

Smart concepts for charging infrastructure locations

Munich, 16-10-2019 Thomas Gereke

Drivers for eMobility adaption

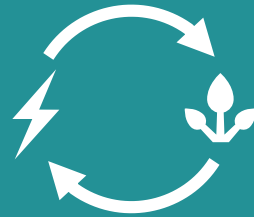
Clean air strategy:

NO_x, CO₂ emission and noise reduction



Sector coupling:

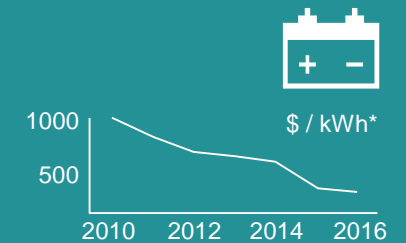
Renewable integration



Integrated mobility concept: Multi-modal transportation



Dropping prices for avg. battery packs:



Attractiveness:

Declining acquisition costs & total cost of ownership, policy & regulatory advantages



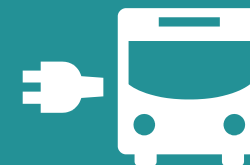
Driving range:

Continuous increase of EV driving range



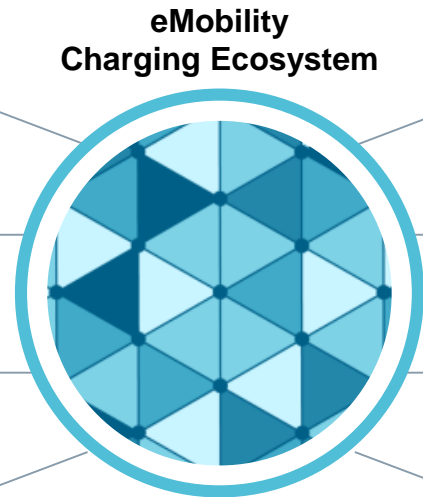
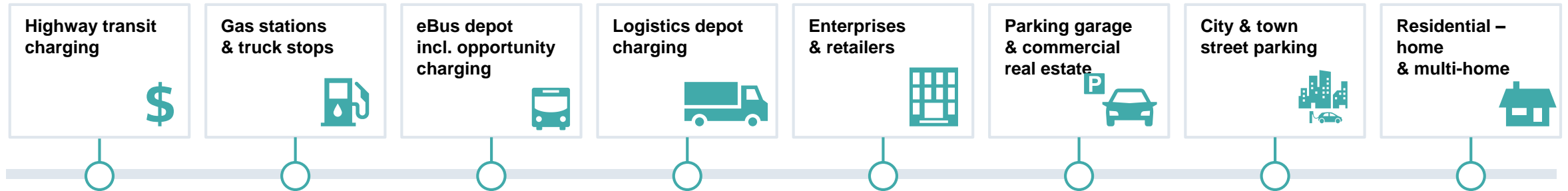
Infrastructure & applications:

Inf. deployment & smooth adaption (eBus, commercial)



*Source: McKinsey sustainable mobility initiative, Bloomberg new energy finance

eMobility Charging Ecosystem



E-vehicle charging (incl. aircraft & utility vehicle); systems and integration



Distributed energy systems: Storage and micro grid



Grid connection and integration in existing power supply architecture



Energy Management System



Dedicated Siemens expert center



New business models and mobility offerings



Connected services/ remote diagnostics



eCar Operation Center »managed infrastructure«

Consulting & financing

Planning & simulation, engineering, network design

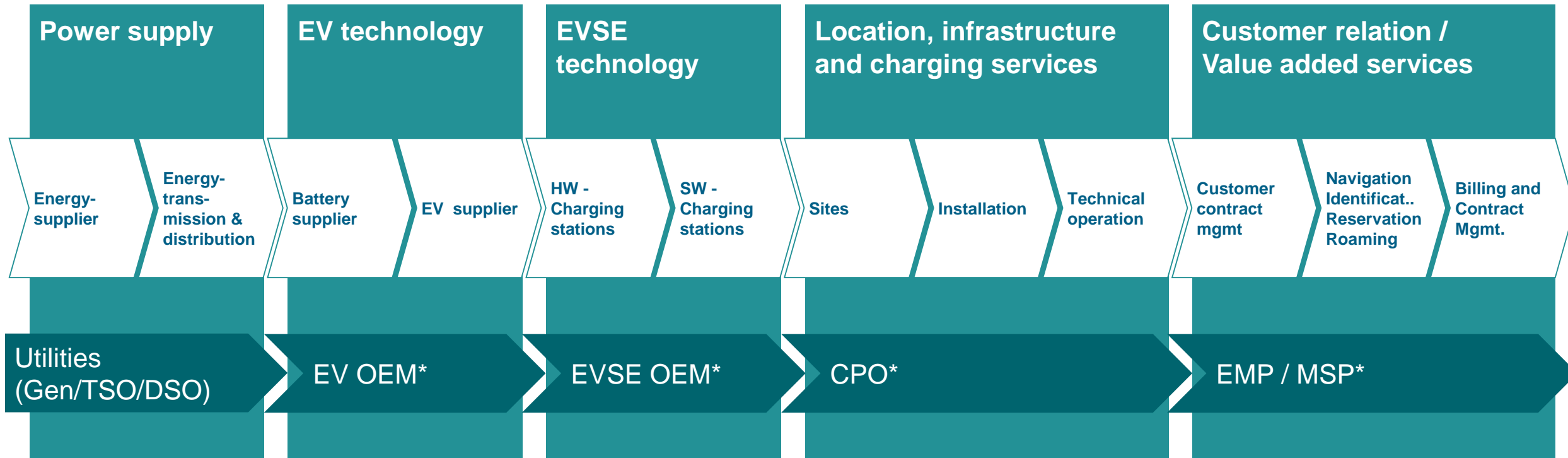
Project management, ordering & delivery, installation & commissioning

Operation & digital enabled services

There is no one-size-fits-all solution for smart location, relevant aspects need to be considered



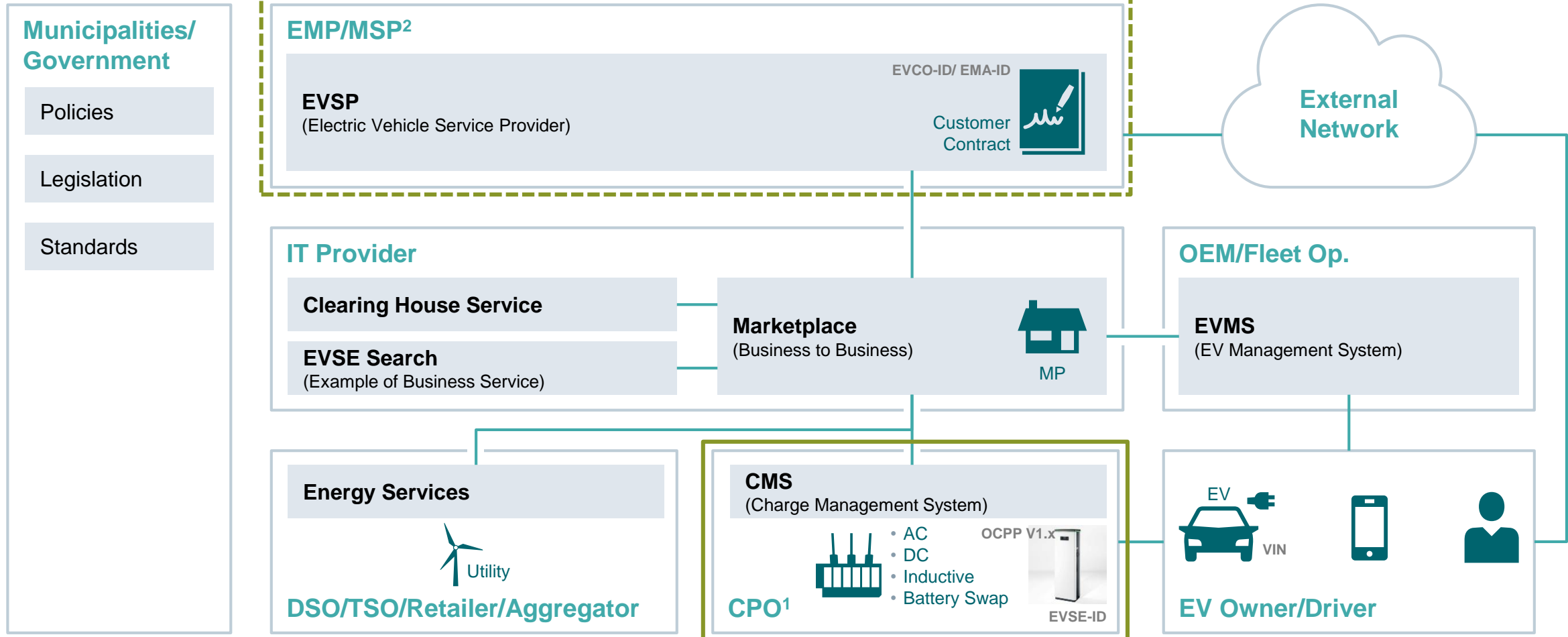
Meet stakeholders along the value chain to understand eMobility ecosystem



Actors:

- EVSE OEM = Electric Vehicle supply equipment manufacturer
- CPO = Charge Point Operator
- EMP/MSP = eMobility Provider / Mobility Service Provider
- EV OEM = Electric vehicle original equipment manufacturer

Overview e-Mobility roles for location operator

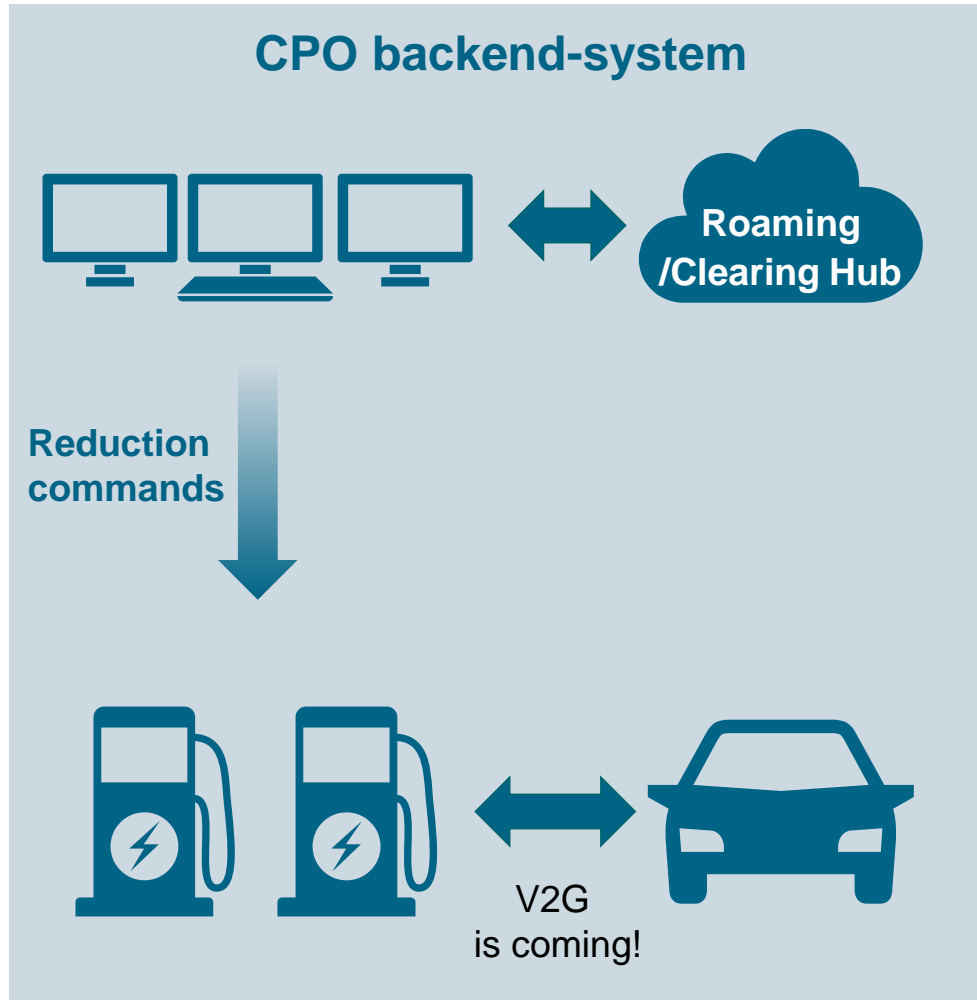


Source: Green eMotion project 2011 – 2015 | 1 Charge Point Operator | 2 eMobility Service Provider / Mobility Service Provider

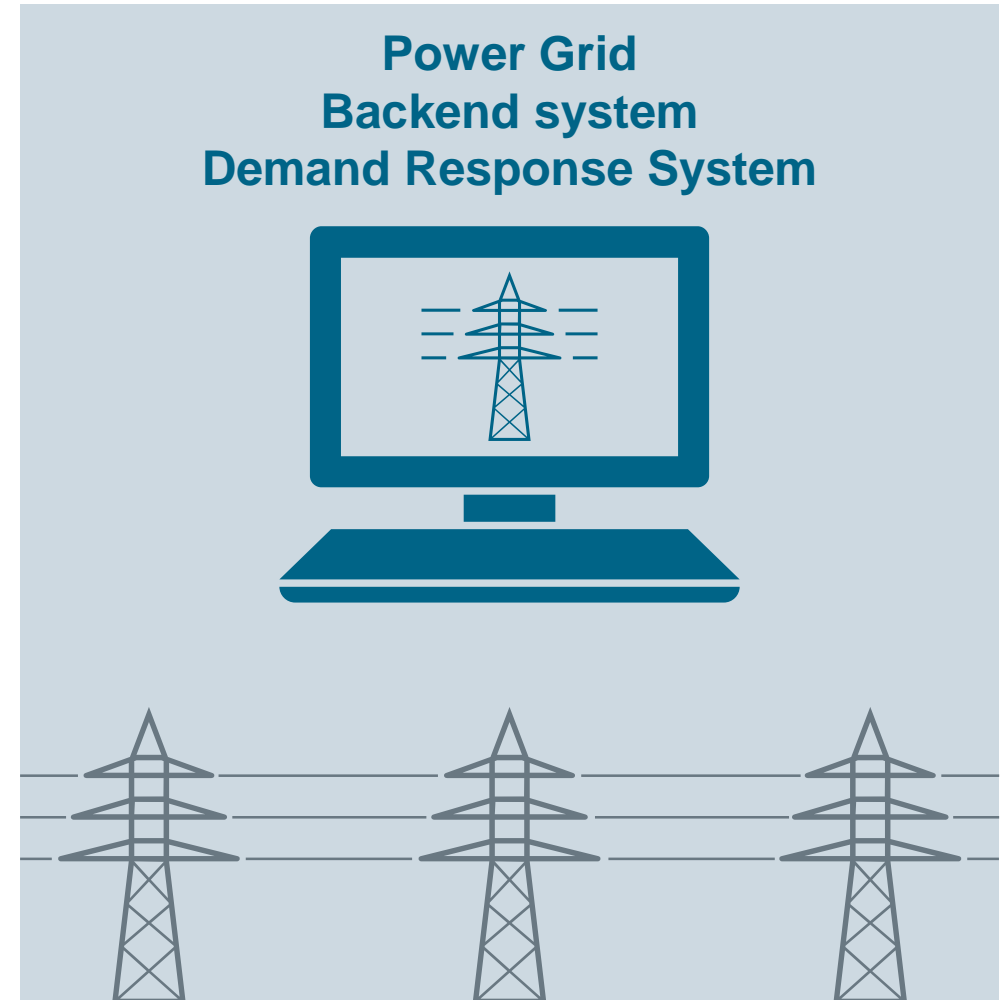
Overview eMobility aspects for locations operators



Smart location with load management (dynamically)



Load management
Requests
Predefined peaks

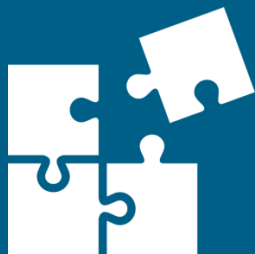


We would like to support you in your e-Mobility journey!

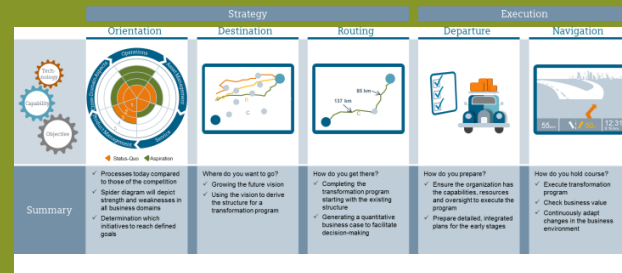


EV-IF

Electric vehicle implementation framework with 400 aspects of consideration



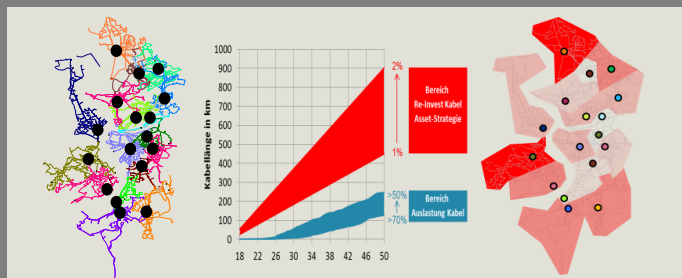
e-Mobility structured methodology



eMobility solution modules



eMobility tools, models & templates



eMobility training



International project experience



Thank you for your attention!

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Thomas Gereke
Senior e-Mobility Consultant
Siemens AG

Mobile: +49 1522 262 9983

E-mail: thomas.gereke@siemens.com



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