



# Outside yellow, inside green

Deutsche Post DHL on its way to carbon-free post and parcel logistics in Germany







In Germany, more than 60 million letters and catalogues are delivered each day, along with some 13 million parcels – nearly ten million of which go to private households. This is due in large part to online shopping, which makes a wide range of products

quickly and easily accessible. For many of us, going online to shop has become second nature, and today, senders and recipients alike consider quality, dependability, shipping status transparency and flexible delivery options as givens.

As the world's leading logistics company, we are aware of our special responsibility to the climate – especially in light of the importance of logistics services today. Social and environmental sustainability have long been integral components of our strategy. For over ten years now, we've been actively working to find sustainable transport, sorting and delivery solutions for letters and parcels. We're developing and implementing concepts that allow us to reduce our overall carbon emissions; in doing so, we follow three key guidelines:

#### We are the most environmentally friendly letter and parcel delivery service in the sector, and we want it to stay that way.

We already emit significantly less carbon per shipment than our competitors, because we already provide carbon-free delivery in approximately 50% of our delivery districts. By 2025, we'll expand that proportion to more than 70%. However, we still strive for more. In the long term, we're aiming to become entirely carbon neutral, which is why we continually set new standards for ourselves to avoid emissions at every stage of the logistics value chain.



both for ourselves and for our customers.

Transparency regarding the type and amount of green-

house gas emissions is an essential requirement in measuring the effectiveness of sustainability initiatives. However, first and foremost, it's also an important tool in developing the right measures to avoid emissions and, thus, to improve carbon efficiency. We already calculate our greenhouse gas emissions based on generally accepted international standards, and from the fall of 2022, we'll provide our private and business customers with specific options and additional information regarding their shipment's carbon emissions.

3 Our customers can actively regulate their carbon emissions through us.

We offer our customers a broad product and service portfolio that allows them to offset their carbon emissions or to actively avoid them through the use of biomass-based fuels. We plan to introduce new products and services this year to reduce individual emissions for private and business customers. Our commitment to sustainability is unmatched in our sector. While other companies spend a great deal on calls for pilot projects, we've already taken major steps towards being carbon neutral. As Germany's best post and parcel service, we're dedicated to extending those advancements throughout our company infrastructure's entire value chain. We hope this allows us to join with our customers, society at large and policymakers to make the delivery of letters and parcels via Deutsche Post and DHL carbon neutral in Germany.

We all bear responsibility for tomorrow today.

Wihola Hagleitner
Nikola Hagleitner

Nikola Hagleitner CEO Post & Parcel Germany

# Green solutions at every stage of the value chain

#### **Transport**

The longest section of the shipping journey is the main leg, when parcels are transported between two sorting facilities. Deutsche Post DHL is working on expanding and implementing sustainable transport solutions in this area - by both rail and road.

#### **Buildings**

With more than 2,700 commercial buildings across Germany, Deutsche Post DHL has the highest density of premises of any company on the German logistics market. The various building types, which primarily consist of sorting facilities and delivery bases, are gradually being modernized and upgraded to make them more environmentally friendly. It's standard for every new structure we build to be carbon-neutral in design and to provide for the use of electrically powered delivery vehicles.





On the journey from sender to recipient, letters and parcels pass through various



Freight train



Natural gas-powered truck



**Electric truck** 



Natural gas-powered truck



Long combination truck (LCV)



Parcel center



Photovoltaic plant













Charging process

Deutsche Post DHL is investing in transformation to reduce or avoid carbon emissions along our entire operational value chain. Every shipment passes through various stages in the logistics process: Items are transported to sorting facilities, where they're processed, and then journey from our delivery bases to their final destination.

#### **Delivery**

Every day, 60% of the households in Germany receive a letter delivered by Deutsche Post DHL, and approximately 15% receive a parcel. Due to the high density of commercial buildings and delivery facilities we have across Germany, each of our delivery vehicles only travels an average of 30 km a day – that's roughly less than a third of the distance traveled by other parcel delivery companies on the market. We've been investing in gradually retooling our delivery fleet in order to deliver shipments to recipients with net-zero carbon emissions.

processing stages. Deutsche Post DHL offers green solutions every step of the way.





StreetScooter Work



treetScooter e-trike





StreetScooter Work L



Rytle e-trike





StreetScooter Work L Gigabox



VSC e-trike





StreetScooter Work XL



StreetScooter e-bike



Packstations (parcel pickup stations) with solar panels in heavily trafficked locations such as shopping areas, train stations and tram stations









Currently, 6% of parcels complete the main leg of their journey from sender to recipient via rail, especially over long transport routes that would cause high emissions if traveled by a truck. We've already tripled that share since the start of 2021. In the mid to long term, we aim to increase that share to around 20%.



Every DHL freight train transports up to 100,000 parcels on the 22 currently existing train connections in the rail transport network. That saves 80-100% on carbon in comparison to road transport – a total of 1,200 t of carbon per month.





# **25-90%** less carbon thanks to natural gas-powered trucks

When methane (natural gas or biogas) is burned, less carbon is released than when diesel fuel is burned. That's why, in 2022, we're bolstering our fleet with 100 CNG (compressed natural gas) trucks for regional and long-distance journeys. We currently have five CNG and two LNG (liquefied natural gas) trucks on the road. This not only reduces carbon emissions, it also significantly lowers nitrogen, fine dust and particulate emissions.









# Fossil-free road transport with electric trucks

In 2022, we plan on piloting fully electric trucks for regional journeys between parcel centers, thus expanding our green transport portfolio.



#### Long combination trucks (LCVs)

Due to their increased cargo capacity, a long combination truck can carry 50% more parcels than a regular truck-and-trailer combination. That reduces road traffic and carbon emissions. This transport solution will be piloted on dedicated routes.

# Over **200** additional semitrailers in 2022

A truck with a trailer transports letters and parcels with lower emissions than two trucks without trailers. The construction of new delivery sites means we can employ more truck-and-trailer combinations and increase transport efficiency even more.



#### **Alternative fuels**

Our depots will also become more environmentally friendly in 2022. Our new shunting vehicles will be fueled with hydrotreated vegetable oil.





This year alone, we're investing around 300 million euros in new carbon-neutral delivery bases that are equipped with photovoltaic plants, heat pumps, charging facilities for electric vehicles and more. This ensures maximum energy efficiency. In 2022, it will save 2,000 t of building-related carbon emissions. By the end of 2025, more than 280 green delivery bases will be in operation.





# 28,000 electric charging stations by the end of 2022

The power produced by the photovoltaic plants at our delivery bases is also used to charge our fleet of electric delivery vehicles. Within the first half of 2022, we already had 24,200 charging stations up and running at our operational sites.

# 95% green energy

We enter into long-term contracts with sustainable energy producers (power purchase agreements) to actively promote the growth of renewable energy. The share of green energy we consume has remained steady at 95% for years now.



## Carbon-neutral heating

The use of biogas and geothermal heating means carbon emissions are sustainably reduced in the long term at our parcel centers. Moreover, it's standard for us to equip new mail and parcel centers with photovoltaic plants, heat pumps, building automation and green roofs and facades.

# Carbon-neutral delivery bases for green cities



Deutsche Post DHL's sustainable site concepts are helping cities and municipalities become greener as well. Our concept for green delivery bases incorporates numerous elements of carbon-neutral construction. Deliveries in approximately 50% of our delivery districts across Germany are carbon neutral. That makes Deutsche Post DHL an exemplary partner when it comes to implementing the EU's Clean Vehicles Directive.



Deutsche Post DHL operates the world's biggest fleet of electric vehicles to deliver letters and parcels. Every electric vehicle saves four tons of carbon annually compared to a conventional delivery vehicle. In the first quarter of 2022, there were already 20,000 such electric vehicles doing joint letter and parcel deliveries as well as sole parcel deliveries. By the end of 2022, that number will reach over 23,000.





StreetScooter Work L

Cargo area volume: 8 m3

Carrying capacity: letter containers and up to 120 parcels

**Range:** 128 km

Area of operation: rural areas



Cargo area volume: 12 m³

Carrying capacity: letter containers and up

to 160 parcels

**Range:** 136 km

Area of operation: rural areas



For 2022, 1,300 StreetScooter Work L Gigabox vans with walk-in cargo areas and shelves have been ordered to expand our electric vehicle fleet.







#### 1 StreetScooter Work XL

Cargo area volume: 20 m³

Carrying capacity: more than 200 parcels

Range: 77 km

Area of operation: urban areas



#### green delivery districts by 2025

Thanks to our extensive electric vehicle fleet. we already deliver emission-free in approximately 50% of our delivery districts. In order to increase that to 70% by 2025, further StreetScooters, electric vehicles and e-trikes will be added to our fleet.





In addition to letters, our mail carriers currently deliver as many as 2.3 million parcels carrying goods each week using carbon-free cargo bikes.

#### Over **14,000** e-trikes by the end of 2025



Every district in which the road layout and traffic allow for delivery via e-trike is provided with them. The advantages: They're less likely to tip over and have larger carrying capacities. In the first half of 2022, we already had 12,600 e-trikes on the road.



The increased carrying capacity of our e-bikes and e-trikes makes a sustainable contribution to carbon-free delivery in urban areas - despite increasing parcel volume.



#### **1** E-trike (various models)

Carrying capacity: up to 8 letter containers, each container has space for up to 6 small parcels

Range: up to 30 km

Area of operation: urban areas

Load capacity: 100-120 kg



In addition to using e-bikes and e-trikes, the four-wheeled vehicle Kyburz is currently being tested in some localities. This vehicle can hold 14 letter containers.





#### E-bike (various models)

Carrying capacity: up to 4 letter containers (for smaller parcels as well)

Range: up to 30 km

Area of operation: urban areas

Load capacity: up to 60 kg



Every parcel delivered directly to a Packstation saves around 30% in carbon emissions over the final mile in comparison to regular doorstep delivery. In the first half of 2022, there were already 9,300 Packstations in operation.



Our new app-based Packstations are more energy efficient than earlier models and are carbon neutral, because they run on power generated by top-mounted solar panels.



Packstations located in places people frequent for other everyday needs allow customers to send and pick up parcels while dealing with other errands, which also saves car journeys.



In cooperation with the Deutsche Bahn, we'll be operating roughly 800 Packstations in easily accessible locations at subway and train stations by the end of 2023.



In Schwerin, we're trialing the transport of parcels via streetcar to load Packstations at tram stops.

### A real boon to climate protection



### GoGreen: A way to offset carbon emissions

An essential component and symbol of our many years of commitment to climate protection is our GoGreen service. Since 2007, carbon-neutral shipping with GoGreen has offset the carbon emissions caused by transport via investment in global climate protection projects.

These projects all meet the Gold Standard. That means they verifiably contribute to the reduction of greenhouse gases, are good for the local environment and provide social benefits for the local population.

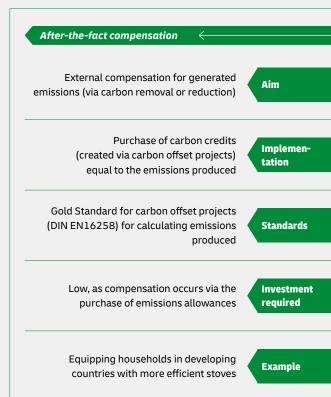
Business customers can book the GoGreen service to send parcels, domestic advertising materials and press products. For letters and private customer parcels, international press products and international dialogue marketing, GoGreen is automatically included in the scope of services.

#### GoGreen: Offsetting emissions via global climate protection projects



#### Offsetting ←

Offsetting projects compensate for emissions. Carbon emissions that are produced as a result of the shipping process, for example, are offset later through climate protection projects that take place across the globe.



Sustainable shipping is the future. Deutsche Post and DHL offer a range of shipping solutions for private and business customers that allow both the senders and recipients of parcels to actively contribute to climate protection.



#### o Insetting

Insetting with GoGreen Plus means avoiding carbon emissions in one's own supply chain. Insetting has a positive impact on sustainability efforts aimed at reducing overall carbon emissions.

#### Future-oriented reduction

Direct avoidance of emissions within one's own network

Additional measures to reduce or avoid emissions in Deutsche Post DHL's network

No recognized standard exists yet (ISO standard in preparation); we've formulated our own insetting concept based on the Gold Standard and emissions calculation according to DIN EN16258

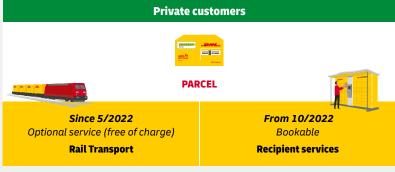
Significantly higher, because the infrastructure itself must be retooled so that carbon emissions are reduced or avoided

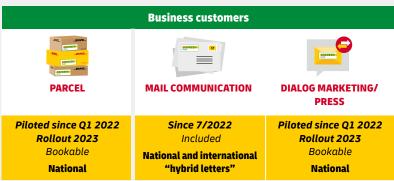
Using biofuels in our truck fleet

### GoGreen Plus: Insetting to reduce or avoid carbon emissions

At the start of 2022, we worked with individual pilot customers to take the next step in carbon-neutral shipping: GoGreen Plus. Unlike offsetting, GoGreen Plus invests in additional emission reduction measures to ensure emissions are avoided within Deutsche Post DHL's logistics network – this is called insetting. Buying and using sustainable fuels is particularly important in achieving this. Deliveries sent with GoGreen Plus are 100% carbon neutral. The first pilot project for domestic goods shipment and dialogue marketing/press has been underway since February 2022. Since July 2022, a GoGreen Plus product for hybrid mail service has been available on the market. Here, remaining carbon emissions from digitally delivered letters in our own network will be avoided via insetting.

#### GoGreen Plus: avoiding emissions in Deutsche Post DHL's network in Germany





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deutschepost.de/en/n/nachhaltigkeit.html