





**Online Partner-Event** 15. - 19. Nov 2021

# **European Gas** and Energy **Research and** Innovation Days

Hosted by



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### **European Gas and Energy Research and Innovation Days**

ERIG is organizing an online partner event "European Gas and Energy Research and Innovations Days" at gat|wat 2021.

During one week from Nov 15<sup>th</sup> – 19<sup>th</sup> you will have the opportunity to participate in the online conference and the thematic deep dives as well as the virtual fair.

This years event is taking a closer look at the role of Power-to-Gas in the regional context, hydrogen tolerence and metrology and is hosted by the current ongoing leading european projects on these topics.

Participate and get to know leading european research and industry activities that are featured with guest contributions, in-depth discussions and on the virtual fair.

All visitors of gat|wat 2021 fair and conference have access to this event.

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Conference Registration total price 30€

Use the "Exhibition Attendance" option to participate in this event – select "online" and "GAT"



### The three major features of the event



#### **VIRTUAL FAIR**

for open networking and exchange

Provides a chance for all visitors to interact with the featured organisations in the virtual fair and access nomerous project pitches in the "Open Stage" library.

### DEEP DIVE WORKSHOPS

for specific detailed topics

Parallel closed and open two hour workshops. All visitors can participate in open workshops. The closed workshops are inteded for approximately 5-7 contributors to make substantial progress to the benefit of all participants



#### **ONLINE CONFERENCE**

for the overarching issues

One day each for:

- The integration of Power to Gas in a regional context
- The progress of hydrogen tolerance of the gas infrastructure
- Addressing the challenges of hydrogen handling & metrology

## What is gat | wat 2021?

The annual congress gat|wat is the leading event of the energy associations in Germany, BDEW and DVGW.

#### It includes participants from

- · Public utilities
- · Industrial enterprises and manufacturers
- $\cdot$  Service providers
- · Engineering firms

It is expected to be attended by more than 500 managers, decisionmakers, governmental representatives, researchers and water and energy engineers.

#### **Extencive Online Platform**

The gat|wat 2021 online platform will be open from October 25<sup>th</sup> to December 12<sup>th</sup>, 2021. Visitors have the opportunity to join the virtual fair for 7 weeks. In addition, there are 8 online events and several on demand videos within the platform. The "European Gas and Energy Research and Innovations Days" are a fully integrated virtual part of this event.







10/25/2021 Online platform starts					12/12/2021 Online platform ends
	ON	LIVE & ONLINE	ONLINE		
October 27 <sup>th</sup> , 2021 14:30 - 17:00	November 3 <sup>rd</sup> , 2021 14:00 - 17:00	November 9 <sup>th</sup> , 2021 14:30 - 17:00	November 15 <sup>th</sup> , 2021 14:30 – 17:00	November 24 <sup>th</sup> – 25 <sup>th</sup> , 2021	December 3 <sup>rd</sup> , 2021 9:00 – noon
Conference ticket Efficiency: Best practices	Conference ticket Biomethane	Conference ticket Research for Hydrogen	All tickets Innovation forum for the water industry	Conference ticket In Cologne and as live stream	All tickets Roadmap Gas 2050
				gat	
	November 5 <sup>th</sup> , 2021 13:00 – 15:30	November 11 <sup>th</sup> , 2021 13:30 – 17:00	November 15 <sup>th</sup> - 19 <sup>th</sup> , 2021 · 9:00 - 16:30	wat	
	Conference ticket	Conference ticket	All tickets	All tickets	
	Methane emissions	Hydrogen readiness	European Gas and Energy Research and Innovation Days	Exhibition in Cologne and virtual	
			Hosted by		
		SUPER		HySte Meterleger for Advanced Hydroger Storage Selutions	

Virtual fair from October 25th – December 12th, 2021



## **European Gas and Energy Research and Innovations Days programme overview**

	SUPER 200* MefHyStø Hydrogen in Gas Grids MefHyStø				
	15th Nov Opening Day – National research and European approach	16th Nov P2G in the regional context Day	17th Nov H2 tolerance of the gas infrastructure Day	18th Nov H2 Handling and Metrology Day	19th Nov Closing Day –Review, summary and outlook
Morning Session	<ul> <li>09:00 - 12:00 · Conference</li> <li>Opening by ERIG President, Dr Linke</li> <li>Keynote by EU Commission, N.N. (tbc)</li> <li>Keynote by H<sub>2</sub> Network North Rhine Westphalia, Dr Kattenstein</li> <li>Highlight research relating to ERIG Country Members</li> </ul>	09:00 - 12:00 · Conference • Opening by SuperP2G coordinator, Prof Marie Münster, DTU • Keynote by ERA-NET, Frederik Lundström, Swedish Energy Agency • Keynote by EVIDA, Peter Kristensen • The business case for P2G - HEAVENN and SuperP2G • SuperP2G region WiVA P&G and the Potential for H <sub>2</sub> for Industry - JKU-Linz • Panel discussion	09:00 – 12:00 · Conference • Opening by HIGGS coordinator, Dr Vanesa Gil, FHA • Keynote by Hydrogen Europe Research, Luigi Crema • Keynote by ENSTOG, Thilo von der Grün • <b>Hydrogen in the transport grid –</b> <b>HIGGS and H2 Backbone</b> • <b>Hydrogen in gas utilisation –</b> <b>THyGA</b> • <b>Panel discussion</b>	09:00 - 12:00 · Conference · Opening by MefHySto coordinator, Dr Michael Maiwald, BAM · Keynote by European · Metrology Network Energy Gases, Annarita Baldan · Keynote by Open Grid Europe, Tobias van Almsick · Hydrogen metrology and underground storage - Gasunie and MefHySto · Hydrogen metrology and refueling stations - H <sub>2</sub> Mobility · Panel discussion	09:00 - 12:00 · Conference • Reflections from the ERIG Research Community • Summary and review of the Deep Dives • Summary and review of the conference by SuperP2G, HIGGS and MefHySto
Lunch	12:00 - 13:00	12:00 - 13:00	12:00 - 13:00	12:00 - 13:00	
Afternoon Session	<ul> <li>13:00 - 15:00</li> <li>Further highlight research relating to ERIG Country Members</li> <li>Panel discussion with the leading scientists of the ERIG Community</li> </ul>	<ul> <li>13:00 - 15:00 · Deep Dive</li> <li>Focus on: Allocation, size and operation of P2G in the future energy system</li> <li>Focus on: Economics of power-to-gas: Imports and offering flexibility</li> </ul>	<ul> <li>13:00 - 15:00 · Deep Dive</li> <li>Focus on: <ul> <li>Legal, regulatory and</li> <li>technical aspects of H<sub>2</sub></li> <li>admixing</li> <li>Techno-economic modelling</li> <li>and validation, enablers and</li> <li>interoperatibility H<sub>2</sub>/NG</li> <li>grids</li> </ul> </li> </ul>	<ul> <li>13:00 - 15:00 · Deep Dive</li> <li>Focus on: Online ppb - Quality influence along the value chain</li> <li>Focus on: Equations of State for H<sub>2</sub> and related mixtures (closed Workshop)</li> </ul>	
Virtual Fair & Open Stage	10:00 - 16:30 Continuous	9:00 – 16:30 Continuous	9:00 – 16:30 Continuous	9:00 - 16:30 Continuous	

Organized by:



ERIG is an European non-profit organisation based on research to foster the role of gas and innovative gas technologies in the future energy system in synergy with the intermittent renewable energy production. ERIG members represent national technical and scientific gas organisations and associations.



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**SUPER** DTU ERIG Prode ebi ENERGIE Green Ħ INSTITUT ALMA MATER STUDIORUN UNIVERSITA DI BOLOGNI This project has received funding in the framework of 瀫/  $\square$ Smart the joint programming initiative ERA-Net Smart Energy DBI 🖁 Energy Systems' focus initiative integrated, Regional Energy Systems Consiglio Nazional delle Ricerche Systems, with support from the European Union's ERA-Net Horizon 2020 research and innovation programme under grant agreement No 775970



AeffyStø Metrology for Advanced Hydrogen Storage Solutions

