



The UIC Energy Efficiency and CO2 Emissions Experts Network is happy to invite you to take part in the next workshop "The End of Fossil Fuels" that will be held on 13 November 2019 in Zürich.

IMPORTANT NOTE: AN ENERGY AND CO2 NETWORK MEETING WILL FOLLOW THE WORKSHOP THE DAY AFTER (ON 14 NOVEMBER) IN THE SAME LOCATION FROM 9H TO 15H. PARTICIPATION IS RESTRICTED TO UIC MEMBERS (PLEASE CONTACT [PHILIPPE STEFANOS](#) FOR ANY INFORMATION).

BACKGROUND

Following the previous Workshop on Infrastructure Managers' Role in Traction Energy Transition; This workshop will focus on the projects developed by every stakeholder to push Rail to full decarbonisation of the traction energy and to highlight alternatives to diesel traction. Thus, this workshop will also focus on the Hydrogen fuelling and battery charging innovations and their best combination with the railway network and rolling stock.

WORKSHOP HIGHLIGHTS

11h – 17h, Lunch 12h35, Coffee break 15h25.

- 10:40 - Signing in
- 11:00 - Workshop starts: welcome and introduction
- Biofuels
- Future trains & alternatives for electrification
- Energy storage
- Tools to decide strategic technology orientations
- Government point of view
- Questions and discussion

VENUE

SBB AG

Human Resources – Bildung SBB
Bildungszentrum Region Ost
Hohlstrasse 532
8048 Zürich
Switzerland

REGISTRATION

To register for the workshop, please follow the link below:

<https://events.uic.org/the-end-of-fossil-fuels>

AGENDA

Time	Session/Topic	Speaker	Item
10:40	<i>Sign in reception at SBB Hohlstrasse 532 Zürich</i>		
11:00	Welcome	Matthias Rücker, SBB Host of the workshop	00
11:05 10'	Introduction Diesel traction, context	Philippe Stefanos, UIC	01
11:15 20'	Biofuels: Use of biofuel and the prospects of shift from diesel locomotives in Russian Railways	Boris Ivanov, RZD	02
11:15 20'	Biofuels Testing of alternative fuels with DB's advanced TrainLab	Mario Lichtenberg, DB	03
11:55 20'	Future trains: Battery trains, EMUs with onboard energy storage	Martin Priessnitz and Thomas Gerstenmayer, ÖBB	04
12:15 20'	Hydrogen	André Philippe Chamaret, SNCF	05
12:35	Lunch		06
13:55 20'	Future trains, continued: Phasing out fossil fuels	Klaus Vestner, DB	07
14:15 20'	Zero Emissions Solutions	Stephen Oommen, Norwegian Railway Directorate	08
14:35 20'	Energy Storage Center of Competence Energy Storage – what, why and how	Ueli Kramer, SBB	09
14:55 20'	Sharing battery benchmark/experience/use cases to boost railway production (replacement to closed diesel lines)	André Philippe Chamaret, SNCF	10
15:15 10'	Discussion	All	11
15:25	Coffee break		12
15:45 20'	Tools/Methods to decide technology to implement Cost / Benefit analyses of different alternatives	Bart Van der Spiegel, Infrabel UIC Energy and CO ₂ Network's Chairman	13
16:05 20'	OPEUS – Shift2Rail energy simulation tool for rolling stock	Tony Letrouvé, SNCF	14
16:25 20'	Overview Challenges and obstacles, perspective	Gerald Olde Monnikhof, ProRail, UIC Energy and CO ₂ Network's Chairman	15
16:45 10'	Questions and discussions about all the topics	All	16
16:55	Discussion - Conclusion		17
17:00	End of the day		