

# Evropska Vanguard iniciativa in vodik

## Vanguard Initiative (VI) and its pilot Hydrogen

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# VANGUARD INITIATIVE:

- 39 European innovative regions (also Slovenia); discuss common objectives and find **complementarities**;
- map and better understand regions' industrial competencies and capabilities (**smart specialisation**);
- develop joint strategic action plans (building critical mass and **complementary specialisations**);
- align strategic investments arising from these roadmaps;
- better support **start-ups and SMEs** in their innovation process;
- make the process of **matchmaking** between promising SMEs and start-ups more efficient and effective.

# VANGUARD METHODOLOGY:

- The Vanguard Initiative has implemented an innovative methodology for developing concrete results that is deployed by all the Pilot Projects.
- The methodology consists of four subsequent phases:
- ***learn, connect, demonstrate, commercialise.***

# VANGUARD PILOTS:

- BIO Economy
- Efficient and Sustainable Manufacturing (ESM)
- 3D Printing
- Energy Related Projects in Harsh Environments
- NANO Products
- AI
- Smart Health/Personalised Medicine
- Hydrogen (H<sub>2</sub>)

# VANGUARD H2 PILOT:

- Standardisation of Hydrogen Pipelines and Vessels in Hydrocomp (Malopolska)
- H2 Networks and Portfolios (Lombardia)
- Replacement of Fossil Fuels for Hydrogen in Industrial Processes (Friuli Venezia)
- H2 in Shipping (Slovenia)



# CLEAN H2 PARTERSHIP:

- Objavljen je razpis Partnerstva za čisti vodik za zbiranje predlogov za raziskave na področju vodika, ki bodo podprle razvoj vodikovih tehnologij v celotni vrednostni verigi vodika.
- Razpis obravnava ključne prednostne naloge, ki so opredeljene v strateškem raziskovalnem programu 'Skupnega podjetja' Čisti vodik (Clean Hydrogen JU) na različnih področjih raziskav in inovacij, ki imajo neposreden in merljiv učinek na doseganje ciljev 'Skupnega podjetja' Čisti vodik.
- Razpis je odprt do 17. aprila. Člani lahko dobijo več informacij tudi na SBRA.

# H2 AND HORIZON:

## HORIZON-JTI-CLEANH2-2024 – Hydrogen research call for proposals

[Spletna stran razpisa](#)

Rok prijave: 17.04.2024

•This call supports projects focused on the development of hydrogen technologies across the whole hydrogen value chain. It addresses key priorities within different areas of research and innovation, with direct and quantified impact towards the achievement of the objectives of the Clean Hydrogen JU.

Twenty topics are available: HORIZON-JTI-CLEANH2-2024-01-01: Innovative proton conducting ceramic electrolysis cells and stacks for intermediate temperature hydrogen production;

- HORIZON-JTI-CLEANH2-2024-01-02: Advanced anion exchange membrane electrolyzers for low-cost hydrogen production for high power range applications;
- HORIZON-JTI-CLEANH2-2024-01-03: Development of innovative technologies for direct seawater electrolysis;
- HORIZON-JTI-CLEANH2-2024-01-04: Development and implementation of online monitoring and diagnostic tools for electrolyzers;
- HORIZON-JTI-CLEANH2-2024-01-05: Hydrogen production and integration in energy-intensive or specialty chemical industries in a circular approach to maximise total process efficiency and substance utilisation;
- HORIZON-JTI-CLEANH2-2024-02-01: Investigation of microbial interaction for underground hydrogen porous media storage;
- HORIZON-JTI-CLEANH2-2024-02-02: Novel large-scale aboveground storage solutions for demand-optimised supply of hydrogen;
- HORIZON-JTI-CLEANH2-2024-02-03: Demonstration of hydrogen purification and separation systems for renewable hydrogen-containing streams in industrial applications;
- HORIZON-JTI-CLEANH2-2024-02-04: Demonstration of innovative solutions for high-capacity, reliable, flexible, and sustainable hydrogen compression technologies in commercial applications;
- HORIZON-JTI-CLEANH2-2024-02-05: Demonstration and deployment of multi-purpose Hydrogen Refuelling Stations combining road and airport, railway, and/or harbour applications;
- HORIZON-JTI-CLEANH2-2024-03-01: Balance of plant components, architectures and operation strategies for improved PEMFC system efficiency and lifetime;
- HORIZON-JTI-CLEANH2-2024-03-02: Scaling-up Balance of Plant components for efficient high power heavy duty applications;
- HORIZON-JTI-CLEANH2-2024-03-03: Next generation on-board storage solutions for hydrogen-powered maritime applications;
- HORIZON-JTI-CLEANH2-2024-03-04: Demonstration of hydrogen fuel cell-powered inland or short sea shipping;
- HORIZON-JTI-CLEANH2-2024-04-01: Portable fuel cells for backup power during natural disasters to power critical infrastructures;
- HORIZON-JTI-CLEANH2-2024-04-02: Improved characterisation, prediction and optimisation of flame stabilisation in high-pressure premixed hydrogen combustion at gas-turbine conditions;
- HORIZON-JTI-CLEANH2-2024-05-01: Guidelines for sustainable-by-design systems across the hydrogen value chain;
- HORIZON-JTI-CLEANH2-2024-05-02: Development of non-fluorinated components for fuel cells and electrolyzers;
- HORIZON-JTI-CLEANH2-2024-06-01: Large-scale Hydrogen Valley;
- HORIZON-JTI-CLEANH2-2024-06-02: Small-scale Hydrogen Valley.

Opis:



ORGANISED BY:



H2 PITCHING AND  
MATCHMAKING EVENT

# STRENGTHENING HYDROGEN ECOSYSTEM THROUGH CROSS- REGIONAL COLLABORATION AND INNOVATION

EVENT ORGANISED AS PART  
OF THE **KEY. THE ENERGY**  
**TRANSITION EXPO**



 1 MARCH 2024 | 11.30

RIMINI FIERA, VIA EMILIA 155, RIMINI (IT)

# H2: RIMINI 1st March 24:

As part of the European *Vanguard Initiative* network, Pilots Hydrogen and ADMA Energy are pleased to invite you to participate to the "**H2 Pitching and Matchmaking**" event taking place during the [KEY-Expo 2024](#) that will be held in Rimini on the **1<sup>st</sup> of March 2024**.

## Event Description:

The event is dedicated to leading European hydrogen SMEs, providing them with an opportunity to **pitch their innovative hydrogen projects** to other companies and key stakeholders from different EU regions to establish meaningful connections and new collaboration opportunities.

## Event Details:

**Date:** 1st March 2024 at 11.30

**Location:** KEY - The energy transition expo | [Rimini Fiera, Via Emilia 155, Rimini \(IT\)](#)

**Focus:** Presentation of innovative projects in the hydrogen sector and networking with industry leaders: the aim is to develop new EU-funded projects.

**Instruction for pitches:** 5 minutes pitch through 3 slides (please use the template attached):

1. Proposing organization (name, location) and topic/subject (note that only **TRL6+** projects will be considered, with a commercialization perspective)
2. Activities/Partners: current/missing (partners, activities, technologies) and key activities of your innovation investment project
3. Overall total project costs and funding needs (estimates) and why publicly supported investment is needed

**Confirmation of Participation:** If you wish to participate in the event and/or present your project, please confirm by 7<sup>th</sup> February by emailing [f.guarrasi@energycluster.it](mailto:f.guarrasi@energycluster.it) and [stefano.valentini@art-er.it](mailto:stefano.valentini@art-er.it) with the filled ppt attached.

**Travel Voucher:** Companies that will physically attend Rimini will be granted an expense reimbursement of 200 euros depending on availability.

# Core Activities

- **EU PROJECTS in all respect!!!**
- **Informing** members on economic developments, with a renewed focus on EU projects, programs and funds. A weekly scan of news, relevant calls, events, publications, etc. – disseminated via weekly e-news bulletin. Additional, bimonthly news bulletin regarding the economy.
- **Partner Search** – besides informing members of relevant EU programs and projects, we actively strive to find and search for relevant partners and potential project consortia.
- **Training** – preparing workshops and study trips for its members
- **Networking** – Secretariat of Network of European Financial Institutions for Small and Medium Sized Enterprises (**NEFI**), membership in **IGLO** (Informal Group of RTD Liaison Offices), **ERRIN** (European Regions Research and Innovation Network), **UnILiOn** (Universities Informal Liaison Offices Network), **Vanguard initiative** (regional network for promoting regional innovation ecosystems) and **ENDR** (Network of Defence Related Regions).
- **Promotional** events, publishing reports and organizing conferences. Publication **MOST** allows us to widely disseminate our members' achievements.

The collage features several key publications and news items:

- Policy Notebook**: A monthly bulletin covering EU policy updates, such as the President of the European Research Council in Slovenia and the Slovenian economy's growth in 2019.
- Most**: A magazine titled 'Most of the Slovenian Economy & Research Association', featuring articles on EU projects and economic trends.
- LifeWatch**: An international research network focused on water quality and environmental monitoring.
- HORSE**: A collaborative research and innovation project in the horse industry.
- Green Capital**: A project aimed at making Ljubljana a more sustainable and green city.

**Naslovne novice**  
Letošnji Dnevni regiji in mest bodo triletni dogodeki  
Med 1500 inovatorji, ki so prijavili na razpis za rešitve krize COVID-19, so tudi Slovenci

Letošnji Dnevni regiji in mest bodo namreč letni dni trgati tri informacije, Organizatorji so se tako odločili, kar v tedni dni zaradi omejitve stikov po pandemiji novega koronavirusa ni moglo izvesti 500 dogodkov, saj so došli več kot enkrat več prijav za partnerstva kot lani. Večino dogodkov bodo izvedli prek spleta. Ključni politični dogodki (med njimi dialog z državljani, politični nagrad Registerja) so predvideni kot kombinacija fizične in spletne izvedbe. Razstave in z njimi povezane razprave bodo organizirani v fizični obliki. Člani lahko dobijo več informacij na SBR A.

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Naš nacionalni Slovene Research Institute for Innovation & Technology (SRI) je bil ustanovljen leta 2017. Njegov cilj je podpreti razvoj in inovacije v Sloveniji. SRI je bil ustanovljen leta 2017. Njegov cilj je podpreti razvoj in inovacije v Sloveniji. SRI je bil ustanovljen leta 2017. Njegov cilj je podpreti razvoj in inovacije v Sloveniji.

**SBRA Gospodarske e-novice**  
LETNIK 1, ŠTEVILKA 6 – 26. JUNIJ 2020

**njega o učinkih tujih denarcev na enoletnem trgu**

**Razpis projekta DIGI-B-CUBE za mala in srednja podjetja**

Ogibjen je razpis projekta DIGI-B-CUBE za prijavo malih in srednjih podjetij, ki želijo sodelovati v mrežarskih projektih za razvoj izdelav za covid-19. Priljubljenosti podjetje vključno z novimi zagonskimi podjetji lahko ožbi neposredno finančno pomoč v višini do 60 tisoč evrov s področja zdravstva, biotehnologije, biofarmacije, informacijske tehnologije, robotike, avtomatizacije, elektronske in nanotehnologije. Prvi oziroma prvi dve letnici 23. julija, drugi pa 3. februarja 2021.

**Evropska komisija je predstavila evropski program znanj in spretnosti**

**Pomisleki Evropskega računskega sodišča glede porabe evropskih sredstev za podnebne ukrepe**

**evropass**  
Komisija je predstavila evropski program

**Evropsko računsko sodišče**  
Evropska komisija se je zavezala, da bo v

ključ za inovacije bo podpiral  
Septembra bodo zagnali enajst

# Thank you!

## Slovenian Business & Research Association

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