), Plasterboard / Gypsum (17 08 02), Plastic (excluding packaging waste) (17 02 03), Timber (17 02 01), Electrical and electronic equipment (non hazardous) (20 01 36 or 16 02 14), Aluminium cans (15 01 04), Paper and cardboard (20 01 01), Glass (20 01 02), Plastics (20 01 39), Oils (13 01 13*)	tonne	21.281	FY24	3
Waste treatment: Recovered. Waste types: , Bricks (17 01 02), Tiles & Ceramics (17 01 03), Concrete (17 01 01) , Inert (17 01 07), Insulation materials (17 06 04), Metals (17 04 07), Metal containers (15 01 04), Metal strapping (15 01 04), Composite packaging (15 01 05), Mixed packaging (15 01 06), Binders (17 01 01), Floor coverings (soft) (20 01 11), Soil and stones other than those mentioned in 17 05 03 (17 05 04), Bituminous mixtures (non hazardous e.g. asphalt) (17 03 02), Mixed construction and/or demolition waste (17 09 04)	tonne	0.985	FY24	3
Waste treatment route: Recovered. Waste type: Glass (17 02 02), Cardboard (15 01 01), Cardboard and paper packaging (15 01 01), Plastic sheet (15 01 02), Plastic fill (15 01 02), Plastic containers (15 01 02), Plastic strapping (15 01 02), Other plastic packaging (15 01 02), Pallets (15 01 03), Other timber packaging (15 01 03), Plasterboard / Gypsum (17 08 02), Plastic (excluding packaging waste) (17 02 03), Timber (17 02 01), Electrical and electronic equipment (non hazardous) (20 01 36 or 16 02 14), Aluminium cans (15 01 04), Paper and cardboard (20 01 01), Glass (20 01 02), Plastics (20 01 39), Oils (13 01 13*)	tonne	21.281	FY24	3

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Waste treatment type: Energy recovery. Waste types: Tiles & Ceramics (17 01 03), Glass (17 02 02), Cardboard (15 01 01), Cardboard and paper packaging (15 01 01), Plastic sheet (15 01 02), Plastic fill (15 01 02), Plastic containers (15 01 02), Plastic strapping (15 01 02), Other plastic packaging (15 01 02), Pallets (15 01 03), Other timber packaging (15 01 03), Composite packaging (15 01 05), Mixed packaging (15 01 06), Binders (17 01 01), Plastic (excluding packaging waste) (17 02 03), Timber (17 02 01), Floor coverings (soft) (20 01 11), Electrical and electronic equipment (non hazardous) (20 01 36 or 16 02 14), Canteen/Office/Adhoc waste (20 03 01), Aluminium cans (15 01 04), Paper and cardboard (20 01 01), Glass (20 01 02), Biodegradable kitchen and canteen waste (20 01 08), Plastics (20 01 39), Adhoc waste (20 03 01), Site clear up (20 03 01), Office waste (20 03 01), Oils (13 01 13*), Mixed construction and/or demolition waste (17 09 04)	tonne	21.281	FY24	3
Waste treatment type: Disposal. Waste types: Bricks (17 01 02), Concrete (17 01 01), Inert (17 01 07), Insulation materials (17 06 04), Bituminous mixtures (non hazardous e.g. asphalt) (17 03 02)	tonne	1.234	FY24	3
Waste treatment type: Disposal. Waste types: Glass (17 02 02), Plastic sheet (15 01 02), Plastic fill (15 01 02), Plastic containers (15 01 02), Plastic strapping (15 01 02), Other plastic packaging (15 01 02), Plastic (excluding packaging waste) (17 02 03), Electrical and electronic equipment (non hazardous) (20 01 36 or 16 02 14), Aluminium cans (15 01 04), Glass (20 01 02), Plastics (20 01 39)	tonne	8.884	FY24	3
Waste treatment type: Disposal. Waste types: Cardboard (15 01 01), Cardboard and paper packaging (15 01 01), Paper and cardboard (20 01 01)	tonne	1164.39	FY24	3
Waste treatment type: Disposal. Waste types: Pallets (15 01 03), Other timber packaging (15 01 03)	tonne	925.245	FY24	3
Waste treatment type: Disposal. Waste types: Metal containers (15 01 04), Metal strapping (15 01 04)	tonne	1.264	FY24	3
Waste treatment type: Disposal. Waste types: Plasterboard / Gypsum (17 08 02)	tonne	71.95	FY24	3
Waste treatment type: Disposal. Waste types: Timber (17 02 01)	tonne	924.245	FY24	3
Waste treatment type: Disposal. Waste types: Canteen/Office/Adhoc waste (20 03 01), Adhoc waste (20 03 01), Site clear up (20 03 01), Office waste (20 03 01)	tonne	520.335	FY24	3
Waste treatment type: Disposal. Waste types: Biodegradable kitchen and canteen waste (20 01 08)	tonne	700.21	FY24	3
Waste treatment type: Disposal. Waste types: Soil and stones other than those mentioned in 17 05 03 (17 05 04)	tonne	19.517	FY24	3

Factor name	Unit	tCO <sub>2</sub> e	Reporting Period	Source Reference
Building emission rates	m2	As per EPC certificates	As per EPC certificate date (assumed 60 yr service life)	4

# Appendix D

ISO14064-1 verification opinion  
statement





# Verification opinion statement

The verification opinion statement (VOS) shown opposite covers the GHG data for FY24 (see note to GHG inventory on page 18).

The VOS refers to a GHG report titled "ISO 14064 FY24 GHG Report V1.0" which is an older version of this climate report. Changes made since the issue of the VOS have not included any amendments to the calculation methodology, uncertainty assessment, or data.

We have achieved a reasonable level of assurance with a materiality level of 10%.

### Verification Report

**Verification Opinion**

Verified with Comments	
Based on the process and procedures conducted, the GHG Statement contained in "ISO 14064 FY24 GHG Report V1.0" produced by Kier Group Plc:	<ul style="list-style-type: none"> <li>is materially correct and is a fair representation of GHG data and information.</li> <li>has been prepared in accordance with ISO14064-1 and its principles.</li> </ul>
With the following caveats	<p>Commuting estimated and extrapolated based on survey responded by 33% of employees.</p> <p>The deliveries of unknown purchased materials that could not be categorised have been excluded of Upstream T&amp;O.</p> <p>Emissions for the use of sold products have only been calculated for those assets in which Kier has design responsibilities and can therefore influence energy demands.</p> <p>Emissions for Joint Ventures (Investments) have been calculated for scope 1 and 2 of JV projects and allocated according to equity share percentage.</p> <p>Market-based emissions for Scope 2 Electricity included in Kier Group Plc Climate Report FY24 have not been verified due to Renewable Energy Guarantees of Origin Certificates not being fully traceable at the time of verification.</p>
The following improvements were raised in relation to future reporting:	Consider improving the consistency in calculations of electricity consumption for the different quarters.

...making excellence a habit."

Confidential

### Verification Engagement

Organization	Kier Group Plc
Responsible party	Kier Group Plc
Verification Objectives	To express an opinion on whether the organizational GHG Statement which is historical in nature: <ul style="list-style-type: none"> <li>Is accurate, materially correct and is a fair representation of GHG data and information.</li> <li>Has been prepared in accordance with ISO14064-1 2019 and its principles</li> </ul>
Materiality Level	10%
Level of Assurance	Reasonable
Verification evidence gathering procedures	<ul style="list-style-type: none"> <li>Evaluation of the monitoring and controls systems through interviewing employees observation &amp; inquiry</li> <li>Verification of the data through sampling recalculation, retracing, cross checking and reconciliation</li> </ul>
The verification activities applied in a limited level of assurance verification are less extensive in nature, timing and extent than in a reasonable level of assurance verification	
Verification Standards	The verification was carried out in accordance with ISO 14064-3: 2019, ISO 14065: 2020 and ISO 17029:2019
Note: Kier Group Plc is responsible for the preparation and fair presentation of the GHG statement and report in accordance with the agreed criteria. BSI is responsible for expressing an opinion on the GHG statement based on the verification.	

## Kier Limited

---

Registered in England No. 2708030

Registered office:

2<sup>nd</sup> Floor,

Optimum House

Clippers Quay

Salford

M50 3XP

Contact us here: [www.kier.co.uk/contact-us/](http://www.kier.co.uk/contact-us/)

[www.kier.co.uk](http://www.kier.co.uk)

Copyright © 2024 Kier Group plc

