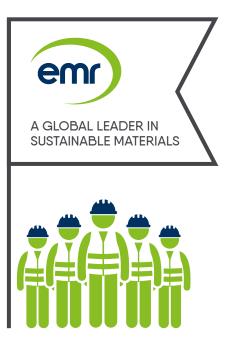
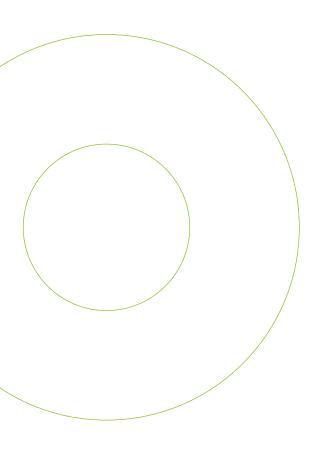
METAL RECYCLING REIMAGINED

OUR DECADE OF ACTION









CONTENTS

O3. INTRODUCTION

04. THE WHY

05. THE HOW

06. ENERGY PRODUCTIVITY

O7. RENEWABLE ELECTRICITY

08. MOVEMENT OF PEOPLE

09. MATERIAL HANDLING AND MOVEMENT

INTRODUCTION

I'M DELIGHTED TO LAUNCH OUR DECADE OF ACTION ON SUSTAINABILITY. IT SETS OUT OUR AMBITION TO BE CARBON NEUTRAL BY 2040 AND PROTECT NATURAL RESOURCES.

OUR VISION

TO BE A GLOBAL LEADER IN SUSTAINABLE MATERIALS

Using recycled materials to create new products has a huge environmental impact, saving between 50% and 90% of the energy and water consumed to create the virgin equivalent. We recycle about 10 million tonnes of metals and plastics every year, resulting in savings of around 10 million tonnes of CO_2 .

However, our products don't come without some environmental cost. Imagine being able to say that we create these sustainable materials with a net-zero carbon footprint. To achieve this, we need to go on a journey that explores new technologies and ways of working to design carbon out of our business.

OUR SUSTAINABILITY GOALS

BE THE PARTNER OF CHOICE FOR MATERIALS MANAGEMENT IN A CIRCULAR ECONOMY

We will invest in the best available technology to minimise the environmental impacts of our recycling. We will work with our customers to create the highest quality sustainable materials and deliver industry leading recycling rates to minimise the amount of waste that goes to landfill.

BE CARBON NET ZERO BY 2040

We have set out an ambitious, practical roadmap to make a significant impact on our carbon footprint by 2030, with a goal of a net-zero carbon footprint by 2040. We will do this by measuring our scope 1, 2 & 3 emissions and setting sensible but challenging targets. Where possible we have aligned ourselves with internationally recognised programmes, so our efforts have clear direction and can be externally validated.

OUR APPROACH

It's easy to be blinded by the science of climate change as it's a profoundly complex issue. We want everyone to 'get it', so we have used a simple framework designed by The Climate Group. These initiatives are a pragmatic approach to creating impactful, time-bound change, supported by the best science.

The EMR Way is that WE CARE, and WE DO, and we need to DO this in the right way. I have been inspired by businesses that are ahead of us on this journey. They do not see the environment and economic performance as a trade-off. With persistence and creativity, they have found ways of improving both. In fact, they have found them to be complementary. So, as we set off on this journey, there can be no compromise on the economic performance of the business – to do so is the path to mediocrity.

WE MUST BE AT OUR COMMERCIAL AND ECONOMIC BEST TO CONTINUE TO INVEST IN OUR FUTURE.

Our Decade of Action marks the start of an exciting journey for EMR, and I look forward to sharing our progress as we work towards our ambitious milestones.



Chris Sheppard EMR Group CEO



THE WHY



THE HUMAN AND ECONOMIC COSTS OF THE COVID-19 PANDEMIC HAVE BEEN TRAGICALLY HIGH. IT HAS FORCED US TO PAUSE AND THINK ABOUT THE RESILIENCE OF OUR NATIONS AND BUSINESSES.

WE UNDERESTIMATED THIS RISK AND WERE GLOBALLY UNDERPREPARED. IT WAS UNEXPECTED – A BLACK SWAN EVENT.

CLIMATE CHANGE IS MUCH MORE CERTAIN, AND ECONOMISTS AGREE THAT THE IMPACT WILL BE MUCH MORE PROFOUND, IT'S JUST UNFOLDING IN SLOW MOTION BEFORE OUR EYES.

COVID-19 has also given us insight into the scale of the climate change challenge. The International Energy Agency is predicting an 8% drop in $\rm CO_2$ emissions in 2020. If this was repeated every year for a decade it would be roughly in line with the pathway to limiting global temperature increase since pre-industrial levels to below the 2°C target set out in the Paris Agreement 1 .

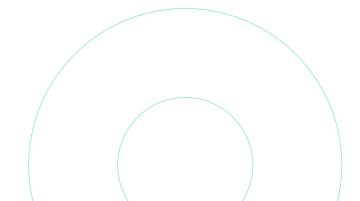
Adapting business models to climate change will take time, but it is critically important to start and get on the learning curve or we risk falling permanently behind. Environmental disruption is happening and accelerating. This change is putting business reputation, customer loyalty and employee trust at risk. It is also clear that governments, lenders and investors will increasingly connect stimulus measures, funding and investment to cleaner and greener business models.

If we are a company that CARES, we must play our part in support of these long-term global climate change goals. Think of this as our legacy for the next generation.

We want to be able to say that we worked hard to show leadership in the face of a such a global challenge.



¹ The Paris Agreement is a landmark environmental accord that was adopted by nearly every nation on Earth in 2015 to address climate change and its negative impacts. The deal aims to substantially reduce global greenhouse gas emissions to limit the global temperature increase in this century to 2°C above pre-industrial levels, while pursuing means to limit the increase to 1.5°C.



THE HOW

We have built our sustainability strategy around four programmes: ENERGY PRODUCTIVITY, RENEWABLE ELECTRICITY, MOVEMENT OF PEOPLE and MATERIAL HANDLING & MOVEMENT.

Over the next decade, we will take significant action in these areas to reduce the carbon intensity of our business, on our journey to be carbon net-zero by 2040.

		ENERGY PRODUCTIVITY	RENEWABLE ELECTRICITY	MOVEMENT OF PEOPLE	MATERIAL HANDLING & MOVEMENT
	°C FRAMEWORK	EP 100 THE CLIMATE GROUP	RE 100 THE CLIMATE GROUP SCOPE	EV 100 by THE 'CLIMATE GROUP	
	OUR COMMITMENT	We're introducing a group-wide Energy Management System for improved management and control over our energy usage for maximum energy efficiency.	Through biomass, biogas, geothermal, solar, hydro or wind power, we will implement options for group-wide renewable electricity procurement or self-generation on each of our sites.	Over the next decade, we will ensure that: Our fleet of smaller company vehicles - either owned or leased are powered by electric/hybrid plugin or hydrogen fuel cell technology.	Over the next decade, we will ensure that: Our fixed and mobile plant is converted to electrical power, hybrid, fuel-cell and/or biofuel where feasible, proactively working with our suppliers to help bring these technologies to our business.
	2030 OUTCOMES	Energy Management System implemented at 100% of sites. 10% improvement in total kWh/ Tonnes Handled from 2020 baseline.	Renewable electricity purchases at 100% of total use.	100% of our cars and light commercial vehicles transitioned to electric vehicles. 50% of small heavy goods vehicles transitioned to electric vehicles.	20% of new material handling equipment and heavy goods vehicles powered by electrical, hybrid, fuel cell and/or bio-fuel sources.

ENERGY PRODUCTIVITY

RESEARCH FROM THE INTERNATIONAL ENERGY AGENCY, SUGGESTS IMPROVEMENTS IN ENERGY EFFICIENCY CAN DELIVER OVER 40% OF THE GREENHOUSE GAS EMISSIONS REDUCTION REQUIRED TO MEET THE < 2°C PARIS TARGET.

Electricity and fuel are significant drivers of our operating costs. The lens of energy productivity allows us to look at the business in a different way, to challenge established ways of working. Technology and energy markets are also changing at an unprecedented pace. Innovation is essential to our future competitiveness. By creatively looking at our energy efficiency, we can have a big impact on our costs at same time as reducing our greenhouse gas emissions.

Through EP100 we have committed to implement an Energy Management System across the business. The bulk of our energy use is consumed in the physical handling, processing and movement of recycled materials, so energy productivity is limited by physics. However, we have committed to delivering a minimum 10% improvement in group energy use per tonne of material handled by 2030.

OUR DECADE OF ACTION:

- Baseline our total energy consumption including electrical energy, diesel, gas oil, petroleum and LPG
- Develop an Energy Management System for roll-out across the business
- Introduce energy efficiency targets on a site-by-site basis
- Perform regular energy efficiency audits
- Provide group-wide staff training in energy efficiency
- Replace legacy equipment with more energy efficient alternatives
- Educate our colleagues in energy efficiency and lean techniques to do more with less



2023

Energy Management System implemented at 30% of sites

Demonstrable improvement in total kWh/Tonnes Handled from 2020 baseline

2030

Energy Management
System implemented
at 100% of sites
10% improvement in
total kWh/Tonnes
Handled from
2020 baseline

2026

Energy Management System implemented at 60% of sites 5% improvement in total kWh/Tonnes Handled from

2020 baseline



RENEWABLE ELECTRICITY

PRIVATE SECTOR ELECTRICITY USAGE ACCOUNTS FOR TWO-THIRDS OF THE WORLD'S ELECTRICITY DEMAND. BUSINESSES ACROSS THE GLOBE CAN INFLUENCE THE UPTAKE OF RENEWABLE ENERGY TO CONTAIN GLOBAL TEMPERATURE RISE IN LINE WITH THE PARIS AGREEMENT.

Renewable energy is available across the territories in which the EMR Group operates. Switching our sites to run on renewable power is an ambitious, but achievable way to become net carbon neutral across scope 2 emissions.

Through RE100 we have committed to power our operations with 100% renewable electricity by 2030.

Under the RE100 criteria, we are committed to sourcing 100% renewable electricity through a combination of producing renewable energy from our own facilities and procurement from third party suppliers.

This electricity will be generated from sources, including biomass, geothermal, solar, water and wind.

OUR DECADE OF ACTION:

- Influence renewable electricity procurement from third party suppliers
- Implement our own renewable electricity generation technology where feasible
- Where not feasible, work with suppliers to purchase electricity from renewable sources
- Where possible commit to sourcing 'new renewable electricity' to support 'greening of the grid'
- Continually review our strategy to cater for changing economic and technological circumstances



2023

Renewable electricity purchases at 30% total use

2030

Renewable electricity purchases at 100% of total use 2026

Renewable electricity purchases at 60% of total use



MOVEMENT OF PEOPLE



WE ARE CURRENTLY WITNESSING THE DEMISE OF THE INTERNAL COMBUSTION ENGINE FOR PERSONAL TRAVEL AND COVID-19 HAS ACCELERATED THE DIGITALISATION OF HOW WE WORK. GOVERNMENTS ALL OVER THE WORLD ARE MOBILISING THE TRANSITION TO ELECTRIC VEHICLES. ELECTRIC VEHICLES ARE CHEAPER TO RUN AND MAINTAIN AND IMPROVE AIR QUALITY.

Electrification of our vehicles offers a further opportunity to reduce the carbon footprint of our business and save money. Technology solutions for heavy goods vehicles are still some way off, but we feel confident in addressing personal transport and smaller commercial vehicles within 10 years.

Through EV100 we have committed to switch 100% of our fleet cars, 100% of our light commercial vehicles (< 3.5 tonnes) and 50% of our small heavy goods vehicles (< 7.5 tonnes) to 100% battery electric, plug-in extended-range hybrid or hydrogen vehicles by 2030.

OUR DECADE OF ACTION:

- Review the transport needs of the business
- Embrace remote working and digital methods of communication
- Develop a 'group-wide' sustainable transport policy
- Review current vehicle procurement and leasing arrangements arrangements to start our transition to low carbon vehicles
- Roll-out group-wide charging infrastructure



2023

30% of our cars and light commercial vehicles transitioned to electric vehicles

10% of small heavy goods vehicles transitioned to electric vehicles

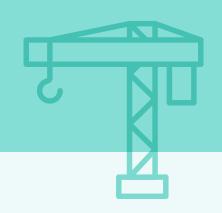
2030

100% of our cars
and light commercial
vehicles transitioned to
electric vehicles
50% of small heavy
goods vehicles
transitioned to
electric
vehicles

2026

60% of our cars and light commercial vehicles transitioned to electric vehicles 30% of small heavy goods vehicles transitioned to electric vehicles

MATERIAL HANDLING & MOVEMENT



HEAVY INDUSTRIES LIKE OURS STILL FACE
TECHNOLOGY CHALLENGES WHEN IT COMES TO
MOBILE MATERIAL HANDLING EQUIPMENT, HEAVY
GOODS VEHICLES AND SHIPPING. WHILE WE NEED
TO SET THIS IN THE CONTEXT OF OUR EMISSIONS
SAVINGS RELATIVE TO VIRGIN MATERIALS, THERE'S
STILL HUGE SCOPE TO IMPROVE. TECHNOLOGY
IS LAGGING IN THIS AREA BUT CHANGE IS ONLY A
MATTER OF TIME.

It is already clear that for certain applications electrically powered mobile plant is cheaper to operate, lasts longer and has fewer maintenance issues. Unfortunately, the current applications of this equipment are limited. Existing technology, battery capacity and access to power are the main constraints, however there have been significant advances in fuel efficiency with the deployment of hybrid and energy recovery technologies. We have also seen economic benefits in mobilising electric technology using portable generators. While they still use fuel, they have the potential to be plugged in for certain applications.

Heavy goods vehicles and shipping are a global challenge, so we are not alone in our ambition to de-carbonise this aspect of our business. Short to medium term solutions are likely to come in the form of bio and synthetic fuels. Longer term perhaps this is battery electric or hydrogen.

We acknowledge this is a longer-term objective and one that requires considerable technological development. We will actively engage with our equipment suppliers to seek appropriate ways in which we can introduce alternative technologies into our material handling and material movements.

OUR DECADE OF ACTION:

- Review the plant and equipment needs of the business
- For all mobile plant investments, evaluate the electric or low carbon alternatives
- Work with suppliers to advance technologically feasible low/zero carbon options for equipment replacement
- Review current heavy goods vehicle procurement and leasing arrangements
- Work with suppliers of freight services to advance low carbon freight throughout the supply chain
- Educate our colleagues in energy efficiency and lean techniques to do more with less



2023

5% of new material handling equipment and heavy goods vehicles to be powered by electrical, hybrid, fuel cell and/or bio-fuel sources.

2030

20% of new material handling equipment and heavy goods vehicles to be powered by electrical, hybrid, fuel cell and/or bio-fuel sources.

2026

10% of new material handling equipment and heavy goods vehicles to be powered by electrical, hybrid, fuel cell and/or bio-fuel sources.

EMR IS A GLOBAL LEADER IN SUSTAINABLE MATERIALS, WITH PHYSICAL OPERATIONS IN THE UK, USA, GERMANY AND THE NETHERLANDS. OUR CORE BUSINESS IS THE RECYCLING OF METALS AND PLASTICS FROM A RANGE OF PUBLIC, COMMERCIAL AND INDUSTRIAL WASTE STREAMS.

SOURCES INCLUDE END OF LIFE VEHICLES, CONSUMER PRODUCTS, INDUSTRY, CONSTRUCTION AND DEMOLITION. OUR RECYCLING ACTIVITIES GENERATE AROUND 10 MILLION TONNES OF SUSTAINABLE METALS AND PLASTICS A YEAR, SAVING OVER 10 MILLION TONNES OF CO₂ COMPARED TO USING VIRGIN ALTERNATIVES.



Tel: +44 (0) 1925 715400 **Email:** ukinfo@emrgroup.com

Web: emrgroup.com



@EMRmetal



facebook.com/EMRMetalRecycling



in linkedin.com/company/emr



