

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.

Enrolment: conference info desk. Visitors to VTT: bring a photocopy of your passport.

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

- Electric bus charging by Siemens, K. Kilpinen, Siemens
- Opbrid charging solutions, R. Bedell, Opbrid

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