

Sustainability Report

2024



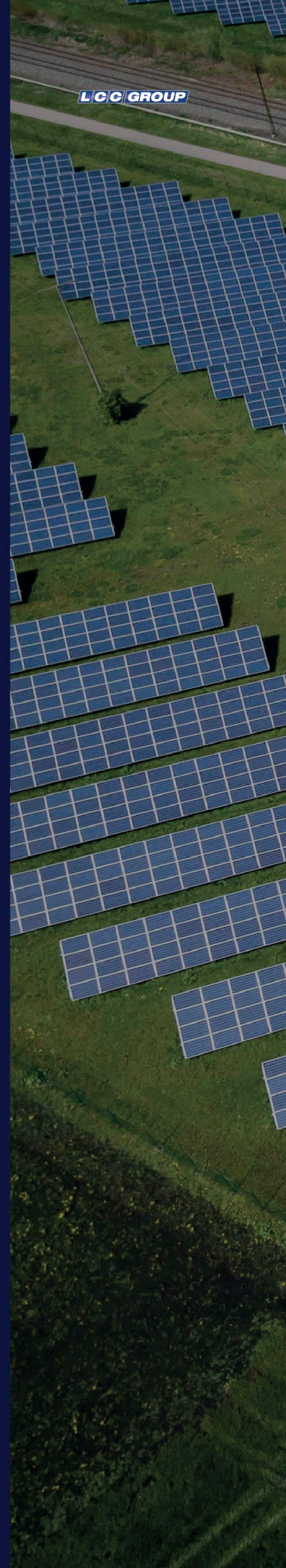
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The Change >

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Glossary

Animal by-products (ABP): Animal by-products (ABPs) are materials of animal origin that people do not consume. ABPs include among others: All parts of an animal slaughtered for human consumption, that are not edible or not placed on the market as food for example the skin, bones, horn and hooves, blood, fat and offal.

Bovine Spongiform Encephalopathy (BSE): BSE, more commonly known as Mad Cow Disease, is a progressive neurological disorder of cattle that results from infection by an unusual transmissible agent called a prion.

Carbon Nanotubes (CNTs): Carbon nanotubes (CNTs) are cylindrical molecules that consist of rolled-up sheets of single-layer carbon atoms (graphene). They can be single-walled with a diameter of less than 1 nanometer (nm) or multi-walled, consisting of several concentrically interlinked nanotubes, with diameters reaching more than 100 nm. They can be defined as a graphite sheet rolled up into a nanoscale tube.

Commercial and Industrial (C&I): “Commercial” refers to any business done with the sole motive of gaining a profit. “Industrial” refers to any business dealing with manufacturing goods.

Department of Agriculture, Environmental and Rural Affairs (DAERA): DAERA is a government department in the Northern Ireland Executive, the devolved administration for Northern Ireland. The department has responsibility for food, farming, environmental, fisheries, forestry and sustainability policy, and the development of the rural sector in Northern Ireland.

Environmental Management System (EMS): An EMS is “a system which integrates policy, procedures and processes for training of personnel, monitoring, summarizing, and reporting of specialised environmental performance information to internal and external stakeholders of a firm.

Fatty Acid Methyl Ester (FAME): Fatty Acid Methyl Esters (FAME) are a type of fatty acid ester that are derived by transesterification of fats with methanol. They are primarily used to produce biodiesel.

Fuels for Ireland: Fuels for Ireland, formerly known as the Irish Petroleum Industry Association, brings together companies involved in the importation, distribution and marketing of petroleum products, low carbon liquid fuels and other means to power transport, heating, agriculture, aviation and industry in Ireland.

Graphene: Graphene is an allotrope of carbon consisting of a single layer of atoms arranged in a hexagonal lattice nanostructure. Graphene is the thinnest and lightest compound and is the building-block of Graphite.

Greenhouse Gas (GHG): Greenhouse Gases are those gases that trap heat in the Earth’s atmosphere, thereby raising the surface temperature of the planet.

Guarantee of Origin (GO): A Guarantee of Origin is an energy certificate defined in article 19 of the European Directive 2018/2001/EC. A GO certifies attributes of electricity, gas, heating and cooling, especially coming from renewable sources and provides information to energy customers on the source of their energy.

Hydrotreated Vegetable Oil (HVO): HVO is a synthetic diesel that has been made from a feedstock of renewable vegetable oil, animal oil or fat.

Isostatic Graphite: Isostatic Graphite refers to graphite materials produced by isostatic pressing. Isostatic graphite is a type of graphite with an ultra-fine grain that is used for specific purposes where the mechanical properties found in other fine-grained graphite are insufficient. Among its other desirable properties, isostatic graphite is corrosion resistant.

Natural Graphite: Graphite is a crystalline form of the element carbon and consists of stacked layers of graphene. Natural graphite is graphite that is formed by nature and is the most stable form of carbon under standard conditions. It is an important industrial mineral which finds applications in almost every facet of manufacturing including electronics, atomic energy, hot metal processing, friction, coatings, aerospace, powder metallurgy and more.

Power Purchase Agreements (PPAs): A PPA is a long-term contract between an electricity generator and a customer, usually a utility, government or company. PPAs may last anywhere between 5 and 20 years, during which time the power purchaser buys energy at a pre-negotiated price. Such agreements play a key role in the financing of independently owned electricity generators, especially producers of renewable energy like solar farms or wind farms.

Renewable Energy Guarantee of Origin (REGO): REGOs are certificates which demonstrate that electricity has been generated from renewable sources. REGOs scheme provides transparency to consumers about the proportion of electricity that suppliers source from renewable electricity. One REGO certificate is issued per megawatt hour (MWh) of eligible renewable output to generators of renewable electricity.

Run of Mine (ROM): Run of Mine or “ROM” coal is the coal extracted from the colliery and which has not undergone any processing or resizing to suit the requirement of the user. ROM coal is a coal comprising of all sizes which comes out of the mine without any crushing or screening.

Silicon Metals: Silicon metals are grey and lustrous semi-conductive metals that are used to manufacture products such as steel, solar cells and microchips.

Single Electricity Market (SEM): The Single Electricity Market (SEM) is the wholesale electricity market operating in Ireland and Northern Ireland.

Single Electricity Market Operator (SEMO): The Single Electricity Market Operator (SEMO) facilitates the continuous operation and administration of the Single Electricity Market.

Streamlined Energy and Carbon Reporting Regulation (SECR): The SECR is a body that mandates large businesses in the UK to annually report on their energy and carbon emissions as well as any efficiency measures.

Steam Coal: Coal burned, primarily in boilers, to generate steam for the production of electricity or for process heating purposes, or used as a direct source of process heat. Steam coal, also known as thermal coal, refers to all coal not classified as coking (or metallurgical) coal.

Sustainable Aviation Fuel (SAF): SAF is a cleaner alternative to power aircraft. SAF is produced using renewable feedstocks such as waste oils and agricultural residues. SAF is capable of reducing aviation carbon dioxide emissions by up to 80% in comparison to using fossil-based fuels.

Sustainable Energy Authority of Ireland (SEAI): The SEAI is an Irish governmental body established to promote and aid in the development of sustainable energy in Ireland. The main objectives of the SEAI as a statutory body are to ensure the implementation and adoption of energy efficiency across all Irish sectors, as well as the development of new technology for use with renewable energy sources and the decarbonisation of the Irish energy supply.

Task Force on Climate Related Finance Disclosures (TCFD): The TCFD provides information to investors about what companies are doing to mitigate the risks of climate change, as well as being transparent about the way in which they are governed. It was established in December 2015 by the G20 and the Financial Stability Board (FSB) and is chaired by Michael Bloomberg. It consists of governance, strategy, risk management, metrics and targets. It will become mandatory for companies to report on these disclosures by 2025 in the UK, although some companies may report earlier.

Used Cooking Oil (UCO): UCOS are oils and fats that have been used for cooking or frying in the food processing industry, restaurants, fast foods and at consumer level, in households.

Ventilated Abatement of Methane (VAM): Ventilated Abatement of Methane (VAM) refers to the process of reducing the quantity of methane that is released into the atmosphere during coal mining operations. VAM technologies have been developed to capture the methane that is present in the ventilation air and convert it into a usable energy source. This not only reduces the amount of greenhouse gases released into the atmosphere but also provides another practical use. The captured methane can be used to power equipment or generate electricity, reducing the reliance on fossil fuels and lowering the carbon footprint of the mining industry.

Introduction by Our Sustainability Partner, The Change

This report was produced by The Change.

The Change is an impact-focused company whose goal is to empower large firms such as LCC Group to innovate, decarbonise and reduce environmental impacts across all operations. The Change and LCC Group have been working together since 2022. The Change has supported LCC Group on its journey towards a sustainable future. At The Change, we believe in embodying “the change we want to see in the world” and this report serves as a testament to LCC Group’s commitment to this message.

The Change see it as our mission to bring an environmental focus to the world’s most likely polluters and to support them in transforming their carbon footprint.

We hope this report is useful in your assessment of LCC Group’s sustainability and carbon reduction plan as we support the group on its way to carbon neutrality and on through that goal to a net zero future.



Signed Andrew Cuthbert



DID YOU KNOW?

The materials used in solar cells are derived from petroleum coke, a form of carbon. Carbon is found in many unexpected places, including within the renewable energy industry.

“

A sustainable business is resource efficient, respects the environment and is a good neighbour.

”

Phil Harding

LCC Group: A Summary of our Decarbonisation Plan

Past & Present:

The story of LCC Group emerges as a testament to adaptability and foresight. Michael Loughran Snr. began trading as Lissan Coal Company in 1980. The company embarked on its journey as a stalwart of the coal industry, catering initially to the domestic coal needs of Northern Ireland. The company then progressed to commercial and industrial uses of steam coal. The primary focus in the beginning was thermal coal, the company is now undergoing a transition towards a 100% renewable future.

Current Operations:

Today, LCC Group has transcended its origins in coal to become a multifaceted organisation spanning four main sectors: solid carbon, gas, electricity, and liquid fuels. The group's diversified portfolio includes a range of businesses, including LCC Coal, LCC Oil, Go Power, and several others. While coal processing remains a significant aspect of LCC Group's operations, the company has evolved beyond its thermal coal-centric origins to embrace a broader spectrum of energy and carbon material solutions.

Alongside its coal operations, LCC Group has made significant strides in the liquid fuels sector, distributing over 1 billion litres of liquid fuel throughout Ireland and the United Kingdom. Additionally, the company has emerged as a prominent provider of natural gas, catering to the energy needs of residential and commercial clients across Ireland.

LCC Group's diversification extends to the electricity sector, where its subsidiary, GO Power, stands as a leading supplier to the industrial and commercial sectors in Ireland. Moreover, the group's oil division, established in 1996, has expanded the range of fuels available to customers, including petrol, diesel and aviation fuel, thus solidifying its presence in the liquid fuels market.

LCC Group has identified renewable alternatives to all elements of its traditional portfolio of products and services. LCC Group are committed to a transition to carbon neutrality by 2036 and to become a net zero company by 2046 through the adoption of renewables.

LCC Group - Decarbonisation Plan Strategy



LCC Groups planned adoption of new technologies

As LCC Group charts its course into the future, a radical but carefully planned transition towards environmental sustainability takes centre stage. The company envisions a transformative shift from being a coal-centric entity to a pioneer in solid carbon production and carbon additives. This strategic pivot will see LCC Group cease coal processing for burning purposes, instead focusing on producing solid carbon products such as graphite, graphene, carbon nanotubes, electrode paste, pre cursor materials for silicon metals and water purification.

LCC Group is poised to facilitate the UK's transition to electric vehicles by establishing the country's first graphite production facility. This move underscores the company's commitment to supplying critical materials for the manufacturing of lithium-ion batteries, thereby supporting the rapidly growing electric vehicle market.

In the gas division, LCC Group will embark on a journey of diversification, expanding its focus from natural gas to significant investments in bio methane and hydrogen production. Hydrogen and bio methane will emerge as a renewable alternative fuel for industries.

The electricity division will see a shift towards renewable energy generation, with LCC Group transitioning from non-renewable to renewable electricity sales through its subsidiary, Go Power. Simultaneously, the liquid fuels division will undergo a transformation, moving beyond traditional fuels to produce and distribute sustainable alternatives such as hydrogen, kerosene, ethanol, methanol, e-fuels, and sustainable aviation fuel (SAF).

With investments in hydrogen production, LCC Group will double down on its efforts towards carbon capture and utilisation (CCU), leveraging captured carbon dioxide to produce e-fuels like methanol, ethanol, and SAF. This holistic approach to sustainability encapsulates LCC Group's commitment to driving positive environmental change while meeting the energy needs of society in a responsible and forward-thinking manner.

In essence, LCC Group's journey towards a more environmentally sustainable future represents a paradigm shift in the energy landscape, where innovation and sustainability converge to shape a brighter tomorrow for generations to come.



**DID YOU
KNOW?**

Silicon metals and isostatic graphite are on the EU and UK critical materials list.

LCC Group's Transition from Thermal Coal to Coal as a Material

Carbon from ROM coal can be used in each of the following applications:



Despite public perception that coal is of the past, LCC Group continues to invest in coal assets due to the fact that carbon, as defined by the IETF and the EU, are seen as critical materials in the production of each of the above products.



Future Vision of Sustainability

A Product-by-Product approach

An approach to decarbonisation of the industrial carbon cycle through CO₂ capture and processing into a potential E-Fuel

A Vision for the Future of Solid Fuels & Carbon Products

Solid Fuels & Carbon Products

In 2023 LCC Group had reduced its distribution of steam coal for thermal purposes to only **26.19%** of total product sold.

LCC Group have been identifying new areas of distribution including the supply of reductants within the carbon supply chain.

LCC Group see a future of vertical integration into the use of coal as a raw material and have tested high purity material from its mine in Wales for its value in the production of iso-static graphite and is currently researching other uses of the material through Future Carbons.

Coal

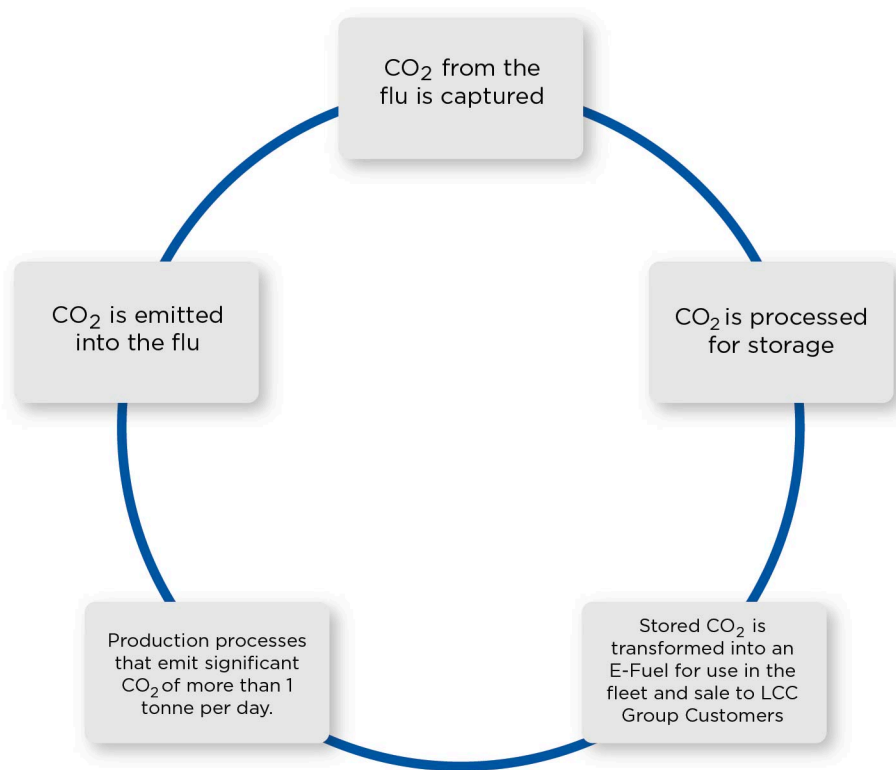
A vision for the future

Carbon Capture Technologies will be the Future Controlling Emissions & Producing E-Fuels

LCC Group are invested in the application of carbon capture to develop a resource for e-fuels production. When these technologies hit TRL 9 we would expect a decrease in the price of e-fuel and the creation of a potentially circular approach to the use of fossil fuels.

When carbon capture technology matures it will be a game changer for the use of coal facilitating blue hydrogen production and the reduction in the emission of GHG from the use of coal in a variety of contexts. The use of coal as a material has seen a significant increase beyond seeing it as only valuable for its calorific value.

*See appendix attachment A

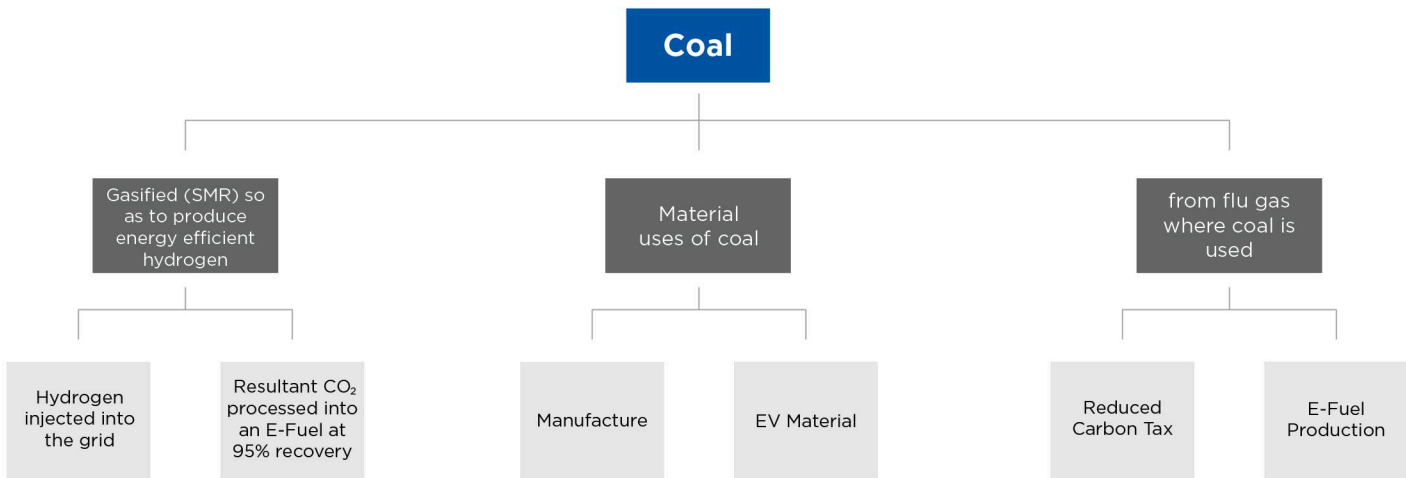


Example:

An example of how carbon capture and the development of e-fuels could occur in carbon intensive industries releasing new fuel stocks to LCC Group for distribution.

Coal: A Roadmap to Sustainability

LCC Group see opportunities for decarbonisation across industries in coal.



Coal has multiple applications, and we believe that in the future it will be used in various ways once viable e-fuel and carbon capture technologies become available.

Coal presents diverse opportunities across various industries, extending well beyond traditional energy production.

In manufacturing, coal remains a vital resource for producing steel and cement that is essential for infrastructure development. Emerging innovations are also leveraging coal as a source for valuable materials like electrochemical materials, which are crucial for the growth of electric vehicle technologies.

Additionally, advancements in carbon capture and storage technologies offer the potential to significantly reduce carbon tax liabilities, making coal a more sustainable option in the face of regulatory pressures. Coal is being explored for its role in e-fuel production, a promising avenue for generating synthetic fuels that can help decarbonise transportation and other sectors.

These evolving uses underscore coal’s adaptability and potential to contribute to a range of industrial applications while addressing contemporary environmental and economic challenges.

Future Sustainability of Gaseous Products

Gaseous Products

Biogas from AD plants is generally seen as a nonconsistent fuel source with a number of problems due mainly due to a lack of consistency of supply. Biogas does have a potential to make existing processes more circular and as a result is a key area of research for LCC Group.

Hydrogen is a hot topic within energy today. Hydrogen can be produced in a variety of ways with options including **"Blue"** (Steam methane reforming combined with carbon capture) and **"Green"** hydrogen produced through electrolysis. The company is investigating a number of Hydrogen projects that may replace natural gas as a source of fuel.

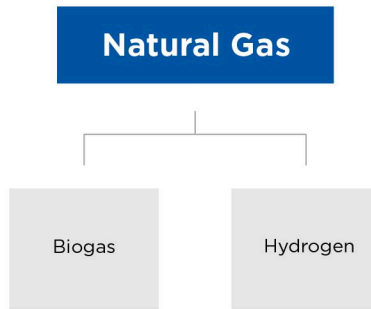
LCC Group estimates that the natural gas LCC Group distributed in 2023 produced **76,571 tonnes of CO₂**. Improvements to this figure will require a change of source from natural gas to alternative energy sources including hydrogen and biogas.



Bio gas

Natural Gas: A Roadmap to Sustainability

LCC Group sees opportunities for decarbonisation across industries in natural gas.



Replacing natural gas with biogas and hydrogen involves several steps.

Biogas is produced through the anaerobic digestion of organic matter such as agricultural waste, manure, municipal waste, plant material, sewage, and food waste. This process generates a mixture of gases, primarily methane and carbon dioxide, which can be purified to enhance methane content, making it suitable for use in existing natural gas infrastructure.

Hydrogen, on the other hand, is produced through various methods, including electrolysis of water, which uses electricity (preferably from renewable sources) to split water into hydrogen and oxygen, and steam methane reforming, which extracts hydrogen from natural gas but requires carbon capture to reduce emissions.

Both biogas and hydrogen can be injected into natural gas pipelines or used in dedicated applications such as fuel cells for hydrogen, providing cleaner alternatives to fossil-based natural gas and significantly reducing greenhouse gas emissions.

Future Sustainability of Liquid Fuels

Liquid Fuels

LCC Group is on the constant lookout for alternative liquid fuels that can be used in today's market. Unfortunately refining processes and the properties of fuels not meeting consistency requirements can often hamper the use of e-fuels with alternative properties to fossil derived fuels.

LCC Group supply fuel to a wide range of verticals including rail, maritime and the supply of both domestic commercial and industrial fuels for heating.

LCC Group sees a huge opportunity in carbon capture combined with a benefit in the conversion of captured carbon into e-fuels. Based on the tonnage of output from a cement plant part owned by the group we would expect to capture over **256,000 tonnes of carbon** for potential conversion to an e-fuel which at an equivalent would be **256million litres** of fuel.

Sustainable Aviation Fuel (SAF) is a hot topic in aviation however currently demand hugely outstrips supply. Aviation is particularly difficult to service with sustainable fuel alternatives given many bio products solidify at low temperatures and the risk of solidification of fuel source in the air could prove catastrophic.



Sustainable Aviation Fuel (SAF)

Liquid Fuels

Diesel at Go Stations is a **7% bio blend**. To go further, changes in the refining process and within the design of combustion engines will be required due to carburettor corrosion, fuel hose degradation, fuel filter blockage and damaged fuel pumps among other problems.

Petrol at Go Stations is a **10% ethanol bio blend**. To go further, changes in the refining process and within the design of combustion engines will be required due to carburettor corrosion, fuel hose degradation, fuel filter blockage and damaged fuel pumps among other problems.

Hydro treated vegetable oil (HVO) is seen as a consistent drop in replacement for diesel. HVO is a core focus of LCC Group and the fuel is being made available at all Go Stations as part of a group wide roll out.

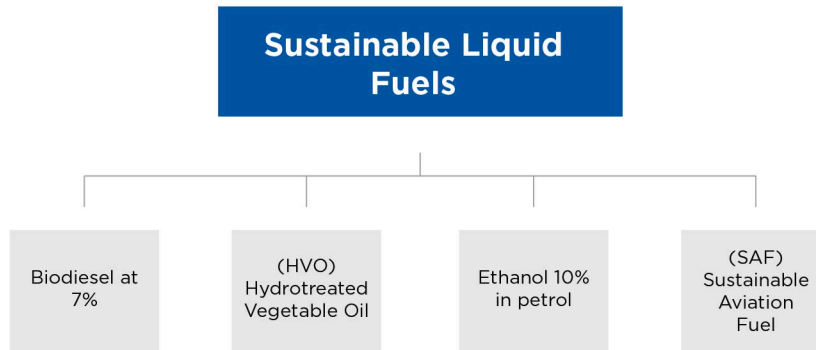
LCC Group are investigating the use of natural methane gas emissions in the production of hydrogen, electricity and heat energy through a VAM system.



Hydro treated vegetable oil (HVO)

Liquid Fuels: A Roadmap to Sustainability

LCC Group sees opportunities for decarbonisation across industries in Sustainable liquid fuels.



Reducing carbon emissions through the use of sustainable liquid fuels offers numerous environmental and economic benefits.

Biodiesel, when blended at 7%, significantly lowers greenhouse gas emissions compared to conventional diesel. This reduction helps mitigate climate change and improve air quality. HVO, used in diesel engines without modifications, offers up to a 90% reduction in CO₂ emissions, along with enhanced engine performance and reduced maintenance costs due to its cleaner-burning properties.

Ethanol, blended at 10% in petrol (E10), decreases carbon emissions and boosts octane levels, improving engine efficiency and performance. Sustainable Aviation Fuel (SAF) plays a critical role in reducing the carbon footprint of the aviation industry, which is a significant contributor to global emissions. SAF can reduce life cycle greenhouse gas emissions by up to 80% compared to conventional jet fuel. This reduction is vital for meeting international aviation emissions targets and promoting sustainable air travel.

Adopting these sustainable fuels not only helps in reducing the carbon footprint of various transportation sectors but also promotes energy diversity and security by decreasing reliance on fossil fuels. Overall, the use of biodiesel, HVO, ethanol, and SAF contributes to a cleaner environment, better public health, and a more sustainable energy future.

Future Sustainability of Alternative Fuels

Alternative Fuels

LCC Group has investigated a number of alternative fuels. Many have been discounted based on impurities such as SOX and NOX and the lack of consistency in fuels.

LCC Group has utilised (SRF) Solid recovered fuel which is **55% bio mass** with an aim to act as an alternative fuel to coal within cement plants.

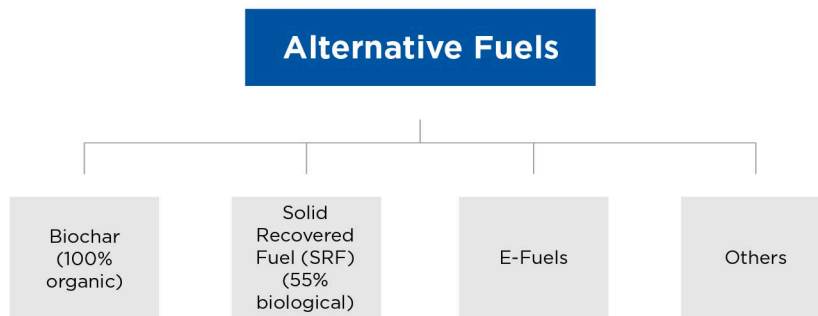
LCC Group and its partners are investigating biochar which has a series of properties that may make it a carbon negative material. Investigations are ongoing.



Bio char

Alternative Fuels: A Roadmap to Sustainability

LCC Group sees opportunities for decarbonisation across industries in alternative fuels.



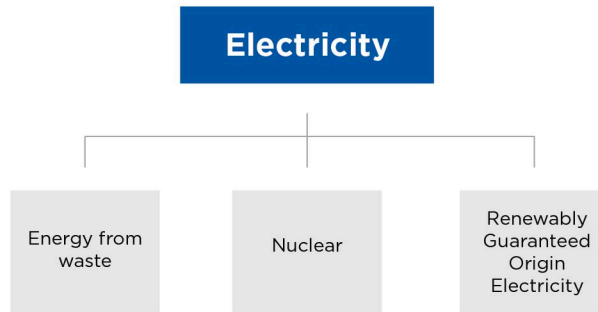
The adoption of alternative fuels like biochar, solid recovered fuel (SRF), and e-fuels presents significant opportunities for carbon reduction across various sectors.

Biochar, produced from biomass, sequesters carbon when added to soil, enhancing soil health while locking away CO₂ for centuries. SRF, made from non-recyclable waste with a high biological content, reduces landfill use and lowers greenhouse gas emissions by replacing fossil fuels in industrial processes.

E-fuels, synthesised using renewable electricity and captured CO₂, offer a carbon-neutral solution for hard-to-electrify sectors such as aviation and maritime transport. These fuels not only reduce carbon emissions but also promote sustainable waste management, improve energy security, and support the transition to a low-carbon economy, fostering a cleaner and more sustainable future.

Electricity: A Roadmap to Sustainability

LCC Group sees opportunities for decarbonisation across industries in electricity.



The shift towards electricity from energy from waste, nuclear energy and renewably guaranteed origin electricity presents substantial opportunities across various industries. Energy from waste (EfW) transforms waste into a valuable resource, reducing landfill use and providing a stable electricity source, which enhances energy security and promotes a circular economy.

Nuclear energy offers consistent, high-output, low-carbon electricity, supporting grid stability and helping industries meet carbon reduction targets. Meanwhile, renewably guaranteed origin electricity boosts sustainability credentials, attracts eco-conscious consumers, and can lower long-term energy costs as renewable technologies become more cost-effective.

Together, these energy sources drive innovation, support environmental goals, and foster economic growth, helping industries transition to a cleaner, more resilient energy future.

LCC Group's Adoption of The Transition Plan Taskforce (TPT)

The Gold Standard in Sustainability Reporting

The TPT's goals are to help organisations meet their climate goals, support the UK government's pledge to achieve net zero by 2050, and drive good practice based on three key principles: ambition, action, and accountability.

The TPT Disclosure Framework recommends disclosing a company's strategic climate ambition, implementation and engagement approaches, governance and accountability arrangements, and financial plans. Companies are expected to adopt the framework and start disclosing their transition plans from 2025 onwards, with the first reporting scheduled for 2026.

The History of the TPT

- **November 2021:** The TPT was announced at COP26
- **April 2022:** The TPT began operations and HM Treasury launched it to establish a gold standard for corporate climate transition plans
- **May–July 2022:** The TPT called for evidence on a sector-neutral framework
- **October 2022:** The TPT began a sandbox on the Disclosure Framework and Implementation Guidance, focusing on transition plan preparers
- **November 2022:** The TPT began a consultation on the Disclosure Framework and Implementation Guidance
- **February 28, 2023:** The consultation on the Disclosure Framework and Implementation Guidance closed
- **July 27, 2023:** The TPT published a Status Update that included next steps, timelines, and consultation feedback
- **October 2023:** The TPT launched its Disclosure Framework, which includes recommendations for transition plan disclosures
- **November 2023:** The TPT launched seven draft Sector Deep Dives, including one on banks, which are open for consultation until December 29, 2023

Aligning LCC Group with UK Targets

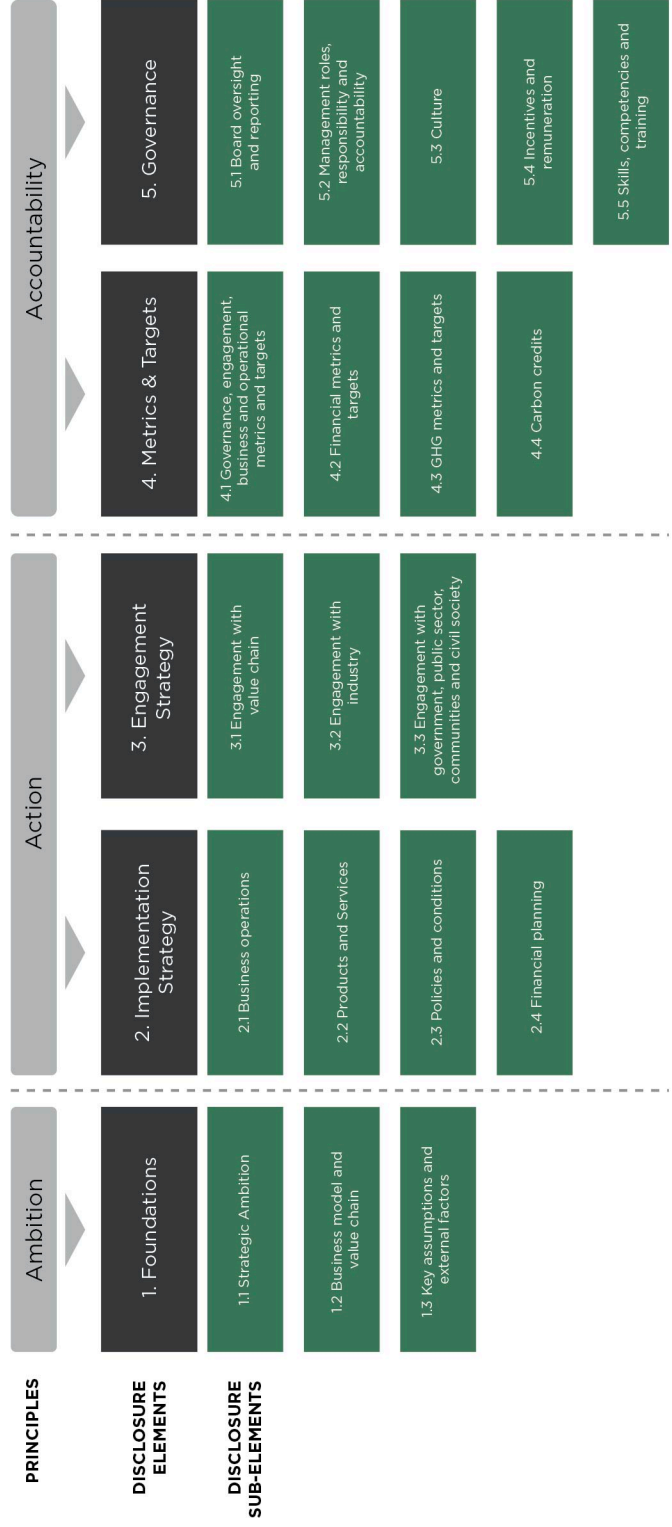
The UK government aims to reduce all direct emissions from public sector buildings by **50% by 2032** and **75% by 2037** respectively this is against a 2017 baseline. All UK emissions are to reach net zero by 2050.

LCC Group has seen a substantial reduction in its direct emissions since its baseline year in 2022 with an overall reduction in emissions in 1 year by an **impressive 1,060,550 tonnes e CO₂**.

The TPT Disclosure Framework

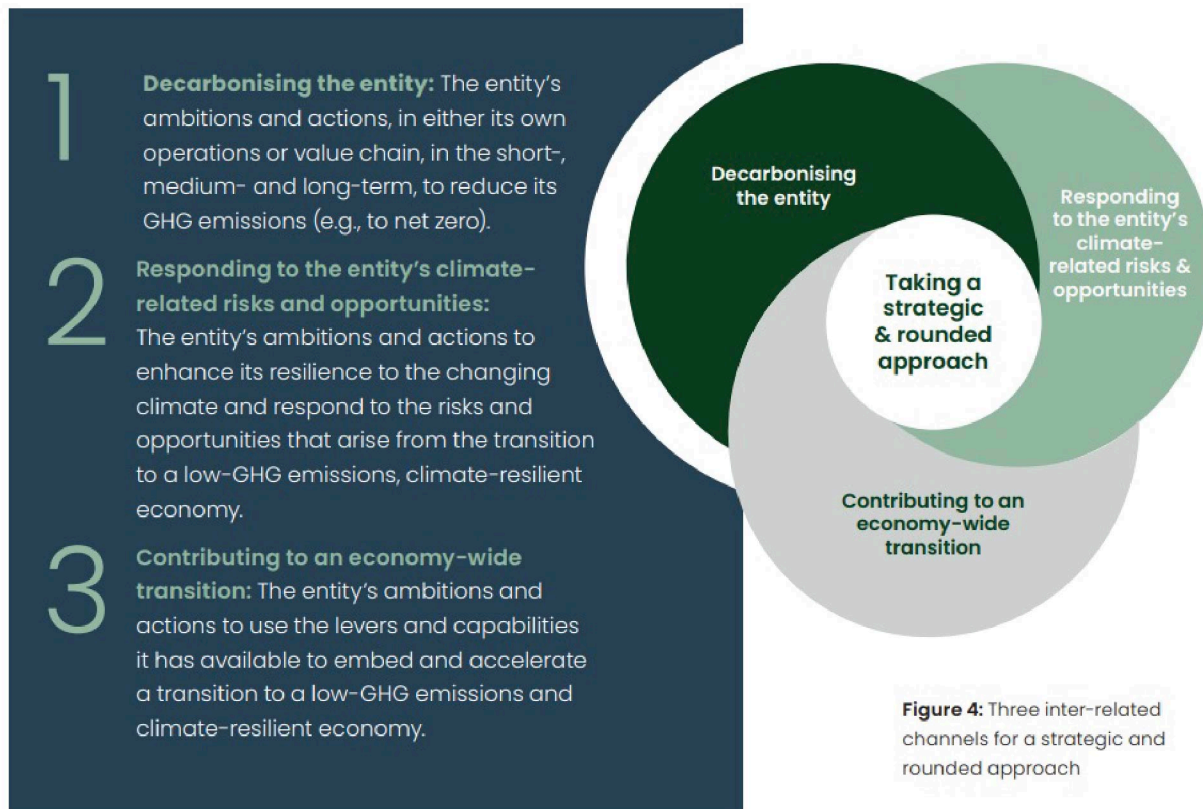
The Transition Plan Taskforce (TPT) was launched by HM Treasury to develop a gold standard for best practice climate transition plans. The Taskforce includes organisations from finance, the real economy, government, regulators, civil society and academia. The Disclosure Framework helps organisations set out a credible and robust climate transition plan as part of annual reporting on forward business strategy.

Transition plans should take a strategic and rounded approach which explains how an organisation will meet climate targets, manage climate-related risks, and contribute to the economy-wide climate transition. Transition planning is an iterative process and companies should get started now.



LCC Group applies the TPT to direct it's efforts in achieving net zero

LCC Group are fully committed to develop its reporting on carbon to the highest possible standards and to explain its aims and goals in line with the principles of the TPT.

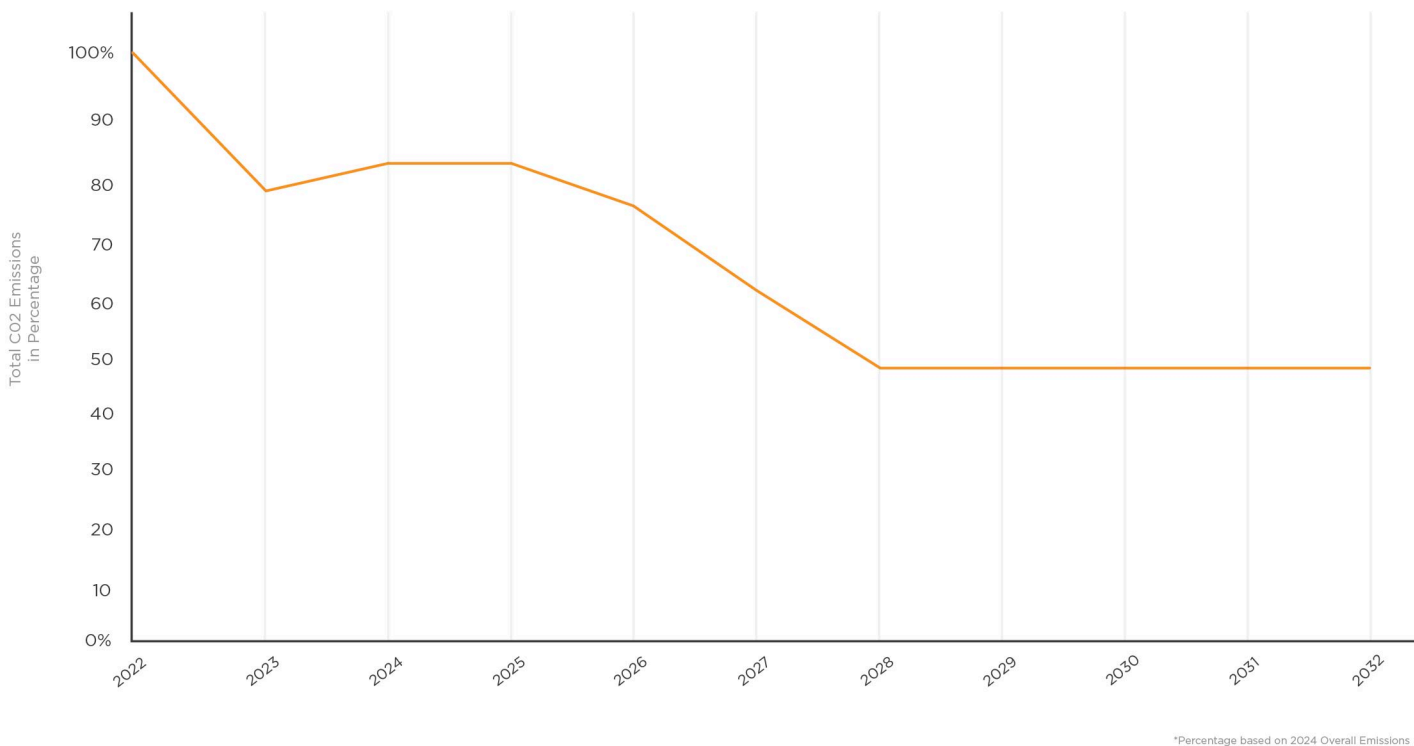


LCC Group’s 2032 Carbon Reduction Estimates

2032 - 50% reduction

LCC Group is on track to hit an overall reduction of emissions across Scope 1, 2 and 3 to 49.86% of our baseline 2022 levels in line with the 2032 target of 50% emission reduction.

Overall Emissions Reduction 2022 - 2032



Explanation of flatlines across our strategy 2022 - 2037

LCC Group aims to deliver a clear consistent carbon reduction strategy. LCC Group will focus its efforts on reducing emissions as quickly as possible however we endeavor to be both authentic and accurate in our predictions requiring the below caveats to be made:

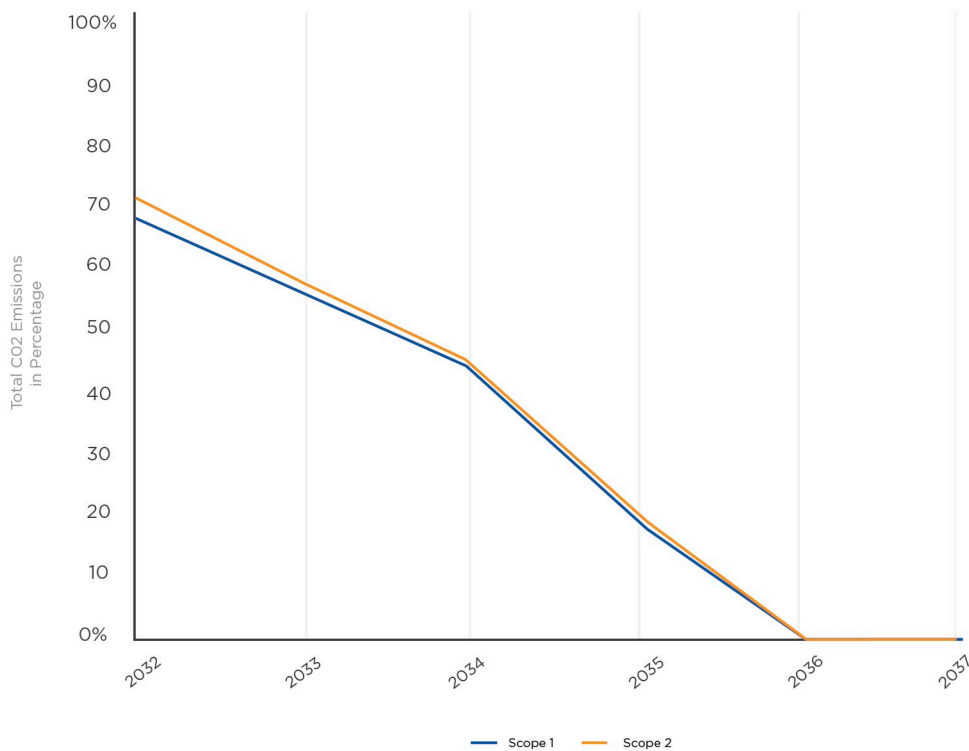
- An expectation of increases in overall Scope 3 emissions due to full disclosure of emissions from our supply chain.

LCC Group’s 2037 Carbon Neutrality Target

2037 - 75% reduction

LCC Group is on track to hit a 100% reduction on Scope 1,2 emissions by 2037 using offsetting as little as possible despite where essential. This goes beyond the UK target and demonstrates LCC Groups absolute focus on its transition, and how the group wishes to set an example for both suppliers, customers and competitors to follow. Regarding our Scope 3 emissions LCC Group still expect public demand for diesel, kerosene and natural gas to exist and expects that due to this the overall Scope 3 reduction caused by our customers using liquid fuel products will fall at approximately 50% resulting in the wider UK not achieving its 2037 target of a 75% emission reduction unless government policy dictates or mandates alternative fuel products.

Scope 1 & 2 Emissions Reduction 2032 - 2037



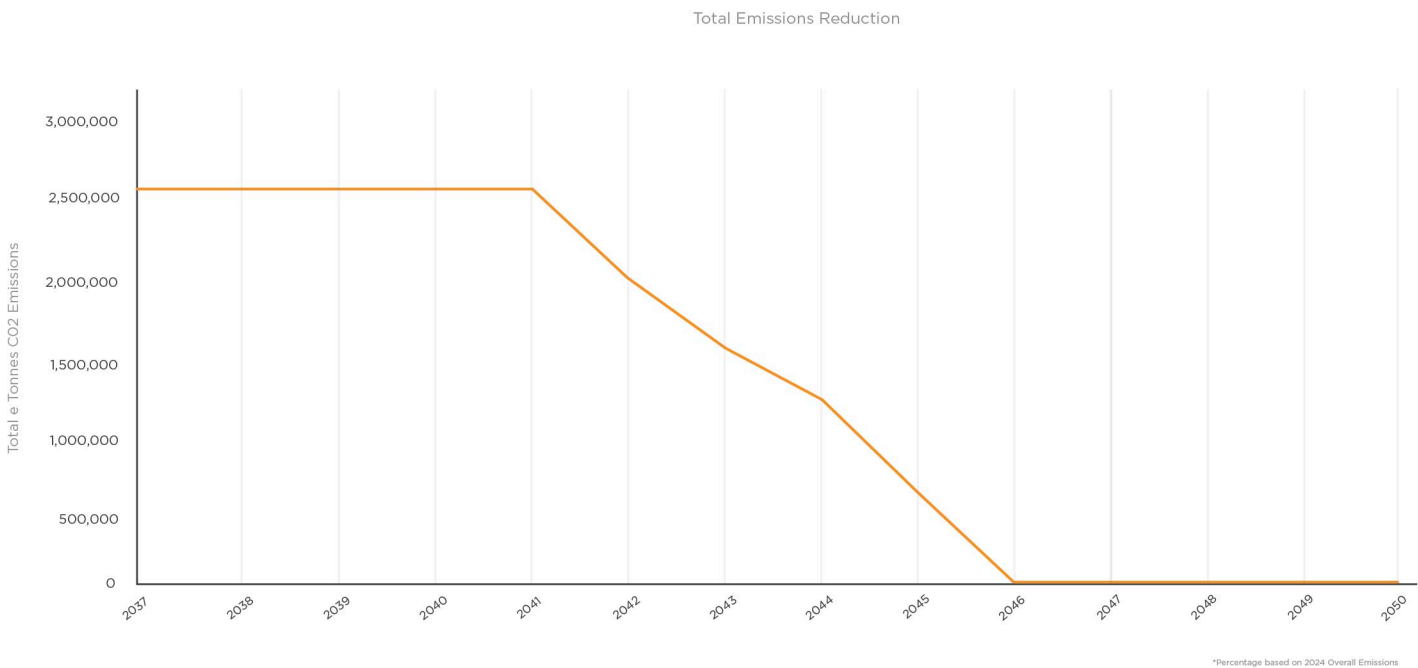
*Percentage based on 2024 Scope 1 & 2 Emissions

N.B. LCC Group is estimating a replacement of the oldest members of the logistics fleet by 2036 resulting in the last of the groups emissions from this source being removed. LCC Group believes that any move towards a more rapid replacement would increase Scope 3 emissions due to the adoption of new vehicles before the lifespan of existing vehicles had been fully depreciated.

LCC Group’s Target of Net Zero by 2046

2050 - Net Zero

LCC Group achieving carbon neutrality on its own emissions in 2036 will support government initiatives and continue to lead the way in the decarbonisation transition through investment and we as a result hope to ensure our Scope 3 emissions can be taken towards zero by 2046 again beating the wider UK target for decarbonisation.



Explanation of flatlines across our strategy 2037 - 2050

LCC Group aims to deliver a clear consistent carbon reduction strategy. LCC Group will focus its efforts on reducing emissions as quickly as possible however we endeavor to be both authentic and accurate in our predictions requiring the below caveats to be made:

- Despite significant effort on the part of LCC Group towards a net zero strategy gaps in governmental policy, availability of finance for the transition from fossil-derived fuels to green fuels and a lack of price competitive and readily available renewable fuels have required LCC Group to be conservative in its prediction of its carbon neutral (Scope 1,2) and net zero strategies.

LCC Group's Decarbonisation Achievements to date

LCC Group has reduced its overall carbon footprint in Scope 1,2 and 3 by an estimated 1,060,550 e tonnes CO₂ from 2022-2023, a reduction of 20.59% in a single year of trading. This was over and above our targeted estimate which had originally been an increase to 4,503,486 e tonnes CO₂ on the 2022 footprint which had been 5,151,809 e tonnes CO₂. The reduction has come in the main due to our reduction in the processing of steam coal for energy purposes in favor of steam coal being processed into a reducing agent (a patent pending process).

26.19% of the steam coal sold was for energy consumption purposes in 2023 when compared with 43.52% in 2022. Since we kept maintaining coal records in 2021, we have seen a total reduction in coal for energy production of 369,550 tonnes. LCC Group also saw an increase in the use of sustainable liquid fuels with 1,600,000 litres of HVO being imported and distributed by LCC Group in 2023. Our drive to reduce fossil fuel consumption saw a move towards the supply of HVO with the sale of 1.6M litres in 2023.

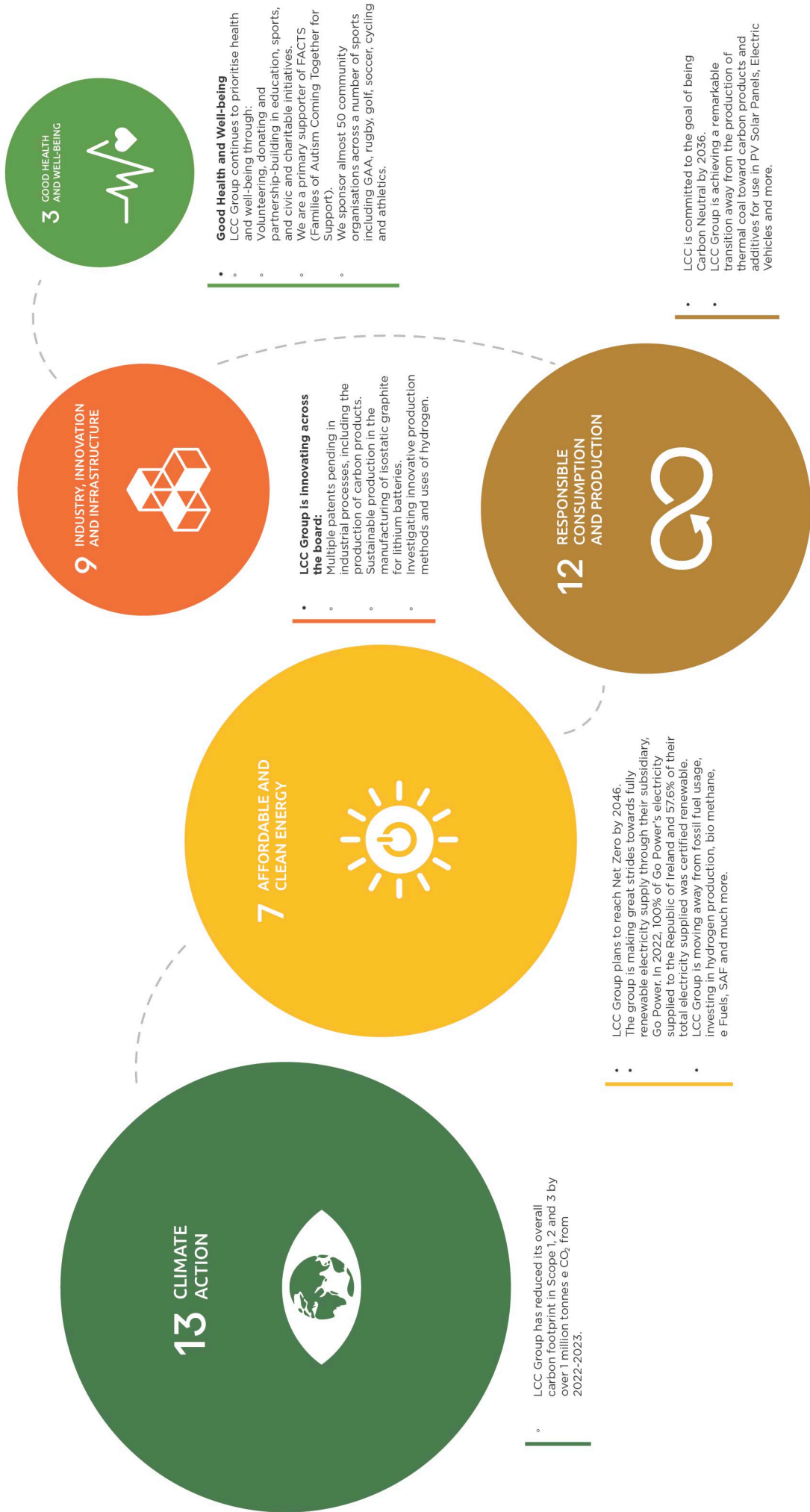


LCC Group's wholly-owned subsidiary, Go Power, is a leading supplier of electricity to the commercial and industrial sectors in Ireland. In 2022, 57.6% of Go Power's total electricity sales were certified by SEMO, Ofgem and GREX as derived from renewable sources, an increase of 1.7% on 2021. 100% of Go Power's electricity sales in ROI were renewable in 2022 (Certified by SEMO). Third party certified figures are not yet available for 2023.

As a distributor of liquid fuel, LCC Group take every opportunity to encourage their customer base towards bio e-fuels and hydrogen. With a growing storage capacity for HVO, biodiesel and ethanol, as well as the aim to produce and blend Sustainable Aviation Fuels in the future, the group is leading the trend toward a sustainable liquid fuel industry.

The Sustainable Development Goals (SDG) goals listed in order of priority for LCC Group to make their impact.

Since our baseline year in 2022, LCC Group have reduced their total carbon footprint by 1,060,550 tonnes e CO₂



Our Decarbonisation Mission

Our core mission is to become carbon neutral in Scope 1 and 2 emissions by 2036 and with the support of our upstream and downstream partners to become net zero by 2046.

We are committed to best practice structured processes and systems that support the successful operation of duties in an ethical, accountable, transparent and effective manner.

This move will be fuelled by the production and distribution of HVO, the provision of renewable electricity and other bio and synthetic fuels. We are moving away from steam coal into carbon products and the replacement of natural gas with biomethane, hydrogen or equivalent alternatives and renewable electricity.



DID YOU KNOW?

Did you know that in 2020 the average amount of isostatic graphite in an EV car cell was 52kg This material is derived from petroleum coke and/or anthracite.

LCC Group's prioritisation on sustainability

This sustainability report reinforces our commitment to decarbonisation and sustainability, outlining our strategies and actions in the realm of environmental, social and governance matters.

This report provides a comprehensive insight into our sustainability performance in 2023, underlining our initiatives aimed at advancing toward a more sustainable future for all. Under the aegis of our corporate mission, we are dedicated to embedding sustainability into the core of our business strategy. Our annual sustainability report stands as an essential document of that ongoing commitment.



At LCC Group, we are aware that the impacts of climate change present significant challenges to economic stability and growth. ”

The report is designed to present a transparent and accurate reflection of our efforts, progress, and challenges in creating sustainable, long-term value for our stakeholders.

At LCC Group, we are aware that the impacts of climate change present significant challenges to economic stability and growth.

As part of our drive towards sustainability, we recognised the need for financial disclosures related to climate risks and opportunities, which led us to voluntarily use the recommendations provided by the Task Force on Climate related Financial Disclosures (TCFD) as guidance for this report.

This report has applied the TCFD principles within ongoing annual reports and we will endeavour to improve the accuracy of our carbon data with upstream suppliers and downstream customers. LCC Group takes seriously its commitment to align with the 2050 with the target for net zero aligning with global best practices in sustainability reporting. We intend to be carbon neutral by 2036 and net zero by 2046.

Our Carbon Reduction Plan

LCC Group is committed to achieving carbon neutrality in its Scope 1 and 2 emissions by 2033. We believe our continued investment in decarbonisation and high focus on efficiencies will make this possible.

We have set goals for future years with a baseline set in 2022. We expected LCC Group's carbon emissions to increase in 2023, however due to an unexpected increase in demand for processed solid carbon materials as an alternative product to one that had previously been used as a thermal coal, our emissions decreased.

LCC Group's total emissions across Scope 1, 2 and 3 from thermal coal decreased drastically by 1,060,550 tonnes from 2022 to 2023*.

Elements of our Carbon Reduction Plan in focus

As an energy company who supply electricity, gas, liquid fuels and solid carbon products, it is our Scope 3 emissions that are the most significant. LCC Group is running a series of high-impact initiatives, with the interest and support of customers, we are fully committed to a Scope 3 emission reduction in line with the UN target for net zero by 2050. Within Scope 1 and 2 LCC Group are committed to using renewable fuels for our organisation.

Evidence of this commitment includes a series of developments at LCC Group. In regards to gas we are exploring the use of hydrogen and biomethane injection into the gas network. This effort has begun with LCC Group purchasing 2 mega watts of biomethane output from Tyrone Energy.

*Based on the assumption that each tonne of coal burned equals 2.8 tonnes of CO² emissions.

Elements of our Carbon Reduction Plan

In our liquid fuel division LCC Group have been blending ethanol as a biological additive to petrol and are currently blending FAME/ Biodiesel for use in our own fleet and with our customers.

We began supplying HVO in 2023. HVO is a drop in replacement for diesel. LCC Group distributed 1.6M litres of HVO in our first year. Go Power, our electricity division, supplied our customers in the ROI with 100% guaranteed origin (GO) renewable electricity in 2022 - 2023. 57.6% of the electricity Go Power provided in N.Ireland was GO certified renewable electricity. LCC Group traditionally processed steam coal for thermal purposes. Today the group has moved towards processing coals into carbon products and additives for use in industry and manufacturing. This move has dramatically reduced LCC's Scope 3 emissions in 2023, when compared with our base line figures.

These combined approaches will enable LCC Group to reduce our Scope 1 and Scope 2 emissions to zero by no later than 2036. Leveraging support from our upstream supply chain and downstream customer base, we anticipate achieving full net-zero status by 2046, ahead of the global 2050 target when including Scope 3 emissions.

LCC Group is a supplier of carbon products and as a result is unable to meet a net zero mission without the support of its upstream and downstream partners. As a result, LCC Group have set a carbon neutrality target where by both Scope 1 and Scope 2 emissions are reduced to zero by 2036 as a first step.



Our Business

Connecting Energy Demand with Supply.

LCC Group is the leading energy and product supplier in Ireland & the UK, handling and delivering domestic and industrial carbon additives and products at all levels of the supply chain.

Since our establishment in 1986, we have effectively connected energy demand with accessible supply, thereby meeting the energy demands of our customers.

Our existence as a corporate entity has been fuelled over the years by providing personalised and dedicated services to our customers, centred on a strong work ethos of equality, responsibility, and accountability.

We are a fair, accountable and effective energy distributor, whose operations hinge on connecting energy demand with associated supply.

Our Brands

As part of our business, we operate a diverse portfolio of companies, each with a unique focus on energy production and distribution, contributing significantly to our overall business goals and aspirations.



LCC Coal



Go Power



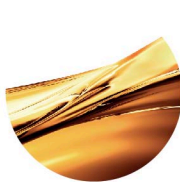
Riverside Oils



GO



LCC Oil



Fuel Preparations



LSS Limited



Star Fuels



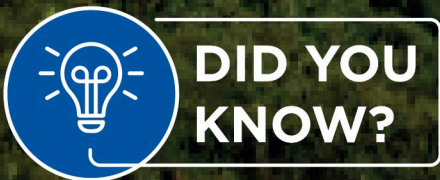
LCC Spain



LCC Belgium

Our Values

At our organisation, our core values serve as the guiding compass for all our actions and decisions. LCC Group's values are centred around customer focus, innovation, independence, fairness, empathy and the environment.



**DID YOU
KNOW?**

Through its contribution to Enprova, LCC Group aims to reduce Ireland's energy usage by 1.5% annually. Enprova is a unique collaboration led by Fuels for Ireland and its members, designed to help Ireland meet its energy-saving obligations.

<https://www.abiuk.co.uk/top-5-greenest-sceneries-in-northern-ireland/>

Our Focus

The world has changed a great deal since the establishment of the company in 1986, but our reason for being - our why - has not. Our strategic focus is on continuously improving the quality of products and services we provide and ensuring that our systems and processes allow us to deliver on those objectives.

To successfully deliver on these objectives, we promote a positive culture of ethical behaviour and effective governance. At the core of our business operations is our mission, vision and values. These are the hallmarks of our corporate existence, and we strive to live by them every day.

Customer Focus

We aim for excellence and professionalism in the delivery of our services. We will meet defined quality standards and continuously review our performance to ensure that the customer remains at the heart of everything we do.

Innovation

We will deliver continuous performance improvements and avail of best practice methods for delivering first-class service and products in doing so enhance confidence in our brand.

Environment

We are committed to a renewable-based future, replacing traditional fuels with renewable alternatives, wherever that is viable and possible.

Independence

We will examine complaints, conduct reviews, and make decisions in a fair, objective and impartial manner.

Fairness

Treating all people with respect, dignity and fairness is fundamental to our relationships with all stakeholders.

Empathy

We will listen carefully to our customers with a view to understanding and being sensitive to their concerns.

Our Business Approach to Climate Change

LCC Group has reduced its overall carbon footprint Scope 1, 2 and 3 by an estimated 1,060,550 e tonnes CO₂ from 2022-2023, a reduction of 20.59% in 1 year.

At COP28, there were renewed commitments on energy transitions and gradual phase out of fossil fuels to meet with global climate ambitions. More countries, including the Republic of Ireland, have signed up to the Powering Past Coal Alliance (PPCA)* which underscores the global drive to transition from unabated coal power generation to clean energy.

In Europe, the European Green Deal targets a net zero by 2050.

Similarly, the United Kingdom has pledged a net zero target by 2050. Also, Northern Ireland has set a target of at least 100% reduction in net zero greenhouse gas (GHG) emissions by 2050.

Given these commitments and the critical nature of our business in providing access to energy, we are committed to making positive strides in the environment through an integrated value chain that meets these climate objectives. We aim to achieve this by transitioning our business operation emissions to alternative sources of energy and diversifying the energy mix. This sustainability report sets out the actions we have taken so far to achieve our commitments and sets the objectives that we will work towards to achieve the targets set by the Northern Ireland Climate Change Act and the European Green Deal.

Our Journey to Carbon Neutrality by 2036

As a Board, we acknowledge the necessity to transition towards a sustainable business model, demonstrating our purposeful action against climate change and alignment with local, regional and global climate ambitions.

Recognising the urgency and scale of the concern, we affirm our pledge and commitment to our decarbonisation plan. Together with management, we are committed to systematically reducing our greenhouse gas emissions across all aspects of our operations, especially our Scope 1 and 2 emissions.



The UK's Decarbonisation Policy

The History of the UK's Decarbonisation Policy

In November 2008, the UK passed the Climate Change Act with an overwhelming majority across political parties.

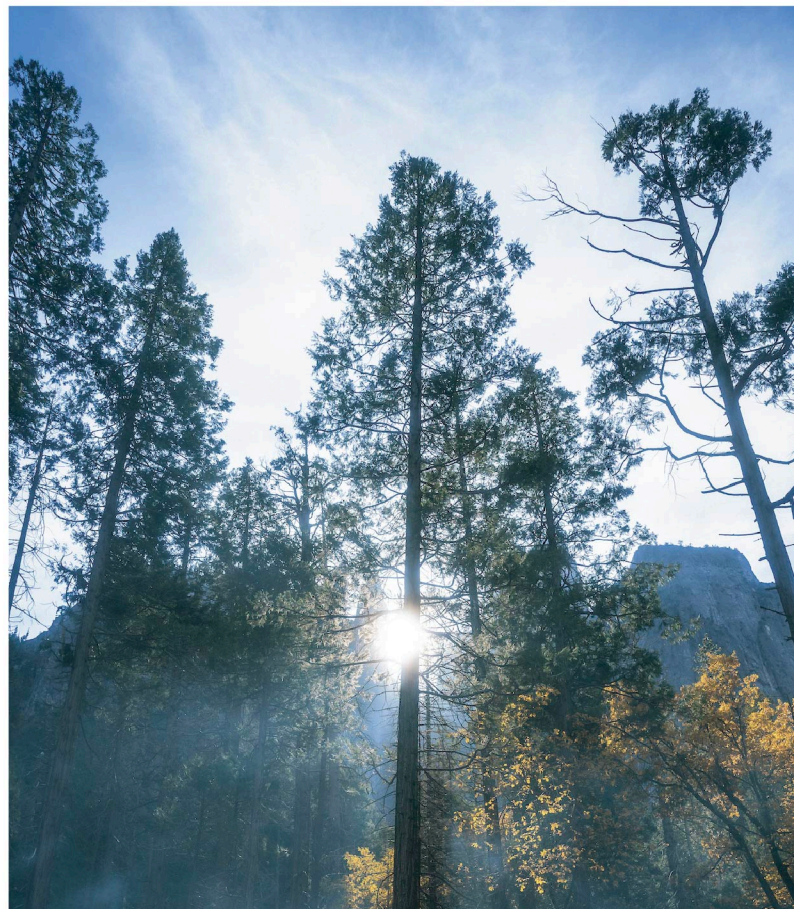
(1)The 2008 Climate Act committed the UK to reducing its greenhouse gas emissions by 80% by 2050 compared to 1990 levels, formed the Committee on Climate Change, and established UK carbon budgets. In June 2019, this was strengthened, committing the UK to bring all greenhouse gas emissions to net zero by 2050. This is referred to as the UK net zero target.

The UK was the first country to set legally binding carbon budgets, which place restrictions on the total amount of greenhouse gases the UK can emit over five-year periods. To date, six carbon budgets have been set, up to 2037. For the purposes of international reporting, emissions are measured and reported on a 'whole of UK' basis through the UK's Greenhouse Gas Inventory. This is also the basis for the UK's Nationally Determined Contributions (2), which give a single, economy-wide emissions reduction target for England, Scotland, Wales, and Northern Ireland together.

However, most aspects of climate change and decarbonisation policy are devolved matters. There are complexities within this, as some related areas (including energy security, and some aspects of energy efficiency) are reserved matters with policy made on a 'whole of UK' basis. However, for the most part decarbonisation of the 'government' sector in the UK is a collective effort, with differences in approach between the administrations at Westminster, Holyrood, Stormont and the Senedd.

1 The Climate Change Act 2008 (2050 Target Amendment) Order 2019.

2 National Determined Contributions (NDCs) are international emissions reductions commitments made under the UNFCCC framework.



Rolling out Decarbonisation across the UK

There are a number of policies in place to reach the UK net zero target, which for England are summarised in the Net Zero Strategy (Build Back Greener) 2021, updated in 2022, which builds on the 2020 Ten Point Plan for a Green Industrial Revolution.

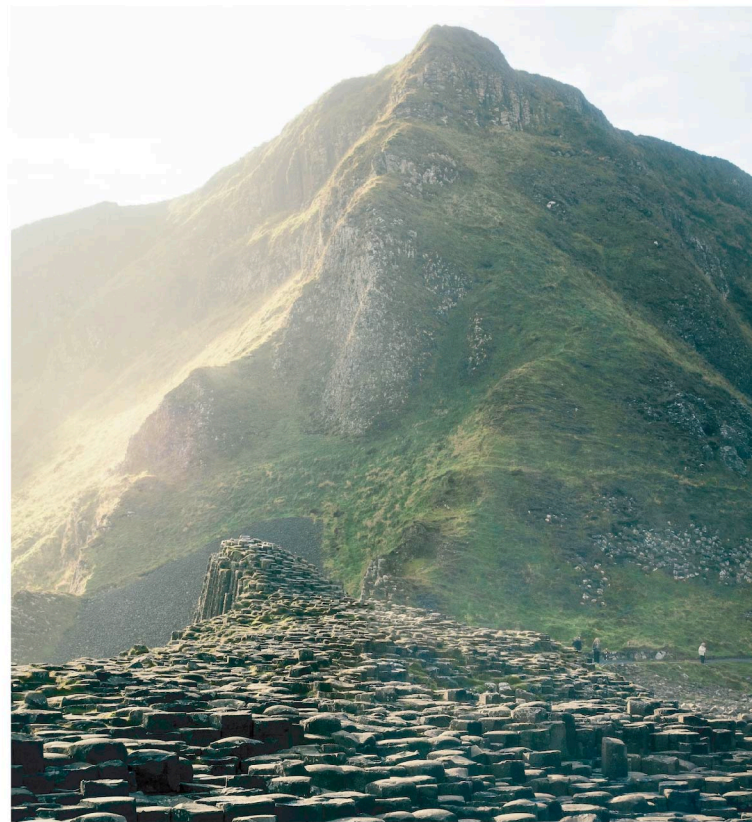
Further updates were made in the 2023 policy paper Powering Up Britain. The Scottish Government has set a target date for net zero emissions of all greenhouse gases by 2045. This includes the Scottish public sector. The Welsh Government has set out the ambition for the public sector in Wales to be net zero carbon by 2030. In 2021, Wales published its Net Zero Carbon Status by 2030: Public Sector Route Map which provides an overview of the actions and milestones needed for the Welsh public sector to reach this ambition.

Net Zero Wales sets out the target for Wales to be net zero by 2050. In Northern Ireland, The Energy Management Strategy and Action Plan to 2030 was formally adopted by the NICS board in January 2019. This strategy sets a target for Central Government to reduce net energy consumption by 30% (from a 2016/17 baseline) by 2030. Since the strategy launch, Northern Ireland has passed its first climate legislation, The Climate Change Act (Northern Ireland) 2022, mandating a net zero emissions target for 2050. This Act also identifies 'Public Buildings' as a specific sector.

In November 2022, ahead of COP27, the UK joined the Net Zero Government Initiative as a partner and signatory. This Initiative is led by the United States and participants agreed to develop and publish a roadmap laying out how they would bring their government emissions to net zero by 2050.

Net Zero target

The UK government aims to reduce all direct emissions from public sector buildings by 50% and 75% by 2032 and 2037 respectively, against a 2017 baseline. All UK emissions are to reach net zero by 2050. There are also ambitious targets within each of the four nations. Scotland aims to reach net zero from all emissions by 2045, Wales has an ambition to reach net zero emissions in its public sector by 2030, and Northern Ireland aims to reduce its government emissions by 30% by 2030 (from a 2016/17 baseline year). These key targets demonstrate the UK-wide commitment to reaching net zero goals within government and beyond.



LCC Group has already made a significant reduction in its CO₂ footprint since its baseline year.

In the Net Zero Strategy the UK set a target to reduce emissions from public sector buildings by 50% by 2032 and 75% by 2037 against 2017 levels.

An overall reduction in CO₂ footprint of LCC Group across Scope 1, 2 & 3 was 20.6% on the baseline year of 2022-2023.

Although detailed Scope 3 records are not available for this period, a summary of the steps towards net zero are listed below:

- LCC Group is already distributing 100% renewable energy to its electricity customers in the Republic of Ireland. In 2022, 42% of the electricity distributed was sourced from renewable energy, representing a 15% increase over the 2021 figures.
- LCC Group has observed a significant reduction in emissions over this period and plans to further decrease the use of thermal coal, with the goal of eventually eliminating it entirely. Although this is an immediate and absolute priority for the group, we currently project that all emissions from coal burning for industrial purposes will be eliminated by 2046. This timeline is a contingency measure, as our aim is to achieve this reduction by 2026 if at all possible.
- LCC Group is a leading force in the adoption of HVO, actively rolling out the product across its Go Station network. We are optimistic that the product will gain traction in both domestic and commercial markets over the coming years. However, we anticipate that the adoption of 100% biological alternatives to current fuels will not be fully realised until 2046, due to the uncertainty surrounding government policy and the inability to predict cross-market price fluctuations in the coming years.
- Although LCC Group is prepared to purchase Guarantees of Origin (GOs) and Renewable Guarantees of Origin (REGOs) to offset emissions, the group's primary environmental goal is to reduce direct emissions through investment. Offsetting will be reserved for persistent and unavoidable emissions within the group.

LCC Group expects to achieve carbon neutrality and emit zero carbon for Scope 1 and Scope 2 emissions by 2037, surpassing the UK target of a 75% direct reduction in emissions.

LCC Group will be carbon neutral, making no Scope 1 or 2 emissions by **2037**, going beyond the **75% emissions** reduction target set by the UK Government by 2037.

Despite an absolute focus on reducing CO₂, LCC Group recognises that due to the nature of its industry, its Scope 3 emissions are expected to persist beyond this date. LCC Group believes that only governmental policy, the emergence of new carbon capture technologies, effective e-fuels, and support from the banking sector can significantly change the consumption patterns of domestic, commercial, and industrial markets.

We estimate that:

- Some use of thermal coal is expected to persist in industry across the period especially within industries such as cement where coal firing is currently a requirement of the EPA (Environmental Protection Agency).
- Emissions are likely to persist within core electricity generation due to the lack of nuclear power on the island of Ireland and the lack of available technologies to move to 100% hydrogen.
- The migration of the gas network in Northern Ireland & Ireland from natural gas towards hydrogen and consistent sources of biogas will require significant investment in hydrogen generation something expected to take a significant period of time.
- LCC Group expect to face new challenges and additional emissions derived from its supply chain that will push overall Scope 3 emissions up requiring the group to allow contingency on suggested figures.

New investments in LCC Group include the investment in a galvanising plant capable of using 100% hydrogen and blends of biogas as a fuel source thus reducing the need for reliance on electrical generation or natural gas allowing for a rapid transition to renewables when a supply of hydrogen comes online.

Sustainability Strategy



DID YOU KNOW?

The EU and UK have stated that silicon metal is a critical material. LCC Group produce a carbon reductant which is essential for silicon production.

Strategy

Our Corporate Strategy at a Glance

The increased momentum for energy consumption has propelled us to evolve as a business and provided opportunities to target. At LCC Group, we have a strong track record of rising to meet the ever-changing demands of our customers.

As a fair, accountable, effective and proactive energy distributor, we see opportunities for LCC Group to be an effective energy transition provider and change agent as part of the global shift in energy demand.

We have the established structures, competitive advantage and strong market position to provide reliable, affordable and flexible energy, as clean energy technologies scale-up and reach maturity in the longer term.

As countries strive towards net zero targets in the 2050, 2060 and 2070 time horizons, we see opportunities to consolidate our market position and offer more effective services through economies of scale. Our business is underpinned by key resources, relationships and enablers that drive our ability to operate in an efficient manner and on a continuous basis.

We will continue to use our leadership position to help steer positive changes across the energy industry and engage and adapt our business model to the changing policies and investment landscape. We aim to position our business to meet the unique challenges while seizing the strategic opportunities in the energy consumption, so we remain an industry leader for years to come.

We are continuously improving the carbon performance of products and services we provide.

We promote a positive culture of ethical behaviour and effective governance.

We foster a strong communication culture within LCC Group by creating a flow of information up, down and across the organisation.

Our integrated business model benefits from the efficient allocation of capital and continuous business improvements across LCC Group.

We encourage a culture where managers and staff feel motivated and empowered to contribute to the organisation and where communication and sharing of knowledge is seen as a joint responsibility.

Strategy

Our Sustainability Strategy

LCC Group commits to a more sustainable transformation in the coming years. Our strategy includes tangible initiatives for reducing our environmental footprint and focuses on driving our business towards cleaner and sustainable sources of energy. For that we have chosen to focus our sustainability strategy on:

Reducing Carbon Emissions: We strive to reduce our operational carbon emissions and achieve carbon neutrality by 2036. To perform this, we aim to enhance our efficiencies, reduce fuel usage, and promote the use of alternative and cleaner fuels in our operations.

Transitioning to Cleaner Fuels: We aim to continually replace a portion of our fossil fuel portfolio with alternative and environmentally friendly fuels such as HVO, Biofuels, ethanol and biodiesel. We aim to increase the proportion of these sustainable fuels in line with advancements in engine design and state of the art refining processes.

Promoting Renewable Energy Sources: We devote a part of our annual investment towards the research and development of new and promising renewable energy technologies. Expanding our renewable energy portfolio is one of our primary aims for the next decade.

Supporting Sustainable Aviation: We are pursuing a strategy to move away from fossil fuels toward Sustainable Aviation Fuel (SAF). Due to limited supply of SAF it is expected we will co-blend SAF and traditional Aviation Fuels for some time. We are actively investigating options to produce SAF in-house.

Embracing Circular Economy Principles: We endeavour to leverage our waste residuals, recycle and re-use them, thus reducing our overall waste generated.

Developing Sustainable Infrastructure: We continually invest in developing sustainable infrastructure that promotes the use of renewable energy, encouraging clean transportation. As part of our initiative, we have begun implementing EV charging stations at our fueling stations. We currently have one in operation at our Banbridge site and will be adding another in Cloghan by 2025. Our roll out is dependent on adequate supply of electricity, infrastructure investments from NIE and availability of adequate space at our locations. We are committed to, where possible, establishing charging stations at all viable locations by 2036.



Community Engagement and Education: We commit to engaging with our communities, sharing knowledge about the importance of environmental conservation and sustainable practices while supporting initiatives that promote sustainability locally.

Demonstrating Corporate Responsibility: We continue to strive to be a responsible corporate entity, ensuring compliance with all regulations and guidelines set by government and regulatory bodies.

Employee Training and Engagement: For us to be successful in this transformation, it's critical to ensure our employees are well trained and motivated. We have initiated an employee engagement program to educate and elicit their ideas to drive our sustainability strategy forward.

Strategy

Our Roadmap to achieve Carbon Neutrality

At LCC Group, we understand the urgent need to address climate change and recognise our responsibility as an energy company in this global challenge. Our sustainability agenda reaches beyond our corporate social responsibility; it embodies a strategic initiative to gradually transition our business practices towards a sustainable, low-carbon future.

This upcoming section of the report provides an outline of our comprehensive roadmap for carbon neutrality. Each sub-section represents a strategic priority in our sustainability journey, embodying our firm commitment towards lowering our carbon footprint.

The roadmap encompasses our short-term goals, and we intend to update this roadmap as we progress, based on new technologies and the evolving market regulations. To further enhance our sustainability commitments, we plan to conduct a thorough climate scenario analysis. This analysis will shed light on potential climate-related risks and opportunities over the medium and long term, further refining our roadmap.

1.Reducing Our Carbon Emissions

We are working hard to deliver a sustainable transport model.

Most of our transport of products by road is by our own coal and fuel trucks, with the remainder transported by contractors or customers. We are focused on developing initiatives that allow us to promote efficiencies and reduce total distance driven, fuel consumption and ensure that we are selecting the most efficient mode of transport. We currently have Initiatives in place to optimise transport use include: GPS route planning; load optimisation; fleet management; and engine idling alerts.

At our Go Fuel Stations, we utilise full-stage two vapour recovery pumps on site, which collect the vapours from the nozzle and vacuum them back into the tank, minimising vapour release into the atmosphere. We also employ a system on all sites, which continuously monitors fuel stock ensuring any risk of contamination is minimised. Our partnership with The Change has seen us committing approximately £60k monthly to research and development initiatives.

This substantial investment is geared towards identifying new intellectual property aimed at enhancing the efficiency of coal processing. In turn, this will enable us to diversify and penetrate new material markets.

2. Transitioning to Cleaner Fuels

We are an active member of the Biofuels Obligation Scheme and continuously strive to replace carbon intensive fuels with carbon neutral biomass and non-fossil fuels. Biofuels can help reduce emissions in transportation and can be used in existing cars and infrastructure without major changes.

Hydrotreated Vegetable Oil (HVO): We actively promote the use and sale ("HVO") as a low carbon, low emission, fossil-free and sustainable alternative to conventional fossil diesel. It is fully interchangeable with conventional diesel and can be mixed at any percentage. HVO fuel is synthesised through the hydro-treatment of vegetable oils, which eliminates up to 90% of net CO₂ emissions and significantly reduces nitrogen oxide ("Nox"), particulate matter ("PM") and carbon monoxide ("CO").



As of now, the importation of HVO occurs in small quantities via road tankers from the UK. We plan to extend the availability of HVO to our commercial and industrial customers by 2024. We aim to execute test runs at selected GO stations in Northern Ireland, UK and the Republic of Ireland in 2024. In 2024, we plan to commence construction of new import tanks at our oil terminals and depots; aiming for completion in 2025. This expansion will facilitate the import and distribution of HVO on a larger scale. With successful trials at our GO stations, we are committed to distributing HVO at all our GO stations by 2036. This rollout will be a phased operation commencing in 2024, subject to planning and compliance with local authorities.

Our Commitment to Fuel

HVO, FAME/Biodiesel, Ethanol, and the potential for hydrogen are key priorities for our supply strategy. In 2023, LCC Group began distributing HVO and aims to have it available at all GO Stations by 2036.

Biofuel blends such as B7 (7% biodiesel) and E10 petrol (10% ethanol) are set at legally required levels by the government.

Strategy

Ethanol: We have initiated a strategic operation to import, blend and supply denatured ethanol. Currently, we are successfully incorporating a blend of 10% denatured ethanol into our unleaded fuel supply, actively reducing our reliance on non-renewable fossil fuels, subject to the fossil fuel base grade being reduced by refiners and the output being compatible with conventional engines. We intend to increase the percentage of ethanol in our petrol.

Biodiesel (FAME - Fatty Acid Methyl Ester): We successfully ventured into the importation, blending and supply of FAME Biodiesel, a sustainable solution manufactured from recyclable materials such as waste animal fats, used cooking oil and waste residues. At present, we are integrating a 7% blend of this biodiesel into our road transport fuels significantly offsetting the environmental impact of traditional fuels. We plan to extend this 7% blend into non-road mobile machinery in commercial and agricultural sectors during 2024 and offer 7% blends in commercial heating gasoil fuels by end 2024.

3. Transitioning to Cleaner Fuels

Animal By Products (ABP) & Used Cooking Oil (UCO): We are presently registered with the Department of Agriculture, Environment and Rural Affairs (DARD) for the licensed purchase, trade and distribution of category 1 Animal By Products (ABP) that can potentially be susceptible to Bovine Spongiform Encephalopathy (BSE). These ABPs serve as feedstock for local biodiesel producers in Ireland. Post processing, we procure the finished biodiesel to blend with fossil fuel diesel and gas oil at our terminal. Our strategic focus on ABPs and UCOs further emphasizes our commitment to a more sustainable future.

4. Promoting Renewable Energy Sources

Go Power presently serves as a leading supplier of electricity and natural gas to Commercial and Industrial (C&I) sectors throughout Northern Ireland and the Republic of Ireland (ROI). As a part of our unwavering commitment to sustainability and renewable energy, we decisively enhanced our strategy in 2023. During this year, Go Power executed Power Purchasing Agreements (PPAs) with various renewable energy generators.

5. Water Filtration

Part of our ongoing initiative is to progressively reduce supplies of industrial coal for thermal power stations within the shortest time frame possible. One key use of anthracite as a filter media for the production of clean fresh drinking water.

6. Supporting Sustainable Aviation

We recognise the need for sustainable alternatives in aviation. To address this, we plan to build new import tanks at our oil terminal for the import and distribution of Sustainable Aviation Fuels (SAF). The construction is scheduled to commence in 2024, and we anticipate completion by 2026. We are also exploring opportunities to produce SAF in-house.

7. Embracing Circular Economy Principles

We support the principles of the circular economy. Our activities give rise to several residual by-products, such as coal residues, dust and other production by-products. To reduce the waste generated from our processes, we maximise our reuse of these by-products in the production loop, largely avoiding disposal. For example, we blend coal fines of various chemical characteristics as an additive to produce product specific value-added blended coal products. These are more efficient and of higher value to industrial global customers. This delivers significant cost savings and reduces the overall quantity of raw materials used in the fuel blending process.

8. Developing Sustainable Infrastructure

We are continuously monitoring grid infrastructure capacity and Electric Vehicle ("EV") user demand to be able to roll out EV charging facilities at GO sites when commercially and practically feasible in the future.

LCC Group hydrating the world.



Filtered from anthracite. LCC Group distribute carbon based filter media for water filtration across the world from its base in the UK.

Strategy

Projects Under Consideration

In addition to the initiatives we are embarking on to meet the carbon reduction targets, we are investing in research and development and have envisioned an assortment of sector-wide initiatives and projects to reduce our carbon emissions, thereby propelling us closer to our ultimate goal of carbon neutrality.

Each of these projects is currently being studied in detail, factoring in feasibility, cost implications, potential carbon savings, and regulatory considerations. The most compelling projects will then form an integral part of our strategic move towards sustainability.

Some examples are described below:

Hydrogen

LCC Group is investigating the usage of "Green" Hydrogen across their operations in partnership with the Industrial Energy Transformation Fund. Methods of production will include biogas, electrolysis and large-scale production across the company.

"Blue," hydrogen is also being considered by the group as an opportunity to generate synthetic e-fuels and as a source of direct fuel that could be injected into the gas network. The group is actively searching for carbon capture technologies that are applicable for land based solid fuel gasification to realise a truly green method of capturing solid carbon and reducing emissions.

Animal By-Products (ABP) and Used Cooking Oil (UCO)

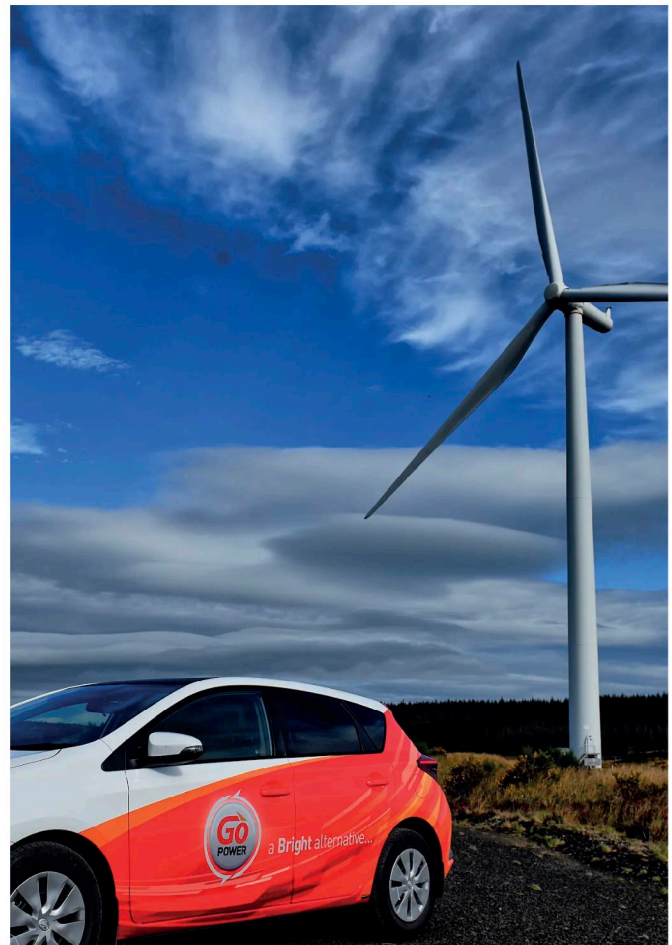
As part of our ongoing commitment to increasing sustainable energy resources, we are setting our sights on significant investments to upgrade and expand our storage terminals.

This ambitious project, slated to commence in 2024 and continue until end of 2025, is designed to elevate our capacity in supporting the biodiesel industry in the UK and Ireland. This project primarily aims to refurbish our storage tanks, enabling optimal heating and lagging, while simultaneously enhancing truck loading and unloading facilities.

A standout feature of this initiative is our goal to augment our storage capacity for two crucial components - Category 1 & Category 3 Animal By-Products (ABP) as well as Used Cooking Oil (UCO) for infrastructure to supply these feed stocks for bio fuel production.

Battery Material Production

LCC Group have begun to consider the development of new carbon-based materials having started the registering of patents on a series of uses of solid carbon for new materials including Graphite, Graphene and Carbon Nanotubes. Our work includes the exploration into potential production of critical materials from the EV battery industry. Graphite is seen as a critical material to the UK EV battery industry.





Governance

<https://www.visitmidulster.com/things-to-do/clogher-valley>

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028 8676 5588 | www.lcgroup.co.uk

Governance

Our Corporate Governance

We have established an appropriate governance structure along with a set of core values, which provide a clear direction to all employees and suppliers about how we expect everyone working for and with LCC Group to behave - ethically and in accordance with our policies and standards.

The company's sustainability and ethical practice applies to all employees and directors.

All staff must certify that they have read and understood this document as it forms part of their terms and conditions of service. Staff are also provided with the Disciplinary Code and the Health and Safety Statement.

These documents are covered during staff induction, which also incorporates a module regarding values, behaviours and ethics. The Group strives to continuously improve the quality of products and services provided and to refine our processes to allow us to deliver on these objectives.

We instil a positive culture of ethical behaviour and effective governance, using shared values to underpin our strategic objectives and shape the way in which we deliver products and services. While each division carries out separate and distinct business, they function as a single amalgamated group under the Board of Directors comprising four Directors and three Non-Executive Directors (as outlined below) and the Senior Management Team.

Responsibilities of the Board

The high-level responsibilities of the Board of Directors are as follows:

- To outline the strategic direction and objectives of the Group.
- To review the implementation of the Group's strategic planning on a Group-wide and divisional basis.
- To enable and support the delivery of the Group's strategic planning.
- To review the priority of Group activities to ensure the most effective and efficient use of resources.
- Ensure employees are trained to the highest standard so all customers receive the highest standards of service.
- Evaluate financial and activity performance against agreed key outputs/targets to ensure effectiveness of financial and management controls.
- Review and consider the threats and opportunities in the risk environment, review and oversee existing risks.
- Review and monitor the effectiveness of policies and procedures in the Group.
- Ensure effective customer communication.

Table 1: Current Board of Directors

Name	Position
Michael Loughran (Snr)	Managing Director/Company Secretary
Michael Loughran (Jnr)	Coal Operations Director
Daniel Loughran	Oil Operations Director
Geraldine Quinn	Financial Director
Joe McGeown	Non-Executive Director
Norman Adams	Non-Executive Director
David Millar	Non-Executive Director
Andrew Cuthbert	Board Advisor on Sustainability

Governance



We instil a positive culture of ethical behaviour and effective governance, using shared values to underpin our strategic objectives and shape the way in which we deliver products and services. ”

Management Committees

Our Corporate Governance Framework also outlines the roles and responsibilities of several Group committees and functions, including the:

Health and Safety Committee

Responsible for the establishment and maintenance of an effective Health and Safety policy. The Committee consists of staff from each division.

Their main role is to advise and assist management and staff on Health and Safety matters. The overall responsibility for the establishment and maintenance of an effective policy for Safety, Health and Welfare at Work rests with the Board of Directors. They are supported in this responsibility by the Health and Safety Officer and the Health and Safety Committee.

The Committee's main role is to advise and assist management and staff on health and safety matters. Meetings are held quarterly (or more frequently should a health and safety related emergency arise).

Risk Committee

As part of LCC Group's control environment, it is responsible for providing advice regarding the suitability and robustness of the group's internal control systems and procedures.

The Accounting Officer appoints the membership of the Committee, which comprises of members from the Board of Directors and an external board advisor on sustainability. The risk committee assists the board in overseeing and reviewing emerging risks. The risk committee prioritises risks, including climate-related risks.

LCC Group is committed to address sustainability and climate related topics. We plan to integrate considerations on sustainability, including climate change, into our organisational structure and function. Currently we have set climate change as a board level issue, intertwined with our business operations and strategic planning.

The external sustainability advisor makes recommendations to the board which are considered and approved as is economically viable to the LCC Group.

Board's Governance and Oversight on Sustainability

Going forward, we intend to prioritise climate change as a strategic board-level agenda. Senior management meetings occur on a monthly basis. In these meetings, we plan to discuss our climate change plans and commitments, so we keep on track as we progress towards our goal.

In our view, effective board governance is instrumental in guiding LCC Group towards sustainable growth and maximising long-term value for our stakeholders in a socially responsible and environmentally conscious way.

Governance

Role of the Board in Sustainability

The role of the board with respect to Sustainability will include:

Setting Sustainability Policies

The board of LCC Group will be responsible for establishing and approving sustainability policies including those related to climate change and public sustainability goals and targets. These policies will help lay the groundwork for our company-wide sustainability practices.

Overseeing our Sustainability Strategy

The board will be responsible for overseeing the formation and implementation of our company’s long-term sustainability strategy and ensuring it aligns with our overall business goals.

Integrating ESG into Risk Management

The board will be responsible for ensuring that ESG factors are integrated into LCC Group’s risks management process. This will include integration in our risk register and risk management policy.

Tracking Sustainability Performance

The board will engage in regular monitoring of our sustainability performance and progress towards our ESG goals including our decarbonisation plans.

Driving Stakeholder Engagement

We intend to regularly engage with our diverse stakeholders in identifying material topics and areas of focus as we progress on our sustainability journey. The board will be critical to guiding this stakeholder engagement and ensuring we get regular feedback on stakeholder perceptions of LCC Group’s sustainability efforts.

Promoting Sustainability Culture

Our board will be forerunners in fostering a sustainability culture throughout our company and setting a proper tone at the top which will cascade down to all employees. This may be through incentivising sustainable practices among employees or ensuring that sustainability is a key factor in decisions and operations. We will provide updates on these efforts in our regular sustainability reports.

Ensuring Regulatory Compliance

With the increasing incorporation of sustainability regulations and commitments in Europe and Northern Ireland, the board of LCC Group will play a pivotal role in ensuring that we comply with all relevant local, regional, and global regulations on sustainability.



Governance

Management Role

Each month, the Senior Management Team brings together the heads of each division to co-operate in the leadership and management of the various divisions.

By taking collegiate responsibility for cross-organisational issues, the Senior Management Team balances the individual divisional responsibilities with their corporate responsibility. The remit of the Senior Management Team is to oversee operations and deliver on strategic plans for all of the companies.

The responsibilities of management are set out as follows in the figure below:

- Support in the development and delivery of Strategic and Business Plans, including actions to address reduction of our carbon emissions.
- Evaluate financial and activity performance against agreed key outputs/targets to ensure effectiveness of financial and management controls.
- Proactively identify threats and opportunities in the risk environment, review and manage existing risks.
- Manage and monitor the effectiveness of policies and procedures in LCC Group.
- Ensure projects deliver optimum output and effectiveness through appropriate allocation of resources.
- Encourage and promote innovation throughout LCC Group activities.
- Foster effective team working across the range of LCC Group companies to ensure optimum efficiency and effectiveness.
- Promote working methods and conduct that reflect the core values of LCC Group.

LCC Group's risk management approach provides the mechanisms to identify, prioritise and rank corporate risks and ensure that the appropriate mitigation actions are implemented to address these risks. However, the main responsibility for identifying corporate risks lies with the Senior Management Team, as its members are well placed to identify and monitor corporate risks.

Risk Committee

The role of the risk committee is to provide assurance on the adequacy and effectiveness of our environmental systems including:

- Internal controls.
- Risk management.
- Governance arrangements.

Its activity covers the entirety of the LCC Group's activity. The committee may also act, as required, in an advisory capacity to projects under development to ensure the adequacy of control measures. The Accounting Officer meets the Risk Committee regularly to discuss key findings of the external advisory function.

The external advisory function works along with the sustainability advisor in identifying potential risks that might affect the organisation, including those related to climate change.

The external sustainability advisor has the responsibility to evaluate LCC Group's strategy and objectives. The advisory functions role includes supporting the group on its ability to adapt to changing market conditions resulting from climate change, regulatory demands, green policies, and resilience against climate related risks.



Risk Management

<https://www.abiuk.co.uk/top-5-greenest-sceneries-in-northern-ireland/>

Risk Management

Our risk management framework includes the identification, assessment, and prioritisation of risks, followed by co-ordinated application of resources to mitigate, monitor, and control the impact of these events or threats.

It is also the foundation for management of risk and integration into LCC Group's approach to decision making and strategy formation.

In our endeavour to endorse sustainable practices, we acknowledge the existence of ecological, social, and governance risks that have the potential to influence our operational efficacy and long-term resilience. Therefore, we have instituted a comprehensive risk management plan to identify, assess, and manage these risks in all our operations.

As we recognise the significant adverse implications of climate change, we are committed to identifying and understanding the associated risks that might affect our business. A substantive part of this commitment involves conducting a comprehensive climate scenario analysis. Therefore ensuring a robust and proactive risk management strategy.

Our approach to climate impact assessment aims at evaluating both transitional and physical risks. Transitional risks constitute changes in technology, market conditions, and laws. These changes could result from society's transition towards a lower-carbon economy. For instance, the introduction of carbon emission - related regulations may lead to compliance costs, a need to revamp operational processes or even potential penalties for non-compliance.

Similarly, with market preferences leaning towards environmentally friendly products, our product portfolio might need a significant shift in its strategic direction.

Our approach to climate impact assessment includes different paths to a lower-carbon, climatically-secure future, each with differing socio-economic, technological and policy changes. From the worst-case scenarios to the ideal ones, this analysis will cover a wide spectrum of situations. This approach will help us develop flexible strategies that can address an array of possible futures.

We will employ forward-looking metrics to evaluate these risks in terms of their probabilities and impact on our financial and operational performance, like the impacts of associated carbon taxes and emission reduction projects. Further to this, the identification of the energy transition scenarios and associated risks will be used to determine our capital expenditures as we work towards reducing our carbon footprint whilst maintaining our role as effective energy distributors.

This will not only allow us to build organisational resilience against potential detrimental effects but also enables us to recognise and seize the accompanying opportunities amidst these challenges.

For example, we take into consideration the potential for investment in renewable energy and sustainability innovations, reiterating our commitment to playing our part in the global transition to a sustainable, low-carbon economy.

Risk Management

Technological advances offer both a challenge and an opportunity. While new, green technologies might make some of our processes outdated or less efficient, they also offer the door to innovation and enhancement in our operations and products.

Physical risks, on the other hand may comprise severe weather events such as floods, cyclones, or even long-term shifts in climate patterns like rising sea levels or increasing temperatures.

These can lead to direct operational challenges like disruption in our supply chain, production downtime, or damage to infrastructure. The indirect challenges include community displacement, an increase in occupational health hazards, scarcity of natural resources and threats to biodiversity leading to reputational risks.

Climate Related Risks

Herein, we have outlined some of the climate-related risks that may have the potential impact in the short, medium, and long term upon our strategic objectives. This is an indicative risk and impacts matrix based on our business and local context. As we conduct a climate scenario analysis, the risks identified will be updated.

Table 2:

Summary of climate related risks over the Short, Medium and Long term

Period	Risk	Description of Impacts	Potential Financial Impact	Mitigation
Short Term	Steam Coal	Changes in climate regulations and increased local and regional climate change commitments can have an impact on our day-to-day operations and overall bottom-line. These can include carbon pricing, emission limits, or new laws aimed at reducing dependence on fossil fuels. Increasingly stringent regulations can necessitate significant changes to manufacturing methods and increase costs associated with permit applications, emissions control technology and adherence to regulatory standards.	Regulatory compliance can elevate operational costs, affecting profit margins and potentially requiring increased capital expenditure for infrastructure and processes needed to meet new regulatory requirements.	LCC Group is committed to clear carbon reduction targets and has put together a sustainability plan that sees LCC Group become carbon neutral by 2036 and Net Zero by 2046.
	Liquid Fuel Risk	Not all transport is likely to be able to convert to battery technology and as a result liquid fuels will remain in use. The synthetic and renewable alternatives that are available today are not produced in sufficient quantities to replace the volume requirements of traditional fossil fuels.	Due to the demand for liquid fuels for a wide range of applications including transport, logistics, aviation and industrial use there is a need to continue to use liquid fuels	LCC Group has invested in storage and distribution capability in Hydrotreated Vegetable Oil (HVO) as an alternative to diesel and has invested significantly in ethanol, and tallow processing so as to facilitate the blending of bio fuels with traditional fuels at levels that current combustion engine technology can deal with.

Risk Management

Table 2 (Continued):

Summary of climate related risks over the Short, Medium and Long term

Period	Risk	Description of Impacts	Potential Financial Impact	Mitigation
Short Term	Market Risks	The market for steam is likely to become more volatile as countries including Ireland and the European Union work to transition to a low-carbon economy. Declining demand for coal, combined with the increasing affordability and popularity of renewable energy sources, may put downward pressure on steam prices and constrain market growth.	Volatility and decline in demand for steam can lead to lower sales revenues, squeezing profit margins and potentially leading to write-downs on coal-related assets.	LCC Group are committed to a future strategy which involves the production of carbon additives for critical materials as listed by the UK and EU such as silicon metal and the production of isostatic graphite for electric vehicles and the supply. Despite falling demand and prices in steam coal prices carbon based material prices are on the increase.
	Electricity supply related risks	Net Zero targets require the group to purchase GOs and REGOs both on behalf of its customers and on behalf of its own internal operations.	Failure to purchase GOs and REGOs to validate the groups carbon neutral and net zero targets would result in an inability to met its net zero target.	LCC Group is committed to GOs and REGOS being in place for all internal operations by 2036 and for all customer processes by 2046 leading to achievement of a net zero target.
	Gas supply related risks	LCC Group would be unable to operate on hydrogen that may be expected to replace natural gas in the future.	LCC Groups equipment would not be able to operate on increasing percentages of Hydrogen.	LCC Group are replacing turbines and equipment that run on gas with state of the art hydrogen ready equipment.
	Financial risks	The transition to a low-carbon economy implies a significant shift in asset values away from steam coal. This poses a risk of stranded assets.	A shift in asset values away from steam coal can lead to stranded assets. LCC Group could face an impairment, potentially affecting our steam coal asset value.	The move towards carbon additives for critical materials such as silicon metals and the production of graphite will mean that the base carbon product price will increase rather than decrease. Synthetic Graphite prices often reach more than 20x the value of steam coal.
Medium Term	Technology Risks	As advancements in renewable energy technologies increase, there is a real risk that steam coal as a primary source of energy may be phased out. The lack of innovation and inability to adopt evolving technologies in the value chain might make it difficult for LCC Group to compete.	Failure to innovate or adopt new technologies can affect competitiveness, reducing market share and revenues. It might also necessitate retroactive investment in technology, raising costs.	LCC Group are investing significantly in research to produce new carbon additives and products. The group is currently considering investment in a graphite production facility with the support of the Advanced Propulsion Centre in the UK.
	Litigation Risks	Environmental awareness has heightened among the public and advocacy groups, and this can translate into potential lawsuits, criminal liability, and legal action against companies including LCC Group who are not doing enough to combat climate change if the group should not commit to a carbon reduction strategy.	Legal action can not only lead to penalties and court fines but also increase legal defence costs and potential settlement fees. It may lead to reputational damage, which can affect LCC Group's market share, profitability, and stock price.	LCC Group have invested significantly in its future sustainability strategy and meets all expected government requirements within the sectors it operates. LCC Group do not expect this to change in the medium term future.
	Regulatory Risks	The raw materials required for carbon additives and products manufacturing may become more scarce and costly due to the environmental impacts of climate change and increased regulatory scrutiny of extraction and transportation processes.	Increased costs for Run of Mine Coal (ROM) can lead to squeezed profit margins. Climate events disrupting the supply chain could mean an increase in operational costs and potential loss of revenue due to production downtimes.	LCC Group have a global reach and expect to continue to access carbon from a wide range of suppliers in a wide range of geographies. This includes Run of Mine (ROM) coal from assets in Columbia and in Wales (UK). The LCC Group feels it is well placed to continue to access materials up until 2050 and beyond.

Risk Management

Table 2 (Continued):

Summary of climate related risks over the Short, Medium and Long term

Period	Risk	Description of Impacts	Potential Financial Impact	Mitigation
Long Term	Political & Social Risks	Over the long term, a sustained shift in public sentiments towards greater environmental protection and sustainability could influence political will and policy-making, leading to a more adverse operating environment for coal companies.	Adverse climate policies could lead to stranded assets, decreased demand, and increased costs. Shrinking public support can lead to losses in consumer base, reducing sales and revenues.	LCC Group's Sustainability strategy meets all regulatory requirements expected to become law within the medium to long term. CBAM, Battery Passport and Emission Trading Schemes) have been analysed by the LCC Group until legislative changes as far out as 2034.
	Reputational Risks	Stakeholder pressures, including from investors, consumers and employees, may increase. Stakeholders may expect higher levels of sustainability, and this could harm LCC Groups' reputation and our capacity to attract investment and maintain customer loyalty.	Damage to reputation can affect the ability to secure financing and can drive away potential customers leading to drop in sales. Investors may divert funds into more climate-friendly industries, making fundraising challenging and possibly increasing the cost of capital.	LCC Group believe that with a net zero target of 2043 it will be a leader in the reduction of carbon. Its plans to enter the EV materials market and to produce future carbon products such as Graphite, Carbon Nano Tubes (CNT) and graphene. Will be supported with LCC Groups leading position in supplying Hydrotreated Vegetable Oil (HVO), Sustainable Aviation Fuels (SAF) and other renewable liquid fuels. Its renewable energy target at Go Power through the supply of GOs and REGOs to its customers, and its recent commitment to hydrogen production and usage as an alternative to natural gas will prevent the group from experiencing negative PR.
	Transition Risks	The longer the transition to a low-carbon economy is delayed, the more abrupt and disruptive the transition could be. The risk includes the potential for reduced demand for some commodities, abrupt and surprising shifts in energy prices, emerging capacity constraints, and unexpected advances in technological solutions.	In the case of an abrupt and disruptive transition, the potential for reduced demand, shifts in energy prices, and capacity constraints, could result in loss of revenues, increased costs, and stranded assets.	LCC Group believe its Sustainability strategy will put it ahead of its competitors in achieving a successful transition away from fossil fuels. The Group are investing in R&D and making significant investment in assets that will facilitate a successful future business in the future circular economy.

Risk Management

Managing Environmental Risks

The coal and oil industry is, by nature, an environmentally intensive sector and we strive to comply with all applicable environmental regulations and permits required to minimise or eliminate negative impacts on the environment.

We have established an appropriate Environmental Management System (EMS) , in line with local environmental permit requirements, and we are proud to be certified to ISO 14001 EMS standards.

LCC Group also conforms to the requirements of ISO 14001:2015 - Environmental Management System Certification, ISO 45001:2018 (Occupational Health and Safety) and ISO 9001:2015 Quality Management System Certification following a successful assessment of the Company's Management system.

We are pleased to report continued excellence in environmental compliance in 2023. During the reporting year, and indeed over the last number of years, no breaches were reported to regulatory authorities.



DID YOU KNOW?

The high carbon content of anthracite is valuable for producing isostatic graphite, which is used in the manufacturing of lithium-ion batteries for the electric vehicle industry.

Other risks facing our business and our Mitigation Approach

Aside from climate change risks, other risks that face our business include

Process Safety, Personal Safety and Environmental Risks: The nature of our operating activities exposes us to a wide range of health, safety and environmental risks such as incidents associated with releases of hydrocarbons when fuelling, operating facilities and transporting hydrocarbons.

Our Approach

- Our operating management system helps us manage these risks and drive performance improvements.
- Our Health and Safety Committee is responsible for the establishment and maintenance of an effective Health and Safety policy.

We frequently monitor implementation of our environmental policy at Board level

Changing Market Dynamics

External factors outside the direct influence of the Group, including economic cycles and technological changes can significantly impact on our performance.

Our Approach

- The impact of external factors is mitigated through a focus on strong financial management, a broad spread of products, customers across the group and prudent expansion due diligence requirements.
- We are privately owned, managed by a Board of Directors, which enables us to respond to opportunities quickly and gives us the freedom and control to ensure that all strategies pursued create superior value for customers and the communities in which we operate.

Compliance with legal and ethical standards

A material failure to comply with applicable legal and ethical standards could result in penalties, costs and reputational harm and damage to relationships with Suppliers or Customers.

Our Approach

We promote a culture of compliance and run our business the right way consistent with our values of Customer Focus and Independence. In line with these values, we aim for excellence and professionalism in the delivery of our services and strive to examine all complaints, conduct reviews and make decisions in a fair, objective and impartial manner.



Our Sustainability Focus



Our Sustainability Focus

Environment

Over the years, we have committed to deepening our understanding of environmental management and protection, both locally and globally. Our goal is to provide the best possible service to our customers while minimising our impact on the environment.

Environmental Policy

Our Environmental Policy is centred around four key principles. We are committed to:

- Meeting environmental legislation including regulations relating to waste management, planning controls, safe oil and coal storage.
- Communicating our environmental aims to our employees, suppliers, customers and the general public.
- Continually improving our environmental performance.
- We aim to prevent pollution from the storage, handling and distribution of coal which can be dusty. Also, the prevention of pollution to water from the storage, transport and pumping of fuel oil.

To meet these objectives LCC Group. operates an Environmental Management System (“EMS”) that meets the requirements of the international environmental standard ISO 14001.

Objectives are set to ensure the correct planning and leadership is given to achieve environmental improvements. The success of the ISO 14001 system depends on compliance from all staff inside our Company.

Every employee is expected to adhere to the Environmental Policy, and it is posted on staff notice boards and included in environmental awareness training. We internally monitor implementation of our environmental policy at Board Level.

We integrate, where possible, environmental considerations into all our business decisions such that we can minimise our environmental footprint and step up our contributions to solving sustainable challenges.

Our Sustainability Focus



LCC Group's wholly-owned subsidiary, Go Power, is a leading supplier of electricity to the commercial and industrial sectors in Ireland. In 2022, 57.6% of Go Power's total electricity sales were certified by SEMO, Ofgem and GREX as derived from renewable sources, an increase of 1.7% on 2021. 100% of Go Power's electricity sales in ROI were renewable in 2022 (Certified by SEMO).

Investing in our Environment

We continuously invest in technology and efficiency projects across our operating business to minimise any environmental irritation. For example, we have made substantial engineering solution investments in our coal wash plants and storage yards over the years by upgrading our water treatment thickener tanks and investing in vacuum disc filters to reduce airborne particles and solids in discharge and generally making the operating activities more efficient and economic.

We are always striving to improve our operational processes to minimise water consumption, reduce energy use, decrease the quantities of third-party chemicals used, limit discharge, reduce emissions and reduce costs.

We recognise that emissions are only one element of our total environmental footprint. Protecting water resources is also an important factor in our overall sustainability efforts.

At all our operating sites, we comply with stringent environmental regulations to ensure that our activities do not endanger local surface water or groundwater. To avoid potential spills of polluting materials, we have invested in and implement best practice material storage and water collection and recycling / treatment systems with the appropriate pumping, decanting, bunding, overflow and runoff arrangements. Where possible, we collect and utilise rain / storm water and recirculate back into the process reducing the amount of water intake from utility sources.

At office level, we have also improved our waste management and reduction initiatives through an enhanced effort to recycle and use the appropriate bins for the disposal of waste.

For now, 57.6% of our electricity is generated from renewable sources and this is set to increase as more of our customers demand green energy from us.

To deliver more on green energy, our management is proactively seeking opportunities to support small wind farm providers (< 10MW), anaerobic digestion farms, solar and biomass plants and provide these energy generators a viable route to the retail market.

Our Sustainability Focus

Our Greenhouse Gas (GHG) Emission Metrics

In our drive to deliver on our sustainability commitments and decarbonisation plan, we have started tracking our Scope 1 and Scope 2 emissions and defined 2022 as our baseline year. We engaged the services of The Change to track our Scope 1 and 2 emissions across all our offices and retail locations. We hope to achieve a year-on-year reduction in our Scope 1 and 2 emissions as we continue to diversify and implement our energy transition initiatives.

Measuring and reporting on our company's Scope 3 greenhouse gas (GHG) emissions has been a significant challenge, but it is an essential step that we have undertaken to affirm our commitment to sustainable practices.

Scope 3 emissions, which refer to all indirect emissions that occur across our value chain, are notoriously difficult to monitor due to their sheer depth and complexity. However, we consider this an opportunity to rise to the challenge of understanding our environmental impact in a more comprehensive light.

We are working to encourage and support our partners in adopting greener supply chain practices by engaging in clear and open conversation with our stakeholders about our sustainability goals and collaborating with our partners to innovate and implement best practices.

While we acknowledge that monitoring Scope 3 emissions is a massive undertaking, we are fully committed to fulfilling our responsibility by starting to collate the information regarding our Scope 3 material categories in 2024.

As business demands rise amidst demand for energy, our target is to consciously drive a reduction in our operational Scope 1 and 2 emissions while maintaining our role of connecting energy demand and supply for our customers.

Table 3: Summary of our Scope 1, 2 and 3 emissions across our offices and retail locations

KPI	Unit	2022	2023
Scope 1	e tonnes CO ₂	2,509	2,855
Scope 2	e tonnes CO ₂	541	631
Scope 3	e tonnes CO ₂	5,148,760	4,087,774
Total	e tonnes CO ₂	5,151,809	4,091,260
Reduction	e tonnes CO ₂		-1,060,550

Notes:

- LCC Group have taken our baseline year as 2022.
- LCC Group will be carbon neutral on its Scope 1 and Scope 2 emissions by 2036.
- LCC Group aim to be Net Zero by 2046, a goal achievable with support from upstream suppliers and downstream customers.
- Refrigeration/cooling system data has not been included in Scope 1.
- Scope 3 emissions are estimates based on standard emission data statistics from 360 energy.
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca, unleaded from comcar.co.uk
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂.
- Scope 3 emissions for 2022, 2023 do not include upstream emissions.
- Scope 3 electricity as 2023 data has not yet been audited by Ofgem, GREX or SEMO.

Our Sustainability Focus

Investing in our People

LCC Group Ltd. has a global reach with over 320 talented employees. In addition to our sound, strategic operations, a big reason we continue to grow and prosper is due to our ability to recognise and attract talented people. We provide competitive compensation, outstanding benefits and recognise the importance of allowing individuals room to explore opportunities and grow their careers.

Building a Sustainable Work Culture

We employ several initiatives to create a positive and supportive work environment where every individual can feel valued and have their say and central to achieving this is ensuring:

- Staff are well informed and have the information to carry out their jobs efficiently and effectively.
- Staff are encouraged to put forward their views and concerns.
- Staff are actively involved in planning and decision making.
- Relevant information is communicated to the appropriate people, in the appropriate manner and at the appropriate time.
- An environment of openness, honesty, consistency, and clarity of communication is encouraged.
- Everyone understands LCC Group's objectives and values and shares in its culture. Staff are actively supported and challenged to deliver on their ambitions and that of LCC Group.
- Staff, regardless of their location are kept informed of what is going on within LCC Group.
- Staff receive feedback on their work and development needs are addressed.
- There are clear channels for communication (including, newsletter, team meetings).

Diversity and Inclusion

We need a diverse workforce to be successful as a company, to help us solve complex challenges that matter and to build long-term and trusted relationships. We want to attract, develop and retain the best talent and to create a diverse and inclusive working environment, where everyone is accepted, valued and treated fairly without discrimination.

Our definition of inclusion covers both visible and invisible differences, stressing the value of both. These include differences in thoughts and ideas, cultures and approaches as well as more visible aspects. This starts with our attraction and recruitment processes and continues through the way we support employees and unlock their human energy while working with us.

Our Sustainability Focus

Employee Development

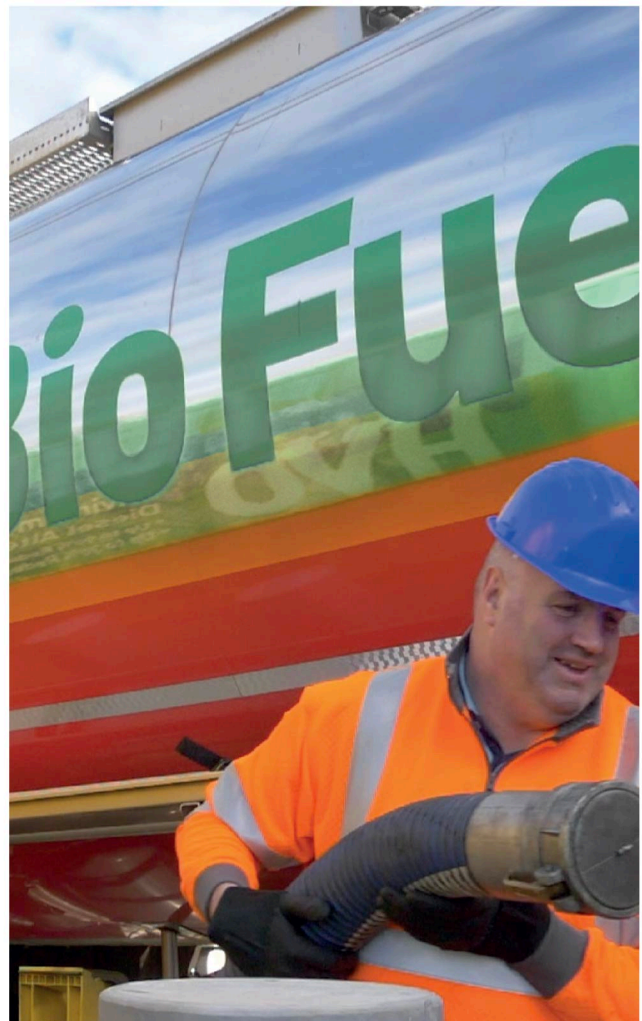
We are committed to the development of our staff at all levels across the business. We encourage continuous learning and development to ensure our people are equipped to meet the demands of a rapidly changing and increasingly digital world of work. We invest in training and development, where required, at all levels, enabling us to build a strong succession pipeline of future leaders. We invest in our people to help them become future-ready, developing their skills as the energy sector evolves. We encourage our senior leaders to hold regular and constructive performance coaching conversations to help drive personal improvement.

Our transition toward a more digitised workplace has been underway for the past couple of years. The requirement for many of our office-based employees to work from home owing to the pandemic greatly accelerated this transition. Traditional ways of working came to a halt, almost overnight. The shift to remote working could have been disruptive and challenging. But with our digital infrastructure firmly established and new ways of working well understood, it was exceptionally smooth. We worked rapidly to further enhance our existing technology capabilities, enhancing our remote-work capacity and developing tools to keep employees informed and connected.

Talent Attraction and Retention

LCC Group’s strategy articulates the need to attract, develop and retain people who are passionate about energy and are motivated to deliver exceptional customer experiences. Our key leadership teams have remained stable. Most appointments this year constituted internal appointments and transfers which bears testimony to our succession depth and ability to deploy talent across different areas of our business. Employee turnover has also remained low.

The identification of potential successors for Executive roles forms an integral part of discussions at Board level. We continue to strengthen our talent pools and succession pipelines to ensure sufficient depth and breadth in line with the capabilities we need to succeed.



Our Sustainability Focus

Health and Safety

At the heart of our operations is our commitment to a safe, conducive and supportive work environment. We strive to ensure that our workforce and everyone at our facility can perform their duties in a safe and supportive environment. We do this by employing several protective measures and investing significantly in personal protective equipment.

We conduct our business in a manner that protects the health, safety and security of all personnel, including employees, contractors and supply chain partners. Our commitment to Health and safety is met through our comprehensive policy and the Health and Safety committee.

Our Health and Safety Policy focuses on the following four pillars, namely:

Adhering to Established Rules

Our established rules of safety guide our workers in staying safe while performing tasks. The rules are aligned with best practice in operating environments and focus on areas such as working at heights, lifting operations, and operating machinery.

Health and Wellbeing

LCC Group is committed to managing health hazards that could cause undue harm to our workforce and society in general. Our Health and Safety officers are responsible for measuring exposure to harmful levels of dust, noise, fumes or chemicals that could cause harm.

Leadership and Qualifications

Facilitating and maintaining a safety culture is an essential part our day-to-day operations. We ensure individuals with the appropriate qualifications are able to enforce authority, where required, to avoid unnecessary incidents. Our continued on the job training is pivotal to achieving this.

Product Safety

We assess our product range to identify any potential health, safety or environmental concerns and ensure compliance with chemical control and product safety through continued monitoring of all our facilities.

Customers trust us to provide them with safe, high-quality products. All our products are sourced and manufactured to be safe for their intended use. In line with our value of empathy, we monitor customer feedback and work closely with Regulators to continue to progress safety standards.

Our Sustainability Focus

Effective Safety Management

To continuously improve safety, our businesses implement safety management systems, as relevant to their activities. We have been assessed and certified as meeting the requirements of ISO 45001:2018 (Occupational Health and Safety). **Our certification covers the following activities:**

- Handling, packaging and distribution of solid fuel for industrial and domestic use;
- Storage and distribution of coal, kerosene, diesel, gas oil and bottled gas;
- Sale and supply of electricity to commercial and industrial customers and sale and supply of gas.

On an annual basis, we carry out a comprehensive review of the Health and Safety performance of all our operating sites. We focus on eliminating hazards at source, carefully planning our activities, identifying potential hazards through risk assessment, managing risks and investing in necessary areas for improvement.

We have invested in all aspects of Health and Safety including mobile plant safety, such as machinery guarding, improvements in platforms and fall protection measures, electrical system upgrades, pedestrian / mobile plant segregation and noise, emissions, and dust reduction initiatives.

Safety in our Supply Chain

When Suppliers enter our sites to deliver products, they are expected to comply with our safety requirements. However, ensuring rigorous safety standards within our supply chain is more difficult to influence.

To address these challenges, our procurement processes comprising monitoring, risk analysis and third-party auditing, ensures that supplier safety is a core part of our supply chain management.



Our Sustainability Focus

Employee Wellbeing

At LCC Group, we know that looking after our mental health is just as important as looking after our physical health. The changes in working and personal situations as societies continue to evolve and face significant challenges, has put a greater emphasis on how valuable it is to maintain good mental health.

We foster an inclusive working environment that always supports our people. We want to help break down the stigma around mental health by encouraging our employees to have conversations about this important topic. We implement employee health and wellbeing programmes across our business, providing incentives, tools, social support and strategies on physical and mental health. This includes optimising ergonomics, providing access to health screening, reducing noise impact and reviewing occupational hygiene.

Internal Communications Arrangements

Good internal communication is vital to the successful operation of LCC Group and to ensure that staff objectives are aligned to the organisational aims. Our internal communications strategy helps:

- Foster a strong communication culture within LCC Group by creating a flow of information up, down and across the organisation.
- Develop a culture where managers and staff feel motivated and empowered to contribute to the organisation and where communication and sharing of knowledge is seen as a joint responsibility.

This ensures that:

- Staff are well informed and have the information to carry out their jobs efficiently and effectively.
- Staff are encouraged to put forward their views and concerns.
- Staff are actively involved in planning and decision making.
- Everyone understands LCC Group's objectives and values and shares in its culture. Staff are actively supported and challenged to deliver on their ambitions and that of LCC Group.
- Staff receive feedback on their work and development needs are addressed.

Our Sustainability Focus

Enhancing Societal Value

We work hard to use our influence and reach to maximise our positive impact in local communities. We contribute to the local economies in where we operate through employment, charitable donations, sponsorships and supporting local businesses.

Corporate Social Responsibility (CSR)

We recognise that we must integrate our business values and operations to meet the expectations of all our Stakeholders. They include customers, employees, suppliers, the community and the environment. We recognise that our social, economic, and environmental responsibilities to these stakeholders are integral to our business. We demonstrate these responsibilities through our actions and within our corporate policies.

In line with our empathy value, we take seriously all feedback that we receive from our stakeholders and, where possible, remain open and honest in communicating our strategies, targets, performance and governance to our stakeholders in our continual commitment to sustainable development.

Some key focus CSR areas that are core to our success are as follows:

- We ensure a high level of business performance while minimising and effectively managing risk.
- We encourage dialogue with local communities for mutual benefit.
- We support and encourage our employees to help local community organisations and activities in our region.
- We operate an equal opportunities policy for all present and potential future employees.
- We provide, and strive to maintain, a clean, healthy and safe working environment.
- We uphold the values of honesty, partnership and fairness in our relationships with stakeholders.
- Our contracts clearly set out the agreed terms, conditions and the basis of our relationship.
- We operate in a way that safeguards against unfair business practices.
- We encourage Suppliers and Contractors to adopt responsible business policies and practices for mutual benefit.

Our Managing Director is responsible for the implementation of our CSR policy, but the responsibility for our performance to this policy also rests with all employees.

Our Sustainability Focus

Strengthening Local Relationships

At LCC Group, we understand that having good relations with the local communities in which we work is critical to our operations. Where we have assets located in populated areas, or on land that provides resources to local communities, we undertake various efforts to participate in constructive community engagement and minimise any negative impacts.

We minimise the impacts that our presence could have on local communities and ensure they benefit from our activities.

Before we make an investment or commence with any new operations, we apply several key processes and practices to ensure we have identified local community and stakeholder concerns and are effectively mitigating any associated risks.



Sponsorships and Charitable Donations

Since our establishment in 1986, we have been giving and volunteering in our local communities and have built lasting partnerships with educational, sporting bodies, civic and charitable initiatives.

Each year, we make regular donations to over 20 different charities, including: the St. Vincent De Paul, Cancer Focus, NI Chest Heart & Stroke, the Air Ambulance and Lough Neagh rescue.

We support the FACTS (Families of Autism Coming Together for Support), which is a peer-to-peer parent support group set up in 2017 by parents of children and young adults with a diagnosis of Autism by making an annual donation to cover the rental of their offices.

We sponsor almost 50 community organisations on an annual basis across a wide range of community sporting organisations such as the GAA, rugby, golf, soccer, cycling, motorcycle and athletics, which make a real and impactful difference at community level. See the list of our sports sponsorship and charity support on the next page.

LCC Group has a charitable foundation in Colombia that helps underprivileged young people achieve their personal aims and goals whether that be attending education or playing sport at a high level.



Our Sustainability Focus

We work hard to use our influence and reach to maximise our positive impact in local communities. We contribute to the local economies in which we operate through employment, charitable donations, sponsorships and supporting local businesses.

Our Sports Sponsorships

We have sponsored a number of sport events including the following:

- Main Sponsor to Maiden City Soccer Academy for all underage and senior teams. Funding MCA to promote sports at schools all over N.Ireland.
- Main Sponsor to Local GAA Games at local home Club Lissan GAA. We are the main club sponsors and sponsor of all underage teams.
- The County Tyrone Club Championship
- Slaughtneil Ladies GAA Teams
- Main Sponsor of the Derry Ladies Senior Team.
- Key Sponsor for Ulster Rugby
- Belfast Giants – Ice Hockey
- Wheelchair Basketball in Cookstown
- World Bowls in Belfast, Seamus Kyne
- Local Pensioners Bowls Mid Ulster

Charity and Community Support

We provided support to various charities and communities. Some of our initiatives includes:

- We are one of the founding partners of Charis – Cancer and we continue to support the organisation annually.
- We have dedicated funding for Asthma Research
- Supported the development fund for a Secondary Education School at Holy Trinity Cookstown
- Annual Donations & ongoing Support to both Churchtown & Lissan Primary Schools located in Lissan. We provided funds for IT equipment, power washing with LCC Staff, and Painting of schools with LCC personnel.
- Annual donations to Lissan Cross Community Play Group. Sponsored year end graduation for kids.
- Provided discounts on Heating Bills and free Giveaways for Saint Vincent De Paul
- Provided discount Schemes on heating and fuel bills set up through Cookstown for the Elderly.
- Organised educational School trips for the local primary schools to LCC facilities.
- Provided funding to Brain Injury matters to support the delivery of art workshops for 15 individuals who have an acquired Brain Injury (ABI).
- Partnered with NOW Group to provide employability training and a work-based placement to individuals encountering employment challenges due to conditions like autism, disabilities, economic inactivity, or those returning to work after a long break.

Our Carbon Reduction Plan



DID YOU KNOW?

Did you know that carbon is a key requirement in the production of silicon metals. It is a key component in the production of materials that are used in the production of everything from solar panels through to advanced metallurgical products.

Emissions Reductions Targets

In order to achieve net zero by 2046, we have adopted the following carbon reduction goals. As a carbon fuels provider our Scope 3 emissions are by far our most significant. Our Scope 1 and 2 emissions will fluctuate/ stagnate and could possibly increase slightly in the next few years due to growth however the overall trend in these will be a decrease per unit of fuel/ energy used. Our Scope 3 emissions are set to drive down the carbon footprint of LCC Group. We intend to survey suppliers and mandate reduced carbon emissions as part of a 2046 strategy for net zero at LCC Group Ltd.

- Carbon Neutrality on Scope 1 and 2 emissions by 2036
 - Use of renewable electricity across our groups internal processes
 - Use and production of e fuels of bio and synthetic liquid fuels within our company to replace fossil fuels
 - Use of hydrogen, bio methane and other alternatives as replacements for natural gas
- Net Zero including Scope 3 by 2046
 - Sale of only coal as a material rather than as a steam coal
 - Sale of only renewable electricity to our customer base
 - Production and sale of bio and synthetic liquid fuels to customers to replace fossil fuels

Carbon Neutral by 2036

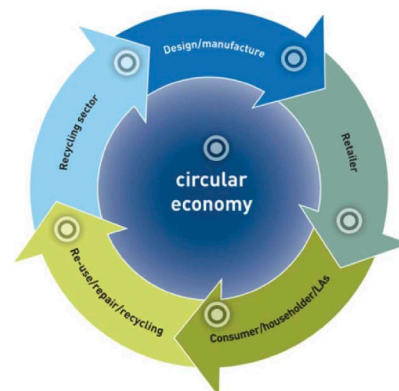
Scope 1 emissions include:

- Diesel used in cars for internal travel
- Diesel used in deliveries
- Diesel used in haulage between internal sites
- Heating oil/ kerosene used in the business

NB to date Refrigeration/cooling system data is not judged as a significant emissions component in LCC Group has not been analysed as yet, is not required as part of a Scope 1 emissions review and as a result has not yet been included in our Scope 1 emissions reporting.

LCC Group are committed to a circular process

LCC Group are considering the principles of circularity on the purchase of future equipment and in the design, build and manufacture of all future products.



Our Commitment to Coal as a Material

LCC Group has recorded a carbon reduction of 1,034,730 tonnes across Scope 1, 2, and 3 emissions between 2022 and 2023. This achievement is based on an established figure of 2.8 kg of carbon, taking into account the blend of coals with varying carbon content processed by the company.

LCC Group has made significant strides in shifting from thermal coal towards the production of low-emission carbon products.

Our Commitment to Electricity

LCC Group's wholly-owned subsidiary, Go Power, is a leading supplier of electricity to the commercial and industrial sectors in Ireland. In 2022, 57.6% of Go Power's total electricity sales were certified by SEMO, Ofgem and GREX as derived from renewable sources, an increase of 1.7% on 2021. 100% of Go Power's electricity sales in ROI were renewable in 2022 (Certified by SEMO).

Our Commitment to Gas Diversification

As part of our comprehensive strategy, we are actively exploring hydrogen as an alternative fuel to natural gas for our customers. Hydrogen presents a promising avenue for significantly reducing carbon emissions, as it can be produced from renewable sources such as wind and solar power through electrolysis.

By integrating hydrogen into our energy infrastructure, we aim to offer our customers a cleaner, more sustainable energy option while simultaneously contributing to carbon neutrality.

We are also dedicated to moving away from natural gas in favour of bio methane. In line with our gas diversification approach, we intend to provide bio methane for multiple applications including gas injection into the grid.

Carbon Neutrality

Our Core Targets - Carbon Neutral & Net Zero

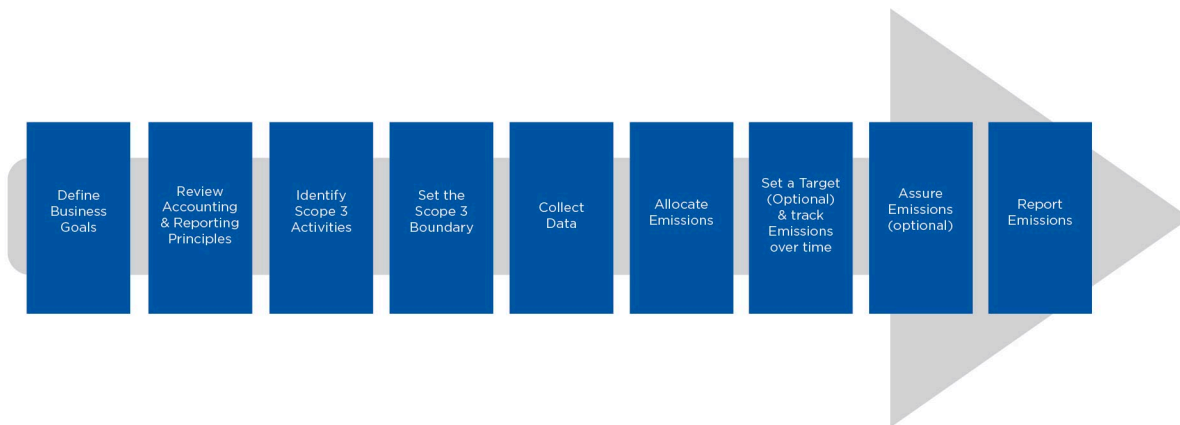
- A drive towards selling 100% renewable electrical energy by 2046.
- A drive towards selling 100% sustainable fuels by 2046.
- A drive towards 100% of our coal being used as a material rather than for its calorific content by 2036.
- A drive towards the full replacement of natural gas with hydrogen and bio methane by 2046.

NB

LCC Group have taken our baseline year as 2022.

LCC Group will be carbon neutral on its Scope 1 and Scope 2 emissions by 2036.

LCC Group aim to be net zero by 2046 a goal achievable with support from upstream suppliers and downstream customers.



Our core mission is to become carbon neutral in Scope 1 and 2 emissions by 2033 and with the support of our upstream clients and downstream partners to become net zero by 2043.

This move will be fueled by the production, storage and distribution of HVO and other sustainable liquid fuels, the move from thermal coal into carbon materials, a transition from natural gas to hydrogen and a transition into renewable electrical power.

We are committed to best practice. Structured processes and systems that support the successful operation of duties in an ethical, accountable, transparent, and effective manner.

LCC Group has reduced its combined carbon emissions in Scope 1, 2 and 3 by an estimated 1,060,550 e tonnes CO₂ from 2022-2023, a reduction of 20.59% in a single year of trading. This was over and above our targeted estimate which had originally been a decrease to 4,503,486 e tonnes CO₂ on the 2022 footprint which had been 5,151,809 e tonnes CO₂. The reduction has come in the main due to our reduction in the processing of thermal coal in favor of coal as a carbon additive material.

External factors limiting our progressing towards Carbon Neutrality by 2036 and net zero by 2046

LCC Group would like to expand access to EV charging points at a number of its sites however we are constrained by a series of factors:

A number of our Go stations do not have the free space to accommodate EV charging points and as a result we have not been able to facilitate these.

If we install charging points at our stations, we would prefer fast charging points to facilitate as many vehicles as possible. Unfortunately, the capacity for an appropriate grid connection is limited and we are currently restricted on what is possible by the restrictions of access to grid connection.

Regarding the limitations on our impacting our Scope 1 emissions profile. There are elements of the LCC Group Fleet that cannot currently be converted from diesel to HVO. As a result, we must phase out our existing fleet over a period of time. Although we aim to do this as quickly as possible, it may not be appropriate to do so for economic or even for Scope 3 reasons whereby disposal of a working vehicle would not make environmental sense.

On our Scope 2 emissions, LCC Group is moving toward Guaranteed Origin (GO) renewable energy.

LCC Group is focused on developing a sustainable business that transforms various areas of a normally high-polluting manufacture into more sustainable practice, rather than outsourcing the polluting stages to other parts of the world.

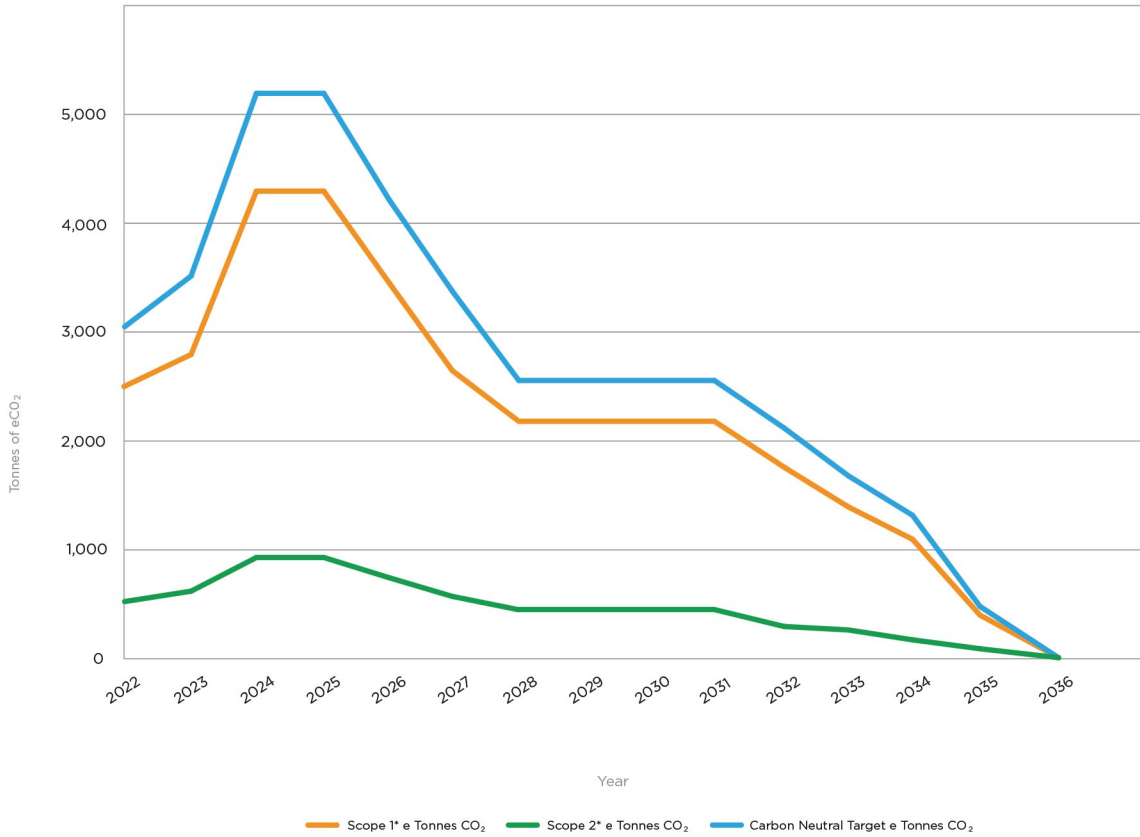
The cost of renewable electricity, e-fuels and sustainable locally produced materials are significant factors in impacting consumer adoption of these products, LCC Group are driving towards ever more economical approaches to the production of circular, renewable and hence provide sustainable alternatives to fossil fuel products. Price differentials will continue to cause differences in our downstream emissions.

Our supply chain will be driven by price of production and the demand for sustainable products. Raw materials, including waste, are limited thus this will limit the supply of renewable products within our workstream supply chain and our Scope 3 emission reductions.

We expect that additional upstream and downstream emissions will need to be added to the emission total in future years hence the allowance of a period of growth. As LCC Group expand its operations so there would be an expected increase in Scope 1, 2 and 3 emissions.

Carbon Neutrality

Diagram demonstrating our commitment to carbon neutrality within LCC Group. Carbon Neutral Target e tonnes CO₂



- LCC Group have taken our baseline year as 2022.
- LCC will be carbon neutral on its Scope 1 and Scope 2 emissions by 2033.
- Refrigeration/cooling system data has not been included in Scope 1.
- Scope 3 emissions are estimates based on standard emission data statistics from 360 energy.
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unloaded from comcar.co.uk.
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂.
- Scope 3 emissions for 2022/23 do not include upstream emissions.
- Electricity data for 2023 has not yet been audited by Ofgem, GREX or SEMO.

Carbon Reduction Projects

LCC Group has a large number of projects across the group that will make a real difference to our emissions targets in future years.

The following environmental management measures and projects are in process, implemented since the 2022 baseline. The carbon emission reduction achieved by these schemes equate to an actual reduction in e tonnes CO₂, of 1,060,550 or 20.59% against the 2022 baseline. The measures and initiatives will be in effect when performing the contract and show that total predicted emissions at LCC Group were reduced by 412,226 e tonnes CO₂ beyond the targeted 648,324 tonnes estimate in the given year.

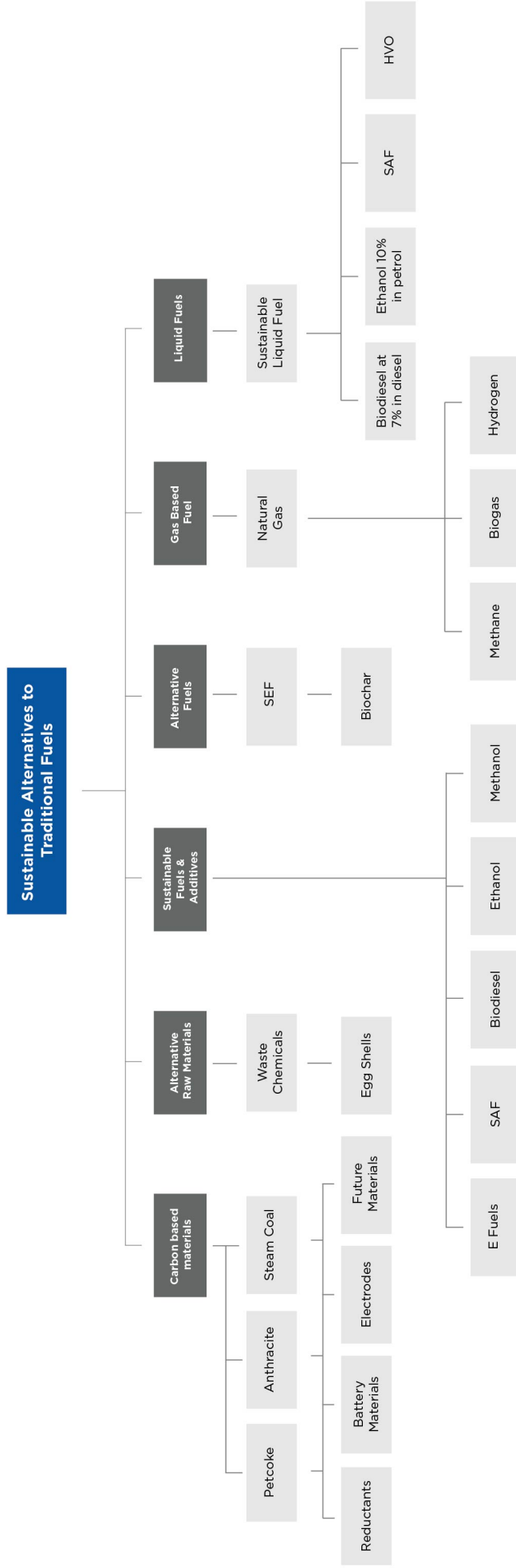
LCC Group have chosen to target a continued reduction in emissions based on this reduction in overall CO₂ in 2024, despite the group being expected to grow in overall scale in 2025.

Initiatives:

- Between 2021 and 2023 LCC Group have reduced emissions from thermal coal by 1,034,740 e tonnes CO₂.
- A significant reduction in the sale of thermal coal by 26.19% between 2022 and 2023 with a rise to 73.81% of coal being sold as a carbon additive material.
- The planning of construction of storage capacity for HVO, Bio Ethanol and FAME for blending in our new Cloghan Point Terminal and existing LSS Terminal.
- The increased supply of HVO for the first time in 2023.
- An increase in overall supply of Bio Fuels from 50.3m litres in 2021 to 54.16m litres in 2023 including HVO, ABP, Bio Ethanol Mixes, & FAME to our customers as part of our green initiative.
- The development of a series of patent pending carbon materials from ROM Coal (Run of mine coal) to reduce further our emissions profile.
- LCC Group wholly owned subsidiary Go Power is a leading supplier of electricity to the commercial and industrial sectors. In 2022 57.6% of Go Powers electricity in Northern Ireland was certified by Ofgem and GREX as derived from renewable sources an increase of 1.7% on 2021 while 100% of the energy the group sells in the Republic of Ireland (Certified SEMO) is certified renewable.
- The implementation of 100% renewable credits in the Republic of Ireland in 2022.
- The implementation of 57.6% renewable REGO credits in N.Ireland in the baseline year of 2022 figures not yet audited by Ofgem, GRES or SEMO for 2023 and are not able to be included in the 2023 report as a result.
- Intention to implement ISO14001.
- Engagement with The Change to identify alternative uses for ROM Coal such as graphite production.
- Blending of biologically sourced product, ethanol, ABP and HVO.
- LCC Group is a significant contributor to the Sustainable Energy Authority of Ireland (SEIA) which funds cross sector community projects, supports residential customers in becoming more sustainable and provides financial assistance for those in need of financial support.
- Certificate of carbon saved implemented for our volume customers in liquid fuels.

A View on the Sustainable Alternatives to Traditional Fuels

LCC Group are committed to a sustainable future and to identification of viable alternatives to traditional uses of fossil fuels where commercially viable.



Engaging our customers in our Net Zero journey

LCC Group prides itself in leading the way in sustainability. We encourage our customers to reduce emissions across their own operations. An example of the below is a certificate supplied to one of our customers who have adopted HVO as a sustainable alternative to diesel.



In the future we plan to implement further measures such as:

- Education material for our clients and suppliers around emissions.
- Data capture method development for upstream and downstream emissions.
- The conversion of ROM Coal into Graphite, Graphene and Carbon Nano Tubes as opposed to coal being used as a solid fuel/ thermal generator based on its calorific value.
- The production and blending of bio and synthetic fuels including SAF and alternative fuels for the maritime industry.
- The VAM (Ventilated Abatement of Methane) at active and disused coal plants owned by other organisations that continue to emit CO₂.
- Hydrogen production facilities, appropriate use and integration into the gas network.

An aggressive target of Net Zero by 2046

Despite the global target, and our expectation it could take longer, LCC Group are asking their suppliers and customers to join the firm on its journey to Net Zero by 2046. This aggressive goal will push our suppliers and clients further, faster.

With a focus on carbon products, renewable energy and sustainable fuels we feel perfectly placed to support the green energy transformation across air, land and sea ensuring that no matter what the distance our customers have access to the most efficient green alternatives in support of a low carbon future.



Commitment to Achieving Net Zero

LCC Group are aware that the vast majority of the emissions generated have been in how the products we supply are used. It is for this reason that although LCC Group has clear targets for reduction of Scope 1 and 2, its Scope 3 emissions are where the group feel it can make its largest impact.

The transition away from the use of fossil fuels purely for their energy content and moving towards the use of solid fuels for other purposes is critical to our net zero target. We must change the habits of our customers and of our supply chain and will, with their co-operation, design a path for the way forward.

As a Carbon product supplier LCC Group is committed to carbon neutrality by 2036 so as to reach net zero by 2046 in advance of 2050. This goal will require a clear commitment from our customer base to ensure the delivery of a substantial Scope 3 commitment.

It is our goal to educate and drive our customer and supplier base to support us on a carbon zero journey by 2046. This allows us room for any slips in delivery ahead of the global 2050 net zero emissions target.

LCC Group took its baseline year in 2022 when it began to record carbon emissions at Scope 1 and 2.

We began estimating Scope 3 emissions but have not yet created a comprehensive approach to include Scope 3 carbon management.

LCC Group have begun to issue certificates for organisations who are able to demonstrate a reduced carbon footprint and we encourage and support good practice. Despite best efforts to date, we have not yet gained a full picture of all upstream and downstream emissions.

Commitment to Achieving Net Zero

During the reporting period LCC Group continues to be a significant contributor to the Sustainable Energy Authority of Ireland (SEIA) which funds cross sector community projects, supports residential customers in becoming more sustainable and provides financial assistance for those in need of financial support.

LCC Group's wholly owned subsidiary Go Power is a leading supplier of electricity to the commercial and industrial sectors. Go Power uses 100% GO (guarantee of origin certified) renewably sourced fuel in the Republic of Ireland. Go Power Encourages all its customers in Northern Ireland to renewable power but the choice currently remains at the discretion of the buyer.

Go Power's overall sales of electricity have been tracked since before 2021. The overall trend is towards an increase in the percentage of renewable energy, despite an increase in sales of some 3.8m MWh between 2021-2022.

2021-2022 saw a decrease of 110g/kWh of carbon being emitted. The company is waiting for final audited figures for 2023 from SEMO on its Guarantees of Origin (GOs) and also from Ofgem on its REGO figures however both 2021 and 2022 CO₂ reductions are based on confirmed figures.

In 2022, 57.6% of Go Power's total electricity was certified by SEMO, Ofgem and GREX as derived from renewable sources, an increase of 1.7% from 2021. 100% of the energy the group sells in the Republic of Ireland (Certified SEMO) is certified renewable.

Go Power also sells natural gas, and the company is actively exploring the replacement of this supply with bio methane and hydrogen in several use cases. LCC Group has a goal of the full replacement of natural gas with synthetic fuels, bio methane or hydrogen by 2046.



Commitment to Achieving Net Zero

Embedded CO₂ within the energy industry is an industry wide problem. A long and complex journey lies ahead, requiring collaboration between innovators, vehicle manufacturers, fuel producers and those blending sustainable synthetic and fossil fuels. LCC Group has commissioned The Change to carry out early-stage research on viable alternatives to liquid fuels while also focusing heavily on the decarbonisation of fuels themselves through blending.

As a fuel distributor, LCC Group is pushing the transition of our customers away from fossil fuels towards sustainable fuels and such as HVO, Ethanol and FAME/ Biodiesel. This transition requires investment by our client base into new engine and machine types.

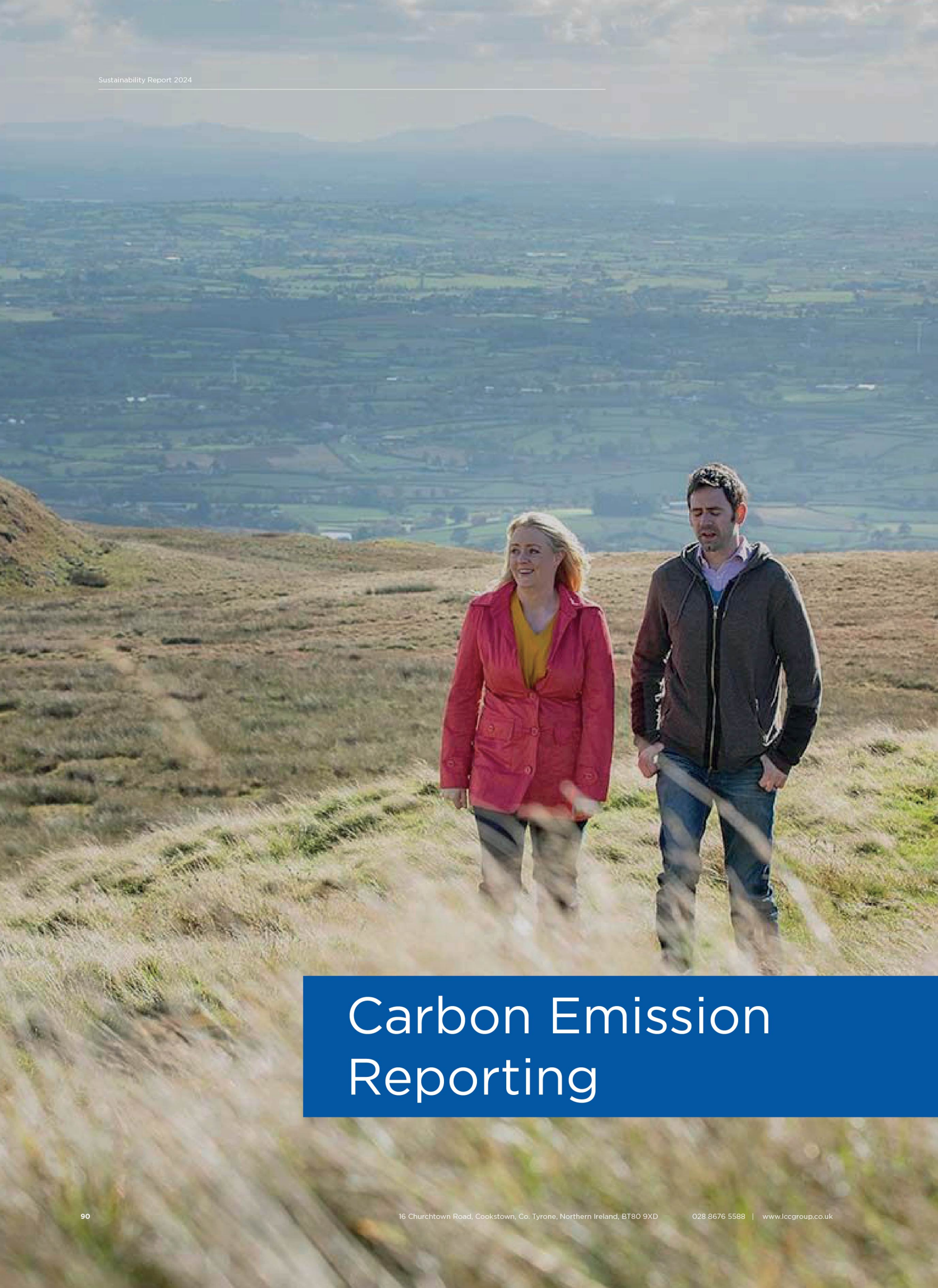
LCC Group is dedicated to the transition of its business into a new era of sustainability. We recognise that Electric Vehicles, Hydrogen and other fuel types will play a part in the future of the energy mix on the island. We are heavily invested in renewable energy with a major focus on wind, biomass and AD in regards to electrical generation and major focus on contracting and supplying renewable PPA's.

LCC Group sees storage and logistics as a key part of developing a new renewable supply chain and are developing storage for renewable and synthetic fuels at LSS and Cloghan point.

HVO, FAME/ Biodiesel, Ethanol and the potential for Hydrogen are key priorities in terms of supply. In 2023 LCC Group began to distribute HVO and intends to have HVO available at all GO Stations by 2036.

Biofuel blends such as B7 biofuel 7% biodiesel and E10 petrol (10% ethanol blend) are blends set at a legally required level by Government. Unfortunately, these levels cannot be automatically increased within current combustion engines and fuel storage technology due to the differing properties of bio fuels.

A drive towards synthetic e-fuels based on non-fossil constituents are being researched for traditional diesel and petrol engines while important initiatives exist in our other markets, including aviation - Sustainable Aviation Fuel (SAF) and marine industries, which are searching for viable sustainable alternatives to traditional fossil fuels.



Carbon Emission Reporting

Baseline Year for Emissions 2022

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions.

LCC Group have recorded emissions in line with its reporting requirement as a large company. The group has defined its baseline year as 2022 given this is the first year figures have been available. GOs (Guarantees of Origin) and REGOs (Renewable Guarantees of Origin) for 2023 have not yet been finalised and audited.

Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2022

Additional Details relating to the Baseline Emissions calculations.

- LCC Group have taken our baseline year as 2022 due to incomplete data until this point.
- LCC Group will be carbon neutral on its Scope 1 and Scope 2 emissions by 2036
- LCC Group aim to be net zero by 2046 a goal achievable with support from upstream suppliers and downstream customers
- Refrigeration/cooling system data has not been included in Scope 1
- Scope 3 emissions are estimates based on standard emission data statistics from 360 energy
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unleaded from www.comcar.co.uk
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂
- Scope 3 emissions for 2022 do not include upstream emissions.

Baseline Year Emissions: 2022

Emissions	Total (e Tonnes CO ₂)
Scope 1	2,509
Scope 2	541
Scope 3 (included Sources)	5,148,760
Total Emissions	5,151,809

2023 Emissions report

Reporting Year: 2023

The Carbon reduction made by the group across Scope 1,2 and 3 has been recorded at 1,060,550 between 2022 and 2023 based on this assumption. This is a reduction of 20.59% in emissions significantly beating our target of 168,059 a planned reduction of 12.58%. With this first year of tracking actual achievements versus a target the group has made a dramatic move towards a change of use of what was thermal coal into a drive towards the production of low emission carbon products.

- LCC Group will be carbon neutral on its Scope 1 and Scope 2 emissions by 2036
- LCC Group aim to be net zero by 2046 a goal achievable with support from upstream suppliers and downstream customers
- Refrigeration/cooling system data has not been included in Scope 1
- Scope 3 emissions are estimates based on standard emission data statistics from 360energy
- Kerosene emission average from energypedia.info, deriv from natural-resources.canada.ca unleaded from comcar.co.uk
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂
- Scope 3 emissions for 2023 do not include upstream emissions or Scope 3 electricity as 2023 data has not yet been audited by SEMO, Ofgem or GREX.

Emissions	Total (e Tonnes CO ₂)
Scope 1	2,855
Scope 2	631
Scope 3 (included Sources)	4,087,774
Total Emissions	4,091,260

Note

Go Power Figures not audited by Ofgem, GREX or SEMO for 2023 and are not included in the report as a result.

Comparison of Scope 1 emissions between the baseline year and 2023

Tonnes of CO ₂	2022	2023
Emissions in Tonnes CO ₂ e		
Scope 1		
Diesel used cars litres (Scope 1)	56	77
Diesel used deliveries litres (Scope 1)	2,240	2,155
Diesel used haulage litres (Scope 1)	140	576
Heating oil kero litres (Gas oil) (Scope 1)	72	48
Refrigeration	TBD	TBD
Total Scope 1	2,509	2,855

Scope 2 Emissions

Scope 2 electrical energy sourcing:

- LCC Group Head Office Electricity kWh
- Go Stations Electricity kWh
- Coal Yards Electricity kWh
- The group have decided that they will continue the transition to purchase 100% renewable energy credits by 2036
- The group have decided to use 100% biofuels and synthetic fuels as replacements for fossil fuels by 2036

Combined these actions will reduce Scope 2 emissions to zero.

Tonnes of CO ₂	2022	2023
Emissions in Tonnes CO ₂ e		
Scope 2		
LCC head office electricity kWh (Scope 2)	51	55
Go stations electricity kWh (Scope 2)	92	137
Coal yards electricity kWh (Scope 2)	397	439
Total Scope 2	541	631

Comparison between baseline year and 2023 in regards to Scope 3 emissions.

Tonnes of CO ₂	2022	2023
Emissions in Tonnes CO ₂ e		
Scope 3		
Upstream Emissions	TBD	TBD
Natural Gas Emissions	77,825	76,571
Thermal Coal	2,777,324	1,448,762
Electricity sales	199,884	179,895
Fuel sales	2,171,552	2,459,117
Scope 3 estimate	5,148,760	4,087,774

Our current Scope 3 approach is limited by the following:

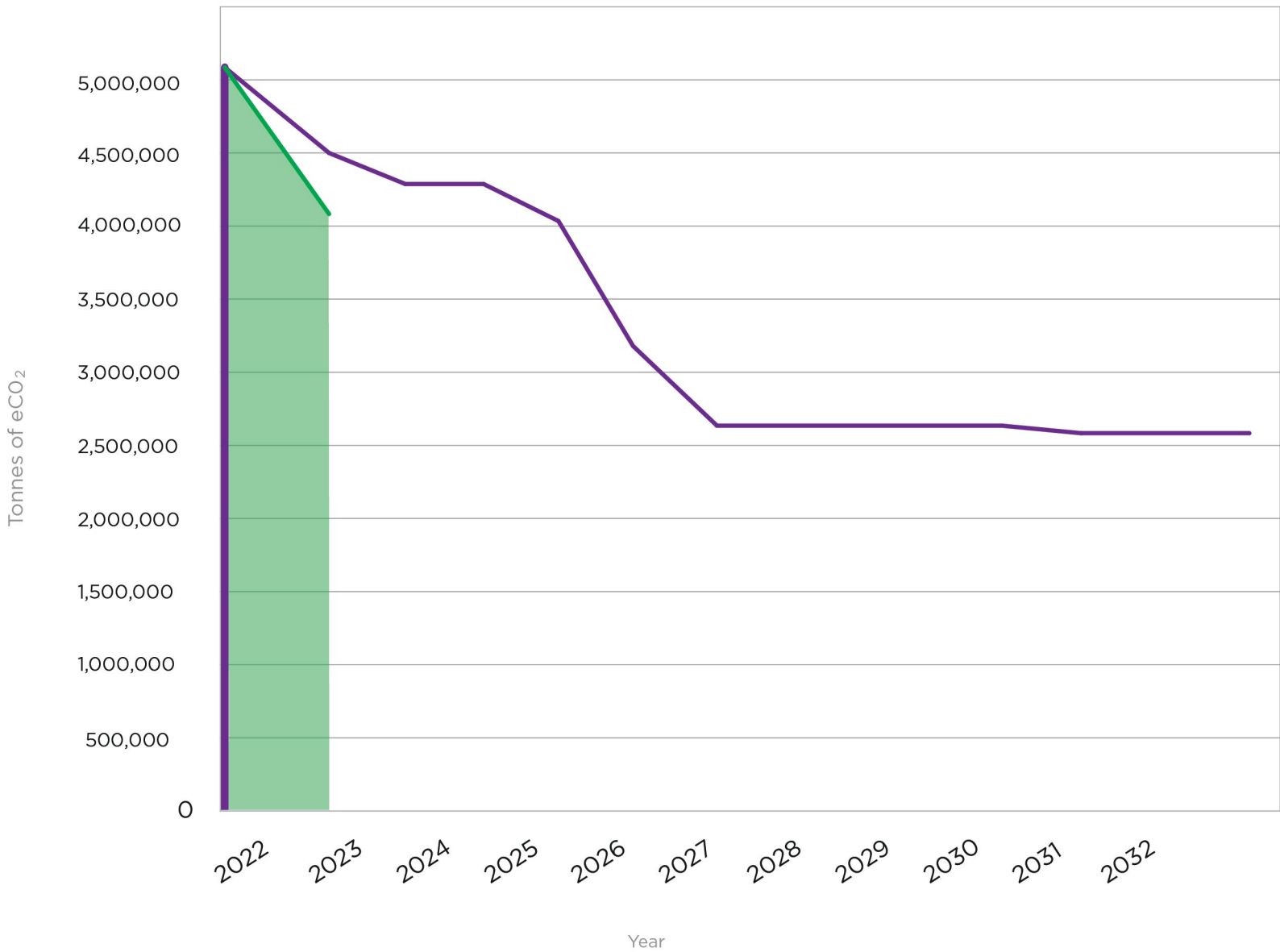
- Scope 3 emissions are estimates based on standard emission data statistics from 360 energy.
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unleaded from comcar.co.uk.
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂.
- Scope 3 emissions for 2022 do not include upstream emissions.
- Scope 3 electricity for 2023 data has not yet been audited by Ofgem, GREX or SEMO.

We have been moving towards a reduction in Scope 3 emissions and increased reporting based on the limitations listed above. We have set goals, that will require the education of both upstream and downstream partners, with our aim being to reduce carbon emissions to zero in Scope 3 by 2046.

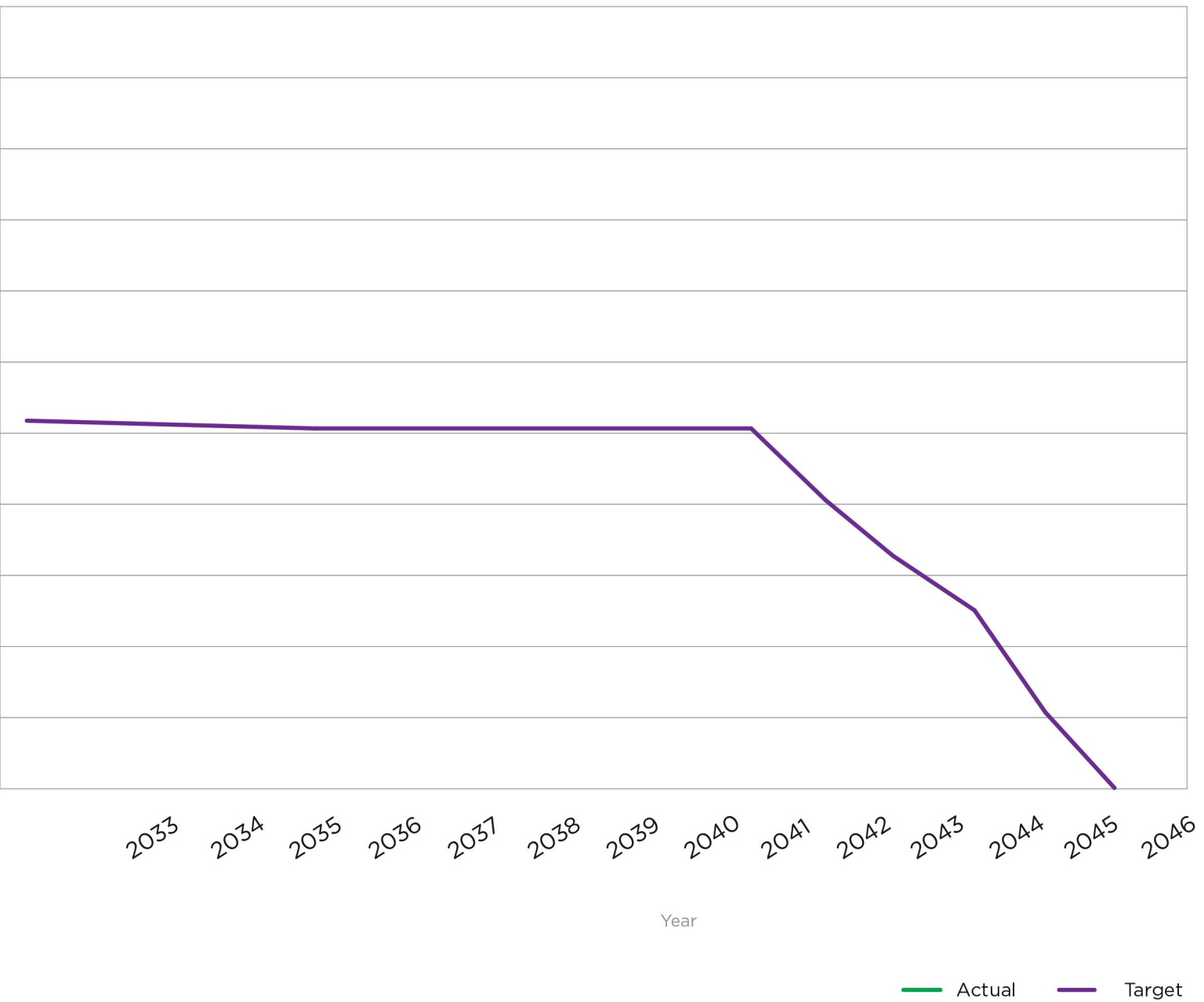
In order to do this we are following the GHG guidance on Scope 3.

LCC Group's Progress 2022 - 2023 against its Carbon Reduction Strategy that results in net zero by 2046.

Actual Emissions for 2022-2023 Vs Target Emissions for 2022-2046



NB The expected increase in CO₂ over the coming years is due in part to an expectation of growth at LCC Group and also based on an expectation that additional upstream and downstream emissions that have not yet been fully considered in this report will need to be included in emission figures in the coming years.



Why LCC Group emissions are not expected to decrease in a linear fashion year on year.

In our aim to deliver a clear consistent carbon reduction strategy LCC Group will focus its efforts on reducing emissions as quickly as possible however we endeavor to be both authentic and accurate in our predictions requiring the below caveats to be made

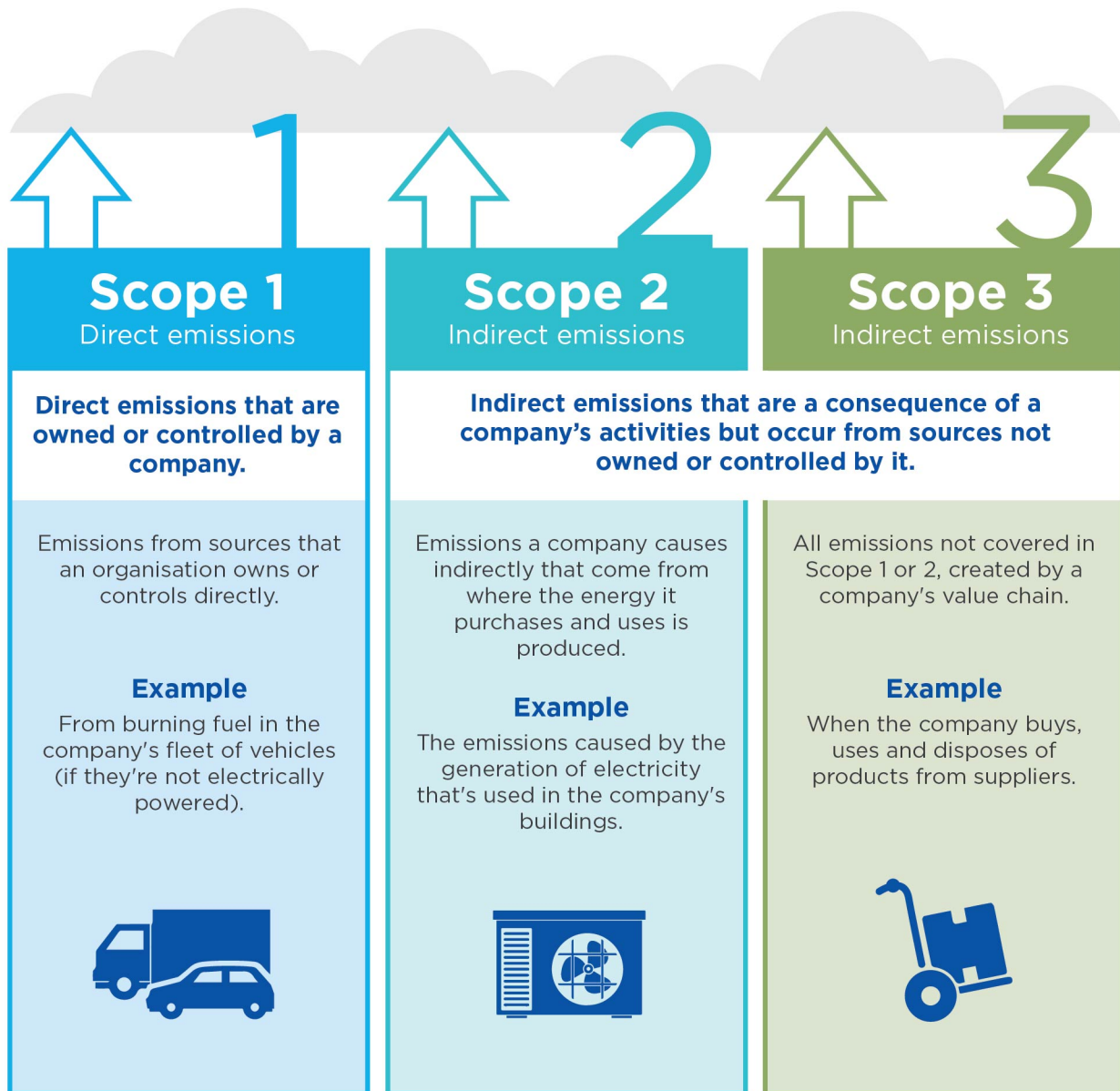
- Despite significant effort on the part of LCC Group towards a net zero strategy gaps in governmental policy, availability of finance for the transition from fossil-derived fuels to green fuels and a lack of price competitive and readily available renewable fuels have required LCC Group to be conservative in its prediction of its carbon neutral (Scope 1,2) and net zero strategies.
- An expectation of increases in overall Scope 3 emissions due to full disclosure of emissions from our supply chain.
- LCC Group are estimating a replacement of the oldest members of the logistics fleet by 2036 resulting in the last of the groups emissions from this source being removed. LCC Group believe that any move towards a more rapid replacement would increase Scope 3 emissions due to the adoption of new vehicles before the lifespan of existing vehicles had been fully depreciated.

Going beyond compliance with TPT reporting

- LCC Group is currently surveying its supply chain to facilitate accurate carbon reporting of Scope 3 emissions.
- LCC Group have been compliant with Streamlined Energy and Carbon Reporting (SECR) since the introduction of the scheme
- LCC Group have been compliant with Energy Savings Opportunity Scheme (ESOS) since the introduction of the scheme.
- LCC Group intend to comply with legislation being implemented by the Environmental Protection Agency around the roll out of the EETS (European Emission Trading Scheme) phase 2.
- LCC Group is beginning an initiative to assess its investments and the return on projects it is involved in on the basis of how they reduce the groups, customers and partners CO₂ emissions across Scope 1,2,3
- In the future LCC Group will calculate:
 - CO₂ footprint of the group across investments
 - CO₂ reduction per £ invested
 - CO₂ reduction per £ lent

What are Scope 1, 2 and 3 carbon emissions?

The three scopes are a way of categorising the different types of greenhouse gas (GHG) emissions created by a company, its suppliers and its customers.



Scope 3 Emissions

We have used our best estimate based on literage of liquid fuel, coal sold, natural gas, electricity and total volume of energy sold to acquire our Scope 3 emissions levels in line with Scope 3 reporting standards. Although Scope 3 is not a requirement of our reporting, LCC Group see our Scope 3 emissions as a critical part of our carbon reduction strategy in line with a global net zero emissions target of 2050. We aim to hit this target by 2046 if appropriately supported by our customers and suppliers.

Scope 3 emissions include:

- Downstream emission estimates from thermal coal produced
- Downstream emissions estimates from electrical energy sold
- Downstream estimates of liquid fuels sold

Emissions on the above use the following sources and estimates. *NB Our Scope 3 emission for upstream suppliers or natural gas due to lack of available data.

Thermal Coal

- Burning 1 Kg of Anthracite produces approx 3.3 kg e tonnes CO₂ while Bituminous coal produces 2.42kg of Carbon dioxide.* The Change have defined a figure of 2.8kg of carbon given there are a blend of coals used with variable carbon content processed by LCC Group Ltd. (Source 360Energy.net)

Electrical Energy

- Renewable certificates from SEMO on GO (Guarantee of origin) Renewable Credits in the Republic of Ireland and GO and Renewable Energy Guarantees of Origin (REGO) as guaranteed by Ofgem and GREX.

Liquid fuels

- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unleaded from comcar.co.uk
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂
- Unleaded
- Derv
- Animal By Products (ABP)

Scope 3 Emissions Risk Summary

Scope 3 emissions require the LCC Group to work together with suppliers and customers. The risk of our customers not supporting us on this journey is significant.

Our efforts to capture and reduce upstream and downstream emissions have already begun, setting an aggressive target for Net Zero by 2046.

Risks related to not reducing Scope 3 emissions

Type of Risk	Examples
Regulatory	GHG emissions-reduction laws or regulations introduced or pending in regions where the company, its suppliers, or its customers operate
Supply chain costs and reliability	Suppliers passing higher energy- or emissions-related costs to customers; supply chain business interruption risk
Product and Technology	Decreased demand for products with relatively high GHG emissions; increased demand for competitors' products with lower emissions
Litigation	GHG-related lawsuits directed at the company or an entity in the value chain
Reputation	Consumer backlash, stakeholder backlash, or negative media coverage about a company, its activities, or entities in the value chain based on GHG management practices, emissions in the value chain etc.

Opportunity for LCC Group under Scope 3

Type of Opportunity	Examples
Efficiency and Cost Saving	A reduction in GHG emissions often corresponds to decreased costs and an increase in companies' operational efficiency.
Drive Innovation	A comprehensive approach to GHG management provides new incentives for innovation in supply chain management and product design.
Increase sales and customer loyalty	Low-emissions goods and services are increasingly more valuable to consumers, and demand will continue to grow for new products that demonstrably reduce emissions throughout the value chain.
Improve Stakeholder relations	Improve stakeholder relationships through proactive disclosure and demonstration of environmental stewardship. Examples include: demonstrating fiduciary responsibility to shareholders, informing regulators, building trust in the community, improving relationships with customers and suppliers, and increasing employee morale.
Company Differentiation	External parties (e.g. customers, investors, regulators, shareholders, and others) are increasingly interested in documented emissions reductions. A Scope 3 inventory is a best practice that can differentiate companies in an increasingly environmentally-conscious marketplace

Scope 3

How Scope 3 emissions have been recorded

Scope 3 emissions for 2023 do not include upstream emissions or Scope 3 electricity emissions as 2023 data has not yet been audited by Ofgem, GREX or SEMO.

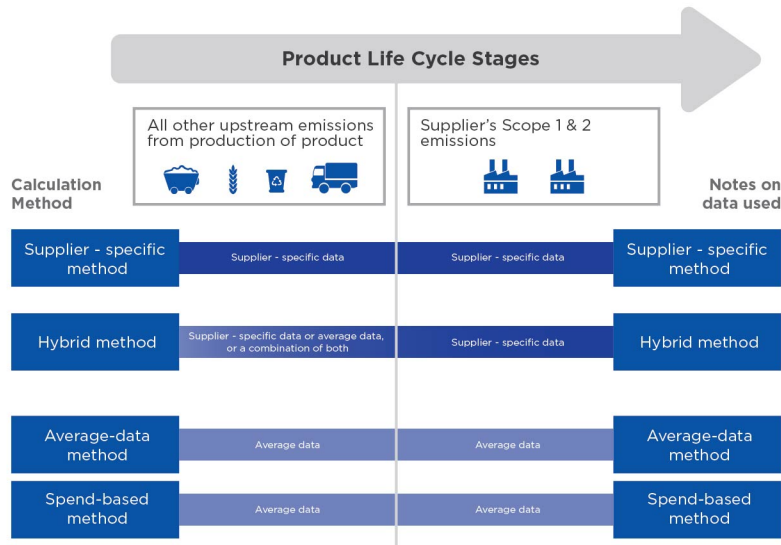


Figure [1.1] Different data types used for different calculations methods

Due to the nature of our business targets for Scope 3 emission reduction with our client base exist in 4 key areas:

- Reduction to zero of upstream emissions by 2046
- Reduction to zero of direct emissions per tonne of coal to zero used by our customers by a move away from thermal coal towards coal as a carbon additive product by 2046
- Reduction to zero of direct emissions per litre of fuel to zero used by our customers by 2043
- Reduction to zero of direct emissions per kw of electricity used by our customers by 2046

Our targets for Scope 3 emission reduction in our upstream emissions will have an aim of net zero by 2046.

As a raw material supplier, and in some cases primary source of materials, the emissions of our supply chain have the potential to be significant. LCC Group is undergoing a transformation program to catalogue and categorise our entire supply chain's emissions by at latest 2036 in an attempt to manage a reduction to net zero by 2046.

Declaration & Sign Off

LCC Group have committed to this sustainability strategy in line with good practice and governance. LCC Group's Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

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

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard .

This Carbon Reduction Plan has been reviewed and signed off by the board of directors.

Signed:

Daniel Loughran

Daniel Loughran - Director

Date: 17/04/24

Appendix



This report has been created in line with the GHG protocol.

Ref: ghgprotocol.org/corporate-standard

Appendix

Commitment to Achieving Net Zero

How we calculated our Scope 3 emissions from coal.

Burning 1 Kg of Anthracite produces approx 3.3 kg Tonnes CO₂ e while Bituminous coal produces 2.42kg of Carbon dioxide.* The Change have defined a figure of 2.8kg of carbon given there are a blend of coals used with variable carbon content processed by LCC Group. The Carbon reduction made by the group based on this across Scope 1, 2 and 3 has been recorded at 1,060,550 between 2022 and 2023 based on this assumption. LCC Group have made a dramatic move towards a change of use of what was thermal coal into a drive towards the production of low emission carbon products.

The basis of the statistics in this report

- LCC Group have taken our baseline year as 2022.
- LCC Group will be carbon neutral on its Scope 1 and Scope 2 emissions by 2036.
- LCC Group aim to be net zero by 2046 a goal achievable with support from upstream suppliers and downstream customers.
- Refrigeration/cooling system data has not been included in Scope 1.
- Scope 3 emissions are estimates based on standard emission data statistics from 360energy.net.
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unleaded from comcar.co.uk.
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂.
- Scope 3 emissions for 2022 do not include upstream emissions Scope 3 emissions for 2023 do not include upstream emissions or Scope 3 electricity as 2023 data has not yet been audited by Ofgem, GREX or SEMO.

When acquiring accurate data in Scope 3 we will follow the data norms per data type.

The following limitations are in place on 2022 data:

When considering thermal coal emissions: Burning 1 Kg of Anthracite produces approx 3.3 kg Tonnes CO₂e while Bituminous coal produces 2.42kg of Carbon dioxide.* The Change have defined a figure of 2.8kg of carbon given there are a blend of coals used with variable carbon content processed by LCC Group.

- Scope 3 emissions are estimates based on standard emission data statistics from 360energy.net.
- Kerosene emission average from energypedia.info, derv from natural-resources. canada.ca unleaded from comcar.co.uk.
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂
- Scope 3 emissions for 2022 do not include upstream emissions.

Appendix

Part of our ongoing initiative is to progressively reduce supplies of industrial coal for thermal power stations within the shortest time frame possible. One key use of anthracite as a filter media for the production of clean fresh drinking water.

LCC Group hydrating the world.



Filtered from anthracite. LCC Group distribute carbon based filter media for water filtration across the world from its base in the UK.

Appendix

LCC Group's baseline year emissions profile 2022

Tonnes of CO ₂	2022
Emissions in Tonnes CO ₂ e	
Scope 1	
Diesel used cars litres (Scope 1)	56
Diesel used deliveries litres (Scope 1)	2,240
Diesel used haulage litres (Scope 1)	140
Heating oil kero litres (Gas oil) (Scope 1)	72
Refrigeration	TBD
Total Scope 1	2,509
Scope 2	
LCC head office electricity kWh (Scope 2)	51
Go stations electricity kWh (Scope 2)	92
Coal yards electricity kWh (Scope 2)	397
Total Scope 2	541
Scope 3	
Upstream Emissions	TBD
Natural Gas Emissions	77,825
Thermal Coal	2,777,324
Electricity sales	199,884
Fuel sales	2,171,552
Scope 3 estimate	5,148,760
Overall Emissions	
Overall Emissions	5,151,809

Appendix

LCC Group's 2023 year emissions profile

Tonnes of CO ₂	2023
Emissions in Tonnes CO ₂ e	
Scope 1	
Diesel used cars litres (Scope 1)	77
Diesel used deliveries litres (Scope 1)	2,155
Diesel used haulage litres (Scope 1)	576
Heating oil kero litres (Gas oil) (Scope 1)	48
Refrigeration	TBD
Total Scope 1	2,855
Scope 2	
LCC head office electricity kWh (Scope 2)	55
Go stations electricity kWh (Scope 2)	137
Coal yards electricity kWh (Scope 2)	439
Total Scope 2	631
Scope 3	
Upstream Emissions	TBD
Natural Gas Emissions	76,571
Thermal Coal	1,448,762
Electricity sales	179,895
Fuel sales	2,459,117
Scope 3 estimate	4,087,774
Overall Emissions	
Overall Emissions	4,091,260

Appendix

LCC Group emissions report showing full categorisation of the emissions profile of LCC in 2023 against its baseline year 2022.

Tonnes of CO ₂	2022	2023
Emissions in Tonnes CO ₂ e		
Scope 1		
Diesel used cars litres (Scope 1)	56	77
Diesel used deliveries litres (Scope 1)	2,240	2,155
Diesel used haulage litres (Scope 1)	140	576
Heating oil kero litres (Gas oil) (Scope 1)	72	48
Refrigeration	TBD	TBD
Total Scope 1	2,509	2,855
Scope 2		
LCC head office electricity kWh (Scope 2)	51	55
Go stations electricity kWh (Scope 2)	92	137
Coal yards electricity kWh (Scope 2)	397	439
Total Scope 2	541	631
Scope 3		
Upstream Emissions	TBD	TBD
Natural Gas Emissions	77,825	76,571
Thermal Coal	2,777,324	1,448,762
Electricity sales	199,884	179,895
Fuel sales	2,171,552	2,459,117
Scope 3 estimate	5,148,760	4,087,774
Overall Emissions		
Overall Emissions	5,151,809	4,091,260
Overall Reduction		-1,060,550

Year on Year - Scope 3 Pathway (2022 - 2032)

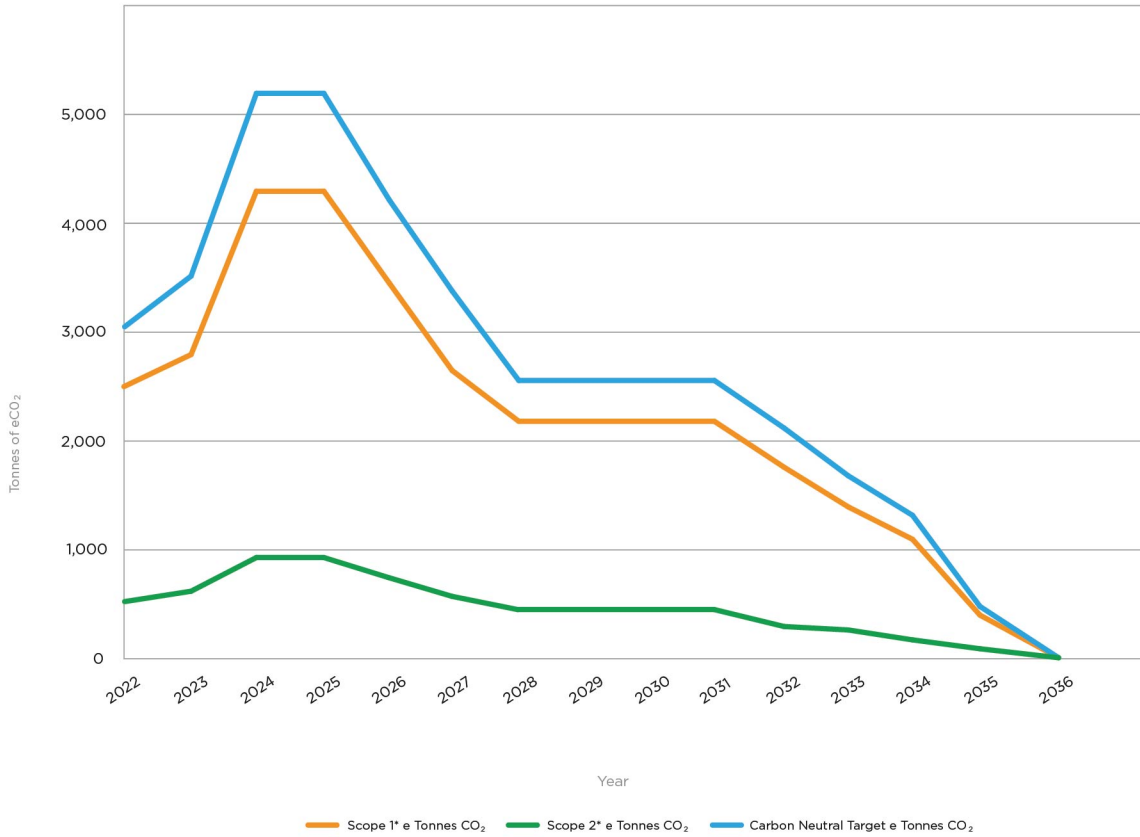
Tonnes of CO ₂ e	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Emissions in Tonnes CO ₂ e											
Scope 1											
Diesel used Cars litres (Scope 1)	56	77	115	115	92	74	59	59	59	59	47
Diesel used Deliveries litres (Scope 1)	2,240	2,155	3,233	3,233	2,586	2,069	1,655	1,655	1,655	1,655	1,324
Diesel used Haulage litres (Scope 1)	140	576	863	863	691	553	442	442	442	442	354
Heating oil Kero litres (Gas oil) (Scope 1)	72	48	72	72	57	46	37	37	37	37	29
Total Scope 1	2,509	2,855	4,283	4,283	3,426	2,741	2,193	2,193	2,193	2,193	1,754
Scope 2											
LCC Head Office Electricity kWh (Scope 2)	51	55	82	82	66	53	42	42	42	42	34
Go Stations Electricity kWh (Scope 2)	92	137	206	206	165	132	105	105	105	105	84
Coal Yards Electricity kWh (Scope 2)	397	439	658	658	526	421	337	337	337	337	270
Total Scope 2	541	631	946	946	757	606	484	484	484	484	388
Scope 3											
Upstream Emissions	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Natural Gas	77,825	76,571	76,571	76,571	61,257	49,005	39,204	39,204	39,204	39,204	39,204
Thermal Coal	2,777,324	1,448,762	1,448,762	1,448,762	1,159,009	927,208	741,766	741,766	741,766	741,766	741,766
Electricity sales	199,884	179,895	179,895	179,895	143,916	115,133	92,106	92,106	92,106	92,106	92,106
Fuel sales	2,171,552	2,459,117	2,705,028	2,705,028	2,705,028	2,164,023	1,731,218	1,731,218	1,731,218	1,731,218	1,731,218
Scope 3 estimate (excluding upstream)	5,148,760	4,087,774	4,333,686	4,333,686	4,007,954	3,206,363	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091
Overall Emissions											
Overall Emissions	5,151,809	4,091,260	4,338,914	4,338,914	4,012,137	3,209,710	2,567,768	2,567,768	2,567,768	2,567,768	2,567,232

Year on Year - Scope 3 Pathway (2033 - 2045)

	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
38	30	0	12	0	0	0	0	0	0	0	0	0	0
1,059	847	0	339	0	0	0	0	0	0	0	0	0	0
283	226	0	91	0	0	0	0	0	0	0	0	0	0
23	19	0	7	0	0	0	0	0	0	0	0	0	0
1,403	1,123	0	449	0	0	0	0	0	0	0	0	0	0
27	22	0	9	0	0	0	0	0	0	0	0	0	0
67	54	0	22	0	0	0	0	0	0	0	0	0	0
216	173	0	69	0	0	0	0	0	0	0	0	0	0
310	248	0	99	0	0	0	0	0	0	0	0	0	0
TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
39,204	39,204	39,204	39,204	39,204	39,204	39,204	39,204	39,204	39,204	31,363	25,091	20,073	8,029
741,766	741,766	741,766	741,766	741,766	741,766	741,766	741,766	741,766	741,766	593,413	474,730	379,784	151,914
92,106	92,106	92,106	92,106	92,106	92,106	92,106	92,106	92,106	92,106	73,685	58,948	47,159	18,863
1,731,218	1,731,218	1,731,218	1,731,218	1,731,218	1,731,218	1,731,218	1,731,218	1,731,218	1,731,218	1,384,974	1,107,980	886,384	354,553
2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,052,072	1,641,658	1,313,326	525,331
2,566,804	2,566,461	2,565,639	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,565,091	2,052,072	1,641,658	1,313,326	525,331

Appendix

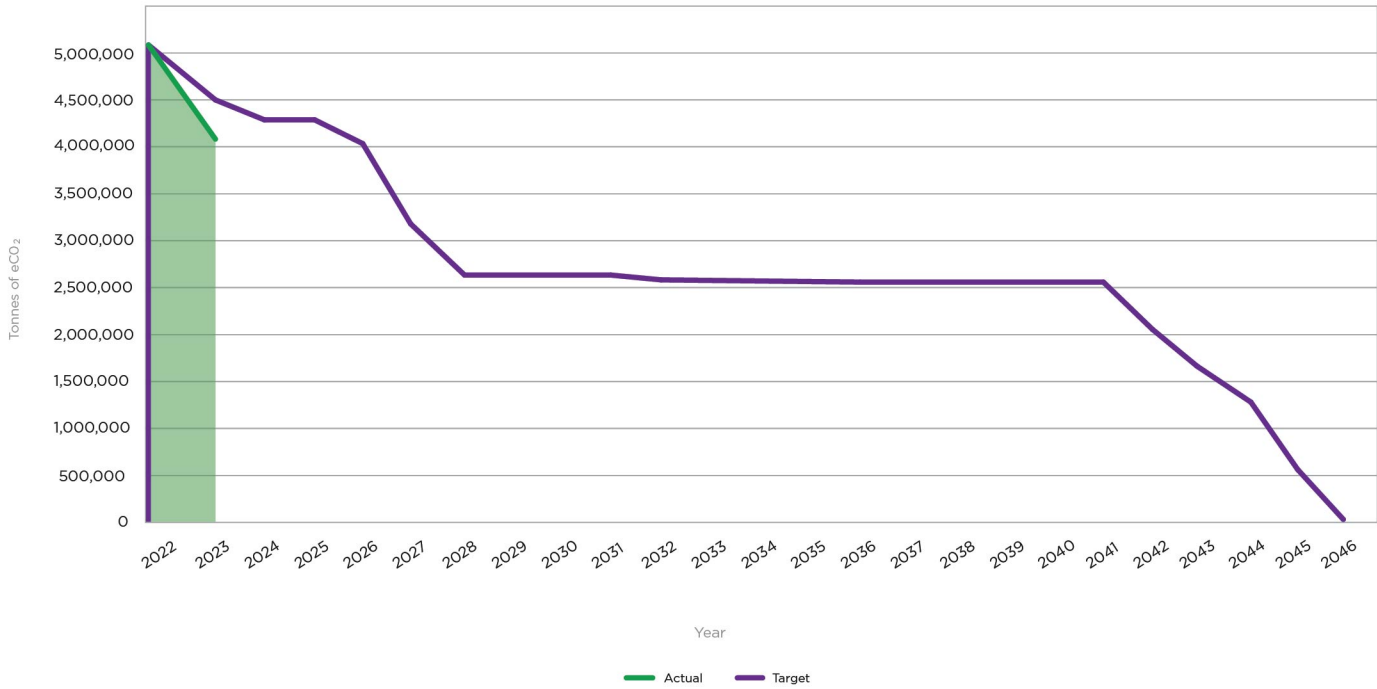
Diagram demonstrating our commitment to carbon neutrality within LCC Group.
Carbon Neutral Target e tonnes CO₂



- LCC Group have taken our baseline year as 2022.
- LCC will be carbon neutral on its Scope 1 and Scope 2 emissions by 2033.
- Refrigeration/cooling system data has not been included in Scope 1.
- Scope 3 emissions are estimates based on standard emission data statistics from 360 energy.
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unleaded from comcar.co.uk.
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂.
- Scope 3 emissions for 2022/23 do not include upstream emissions.
- Electricity data for 2023 has not yet been audited by Ofgem, GREX or SEMO.

Appendix

Diagram demonstrating Actual Vs Target Emissions at LCC Group, together with our commitment to our 2046 target.



- Refrigeration/cooling system data has not been included in Scope 1 for 2022.
- Scope 3 emissions are estimates based on standard emission data statistics from 360 energy.
- Kerosene emission average from energypedia.info, derv from natural-resources.canada.ca unleaded from comcar.co.uk.
- Ethanol, FAME and HVO as natural products have not been included as emitters of CO₂.
- Scope 3 emissions do not currently include upstream sources.

Appendix

LCC Group - Leading the way. Always exceeding expectations in decarbonisation

LCC Group do not hold detailed emissions data since 2019 which was the comparison date against which the UK target was set however the organisation has gone above and beyond in order to transition the organisation in line with the UK sustainability target.

Tonnes of CO ₂	2032	2037	2050
Percentage decrease expected by UK targets	50%	50%	100%
Decrease achieved Scope 1	69.92%	100%	100%
Decrease achieved Scope 2	71.67%	100%	100%
Decrease achieved Scope 3	49.82%	50%	100%
Overall	49.86%	49.79%	100%

Appendix

UK Figures actual

Tonnes of CO ₂	2022	2032	2037	2050
Emissions				0
Scope 1				
Diesel used cars litres (Scope 1)	56	28.01	14.00	0
Diesel used deliveries litres (Scope 1)	2,240	1,120.05	560.03	0
Diesel used haulage litres (Scope 1)	140	70.04	35.02	0
Heating oil kero litres (Gas oil) (Scope 1)	72	36.19	18.10	0
Total Scope 1	2,509	1,254.29	627.14	0
Scope 2				
LCC head office electricity kWh (Scope 2)	51	25.71	12.86	0
Go stations electricity kWh (Scope 2)	92	46.13	23.07	0
Coal yards electricity kWh (Scope 2)	397	198.50	99.25	0
Total Scope 2	541	270.35	135.17	0
Scope 3				
Upstream Emissions	TBD	TBD	TBD	TBD
Natural Gas Emissions	77,825	38,912.41	19,456.21	0
Thermal Coal	2,777,324	38,912.41	694,331.05	0
Electricity sales	199,884	99,941.94	49,970.97	0
Fuel sales	2,171,552	1,085,775.95	542,887.98	0
Scope 3 estimate (exc upstream)	5,148,760	2,574,379.99	1,287,189.99	0
Overall Emissions				
Overall Emissions	5,151,810	2,575,904.63	1,287,952.30	0

Appendix

UK Figures actual (reduction)

Reduction in CO₂ on key dates in line with the UK carbon reduction plan

Tonnes of CO ₂	2022	Reduction 2032	2032	Reduction 2037	2037	Reduction 2050	2050
Emissions							
Scope 1							
Diesel used cars litres (Scope 1)	56	0.84	47.06	0.00	0.00	0	0
Diesel used deliveries litres (Scope 1)	2,240	0.59	1,324.16	0.00	0.00	0	0
Diesel used haulage litres (Scope 1)	140	2.52	353.61	0.00	0.00	0	0
Heating oil kero litres (Gas oil) (Scope 1)	72	0.40	29.29	0.00	0.00	0	0
Total Scope 1	2,509	0.70	1,754.12	0.00	0.00	0	0
Scope 2							
LCC head office electricity kWh (Scope 2)	51	0.65	33.64	0.00	0.00	0	0
Go stations electricity kWh (Scope 2)	92	0.91	84.33	0.00	0.00	0	0
Coal yards electricity kWh (Scope 2)	397	0.68	269.55	0.00	0.00	0	0
Total Scope 2	541	0.72	387.52	0.00	0.00	0	0
Scope 3							
Upstream Emissions	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Natural Gas Emissions	77,825	0.50	39,204.24	0.50	39,204.24	0	0
Thermal Coal	2,777,324	0.27	741,766.07	0.27	741,766.07	0	0
Electricity sales	199,884	0.46	92,106.49	0.46	92,106.49	0	0
Fuel sales	2,171,552	0.80	1,731,218.05	0.80	1,731,218.05	0	0
Scope 3 estimate (exc upstream)	5,148,760	0.50	2,565,090.62	0.50	2,565,090.62	0	0
Overall Reduction							
Overall Reduction		1.92		0.50		0	

Appendix

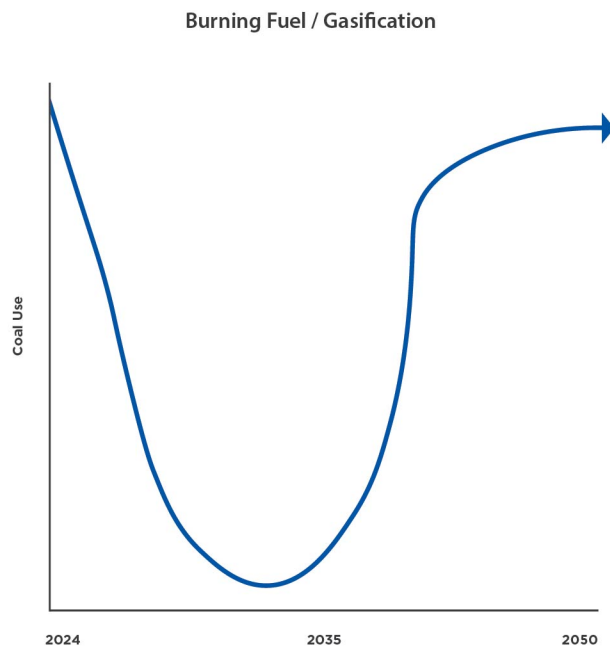
(Attachment A)

The Future of Coal

When carbon capture technology matures it will be a game changer for the use of coal facilitating blue hydrogen production and the reduction in the emission of GHG from the use of coal in a variety of contexts. The use of coal as a material has seen a significant increase beyond seeing coal as only valuable for its calorific value.

Burning Fuel/ Gasification

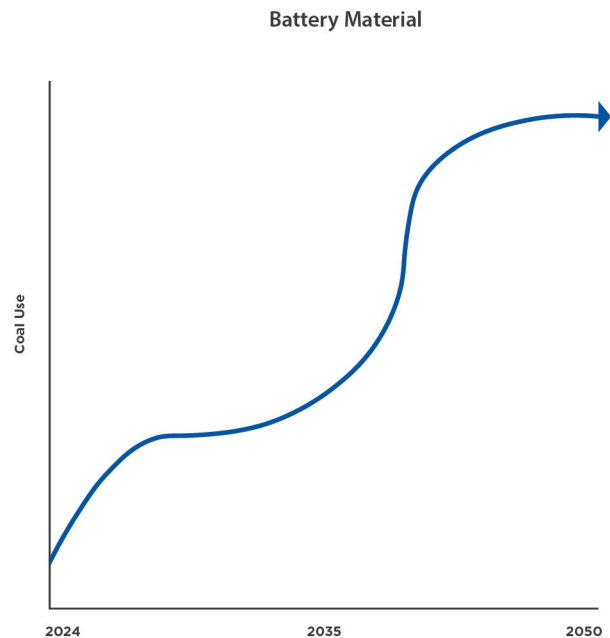
It is the expectation that carbon capture technology combined with coal gasification will enable coal to be used for a wide range of applications while avoiding significant future emissions thus unlocking new use cases for coal once appropriate technologies reach TRL9.



Battery Materials

LCC Group expect an increase in the use of Pet Coke and Anthracite for the production of battery materials accross europe.

Although the trend will be non linear significant demand will be created for this and other material applications of coal.

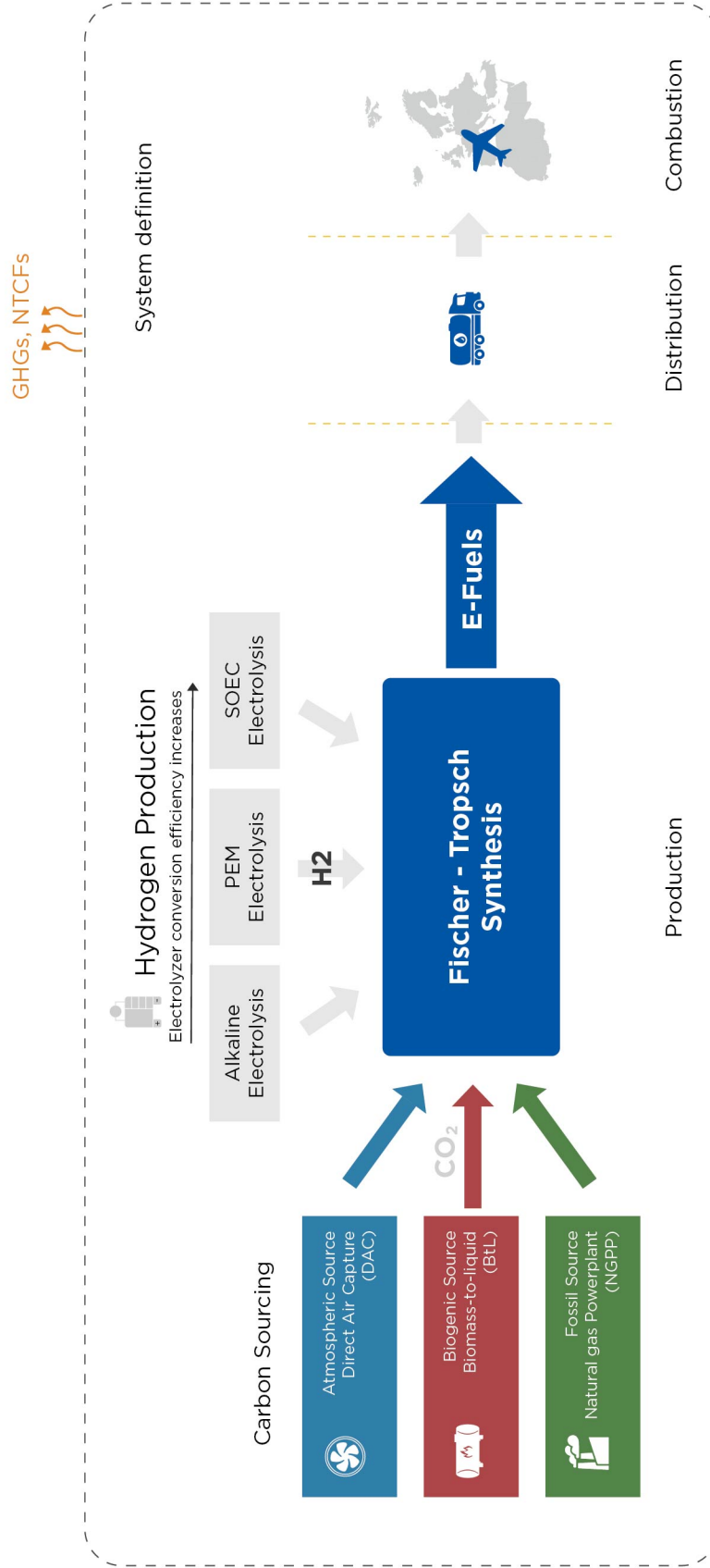


Appendix

(Attachment A)

E-Fuels - The Viability Today

The development of e-fuels from waste flu gas is generally at TRLs earlier than 6. The expected output cost of e-fuels from this source is 2.60 euro per litre reaching 1.5 euro per litre by 2050, leaving the technology uncompetitive with traditional fossil fuel extraction methods. E-Fuels may not necessarily be a drop in replacement for most current liquid fuel products causing the need for future engines to adopt to new fuel sources.



<https://www.sciencedirect.com/science/article/pii>

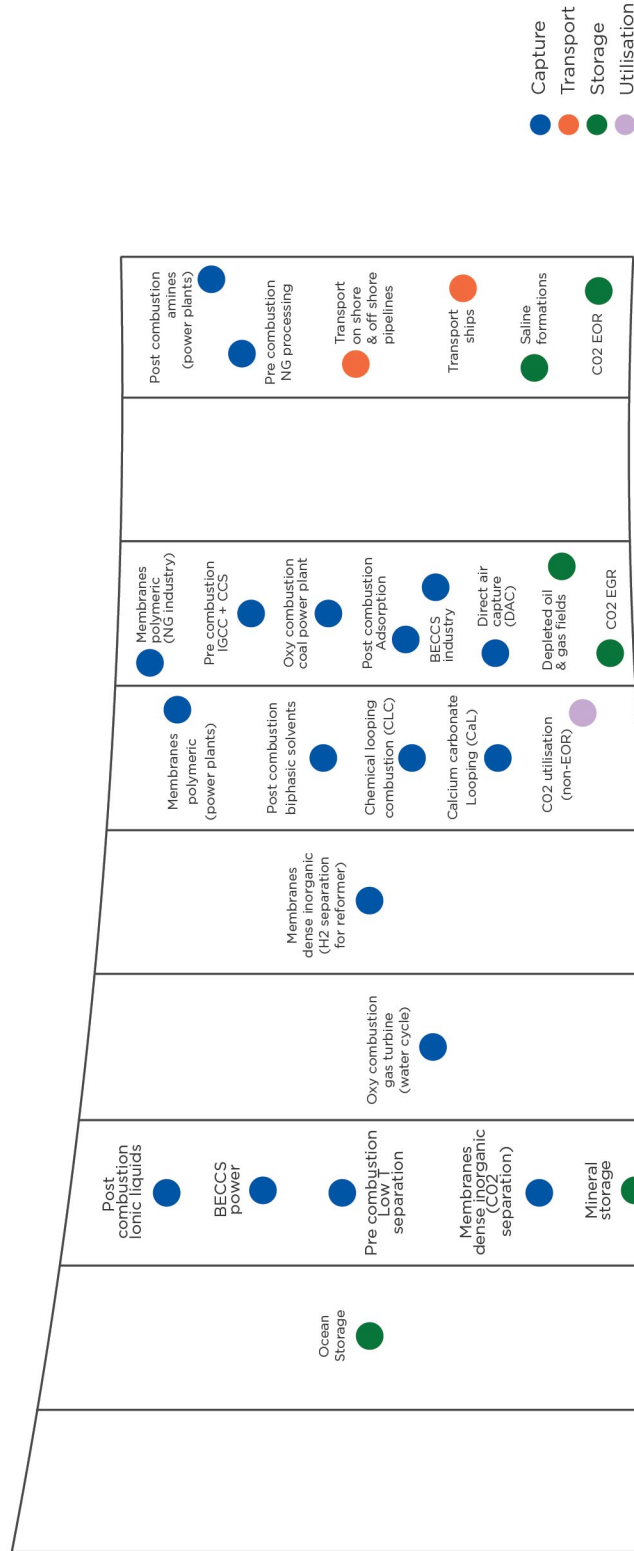
Appendix

(Attachment A)

Carbon Capture - The Viability Today

Carbon capture technology is generally not yet viable at an industrial scale for the capture of flu gas. No large scale solutions yet exist to allow 95% capture of CO₂ from the burning of coal.

Concept	Formulation	Proof of concept	Lab prototype	Lab Scale plant	Pilot plant	Demonstration	Commercial Refinement Required	Commercial
TRL1	TRL2	TRL3	TRL4	TRL5	TRL6	TRL7	TRL8	TRL9



Current technology readiness level (TRL) of CO₂ capture processes. (Bui et al., 2018).





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The Change >