Building a market for EV charging infrastructure

CharIN Tuesday Europe

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Benefits from EVs

- Provide flexibility
- Integrate renewables
- Decarbonise transport and power
- Reduce cost
EV drivers everywhere should have ready access to sufficient, accessible and smart charging infrastructure to fit their needs at attractive prices.
Essential charging network

• Focus investments on essential infrastructure
• Allocate subsidies in most effective manner
• Include non-profitable locations

→To get there
  • Grid-integrated planning
  • Issue public tenders with “mixed zones”
  • Auction charging point locations to reveal value
Grid-integrated planning

Source: UK Open Power Networks
The role of grid operators

Tariff design and fast charging

- High, inflexible network tariffs preclude viable business case for fast chargers
- Problem will increase with HDV charging
- Temporary exemption or gradual phase in can support commercial operation
Transparent, easy-to-compare pricing

- Pricing mainly based on consumption (kWh)
- Transparent price composition
- Keep roaming prices proportionate
Policy Recommendations

- Develop a common vision for EV charging in EU.
- Require MS to define an “essential charging network.”
- Require time-varying network tariffs for smart charging and reduced network tariffs to develop public fast charging.
- Offer guidance for making EV charging prices more transparent. Encourage pricing based mainly on electricity consumed.
About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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More Information

➤ Building a market for EV charging infrastructure: A clear path for policymakers and planners

➤ Start with smart: Promising practices for integrating EVs into the grid

➤ Treasure hiding in plain sight: Launching electric transport with the grid we already have