

The road to ZE city logistics



Daniel Spetter















Royal Euser

Family owned company;

- Founded 1918
- Transport vegetables and fruits from farms to traders
- In 100 years survived different types of crisis (WO I and II, and now pandemic- lockdown)
- 2021 first BEV will be delivered and operated











Active in different markets:

omzet Euser Transport



Transport DC to supermarkets

transport DC to hotel/restaura nts

PALLETDISTRIBUTIE

transport

network cargo

transport DC drugstore / hospitals

/patient



PHARMA

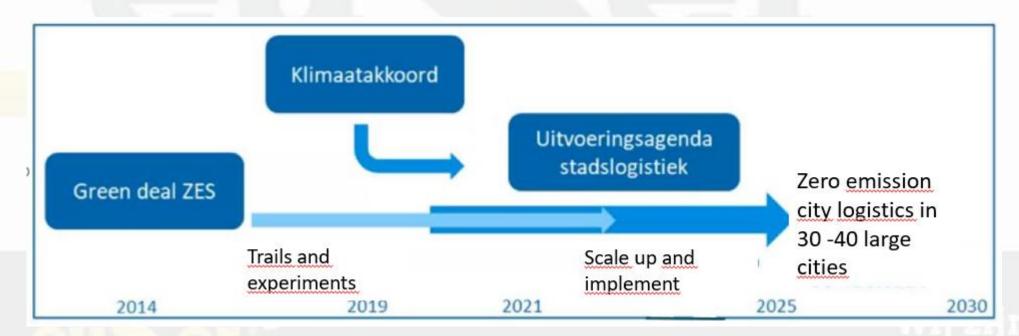
RETAIL

HORECA



Challenges for Dutch city logistics

Zero Emission City Logistics from 2025



And more challenges:

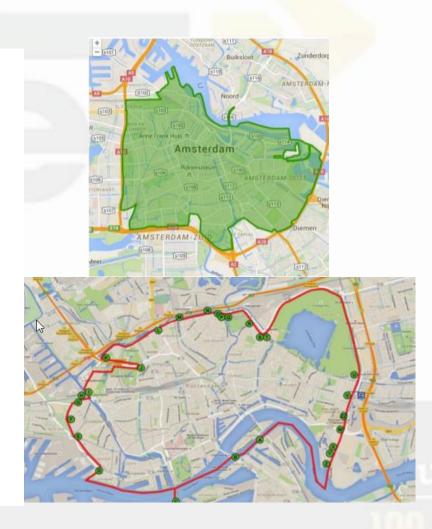


Zero Emission zones are defined:

Zero Emission Stadslogistiek vanaf 2025

Vanaf het laatste kwartaal van 2020 maakten de eerste steden hun Zero Emissie Zones bekend. Inmiddels (maart 2021) staat de teller op 14 steden





E- trucks; OEMS have solutions







First step to take: Financial impact

The Business Case of the E-truck:

Fixed Yearly costs:

- Purchase value: 4 times the price of a Diesel Truck
- Residual value: Zero!!

Variable Yearly costs:

- Maintenance and repair: should be lower but batterie waranty
- Fuel vs Electricty: 50 % benefit per km.
- (Extreme) High cost for infra-structure for charging.

Financial impact:

- Usage profile of BEV should be very high: To lower the fixed cost
 - wide delivery windows >> privileges needed!!
 - Fast charging infra
- Truck/ trailer: BEV
 - Yearly cost difference compared to diesel truck:
 - 17K 25K per Year!
 - This is includes the start up subsidie!!
- Only with the commitment of their customers transport compagnies this transition can happen.



More Challenges for E- trucks (20-40 ton):

- Limited Range: ca.200 km:
 - Dedicated routeplanning needed.
 - Fastcharging in between routes during day

- Charging infra: Huge electrical power needed
- Availability of this: Electrical power





What electrical Power are we talking about?



1 E-truck:

Batterie in E truck = 320 kW

2x charging per 24 hr = 640 kW per day

310 days per year= ca. 200.000 kWh/yr

Is the energy consumption of 100 families.



A regional distribution Centre in retail:

- 100 Vehicles
- 73 MWh needed energycapacity:



=73MWh = 9.400



= 118.000 x



'Transitie naar elektrische trucks is verre van makkelijk'









