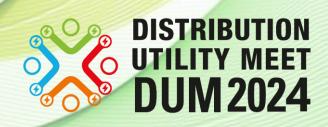


India Smart Grid Forum



Session: RE, EV and Grid Stability and Challenges of 10 Million Rooftop Solar PV Systems V2G and EVs as VPPs

Presented By

Eckehard Tröster, CEO, Energynautics GmbH, Germany

Distribution Utility Meet | 14 - 15 November 2024 | www.dumindia.in







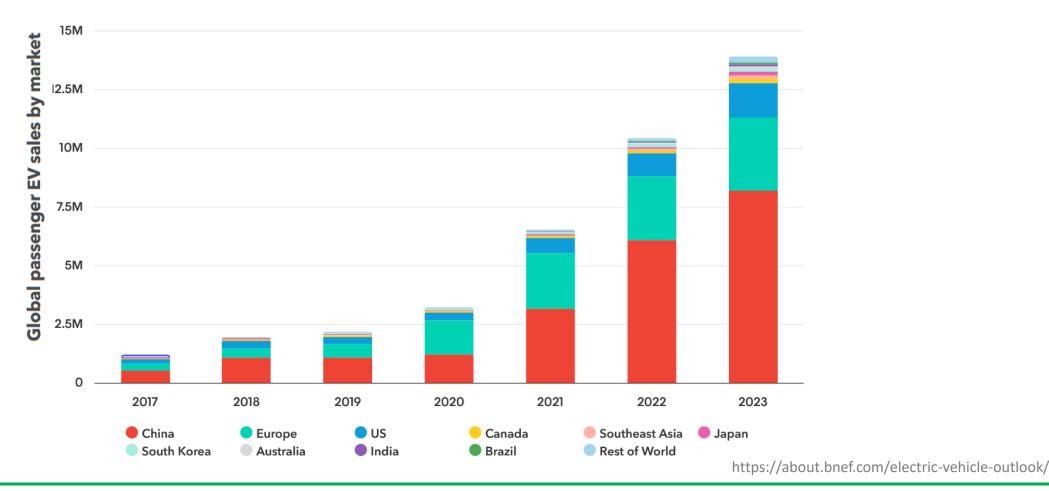




FLEXIBILITY IS KEY TO INTEGRATE HIGH SHARES OF PV



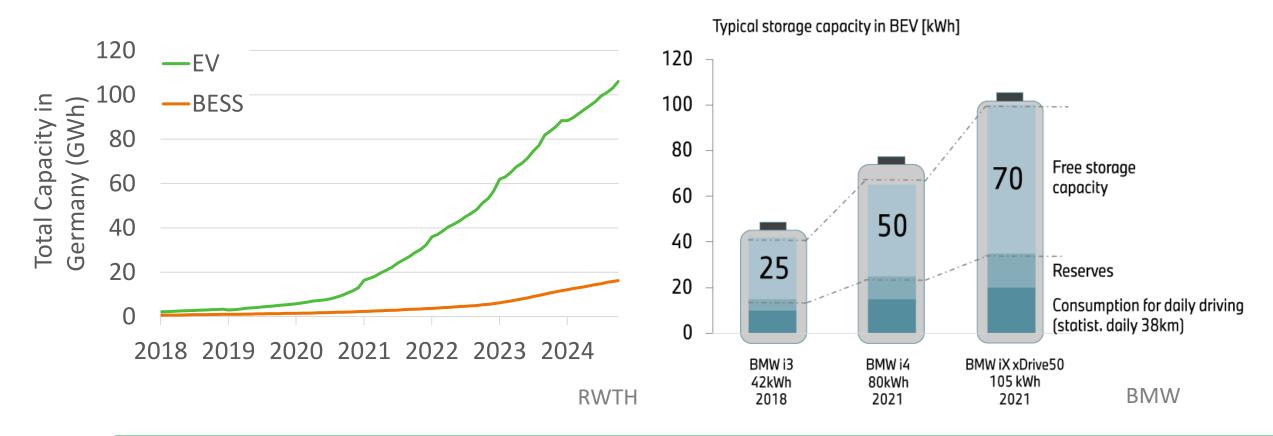
 Electric vehicles are on the rise and have the potential to deliver a high amount of flexibility!



SIZE MATTERS



• Batteries in modern EVs (>45kWh) have multiple storage capacity of standard PV home storages (9kWh)!

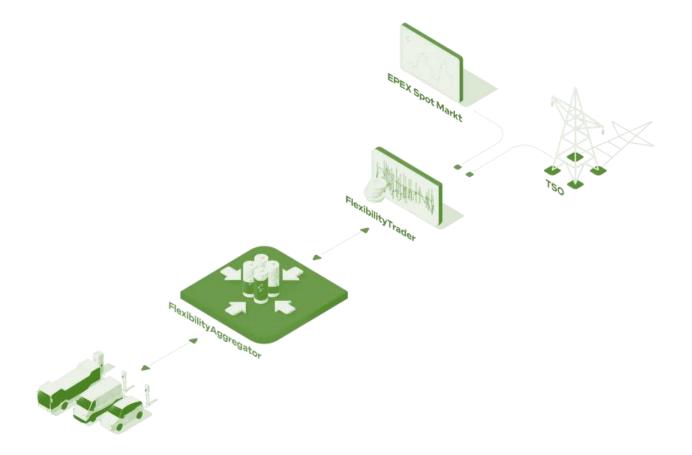


Smart Charging and Virtual Power Plants (VPPs)



Short term goal: Unlock flexibility through smart charging and VPPs



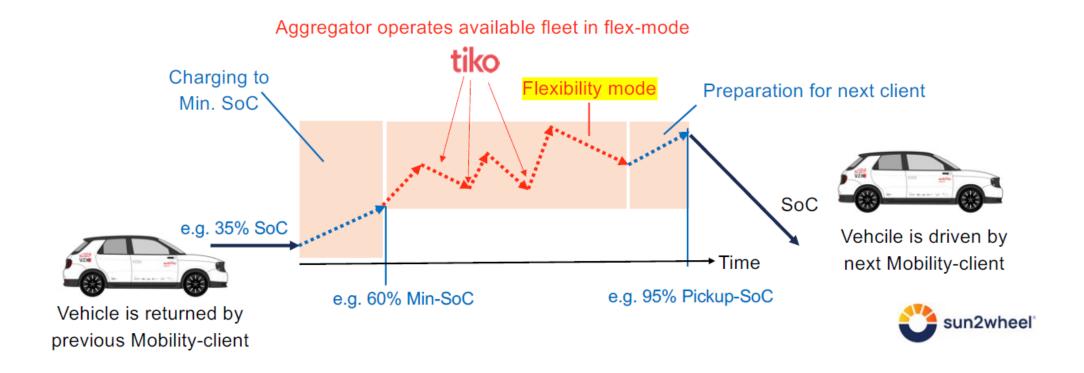


Source: The Mobility House

Vehicle-to-grid



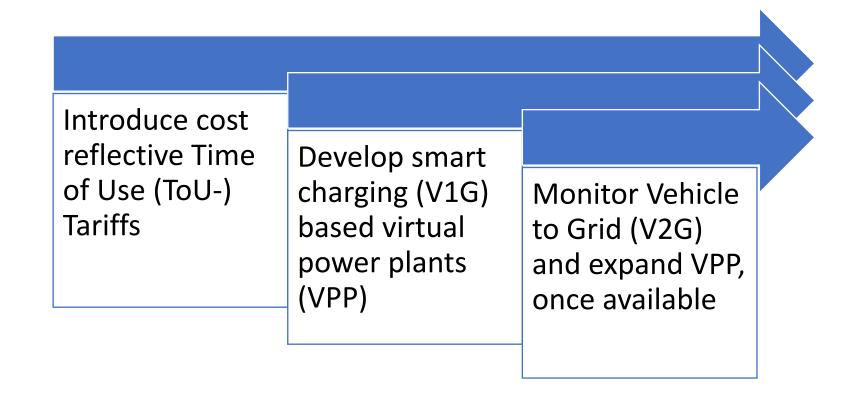
- Medium term goal: Unlock further flexibility through vehicle-to grid (V2G) operation!
- CHAdeMO EV's & soon Renault 5 are V2G capable



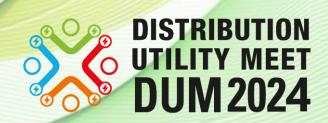
KEY TAKEAWAYS and RECOMMENDATIONS



- Electric vehicles have significant unused battery capacity for power system optimization.
- Make use of available flexibility asap!







THANK YOU

For discussions/suggestions/queries email:

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BACKUP SLIDES