



20 - 24 November 2023
Brussels, Belgium
 euhydrogenweek.eu



The programme at a glance

	20.11.2023		21.11.2023		22.11.2023		23.11.2023		24.11.2023
AM			High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	Online sessions
PM	High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	High Level Policy Conference (Hall11)	B2B Forum (Hall 7)	Online sessions
evening	HE Winter Market		Expo Drinks Reception		Clean H2 Partnership +H2 Europe Research Awards				
EXPO	Expo (Halls 7 and 11)		Expo (Halls 7 and 11)		Expo (Halls 7 and 11)		Expo (Halls 7 and 11)		

The programme in detail

MONDAY, 20.11.2023 OPENING DAY

What/Where	HIGH-LEVEL POLICY CONFERENCE Hall 11, Main Auditorium	B2B FORUM Hall 7, B2B Auditorium
13:00-14:00	REGISTRATION & NETWORKING	
14:00-15:00	<p>Session 1: Hydrogen and the global challenges ahead</p> <p>The United Nations, under the Paris Agreement, set a 1.5°C increase limit to global temperature rise and decided to move away from fossil fuels. The EU has joined this objective and committed to ambitious pathways to decarbonise its economy. Hydrogen is one of the highly promising and fast developing solutions to achieve this, however there are many challenges we must address first. Setting the right policy frameworks, enable sustainable business models with the proper funding and financing opportunities while re-skilling the workforce and building an international hydrogen market being only the tip of the iceberg. It is not just an evolution, but the fourth global industrial revolution that we are undergoing. Stakeholders are aware that this transition requires massive upfront investments and that all energy intensive industries will be challenged to their core.</p>	<p>Session 1: Regulation, code & standards: A guidebook into hydrogen trade</p> <p>There are many policy and regulatory developments worldwide, yet clear rules, standards and certification processes are needed for the ramp up of the hydrogen ecosystem globally. In this session, we will lay the ground for a global hydrogen trade guidebook and investigate the use of digital tools to facilitate such trade in light of those policy developments.</p>
15:00-16:00	BREAK	
16:00-17:00	<p>Session 2: Storing clean hydrogen in Europe</p> <p>The REPowerEU strategy adopted by the European Commission in 2022 sets out the ambition to produce 10 million tonnes of renewable hydrogen by 2030. Such goal requires a massive effort from the whole sector, including technology scale up in</p>	<p>Session 2: Financing the global hydrogen ecosystem</p> <p>With global demand for clean hydrogen set to reach 500-680 mt by 2050, catalysing investments in third countries to support the development of the hydrogen value chain is key. While enabling policy frameworks remain necessary to provide</p>

	hydrogen production, transport infrastructure and storage. Hydrogen long-term seasonal storage addresses the variability of renewable energy, improves grid flexibility, and supports a transition to a sustainable and balanced power system. Its ability to store large amounts of energy over extended periods makes it valuable for a reliable, resilient, and decarbonized energy system.	market clarity for investors, instruments such as concessional and blended finance to reduce the green premium, de-risking tools to attract private capital and technical assistance to improve bankability of projects are necessary to accelerate the uptake of green hydrogen in these countries. This session will address financing tools and approaches to European and International Finance Institutions (IFIs) collaboration with third countries to bridge the investment gap and support the uptake of green hydrogen globally.
17:00-18:00	END	
18:00-20:00	HYDROGEN EUROPE WINTER PARTY IN THE EXPO AREA	

TUESDAY, 21.11.2023 DAY 2

What/Where	HIGH-LEVEL POLICY CONFERENCE Hall 11, Main Auditorium	B2B FORUM Hall 7, B2B Auditorium
09:00-10:00	REGISTRATION & NETWORKING	
10:00-11:00	<p>Session 3: The Hydrogen Bank</p> <p>The Hydrogen Bank will establish a full hydrogen value chain in the EU. This new scheme will aim at supporting hydrogen production in the EU and at facilitating imports of hydrogen and derivatives from third countries. The Bank can be a great opportunity to enable hydrogen projects get off the ground in a competitive way helping to reach the ambitious targets for the sector. While the first auction for domestic production will open at the end of this year with a €800 million budget, some key questions remain to be answered: will projects be allowed to cumulate state aids that they also receive? Will non-price criteria be elaborated too for the selection? What will be the role for low-carbon hydrogen? How will Member States and existing EU structures be involved? This session will investigate how the scheme should be designed and further deployed.</p>	<p>Session 3: Clean Hydrogen Monitor 2023</p> <p>Hydrogen Europe proudly presents its yearly Clean Hydrogen Monitor. This session will cover the main aspects of the 2023 edition: The current hydrogen market in Europe, clean hydrogen pricing, the industry ambitions for both production and consumption of clean hydrogen as well as updates on European legislation, and an overview of some of the most relevant national policies. This year's monitor will also include a perspective on the role of some critical raw material markets in the clean hydrogen economy, electrolyser manufacturing capacity, updates on infrastructure deployment, and insights into fuel cell rollout in mobility.</p>
11:00-12:00	NETWORKING BREAK	
12:00 - 13:00	<p>Session 4: Scaling up electrolysers manufacturing</p> <p>Electrolysers are one of the main pillars of the EU's net zero strategy to decarbonise by 2050. Under the REPowerEU strategy, the EU committed to produce 10Millions Tons of renewable hydrogen by 2030, requiring some 120 GW of electrolysers to be installed within this decade. Currently, the EU has a world-level competitive edge on electrolysis, being capable of manufacturing electrolysers and their related components with the highest standards on efficiency, reliability, and sustainability. Still, in the fast-paced world of clean technologies, Europe could easily lose its leading position to international competitors, such as China and the US, as it already happened in the past for</p>	<p>Session 4: Sector coupling and hydrogen storage: the role of hydrogen in future energy systems</p> <p>Hydrogen technologies are fundamental for sector integration as they can allow the coupling and more efficient operation of gas, electricity, and heat networks, while also enabling their decarbonisation. Considering the increased share of renewables in the power system and the associated challenges, this session focuses on the integration of gas and electricity systems, looking at the benefits and challenges that hydrogen storage has for the power and industrial sectors.</p>

	<p>other sectors. With the proposed Net Zero Industry Act, as reaction to the USA's Inflation Reduction Act, Europe is trying to tackle this risk, but will it be enough to ensure its competitive edge? What are the main challenges faced by the industry? Do we have the right skills and the right funding mechanisms? And what about further supply shortages such as critical raw materials?</p>	
13:00-14:00	NETWORKING BREAK	
14:00-15:00	<p>Session 5: Ensuring a resilient EU hydrogen supply chain through the Green Deal Industrial Plan</p> <p>The European Green Deal Industrial Plan (GDIP) was presented by the European Commission in February 2023 as a response to the massive USA subsidy scheme for clean technologies and it aims to tackle the EU's green industry scale up challenges, exacerbated by the competition from US and Asia. Industry and policy makers will discuss if these measures are sufficient to maintain and strengthen a strong European value chain for hydrogen. How are the GDIP flagship initiatives helping to tackle the fierce competition from abroad? How can the access to economic support be accelerated? Does Europe have the right set up to establish a strong industry?</p>	<p>Session 5: Deployment of the hydrogen ecosystem: a view from EPCs</p> <p>Following the many legislative measures from the EU, it is now time to look into the practicalities of developing the needed large scale renewable hydrogen projects. If those targets are to be met, the industry needs to tackle a whole range of issues and obstacles including long lead times for electrolyser supplies, new renewable energy developments, permitting, water supply, Power Purchase Agreements and offtake agreements. This session will focus on exactly that, trying to identify the key lessons learned from the ongoing developments.</p>
15:00-16:00	NETWORKING BREAK	
16:00 – 17:00	<p>Session 6: The role of hydrogen in decarbonising road transport</p> <p>It has become clear that there is no silver bullet solution to the decarbonisation of road transport and that all zero emission technologies will have to be deployed to reach the ambitious emission reduction targets and keep us on track for the 1.5 degrees target set in the Paris Agreement. The Alternative Fuels Infrastructure Regulation (AFIR) has finally broken the long-standing chicken-and-egg dilemma between the deployment of infrastructure and the selling of zero emission vehicles: an EU wide network of hydrogen refuelling infrastructure will be in place by 2030. In this light, panellists will discuss the opportunities for hydrogen as an alternative fuel in the road transport sector as well as the remaining outstanding challenges that must be addressed for a successful decarbonisation of the sector.</p>	<p>Session 6: Start up pitched from the H2UB HYDROVERSE</p> <p>H2UB presents 20 of the most innovative and exciting hydrogen start-ups in Europe live on stage. In two exciting pitch rounds, the spotlight will shine on creative minds, problem solvers and game changers who are making a contribution to the ramp-up of the hydrogen economy.</p>
17:00-18:00	END	
18:00-20:00	BOOTH PARTIES IN THE EXPO AREA	

WEDNESDAY, 22.11.2023 DAY 3

What/ Where	HIGH-LEVEL POLICY CONFERENCE Hall 11, Main Auditorium	B2B FORUM Hall 7, B2B Auditorium
09:00 – 10:00	REGISTRATION & NETWORKING	
10:00 – 11:00	<p>Session 7: European hydrogen backbone: the necessary link</p> <p>The creation of a hydrogen infrastructure, based on existing and new assets, is a necessary element in the development of a competitive, liquid, renewable and low-carbon pan-European hydrogen market and a key element in Europe's broader decarbonisation journey. Numerous initiatives demonstrate the industry's determination and commitment to create this necessary link. With new players and customers coming into the market, it is imperative to have a focused policy and clear regulatory framework for the development and construction of hydrogen pipelines, large underground storage sites and terminal at ports for both hydrogen and its derivatives. This session will allow participants to gain insights into the existing ambitious infrastructure plans in Europe.</p>	<p>Session 7: Hydrogen for maritime</p> <p>With the FuelEU Maritime and AFIR finalised, the regulatory framework facilitating the deployment of alternative fuels bunkering infrastructure and their use in the maritime sector is set. Moreover, ports are determined as energy transit hubs facilitating the import, utilisation, and distribution of alternative fuels on the EU market until 2050. Several technologies and fuels have high potential to reduce emission levels, determined by the aforementioned regulative framework. This session will address the decarbonisation of the maritime sector both from technology and market perspectives, including the relevant role played by ports.</p>
11:00-12:00	NETWORKING BREAK	
12:00-13:00	<p>Session 8: The hydrogen import challenge: the strategic role of EU ports</p> <p>To meet hydrogen's import target, infrastructure, regulation, and support mechanisms must be fit for purpose. Many initiatives aim to deliver a framework to ensure international partnerships that can provide a level-playing field, boost welfare and diversify the economy with impacts on world geopolitics. Competition for hydrogen imports, new energy dependencies, and an international market based on common standards are some of the challenges that need to be addressed to seize the opportunities of bringing competitive hydrogen to the European market. A particular attention should be given to ports as they are more and more becoming important hubs which create industrial activities and foster the hydrogen economy.</p>	<p>Session 8: Hydrogen for aviation</p> <p>With an increase in domestic and international travels of passengers and freight, aviation has become the fastest growing source of CO2 emissions in transport. As such aviation accounts for 13.9% of the total emissions from transport. Thus, this sector will need to decarbonize in line with the ETS aviation and ReFuel EU Aviation which includes hydrogen and Sustainable Aviation Fuels (SAF) as alternative solutions. In this session, we will examine how low-carbon and zero-emission fuels and technologies can contribute to the decarbonization of the sector as well as its cost competitiveness.</p>
13:00-14:00	NETWORKING BREAK	
14:00 - 15:00	<p>Session 9: Driving forward EU research and innovation in hydrogen technologies</p> <p>The members of the Clean Hydrogen Joint Partnership will discuss the role and outlook of the partnership, and the main issues shaping EU research and innovation in clean hydrogen technologies. This session will bring together the different perspectives of industry, research and EU policy makers which are closely working together contributing to the European climate neutrality targets.</p>	<p>Session 9: Liquefied hydrogen: the untapped potential?</p> <p>With the objective of importing 10 million most of the talk so far has been on pipelines and ammonia. We shouldn't however forget about the potential of liquefied hydrogen (LH2). Transport and storage of liquefied hydrogen comes with many challenges, but as the recent JRC report has shown, if those challenges can be overcome at scale, LH2 can become both an energy and cost-efficient option for hydrogen delivery. It can also be an attractive fuel option in the maritime, aviation and even long-haul trucking sectors providing 2-3 times higher energy density than gaseous hydrogen. This session will provide an update on the current</p>

		technological readiness of liquefied hydrogen, outstanding challenges, and potential benefits.
15:00 - 16:00	NETWORKING BREAK	
16:00 - 17:00	<p>Session 10: Synergies to increase EU funding impact and boost the hydrogen economy</p> <p>The session will reflect on potential synergies between different public funding instruments to increase their impact and discuss how coordinate efforts can boost and scale up hydrogen technologies across Europe.</p>	<p>Session 10: Hydrogen derivatives</p> <p>Hydrogen derivatives offer a promising solution to facilitate hydrogen trade and fulfil import requirements into the EU. While they often come with additional energy requirements and costs, they also offer an already existing transport and storage infrastructure. Some of these carriers can even be used directly in some applications, which significantly improve the business case. In this session, we will discuss the different types of promising hydrogen carriers and their advantages and challenges both from the technological and the economical points of view.</p>
17:00- 18:00	NETWORKING	
18:00 - 20:00	CHP AND HER AWARDS	

THURSDAY, 23.11.2023 DAY 4

What/ Where	HIGH-LEVEL POLICY CONFERENCE Hall 11, Main Auditorium	B2B FORUM Hall 7, B2B Auditorium
09:00 – 10:00	REGISTRATION & NETWORKING	
10:00 – 11:00	<p>Session 11: Rolling-out and scaling-up Hydrogen Valleys in Europe</p> <p>The European Commission allocated to the Clean Hydrogen Partnership an additional €200 million through REPowerEU Plan, to double the number of Hydrogen Valleys in Europe by 2025. Hydrogen Valleys mark a significant milestone in the establishment of integrated local hydrogen ecosystems. These initiatives not only contribute to sustainable energy solutions but also serve as catalysts for industrial growth and job opportunities. While challenges remain, the adoption of this concept is gaining momentum, driven by shifting perspectives and increased private investments.</p>	<p>Session 11: Start up pitched from the H2UB HYDROVERSE</p> <p>H2UB presents 20 of the most innovative and exciting hydrogen start-ups in Europe live on stage. In two exciting pitch rounds, the spotlight will shine on creative minds, problem solvers and game changers who are making a contribution to the ramp-up of the hydrogen economy.</p>
11:00- 12:00	NETWORKING BREAK	
12:00- 13:00	<p>Session 12: Empowering citizens: building up the skills and knowledge for the new hydrogen economy</p> <p>The hydrogen value chain is expected to employ more than one million people by 2030 and five times as many by 2050. The latest legislative developments add to the pressure to create a European workforce that matches the needs of the growing hydrogen sector. 2023 is the European Year of Skills and many initiatives are being developed to support the reskilling and upskilling of the labour force. This session will closely look into the many activities in place, from the Hydrogen Academy to the</p>	<p>Session 12: Hydrogen production pathways</p> <p>While electrolytic hydrogen production continues to dominate the project pipelines, there are other mature clean hydrogen production pathways. This session will explore the unique situational benefits, resource requirements, and commercial feasibility of high temperature electrolysis, waste-to-hydrogen production, biomass, and methane pyrolysis.</p>

	Skills Strategy and the interconnection to current files as the Net Zero Industrial Act.	
13:00-14:00	NETWORKING BREAK	
14:00 - 15:00	<p>Session 13: Clean Hydrogen Partnership independent scientific advisory workshop part 1 – global technology trends, outlook</p> <p>This session will discuss the main issues shaping global research and innovation in established and emerging clean hydrogen technologies, how to better support R&D to bring down costs and improve performance, including for fuel cells, hydrogen-based fuels and electrolyzers, and synergies and developments in sectors related or competitive to hydrogen technologies.</p> <p><i>As part of its mandate, the Clean Hydrogen Partnership must consider independent opinions and advice from the wider scientific community on the items included in its Strategic Research and Innovation Agenda (SRIA), as well as in work programmes and developments in adjacent sectors.</i></p>	<p>Session 13: Hydrogen for buildings and industrial heat</p> <p>The REPowerEU ambitious hydrogen targets position hydrogen as a key technology for the energy transition, however, many questions remain unanswered on the technological dimension of it. This session will explore what are the hydrogen technologies available to decarbonise buildings and industrial heat, what are their advantages and what are the market barriers they face to be fully deployed in the coming years.</p>
15:00 - 16:00	NETWORKING BREAK	
16:00 - 17:00	<p>Session 14: Clean Hydrogen Partnership Independent scientific advisory workshop part 2 – technology</p> <p>The Clean Hydrogen Partnership contributes to the European climate neutrality goal by developing and scaling up a wide range of hydrogen applications which are currently either less competitive or have a low technology readiness level but are expected to contribute to the 2030 energy and climate targets and most importantly make possible climate neutrality by 2050.</p> <p>This session will address the state of play of technologies development (and R&I activities) on hydrogen production, distribution, storage and end uses, both transportation and clean heat and power, and it will tackle the relevant outcomes of the annual scientific community consultation organised by the Partnership.</p>	END – NO B2B Forum session
17:00-18:00	NETWORKING	

FRIDAY, 24.11.2023 DAY 5 – ONLINE

TBD	Webinar: On the way to COP 28
TBD	Webinar: EastMed