

# MALCOLM

# PRACTICAL SOLUTIONS, SUSTAINABLE FUTURE

**Maria** 

JUNE 2024

NCOLM



## TABLE OF CONTENTS

Welcome to Our Environmental Sustainability Strategy 2024	03
Our Environmental Sustainability Framework – Context	04
Our Environmental Sustainability Framework – Planet First	06
Our Environmental Sustainability Framework – Governance	07
Our Priority Themes	08
Our Targets - Near-Term (2030) & Long Term (2045)	09
Our Roadmap - Overview	10
Alternative Fuels	11
Optimising Rail Freight	12
Plant & Vehicle Technology	13
Plant & Vehicle Technology - Holistic Process Approach	14
Plant & Vehicle Technology – Battery Electric Vehicles and Hydrogen	16
Plant & Vehicle Technology – Innovation & Practical Solutions	17
Energy Efficiency	18
Materials and Waste	19
Materials and Waste – Circular Economy	20
Industry Collaboration	24
Remaining Priorities	26

### WELCOME TO OUR ENVIRONMENTAL STRATEGY 2024

#### We are pleased to welcome you to our Environmental Sustainability Strategy 2024.

Sustainable business practices have been at the core of our one hundred years history – putting our people at the heart, building successful partnerships for longevity, and looking at new innovative ways to reduce our carbon footprint. Our experience has enabled The Malcolm Group to be adaptable, practical, and efficient – attributes we hold key as we progress our environmental sustainability strategy.

As a cross-sectoral business, operating within logistics, civil engineering, and waste industries, we recognise the opportunities and challenges ahead. With each sector being a vital component of continued growth and economic viability of the UK, the transition towards Net Zero across each sector is unique, bringing their own risks and rewards. A consistent feature, however, is the importance of collaboration and collective agreement across our peers, customers, industry bodies and governments.

At The Malcolm Group, our ethos has been and will always be 'Practical Solutions, Successful Partnerships.' Our solutions remain ambitious yet realistic; Our results establish long lasting and collaborative partnerships. We will drive this throughout the implementation of our *Environmental Sustainability Strategy*.

This strategy provides the foundations on which our journey trajectory will be progressed. We recognise the role that new policy, technological advancements and investment will have on the successful outcome of our strategy. Our strategy is built on the inner mechanisms of our business operations ensuring sustainability remains as a key driver within internal decision making and we will continue to use our experience and knowledge of our sectors to work for wider external benefits for a just transition towards Net Zero.



Our Environmental Sustainability Strategy compliments and supports our wider approach to ESG (Environmental, Social and Governance). We recognise the role we have in continuing to reduce carbon, improve air quality, enhance biodiversity, provide fulfilling employment opportunities, and connect communities.

We look forward to continuing our journey towards a greener future.



**Andrew Malcolm MBE** CEO, The Malcolm Group

### OUR **ENVIRONMENTAL** SUSTAINABILITY FRAMEWORK -**CONTEXT**

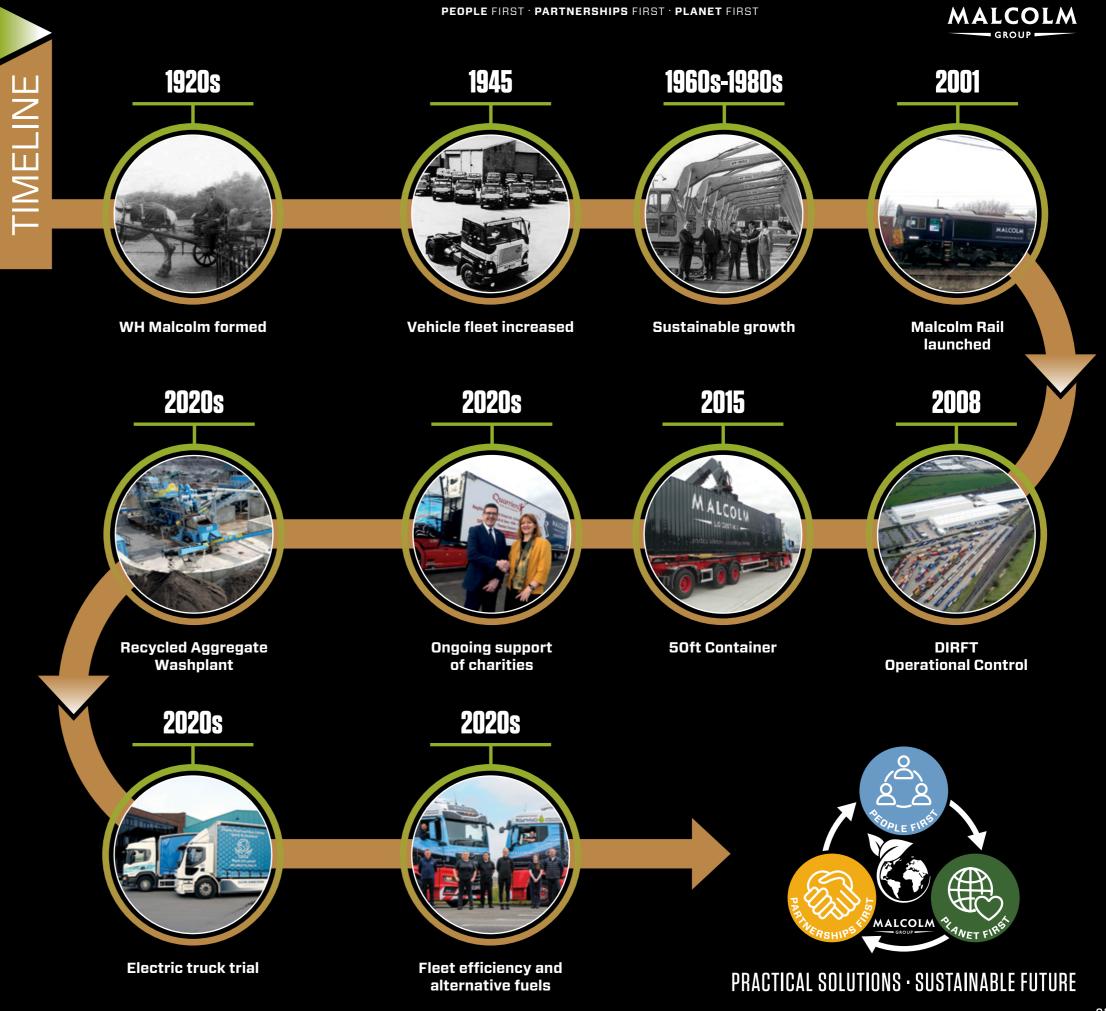
Four simple words define our company ethos -'Practical Solutions, Successful Partnerships'. As we progress towards our sustainability ambitions, we recognise that this ethos has provided The Malcolm Group with a longevity, committed workforce and customer base to be proud of. Therefore, our Environmental Sustainability Strategy has been named 'Practical Solutions, Sustainable Future'.

Sustainable business practices have been at the heart of our 100 years history. Environmental Sustainability is not a new concept for The Malcolm Group. We have pushed the boundaries of operating sustainably since our inception putting people at the heart, building successful partnerships for longevity and looking at new innovative ways to reduce our carbon footprint.

Our wider Environmental, Social and Governance approach puts:

- People First
- Partnerships First
- Planet First

Our environmental strategy presented captures our approach towards 'Planet First'.



### **OUR ENVIRONMENTAL** SUSTAINABILITY FRAMEWORK -**PLANET FIRST**

Our key focus areas across 'Planet First' are:



Based on our business activities, the key focus areas are those which we can take steps to reduce negative impacts and enhance positive impacts.

These key areas align with the following United Nations Sustainable Development Goals.



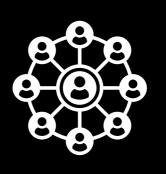
SUSTAINABLE GALS

### OUR ENVIRONMENTAL SUSTAINABILITY FRAMEWORK -**GOVERNANCE**



- Monitor ESG target progress
- Support and guide

#### **WORKING GROUPS**



Formed from operational managers and staff across the Group. The working groups will play a key part in providing feedback and operational insight to the ESG Committee as well as proactively implementing sustainability and environmental initiatives across the various business streams.



Overall responsibility for all climate related and environmental sustainability matters.

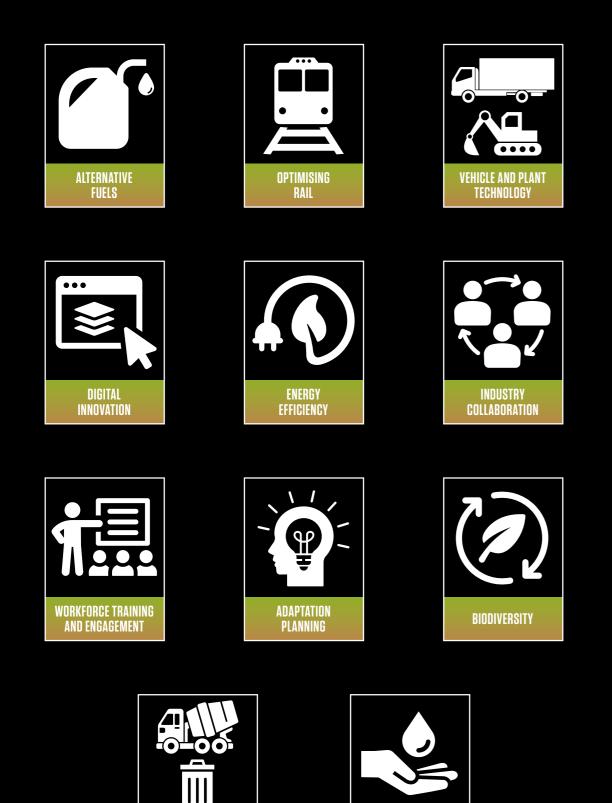
- Incorporate climate related risks and opportunities as
- part of business decision making
- Review ESG/Sustainability Committee Reports

Formed of executive team members and Subject Matter Experts (SME), the committee will meet at a minimum, quarterly. The committee will receive updates from the Group Environmental and Sustainability Director, in regards to target progress and updates from within the industry.

- Approve initiatives for Board sign off

## **OUR PRIORITY THEMES**

We recognise the holistic nature of environmental sustainability, thus have set priority themes across Climate Action - Resource Efficiency - Sustainable Partnership.



WATER

MATERIALS

AND WASTE

# **OUR TARGETS** -NEAR-TERM (2030) & LONG TERM (2045)

In October 2023, we signed a letter of commitment to the Science Based Target Initiative (SBTi).

As part of this commitment, we have taken steps as a business to determine, calculate and plan to reduce emissions across Scope 1, Scope 2 and Scope 3 emissions.

The next step on our journey is to finalise target development and submit for approval to the SBTi.

Scope 1		
Natural Gas		
Transport		
Other Fuels		
Scope 2		
Location Base	ed	
Market Based	1	
Scope 3		
Category 1:	Purchased Goods and Services	
Category 2:	Capital Goods	
Category 3:	Fuel-related Emissions	
Category 4:	Upstream Transportation and Distribution	
Category 5:	Waste Generated in Operations	
Category 6:	Business Travel	
Category 7:	Employee Commuting	
Category 11:	Use of Sold Products	
Category 12:	End-of-life Treatment of Sold Products	
Category 13:	Downstream Leased Assets	





Malcolm Group Near-term

emission reduction

reduction in Scope 1 and Scope 2 absolute emissions (tCO,e) by 2030 from a FY2022 baseline.\*

reduction in Scope 3 absolute emissions (tCO<sub>2</sub>e) by 2030 from a FY2022 baseline.\*

\* Current working targets for The Malcolm Group. These targets are based on an absolute emission reduction from a FY2022 baseline year. As new guidance from SBTi become available these targets may be subject to change reflecting sector specific guidance. This document will be updated to reflect final targets once validated by the SBTi.

09

## **ROADMAP - OVERVIEW**

#### **Environmental Sustainability Road Map Summary**

Iternative Fuels	Transition fleet towards use of non-fossil fuels which reflect market availability and business needs.	
	In accordance with Scottish Government's HGV Decarbonisation Pathway, plan transition to electric power and/or hydrogen post 2030.	
Optimising Rail	Rail replacement in lieu of road freight can offer considerable CO <sub>2</sub> e savings. We will continue to promote use of rail service amongst customers and demonstrate the benefits of rail and road freight combinations.	
/ehicle and Plant Technology	With a considerable fleet of vehicles and ancillary equipment, ensuring they are maintained to provide optimum performance and efficiency will collectively provide CO <sub>2</sub> e savings.	2025 SBTi Targets Validation
	Optimise the whole system approach from transport, handling and storage. Remain innovative within the industry and enhance our service offerings.	
Digital Innovation	Continually improve systems and processes in accordance with digital technological advancements.	
energy Efficiency of offices/ warehouses/facilities	Reduce energy consumption across our estate through targeting high energy consumption such as lighting and replacing lighting levels with energy efficient LEDs and/or natural daylight.	2024 ESG Committe Established
	Continue planned preventative maintenance across our portfolio. Review options for renewable energy sources such as Photovoltaic (PV) panels within our estate.	
ndustry Collaboration	Use our industry experience and position to collaborate across industry, customers, and supply chain to drive improvements.	0000
Norkforce training, levelopment and engagement	Provide our workforce with the required training, tools and knowledge to collectively, as a business, make progress towards net zero.	2023 SBTi Commitme letter signed
Adaptation Planning	Recognising the need to balance our 'mitigation' measures with our 'adaptation' measures. Adapting for future environmental changes brought on by climate change. This also includes the need to adapt to changes in energy infrastructure and use.	
Biodiversity	A diverse and prosperous biodiversity is essential for humanity and our progress towards a sustainable future. Explore opportunities across our land to enhance biodiversity in accordance with local authority biodiversity action plans (LBAPs).	<b>2022</b> Scope 1, 2 & 3
Material and Waste	Reduce the carbon intensity of products and materials we utilise. Avoiding waste where possible and recognising waste streams as a resource rather than a disregarded product.	emissions calculated to form baselind
Nater	As a precious resource, ensuring water efficiency across our operations to drive reliance on mains water consumption.	and the second

## **ALTERNATIVE FUELS**

Our first-class service offering is made available through our substantial road and construction fleet. We recognise that, as an industry, fossil fuels such as diesel are critical in ensuring we continue to operate and perform at the levels expected. However, as new fuel technologies and processes becomes available, we are exploring the use of alternative fuels within our operations.

As technological and infrastructure advances are made within the fields of battery electric and hydrogen, our approach is to explore alternative fossil-free fuels and introduce the use of these to support our fuel requirements.

As part of our assessment of alternative fuels, we have engaged in a number of trials across:





#### CASE STUDY 01 **Biogas CNG**

We have undertaken extensive trials using CNG gas powered vehicles. Utilising 4x2 CNG tractor units from our OEM partners lveco and Scania, we conducted various city-based deliveries using an urban trailer.

- Annual CO<sub>2</sub>e saving of 100T (vs Diesel)
- Cost saving on fuel
- Vehicle noise reduction







Alongside our valued customer Diageo, we conducted a trial of HVO use on 10 selected vehicles from our Grangemouth facility. During this trial we calculated a 90% reduction in Wellto-Wheel (WtW) CO<sub>2</sub>e emissions when compared with diesel.



## **OPTIMISING RAIL FREIGHT**

Transporting goods by rail freight will play an integral part in our environmental sustainability strategy to reduce carbon emissions both for The Malcolm Group and the customers we support.

The Malcolm Group have operated daily Anglo Scottish rail intermodal services since 2001. Over 20 years later, we have moved over 700,000 containers, taking >20 million miles off the UK road network. For The Malcolm Group, offering sustainable solutions involves a combination of highly efficient road freight supported by our rail freight capacity.



#### ALL ABOARD! Malcolm Rail from Elderslie to Grangemouth Docks.

On 6th March 2024, we orchestrated the first intermodal service run for ten years, between The Malcolm Group's Elderslie Terminal and Forth Ports Limited Grangemouth.

This trial journey was to stimulate rail freight growth in Scotland and promote the value of modal shift to Scotland's decarbonisation strategy.

Led by our Rail Director, Andrew Sumner, this event is the stepping stone to reintroduce the service on a permanent basis.



The Malcolm Group was pleased to be part of the trial of double-stacked pallet rail freight, led by Nestle UK & Ireland and Tesco.

containers

This innovative rail container uses a roof raising mechanism which allows products to be double stacked from floor to ceiling before the roof is lowered for transit.

Having the potential to freight double stacked goods via train has significant opportunity to further reduce CO<sub>2</sub>e emissions within the industry.

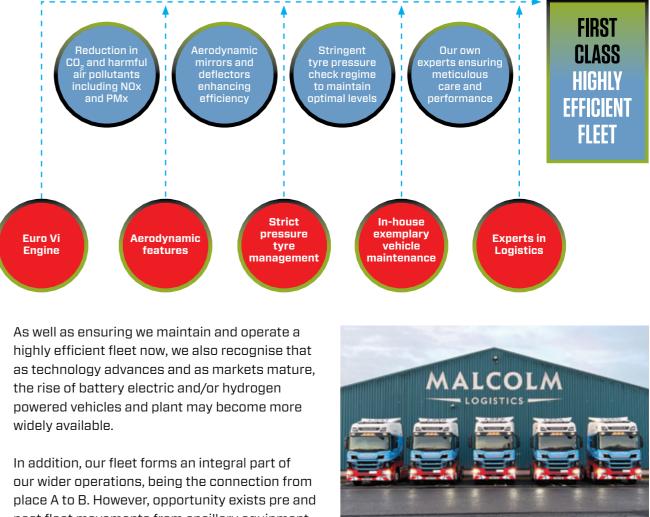
We are proud to have participated in this trial alongside our fellow partners.



## PLANT AND VEHICLE TECHNOLOGY

With over 500 trucks, 1,200 trailers and 200 items of heavy plant, our fleet is the cornerstone of our business. Covering the length and breadth of the UK, our fleet has established the Malcolm brand.

Our fleet, along with our people, are our biggest assets. With a 5 star ECO Stars Recognition, we take pride in ensuring our plant and fleet run effectively and efficiently.



post fleet movements from ancillary equipment usage, warehousing efficiency, and staff training and awareness.

Therefore our sustainability roadmap explores opportunities with our plant and fleet across:

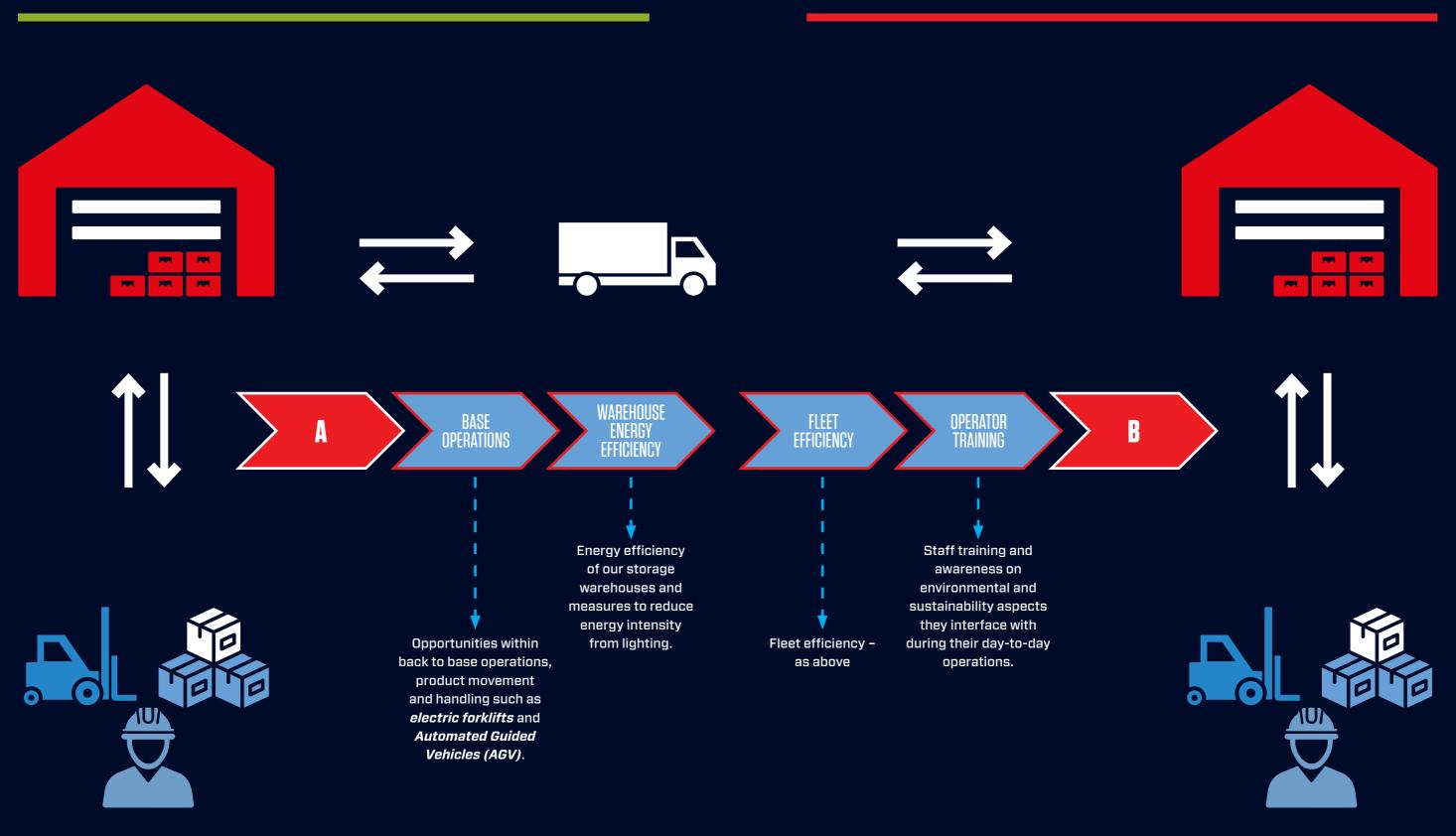
- Holistic Process Approach
- Electric Vehicle Technology and Hydrogen Technology
- Innovation and practical solutions.





### PLANT AND VEHICLE TECHNOLOGY -HOLISTIC PROCESS APPROACH

Ensuring we maintain a holistic approach for sustainable improvements across the whole process system. Transporting goods requires handling, storage and operators to conduct the process. Our aim is to optimise each of these aspects whether that be from a perspective of safety, efficiency and time.





#### PEOPLE FIRST · PARTNERSHIPS FIRST · PLANET FIRST

### PLANT AND VEHICLE TECHNOLOGY -BATTERY ELECTRIC VEHICLES AND HYDROGEN

Our business operations rely on our plant and vehicle assets being able to provide heavy haulage and civil construction activities – 24/7 365 days. As such, we recognise that at this time, whilst advancement in technology towards all electric trucks and plant is continuously progressing, the current market offerings do not meet our business requirements.

However, whilst future deployment of electric and or hydrogen powered trucks forms part of the The Malcolm Group long term sustainability roadmap including current infrastructure review, we have explored areas of our business in which current all electric vehicles can potentially support. This includes:

- Localised freight routes using electric rigid vehicles
- All electric vans for internal movements

Utilising electric vehicles as part of detailed trials is crucial in ensuring we can assess they meet our operational and sustainable requirements. With an all electric and hydrogen based landscape for plant and vehicles in the future , we are currently reviewing our energy infrastructure across our portfolio. As part of this, we will be phasing the installation of additional EV charge points across our sites and depots.

### CASE 05 Battery Electric Trucks and Vans

In 2023, we trialled two fully electric trucks, a Volvo and a Scania, both weighing 18 tonnes, at our Newhouse facility. Thanks to government legislation, each truck could accommodate an additional 2 tonnes to offset the load loss due to the batteries' added weight. These vehicles were extensively utilised for local runs, mirroring the delivery routines of their diesel counterparts.

With an approximate range of 130 miles on a full charge, contingent upon load and road conditions, these vehicles fell slightly short of our operational requirements. Nonetheless, they demonstrated an impressive 100% reduction in  $CO_2e$  emissions, aligning with our commitment to achieving net-zero. These electric units proved to be exceptionally well-suited for short-range multi-drop operations.

In 2024, we welcomed an all-electric van within our maintenance fleet as part of a year long trial. Used to transport goods between local Malcolm





facilities, this electric van is being assessed on its suitability to perform within our business operations.

Post trial, a review will be undertaken on performance throughout the trial which will help inform future decisions in this field.

### PLANT AND VEHICLE TECHNOLOGY -INNOVATION AND PRACTICAL SOLUTIONS

At The Malcolm Group, we have used our expertise to drive innovation within our business operations. Continually adapting and improving our service offering has ensured we have built successful partnerships within our industry.

Through innovation of our fleet services we have been able to deliver added benefits to our customers across sustainability, efficiency and time.

We are able to innovate due to a combination of our committed workforce and collaborative approach with customers and the wider industry. As part of our sustainability roadmap, remaining innovative across not only our fleet but our wider technological systems is key in meeting our sustainability targets.

case study 06	50' Container
------------------	---------------

The Malcolm Group have continually pushed the boundaries in exploring innovative multimodal opportunities. The introduction of *our 50*'





The Malcolm Group, in collaboration with SDC trailers, pioneered the development of the first LST skeletal trailer in 2014.

Since then, through participation in the UK Government's LST trial we have spearheaded their use as part of our service offerings.



**container demonstrates this**. The 50' container accommodates 4 more pallets of goods than the standard 45' container. For goods which often 'cube out before weighing out' the 50' container allows more goods to be transported with less carbon – with an average of 13%  $CO_2e$  reduction per pallet moved.



## ENERGY EFFICIENCY

With over 6 million square feet of warehousing and office space across the UK, we place great emphasis on the energy efficiency of our assets.

Our approach follows the energy hierarchy at all times: **Be lean, be clean, be green**.

We have taken proactive steps in order to target high energy usage across our estate. We have implemented a phased lighting replacement programme across our portfolio intended to:

- Replace lighting with LEDs
- Streamline lighting to provide optimum working environment
- Install lighting sensors

case study 08

• Introduce natural daylight to facilities to offset lighting requirements

#### Planned Preventative Maintenance

Our in house maintenance department have established a Planned Preventative Maintenance regime across our owned estate to ensure facilities and equipment have targeted maintenance to avoid unnecessary replacements and efficient running. Lifecycle analysis forms part of this regime, ensuring products, equipment and services are chosen with a full understanding of lifespan, replacement availability and life costing.



#### A Renewables Future

Whilst our current efforts are ensuring we reduce the energy we are currently using across our estate, we recognise that as electrification of items such as vehicles becomes more widespread, energy demand will likely increase. As such, and as part of our environmental sustainability roadmap, we will be undertaking a detailed study on renewable options for our estate, such as Photovoltaic (PV) panels, along with exploring the rise in Energy as a Service business models.

In 2023, we entered into a renewable energy tariff with our supplier across our portfolio.

Roof Light Installation

As part of our energy management programme across our estate, we are phasing the introduction of roof lights within selected warehouses.

Introducing roof lights allows natural daylight to provide the adequate lighting level for safe work. For times with less daylight or additional lighting is required, LED lights combined with sensors are used.



The introduction of roof lights at our Crick warehouse has already shown a 50% reduction in energy usage.

## MATERIALS AND WASTE

We are market leaders in resource management. Through our investment in services, we aim to close the loop – by providing a one stop shop of specialist civil engineering services, recycled aggregate supply and waste management services.

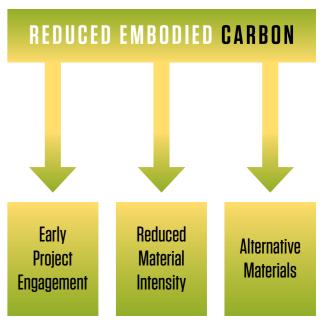
We recognise our potential to support the industry in achieving wider sustainability benefits through reduction in Embodied Carbon, Waste and facilitating a Circular Economy.



Our approach to reduce embodied carbon includes:

- Working closely with our clients at preconstruction to identify opportunities at the earliest possible time.
- Assessing opportunities for reduced material usage and alternative specifications, including concrete, working closely alongside civil and structural engineers.
- Promoting, where feasible and practical, materials with lower embodied carbon impacts. This includes use of materials with EPDs, goods procured locally and using our expertise within aggregates to promote use of recycled materials.





### MATERIALS AND WASTE -**CIRCULAR ECONOMY**

We have long advocated for an industry shift from the typical linear economy of 'take-make-waste' to a circular economy of 'reduce-reuse-recycle-recover'.

We recognise our service offerings of waste processing and recycling places a duty upon us to engage, promote and seek wider adoption of good waste management across the construction industry.

STUDY

Waste Management

In addition to being one of the leading operators of landfill services in Scotland, we also own and operate a fully licensed waste management facility, strategically located at our South Street depot in Glasgow to service our customer needs. The South Street facility handles all of our skip waste and includes a state-of-the-art CRS recycling system & kinetic flip flow system. This new system is capable of handling over 1500 tons of waste per week, which has enabled Malcolm Construction to recycle more products than ever before, at a higher guality and achieving higher guantities and landfill diversion rates. We have continued to invest in our waste facility ensuring we can deliver optimum recycling and recovery processes for various waste streams. We recognise the importance of good waste management across the industry which maximises the quality of recyclate. As such, we actively work alongside our customers to promote waste avoidance and reduction within their businesses as well as providing advice on storage of waste materials. We strive for zero waste to landfill and will continue to invest in equipment, refine working practices and commit to working alongside our peers to drive change within the sector.





Washplant at

Loanhead Quarry

In 2011, Malcolm Construction became one of the first companies in the country to install an aggregate wash plant at our Shewalton depot in Irvine. This facility allowed for waste soil material, ordinarily destined for landfill, to be processed into a full range of recycled sands, gravels and filter press silt cake.

In late 2022, we added to the Shewalton site when we officially opened our new larger wash plant at our Loanhead Quarry. Partnering with wet-industry processing specialists CDE, the new wash plant can accept construction and demolition waste at a rate of 150 tonnes/hr. The plant has a full water recovery and treatment system that recycles the water harvested from rainfall that is used in the soil washing process. The plant reuses over 95% of water in its process, requiring minimal water top up. Upon commissioning of the plant, we held an open day for industry peers to attend our quarry and see first hand the process and materials produced. Our aim is to drive wider adoption of recycled aggregates across Scotland and the UK from reputable and trustworthy sources. We continue to work alongside our industry peers to drive this change.

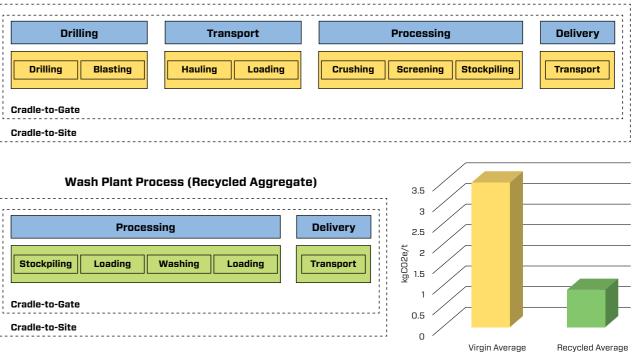
## STUDY

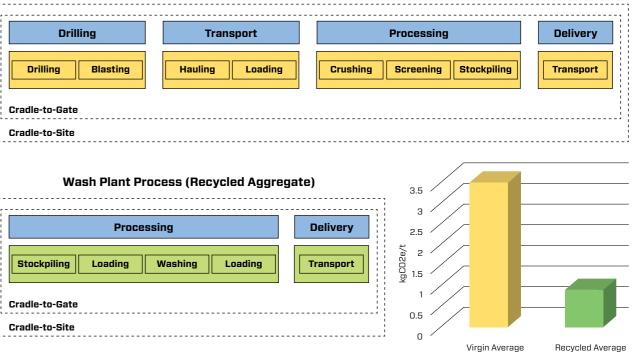
**Aggregate Emission** Calculations

In 2023, we commissioned a comprehensive carbon emissions footprint calculation for our aggregates, covering both our virgin and recycled materials. In accordance with BSI PAS 2050:2011 'Specification for the assessment of the life cycle greenhouse gas emissions of goods and



#### Quarry Process (Virgin Aggregate)







services' methodology, the emissions footprint across the process lifecycle 'Cradle-to-Site' for both product types was undertaken.

This exercise not only demonstrates the potential carbon emission savings of using recycled aggregates – 74% reduction vs quarried but provides our customers with tangible information to support their sustainability journeys.

NON

Construction and demolition material produced from sites across Scotland which can be recycled.

Recycled aggregates used within new construction projects.



Construction and demolition material processed at our quarry into top quality recycled aggregates.

Processed recycled aggregate products for distribution.

MADCOLM

## INDUSTRY COLLABORATION

We recognise that collaborating across industry, customers, value chain, our people and the public maximises our opportunities to continually improve our service as well as our sustainable credentials.

As we progress towards a net zero future, we recognise that many actors and stakeholders need to come together to make changes practical and possible. As such, we are committed to using our industry experience to collaborate both sectorial and cross sectorial to ensure our actions not only have beneficial consequence for our business but others.

As part of our environmental sustainability roadmap, we are committed to:

- Working alongside our customers to continue to provide the service expected.
- Work side by side with our value chain members, supporting their transition to net zero as well as learning from them on how we can adapt.
- Continue to operate closely with our key vehicle original equipment manufactures (OEMs) to ensure we track technological advances and transition accordingly.
- Invest in our people through training to ensure skills are maintained and transitioned over time.
- Be a leader in our industry, collaborating with industry bodies, competitors and government to drive change across the sector.

#### HGV Decarbonisation Pathway for Scotland

Zero Emission Truck Taskforce



 $\Theta$ 



The Malcolm Group were proud participants in the Zero Emission Truck Taskforce (ZETT) which over 18 months alongside fellow industry partners, energy providers and the Scottish Government, worked to create the HGV Decarbonisation Pathway for Scotland which was published by Transport Scotland in March 2024.





In 2017, City Legacy Homes, a consortium consisting of CCG, Cruden, Mctaggart & Mickel and The Malcolm Group, received the prestigious *Queen's Award for Enterprise in Sustainable Development*.

City Legacy Homes successfully delivered the Athletes Village in Glasgow east end as part of the 2014 Commonwealth Games.

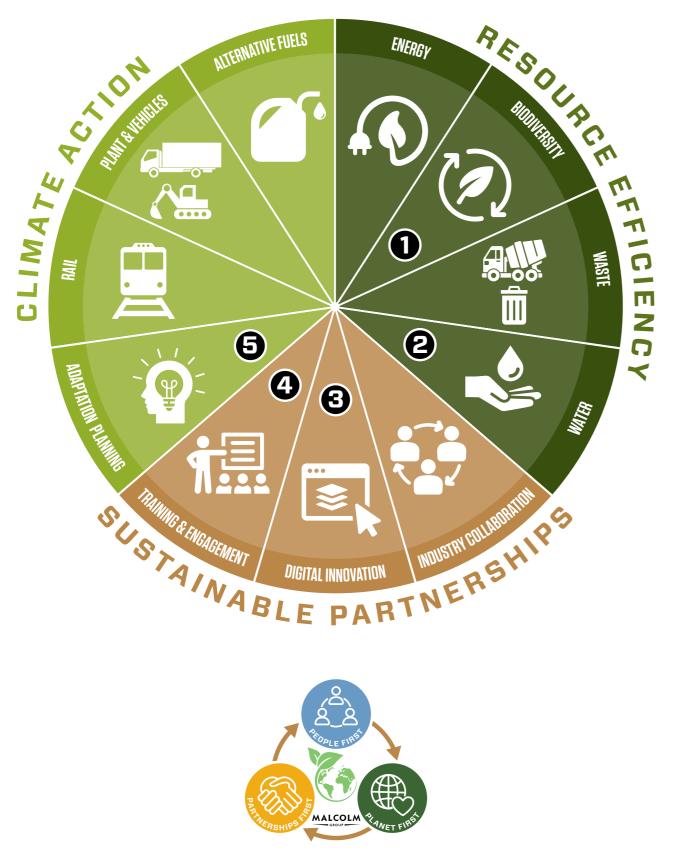


# SUPPORTING BRITISH INDUSTRY. Reducing environmental impact.

Malcolm Rail is helping UK businesses meet their customers' delivery expectations and ESG targets



## **REMAINING PRIORITIES**



**PRACTICAL SOLUTIONS · SUSTAINABLE FUTURE** 



2

Θ

4

6



Water



We place great emphasis on reducing resources across our operations, including water. We have established rainwater harvesting methods across a number of our warehouses and operational facilities including within our wash plants which treat and reuses water throughout operation.



ENGAGEMENT

H

Ŧ

ADAPTATION PLANNING

WATER

**Digital Innovation** We have established an internal Digital Technology Working Group which brings together several key internal stakeholders from across our group and operations. As part of this group, advancement on technology is discussed and tracked across IT systems, warehouse management and route planning. With the aim of ensuring optimum efficiency within operations, across time, delivery and cost this has direct benefits with regards to carbon and waste reductions.



We continue to provide our HGV and tipper drivers with driver efficiency training to drive down fuel costs and associated carbon.

#### Adaptation Planning

We recognise the need, as a business, to understand the impacts of climate change and ensure adaptability of our activities.

Adaptation forms part of our wider building and property management, with impacts of climate change integral to decision making.



A diverse and prosperous biodiversity is essential for humanity and our progress towards a sustainable future. We are currently exploring how best we can utilise our land ownership across our portfolio to enhance biodiversity in accordance with local authority biodiversity action plans (LBAPs).

Our biggest asset is our employees. We recognise the importance of collectively moving towards a sustainable future. Therefore we have established an internal campaign to raise awareness of sustainability aspects across our business and steps our employees can take to

### PRACTICAL SOLUTIONS · SUSTAINABLE FUTURE

LCOLA

VET F



Malcolm Group Head Office

Brookfield House, 2 Burnbrae Drive, Linwood, Renfrewshire PA3 3BU Tel: 01505 324 321

www.malcolmgroup.co.uk



