



26th **ESV 19**
NETHERLANDS

FIELDTRIP C

VDL ETS		
Address: Veste 9-11, Valkenswaard		
Contact:	Menno Kleingeld	Managing Director VDL ETS
	Ruud Bouwman	Lead Engineer
	Hans Lammers	RDW host
	Jan Sybren Boersma	Fieldtrip coordinator ESV

General information

Title	New Fuel, new hazards? <i>Electrification, Batteries, Hydrogen Fuel Cells.</i>
Beschrijving	<p><i>Electrification, Batteries, Hydrogen Fuel Cells. New Fuel, new hazards?</i></p> <p>Initiated by the desire for more environmental friendly transport, the internal combustion engine is getting serious competition from alternative power-train concepts. Electric powertrains are the best alternative in the near future.</p> <p>The new department ETS (Enabling Transport Solutions www.vdlets.nl) of the company VDL in Valkenswaard develops heavy duty e-mobility solutions for public transport solutions and e-trucks with high power battery-charging and hydrogen fuel-cell technology. The scheduled trips of public transport bus operators and transport companies offer good possibilities to balance energy capacity and charging power.</p> <p>You will be invited to the production and development department of VDL in Valkenswaard. The visit has a focus on the electric busses that are currently developed for customers. In a 45 minute presentation VDL development engineers will explain the design decisions for the high voltage systems in the vehicles and charging stations from a safety perspective. In the other 45 minutes session you will have a detailed demonstration of three applications with different charging systems, including the hydrogen fuel cell technology. We aim on maximum of 30 participants per group (3x10 for the demonstration) in order to have interactive sessions.</p> <p>VDL ETS is part of VDL Groep, an international industrial family business headquartered in Eindhoven, The Netherlands, with over 100 operating companies, spread throughout 20 countries, with more than 17,000 employees. The VDL companies break down into four divisions: Subcontracting, Car Assembly, Buses and Coaches and Finished products.</p>
Duration	14:00 – 17:00 / 17:30
Max. # participants	2 x 30 persons
Transport	A VDL bus with a hydrogen range-extender will pick up a maximum of 60 people at the Evoluon.
Schedule	<p>June 13th, 2019</p> <p>14:00 departure from Evoluon (Travel time 30 minutes)</p> <p><i>Beginning in the restaurant, short introduction of ESV and then VDL continues with the sessions.</i></p>

	<p>14:30 General introduction 14:45 Session 1 (40 min) 15:25 Break (coffee) 15:40 Session 2 (40 min) 16:20 End of program Back to Evoluon and hotels by bus 17:00 Expected arrival time at the Evoluon . The bus stops, afterwards, also at the hotels.</p>
Website	www.vdlets.nl
Sessions	
Session 1	Presentation of electrification technology and safety aspects (40 min)
Session 2	Visit to three different solutions in three parallel small groups (3x 10 min and 10 min for changing)
Practical information	
Dress Code	Flat shoes are required. The visit will be both indoors as well as outdoors. It is an active production facility, outside the lanes only with safety shoes.
Access	<p>The location has limited public transportation access. On-site parking is also minimal, it is therefore recommended that you take the shuttle bus from the Evoluon. The location is unfortunately poorly accessible for handicapped (absence of elevator to the presentation room).</p>