



# LIGHTER COMMERCIAL VEHICLES

ECONOMICAL & ECOLOGICAL

## Who we are

We are 7 engineers with backgrounds in automotive, aerospace & production, 9 employees in total



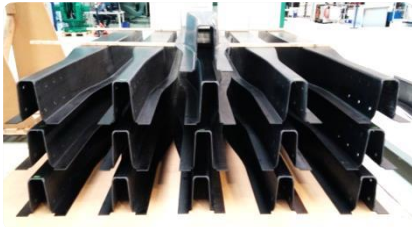
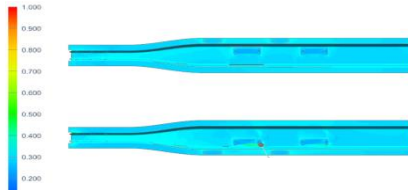
## Co-Funded Project: Serial Production Process for large CFRP Parts

Our goal is to develop an economical serial production process for / and a CFRP chassis



## What we do

We develop, produce & validate CFRP components and vehicles up to 3.5t



## Why we do it

Because it makes economical & ecological sense. Also, there is a large and growing market demand.

**+ 40%**

**Payload**

**- 28%**

**Total Cost of Ownership**

**1.7 Million**

**New Registrations**

<3.5t in EU in '15

**+ 300.000 €**

**Revenue per Vehicle p.a.**



**- 2 Tons**

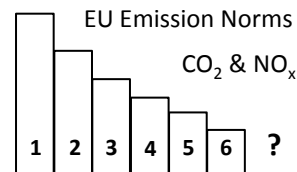
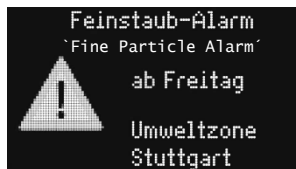
**CO<sub>2</sub> per Vehicle p.a.**

**+ 12%**

**3.5t vehicles vs. '14**

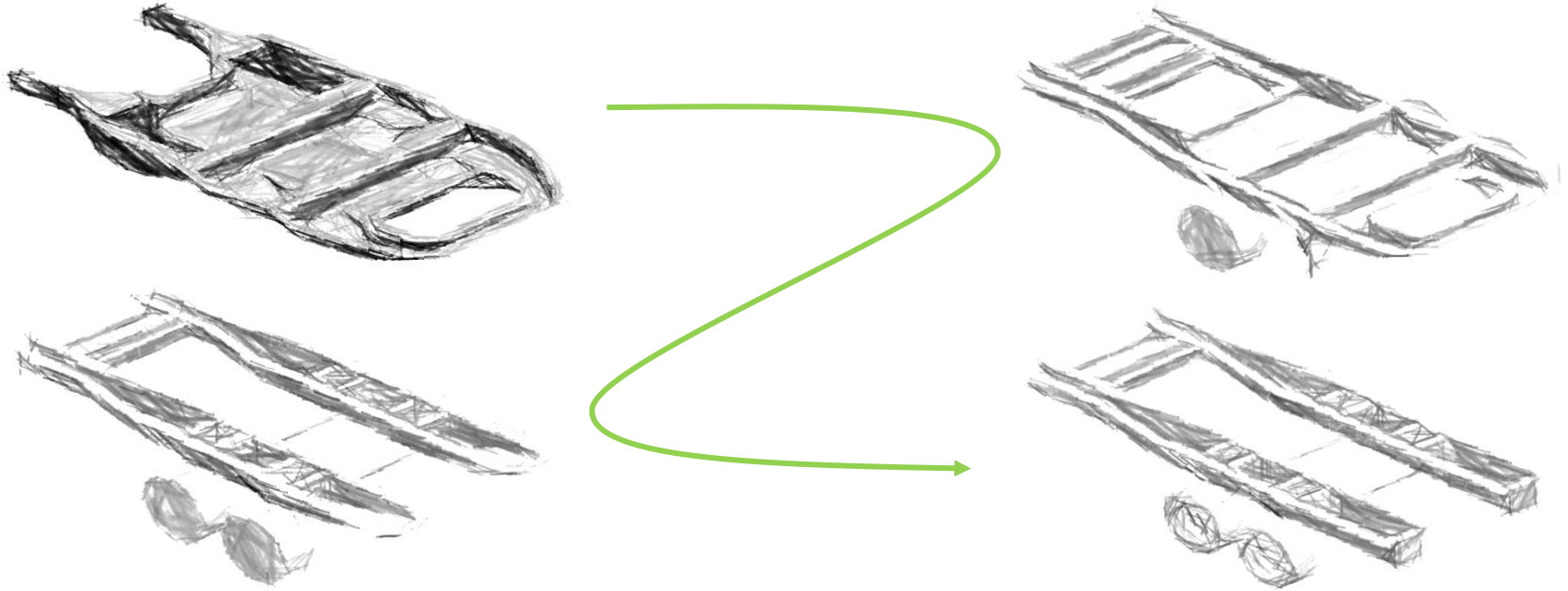


B 	< 3.5t
C1 	< 7.5t



## How we do it

Continuous improvement of geometrie, material and process

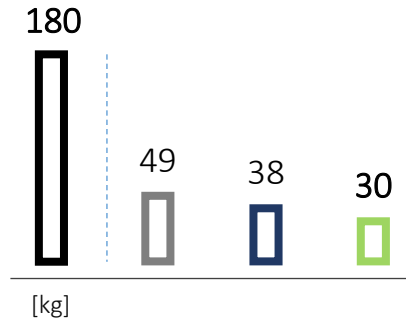


Result: Reduction of weight and costs, as well as production and assembly time

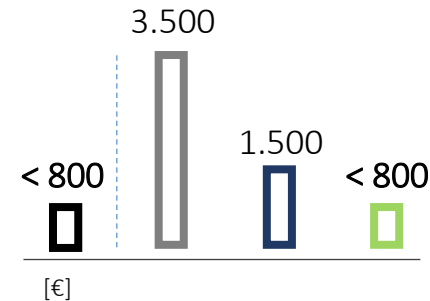
## Where we stand today

More than 140kg lighter than steel @ comparable costs

**- 83 %**  
Chassis Weight



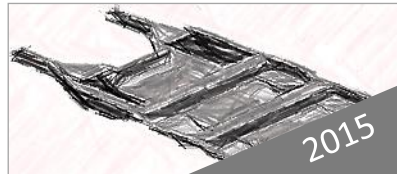
**± 0%**  
Assembled Costs



Steel Chassis



Carbon Single Piece



Carbon Twin (RTM)



Patented by CarbonTT

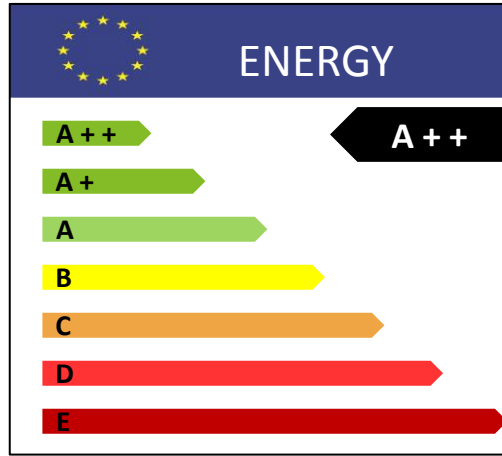
Carbon Twin (Cont.)



Patented by CarbonTT

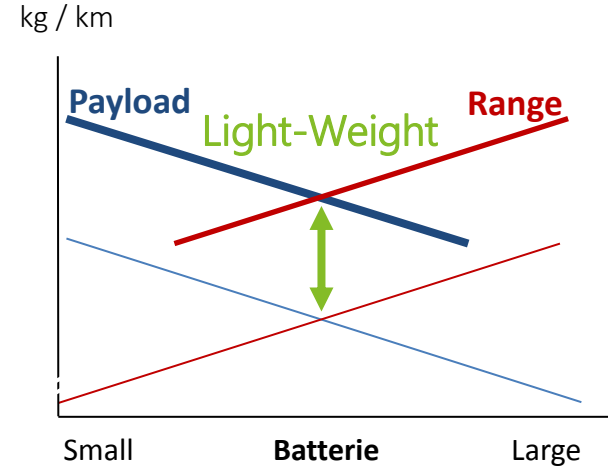
## Lighter eMobility

Weight Reduction enables quicker transition to electric vehicles because of greater range



### Effects of Light-Weight:

- Less Energy Consumption
- Greater Range
- Higher Payload
- Less Vehicles & Traffic
- Less Fleet-Kilometers





Lighter. More Economical. More Sustainable.



Nutzfahrzeuge



EcoLight by **CarbonTT**

- VW T6: up to 1.500kg payload, approx. 16m<sup>3</sup> box-volume
- More efficient routes & less emissions
- VW certified & validated



Electric. Zero-Emissions. Extra-Light.



**STREETSCOOTER**



**EcoLight by CarbonTT**

- Work: min. 750kg Payload, 4m3 Volume
- Work L: min. 1.000kg Payload, 8m3 Volume
- Custom Specifications

## Specifications & Options

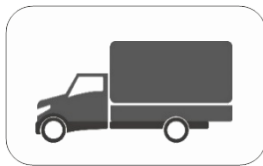
Vehicles can be adapted to individual needs – always ultra-light



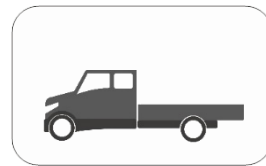
Box



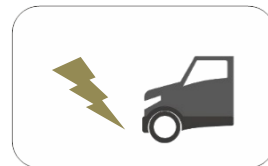
Cooled



Tarpaulin



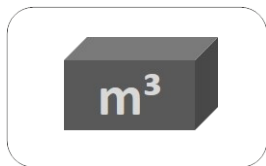
Flat-Bed



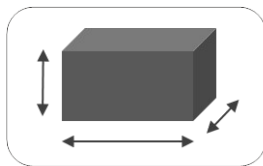
Electric



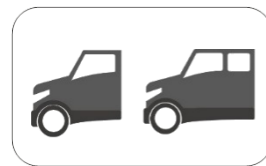
Payload



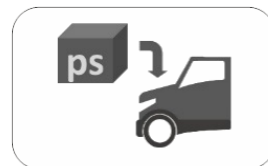
Volume



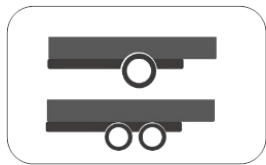
Dimensions



Seats



Power



Axles



Lift



Doors



Steps



Spoiler

Thank you.

Carbon Truck & Trailer GmbH  
Airbusstrasse 1 · 21684 Stade · Germany



Learn more:  
[www.carbonTT.com](http://www.carbonTT.com)