

blo>.power





bloX.power

We chain green power and electric mobility to balance renewable energy grids and reduce the carbon footprint.

Challenge of renewable energies: Oscillating energysupply causes blackouts

For 2030, a total capacity of 350 GW (80% of total energy) in renewable energie are estimated (Germany).

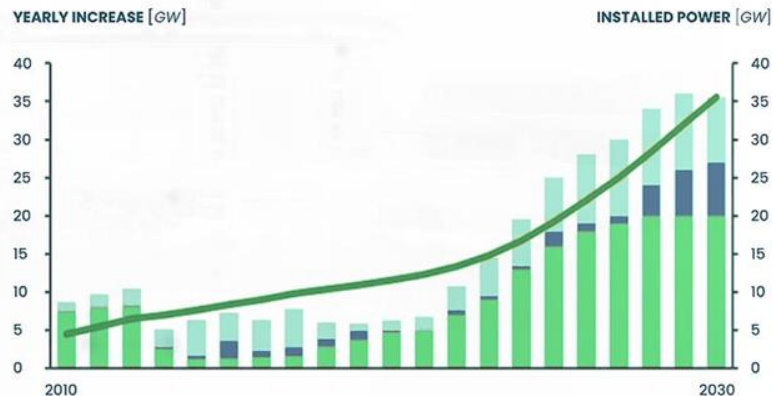


Figure 1 Prognosis of installed power by renewable energies [1]



Challenge of renewable energies: Oscillating energysupply causes blackouts

Renewable energies cause **supply spikes** in the power grid, leading to instability and potential blackouts.

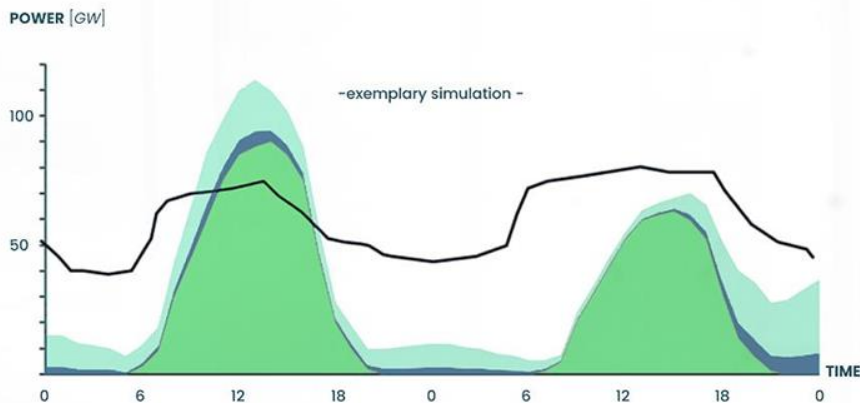


Figure 2 Exemplary simulation: Supply of renewable energies vs load [1]



[1]: EV CHARGING - SMART ENERGY SERVICES Workshop, P3 automotive GmbH

Solution: Grid balancing by storage of electrical energy

To counter the volatility in supply, energy is stored in order to **balance** supply and demand spikes

Most efficient way to store energy: Battery Storage with conversion-losses of only 10%

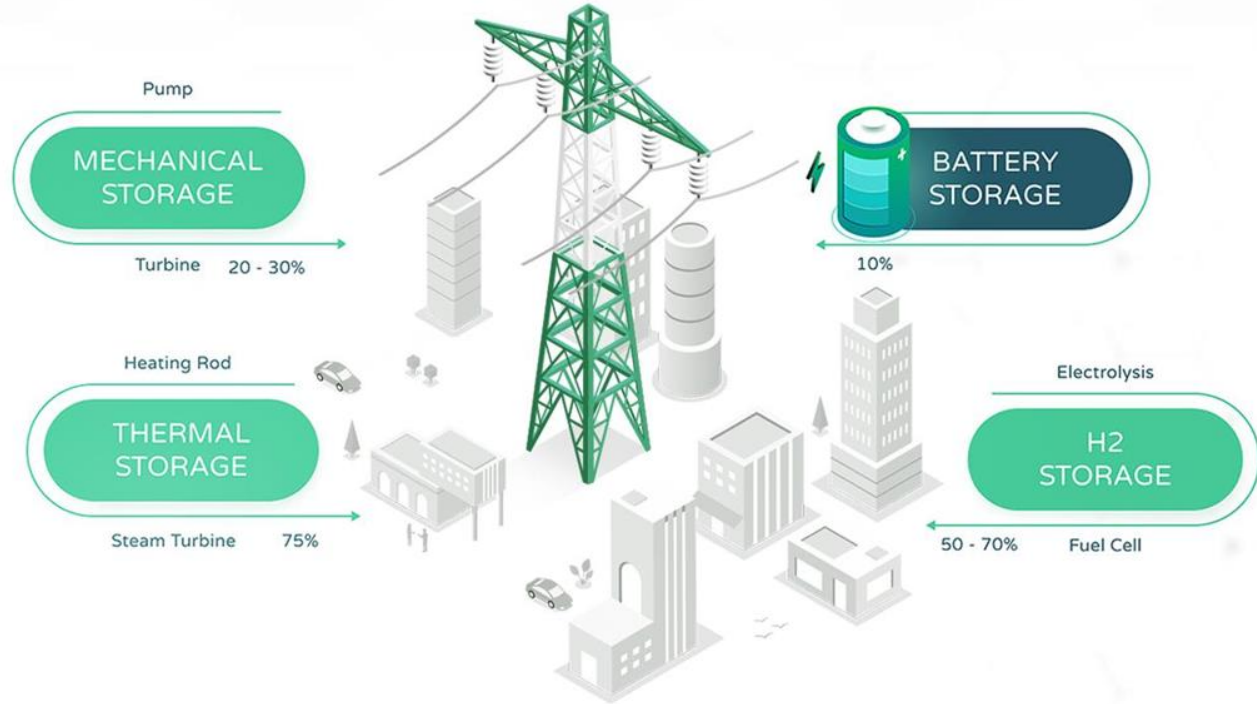


Figure 3 Losses of energy conversion end of the converter chain, without power-heat coupling [2]

Solution: Grid balancing by storage of electrical energy

Battery capacity of **Nissan Leaf** can provide energy for an average (German) household for **4.8 days**

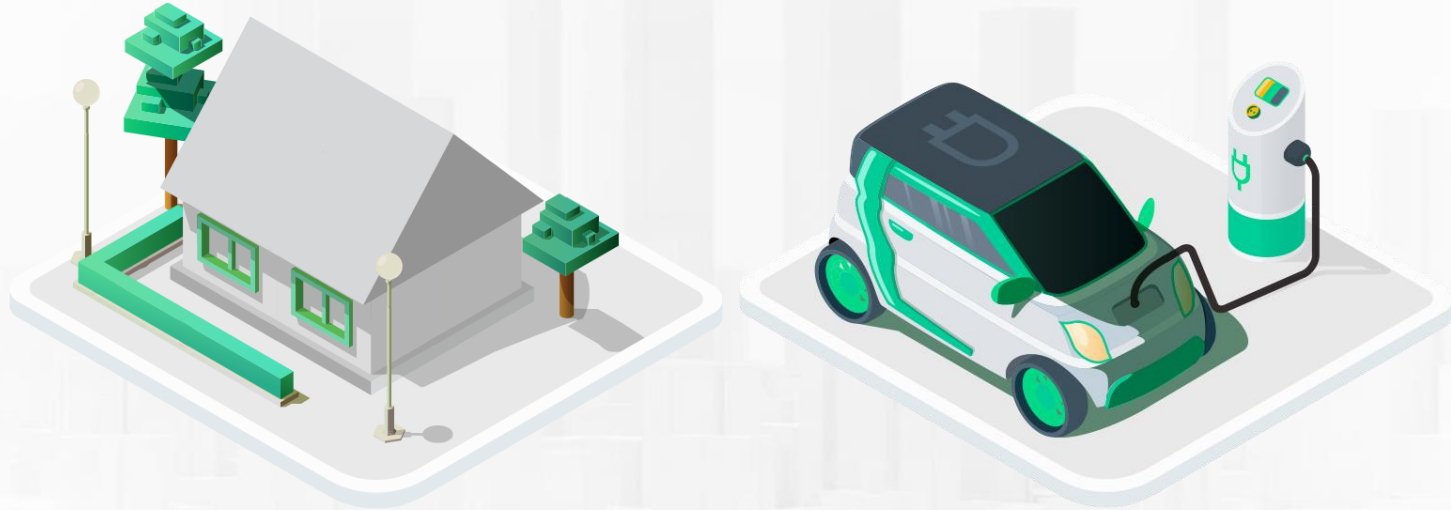


Figure 4 Energy consumption of average household vs battery storage capacity of Nissan Leaf

Solution: Grid balancing by storage of electrical energy

- ✓ **Potential storage capacity** of electric vehicles (in Germany) exceeds the total capacity of pump storages **by a factor of 50**.
- ✓ Therefore, **EV batteries are the perfect solution for grid balancing** and other use cases, where storage of energy is needed

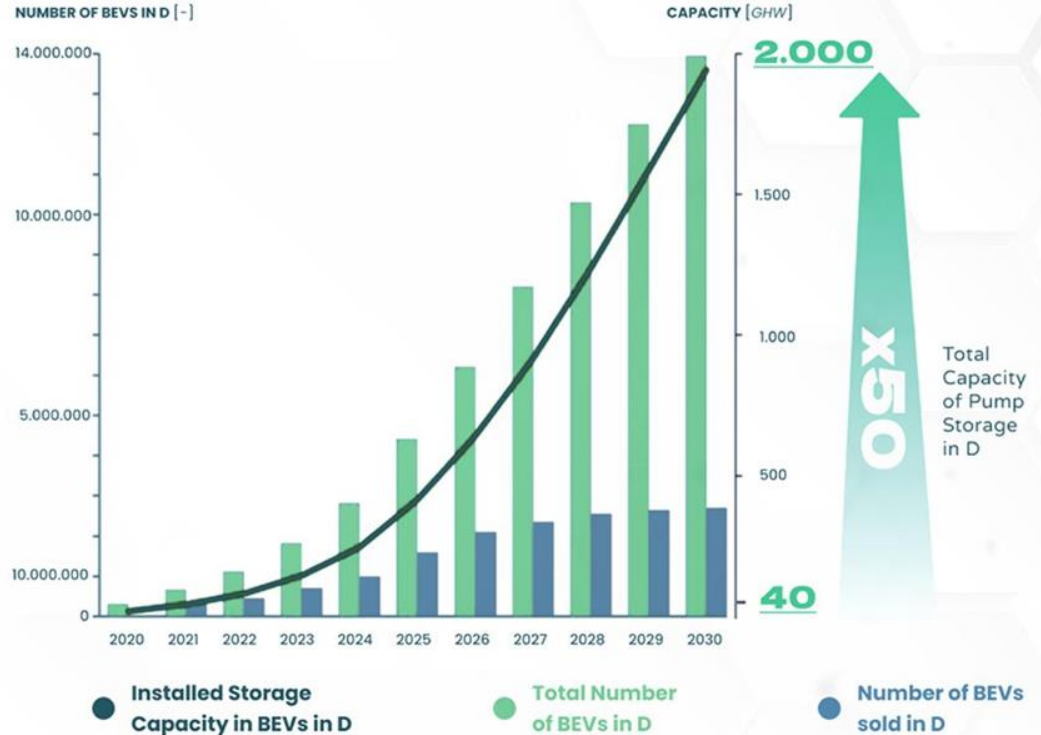
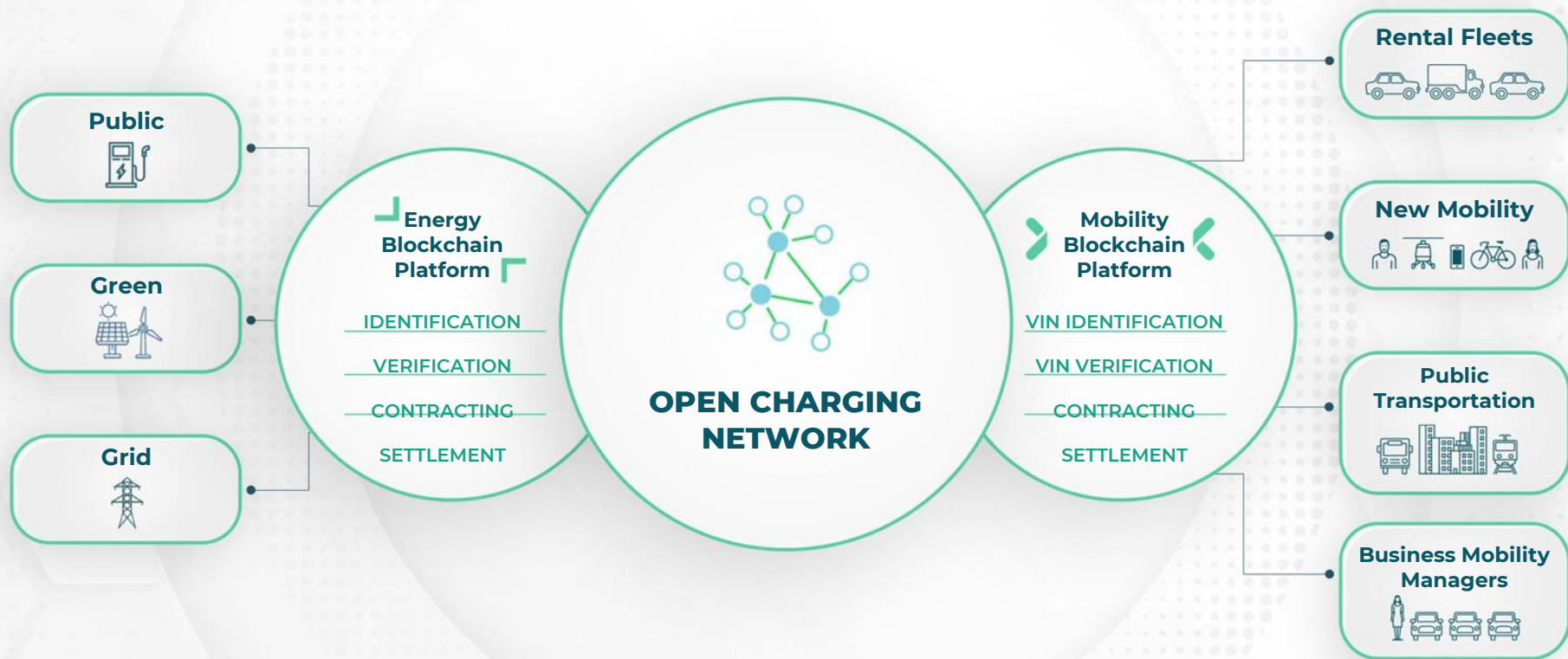
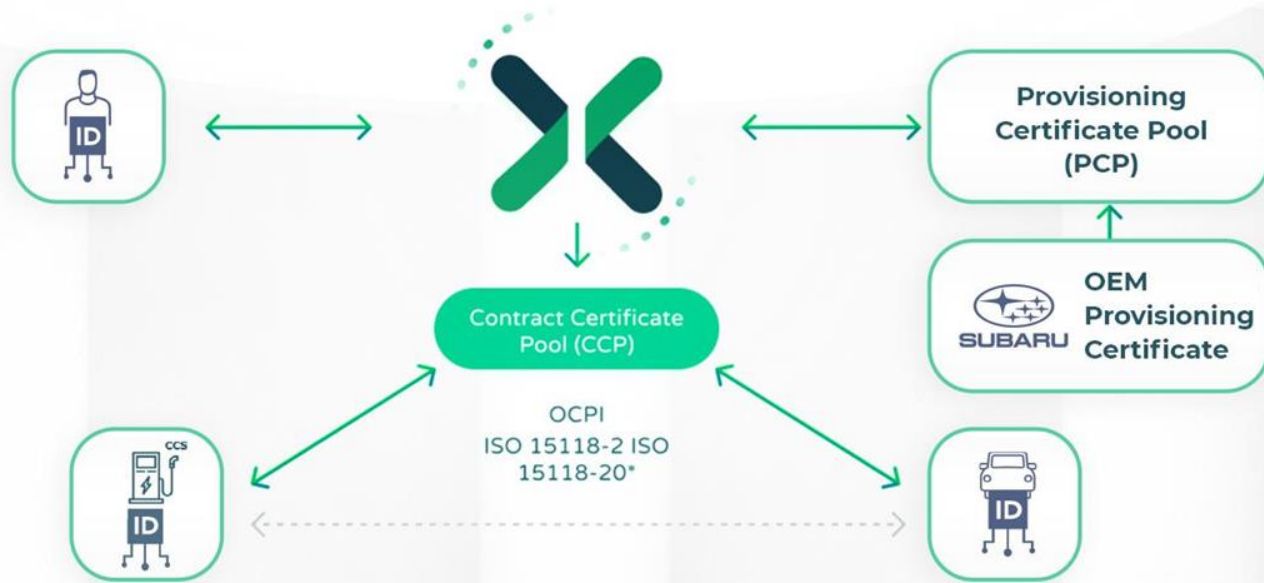


Figure 5 Prognosis of storage capacity in BEVs [1]

Our technology was developed to enable **sector coupling** by providing **secure and instant accounting**



Using the open chargepoint interface ensures secure service roaming



Public Key Infrastructure (PKI) based on ISO 15118-20 -> IT Security



Real time pooling and whitelisting of digital certificates for all related parties



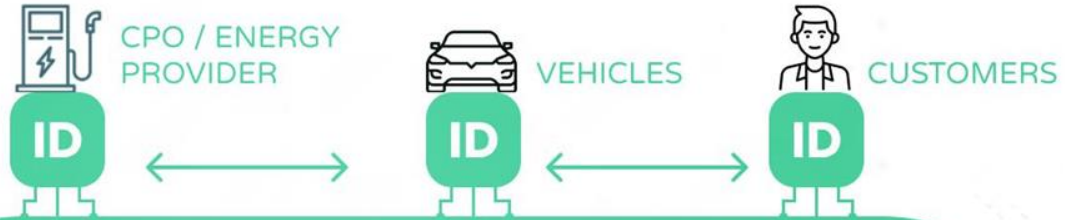
Enhanced distributed security via blockchain



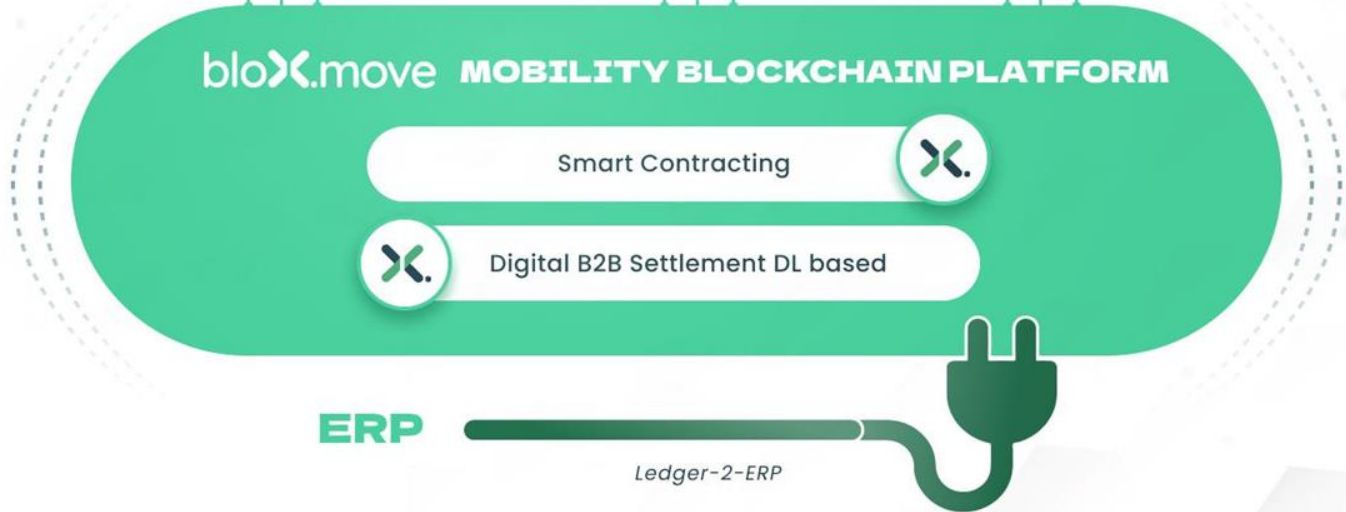
Instant settlement via blockchain

**Based on DID identifiers bloXpower provides
seamless roaming across all services of the ecosystem**

DECENTRALIZED
DIGITAL IDENTITIES



PROTOCOL AS A
SERVICE



LEDGER TO ERP,
ACCOUNTING, PAYROLL

bloXpower offers solutions for main 4 target segments and connect their roles in a new ecosystem design



1) Electric Fleet Operators & OEM with EV production




Max Kessler
Age: 45
Job: Account Manager
Location: Stuttgart



Motivation	Pain Points
<ul style="list-style-type: none"> Offer customers access to a large variety of charging points – At home, at work or in public Offer customers flexible charging contracts & settlement with energy providers Provide technological requirements for future business models (Vehicle-to-Building, Vehicle-to-Grid, Decarbonization) 	<ul style="list-style-type: none"> Requires new ways of strategic thinking and innovation Market not mature enough, role of Fleet Operator to be defined Integration of / into existent Fleet-Management- / Charging-Software
Value Max brings	Value Max gets
<ul style="list-style-type: none"> Business knowhow EV Fleets Customers with different needs Environment for testing and scaling Charging Roaming POC 	<ul style="list-style-type: none"> New Products: EV Roaming and Bring-Your-Own-Provider Automated and instant settlement between Customer and Energy Provider Offer flexible product packages to seamlessly switch from combustion-engine- to E-Fleet Access to bloXpower ecosystem -> future business cases in energy

2) Companies with fleet and/or need for CO2-Compensation

Lisa Walker
Age: 33
Job: Sustainability Manager
Location: Amsterdam

Motivation	Pain Points
<ul style="list-style-type: none"> Is in charge of fleet and is open for innovative models & transition to E-Mobility Wants to use CO2 compensation models to improve (green) brand awareness Has pressure to solve regulatory requirements 	<ul style="list-style-type: none"> Market not mature enough Regulatory issues Validation of certificates unclear Double spending / selling of certificates Inflexible IT landscape Requires new ways of strategic thinking and innovation
Value Lisa brings	Value Lisa gets
<ul style="list-style-type: none"> Traditional brand with excellent reputation Motivation to improve CO2 balance Environment for scalable testing of Carbon Credit applications Potential revenue through transactions 	<ul style="list-style-type: none"> Improved CO2 Balance Conformity for regulations Access to Carbon Credit market and early mover advantage Improved brand image and potentially new customers / target segments

OLAF SCHNEIDER
Age: 48
Job: CEO
Location: Halle

Motivation	Pain Points
<ul style="list-style-type: none"> Few energy providers own large fraction of energy market & customers Need for competitive & innovative products to attract new customers Already offers EV charging at specific CPO, now wants to expand charging business 	<ul style="list-style-type: none"> EV & CPO Market not mature enough Regulatory issues Inflexible IT landscape Requires new ways of strategic thinking and innovation
Value Olaf brings	Value Olaf gets
<ul style="list-style-type: none"> Green & Local Energy Source for validation & emission of CO2 certificates Network of EV charging customers Support from governmental subsidies / local institutions 	<ul style="list-style-type: none"> New product: 100% Green EV Roaming Expanded network of CPOs offering SWH's energy New target segments & customers Access to Energy Web Foundation- and bloXpower-ecosystem to develop further business cases, e.g. with mobility providers




Thomas Müller
Age: 56
Job: CEO
Location: München

Motivation	Pain Points
<ul style="list-style-type: none"> Develop solutions for EV Roaming + Smart Charging and be prepared for future developments in bidirectional charging / flexibility Offer these solutions specialized to the needs of Fleet Operators, MSPs and OEMs 	<ul style="list-style-type: none"> Implementation of Smart Charging solutions only possible if CPO invests in expensive hardware for ISO-15118 & powerline communication Dependency on OEMs to produce vehicles with CCS adapter & provisioning certificate
Value Thomas brings	Value Thomas gets
<ul style="list-style-type: none"> Network of Charge Point Operators and Fleet Operators Expertise in Charging Technology Potential for revenue through transactions 	<ul style="list-style-type: none"> New technology & settlement infrastructure to realize advanced charging applications Access to bloXmove/bloXpower ecosystem to develop new business models including MaaS & energy sector

3) Local and Green Energy Providers (EP)

4) Charge Point Operators (CPOs), former fuel providers

With bloXpower's technology we unite the power X mobility sectors and enable various partners to prove 5 new business cases – in first live labs:



energy web

Bring your own Provider

READ MORE

- Be able to **set up 1-to-1 charging contracts** with an energy provider of your choice to power your fleet with **green energy**
- **Take your energy provider everywhere** – to public charging stations, as well as to the wall boxes of your employees for **home charging** and let us do the **instant, direct and secure settlement**
- Use the **on-chain documented charging data** to prove the origin of your energy for **carbon accounting** purposes (2023 Corporate Sustainability Reporting Directive)

Vehicle-to-Building

- Enable employees to **utilize their company car as an energy storage** for **smart home** purposes, including **bidirectional charging**. Improve **green brand image** and **employee satisfaction**
- Use the **on-chain documented charging data** to prove the origin of your energy for **carbon accounting** purposes (2023 Corporate Sustainability Reporting Directive).



Vehicle-to-Grid

- **Monetize parked EVs** as an energy storage
- **Contribute** to stability of local renewable energy grid
- **Receive financial compensation** for balancing service and **let your employees participate and profit**
- Improve **local brand image** and **employee satisfaction**

Battery Passport

Carbon Credits / offsetting

- On chain documentation of your **fleets charging history, including energy origin**.
- Valid basis for carbon accounting (2023 Corporate Sustainability Reporting Directive)
- **Monetize your fleet** and create verified Carbon Credits out your data.
- The tokens can then be traded on markets or be distributed as a reward to your employees or customers.

The decentralized Mobility Blockchain Platform has a solid history at Mercedes-Benz Group and a promising future as independent venture

3 YEARS

of incubation
with Mercedes
and further
blockchain
champions

Daimler Mobility



Radtke & Loh



MAY 2021

bloXmove is
established by the
3 founders after
the management
buy-out



PRE-SEED

funding through
convertible loans,
founders hold >
80%



17

signed
partnerships
by ecosystem
customers



27 bloXmovers bring the expertise, experience and network to deliver



Sophia Rödiger
CEO & Founder

- 7 yrs. in mobility industry
- Business psychologist
- Partnership and investment management
- Digital Sales & Marketing



Bernd Hanisch
CFO & Founder

- 20 yrs. in fleet management
- Finance & controlling
- Product management
- eMobility



Dr. Harry Behrens
CTO & Founder

- 7 yrs. in blockchain
- PhD in decentralized network technology
- Develops the Mobility Blockchain Platform @Daimler



Marvin Kassühlke
CPO

- Product Development and Management
- Consultancy
- Scrum and Agility



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