

Charge Everywhere –

Πως η έρευνα υπηρετεί τις τωρινές και μελλοντικές προκλήσεις της αγοράς ηλεκτροκίνησης

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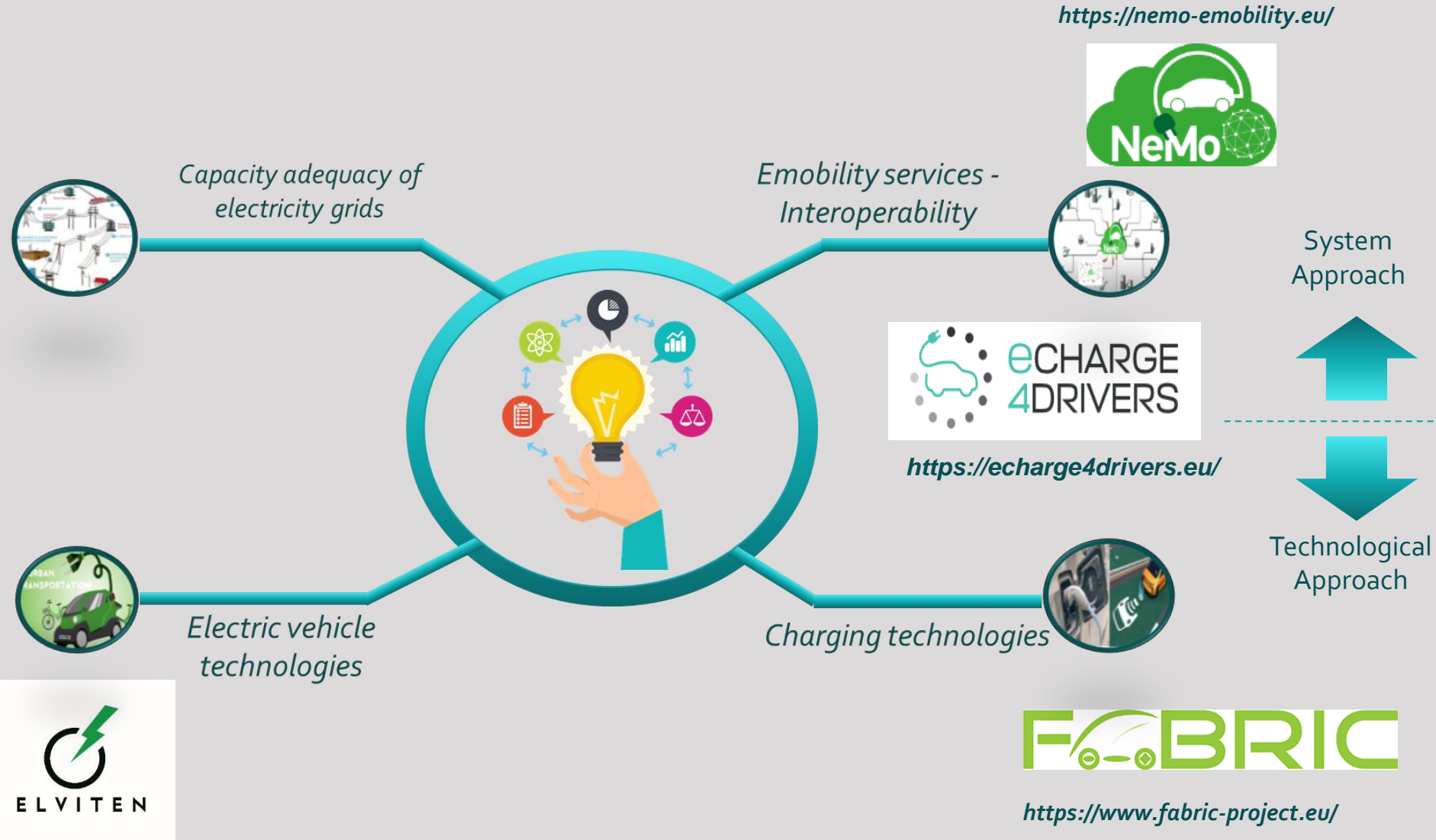
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Content

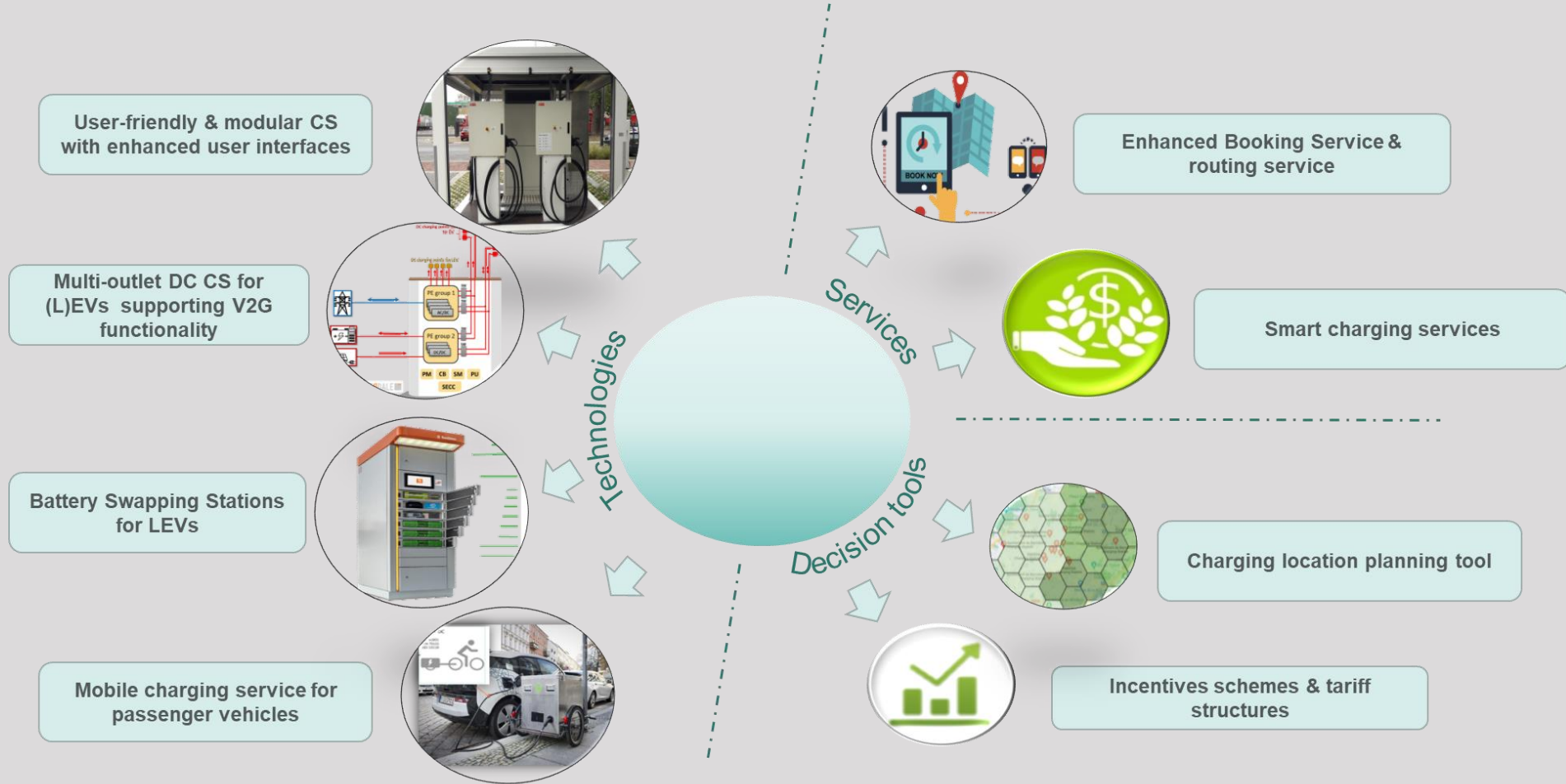
- ❑ Research directions
- ❑ Current trends towards user-centric charging technologies and services
- ❑ Emobility platform - the ring to bind all actors
- ❑ Emobility research challenges - trends

Research Directions



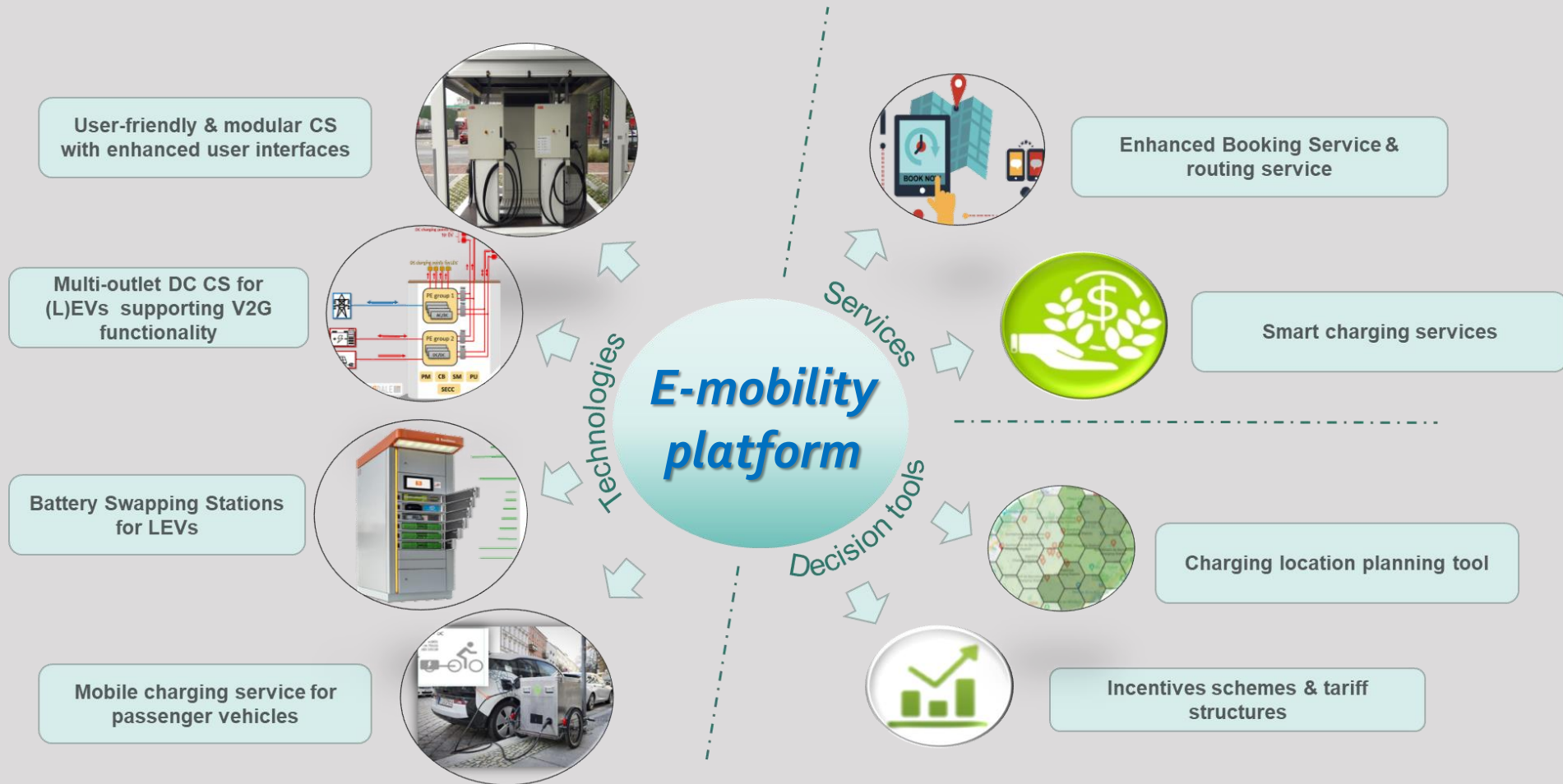


Current trends towards user-centric charging technologies and services





Current trends towards user-centric charging technologies and services





CIBOS
#innovation #platforms



E-mobility platform – the ring to bind all actors

CPO services

- Asset management
- CS network visualization
- Asset & operational analytics
- Remote controllability
- Booking functionality
- User & role management

eMSP services

- User contracts- RFID
- Mobile authentication (QR, NFC codes)
- Dynamic tariff schemes support (energy/time)
- Statistics/reporting
- Booking as a service
- Smart charging*

User services

- Android and iOS support
- Criteria based overview of the CPs in proximity (type/prices/occupancy)
- Favourite CP
- Booking option
- Support multi-payment methods (wallet, credit card, paypal, cryptocurrency*)
- Start charging without RFID
- Charging monitoring
- Charging Session & wallet transaction logs

EVerywhere.

Electromobility Made Simple



E-mobility Research challenges

*Does booking
service bring real
added value?*

*Design of new tariff
schemes to reflect
charging costs and
penalties for improper
use of CS*

*How multi-users
requests can be
handled by a route
planner?*

*Dynamic/Opportunistic
EV aggregation capacity
for V2X services*

*Accessibility principles,
especially for users with
impairments, are not yet
prepared*

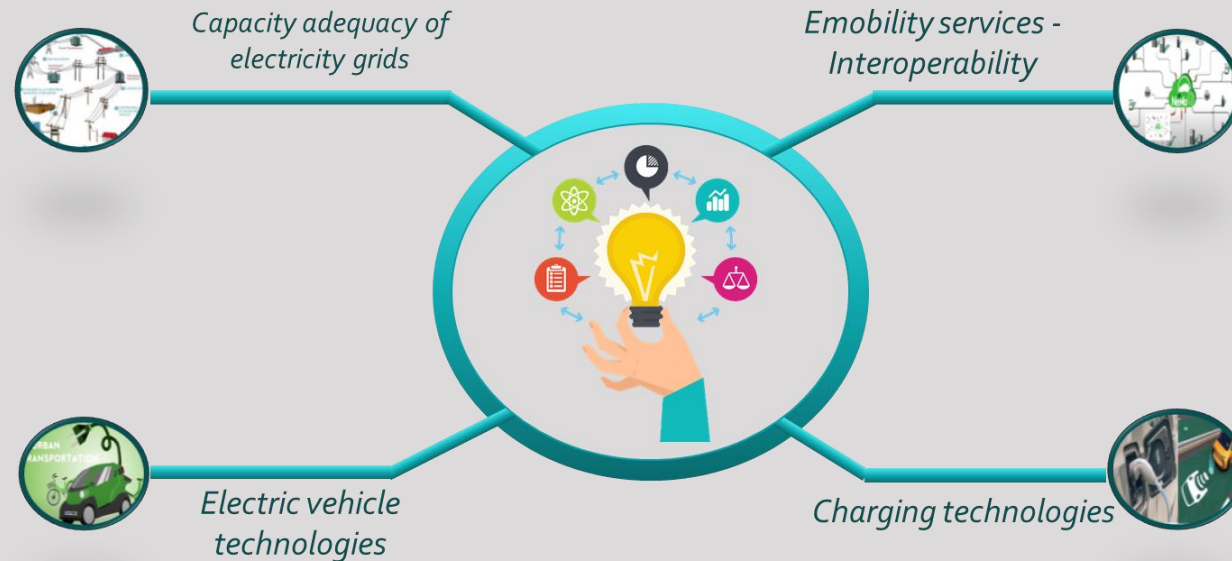
*Is ISO15118 the
protocol to ensure
interoperability?*

Understand the value propositions V2X services can deliver to the EV users and the involved actors

Extract the flexibility capacity needs at different grid levels

Services unlocking new business opportunities and enabling dynamic aggregation and multi-objective EV management

Assess the battery degradation cost



Cost-efficient charging technologies and vehicle interfaces (AC & DC) with reduced energy losses

**E-mobility
Research
challenges**





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Thank you
for your attention!!!



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