Smart charge

- Introduction
- Current strategy
- Technical proposal
- Deliverables

Introduction

- A lot of projects and insights about smart charge or V2G
- Smart charge from charging grid operator perspective
  - DSO's : avoid grid overload
  - Parking :
    - Cope with limited power to satisfy maximum number of customers (short term rental)
    + Optimize installed power especially at night
- Smart charge for an OEM :
  + Provide green energy
  + Provide energy cost savings to EV Drivers
  - Make sure customer is charged when he's leaving

Current strategies and concerns

- Already a technical standard to manage the charge
  - IEC 15118

- However :
  - ***No clear business model for customer***

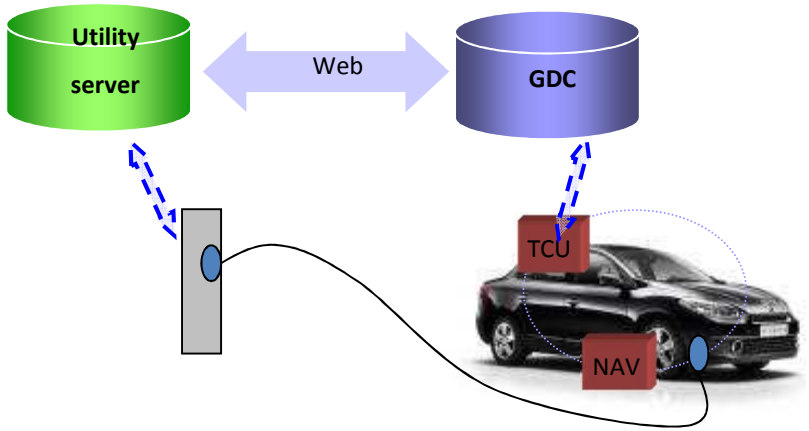
    - "I have a fixed energy price (flat or D/N). Why should I let someone manage my charge and limit my mobility ?"
    - "Why should I pay more than 300€ (EV + Wbox) to allow smart charge ?"

- **<u>For Renault :</u>** key stake is to allow DSOs to analyse the benefits and define a way to decrease customer running costs.

TECHNICAL PROPOSAL

- Leasing battery ⇨ real time battery follow up

- Gives the opportunity to provide real time State of Charge
  - Allows utility to manage load via current poles



DELIVERABLES

- Expectation :
  - Global economics
  - Energy contract
- Important use cases for OEMs :
  - Fleet in their own premisses
  - Fleet on other premisses
  - At Home
  - In Public
  - In Private parking on publicly accessible places