

IEA Implementing Agreement Hybrid and Electric Vehicles

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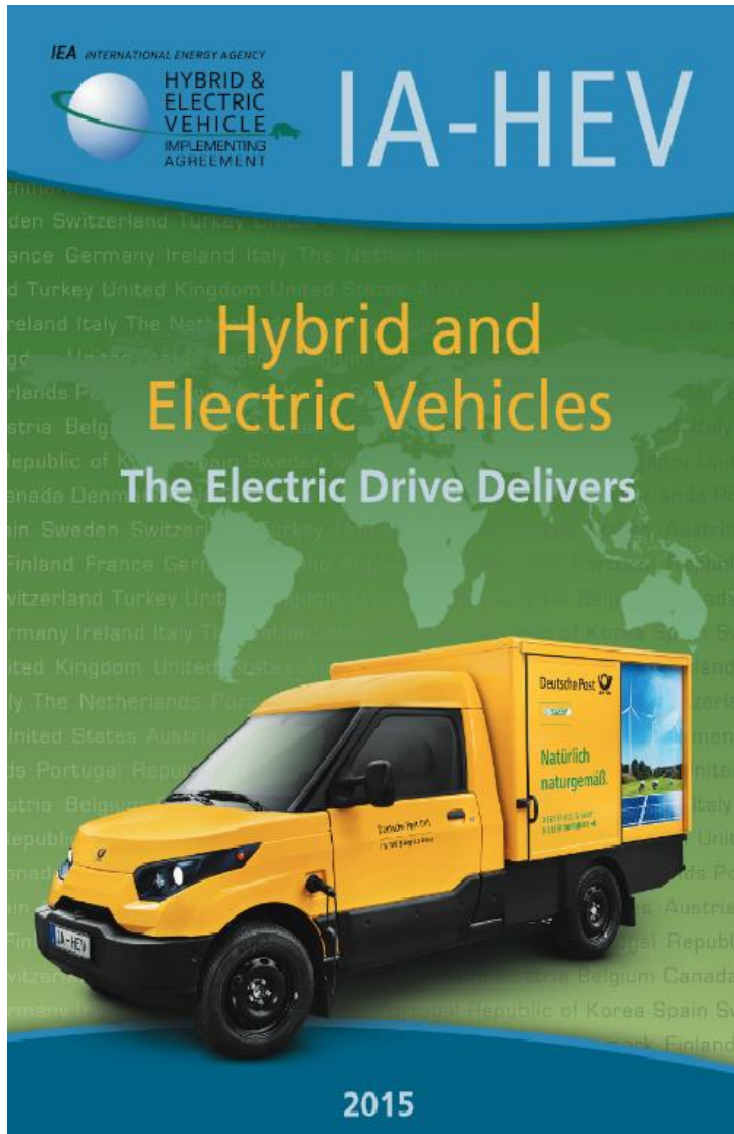
Operating Agent Task 1 “Information Exchange” and
Task 29 “Electrified Connected and Automated Vehicles”

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IA-HEV Mission



- Produce and disseminate balanced, objective information about advanced electric, hybrid, and fuel cell vehicles.
- Enable member parties to discuss their respective needs, share key information, and learn from an ever-growing pool of experience from the development and deployment of hybrid and electric vehicles.
- Collaborate under the International Energy Agency (IEA) framework
www.ieahev.org

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VDI|VDE|IT



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Region	2014									
	EV					PHEV				
	Motorbikes	Passenger Vehicles	Trucks	Buses	Total EV	Motorbikes	Passenger Vehicles	Trucks	Buses	Total PHEV
Europe	60065	143240	12061	1697	217063	109	63071	16	55	63251
North America	n/a	141637	0	0	141637	n/a	156057	0	8939	164996
Asia	n/a	123023	8274	17772	149069	n/a	59244	0	18087	77331
Worldwide	60065	407900	20335	19469	507769	109	278372	16	8994	305578

Status Quo 12/2014:

- According to official sources of members of the IEA-HEV there are about 685,000 EV/PHEV passenger cars on the road
- Given the current growth rate, 1 Mio will be reached in 2015

Task 1, Information Exchange Collects, analyzes, and disseminates information#

Task 21, Accelerated Ageing Testing for Li-ion Batteries Collaboration for Li-ion ageing testing

Task 22, E-Mobility Business Models Understanding the revenue opportunities

Task 23, Light-Electric-Vehicle Parking and Charging

Infrastructure Identifies and addresses issues with e-scooters, e-bikes and pedelec

Task 24, Economic Impact Assessment of E-Mobility Performs SWOT analysis of key indicators associated with e-mobility

Task 25, Plug-in Electric Vehicles Studies information and current variables related to PHEVs

Task 26, Wireless Power Transfer for EVs Develop a greater global understanding of WPT systems and interoperability through country-based standards study

IA-HEV Tasks



Task 27, Electrification of transport logistic vehicles (eLogV) Summarize implementation hurdles and identify early niche markets and commercialization opportunities

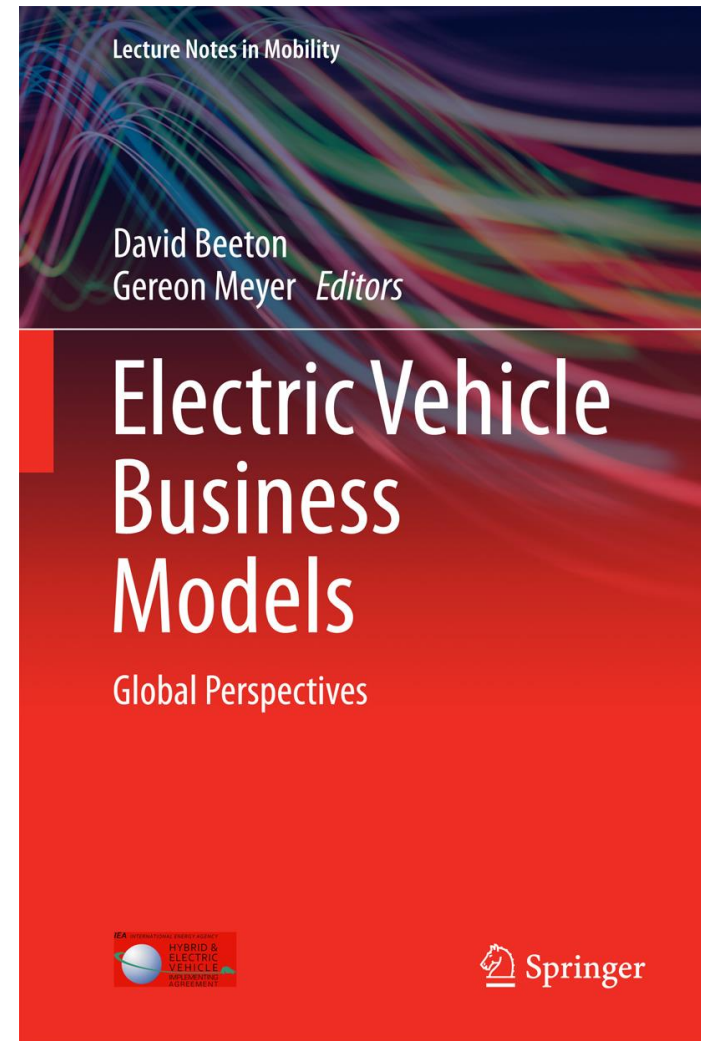
Task 28, Home grids and V2X technologies Analyzing technical and economic viability of V2X technology

Task 29, Electrified, connected and automated vehicles Explores possibilities for synergies between connectivity, automation and electrification of vehicles

Task 30, Assessment of environmental effects of electric vehicles Collects and analyzes environmental benefits of EVs in comparison to conventional vehicles

Task 31, Fuels and energy carriers for transport Provides a comprehensive overview of different fuel and drivetrain options

IA-HEV Results



Task 29:

Electrified Connected and Automated Vehicles



Objectives:

- Analyze the potential **technological synergies** of electrification, connectivity and automation of road vehicles and derive research, development and standardization needs
- Study the **business models** combining electrification and connectivity / automation of road vehicles and identify need for action by companies and/or governments
- Assess the impact of **user / driver behavior** on the combination of electrification, connectivity and automation and conclude on needs for measures in awareness and legislation

Task 29: Synergies



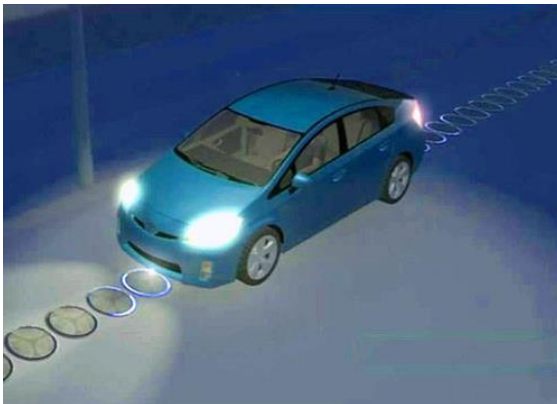
Energy Efficiency



Follow Me Function



Self Driving Shuttles



On Route Charge



Robot Car



Small and Lightweight

IEA Implementing Agreement Hybrid and Electric Vehicles

... also a valuable source of information for the
European Electrification Roadmap in the
Strategic Transport Technology Plan (STTP)

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