

# Carbon Reduction Plan

2024





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## 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

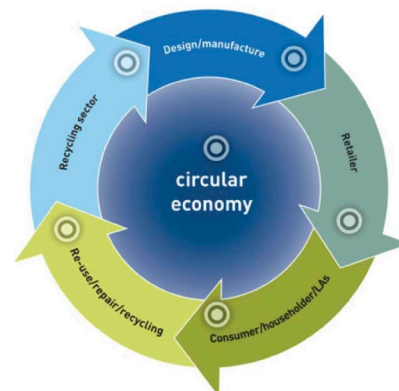
### Scope 1 emissions include:

- 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

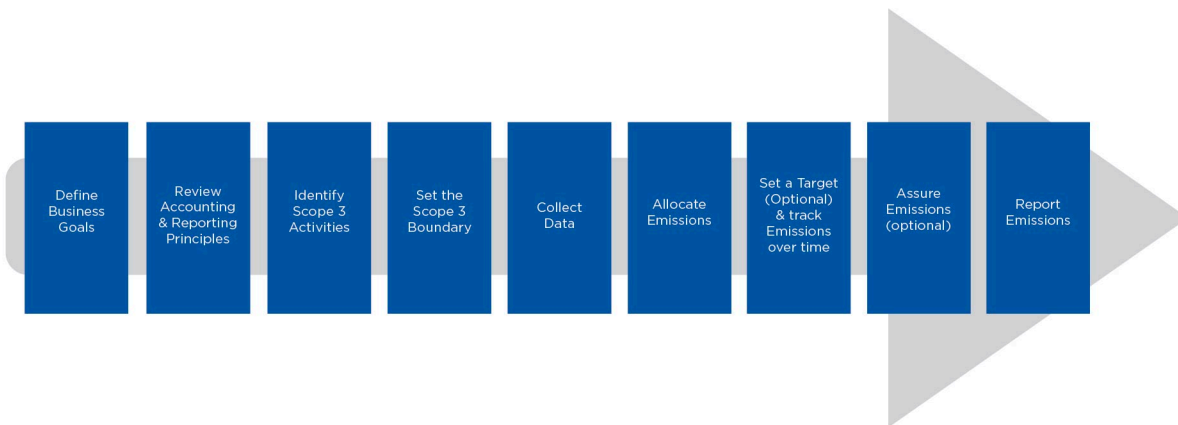
- A drive towards selling 100% renewable electrical energy by 2046.
- A drive towards selling 100% sustainable fuels by 2046.
- A drive towards 100% of our coal being used as a material rather than for its calorific content by 2036.
- A drive towards the full replacement of natural gas with hydrogen 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 CO<sub>2</sub> 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 CO<sub>2</sub> on the 2022 footprint which had been 5,151,809 e tonnes CO<sub>2</sub>. 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.

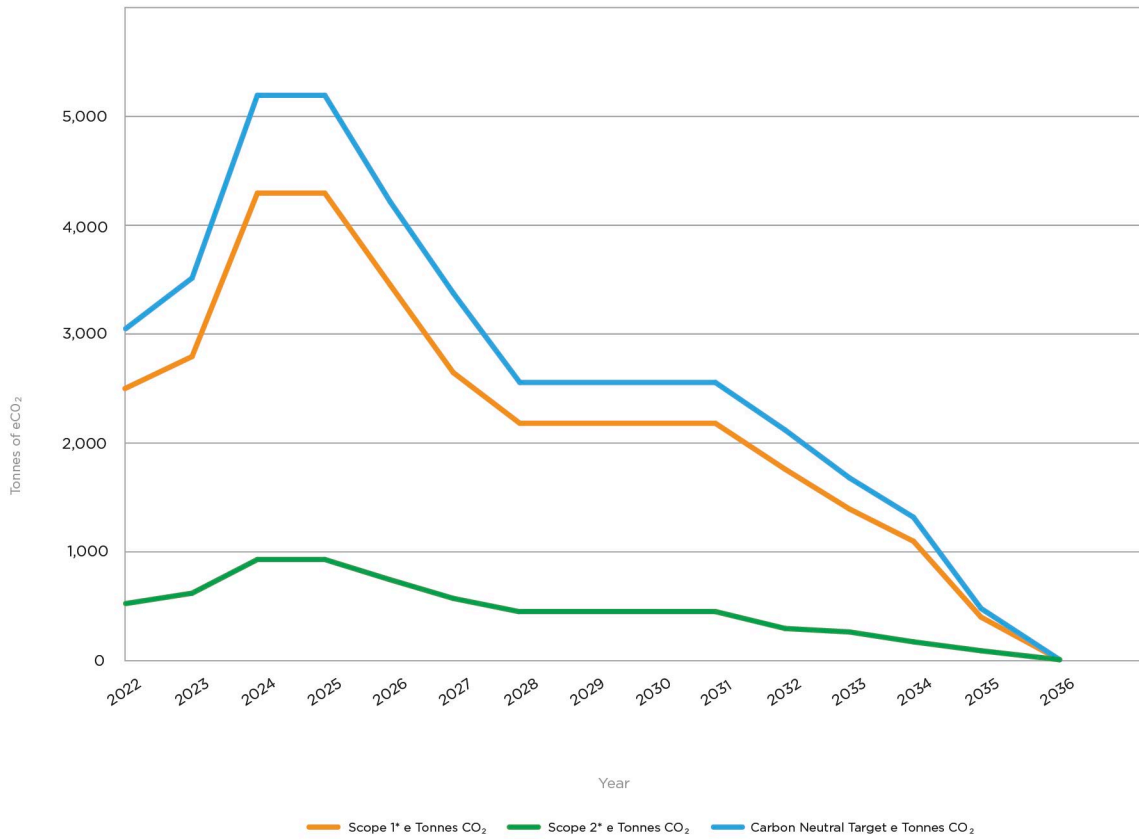
Our supply chain will be driven by price of production and the demand for sustainable products. Raw materials, including waste, are limited thus this will limit the supply of renewable products within our workstream supply chain and our Scope 3 emission reductions.

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 CO<sub>2</sub>



- 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 CO<sub>2</sub>.
- 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 CO<sub>2</sub>, 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub>.
- 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 CO<sub>2</sub>.
- 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 CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub>
- Scope 3 emissions for 2022 do not include upstream emissions.

### Baseline Year Emissions: 2022

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

## 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 CO<sub>2</sub>
- 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 <sub>2</sub> )
Scope 1	<b>2,855</b>
Scope 2	<b>631</b>
Scope 3 (included Sources)	<b>4,087,774</b>
<b>Total Emissions</b>	<b>4,091,260</b>

#### 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 <sub>2</sub>	2022	2023
Emissions in Tonnes CO <sub>2</sub> e		
<b>Scope 1</b>		
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
<b>Total Scope 1</b>	<b>2,509</b>	<b>2,855</b>

## 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 <sub>2</sub>	2022	2023
Emissions in Tonnes CO <sub>2</sub> e		
<b>Scope 2</b>		
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
<b>Total Scope 2</b>	<b>541</b>	<b>631</b>

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

Tonnes of CO <sub>2</sub>	2022	2023
Emissions in Tonnes CO <sub>2</sub> e		
<b>Scope 3</b>		
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 CO<sub>2</sub>.
- 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.

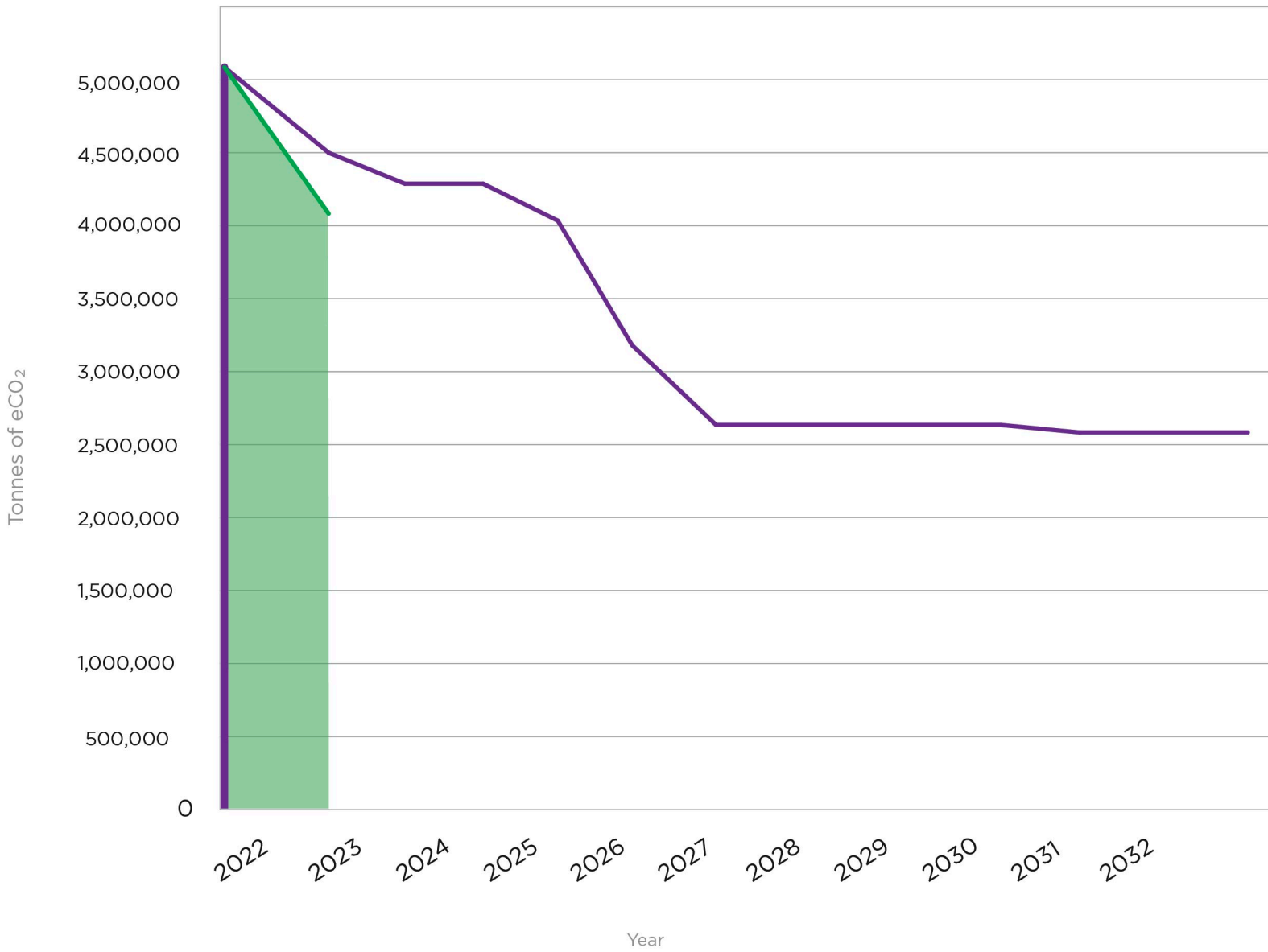
We have been moving towards a reduction in Scope 3 emissions and increased reporting based on the limitations listed above. We have set goals, that will require the education of both upstream and downstream partners, with our aim being to reduce carbon emissions to zero in Scope 3 by 2046.

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 CO<sub>2</sub> 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

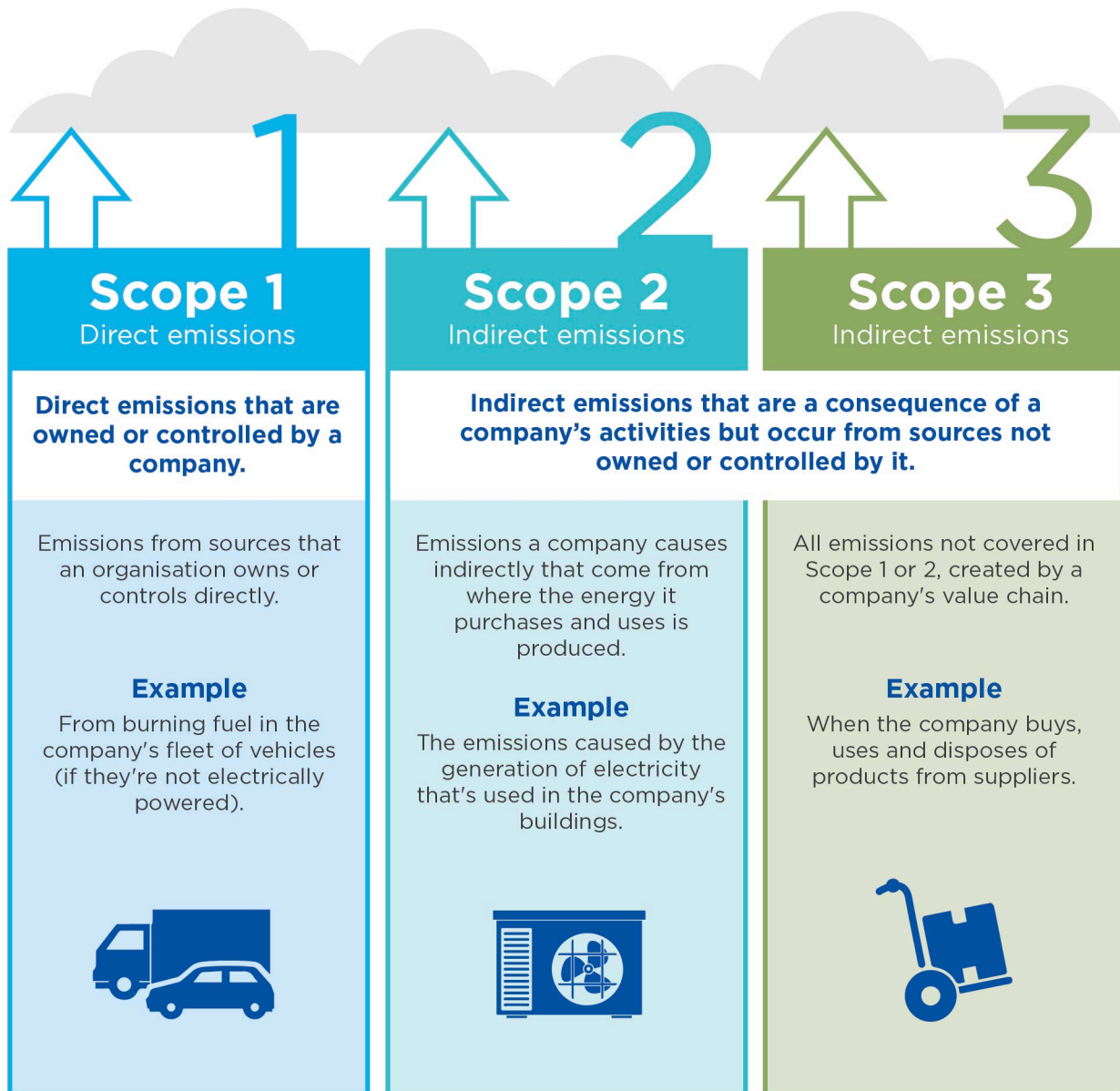
- Despite significant effort on the part of LCC Group towards a net zero strategy gaps in governmental policy, availability of finance for the transition from fossil-derived fuels to green fuels and a lack of price competitive and readily available renewable fuels have required LCC Group to be conservative 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 CO<sub>2</sub> emissions across Scope 1,2,3
- In the future LCC Group will calculate:
  - CO<sub>2</sub> footprint of the group across investments
  - CO<sub>2</sub> reduction per £ invested
  - CO<sub>2</sub> 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 CO<sub>2</sub> 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 CO<sub>2</sub>
- 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
<b>Regulatory</b>	GHG emissions-reduction laws or regulations introduced or pending in regions where the company, its suppliers, or its customers operate
<b>Supply chain costs and reliability</b>	Suppliers passing higher energy- or emissions-related costs to customers; supply chain business interruption risk
<b>Product and Technology</b>	Decreased demand for products with relatively high GHG emissions; increased demand for competitors' products with lower emissions
<b>Litigation</b>	GHG-related lawsuits directed at the company or an entity in the value chain
<b>Reputation</b>	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
<b>Efficiency and Cost Saving</b>	A reduction in GHG emissions often corresponds to decreased costs and an increase in companies' operational efficiency.
<b>Drive Innovation</b>	A comprehensive approach to GHG management provides new incentives for innovation in supply chain management and product design.
<b>Increase sales and customer loyalty</b>	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.
<b>Improve Stakeholder relations</b>	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.
<b>Company Differentiation</b>	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.

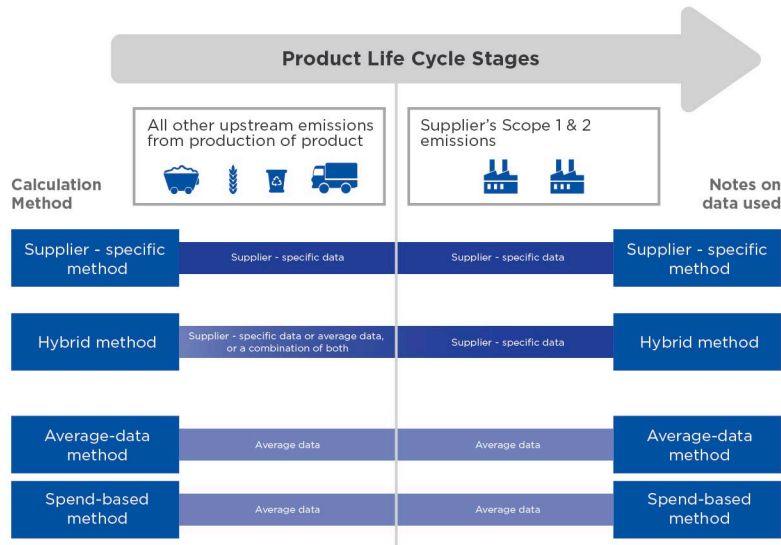


Figure [1.1] Different data types used for different calculations methods

## 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*

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Daniel Loughran - Director

Date: 17/04/24









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