

Webinar on New Energy Carriers in Road Tunnels

20-21 October 2021
(two afternoon sessions)

Program (maybe subjected to changes)



Organised by
PIARC, ITA-COSUF, and Dutch Knowledge Platform Tunnel Safety (KPT)



ITA COSUF
Operational Safety of
Underground Facilities



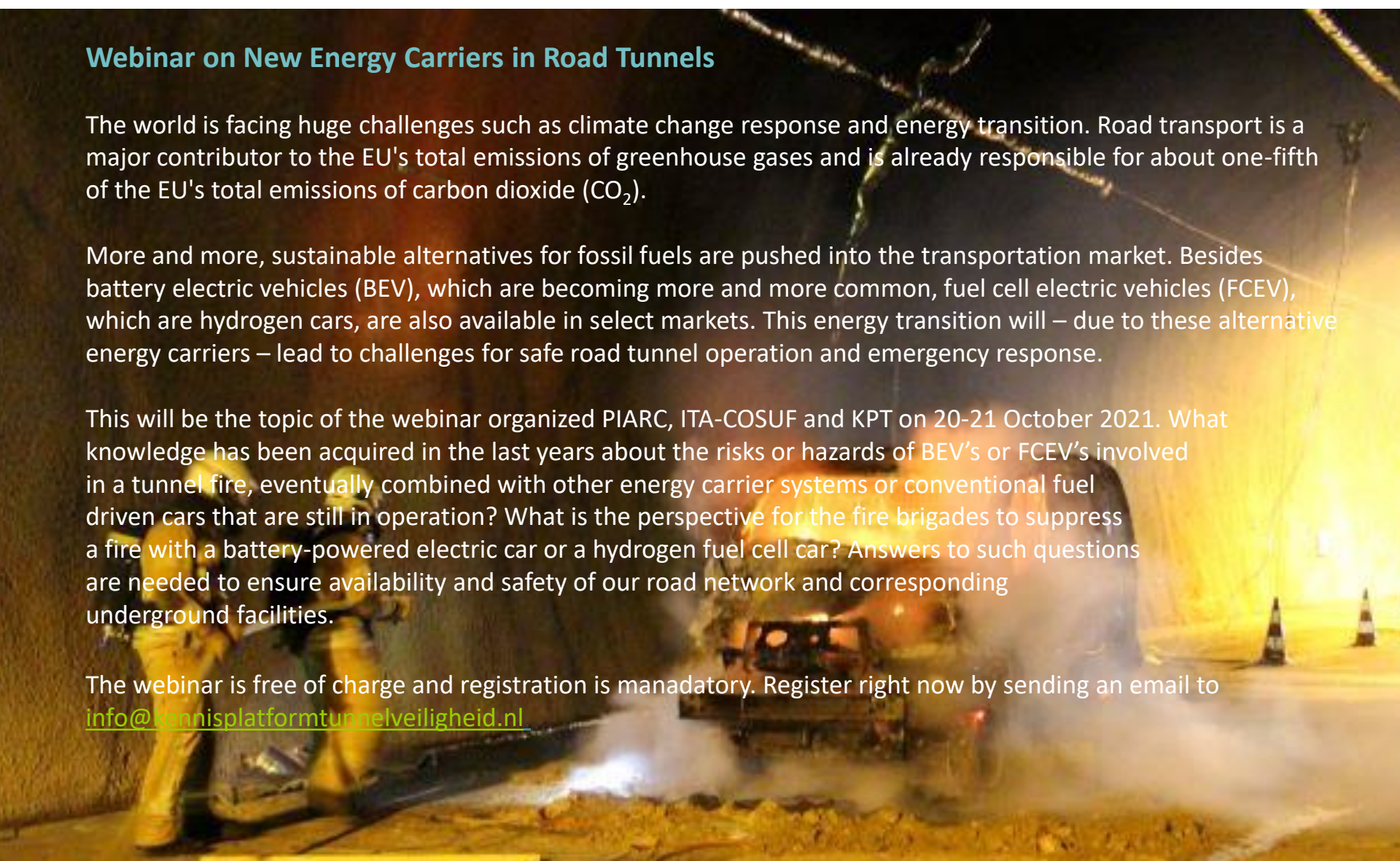
Webinar on New Energy Carriers in Road Tunnels

The world is facing huge challenges such as climate change response and energy transition. Road transport is a major contributor to the EU's total emissions of greenhouse gases and is already responsible for about one-fifth of the EU's total emissions of carbon dioxide (CO₂).

More and more, sustainable alternatives for fossil fuels are pushed into the transportation market. Besides battery electric vehicles (BEV), which are becoming more and more common, fuel cell electric vehicles (FCEV), which are hydrogen cars, are also available in select markets. This energy transition will – due to these alternative energy carriers – lead to challenges for safe road tunnel operation and emergency response.

This will be the topic of the webinar organized PIARC, ITA-COSUF and KPT on 20-21 October 2021. What knowledge has been acquired in the last years about the risks or hazards of BEV's or FCEV's involved in a tunnel fire, eventually combined with other energy carrier systems or conventional fuel driven cars that are still in operation? What is the perspective for the fire brigades to suppress a fire with a battery-powered electric car or a hydrogen fuel cell car? Answers to such questions are needed to ensure availability and safety of our road network and corresponding underground facilities.

The webinar is free of charge and registration is mandatory. Register right now by sending an email to info@kennisplatformtunnelveiligheid.nl





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October 20st 2021: Webinar on New Energy Carriers in Road Tunnels

13:00 Walk in and opening words (representatives ITA COSUF, KPT, PIARC)

Keynote lecture

13:30 Presentation concerning expected fleet distribution related to power trains requested (to be confirmed)

Wednesday session: A look into today's landscape

14:00 Dimitry Makarov (Ulster University), Vladimir Molkov, Preliminary results from the HyTunnel-CS project

14:25 Felix Haberl (Volvo Powertrain), Development of powertrains for heavy duty vehicles up to 2040 – R&D strategy of Volvo-Mercedes trucks

14:50 **Break-out**

15:10 Patrik Föbtleitner, Peter Sturm (TU Graz), BRAFA project – results from fire tests of BEVs – fire characteristics and extinguishing techniques

15:30 Haukur Ingason (RISE), RISE research on gas containers exposed to fires

15:55 Wrap-up/closing remarks (PIARC and or ITA COSUF)

16:00 **End of day 1**



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October 21st 2021: Webinar on New Energy Carriers in Road Tunnels

13:00 Walk in and opening words (representatives ITA COSUF, KPT, PIARC)

Keynote lecture

13:30 Rémi Berger (CARA), New energies, trends, developments, opportunities and future prospects

Thursday session: A look out for the future

14:00 Ola Willestrand (RISE), RISE research on fires in Evs

14:25 Christoph Willmann (Cetu/INERIS), New Energy Carriers in tunnels - additional risks for users- consolidated results

14:50 **Break-out**

15:10 *To be filled in (Presentations and/or Panel discussion)*

15:55 Wrap-up/closing remarks (PIARC and or ITA COSUF)

16:00 **End of day 2**



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More information on organizing partners

PIARC – For more information about publications on safe tunnel operation and other activities, please visit www.piarc.org

ITA-COSUF – For more information or to become a member please visit www.ita-cosuf.org

KPT – the website www.kennisplatformtunnelveiligheid.nl of the Knowledge Platform Tunnel Safety is available in Dutch only.

Registration

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