

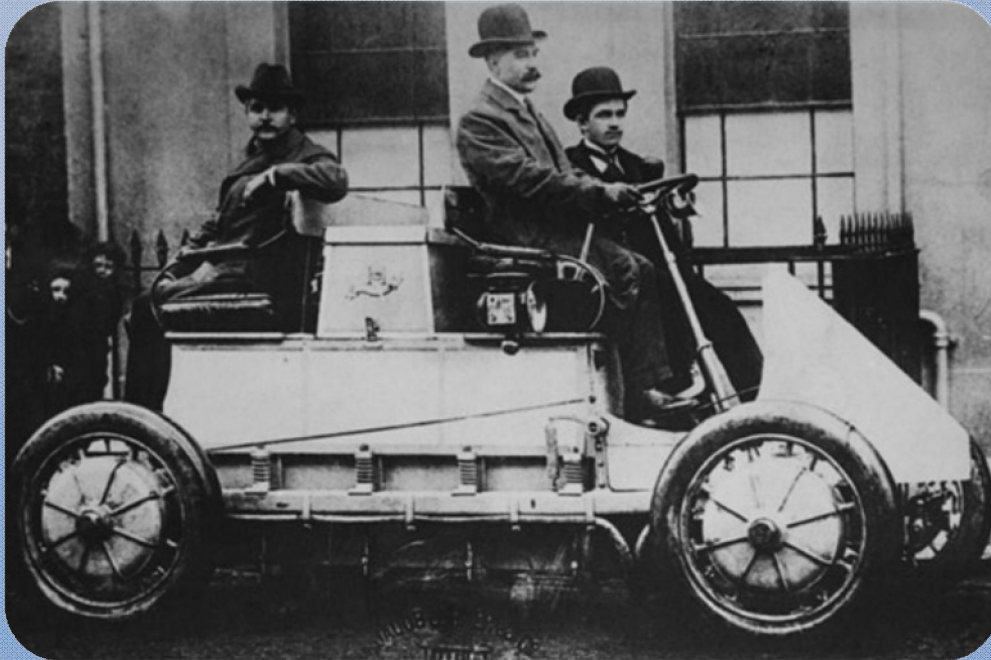


Electric vehicles here and now – everyday user view

Simon Čretnik

Electric vehicles

- car, motorcycle, moped (scooter), electric bicycle, boat, airoplane, train, ship
- On the market since the end of 19th century



Usage of carbon fuels

- Money goes out of country
- Food competition
- Industrial use



Fun

- Acceleration
- Torque
- ...



Comfort

- Quiet ride
- Charging at home, work...



EV market 2010



EV market 2010



EV market 2010



EV market 2010



EV market 2010



EV market 2011



EV market 2012



Slovenija and electric vehicles

- Pipistrel – electric airoplanes
- Seaway – electric boats
- Detela, Elaphe – inovative electro motors
- Piktronik – power electronics
- Stoja – traction motors, power electronics
- Etrek – charging stations

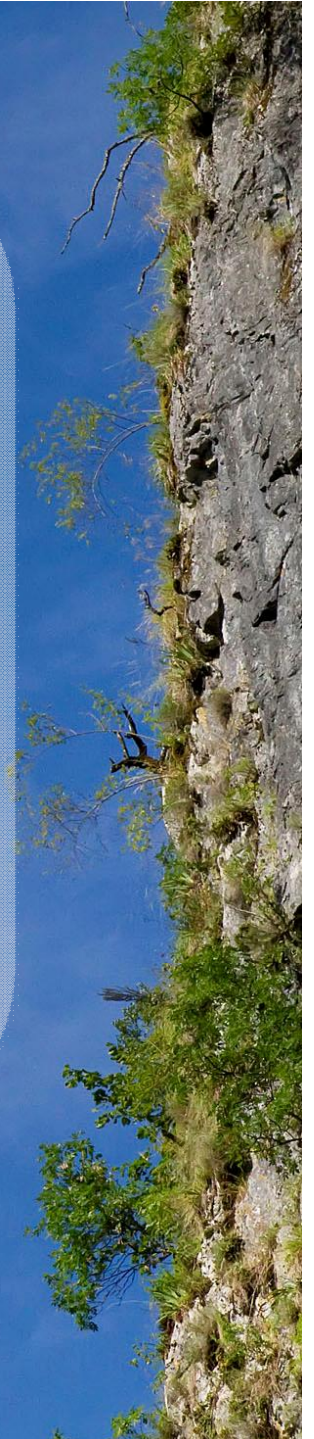


Ask them...

- Pečjak-Mazda rx8 (conversion)
- Potokar-Vectrix,
- Bernard-Tesla roadster
- Pirc-Tazzari zero
- Krnc-Aixam
- ANDROS-racing on ice
- Zero and Quantya - motocross

Should I buy...

- Economy view
- Ecology view
- Social view

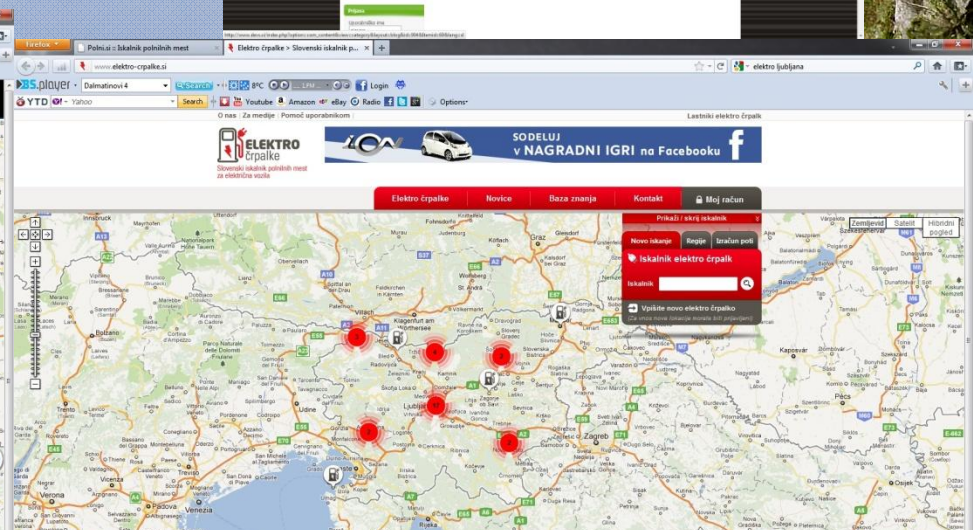
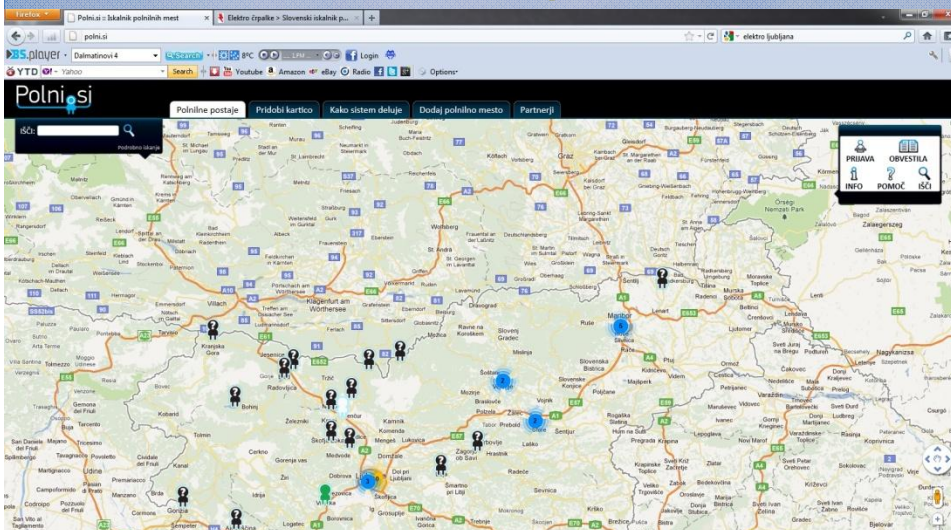
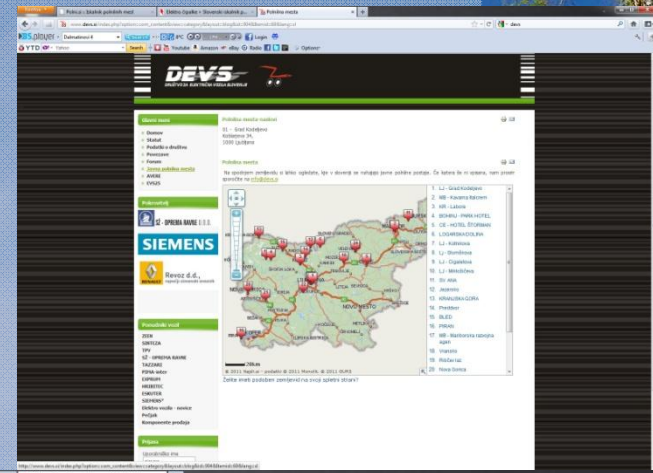


Where can I charge...

❖ Devs.si

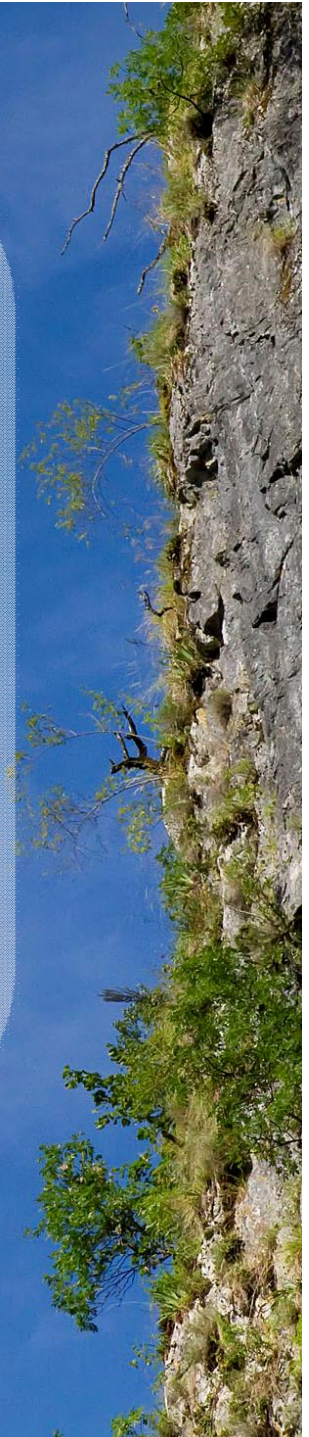
❖ Polni.si

❖ Elektro-crpalke.si



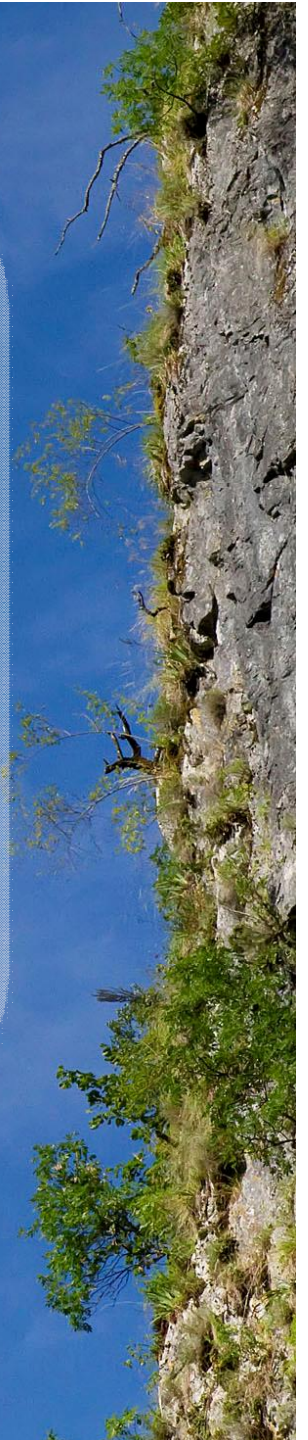
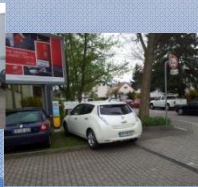
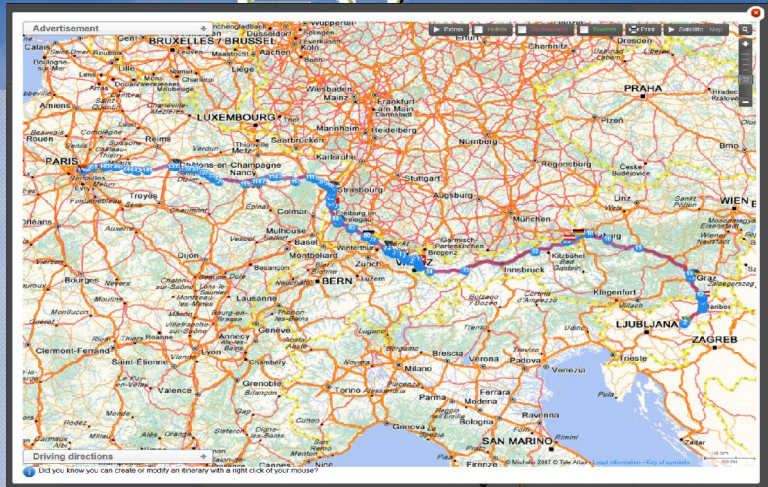
Can I drive from Slovenia to France with

- ❖ Serial produced electric vehicle – Nissan Leaf
- ❖ Single charge range – 150km
- ❖ Availability of charging infrastructure – trip planned
- ❖ with help of Lemnet searcher of charging places (www.lemnet.org)
- ❖ Possibility of fast charging (DC 50kW) as much as possible



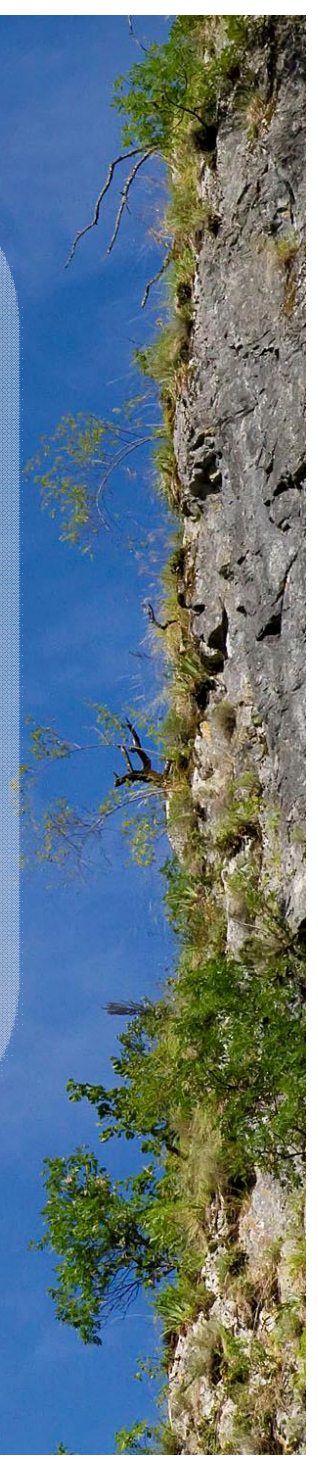
Can I drive from Slovenia to France with

EV



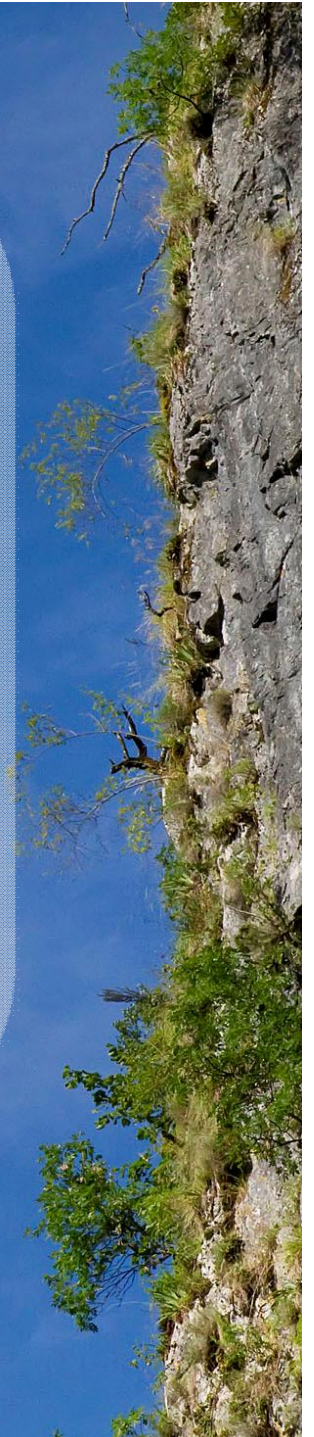
EV user problems

- ❖ Parking places occupied with ICE cars
- ❖ Charging stations not working



EV user problems

- ❖ User identification required – but not available
- ❖ Not enough charging places
- ❖ Very expensive charging in some places



EV user solutions

- ❖ Parking on another place – and using alternative transportation eg. Scooter, bicycle...
- ❖ Using high quality charging stations
- ❖ Smart placement of charging stations



Design...

- Is



Design...

- Could be



Public transport

- Train, bus



Questions





Thank you,

Simon Čretnik

simon.cretnik@siemens.com

info@devs.si