Prospects for the electrification of transport

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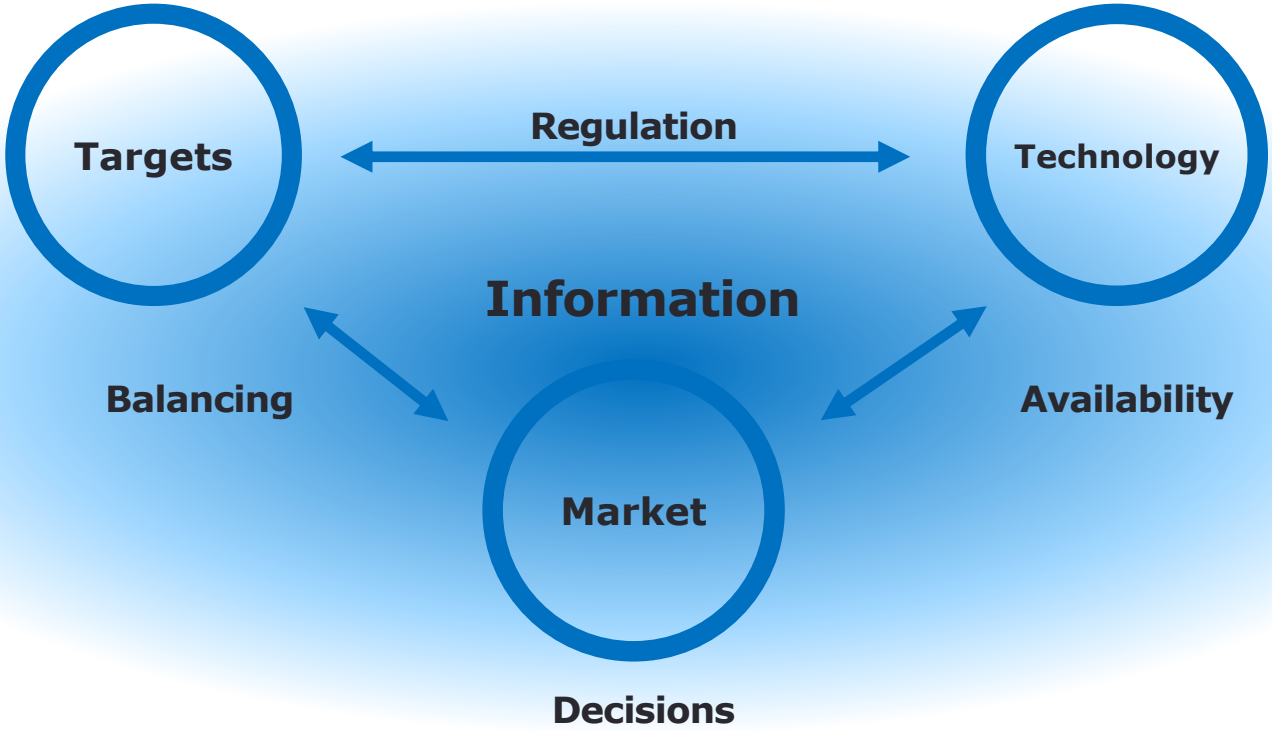
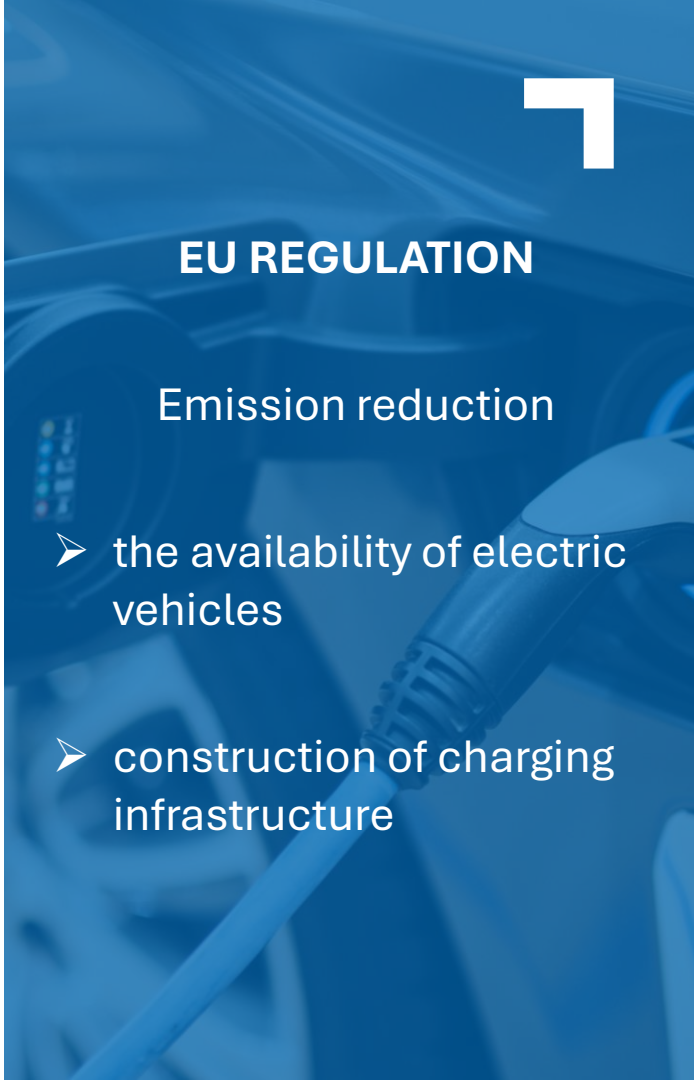
EU Climate objectives
Sustainable Smart Mobility Strategy



Predictable regulation drives eMobility in EU

EU regulation

- ✓ Regulation for the deployment of alternative fuels infrastructure (AFIR)
- ✓ Performance standards (CO2)
- ✓ Energy Performance of Buildings Directive (EPBD)
- ✓ Clean Vehicles directive (CVD)
- ✓ Effort sharing regulation & ETS2



National targets derives from the EU regulation

2030 Halving the greenhouse gas emissions of domestic transportation

2045 zero emissions Domestic transportation

FULL ELECTRIC VEHICLE

plays significant role of cost-effective emission reduction in transportation

since

it eliminates the use of fossil fuels and therefore emissions permanently throughout its lifecycle without additional measures.

Consistent emission standards increasingly expand the electric vehicle offering towards fully electric cars.

BEV/PHEV

BEV PHEV	2024 (Q2)	Fullfilment 2030 scenario
BEV	99 343	16 %
PHEV	152 209	51 %

Scenario 2030

BEV/PHEV
Vehicle Fleet
(share of total car fleet)

BEV 626 800 (22 %)

PHEV 298 800 (10 %)

Total 925 600

https://www.hiisi2035.fi/

Full electric vans, busses and trucks

Full electric vehicles	2024 (Q2)	Fullfilment 2030 scenario
Vans	3 744	8,8 %
Trucks	84	0,4 %
Buses	781	21,7 %

Scenario 2030

Electric Vehicle Fleet
(share of total vehicle fleet)

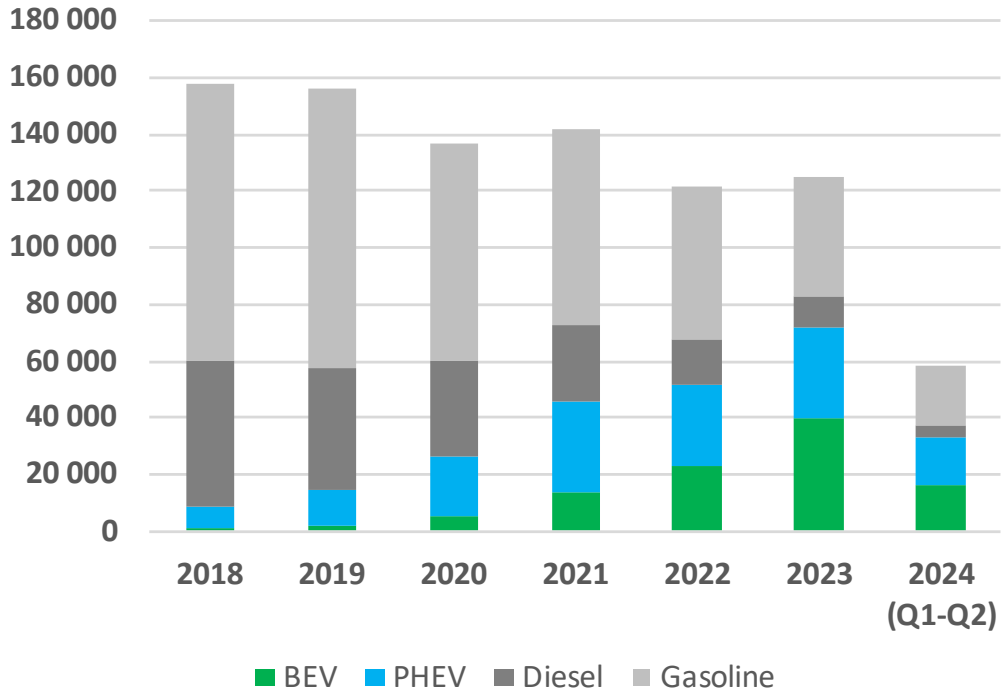
Vans 42 500 (13 %)

Trucks 2 400 (2,5 %)

busses 3 600 (30 %)

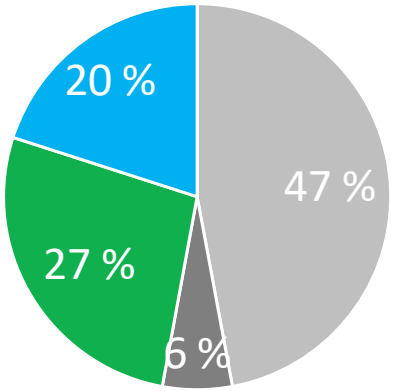
https://www.hiisi2035.fi/

Renewal – new registrations & imported used cars



Renewal – new registrations & imported used cars

New registrations



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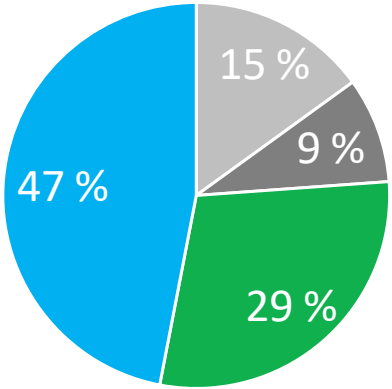
Imported used cars



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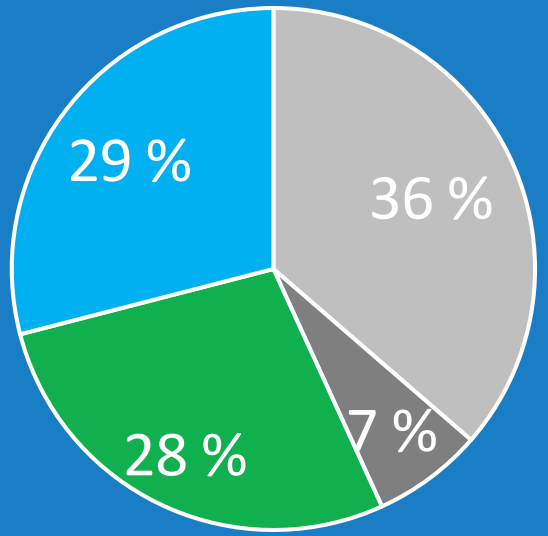
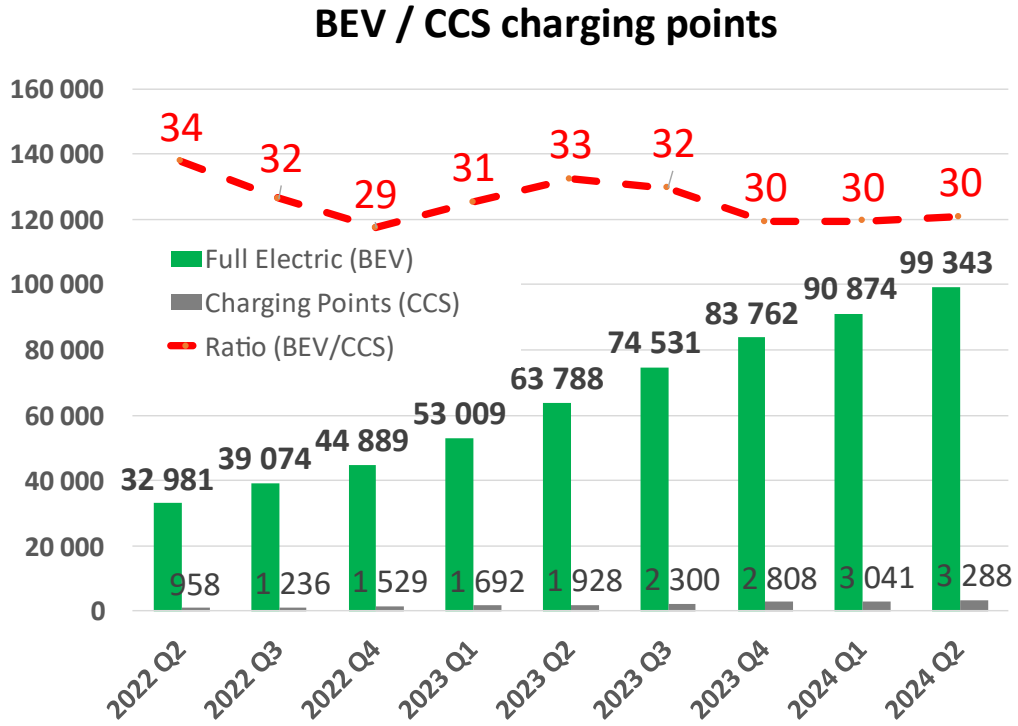
BEV PHEV Diesel Gasoline

Car fleet rewneval 2024 (Q1-Q2)



Electric Vehicles (BEV) and Charging points (CCS)



2/3 of the

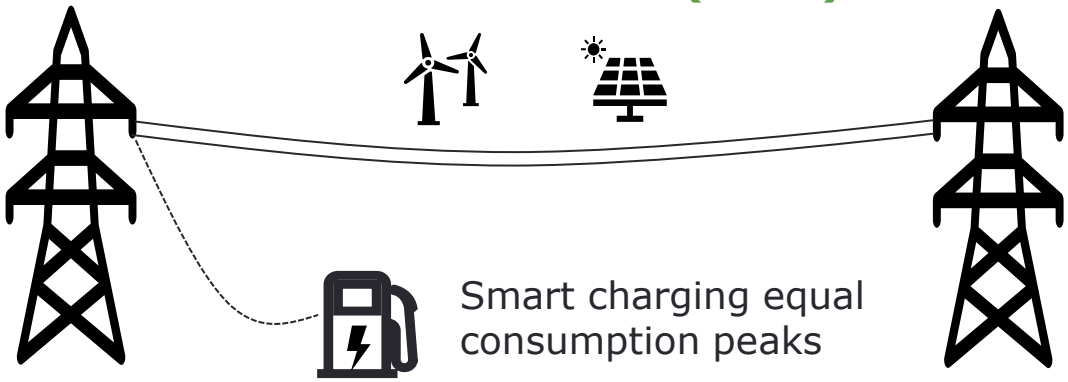
CCS charging points

enables

≥ **150 kW power**

Low emission energy creates sustainable basis for electrification in Finland

Electricity consumption in Finland 92 TWh (2030)



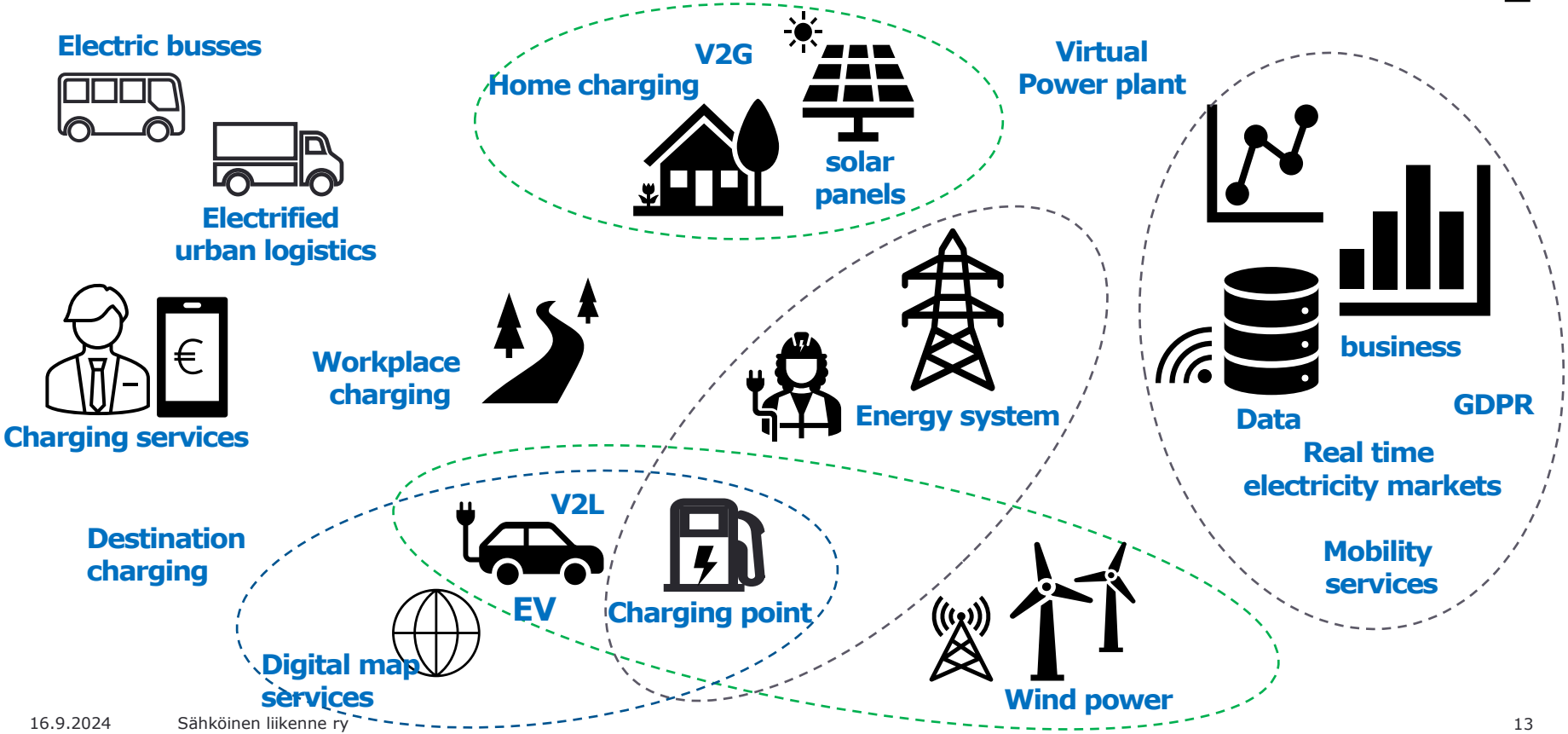
Smart charging equal consumption peaks

+4% By electrifying transportation only a small effect for electricity consumption

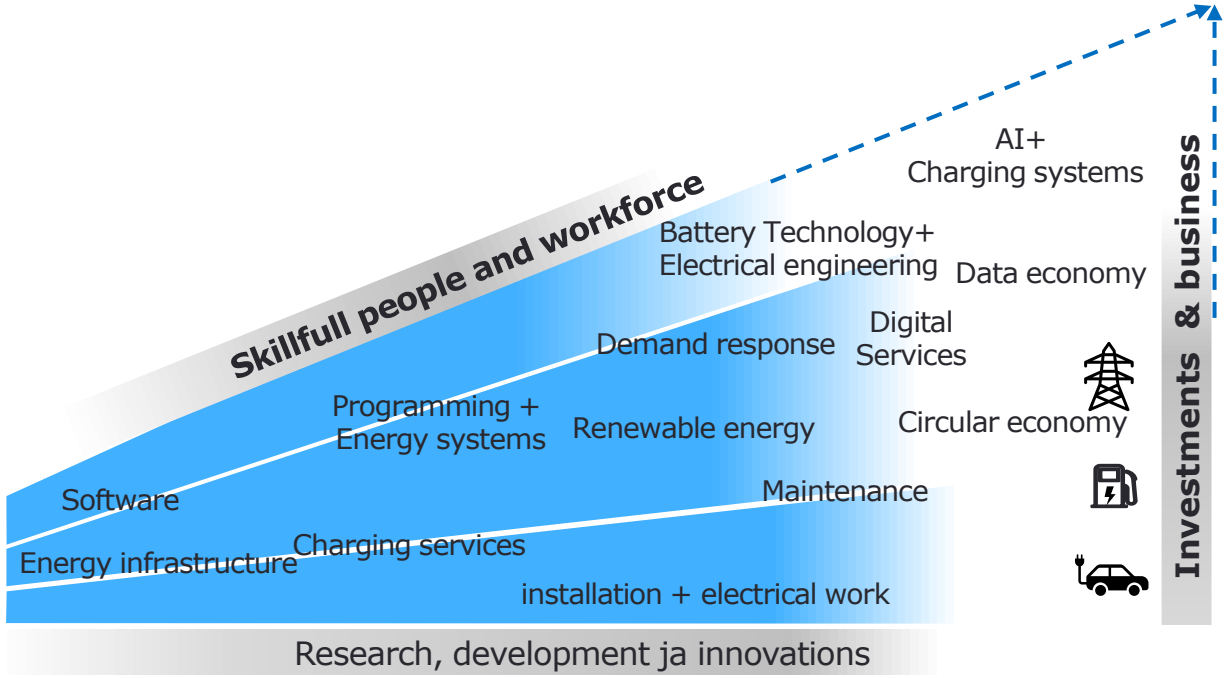
Benefits for energy system 2030

- Electricity consumption only + 3,5 TWh
- Multiplied energy efficiency
- Better delivery security
- Increased self-sufficiency
- Less imported fossil fuels

eMobility creates new business opportunities



Skilled people enable the electricication economy



Cluster

- Charging
- Energy
- Services
- Vehicles

Emission standards have only an indirect influence on consumer and business purchasing decisions.

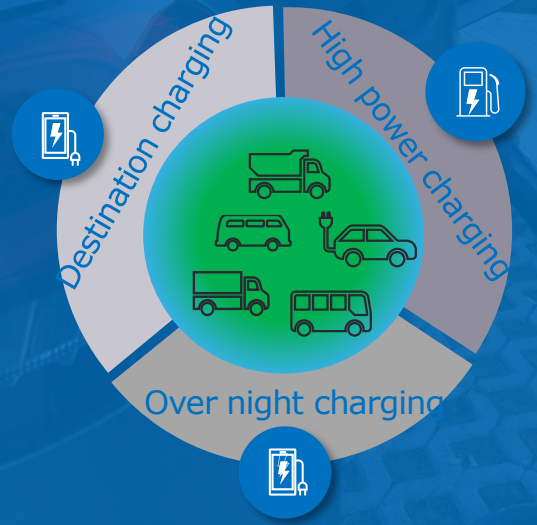
The pace of electrification is strongly influenced by national policy measures that affect the choices of consumers and businesses.

What balancing is needed to reach the targets

The development of road transport towards zero emissions will happen faster and more permanently when:

- A favorable environment enables faster renewal of the vehicle fleet than at present.
- Vehicle purchases and investments are encouraged to be full electric.
- The construction of charging infrastructure is promoted to enable smooth everyday mobility.

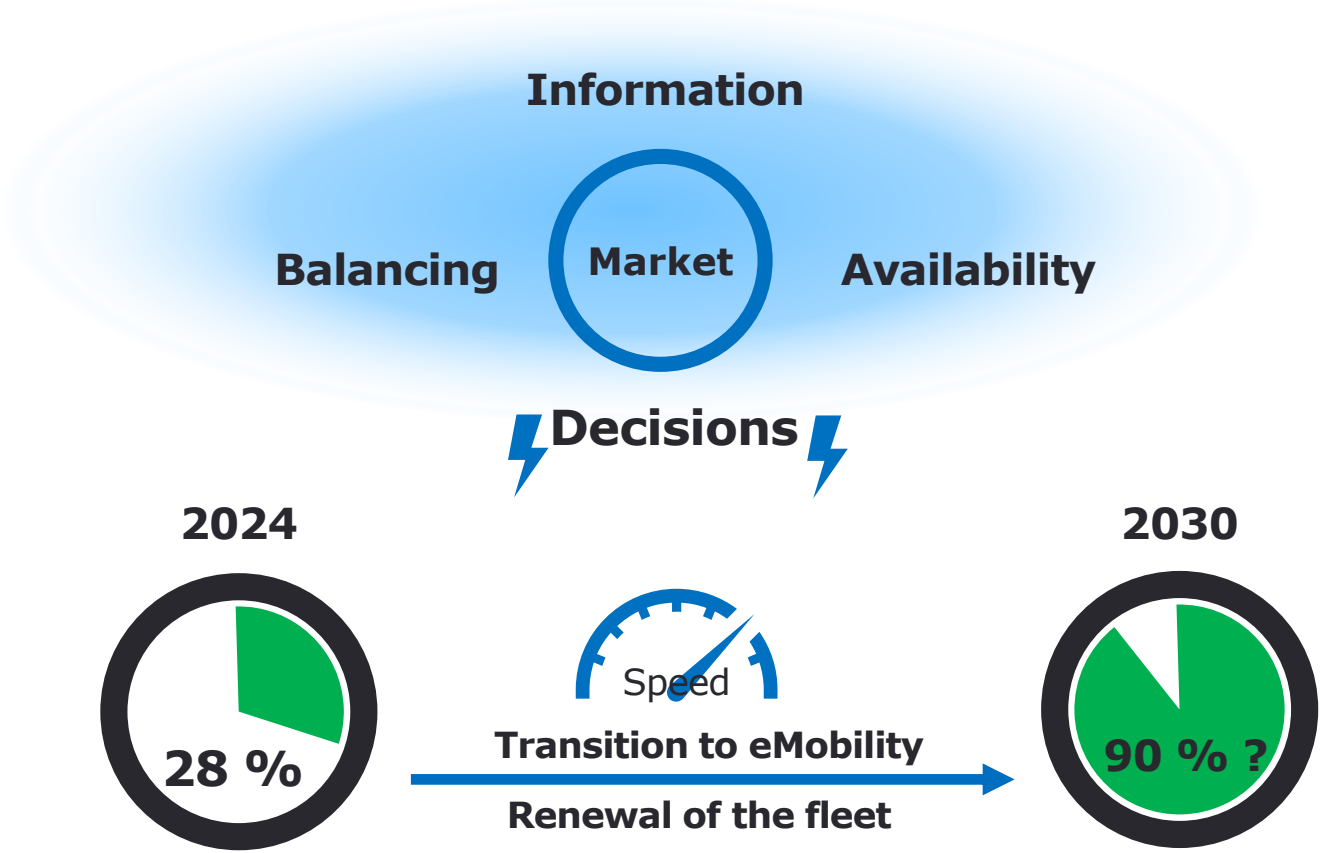
A comprehensive and smart charging network optimized for the needs of all road transport maximizes electrified kilometers.



Facts and other things promoting electrification

- Energy efficiency and smart charging
- Corporate sustainability goals
- Low cost of use / Lifecycle cost of ownership
- Positive driving experiences
- The benefits for business and environment
- The availability and ease of use of charging
- The commercialization of megawatt charging
- Home, terminal and overnight charging possibilities
- Charging services aimed for professional transport

Electrification towards targets needs balancing actions, availability, information



Sähköinen liikenne
E-mobility