

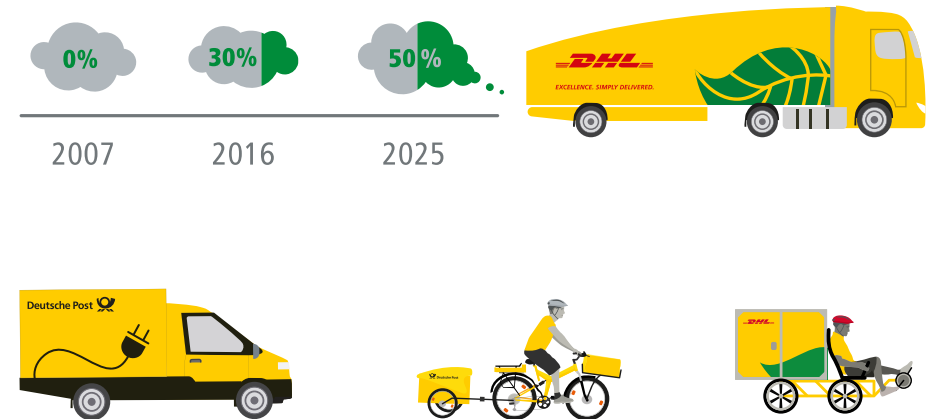
DHL'S MISSION TO GOGREEN

MISSION 2050
ZERO EMISSIONS
GOGREEN

In 2017 DHL committed to reduce all logistics-related emissions to net zero by 2050.

To help realise this vision, we have set interim goals. By 2025 we want to:

1. Increase our carbon efficiency by 50% compared to 2007 levels
2. Have more than 50% of our sales incorporate Green Solutions
3. Reduce local air pollution emissions by operating 70% of our own first and last mile services with clean pick-up and delivery solutions globally
4. Certify 80% of our employees as GoGreen specialists.



TRAILAR is a key contributor to our GoGreen programme globally and in the UK:



“Our TRAILAR solution is a key contributor to our GoGreen program and takes us a big step forward towards our goal of becoming the zero-emissions logistics leader by 2050”

Thomas Ogilvie, DPDHL Group Board Member





**Combining solar technology with commercial vehicles
for greener future freight in London and beyond**

Aaron Thomas – Co Founder & Managing Director

TRAILAR

A company of

Deutsche Post DHL
Group



Management program is the catalyst for green innovative idea



Rise in popularity of solar technology and new applications



First transport solar solution prototype



Deutsche Post DHL accelerates the idea to become a Ltd company



Innovate a vehicle in 3 simple steps



Step 1

Apply ultra thin solar matting to the roof of a commercial vehicle



Step 2

Connect the matting to the Smart Charge Controller which monitors the electrical requirement. It then regulates and changes the energy transfer behaviour depending on the vehicle state



Step 3

Fuel and maintenance spend are reduced. Vehicle becomes a more sustainable mode of transport



System basics and technology

5

Antenna

- Monitor the major electrical system characteristics
- Sensors are non-invasive

1

Solar Mats

- Providing the energy from the sun

4

Fleet Management System

- The system is connected to the vehicle FMS port
- FMS interaction is read-only
- GPS in-built

3

Vehicle Batteries

- On-board or additional batteries used

Sensor 4

2

Smart Charge Controller

- Regulates the energy transfer to the vehicle electrics
- Monitors the vehicle electrical systems
- Changes the energy transfer behaviour depending on vehicle state

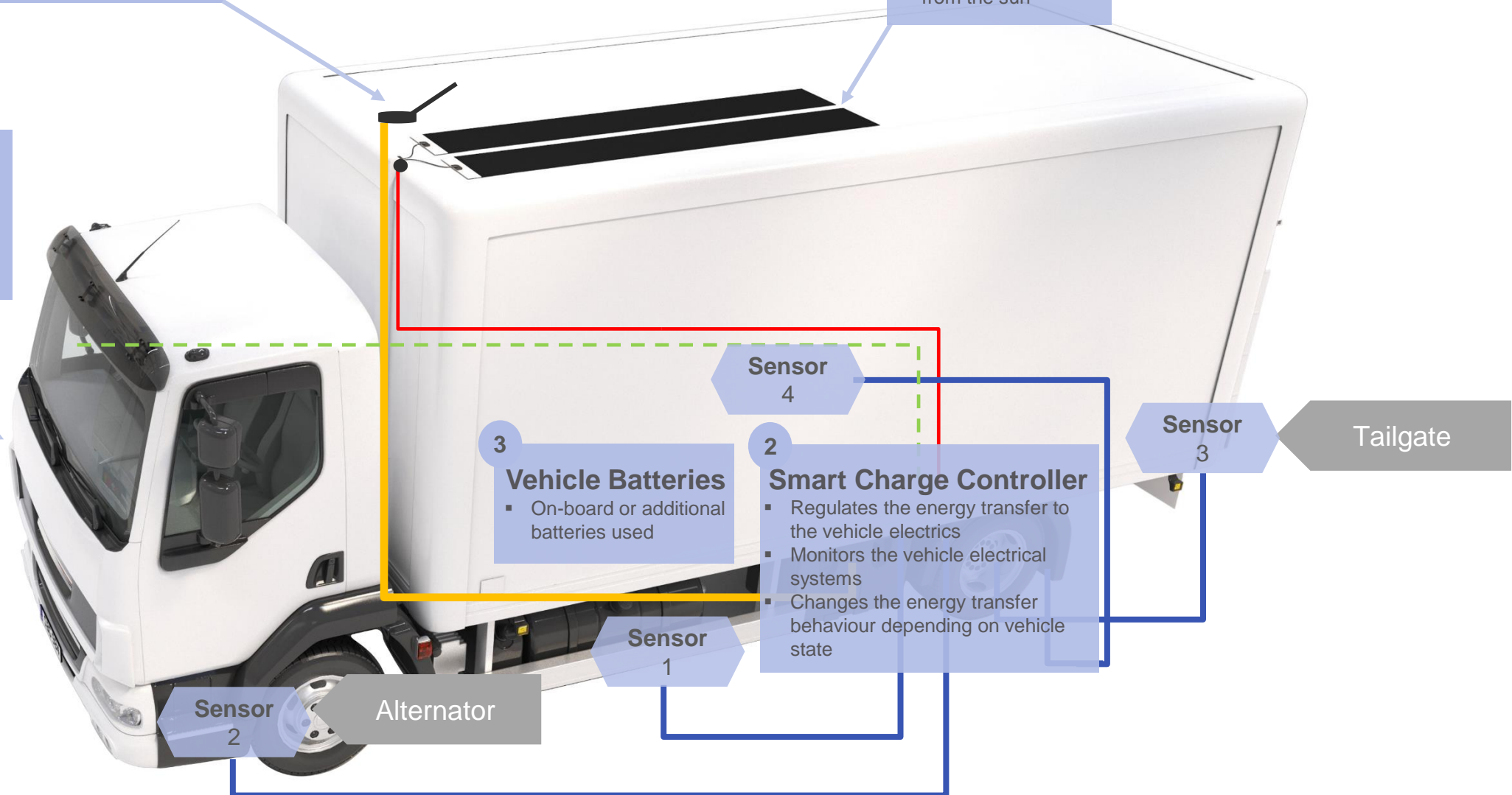
Sensor 3

Tailgate

Sensor 1

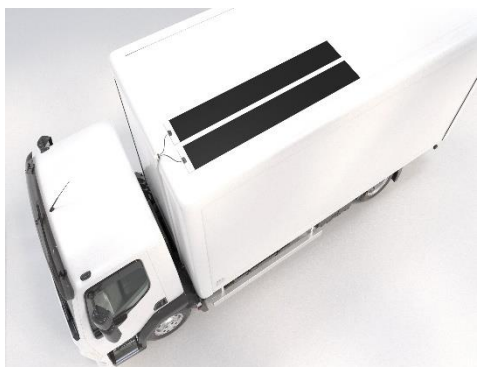
Sensor 2

Alternator



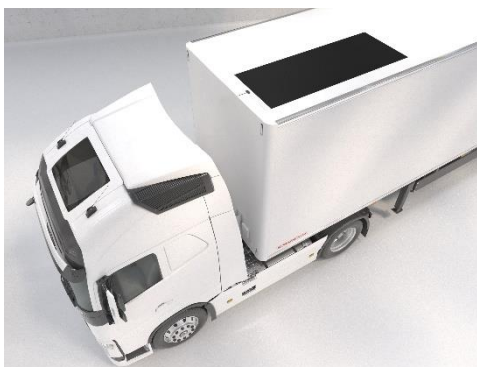


Solutions that focus on Freight/Transport issues caused by the Pandemic and that can aid the future freight of London



Rigid

- 850L P.A. fuel saving
- 2.5t CO₂ reduction P.A.
- Powers ancillary equipment



Trailer

- 500L P.A. fuel saving
- 2.5t CO₂ reduction P.A.
- Trailers become electrically self-sufficient



Fridge van

- 3.5t box or panel van
- 700L P.A. fuel saving
- 2.5t CO₂ reduction P.A.



Bus

- Bus & Coach, single or double deck
- 2700L P.A. fuel saving
- 7t CO₂ reduction P.A.



Refuse truck

- 2000L P.A. fuel saving
- 5.5t CO₂ reduction P.A.



The **TRAILAR** system means that idling during tail lift use is no longer required



Trailers no longer require anderson leads as trailers become self-sufficient



Batteries last longer. Charges at a voltage and a current optimised for minimal battery wear and maximum charge capacity



VOR and call out times can be reduced through predictive maintenance via operational insights (telematics)





TRAILAR

Thank you – Questions?



TRAILAR



@instatrailar



@solartrailar