



TSO 2020 Power to Hydrogen Mid-Term Workshop

EU policy for clean mobility and the role of energy storage

Axel VOLKERY, MOVE B4



@Transport_EU

Mobility and
Transport

CONNECTING
EUROPE

Energy storage – transport use context

- Sectoral integration a priority in the context of boosting use of energy from renewable sources / economy decarbonisation
- Power-to-X solutions – efficient uptake of variable RES and contribution to balancing of the electricity grid (alongside other flexibility mechanisms)
- Power-to-Gas:
 - Hydrogen production (mainly electrolysis) provides varied storage solutions
 - Mobility primary application for low-carbon hydrogen, particularly in the heavy-duty use sector in the long-term

Pillars of Clean Mobility



Vehicles



Alternative/
Clean
Sources



Infra
structure



Better
Organisation





CO2 emission targets for cars, vans & trucks
Clean Vehicles Directive



Renewable Energy Directive
(& Battery Action Plan)



Alternative Fuels Infrastructure Directive (& Action Plan)
Energy Performance of Buildings Directive



Intelligent Transport Systems Directive
Combined Transport Directive
Eurovignette Directive

EU Legislation supporting clean mobility
(& other initiatives)

Energy storage – transport use context

- Widely expected acceleration of vehicle take up post 2020 (mainly BEVs).
- Overall total electricity demand increase manageable, but local network constraints possible (peak demand)
- Smart charging, deployment of stationary storage and V2G applications need to complement infrastructure expansion
 - Integration of micro-grids, energy storage and electric vehicles – an intelligent electricity network with new actors
 - Automotive and energy industries need to work together



Horizon 2020 -> Horizon Europe (including FCH JU)



Connecting Europe Facility (synergy transport – energy – digital; ancillary elements pertaining to other sector)



InvestEU (sustainable infrastructure – guruantee)

Complementarity & flexibility

CEF grants can be used for blending with InvestEU or other private financing)CEF Blending Facility)



Thank you for your attention

Dr Axel Volkery
Clean Transport Policy Coordinator
DG MOVE B4