

# SUSTAINABLE

How DHL is reducing its greenhouse gas emissions.

Which emission reduced solutions customers can use.

How DHL makes reporting easy for companies.





# TIME TO DELIVER

Climate change is an urgent issue that demands immediate action. At DHL Group, we are committed to addressing this challenge head-on. This brochure highlights the concrete steps we are taking to reduce our environmental footprint and the sustainable solutions we offer our customers.

Transitioning to a low-carbon economy quickly is essential. While logistics is inherently carbon-intensive and new technologies can be costly, we are focused on implementing what is technically feasible and commercially viable now.

We don't wait. We are taking decisive actions across all areas of our operations and investing ahead of the curve to encourage supplier innovation and scale sustainable solutions.

Our efforts are aimed at offering emission reduced logistics. We invite you - our customers, policymakers, industry peers, and partners - to join us in taking action now. Together, we can drive the change needed for a sustainable future.

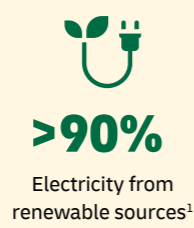
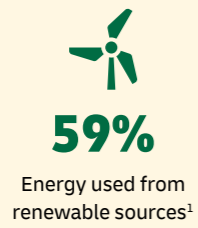
## Contents

- 4 Figures / Best practices
- 6 Pickup and delivery
- 8 Line haul
- 12 Air and Ocean
- 16 Facilities
- 18 Scopes 1-3
- 20 GoGreen Plus
- 22 Reporting
- 24 Emission reduced solutions
- 26 The whole story

→ [dhl.com/sustainability](https://dhl.com/sustainability)



Find out everything about our sustainability approach here.



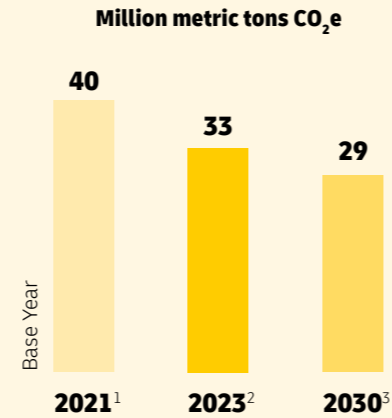
<sup>1</sup> Facilities GHG emissions Scope 1 and 2 for the last 3 years on average. | <sup>2</sup> Also includes locations that are only certified according to one ISO. | <sup>3</sup> In accordance with the internal DHL Group framework (based on the World Green Buildings Council's guidance, certified by SGS). Deviations permitted in justified exceptional cases.

# SUSTAINABILITY IN FIGURES

Every year is an important step towards low-emission logistics.

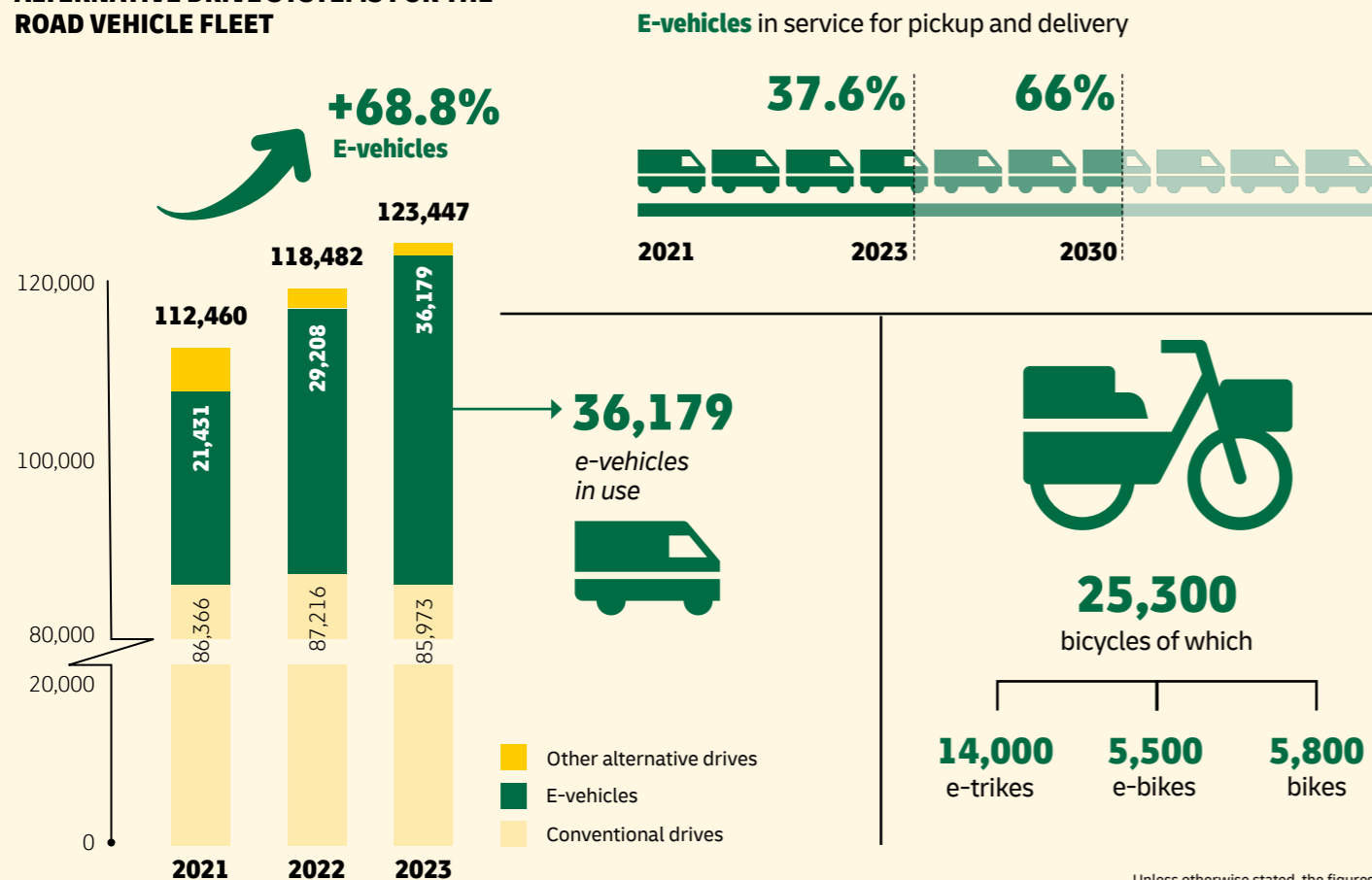
Figures

## GREENHOUSE GAS (GHG) EMISSIONS (WELL-TO-WHEEL)



<sup>1</sup> Includes the effect from the acquisition of the Hillebrand Group in fiscal year 2022, recognized starting in the 2022 Annual Report. <sup>2</sup> From financial year 2022 including reduction effects from market-based processes. | <sup>3</sup> Subject to potential restatement due to methodology updates or changes in business scope, e.g. due to M&A.

## ALTERNATIVE DRIVE SYSTEMS FOR THE ROAD VEHICLE FLEET



Unless otherwise stated, the figures refer to the year 2023.

# CUSTOM-FIT SOLUTIONS

Best Practice

We are walking the path of decarbonization with our customers across transport modes and countries around the world. The results speak for themselves.



## MYTHERESA

Our partnership with luxury e-commerce platform Mytheresa enables a **reduction of 27,000 metric tons of CO<sub>2</sub>e emissions** over five years using Sustainable Aviation Fuel (SAF) through our GoGreen Plus service instead of conventional jet fuel.



CLAIRE'S ACCESSORIES

**127**

**METRIC TONS RECYCLED WASTE PACKAGING**

Together with our customer Claire's Accessories, we have implemented an onsite closed loop packaging solution to **recycle cardboard packaging waste** and turn it into base cartons for their new stock.

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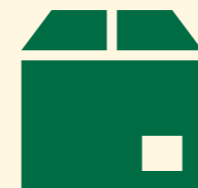


Find more customer stories here.

## GoGreen PLUS

### DM

For drugstore chain dm, we send 10.2 million parcels and 10.7 million advertising mailings per year using GoGreen Plus, delivering an annual reduction of **7,000 metric tons in CO<sub>2</sub>e** in 2023.



## SCHNEIDER ELECTRIC

**20%**



We designed a multimodal shipping solution for Schneider Electric - a world leader in energy management and automation - that combines air and sea transport, **reducing GHG emissions by 20%**.

## FORMULA 1

**83%**



We doubled our fleet of biofuel-powered trucks for the 2024 season of Formula 1 to a total of 37 trucks, achieving an average **reduction of GHG emissions of 83%** per truck compared to its diesel fueled counterpart.



STREETSCOOTER GIGABOX



RYTLE MOVR 3

Pickup and delivery

# MEET OUR E-FLEET

We aim to keep greenhouse gas emissions as low as we can when picking up and delivering shipments to end customers. With more than 36,000 electric vehicles, we have the largest e-fleet of any logistics company globally. In addition, we deployed 14,000 e-trikes and 5,500 e-bikes in 2023.



RYTLE TRILINER



RENAULT KANGOO MAXI ZE



GM BRIGHTDROP ZEVO 600



MELLOWVAN



PEUGEOT E-PARTNER

**TARGET**  
Electrify more than 2/3 of our pickup and delivery vehicles by 2030



JAC



SCOOTER GOUPIL TYPE



MERCEDES-BENZ E-SPRINTER



STREETSCOOTER WORK L



SOLAR BOAT



STREETSCOOTER WORK



GAIUS RAPIDE 3



VOLVO FL ELECTRIC 16T



FORD E-TRANSIT



VOLKSWAGEN E-CRAFTER



STREETSCOOTER WORK XL



URBAN ARROW CARGO XL

→ [dhl.com/delivered](https://dhl.com/delivered)



Find out everything about our e-fleet here.



## Line Haul

Electric power is the most sustainable long-term solution for heavy duty truck – however we also need alternative technologies to reduce greenhouse gas emissions now.



**TARGET**  
Increase sustainable fuels and electrification share to >30% by 2030.

# YOUR ROAD

# TO NET ZERO



**HVO**

HVO (Hydrotreated Vegetable Oil) is produced from used cooking oils and other organic waste materials. It can be blended and used in diesel engines in selected countries.

**GHG Emissions Reduction**

**80%**

at DHL Supply Chain UK due to the switch from diesel to HVO

**What we do**



- Conversion of all filling stations for DHL Supply Chain in Ireland and UK
- 600 million liters of HVO in 2023 for DHL Supply Chain in Ireland and UK

**Best practice**

- 200 HVO trucks in Sweden Freight network



**Bio-CNG/-LNG**

A natural gas produced from anaerobic digestion of organic waste, it is typically either LNG (liquid) or CNG (compressed).

**GHG Emissions Reduction**

Up to **80%**

depending on the feedstock

**What we do**



→ Our Green fuels route planner checks whether routes can be converted to green fuels and alternative drives.

- Expansion of own fuel station infrastructure

**Best practice**

- 35 vehicles with bioLNG for Marks & Spencers
- 400 trucks in Post & Parcel Germany network



**Rail**

More than 250,000 routes for DHL Group in Europe are multimodal. This means that shipments are transported as far as possible by rail and the remaining distance by truck.

**GHG Emissions Reduction**

**80 - 100%**

per DHL freight train compared to road transport

**What we do**



- Increasingly shifting volumes from road to rail
- 250,000 multimodal routes in the EU

**Best practice**

- 35 to 41 containers each week on rail from Asia to Germany and Great Britain for adidas
- 8 trains per week for P&P



**Battery Electric**

Battery-powered electric vehicles are the most energy-efficient option among the low-emission solutions. Grid capacity is the main hurdle here.

**GHG Emissions Reduction**

**100%**

if the power comes from renewable sources

**What we do**



- More than 50 electric trucks from 7.5 to 60 tons in use in Europe and the USA
- Test and implement hybrid solutions with modular range extender technologies

**Best practice**

- Volvo FL Electric 16t Delivering to Fashion retailers in the City of London (100km/day)



**Hydrogen**

Hydrogen vehicles offer impressive range and quick refueling over longer distances, but still need to be trialed.

**GHG Emissions Reduction**

Up to **100%**

when producing hydrogen with electricity from renewable sources

**What we do**



- DHL Freight is testing the hydrogen combustion engine and fuel cell technology
- First hydrogen pilot successfully completed (27t Box Body Rigid with mobile H2 refueler)

**Best practice**

- 2 hydrogen fuel cell trucks deployed by DHL Supply Chain for Diageo in US

→ [dhl.com/delivered](https://dhl.com/delivered)



Find a deep dive into line haul decarbonization here.

## Air Transport

We are the leader in Sustainable Aviation Fuel (SAF) with a share of 14 percent of all SAF used globally in 2023, more than any other airline.



# #1 TOPIC



## All you need to know about SAF

### Benefits

Sustainable Aviation Fuel (SAF) is an aviation fuel made from sustainable feedstocks such as used cooking oil and other residues. **We focus on fuels with external sustainability certification.**

SAF can reduce emissions by **around 80%** over the entire life cycle compared to conventional jet fuel.

**Up to 50%** SAF content can be blended into conventional jet fuel without the need to convert aircraft.

Battery electric and hydrogen technologies are being researched, however there is no alternative to hydrocarbon based fuels on the horizon for long distance flight. **Scaling up SAF is critical because**  
 → SAF is available at short term.  
 → SAF can use the existing infrastructure.

### Challenges

The waste oils need for SAF is very limited and costly. Alternative feedstocks might make sense if not competing with food production.

SAF currently accounts for **less than 1%** of all aviation fuels consumed.

Planned production capacities will provide **1-2% of jet fuel** demand by 2027.

#### Our challenges:

- We want to make SAF available to our customers on a long-term and predictable basis.
- We want to ensure that our SAF is made from sustainable feedstock.
- We want to reconcile sustainability and economic efficiency.

→ [dhl.com/delivered](https://dhl.com/delivered)



The greatest potential and the greatest challenge lie in decarbonizing air and ocean transport. While we support innovative technologies, sustainable fuels will play a fundamental role in the coming years.

### Actions

Buying the SAF currently available is essential for us. In addition, with GoGreen Plus we **help customers meet their Scope 3 targets.** GoGreen Plus uses 'book & claim' to track and transfer the emission reductions from sustainable fuels across the value chain.

We sign multi-year contracts to partner with SAF producers such as World Energy, Neste, BP and Envision to secure supply.

In 2023, we sourced 14% of global SAF supply for our own aircrafts, achieving a ratio of 3.2% – **the highest of any global airline.**

#### To decarbonize aviation, we have a clear list of further measures:

- Accelerated re-fleeting by investing in the latest technology of most fuel-efficient aircrafts
- Ordered up to 12 all electric Alice cargo aircrafts to be in operation from 2027 onward
- Implement fuel optimization program with multiple measures

**TARGET**  
 >30% share of sustainable fuels in air and ocean by 2030.



## 5 things you need to know about Sustainable Marine Fuel (SMF)

**1** Sustainable Marine Fuel (SMF) can reduce GHG emissions by **85%** (green ammonia and other power-to-liquid fuels can be up to 100%) compared to conventional marine fuels.

SMF are naturally low in sulphur and produce **fewer air pollutants** such as sulphur oxide.

**3** To procure reductions leveraging SMF, we rely on our **network and strategic partnerships** in the industry.

GoGreen Plus leveraging SMF can be selected for LCL (less than container load) and FCL (full container load) shipments via **myDHLi Quote + Book** or via your DHL Global Forwarding account manager.

**5** Swedish fashion brand Lindex was the first company booking **GoGreen Plus for FCL Ocean Freight** – thereby a pioneer in low emissions fashion logistics.





# POWERHOUSE

One part of the supply chain that should not be overlooked is the warehouse footprint. We deploy energy-efficient technologies, energy from renewable sources and other emission reduction alternatives.

## Buildings

**TARGET**  
All new owned buildings carbon neutral<sup>1</sup>

### Renewable Energy

- Solar panels (PV)
- Solar ready roof
- Battery storage ready
- Purchased renewable energy from the grid

### Environment

- Biodiversity
- Rainwater harvesting
- Low water use buildings

### Building automation and measurement

- Enhanced building automation
- Main meter energy monitoring
- Sub meter advanced energy monitoring

### Efficient lighting

- LED lighting with smart control system
- Vertical skylights

### Electricity

- Charging stations for operating vehicles
- Charging stations for e-vehicles (cars)
- Efficient transformers

### Heating and cooling

- Efficient HVAC (Heat pumps)
- Natural ventilation, automated control
- Sun protection/shading
- Efficient dock seals
- Rapid rise doors

→ [dhl.com/delivered](https://dhl.com/delivered)

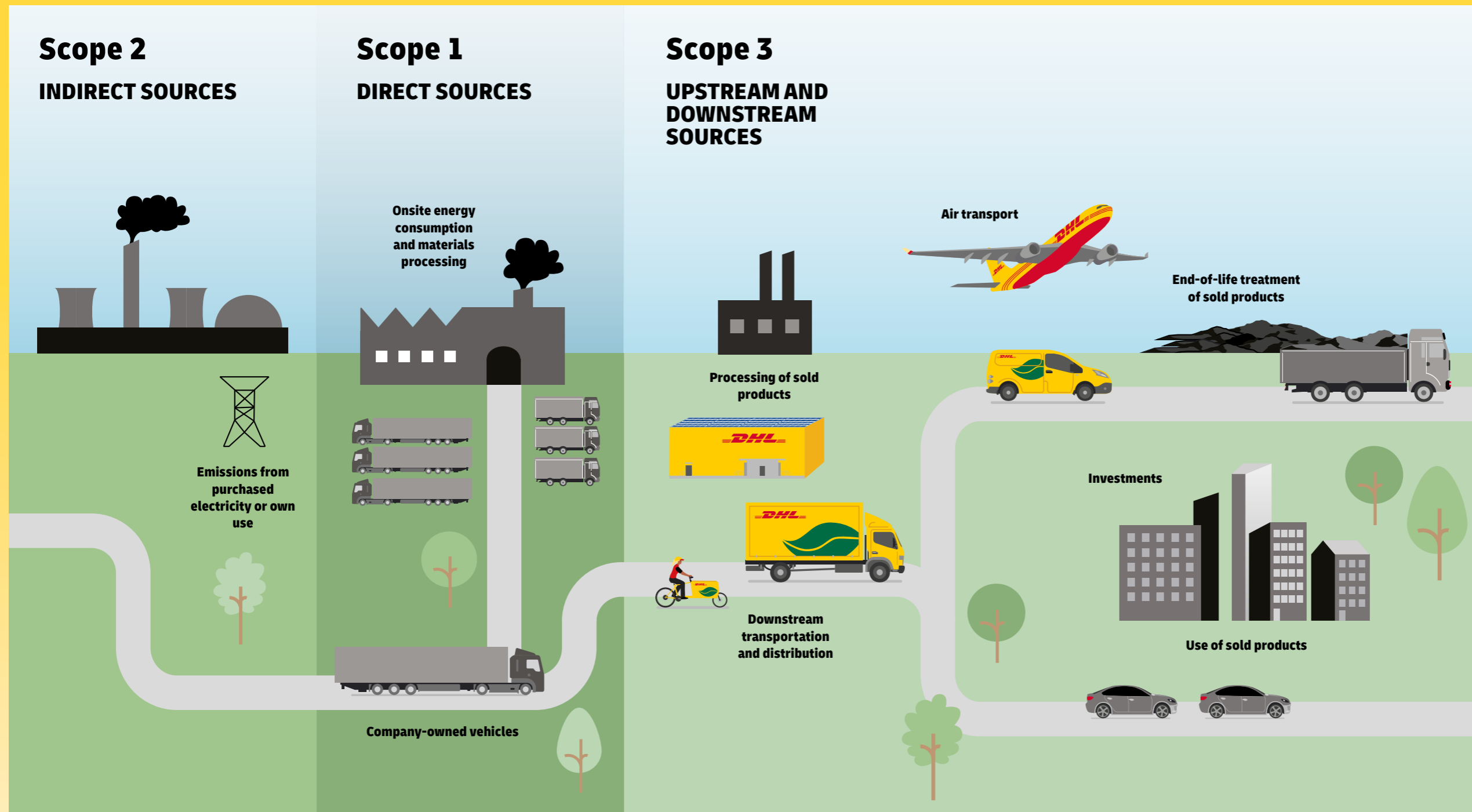


Explore the additional 15 advanced levers here.

Footnote 1) Carbon-Neutral Building refers to a DHL internal rating standard for building emissions. It includes buildings' operational carbon emissions according to Scope 1 and Scope 2, with 75% or more carbon reduction and a maximum of 25% offsets with verified carbon credits allowed (compared to a baseline where fossil energy is used for electricity and heating). The reduction of emissions is achieved by renewable energies, like solar PV, and the deployment of energy efficient technologies.

# WE HANDLE YOUR SCOPE 3

From direct fuel switching to innovative technologies, our logistics solutions can support the decarbonization of your Scope 3 emissions - the choice is yours.



DHL's logistics service supports the decarbonization of our customers' Scope 3 emissions.

The Greenhouse Gas Protocol (GHGP) Corporate Standard classifies a company's emissions into three 'Scopes'.

**Scope 1** covers the **direct emissions** a company produces through their own operations or sources they have control over.

**Scope 2** covers the **indirect emissions** associated with the company from the generation of the electricity and heating energy they purchase and use.

**Scope 3** includes all the **other indirect emissions that occur in a company's value chain** - including any up- or downstream emissions from transportation and distribution.

# REDUCING CUSTOMER EMISSIONS

To support our customers' decarbonization efforts, DHL introduced GoGreen Plus in 2021. GoGreen Plus products are based on true value chain decarbonization – insetting – rather than carbon compensation or offsetting.

The mechanism we employ for our insetting products is called 'book & claim'. Book & claim enables us to directly replace fossil fuels with sustainable fuels within our network and allocate environmental benefits to paying customers, even when their shipments are not physically transported with the assets using these fuels. This means we can help reduce the environmental impact throughout our own supply chain, in the air, across the ocean, and on the road. We can also provide solutions for dedicated local operations in warehousing and transportation.

## Overview of GoGreen Plus products & services



**GoGreen PLUS**

**Sustainable fuels & technology**  
Decarbonization of logistics services by using sustainable fuels and alternative technologies.

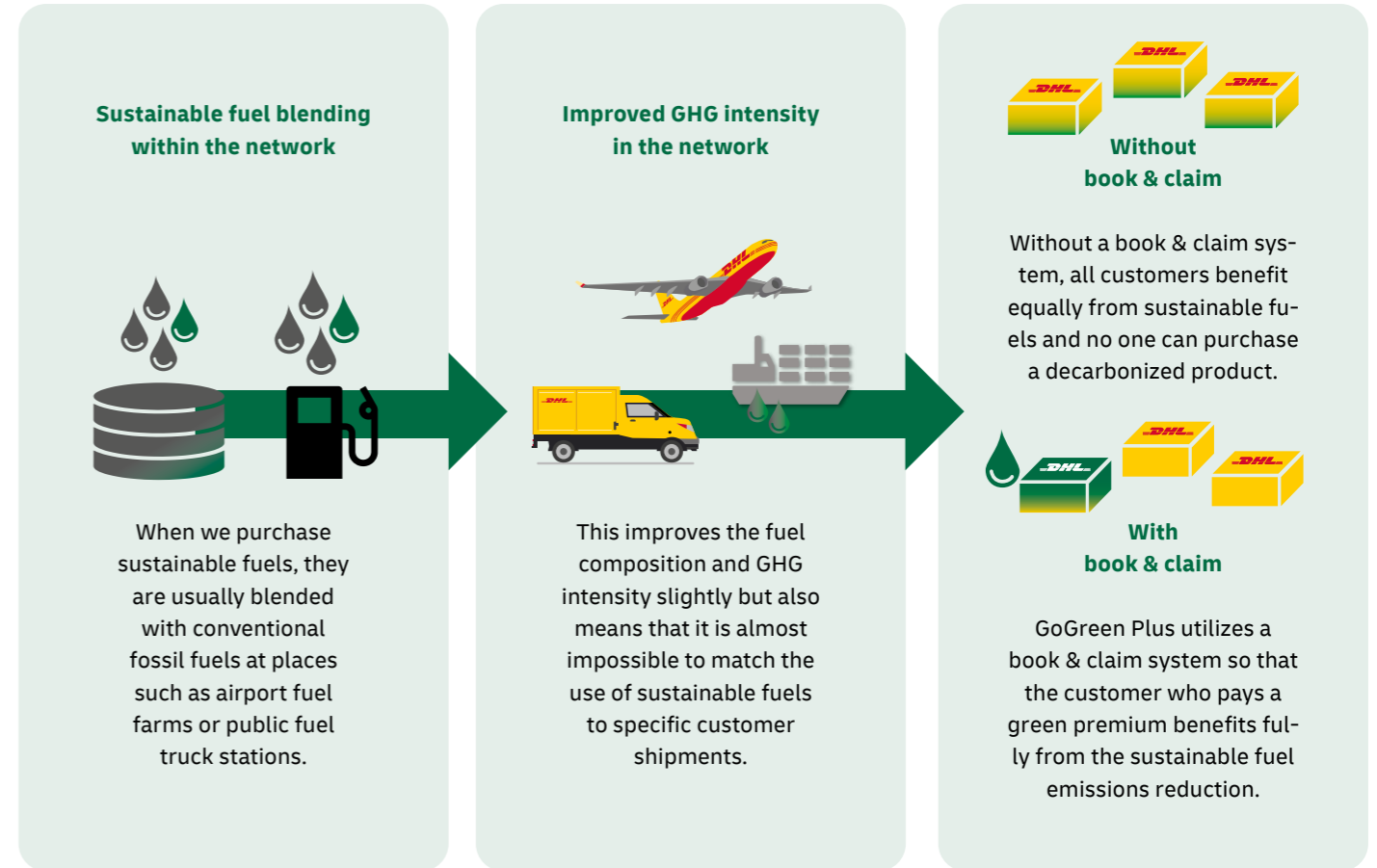
**Insetting via GoGreen Plus products**  
Insetting enables us to directly replace fossil fuels with sustainable fuels. We thereby help to fight climate change along our supply chain.

**Air freight** **Ocean freight** **Road freight**

**Solutions for dedicated local operations**

**Warehousing Solutions** **Dedicated Transport**

## DHL approach to insetting Reduction within our network can be attributed to individual shipme



## GoGreen Plus services offer you a number of key benefits:

- 1** You may share our determination to reduce your GHG emissions and our belief that it is worth paying a premium to achieve this. **GoGreen Plus enables you to act on this belief.**
- 2** You have decarbonization targets you need to hit, **GoGreen Plus can play an important role in helping you.**
- 3** You are reporting your Scope 3 emissions, the 'book & claim' mechanism and **the certificates we issue are proof points to support your reporting.**
- 4** You can communicate your use of GoGreen Plus and the benefits of using it to your own customers, **enhancing your reputation** and increasing the willingness of your customers to pay a premium too.

# THE BOTTOM LINE

We not only take the transparent reporting of our own emissions very seriously, but also support our top 100 global customers in doing so.

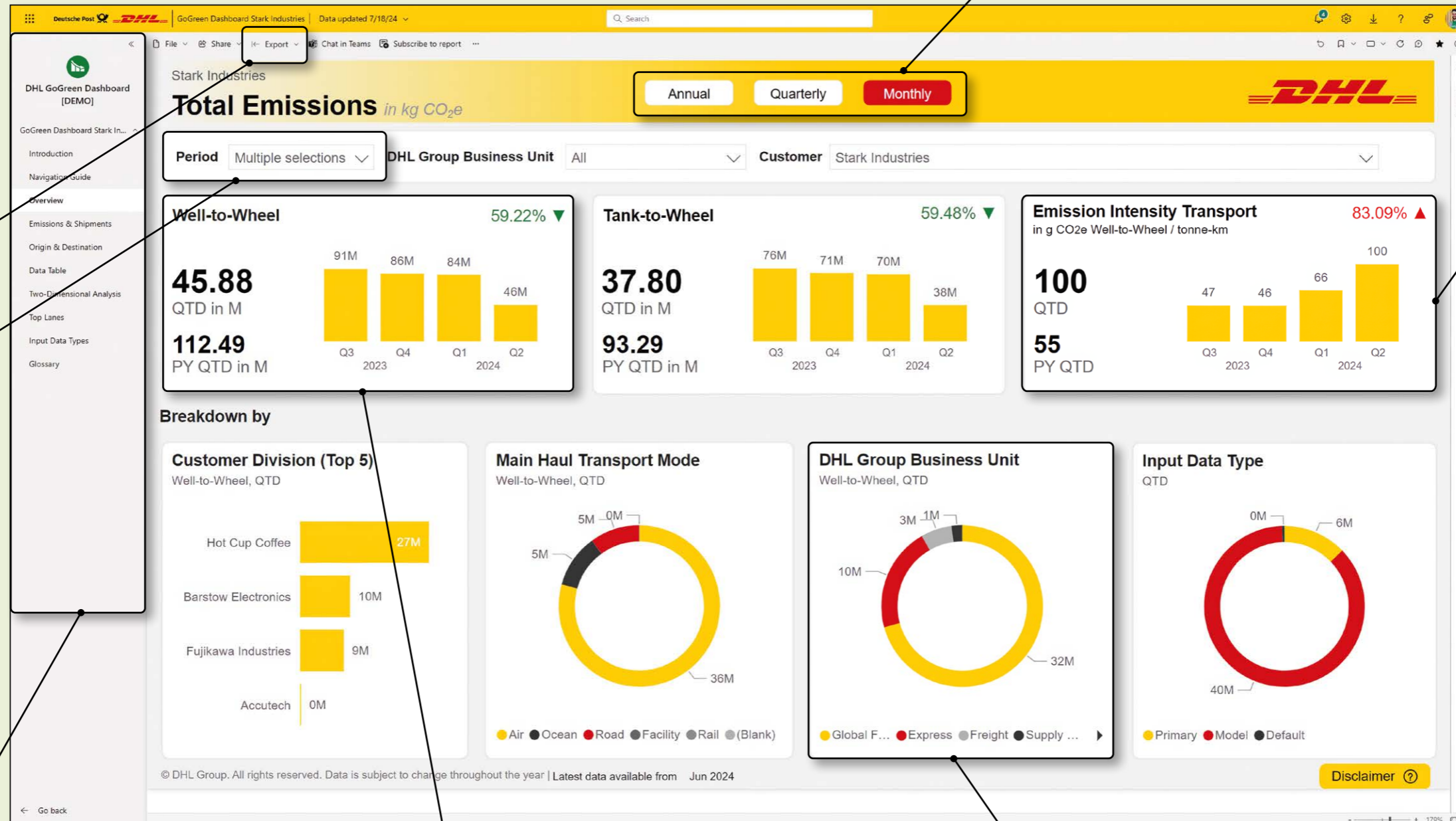
Annual, quarterly or monthly breakdown

Total figures above broken down – enhanced reporting insights, such as emissions across transport modes, lanes, and DHL products.

Direct export of report & data tables in multiple formats

Monthly data update & customizable periods

Dashboard structure pane for deep-dives into GHG emissions & shipments, origin & destination, data table, two-dimensional analysis, top lanes, input data types



Total GHG emissions figures, compliant with ISO14083 Standard and Global Logistics Emissions Council (GLEC) Framework

Consolidated GHG emissions information from all divisions of DHL Group in a standardized format.

→ [dhl.com/campaign](https://dhl.com/campaign)

Find out everything you need to know about the dashboard here.

# EMISSION REDUCED SOLUTIONS: YOUR CHOICE

Covering your end to end supply chain: we offer emission reduced products in all our divisions.

## SUSTAINABLE SOLUTIONS FOR PARCELS AND DOCUMENTS (INCLUDING EXPRESS SHIPPING)

**Express GoGreen Plus**



**Mail and Parcel Germany Business Customers GoGreen Plus**



**eCommerce Parcel Domestic and Cross-Border GoGreen Plus**



## SUSTAINABLE CONTRACT LOGISTICS SERVICES

**Carbon Neutral Warehousing**



**Sustainable Transport**



**Sustainable Packaging**



## SUSTAINABLE SOLUTIONS FOR FREIGHT TRANSPORTATION

**Air Freight GoGreen Plus**



**Ocean Freight GoGreen Plus**



**Road Freight GoGreen Plus**



**Rail Freight (and Multi-Modal Solutions)**



**GoGreen Optimization**



## EMISSION TRANSPARENCY LOGISTICS SOLUTIONS

**DHL GoGreen Dashboard**



**DHL Carbon Calculator**



**Carbon Reports for Business Customers**



→ [dhl.com/sustainability](https://dhl.com/sustainability)

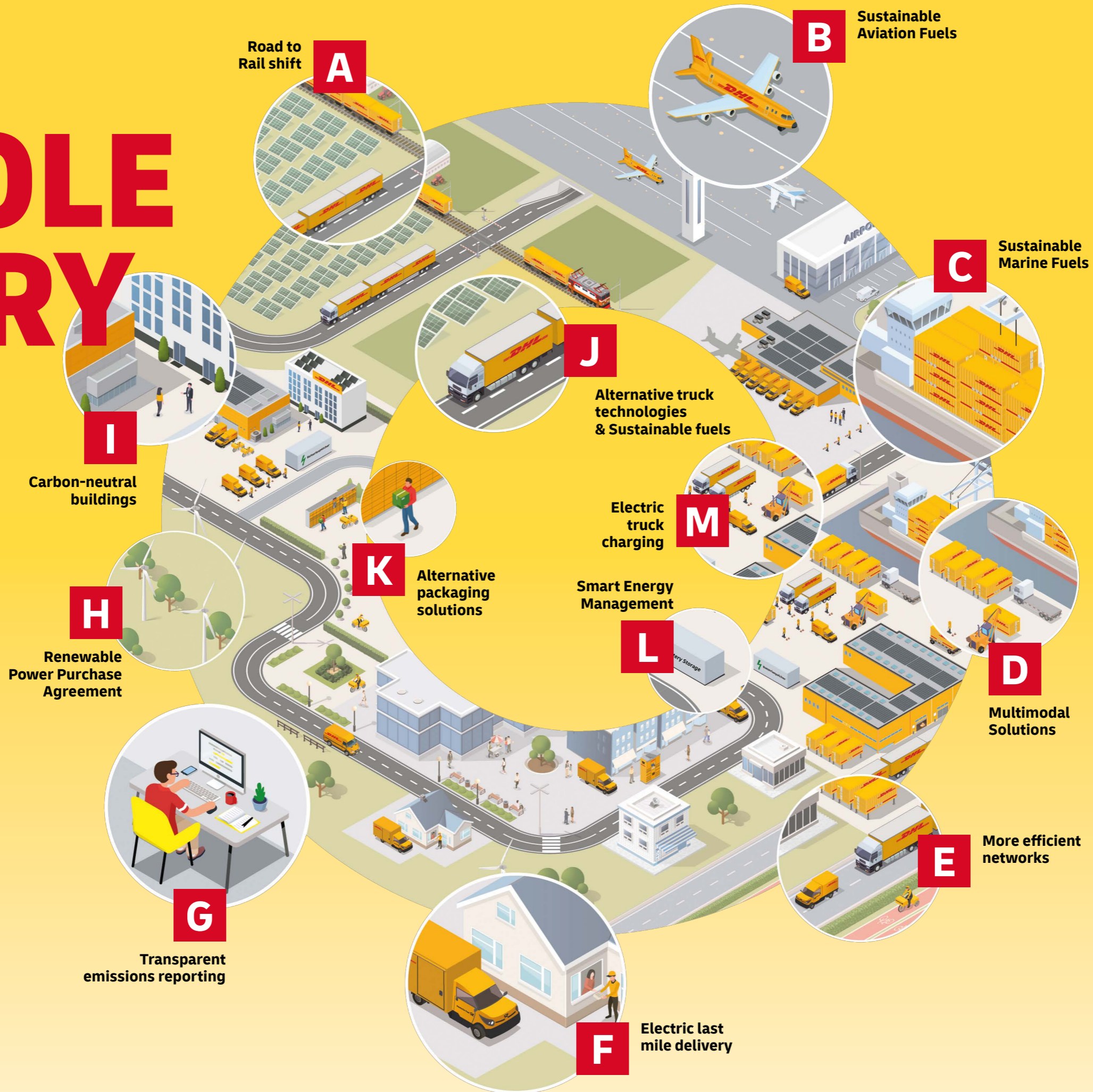
Our new sustainability website provides insights and resources on sustainable logistics at a glance.

- Discover our emission reduced products portfolio.
- See how DHL customers work towards their sustainability targets.
- Learn more about emission reduced logistics.



# THE WHOLE STORY

Decarbonize now – we are looking at every link in the supply chain and finding ways to reduce the emissions and make sustainable solutions commercially viable.



Before we take a step **forward together** - maybe a step back will help you to learn more about sustainable logistics first? We've provided everything you need to know to get started - from industry terminology to information on the latest decarbonization technologies.

→ [dhl.com/sustainability](https://dhl.com/sustainability)



Find out more about our emission reduced logistics here.

## If the idea of decarbonizing your supply chain with DHL interests you:



**1. Select GoGreen Plus per shipment** (manually) when creating a shipment in our shipping applications. Ideal for ad-hoc transactions.

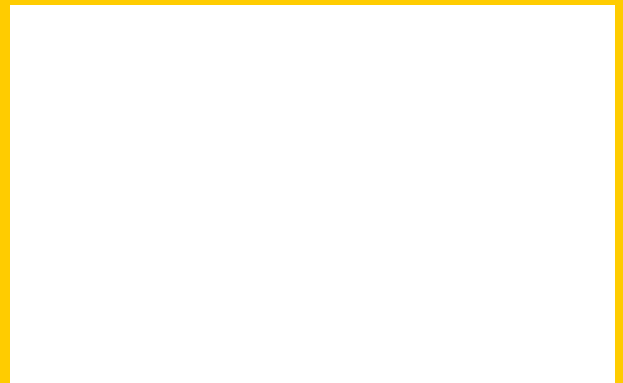


**2. Immediately start to reduce** the GHG emissions associated with all your shipments using our standard emission reduced product offerings with a simplified pricing model and pre-set GHG reduction percentage. Most suitable for volume shipping.



**3. A customized offer based on your exact reduction targets and shipping profile.** Offering you the full flexibility and multiple investment and billing options, including joint development of a tailored emission reduced logistics solution. Reach out to your sales representative to find out more.

## Your DHL contact



→ [dhl.com/sustainability](https://www.dhl.com/sustainability)



Find out more about our emission reduced logistics here.