



Ole esimeste seas!
TEEL TULEVIKKU



Be the first on the road to the future

ELMO - Estonian
Electromobility
program 2011-2013

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About Estonia and its way to smart society

BACKGROUND



ESTONIA



Member of EU
2004



Member of NATO
2004



Member of OECD
2010



Member of EURO
2011

1,3M inhabitants, largest city. Tallinn 0,4M inhabitants
GDP per capita \$19,375 (PPP), GDP total \$25,7B
Independent since 1918, occupied by Soviet Union 1941-1991

Short overview

ELMO

ESTONIAN ELECTROMOBILITY PROGRAMME



Goals of the ELMO program

Long term vision

Estonian private transportation is green and economically sustainable

Long term goals

- Reduce emissions of the private transportation
- Raise the awareness about green transportation alternatives with focus on electric vehicles

Short term goals

- Remove the barriers from the electric vehicle market uptake in Estonia

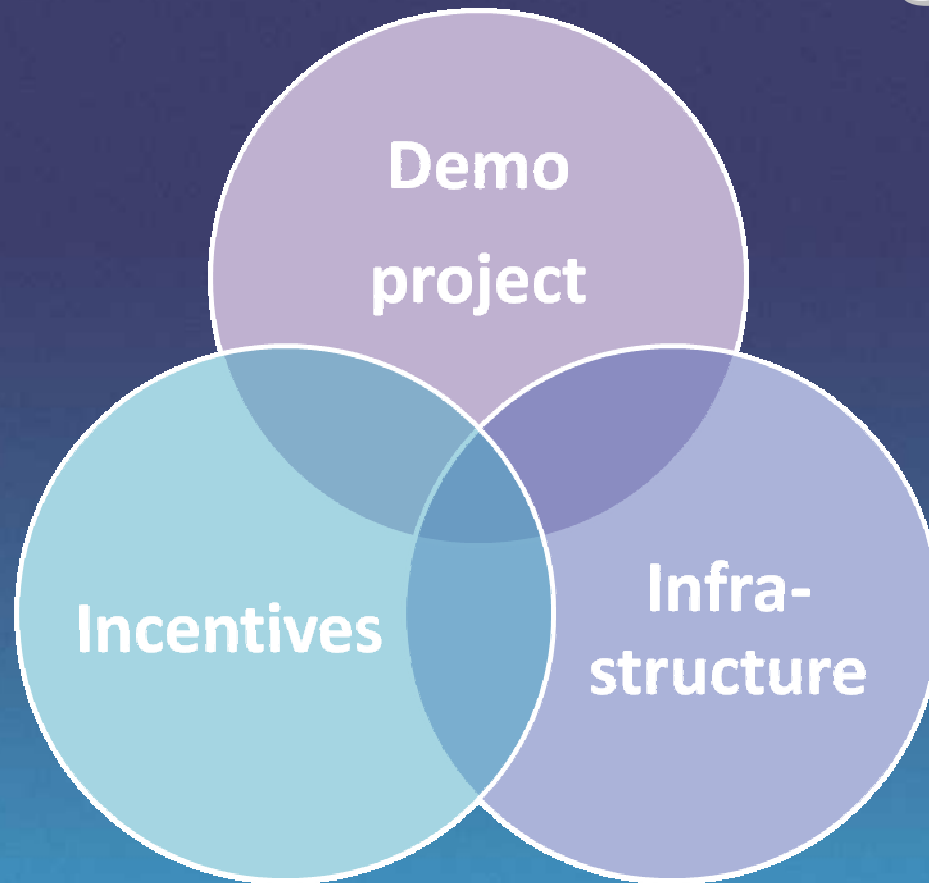
Our partner in EV program: Mitsubishi Corporation

Global emission trade
to support the eco-
innovation

Estonia sells
10m AAUs of CO2
emission quota to
Mitsubishi Corp to
finance electromobility
program



Fitting the pieces together for the future of electric cars



1. DEMO PROJECT

507 x

FOR SOCIAL WORKERS
AROUND ESTONIA



Mitsubishi iMievs in action



Photos: Bianca Mikovitš, Maaleht

2. INCENTIVES

-50%



Max 18 000 EUR PER CAR,

NO BRAND RESTRICTIONS, FOR PRIVATE AND COMMERCIAL
BUYERS, UNTIL THE END OF 2012

+ 1000EUR FOR MODE3 HOME CHARGER

3. FAST CHARGING INFRASTRUCTURE



Our strategy

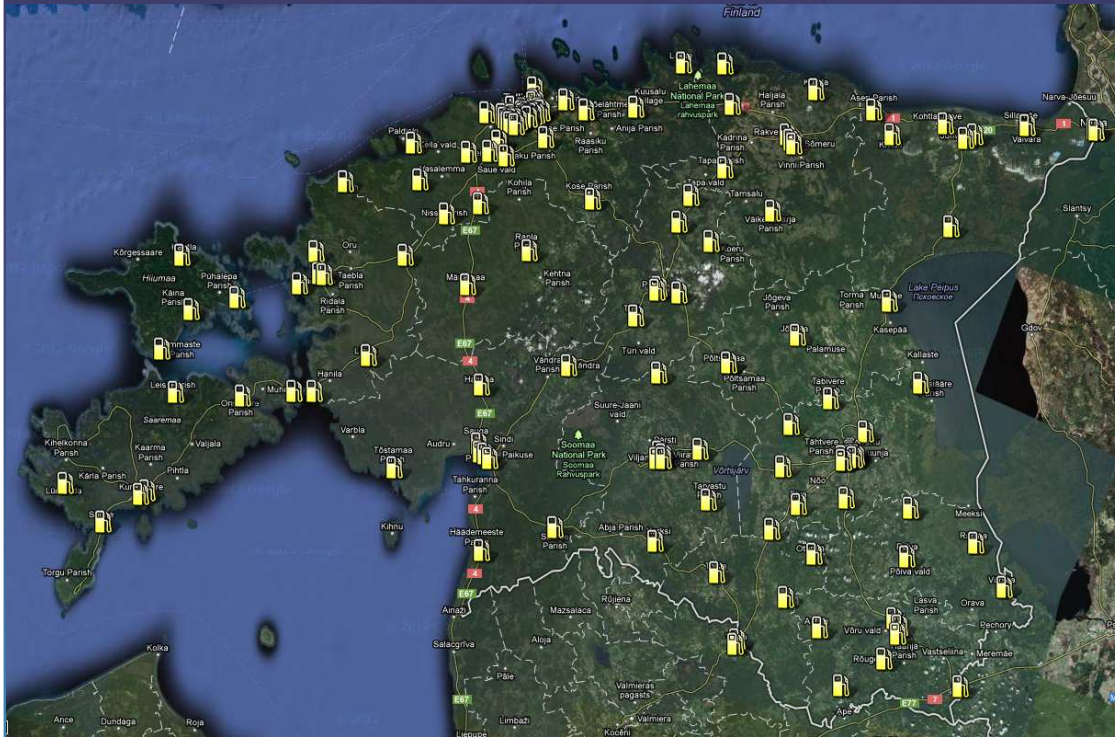
Priority

deal with range anxiety of the first users

Solution

- Country wide network of ultra fast quick chargers (ca 200 DC chargers)
- 24/7 world class and innovative service
- Standards: follow the cars (CHAdeMO)

Why ultra fast quick charging?



Nobody wants to wait hours to charge a car

Less locations → less costs, less problems

More cars per charger per day than any other solution

Estonian quick charger network

Innovations in execution

1. Government procures full infrastructure solution at once

- **Assets:** chargers and operating system
- **Services for 5 years:** maintenance, business, customer support
- **Single operator system**

2. Government negotiates locations and high power connections at once and centrally

- Easier to plan and execute

CONCLUSION ABOUT ELMO PROGRAMME

Estonia as a role model

- We are supporting the early adopters, **creating a market demand**
- We provide **large scale demonstration** of EVs
- Estonia made a bold choice to build up **ultra fast charging network**
- Single operator single network management system – **new business model test**

FUTURE OF CHADEMO IN EUROPE

CHAdEMO – what is it?

Industry standard?

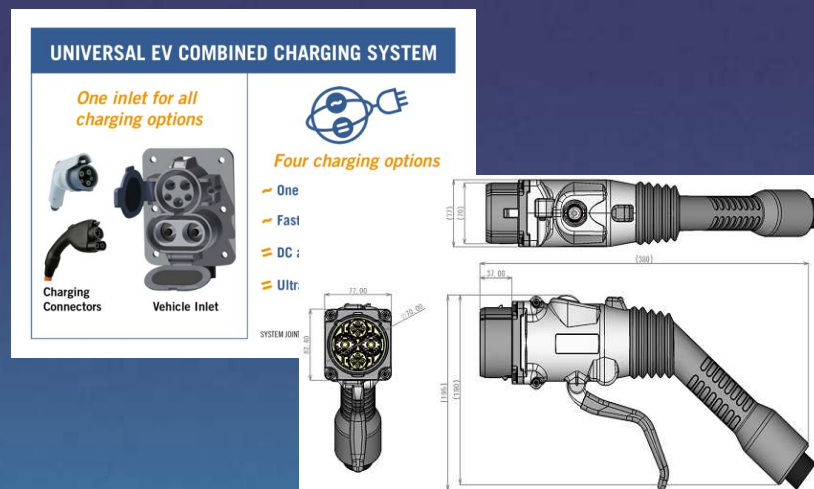
- Not quite
- But the most popular technology platform at the moment
- Basic agreement to get everything started
- No intrinsic business value (today)

Cornerstone for electromobility?

- More than a standard – ecosystem of electric mobility developed globally
- Very promising at the moment
- BUT needs a **stronger vision and strategic approach**
- **Real business value**

So what the world needs now?

Standards



- Yes - to build compatible systems
- No – technology is in a rapid development process, **don't stop innovating!**

Eco-system platforms

- Electromobility cannot be built without eco-system approach!
- Eco-system is a mix of interdisciplinary technologies and services
- Look for successes!
 - Android platform
 - iOS platform

What kind of CHAdeMO world needs?

- Strong vision and strategy
- Eco-system oriented
- Excellence in R&D, development of services etc.
- Large industry innovation backing + community support
- Truly global approach

www.elmo.ee

www.estonia.eu



Estonia.eu

Official gateway to Estonia

Questions and answers

THANK YOU!

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