

Cargo bikes in logistics in Germany

**LOW CARBON
LOGISTICS**

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Legal situation in Germany



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Equated to the bicycle if:

- High $\leq 2,50$ m
- Length ≤ 4 m
- Width
 - One-track ≤ 1 m
 - Multi-track $\leq 2 - 2,55$ m (judicial loophole)
- For eCargo-bikes electrical pedal assistent is allowed
 - Electrical drive unit up to 25 km/h with handy starting aid 6 km/h
 - 250 watt
- Cargo bikes in logistics can use loading zones in the city



Legal situation in Germany



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Differentiation *heavy cargo bikes*

- Volume $> 1 \text{ m}^3$
- Load $> 150 \text{ kg}$
- But they are also equated to bicycles if they are not too big



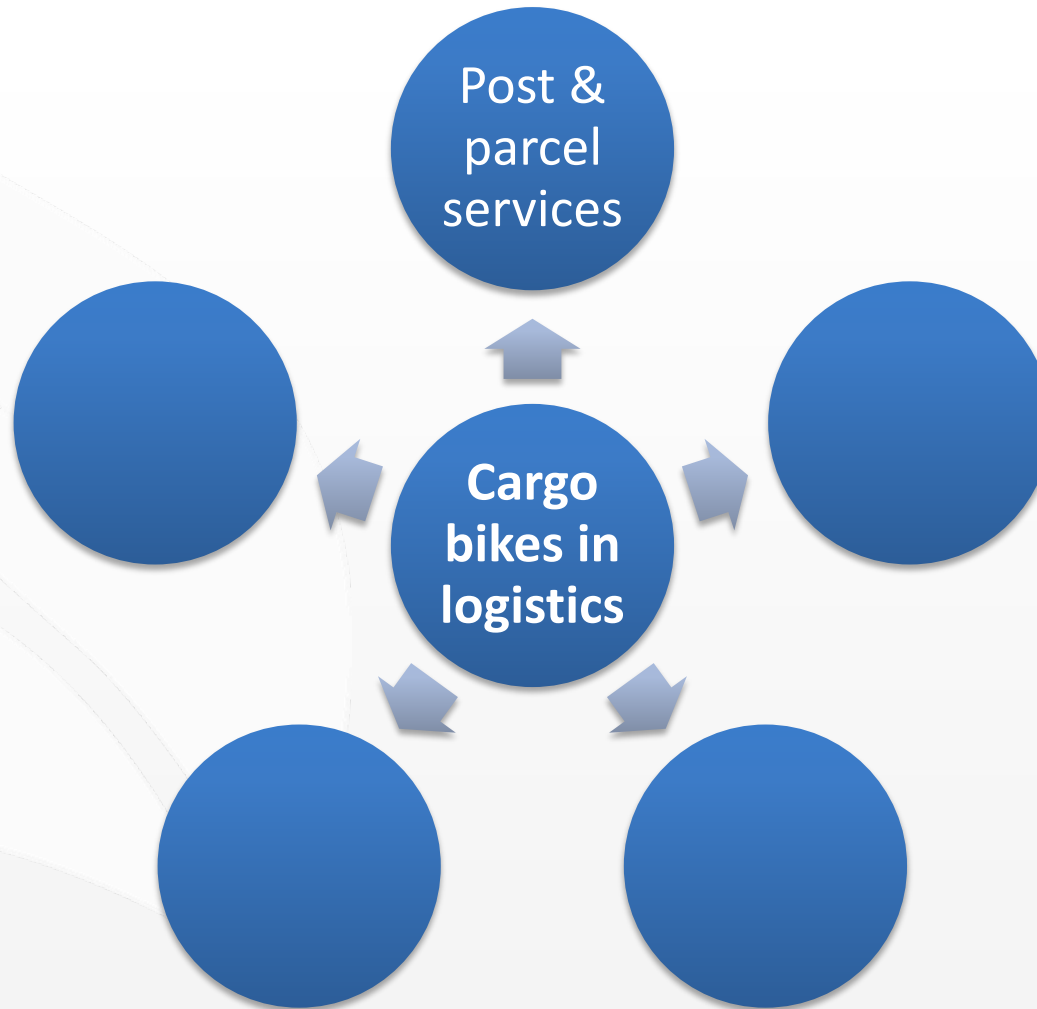
German start-up rytle (Source: www.blue-rocket.de)



Market segmentation



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Post and parcel services



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Type of businesses	<ul style="list-style-type: none">• Big companies like DHL or UPS• Small couriers
Goods	<ul style="list-style-type: none">• Letters• Parcels (< 31,5 kg)
Type of bikes	<ul style="list-style-type: none">• Cargo bikes• eCargo bikes• Heavy cargo bikes



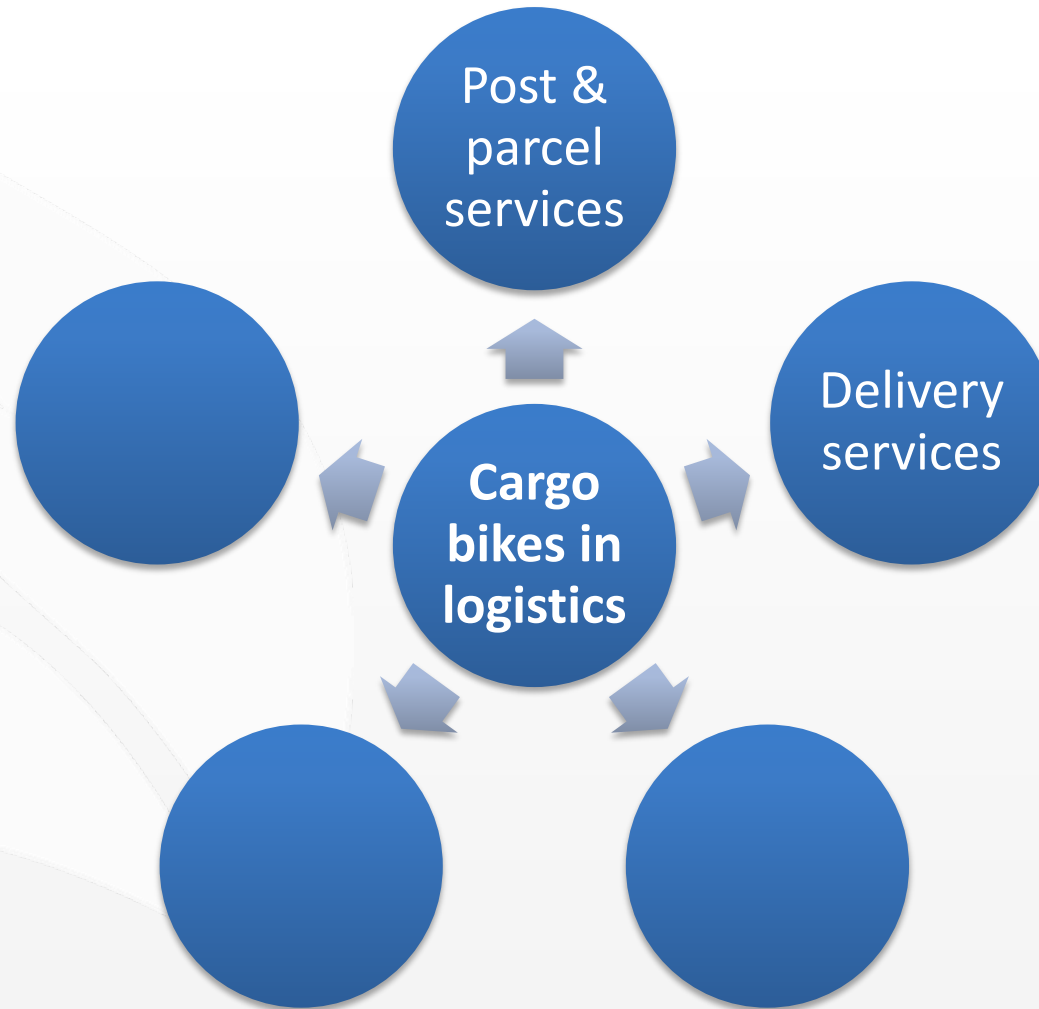
Figures: www.nwzonline.de; www.elektrobike-online.com



Market segmentation



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Delivery services



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Type of businesses	<ul style="list-style-type: none">• Retail and catering• Delivery start-ups
Goods	<ul style="list-style-type: none">• Food• Non-Food articles
Type of bikes	<ul style="list-style-type: none">• Cargo bikes• eCargo bikes



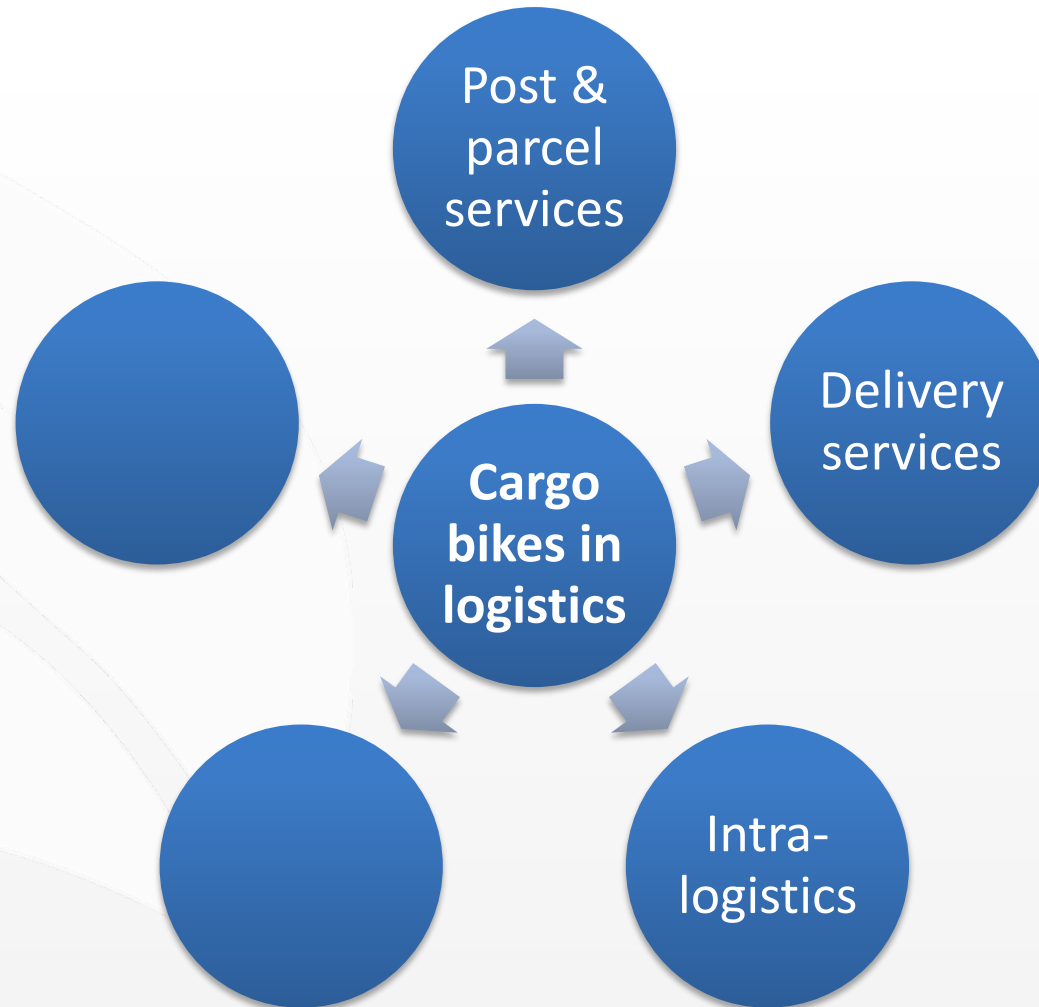
Figures: www.enviado.de; www.lastenrad.vcd.org



Market segmentation



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Intralogistics



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Type of businesses	<ul style="list-style-type: none">• Big companies• Businesses with big areas• Public administrations
Goods	<ul style="list-style-type: none">• Letters and parcels• Materials required for work• Waste disposal
Type of bikes	<ul style="list-style-type: none">• Cargo bikes• eCargo bikes• (Heavy cargo bikes)



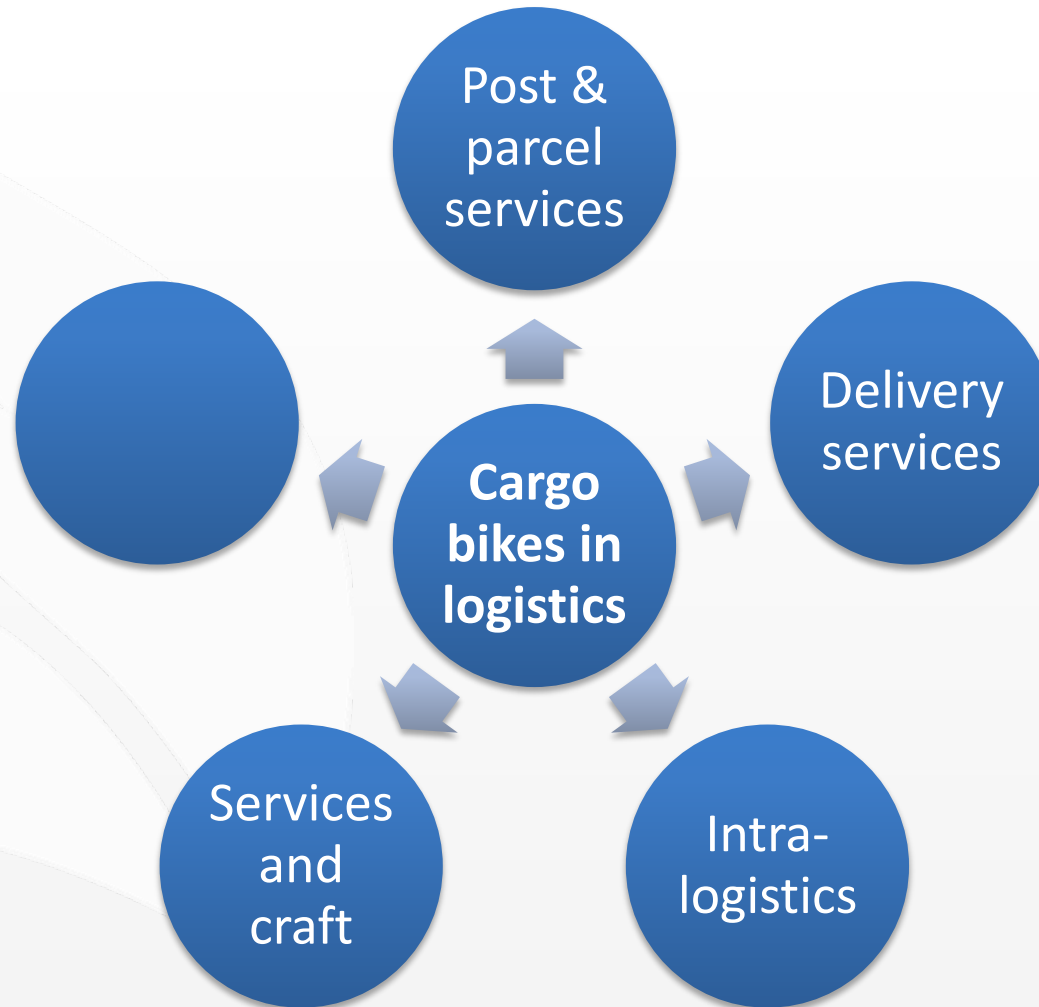
Figures: www.badische-zeitung.de; www.lastenrad.vcd.org



Market segmentation



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Services and crafts



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Type of businesses	<ul style="list-style-type: none">• Small businesses• Craft• Facility management services
Goods	<ul style="list-style-type: none">• Materials required for work
Type of bikes	<ul style="list-style-type: none">• Cargo bikes• eCargo bikes• (Heavy cargo bikes)



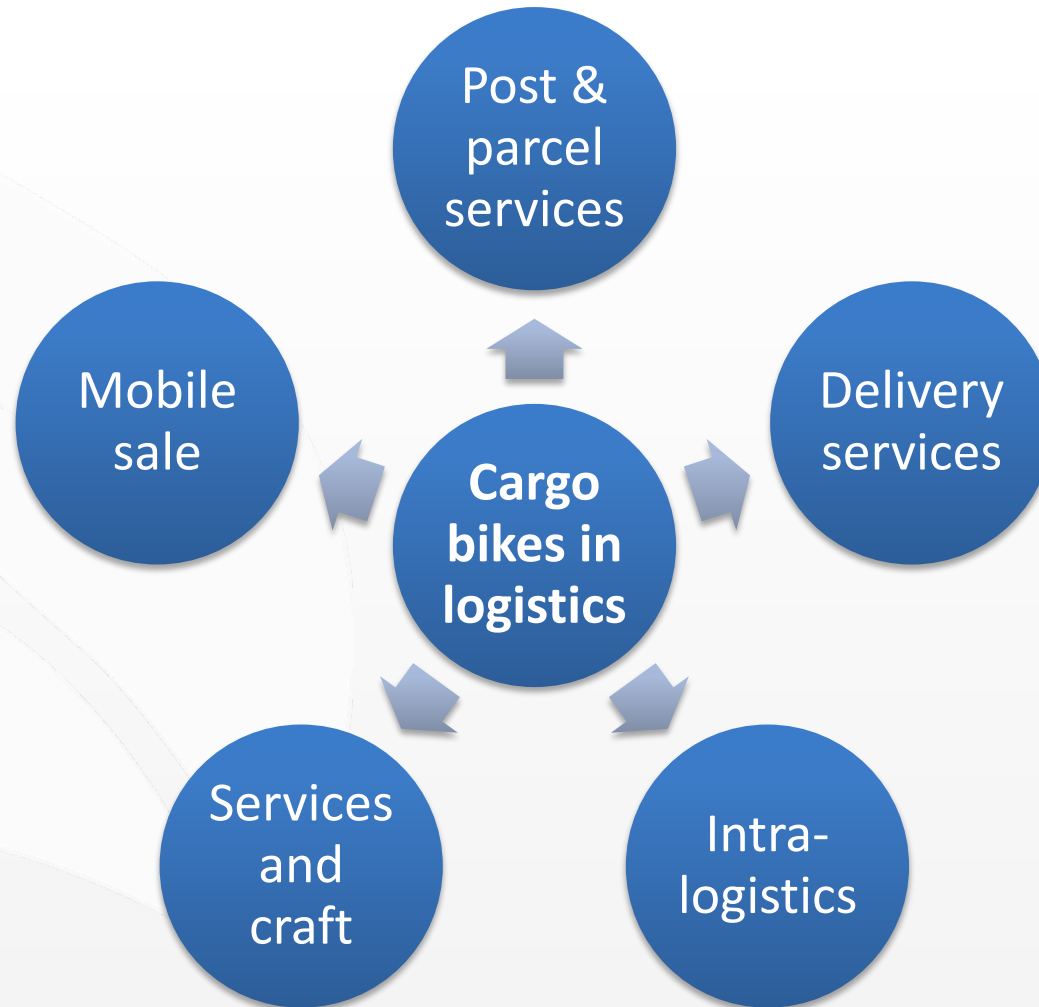
Figures; www.lastenrad.vcd.org



Market segmentation



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Mobile sales



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Type of businesses	<ul style="list-style-type: none">• Small businesses• Franchise
Goods	<ul style="list-style-type: none">• Food
Type of bikes	<ul style="list-style-type: none">• Special cargo bikes



Figures: www.coffee-bike.com ; www.lastenrad.vcd.org



Low Carbon Logistics – Bad Doberan



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Low Carbon Logistics – Bad Doberan

- Micro depot and Cargo Bike in a small town
- Container (10 ft shipping container) located on a city-owned parking area
- Special authorization for driving in the pedestrian area with the Cargo Bike
- The micro depot serves on the one hand as a shelter for the Cargo Bike and the other for the transshipment
- Parcels are transported from the central depot to micro depot
- The position of the cargo cyclist is held by a local resident



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Evolo Z2



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Dimensions	<ul style="list-style-type: none">• Length=3,30m• High=2,00m• Width=1,05
Load	<ul style="list-style-type: none">• 2 m³• More than 250 kg load
Battery	<ul style="list-style-type: none">• Greenpack• 4h running
Specials	<ul style="list-style-type: none">• Euro pallet capacity





Low Carbon Logistics – Bad Doberan

- Operated by the municipal building yard
- Waste disposal of public dustbins and parks
- New chance for employees without driving license
- 3 month test



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Veleon Clean City



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Dimensions	<ul style="list-style-type: none">Length=1,99mWidth=0,76m
Load	<ul style="list-style-type: none">0,2 m³70 kg
Battery	<ul style="list-style-type: none">Heinzmann
Specials	<ul style="list-style-type: none">Mobile dustbin





Experiences



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- At first, companies react very cautiously to the use of cargo bikes
- Financial incentives or public funding are often needed
- Good-practice is very important
- (heavy) Cargo bikes are not that professional yet
- Satisfied drivers
- Excellent marketing



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