

ELLA

urban mobility solutions

enabling sustainable urban mobility

A new brand for a standardized, repairable battery pack
Light Electric Vehicles, Battery Swapping Infrastructure,
Eco Energy Storage and manifold Mobile Applications

ELLA kick



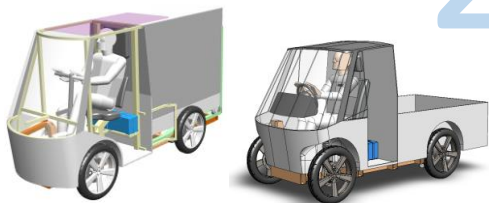
ELLA bike



ELLA moto



ELLA car



1

ELLA battery



xPack100-
VDE SPEC 90035-
Standard Battery

2

ELLA vehicle



ELLA sea

ELLA station



ELLA energy

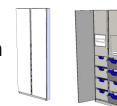


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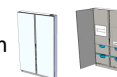


SAFE
Combistation for
parcels and batteries

SAFE 1+7
up to 12 kWh
12 kW



SAFE 1+3
up to 6 kWh
6 kW



SAFE 1+1
3 kWh
3 kW



Solar/Net charger
Mobile battery generator



1

CONSTIN
design + innovation



08.07.2025

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ELLA

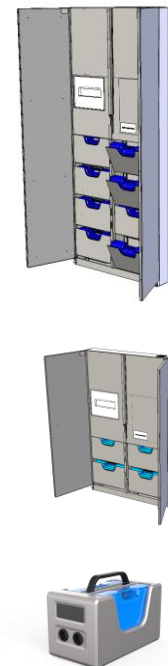
urban mobility solutions

ELLA battery

ELLA vehicle

ELLA station

ELLA energy



Advantages xPack100-battery

1. Tough, symmetrical plug,
2. Optimum ratio of volume to storage capacity storage capacity thanks to modular BMS
3. Cable-free assembly for optimum automated production
4. Greatest design freedom for integration in different applications, especially in LEVs compared to other vertical batteries.
5. Optimized thermal management through separation of BMS and cell stack
6. Direct cooling of the cells by air flow
7. Dirt and moisture-protected contacts
8. Patented double handle (still to be applied for)
9. Calibratable energy quantity measurement



Advantages xPack100-battery



- 10. secure communication via CAN and precise measurement of physical variables allows the administration of large populations of xPack batteries from different manufacturers for SOH analysis and for the interconnection of swarm storage systems.**
- 11. the intelligent communication of the modules with each other and with the application via the standardized CAN protocol, xPack batteries with different cell chemistries and cell types can be interconnected in parallel can be interconnected in parallel via the CMS.**
- 12. patented contact spring system for weld-free cell contacting**



Technical data of the xPack100 rechargeable standard batteries

Cylindrical cells of the 18650, 21700 and 26700 formats can be installed

Voltage level : 48V

Continuous current : up to 60A continuous current depending on cell type, number of cells, housing design and thermal management

Continuous power: up to 3 kW

Energy content : up to 2.5 kWh

Communication : CANopen 454 (EnergyBus)

Dimensions: 368 x 217 x 88mm (xPack100)



kicker

the kickscooter with
a broad stand for more
comfortable driving

new IPR



ELLA vehicle

ELLA kick kickTrike

the only kickscooter for
the weekly shopping tour
from the discounter
into the kitchen

The small transporter

- Facility Management
- Craftsmen/janitorial services
- Tourists
- Older people
- People with impairments
- Young families without car



kickTrike applications

ELLA vehicle

ELLA bike traveler

The long distance e-b
with up to 2 kWh of
green energy



Traveling with the
e-bike- also in
the mountains

- Private individuals
- Professional users
- for long distances



ELLA vehicle

ELLA moto cargoScooter

the only scooter with a trunk,
(seatBoXXL)
big enough for a safe,
weekly shopping tour

Shopping with
the scooter

- Sharing-services,
- Privat individuals without car

under NDA



new IPR

ELLA vehicle

ELLA moto

P3-series



Sporty, silent On the move, even

- Private individuals,
- E-motorsport
- Forester
- Hunters



ELLA moto

V-series



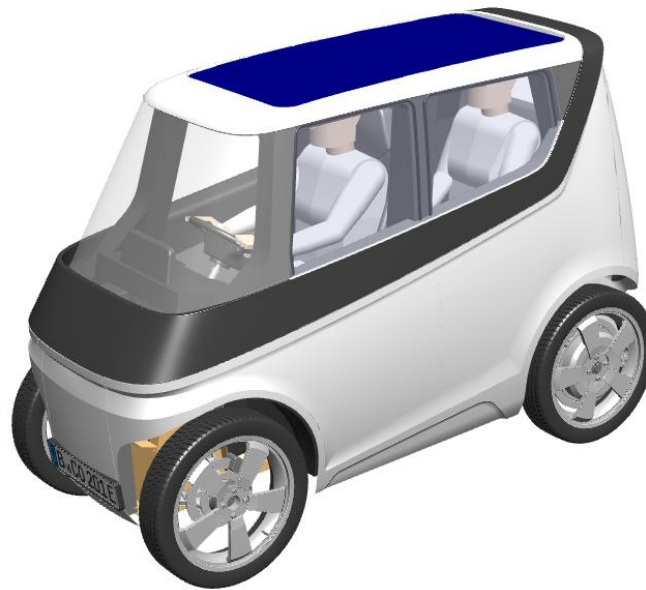
new IPR

ELLA vehicle

under NDA

ELLA car

1+1



new IPR



Ride for free – thanks to the sun!
The search for a parking space is history

- Tradesmen,
- Mobile care services,
- sharing services,
- private individuals

CONSTIN
design + innovation

08.07.2025

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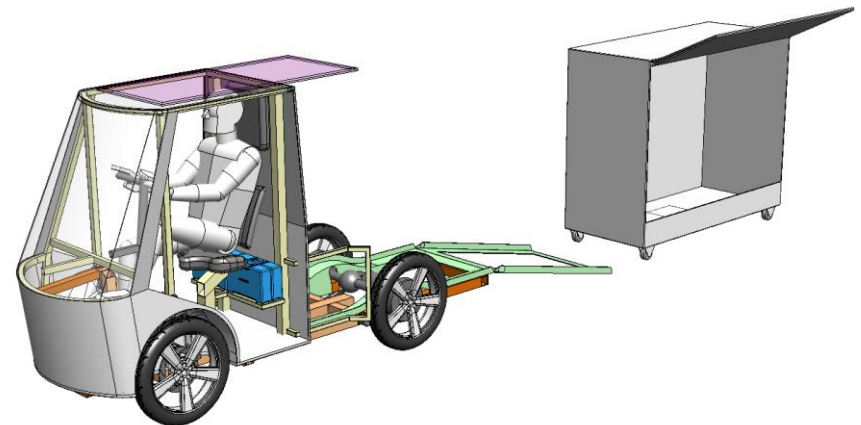
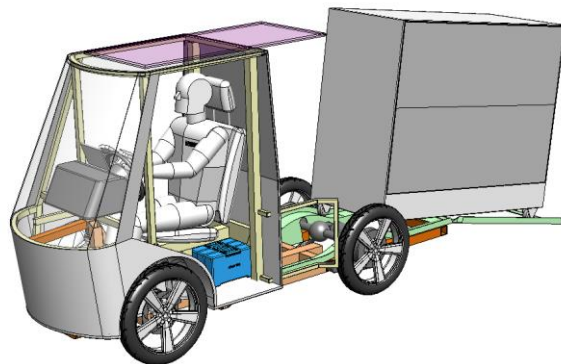
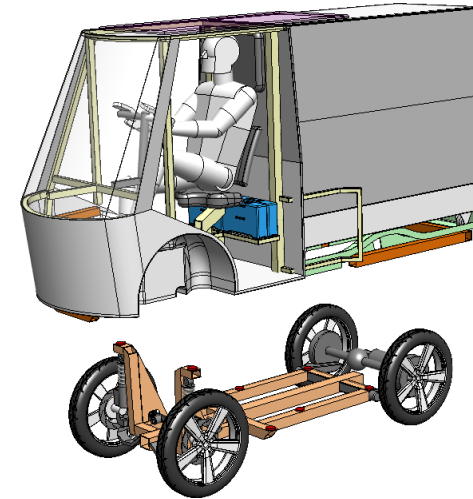
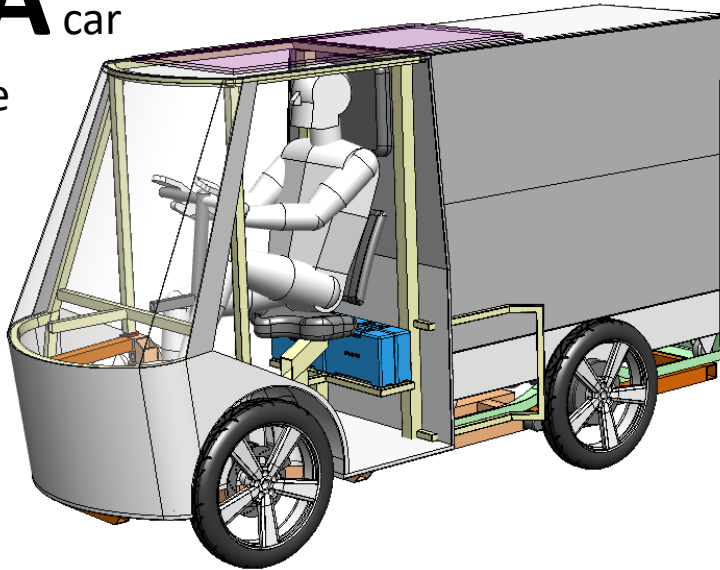
12

ELLA vehicle

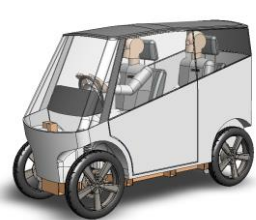
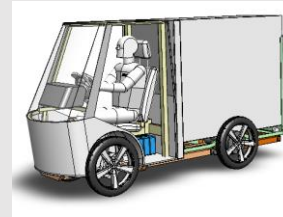
ELLA car
cargobike

Tough, cheap
standard vehicles

- Last Mile
- Delivery service



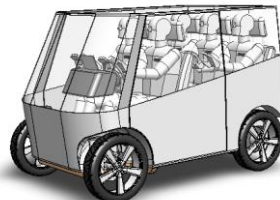
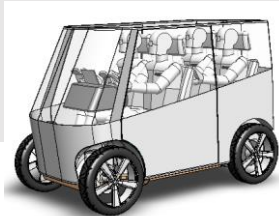
ELLA car platform



width 1100 mm



width 1400 mm



width 1700 mm

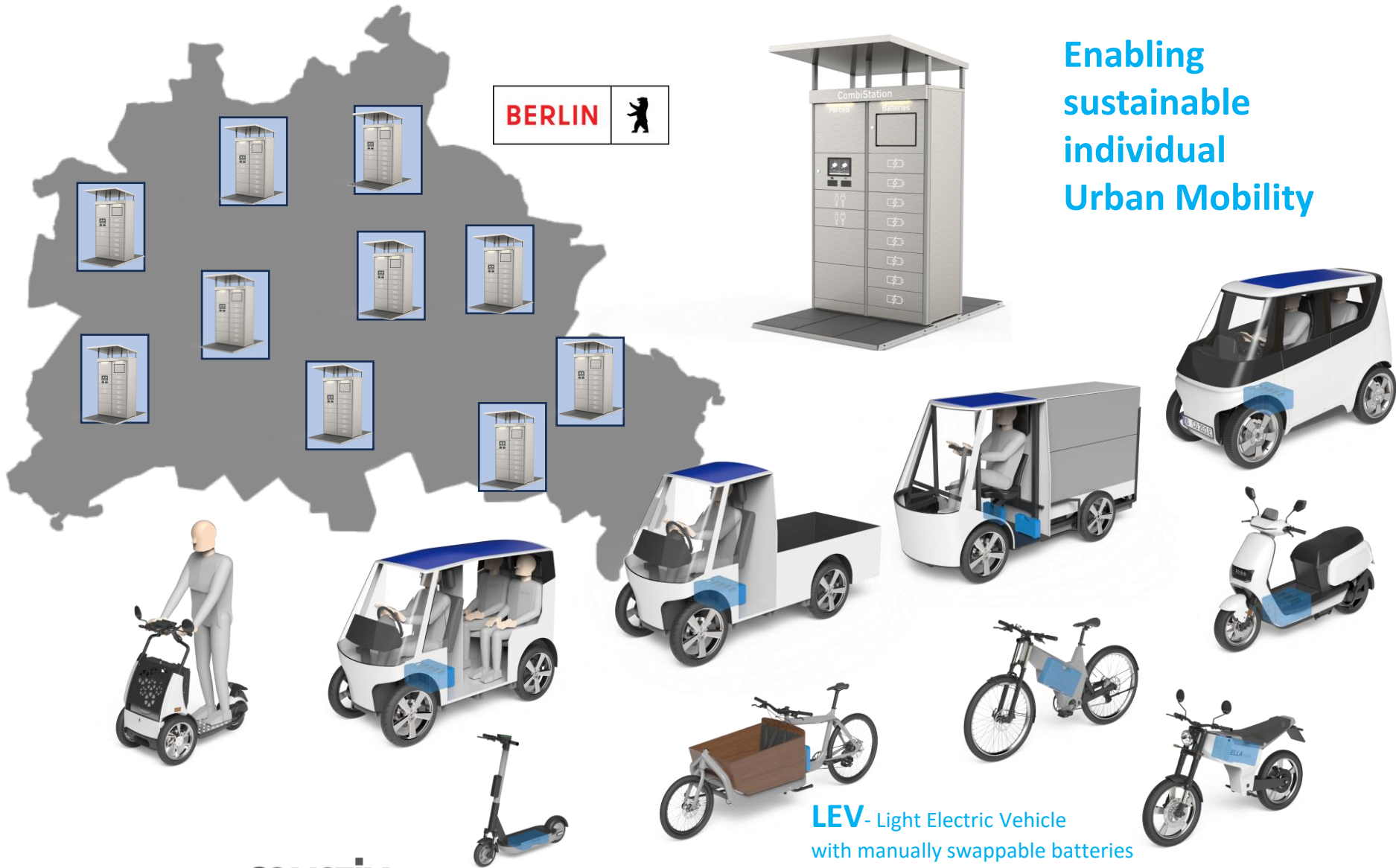
CombiStation

- Innovative combination of parcel station and battery exchange station
- Greater location attractiveness thanks to dual function
- Flexible division of functions
- Expandable capacities
- Open for all tested and approved interchangeable battery types
- Open for all parcel services
- Temperature control of the individual compartments. Heating in winter, cooling in summer
- Energy fed back into the grid or operation for peak load capping
- Charging alternatively via solar system or from the grid
- Gentle charging of the battery
- Controlled charging of the batteries



ELLA station CombiStation - Infrastructure (CS-I) example: Berlin City

Enabling
sustainable
individual
Urban Mobility

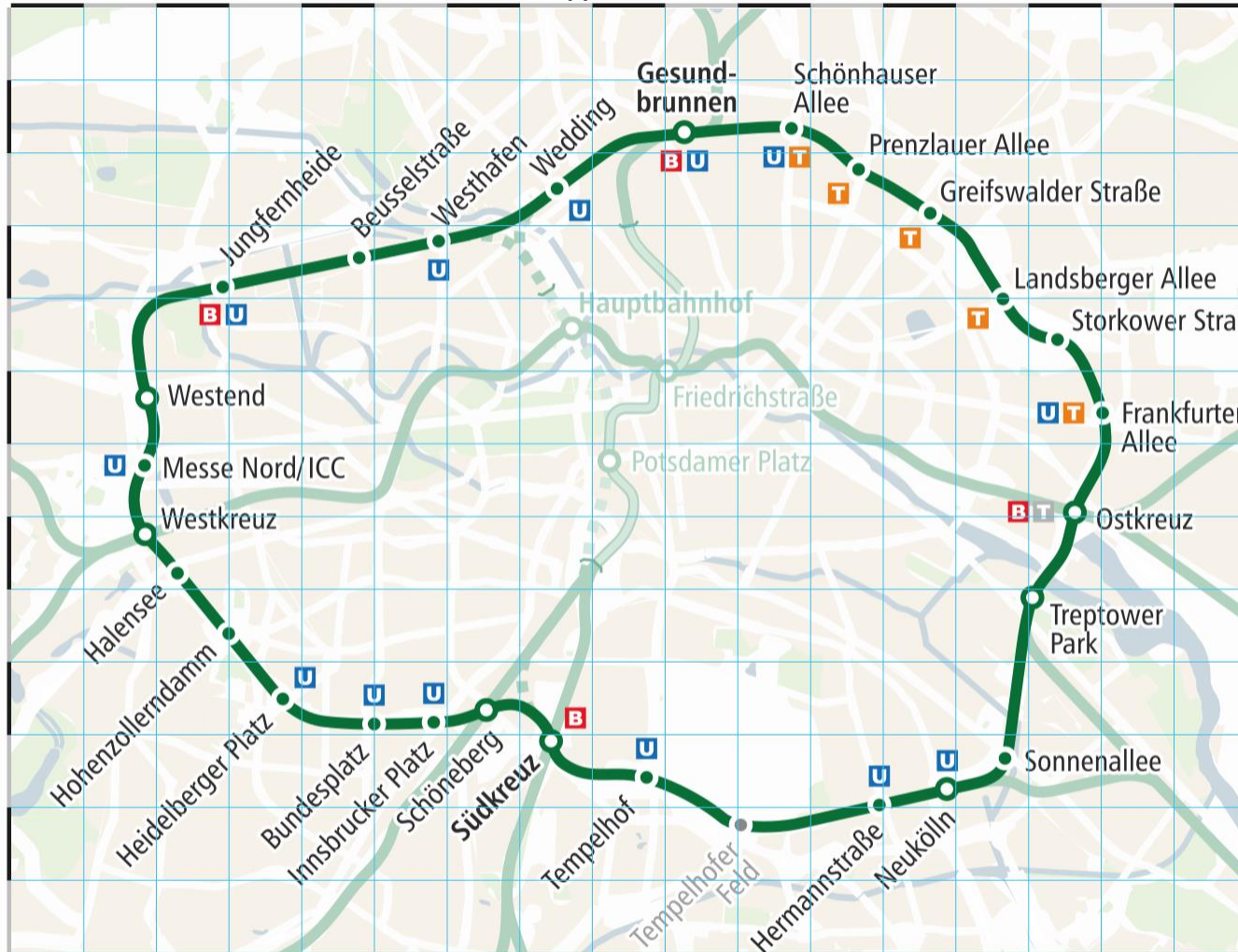


LEV - Light Electric Vehicle
with manually swappable batteries

08.07.2025



The area of Berlin Central within the commuter train-ring is approx. **120 km²**

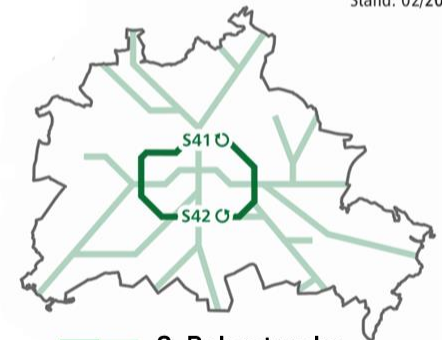


Light electric vehicles, from e-scooters to e-commercial vehicles (L1e to L7e) with swappable batteries, are sustainable, well-suited vehicles for individual, urban transportation. The energy supply is provided swappable batteries that can be changed at battery swapping stations. The combination of parcel- and battery station has many advantages for the choice of location. The result is called

CombiStation

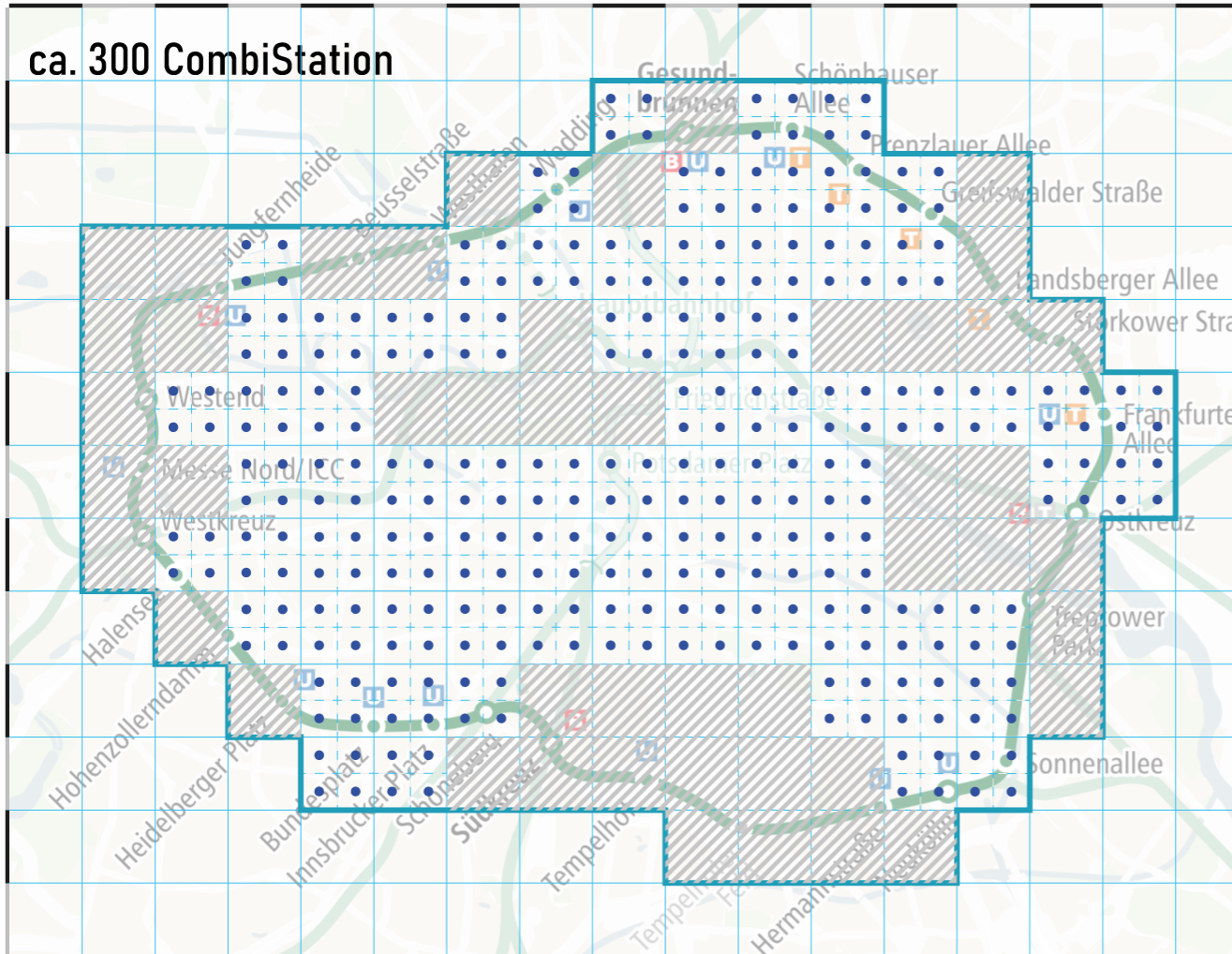
S-Bahn-Ring Berlin

Stand: 02/2021



The area of Berlin Central within the commuter train-ring is approx. **120 km²**

ca. **300 CombiStation**



75 km² of this area are dense residential areas with a need for individual local mobility. With 4 CombiStations per 1km², the maximum distance to the next station is 250 m. This way the battery and parcel stations are easily accessible.

To cover the area of Berlin Central with battery changing stations you need approx. **300**

CombiStations in total.

With costs of **20,000 €** per CombiStation (2-column with 8 batteries / total 12 kWh) the total investment is for the CombiStation infrastructure only **6 million €**



Non-residential Areas

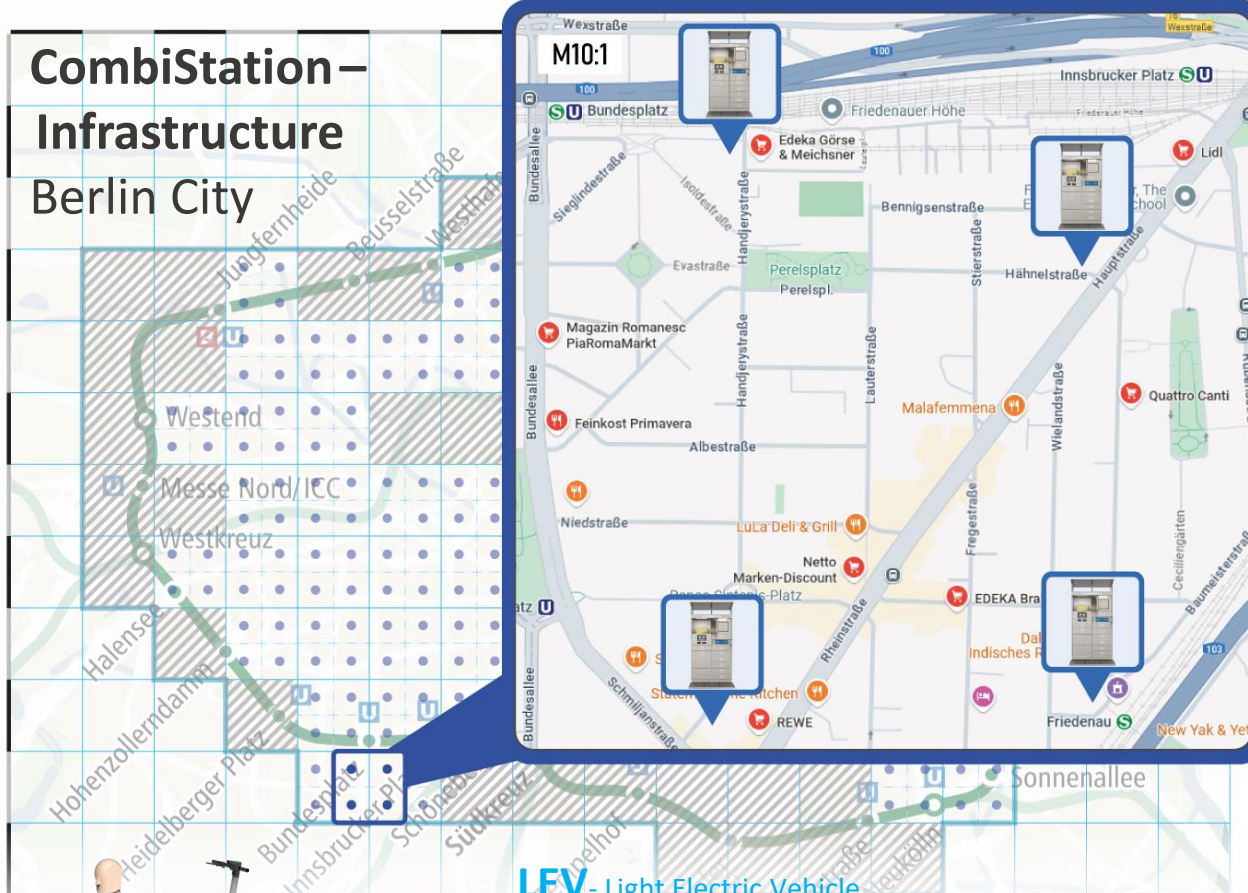


4 Stations per km²

1km

1km²

CombiStation – Infrastructure Berlin City



LEV - Light Electric Vehicle
with manually swappable batteries



Food & Energy

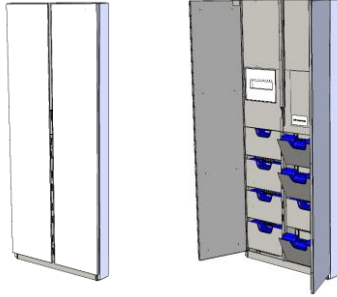
In PPP (Private Public Partnership) the CombiStations are located at the grocery discounter, who sells the vehicles without batteries, rents out the batteries and uses the battery power itself to serve the grid. All battery stations are connected as one energy storage system



ELLA energy

xPack-Battery-Charger/USV
Battery-Generator / Energy Storage

Charger 1+7
Up to 12 kWh
12 kW



Charger 1+3
Up to 6 kWh
6 kW



Charger 1+1
3 kWh
3 kW

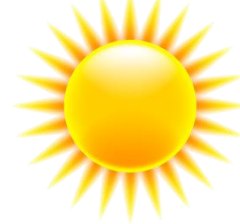


1000x500
1000x500



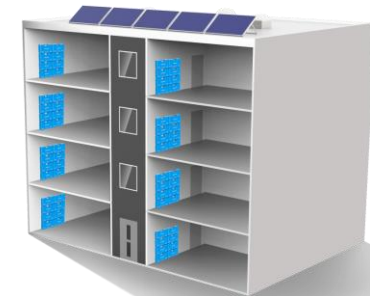
Design fronts

1000x500
1000x500



In single-family houses

under NDA



in multi-storey residential buildings

A green energy storage unit in every home
A secure, decentralized, networked
Swarm storage

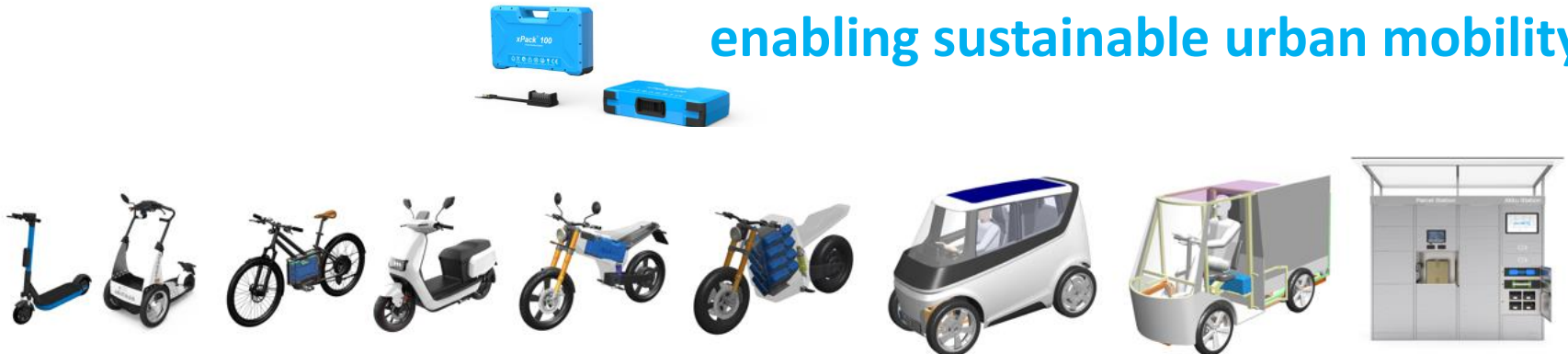
- Municipal utilities, power stations
- Solar system installers

- xPack batteries in the charger are, depending on the design of the device
- Balcony power station storage
 - UPS (uninterruptible power supplies)
 - Battery generators (for mobile applications)
 - and generally green energy storage

Benefits of the ELLA brand

- **Standardized, sustainable, 48V xPack100 battery system** for all light-electric vehicles
Many mobile applications and stationary and mobile energy storage systems
- **Dense battery awapping infrastructure** thanks to **Combistationen** for Parcels **and** Batteries
- **Reliable, inexpensive battery supply by** several licensed battery manufacturers
- **Low acquisition costs for applications** due to separation of
Vehicle/application sales and battery rental
- **Patent-protected transportation capabilities** for kickTrike, cargoScooter
and ELLA 1+1bring unique advantages for the end user compared to the competition
- **Cost-effective vehicle production** thanks to consistent standard component platform
- **Very low running costs** thanks to solar roof technology in the ELLA car
- **Comprehensive portfolio of industrial property rights**
in all areas of application of the xPack100 rechargeable battery

enabling sustainable urban mobility





urban mobility solutions

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