

EMSISSION FREE DELIVERY AT AUSTRIAN POST

FROM AN EARLY STAGE IDEA TO A CLEAR AND DISTINCTIVE STRATEGY



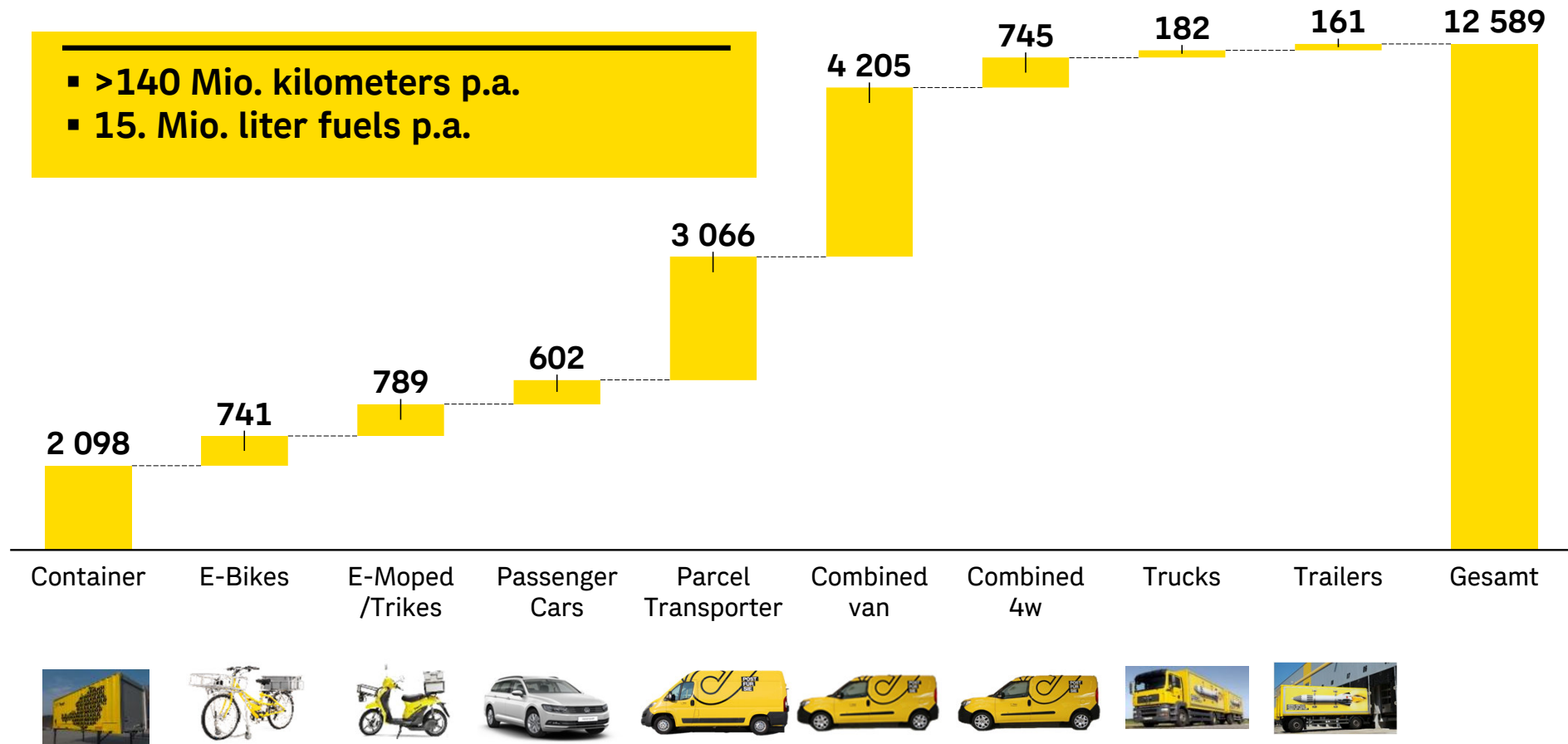
Paul Janacek
VP Group Fleet
Austrian Post

Dec. 13th 2021

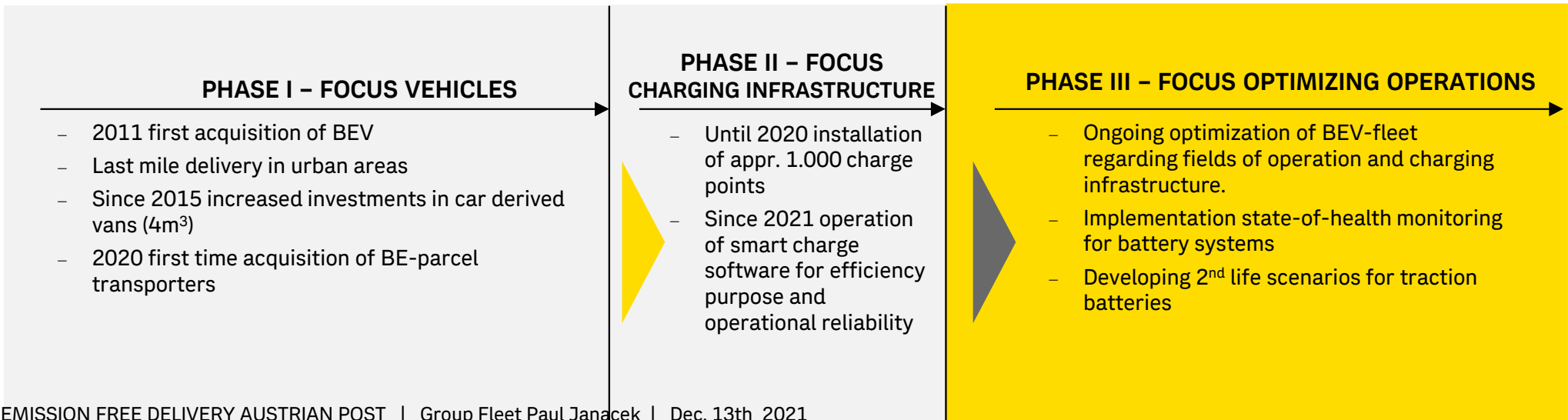
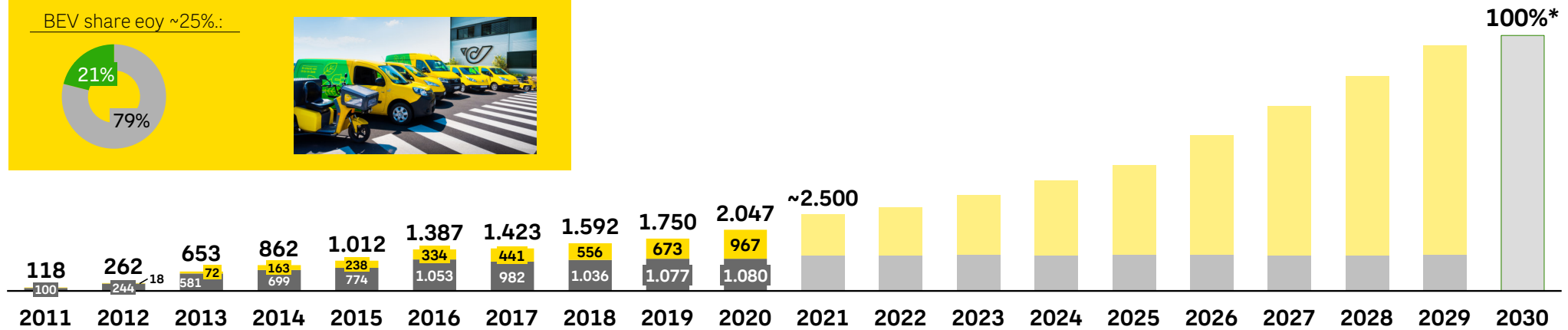
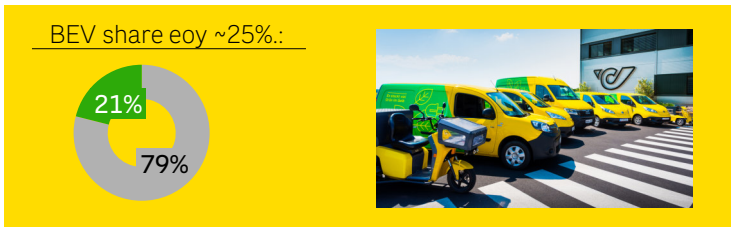
FLEET SIZE AUSTRIAN POST (INCL. LINE HAUL)



- >140 Mio. kilometers p.a.
- 15. Mio. liter fuels p.a.



BEV-FLEET: CONTINUOUS FIELD EXPERIENCE SINCE 2011



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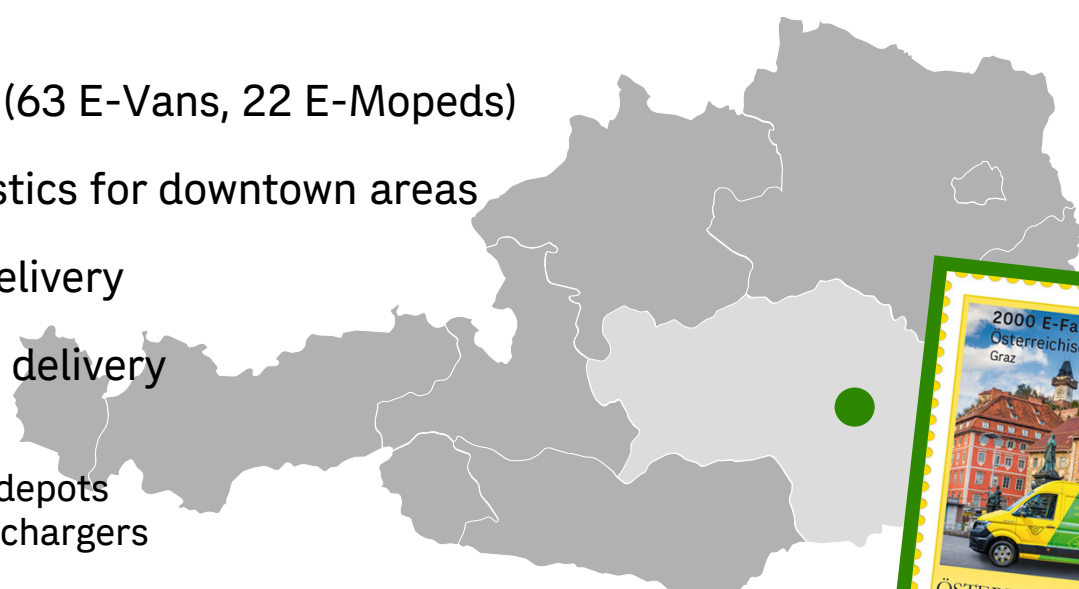
■ 2-lane ■ single lane

► GREEN GRAZ: EMISSION FREE DELIVERY FROM 2021 FOR 290K PEOPLE

IMPLEMENTATION PLAN



- (1) 2020 mail delivery 100% CO₂ free (63 E-Vans, 22 E-Mopeds)
- (2) Cityhub-Project – centralized logistics for downtown areas
- (3) Piloting of 1st E-Vans for parcel delivery
- (4) 2021 Rollout 70 E-Vans for parcel delivery
 - 100% emission free since Oct. 2021
 - Austria's biggest charging spots at two depots with 110 AC-11kWh and 30 DC 25kWh chargers



OUTLOOK: LIFE-CYCLE MANAGEMENT OF TRACTION-BATTERIES AS KEY ENABLER FOR ADDITIONAL COST BENEFITS AND INCREASED SUSTAINABILITY



LIFE-CYCLE OF BATTERY SYSTEMS AS FOCUS TOPIC

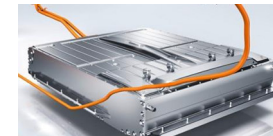


ONGOING ANALYSIS

- Batteries in operations show robustness against degradation.
- Life-cycle for BEV in transportation up to 10 yrs. manageable.
- Low power charging as benefit for last-mile delivery.
- Software based battery monitoring to optimize field of operations and managing degradation.

SECOND LIFE OPERATION

- In case of BEV total loss due to accident usage of battery in stationary system at depots.



RE-MARKETING

- Selling of used BEVs
- Recycling of battery systems