ECV Final Seminar & Nordic Electric Bus Initiatives 2
Helsinki, 11 – 12 May, 2016

Venue: Finpro auditorium, Porkkalankatu 1, 00180 Helsinki

Provisional programme

DAY 1 – 11.5.2016
Possibility for 1.25 h Visits to Tapiola fast charging and VTT: 11:00 and 17:15.

TECHNICAL SESSIONS (auditorium)

8:30 – 12:30 Registration open
8:30 – 9:00 Coffee
9:00 – 9:10 ECV Final Seminar, welcome and opening address – Mikko Pihlatie & Jouko Suokas, VTT
9:10 – 9:30 Electric vehicle systems and related businesses – Martti Korkiakoski, Tekes EVE

9:30 – 10:30 Session 1: Electric and hybrid working machines (Chair J. Pippuri, VTT)
   ○ Full-scale series hybrid mining loader with zonal hydraulics, P. Sainio, Aalto
   ○ Virtual platform for mobile machinery hybridisation, J. Nokka, LUT
   ○ Kalmar fast charge, electrification in ports, H. Häggblom, Cargotec

10:30 – 11:00 Coffee break
11:00 – 12:00 Session 2: Electric drive and powertrain solutions (Chair J. Pyrhönen, LUT)
   ○ Electric city bus energy flow model, P. Rahkola, VTT
   ○ Evaluation of hybrid and electric powertrains in mobile machinery, K. Tammi, Aalto
   ○ Visedo powertrain solutions, K. Rauma, Visedo

12:00 – 13:00 Lunch break
13:00 NEBI2 opening and welcome note, Mikko Pihlatie, VTT & Svend Söyland, NER
13:15 – 14:15 Session 3: Energy storage technologies and applications (Chair K. Tammi, Aalto)
   ○ Lifetime of Li-ion batteries, P. Vie, IFE
   ○ Modelling batteries for mobile applications, A. Hentunen, Aalto
   ○ Lithium-ion batteries for mobile applications, A. Väyrynen, Leclanché

14:15 – 15:15 Session 4: Power grid aspects (Chair K. Kauhaniemi, UVA)
   ○ Electric vehicles in electricity grids, A. Rautiainen, TUT
   ○ Electric vehicle controlled charging, V. Tikka, LUT
   ○ Smart grid integration of eBus charging infrastructure, J. Karppinen, Helen

15:15 – 15:45 Coffee break
15:45 – 17:15 Session 5: Electric bus charging technologies (Chair S. Kukkonen, VTT)
   ○ Heliox charging systems, B. Bouhuijs, Heliox
   ○ High power charging systems by Ekoenergetyka, M. Wojenski, Ekoenergetyka
   ○ Fundamentals of electric bus charging, J. Mäkinen, ABB
19:30 -> Conference dinner (pre-registration required)
Electric bus transfer from hotel Holiday Inn and Hotel Presidentti at 19:00

**DAY 2 – 12.5.2016**

**Possibility for 1.25 h Visits to Tapiola fast charging station and VTT at: 08:00 and 16:45.**
**Enrolment: conference info desk. Visitors to VTT: bring a photocopy of your passport.**

**TECHNICAL SESSIONS (auditorium)**

09:00 – 10:20 Session 6: System design and services (Chair: S. Söyland, NER)
- Towards standardisation of electric bus charging, T. Raitaluoto, VTT
- Feasibility of electric buses in public transport, O. Vilppo, TUT
- Building effective electric bus systems, A. Grauers, Chalmers Univ. Of Technology
- Vattenfall as a charging point operator, S. Hurtig, Vattenfall

10:20 – 10:50 Coffee break

10:50 – 12:30 Session 7: Electric bus technologies (Chair: P. Sainio, Aalto)
- Future moves with Linkker technology, S. Ruotsalainen, Linkker
- Presentation by Volvo, M. Broback, Volvo
- Electric buses by VDL, S. Ojamo
- Electric buses by Solaris, R. Sekowski, Solaris
- Presentation by Hybricon, R. Åkerlind, Hybricon

12:30 – 13:30 Lunch break

13:30 – 14:45 Session 8: Electric vehicle systems operation, on-going demonstrations (Chair: J. Laurikko, VTT)
- ZeEUS – UITP electric bus flagship, initial results, P. Bruge, UITP
- Electric bus R&D platform, results from commercial electric buses, T. Halmeaho, VTT
- City of Copenhagen experience with electric buses, M. Krogsgaard, City of Copenhagen
- ElectriCity experiences and results, J. Elsren, Västtrafik

14:45 – 15:15 Coffee break

15:15 – 16:45 Session 9: Roll-out strategies and procurement (Chair: M. Pihlatie, VTT)
- Nordic best practices for electric bus procurement, M. Krogsgaard, city of Copenhagen
- Consequences from operating fully electric buses in a city, how to scale up?, Fredrik Forsell, city of Umeå
- Helsinki region transport, from pre-commercial pilot to roll-out, R. Mäkinen, HSL
- Procurement of the charging infrastructure for Helsinki ebus piloting and beyond, A. Lähdetie/H. Stam, City of Helsinki, Helsinki City Transport
- Wrap-up: how to proceed to commercial roll-out? (HSL, Copenhagen, Helsinki, Umeå, UITP)

16:45 – 17:00 Concluding remarks, closing of the conference – VTT, NER