

Proposal

The new approach to infrastructure
construction for electric cars

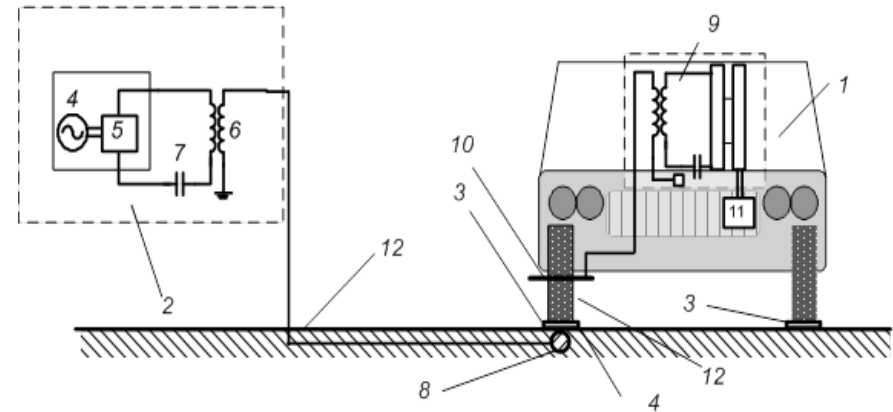
Wireless charging technology

Developer: Russian Scientific
Research Institute of Electrification

Wireless charging technology

Our technology

- High performance (90%)
- Transmission height (up to 0,3 m)
- High power support (up to 50 kW)
- Frequency range (1,0 ... 20 kHz)
- Energy transmission method based on resonance
- Energy receiving method based on electric-induction mechanism



Results achieved

- 4 kW were transmitted for 0,15 m during movement

Advantages

Technology advantages

- Better performance than induction method
- No heating of car elements
- High transmission power
- Transmission height (corresponds to the clearance of the vehicle)

Market advantages

- Electric cars become real competitor of regular cars
- Real time charging (invisibly for drivers)
- Customers comfort
- Green Planet
- Safe for health

Usage scenarios

Wireless charging at office, parking zone, garage



Advantages:

- Hands free
- Easy installation



Usage scenarios

City wireless fast charging station

Advantages:

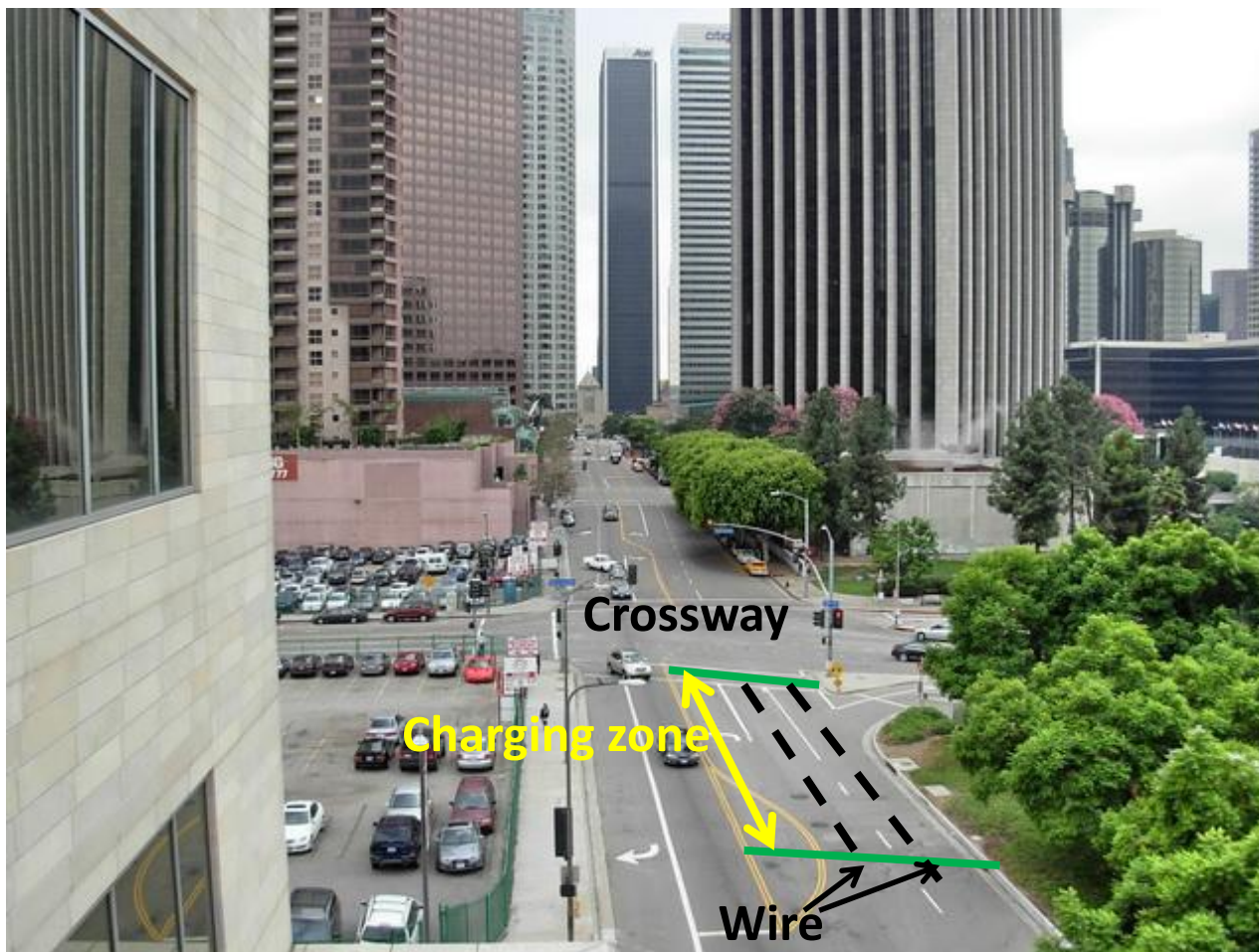
- Low CAPEX
- Drivers comfort



No cables

Usage scenarios

Traffic light zone wireless charging



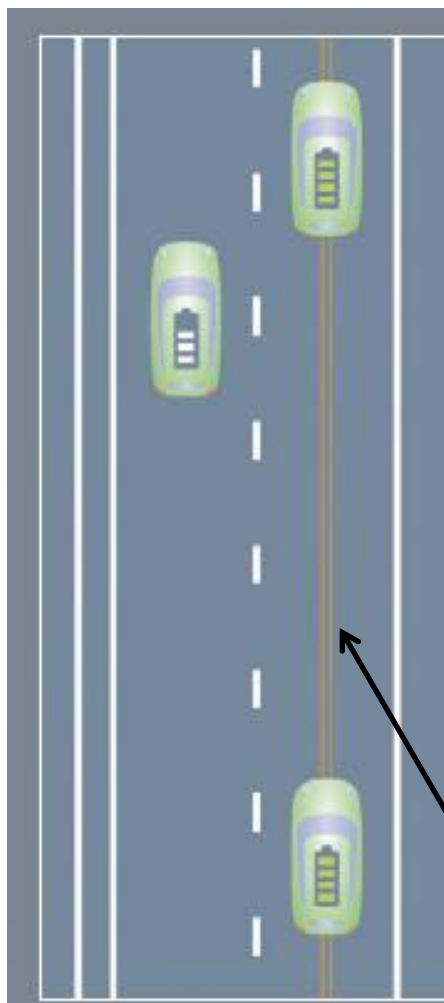
Advantages:

- Wireless charging in high traffic zone
- Add miles when stop at crossway



Usage scenarios

Dedicated line for wireless charging



Advantages:

- For electric traction (bus, taxi, etc)
- Add miles when driving



Our proposal

Research and development

- Prepare the road infrastructure (100 meters test zone)
- Prepare, install and configure the necessary power transmission devices
- Prepare, install and configure the receiving device on electric car model
- Testing and acceptance
- Prepare for the future steps