

# RETHINKING PACKAGING

8 Februari – Webinar over herbruikbare verzendverpakkingen  
Marleen Nelemans

**DHL eCommerce Solutions – Excellence. Simply delivered.**



# DPDHL Group, the world's leading logistics company

- **570,000** employees worldwide
- Active in **220 countries**
- In 2020, the Group generated revenues of more than **66 billion Euros**



**eCommerce  
Solutions**



**Post & Parcel  
Germany**



**Express**



**Global  
Forwarding,  
Freight**



**Supply Chain**

## Reducing emissions and setting targets for climate protection

The DPDHL Group will invest **€7 billion until 2030 in Clean Operations** to reduce our emissions to under 29 million tons by 2030 as part of the Science Based Targets initiative (SBTi)



Target **>30% Sustainable Aviation Fuels blending** by 2030 in our airfreight business



**Electrify 60%** of last-mile delivery vehicles & grow **sustainable fuel share in line-haul** on average **to >30%** by 2030



**Carbon neutral design** to be used for all new buildings






Increase the usage of **Sustainable Marine Fuel** for our FCL & LCL shipments



Offer **green alternatives for all of our core products/solutions** by using, for example sustainable fuels and low carbon technologies

# Our sustainability roadmap – real examples from DHL Parcel Benelux

We can't create a lasting positive impact unless we follow a clear strategy. Within Parcel Benelux, Sustainability mirrors the DPDHL Group roadmap, focussed on 3 key commitments:

-  **Clean operations for climate protection**
-  **Great company to work for all**
-  **Highly trusted company**

And in addition to the above 3 commitments, we also aim to **create lasting impact** in the communities we operate in **through our Go Programs**



## Ideal CityHub structure; short routes

- The CityHubs are situated close to city centres or central in rural areas
- Large cities have **2 to 5 CityHubs**
- With **139 CityHubs** we keep our routes short and efficient. As a result we can deliver with smaller vehicles
- Electrification is possible far better
- The CityHub is supplied by **3 National** and **14 Regional hubs**

### The Netherlands

- 355 municipalities
- 4.100 postal codes
- 220.000 streets

### DHL Parcel / day

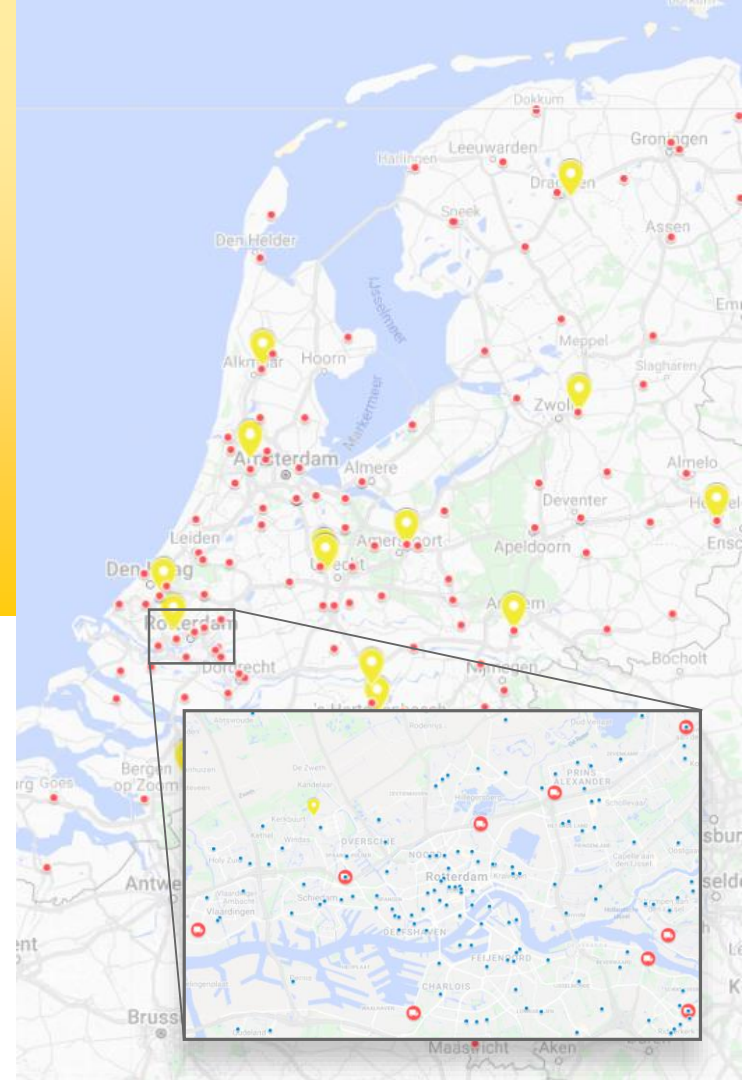
- 6.000 tours
- 800K parcels

### Our daily operation

- 17 tours per municipality
- 1,5 tours per postal code
- 4 parcels per street

### Amsterdam

- 400 per postal code
- 7,5 parcels per street



# Securing Real Estate 26 positions in the Netherlands to accommodate future green growth



Zoetermeer



Nijmegen



Lease Amsterdam



Leeuwarden



Breda



Tilburg



Lease Den Haag



Hendrik Ido Ambacht



Groningen



Almere



Helmond



Amsterdam Zuid



Geleen



Lease Rotterdam



Roermond



Amsterdam West

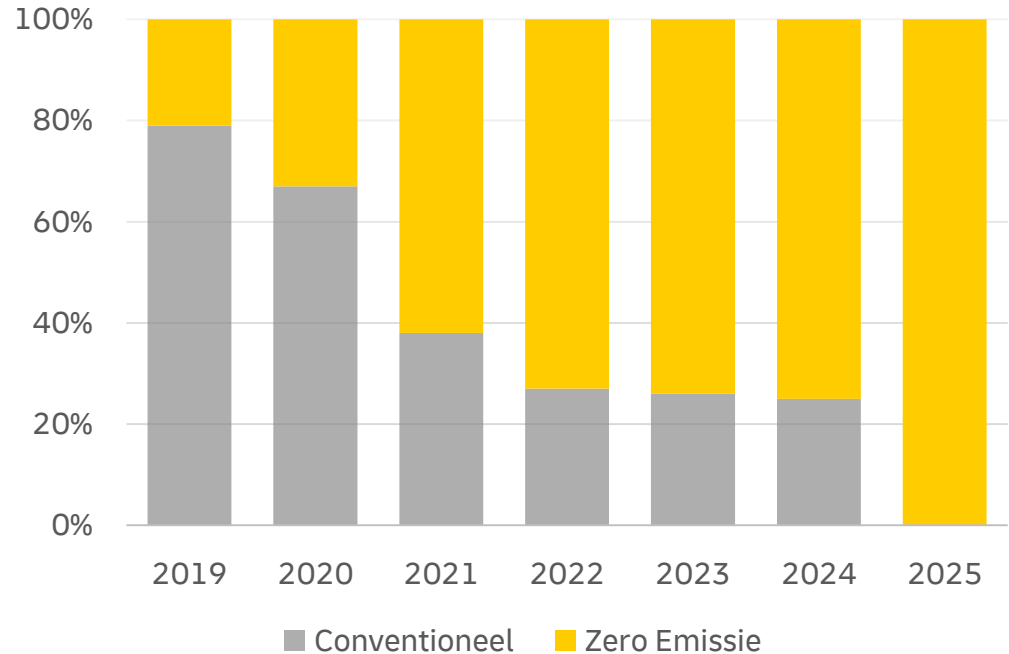
INVESTING

**GOGREEN**

**€150M**

## We electrify our Last Mile

- CityHubs are located on the edges of cities or centrally in rural areas, large cities have **2 to 5 CityHubs**
- This also makes electrification easier. Currently we will have over **1.400 electric routes**, being the largest eFleet
- This will increase to **+2.200 in 2022**, also starting in Belgium
- By **2025** all own LM vans will be electric



## No. 1 eFleet in the Netherlands

Clean operations for climate protection

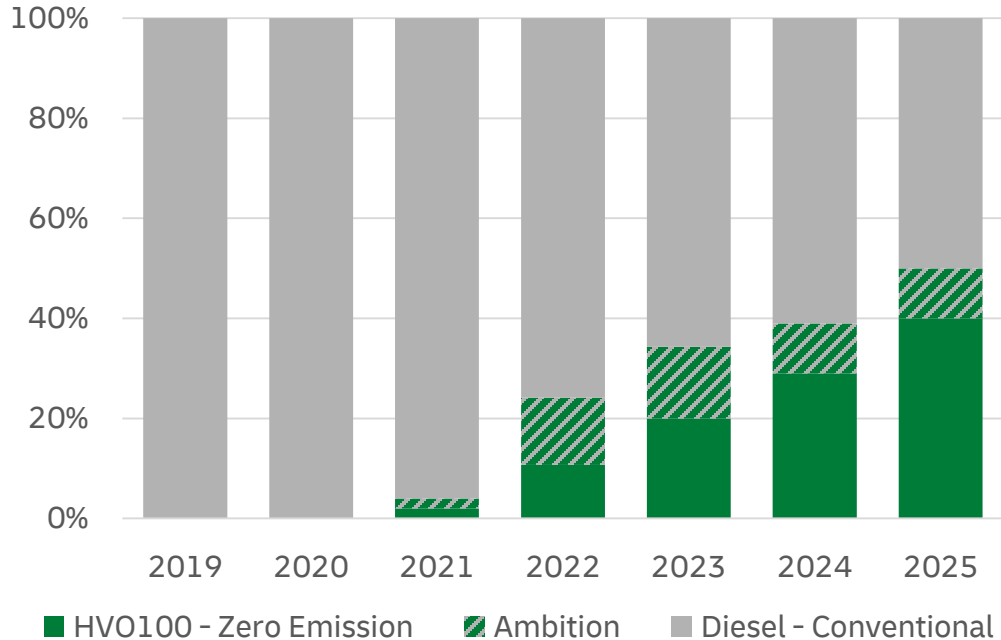


# 1400 = largest E- fleet in the Benelux





## Ramp up use of HVO100 & BioFuels



### Use for DHL

- Successful pilot in Zwolle
- Will be rolled out in BNL network
- Both own and Service Partners (Network & Last Mile)

Each **10% HVO100** growth

=

**16 gr. CO<sub>2</sub>** per parcel

(B2C BNL)

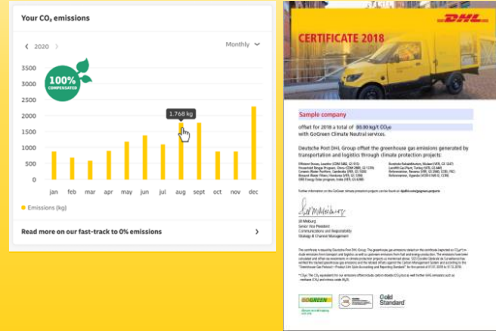
# The results for our customers

1



**REDUCTION  
OF CARBON  
EMISSIONS**

2



**COMPENSATE &  
INSIGHT  
CARBON  
EMISSIONS**

3



**CLIMATE NEUTRAL  
DELIVERY**

Great news! This parcel is delivered climate neutral. From now on receiving even more green parcels? Then choose pick up from a DHL ServicePoint.

[▶ Read more about GoGreen](#)

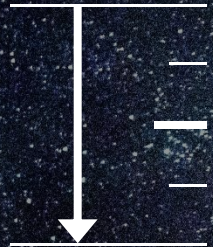
## Understand CO<sub>2</sub> emission related to Parcel delivered at consumer (2020)

2020 NL B2C Average:

**350 gr. CO<sub>2</sub>**  
(eCom, DFY, C2C)

2021 NL B2C Estimate:

**330 gr. CO<sub>2</sub>**



**EVERY REDUCTION,  
SMALL OR BIG, MATTERS!**

## The Right Perspective & Awareness -> Parcel = 330 Gram CO2 – compared to:

300 gram =



800 gram =



900 gram =



2.000 gram =



6 kg =



30 KM

14 kg =



32 kg =



79 kg =



# Reduce & Rethink packaging

## 2 Different projects

- 1) Rethink packaging: Our Easy Green Capsule is born
  - Tests with customers to test their reusable packaging
- 2) Minimize our own material
  - Lean Sig Sigma/First choice initiative to reduce waist materials such as foils

### Reusable. robust and branded box



### Pallet lid-and-strap systems

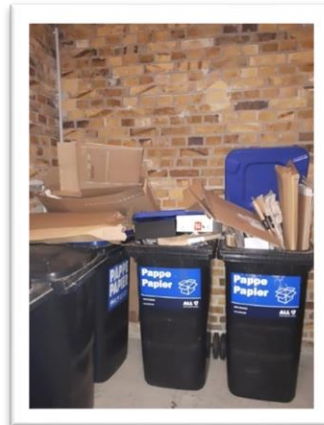




# EASYGREEN PACKAGING

# Problem

The growth of eCommerce deliveries... is increasing “one-way” waste.



Our **Aim** is:

- 1) To reduce waste (packaging & fillers)
- 2) Attract new customers (and improve loyalty of existing ones)
- 3) Improve consignee experience (less time crushing boxes, sorting waste)

## Barriers to entry

Cooperation between customer – consumer – logistics provider – manufacturer + willingness to co-invest in such solutions

Policy – EU Packaging and Packaging waste directive + local policies that encourage the use of reusable packaging

Lack of education and standards – ISO and BSI Kitemarks

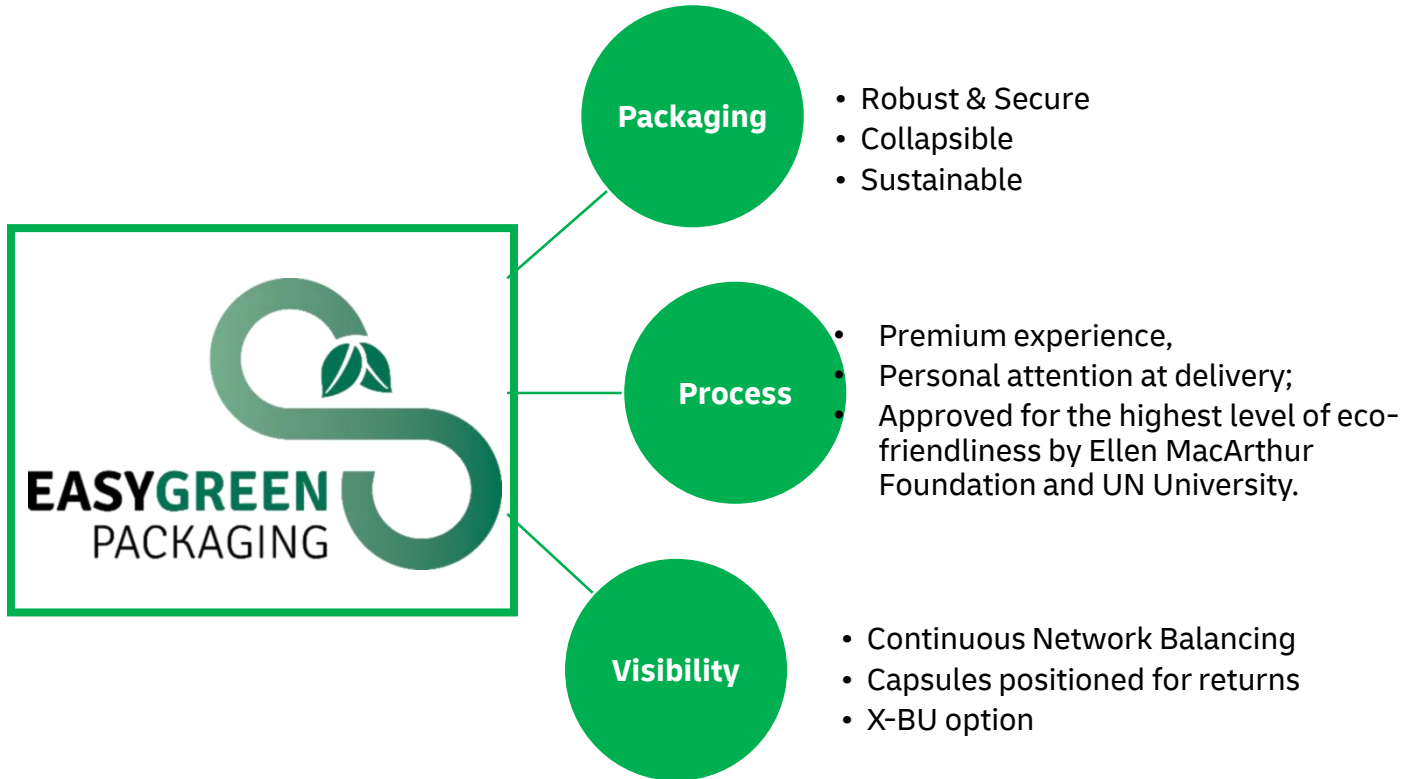
Excessive branding needs

General adoption of reusable packaging





# The EasyGreen Packaging Solution



# Physical solution – The EasyGreen Capsule

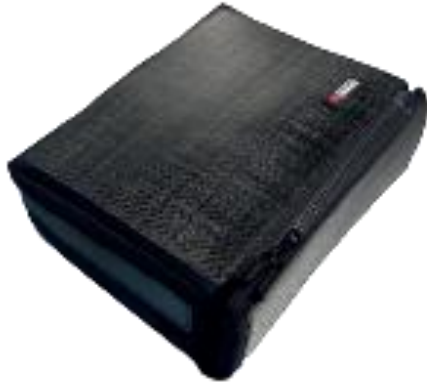
- Water proof;
- Dustproof;
- Tear proof;
- Stackable;
- Unique sealing mechanism;
- Made of polypropylene and cardboard;
- Air cushioning protection system for small items;
- 3 times more resistant than the DHL cardboard box.



# Physical solution – The EasyGreen Boxbag

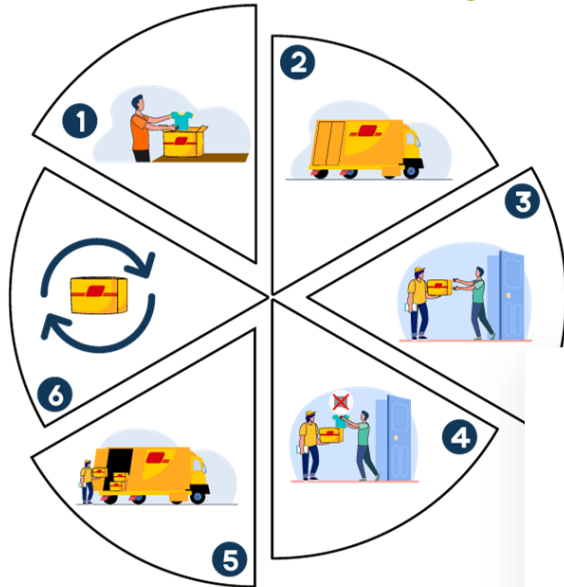
Our sustainable solution to the FAT PACK Issue!

- Adaptable in size (3 in 1)
- Water proof
- Dustproof
- Tear proof
- Polypropelene
- Light weighted
- Similar protection to a box
- Similar adaptiveness and weight to a flyer



# “EASY, NATURAL AND LOGICAL!”

- Mihai Panait, Consignee



Greener



More efficient



Increased customer loyalty



Better end consumer satisfaction



Closed Loop model

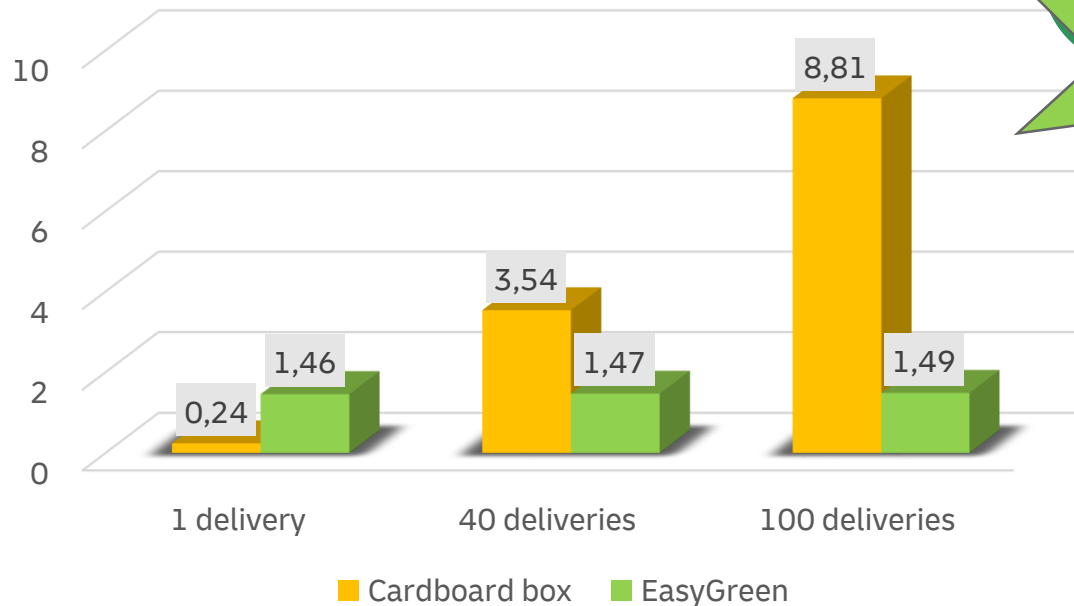


## Delivery options



# Environmental impact (worst case scenario)

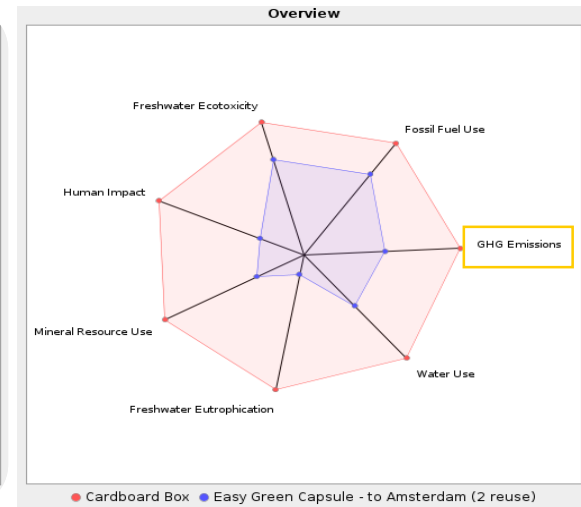
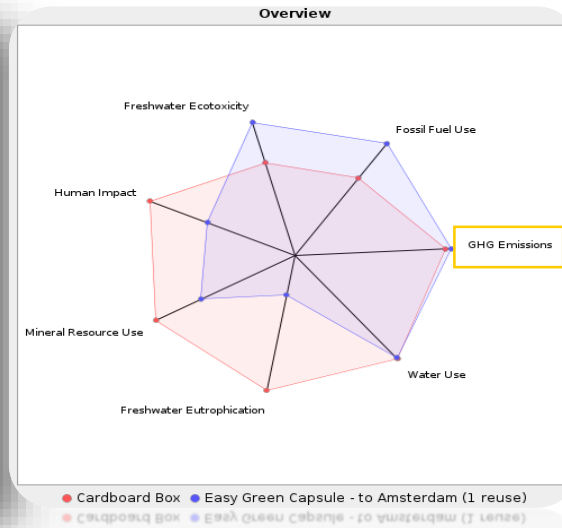
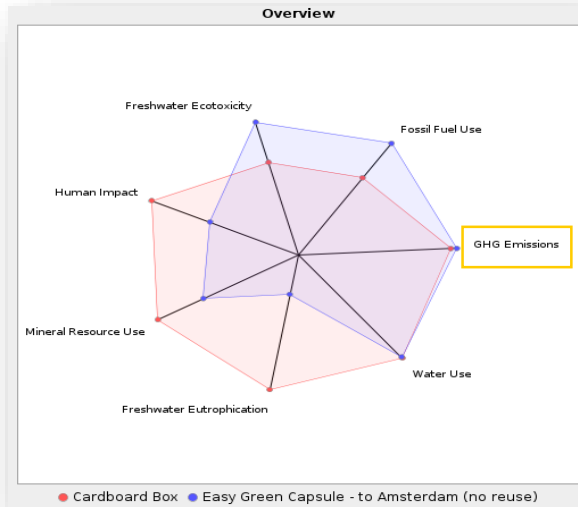
## CO2 emissions comparison in kgCO2



CO2/Kg reference used:

- 0.82kg CO2/kg recycled corrugated cardboard\*
- 2.41kg CO2/kg virgin polypropylene\*

# Environmental impact



- The GHG emissions of the Easy Green Capsule **is 4% more** than that of the Cardboard Box on its own (without reuse)
- However, GHG emissions from the Easy Green Capsule is **less** than using a conventional cardboard box by the time the capsule has been **reused 2 times** compared to a conventional cardboard box, meaning that the Easy Green Capsule reaches its GHG emissions breakeven point after it has gone through 2 complete reuse cycles.

# PAST TRIALS



## Express

End-to-end process- Roemania



## P&P & DHL Express

Packaging Quality

Operational testing in Leipzig-Lab



## Supply Chain's warehouse

Poland



# Starting trials



## United Kingdom

DHL Express trial in Maidstone  
Shoe company customer  
Start 7<sup>th</sup> February



## Thailand

DHL Supply Chain in Bangkok  
Multiple customers  
Start end of February



## Netherlands

DHL Express Amsterdam  
New accounts  
Start end of February

An aerial photograph of a two-lane asphalt road that winds through a dense, lush green forest. The road curves in an S-shape across the frame. Several cars are visible on the road: a dark car on the left side of the first curve, a dark car on the right side of the second curve, a white car on the right side of the third curve, and a red car on the right side of the fourth curve. A bright yellow banner is positioned at the bottom of the image, containing the text "Thank you for your attention" in a bold, red, sans-serif font.

**Thank you for your attention**