

24.10.2023 ZERO EMISSION KNOWLEDGE

Agenda

Introduction Evert de Jong (ECTA)

2. - Legislation and Directives

- Implications and Standards, incl. ISO 14083

- Hydrogen Use Cases in Transport

Adriaan van Hoeken (Lhyfe.com)
Christophe Dubruque (Lhyfe.com)

3. Q & A / Panel

Adriaan van Hoeken (Lhyfe.com) Christophe Dubruque (Lhyfe.com Luc Haesaerts (Haesaerts) Evert de Jong (ECTA), moderator

4. Closing remarks

Evert de Jong (ECTA)



Meeting rules

- 1. Do's and dont's no commercial contents, reminder of EU Competition Law requirements
- 2. Because of the high number of participants, we request all (except for the speakers / panel members) to communicate via the chatbox of the meeting.
- 3. Please all mute your microphones and block your cameras to facilitate a smooth meeting and ensure the best connectivity during the meeting.

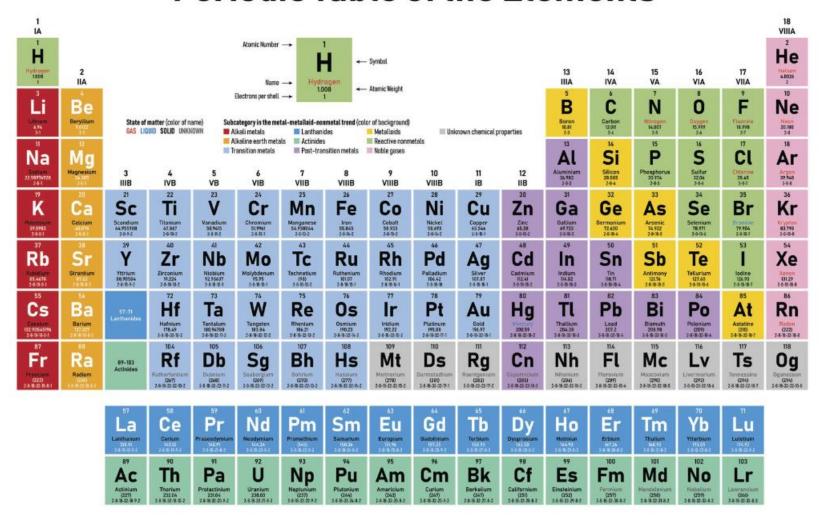


Disclaimer

- 1. The documents referred to in this presentation (e.g. Standards, directives, and their derived documents) may be further developed/changed in the near future. You are advised to check with latest versions, final published documents to make sure you have to correct information to base your system on.
- 2. ECTA webinars have an advisory nature. We do not provide any solutions how to implement specifically in your own organization, nor can we take any responsibility for the choices you make.



Periodic Table of the Elements





THE COLORS OF HYDROGEN

GREEN

Hydrogen produced by electrolysis of water, using electricity from renewable sources like wind or solar. Zero CO₂ emissions are produced.

PURPLE/PINK

Hydrogen produced by electrolysis using nuclear power.

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BLUE

Hydrogen produced from fossil fuels (i.e., grey, black, or brown hydrogen) where CO₂ is captured and either stored or repurposed.

TURQUOISE

Hydrogen produced by thermal splitting of methane (methane pyrolysis). Instead of CO₂, solid carbon is produced.

GREY

Hydrogen extracted from natural gas using steam-methane reforming. This is the most common form of hydrogen production in the world today.

BROWN/BLACK

Hydrogen extracted from coal using gasification.

YELLOW

Hydrogen produced by electrolysis using grid electricity from various sources (i.e., renewables and fossil fuels).

WHITE

Hydrogen produced as a byproduct of industrial processes. Also refers to hydrogen occurring in its (rare) natural form.

https://aeclinic.org/aec-blog/2021/6/24/the-colors-of-hydrogen



Presentation

- Legislation and Directives
- Implications and Standards, incl. ISO 14083
- Hydrogen Use Cases in Transport

by Adriaan van Hoeken (Lhyfe) Christophe Dubruque (Lhyfe)



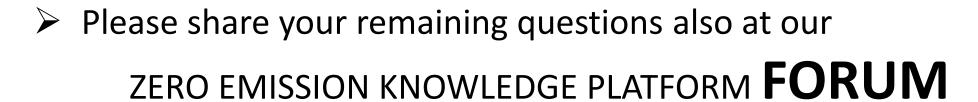
Q & A

with Adriaan van Hoeken (Lhyfe)
Christophe Dubruque (Lhyfe)
Luc Haesarts (Haesaerts)
Evert de Jong (ECTA) - moderator



Thanks for your participation in this webinar.

May I also bring to your attention:





Our Annual Meeting in Dusseldorf on 16 Nov. 2023

registration: https://ecta.com/product/ecta-annual-meeting-2023/