

Methodology for the development of microgrid solutions for the acceleration of hydrogen mobility



březen 2025

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NÁZEV PUBLIKACE

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PROJEKT

Národní centrum vodíkové mobility (TN02000007)

ZPRACOVATEL

Centrum dopravního výzkumu, v. v. i. (CDV)

AUTOŘI

Vojtěch Přikryl (CDV)

Methodology for the development of microgrid solutions for the acceleration of hydrogen mobility

21. 3. 2025, Mezinárodní odborná konference **HydrogenDays 2025**

Program (21. 3. 2025)

day)	21 March 2025 (Friday)
SCIENTIFIC PART – SUN I HALL	
09:00–10:15	PARALLEL BLOC I Cross Cutting Issues (Education & Safety aspects)
10:15–10:30	COFFEE BREAK
10:30–12:00	PARALLEL BLOC II Decentralized H ₂ value chain <i>Chair: Martin Prokop (UCT Prague)</i> 10:30–10:50 Independent power supply for decentralized energetics <i>Lukáš Polák (ÚJV Řež)</i> 10:50–11:10 Low cost modular AEM electrolyser assembly <i>Jan Valha (Valcon)</i> 11:10–11:30 Hydrogen and graphene-like carbon production via microwave plasma (bio)methane pyrolysis <i>Jafar Fathi (Institute of Plasma Physics, CAS)</i> 11:30–11:50 Methodology for the development microgrid solutions for the acceleration of hydrogen mobility <i>Vojtěch Příkryl (Transport research centre)</i>

O konferenci**HydrogenDays** 2025

Organized by



INFORMATION

PROGRAMME

ABSTRACTS

GUIDELINES FOR AUTHORS

REGISTRATION

ACCOMMODATION

AWARDS

PARTNERS & EXHIBITORS

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AUSPICES

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HYDROGEN DAYS conference is an excellent frame for updates on hydrogen policies and strategies as well as hydrogen and fuel cell technologies and represents the best setting to show the latest advances in research, projects, and products in the Czech Republic, Visegrad regions, and Central Europe.

Conference topics**1. Development and deployment in the energy sector**

- hydrogen production, hydrogen storage, energy storage, infrastructure, co-generation systems, sector coupling, etc
- fuel cells, reversible fuel cells, etc.
- business cases, market implementation, etc.

2. Development and deployment in transportation

- fuel cells as an energy source for mobile applications, power trains based on hydrogen combustion, combined systems, etc.
- forklifts, personal cars, trucks, buses, ships, trains, etc.
- hydrogen infrastructure, etc.

3. Cross cutting and overarching issues

- education & information, legislation & safety, reliability, certification, grid integration, etc.
- market introduction, business cases, hydrogen valleys etc.
- cooperation possibilities, European policies and national strategies etc.
- decarbonization potential
- green hydrogen policy

Více na <https://www.hydrogendays.cz/2025/pages>

Fotodokumentace

Ukázky z prezentace

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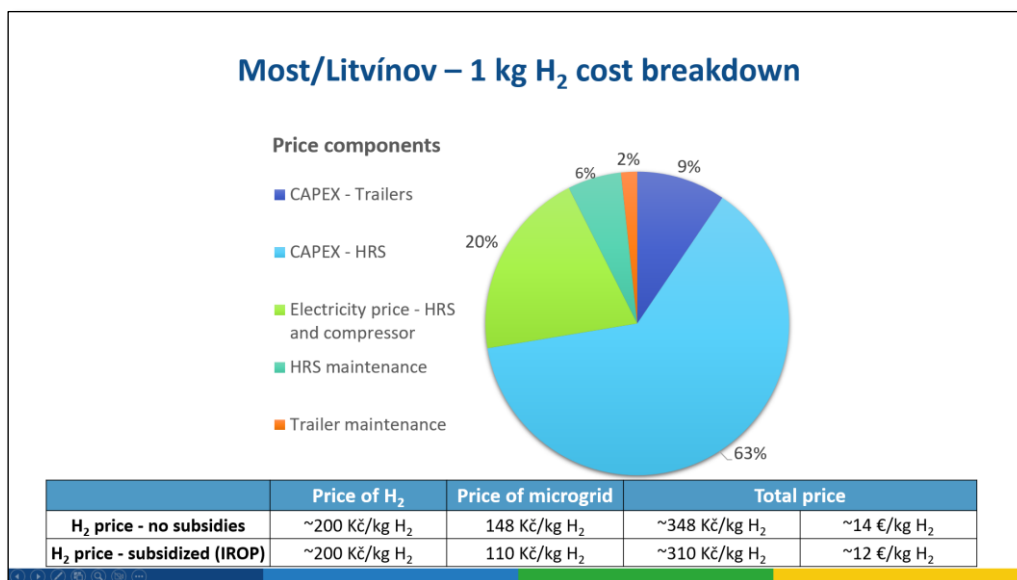
Program **Národní centra kompetence**

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Vojtěch Přikryl

Hydrogen Days 2025



Liberec – variants

Variant at PVE

- Transported with 2 pairs of AB-Roll containers
- Containers work as the HRS storage

Variant at HRS

- No transport
- Electricity network fees
- Placement of electrolyser

	Variant at PVE		Variant at HRS	
H ₂ price - no subsidies	906 Kč/kg H ₂	36 €/kg H ₂	749 Kč/kg H ₂	30 €/kg H ₂
H ₂ price - subsidized (OPD+Greengas)	527 Kč/kg H ₂	21 €/kg H ₂	470 Kč/kg H ₂	18 €/kg H ₂
H ₂ price - subsidized (IROP+Greengas)	651 Kč/kg H ₂	26 €/kg H ₂	594 Kč/kg H ₂	23 €/kg H ₂