GOGREEN – MISSION 2050: ZERO EMISSIONS
Greening Freight Distribution at the City and Global Level

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Key facts about Deutsche Post DHL Group

- About 510,000 employees in more than 220 countries and territories (of which about 60% outside of Germany)

- Group revenues: EUR 57.3bn
  Group EBIT: EUR 3.49bn
  Market capitalization\(^1\): EUR 38.760bn

- 59m letters per workday in Germany
  4.3m parcels per workday in Germany
  Around 28,000 sales outlets in Germany

- ~ 809,000 international express shipments per day (Time Definite International)
  +7.6% versus 2015

- 3.6m tons of air freight; 3.1m TEU\(^2\) of ocean freight. No. 2 European road freight

- 13.7m square meters\(^3\) of warehouse space in contract logistics

Deutsche Post DHL Group carbon footprint 2016

Total 26.92 million tonnes CO₂e

11% ocean transport

3% buildings

21% road transport

65% air transport

Source: Deutsche Post DHL Group; Corporate Responsibility Report 2016
Successes of our GoGreen program

- **First global logistics service provider** with a quantified CO₂ efficiency target

  - **2008**

- **Adopting the Shared Value approach** and a new generation of tailored GoGreen Solutions

  - **2012**

- **Start of large scale rollout of electric mobility** for pick-up and delivery services

  - **2014**

- **Achieving 2020 target** to improve carbon efficiency by 30%, 4 years early

  - **2016**

The world agrees on the **Paris Agreement**

- **UN Sustainable Development Goals** are decided

- **Major customers** demand green logistics services

- **Investors** demand action and transparency

- **Regulatory requirements** lean towards decarbonization of transport

Source: Deutsche Post DHL Group
Our bold long-term mission

MISSION 2050: ZERO EMISSIONS

Source: Deutsche Post DHL Group; Zero emissions refers to net zero emissions
Four strategic targets for 2025

We defined four strategic targets for 2025 to track progress against our 2050 mission

1. Global Target

By 2025, we will increase our carbon efficiency by 50% over 2007 levels to support the global ambition to limit global warming to well below 2°C.

2. Local Target

By 2025, we will improve local quality of life by delivering 70% of our own first and last mile services with clean pick-up and delivery solutions.

3. Economic Target

By 2025, more than 50% of our sales will incorporate Green Solutions which make our customers’ supply chains greener.

4. People Target

By 2025, we will have trained 80% of our employees to become certified GoGreen specialists and we will actively involve them in our environmental and climate protection activities. This includes joining partners to plant one million trees each year.

Source: Deutsche Post DHL Group
If you want something new you have to stop doing something old.

Peter Drucker
Global efficiency technologies - Last mile delivery

Electric vehicles offer benefits especially in the short and start-stop intensive driving cycles in ‘last mile’ delivery

Source: Deutsche Post DHL Group
StreetScooter Work – The first electric vehicle developed in collaboration with delivery staff

**Motivation for in-house development**
- Fast achievement of target costs
- Guarantee of optimal ergonomics
- Better visibility conditions and robustness
- Emotional enthusiasm of delivery staff
- Reduction of CO$_2$, local emissions and noise

**Technical data**
- Range 80 km
- 4 m$^3$ loading volume
- 710 kg payload
- 20.4 kWh battery capacity
- 48 kW power
- Total weight 2.1 t
- Max. 85 km/h (DP), up to 120 km/h possible

Source: Deutsche Post DHL Group
# StreetScooter Portfolio – Tailor-made tools for last-mile delivery

<table>
<thead>
<tr>
<th></th>
<th>Bike</th>
<th>Trike</th>
<th>Work</th>
<th>Work L</th>
<th>Work XL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status</strong></td>
<td>Series prod., &gt; 1,000 in ops</td>
<td>5 prototypes in testing</td>
<td>Series prod., &gt; 3,400 in ops</td>
<td>Series prod., 150 in ops</td>
<td>170 by end of 2017</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>4 boxes</td>
<td>6 boxes</td>
<td>4 m³</td>
<td>8 m³</td>
<td>20 m³</td>
</tr>
<tr>
<td><strong>Payload</strong></td>
<td>50 kg</td>
<td>90 kg</td>
<td>710 kg</td>
<td>1,000 kg</td>
<td>1,250 kg</td>
</tr>
<tr>
<td><strong>Payload tot. weight</strong></td>
<td>210 kg</td>
<td>285 kg</td>
<td>2,080 kg</td>
<td>2,650 kg</td>
<td>4,250 kg</td>
</tr>
<tr>
<td><strong>Engine</strong></td>
<td>250 W</td>
<td>250 W</td>
<td>48 kW</td>
<td>64 kW</td>
<td>84 kW</td>
</tr>
<tr>
<td><strong>Max. speed</strong></td>
<td>25 km/h</td>
<td>25 km/h</td>
<td>85 km/h</td>
<td>85 km/h</td>
<td>85 km/h</td>
</tr>
<tr>
<td><strong>Battery capacity</strong></td>
<td>480 Wh</td>
<td>2 x 480 Wh</td>
<td>20 kWh</td>
<td>29 kWh</td>
<td>48 - 96 kWh</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>25 km</td>
<td>30 km</td>
<td>80 km</td>
<td>80 km</td>
<td>80 – 200 km</td>
</tr>
</tbody>
</table>
Past and current evolution steps of containerization

The containerization concept is undergoing continuous advancements

2015: Introduction of Cubicycles for last mile delivery

2016: Introduction of van/trailer combinations to carry the boxes to inner city swapping zones

2017: Replacement of the van/trailer combinations by e-vans carrying the boxes to the inner city swapping zones

Source: Deutsche Post DHL Group
The best way to predict the future is to create it.

Peter Drucker