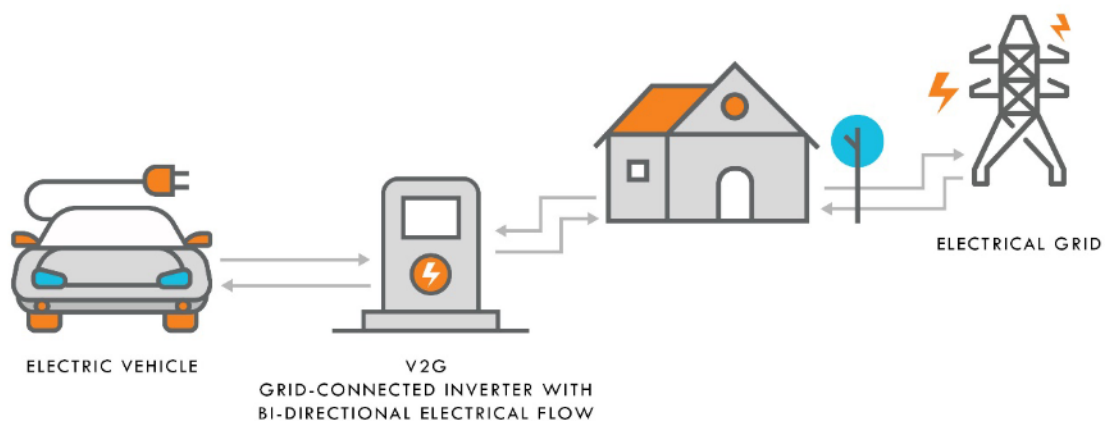


Master Thesis

## ***Current technical and legal obstacles to the roll-out of vehicle-to-grid***

The rollout of vehicle-to-grid (V2G) technology faces several current technical and legal obstacles. Addressing these obstacles is essential to facilitate the widespread adoption of V2G technology, improve grid management, and enhance the electric mobility ecosystem. Standardization, regulatory adjustments, and investment in technology and infrastructure are critical steps to overcome these challenges.



Integrating electric vehicles intelligently into the energy sector through bidirectional charging is a key element for our future ecosystem. [www.idealenergysolar.com/wp-content/uploads/2019/12/V2G-Graphic.jpg]

### **Task**

One potential means of increasing energy efficiency and grid management could be to use the batteries of e-cars as an energy supplier at times when PV plants, wind turbines, etc. cannot provide sufficient power. Analyze the current obstacles to a nationwide roll-out of bidirectional charging (so-called vehicle-to-grid) of e-cars in Germany and develop proposals for solutions.

### **Requirements**

- Good knowledge of the German language. Preparedness to deal with legal texts and affairs

Start: as of now

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