

Challenge Enpulse Proposal: Corrently Charge

STROMDAO

digital energy infrastructure for tomorrow.



IAA Mobilitython 2022



Problem definition

If we would know the goals the driver has by time of connecting to our charging point, we could optimize the charging session, for the driver, for us, for the environment.



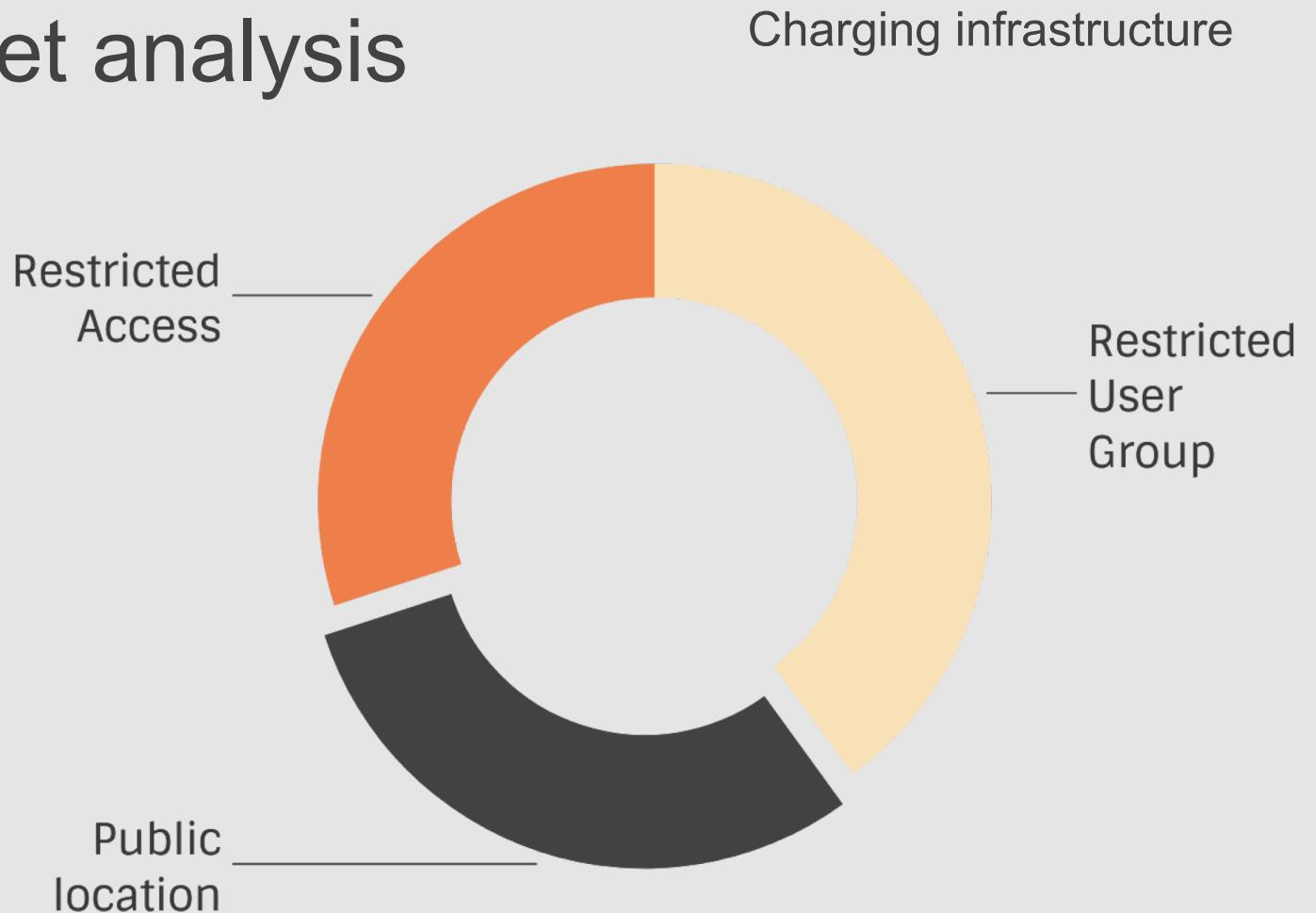
Problem definition

- Enterprises invest in solar panels with the desire to resell the electricity within their areal
- E-mobility clients want the best price for every individual charging requirement
- No possibility on the market allowing to link both problems to a valuable solution





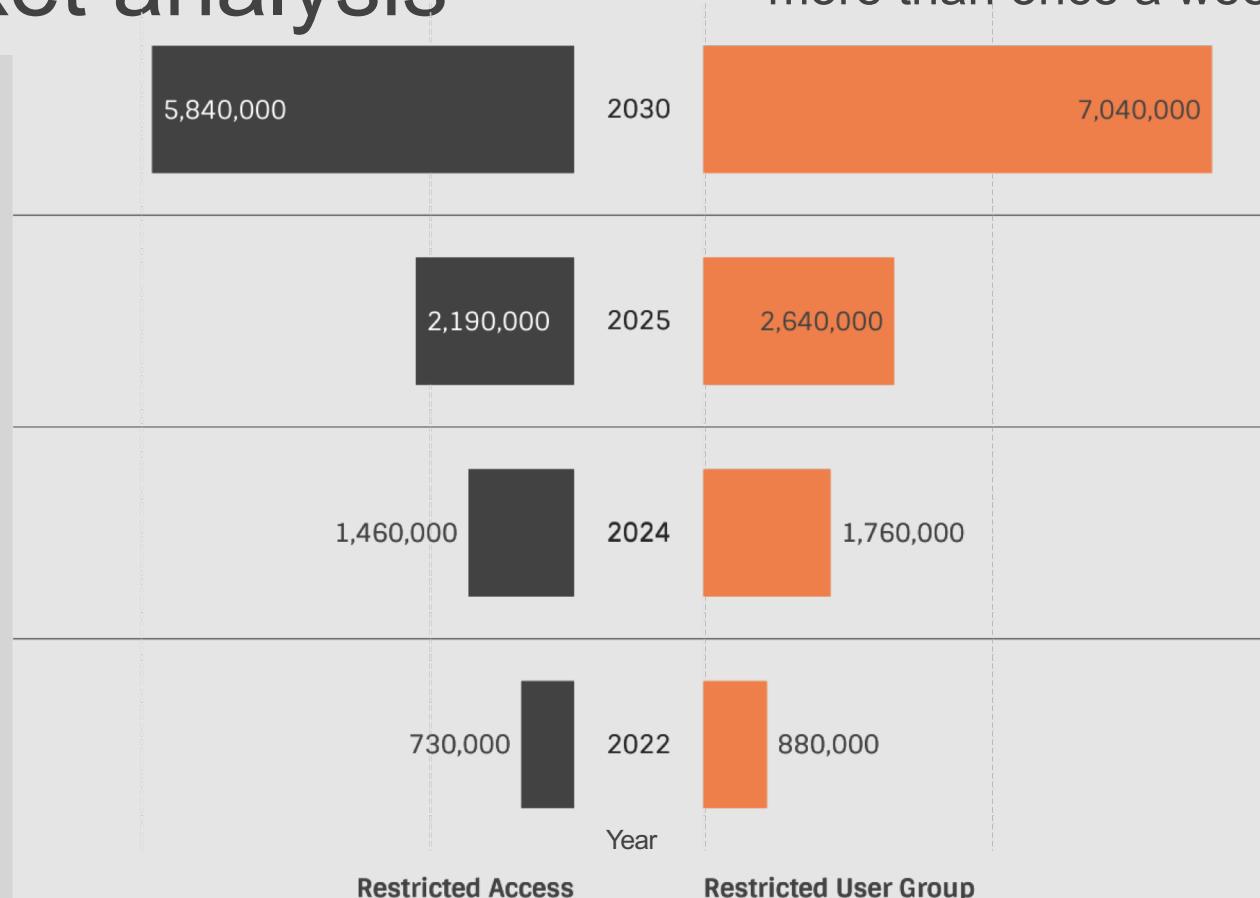
Market analysis





Market analysis

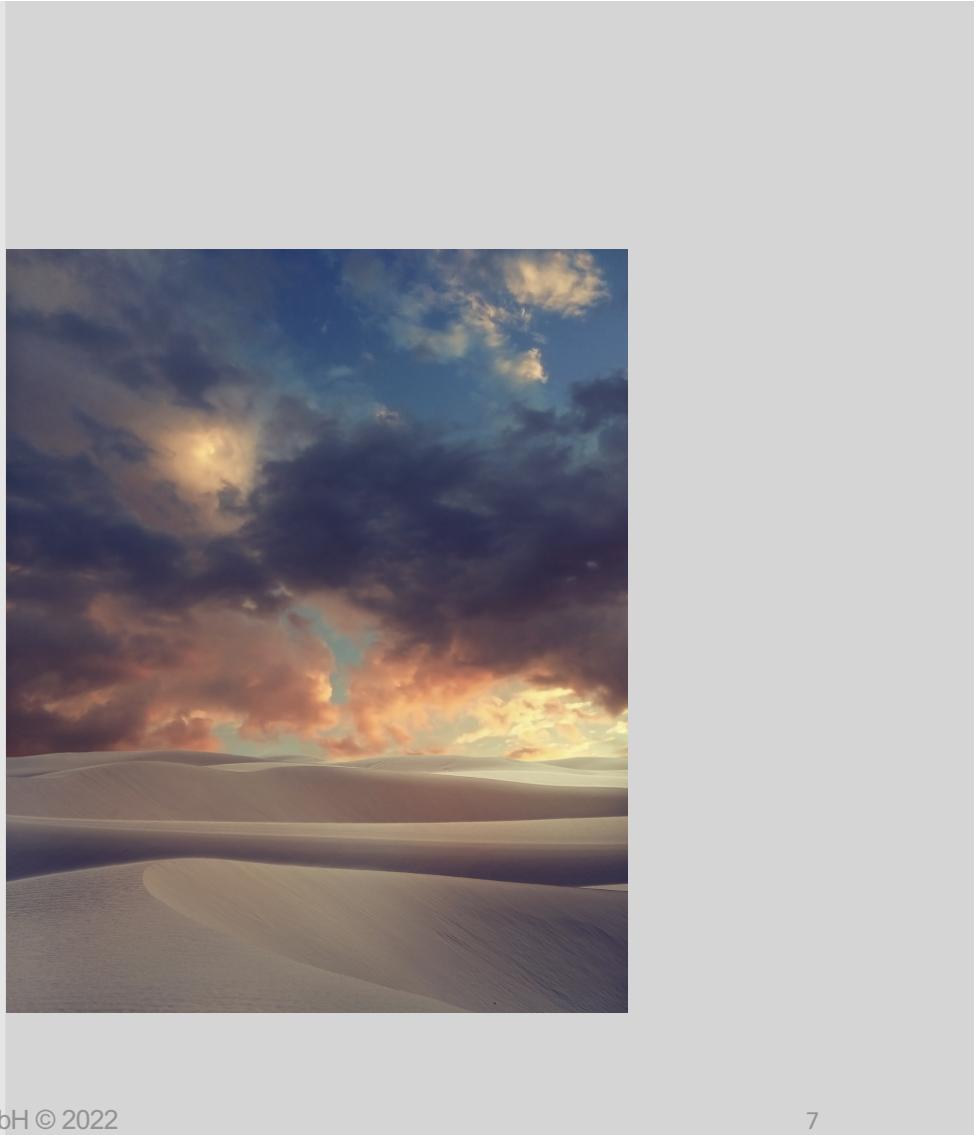
BHV/PHEV charging
more than once a week



Proposed solution

Automated tariff evaluation as soon as charging session starts. Tariffs take local generation and green power index into account giving different tariffs to the client as options of required energy (final state of charge), available time, energy mix.

Selected tariff requirements are automatically fulfilled via a scheduler connection to CPO's backend (via OCPP protocol). The solution Currently Charge acts as an intermediate between a given energy management system and the charge point.



Charging Requirements (Car)

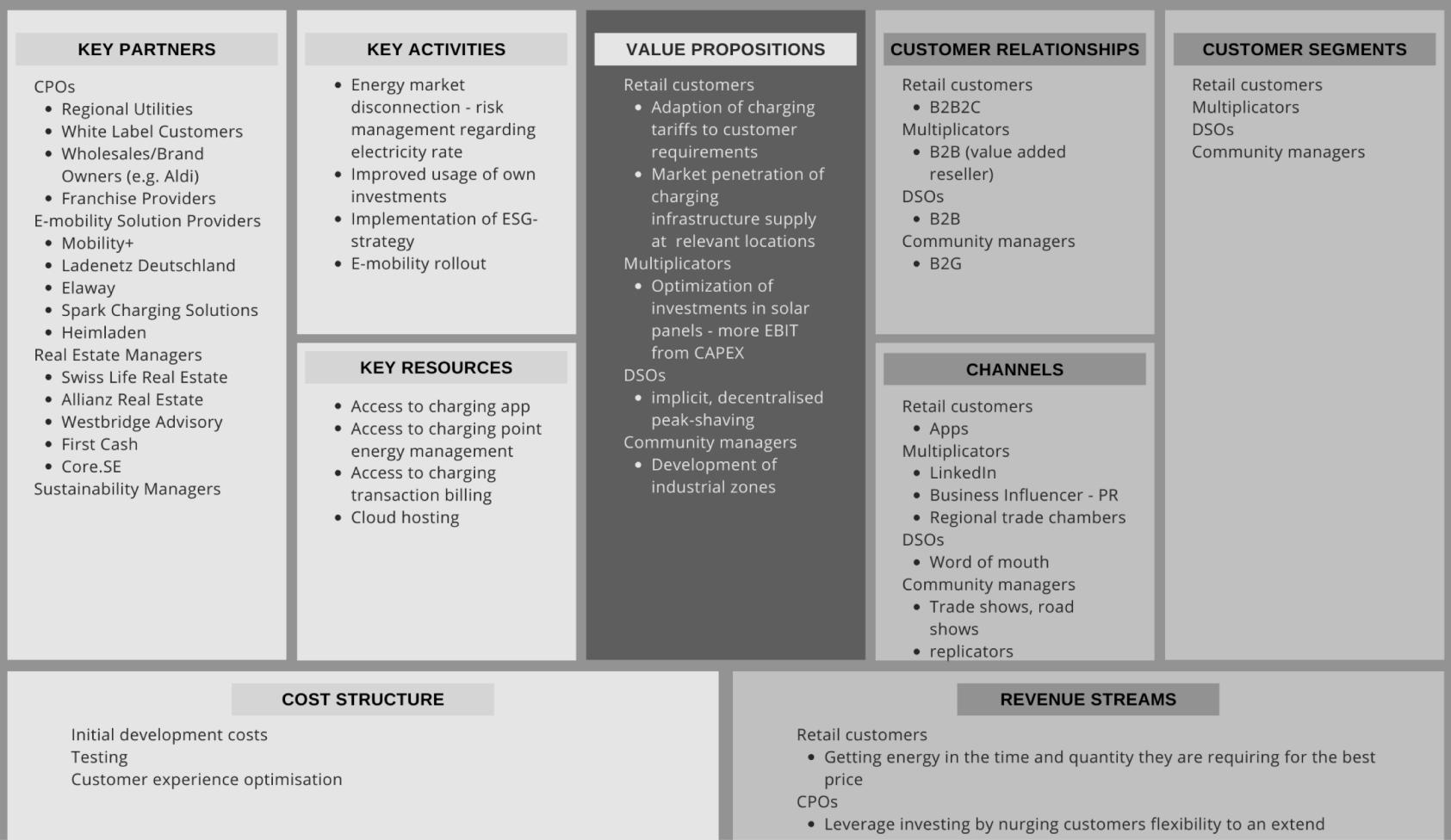
MVP Note: Parameters are taken from car manufactures webservice and do not need to be entered here.

State of Charge (SoC)	32
Capacity of Battery (Wh)	18000
Max charging Power (W)	2300
Get Tariffs	

Currently Charge Tariff Builder



THE BUSINESS MODEL CANVAS



Needed resources to implement the solution

If we get 128,300€, it is possible for team STROMDAO to bring Corrently Charge to an MVP running at the lighthouse customers in production gaining first revenue.

Resource	Costs
People (120 PD)	93,300€
Organization / Technology	35,000€
Total MVP	128,300€



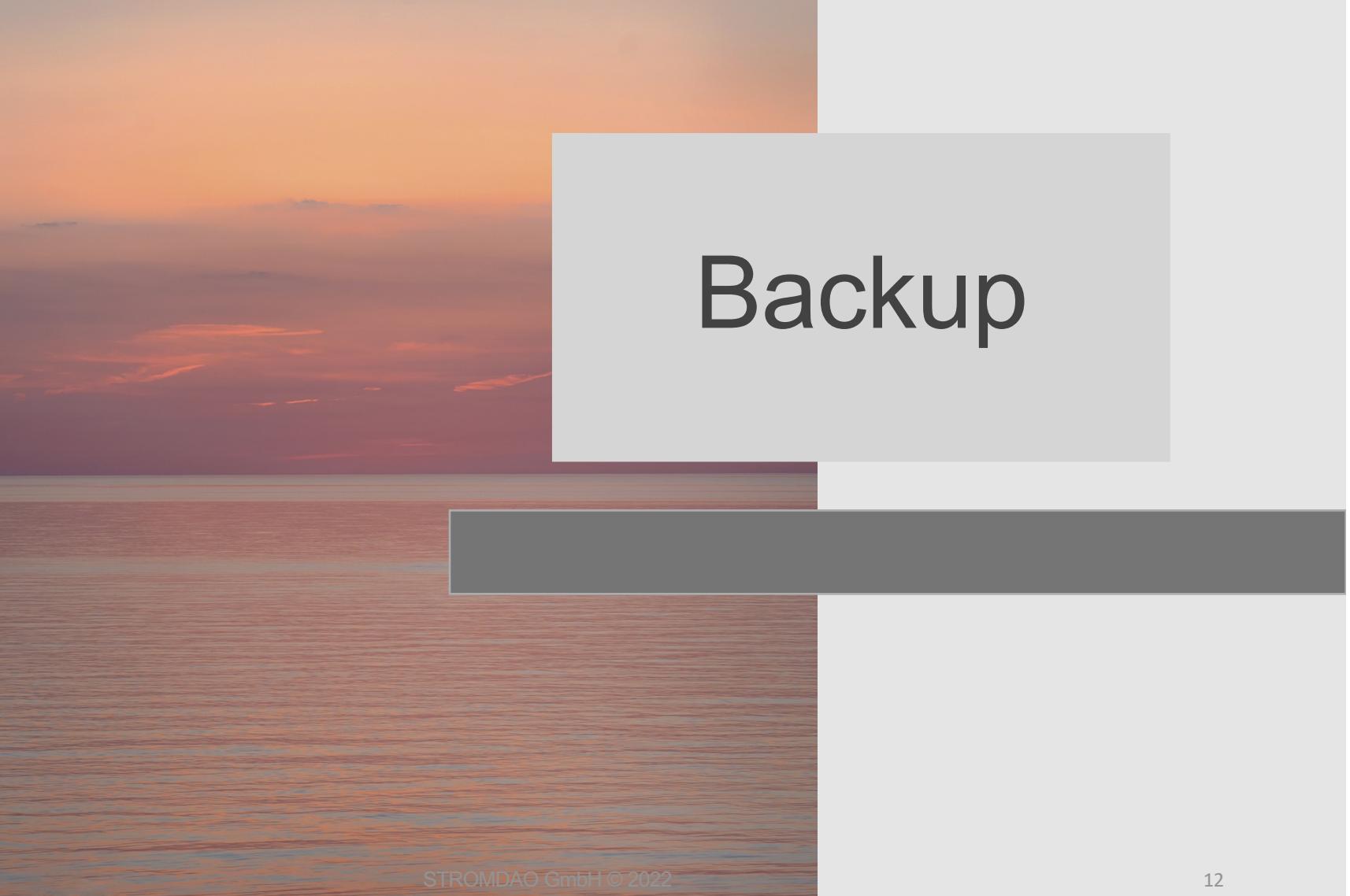
Contact

STROMDAO GmbH
Gerhard Weiser Ring 29, 69256 Mauer



Phone
06226 - 968 00 90

E-mail
kontakt@stromdao.com



Backup



Personas



- Works at a medium-sized company who offers their employees EV charging on-site
- Goal that at the end of the working day (8 hrs) EV is at least 80% charged
- Benefits from most physically available green energy in the grid → good conscience
- Benefits from low charging price as this price is lower than the average electricity tariff



- Company has solar panels installed on company site
- Becomes a more attractive employer in times of skill shortage with offering reasonable EV charging tariffs
- Higher revenue through directly selling EV electricity to employees instead of feed-in compensation



Most optimised load profile and least outputted carbon emissions EV charging possible



Implementation plan



10 2022

Final
implementation of
prototype



11 2022

Testing phase



12 2022

Rollout



Potential impact

- Worldwide scalable
- Decentralised peak-shaving supports energy revolution, stabilization of the electricity grid and boost of renewable energies