

EUROPEAN HYDROGEN WEEK

29 NOVEMBER – 3 DECEMBER 2021

Hybrid event: The Hotel, Brussels and online

Draft Agenda

DAY 1 Monday, 29 November - HYDROGEN FORUM (*hybrid day*)

Moderator: *Bart Biebuyck, Executive Director Fuel Cells and Hydrogen JU (FCH JU)*

09:30 **SPECIAL ADDRESS** by *Ursula Von der Leyen, President of the European Commission*

Launch of the Clean Hydrogen Partnership (including unveiling of logo) by the European Commission, Hydrogen Europe and Hydrogen Europe Research

Keynote speech by *Jean-Eric Paquet, Director General DG Research and Innovation, European Commission*

Keynote speech by *René Schutte – FCH JU Chair and Hydrogen Europe Board Member*

Keynote speech by *Dr. Fatih Birol, Executive Director of the International Energy Agency*

10:35 **Break**

10:45 **SESSION 1: CLEAN HYDROGEN - ON THE ROAD TO 2050**

Keynote speech by *Kerstin Jorna, Director-General DG Internal Market, Industry, Entrepreneurship and SMEs, European Commission*

Panel discussion with industry and research representatives - will assess the key actions that need to happen for clean hydrogen to make the road to 2050 a success

Moderator: *Hans Van Steen, Adviser for Research and Innovation and Energy Efficiency, DG Energy, European Commission*

Panellists:

Melissa Verykios, Member of FCH JU Governing Board, Deputy CEO of Helbio

Jon Lokke, CEO of Nel and President of Hydrogen Europe

Anke Kaysser-Pyzalla, Chair of DLR Executive Board

Jorgo Chatzimarkakis, CEO Hydrogen Europe

12:00 **Intervention from the Member States**

Frédérique Vidal, Minister of Higher Education, Research and Innovation, France

Jernej Vrtovec, Minister of Infrastructure, Slovenia



12:30 **Lunch break**

14:00 **SPECIAL ADDRESS ON HYDROGEN IN THE GLOBAL DIMENSION**

Frans Timmermans, Executive Vice President of the European Commission for the European Green Deal

14:15 **SESSION 2: HYDROGEN FOR WORLD CLIMATE MITIGATION**

Introductory speech by *Juan Carlos Jobet, Energy Minister, Chile*

Panel discussion on the role of hydrogen in combatting climate change, including within the UN sustainable development goals framework

Moderator: *Clara de la Torre, Deputy Director-General DG CLIMA, European Commission*

Panellists:

Dolf Gielen, Director of IRENA Innovation and Technology Centre, IRENA

Alannah MacTiernan MLC, Minister for Hydrogen Industry, Western Australia

Amund Vik, State secretary, Ministry of Petroleum and Energy, Norway

Thomas Anker Christensen, Climate Ambassador, UN Green Hydrogen Compact

Michael Matheson MSP, Cabinet Secretary for Net Zero, Energy and Transport, Scottish Government

Atanas Pekanov - Deputy Prime Minister for EU Funds Management, Bulgaria

15:15 **SESSION 3: INTERNATIONAL PARTNERSHIPS FOR HYDROGEN**

Introductory speech by *Marjeta Jager, Deputy Director General International Partnerships, European Commission*

Panel discussion on cooperation with other European and international hydrogen-related initiatives

Moderator: *Tudor Constantinescu, Principal Advisor DG Energy, European Commission*

Panellists:

Dr. Sunita Satyapal, Director "Hydrogen Program", Department of Energy, USA, IPHE representative

Eiji Ohira, Director-General NEDO, Japan, Hydrogen Energy Ministerial representative

Anna Krzyzanowska, Adviser, DG Research and Innovation, European Commission, Mission Innovation representative

Timur Gul, Head of Technology Division, IEA, CEM representative

16:15 **Break**

16:30 **Keynote speech** by *Maria da Graça Carvalho, Member of the European Parliament*

16:45 **Video address** by *Birgit Honé, European Committee of the Regions' rapporteur on Clean Hydrogen, Minister for Federal and European Affairs and Regional Development, Lower Saxony*

17:00 **SESSION 4: FROM RESEARCH TO INNOVATION IN SYNERGIES WITH EU MEMBERS STATES, REGIONS AND CITIES**

Introductory speech by *Matthew Baldwin, Deputy Director-General DG MOVE, European Commission, Manager of the Climate Neutral and Smart Cities Mission*

Panel discussion with Member States and Regions representatives on national R&I development strategies, synergies with national and regional funds

Moderator: *Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation, European Commission*

Panellists:

Nienke Homan, Minister, Province of Groningen, Netherlands

Pep Malagrava Rigo, Director General for Energy and Climate Change of the Government of Balearic Islands

Kurt-Christoph von Knobelsdorff, Managing Director, NOW GmbH

Prof. Daria Vladikova, Bulgarian Academy of Sciences

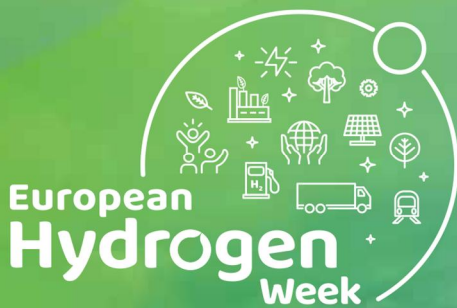
18:00 **Break**

18:15 **AWARDS CEREMONY**

FCH JU Awards introduced by *Bart Biebuyck, Executive Director, FCH JU*

- The **Best Innovation Award** handed over by *Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation, European Commission*
- The **Best Success Story Award** handed over by *René Schutte, FCH JU Chair and Hydrogen Europe Board Member*
- The **Best Outreach Award** handed over by *Bart Biebuyck, Executive Director, FCH JU*

Hydrogen Europe Research "Young Scientists Awards" (below 35 years old) for transport, energy and cross-cutting, introduced and handed over by *Laurent Antoni, President, Hydrogen Europe Research*



DAY 2 **Tuesday, 30 November - EUROPEAN HYDROGEN RESEARCH AND INNOVATION PRIORITIES (hybrid day)**

Parallel sessions of the European Clean Hydrogen Alliance (organised by the European Commission - DG GROW) – fully online, by invitation only

PUBLIC SESSION: EUROPEAN HYDROGEN RESEARCH AND INNOVATION PRIORITIES (hybrid event)

09:30 **Opening address by**
Jussi Manninen, EARTO representative, EVP Carbon Neutral Solutions VTT

09:45 **SESSION 1: BUILDING THE SKILLS FOR A HYDROGEN ECONOMY**

Introductory speech on European Skills agenda by *Manuela Geleng, Director for Skills, DG Employment, European Commission*

Panel discussion on importance of specialised skill acquisition to accompany the rapid growth of the hydrogen economy

Moderator: *Laurent Antoni, President, Hydrogen Europe Research*

Panellists:

Salah Mahdy, Global Director, Hydrogen Business, Howden

Hélène Chraye, Head of Unit Clean Energy Transition, DG Research and Innovation, European Commission

Begoña Arano, Head of Department Marie Skłodowska-Curie Actions & Support to Experts, European Research Executive Agency

Christelle Werquin, General Delegate, France Hydrogène

Ana Nikolov, ICBC Institute Executive Director and Head of AEBR Balkans

11:00 **Break**

11:15 **SMART TALK ON THE HYDROGEN KNOWLEDGE HUB**
Moderator: *Bart Biebuyck, Executive Director, FCH JU*

Participants:

Dirk Beckers, Director, CINEA, European Commission

Alexandru Floristean, Manager Intelligence, Hydrogen Europe

Hélène Chraye, Head of Unit Clean Energy Transition, DG Research and Innovation, European Commission

12:00 **Lunch Break**



13:30 **Introductory speech** by *Mirela Atanasiu, Head of Unit Operations and Communications* on European Clean Hydrogen Partnership's scientific priorities

14:00 **SESSION 2: RENEWABLE HYDROGEN PRODUCTION, DISTRIBUTION AND STORAGE**
Panel discussion on short-term scientific priorities on hydrogen production

Moderator: *Gabriele Centi, Professor University of Messina*

Panellists:

Julie Mougin, Head of Hydrogen Technologies, CEA

Samir Bensaid, Coordinator of the PhD Programme in Chemical Engineering, Politecnico di Torino

Hadi Hajibeygi, Associate Professor, TU Delft

Georgios Mitkidis, Head of Alternative Energy & Renewable Fuel, Motor Oil Hellas

15:00 **Break**

15:15 **SESSION 3: HYDROGEN FOR END USES**

Panel discussion on short-term scientific priorities on hydrogen for transport, heating, cooling and industrial use

Moderator: *Hubert A. Gasteiger, Professor Technische Universität München*

Panellists:

Steffen Møller-Holst, Vice-President, Sintef

Ankica Kovač, Assist. Prof. University of Zagreb

Alexander Dauensteiner, Product Line Owner Fuel Cells, Viessmann

Daria Vladikova, Bulgarian Academy of Sciences

16:15 **CONCLUDING PANEL ON SCIENTIFIC PRIORITIES**

Moderator: *Bart Biebuyck, Executive Director, FCH JU*

Panellists:

Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation, European Commission

Christian Ehler, Member of European Parliament, Member of ITRE Committee

Ann Mettler, Vice President Europe, Breakthrough Energy

DAY 3 **Wednesday, 1 December - EUROPEAN HYDROGEN STRATEGY: ENERGY, TRANSPORT AND STANDARDISATION POLICIES** *(hybrid day)*

9:30 **SESSION 1: SCALING UP TO GW ELECTROLYSERS**

Introductory speech by *Nils Adag, CEO Sunfire*

Moderator: *Stefano Grassi, Head of Cabinet of Commissioner for Energy Kadri Simson*

Panellists:

Jon Lokke, CEO of NEL, President of Hydrogen Europe

Graham Cooley, CEO, ITM Power

Antonino Aricò, Director, Institute of Advanced Energy Technologies - ITAE

Capella Festa, Chief Operation Officer, GENVIA

10:45 **Break**

11:00 **SESSION 2: PORTS AS EUROPEAN AND GLOBAL FACILITATORS**

Introductory speech by *Jacques Vandermeiren, CEO of Antwerp Port Authority*

Moderator: *Tudor Constantinescu, Principal Adviser DG Energy, European Commission*

Panellists:

Reggy Vermeulen, CEO of Port Duqm, Oman

Juan Manuel Diez, Director Strategy and Innovation, Valencia Port Authority

RADM Virgil Chițac, Mayor of Constanța

Bart Biebuyck, Executive Director, FCH JU

12:00 **Keynote speech** by *Kadri Simson, European Commissioner for Energy*

12:15 **Lunch Break**

13:55 **Keynote speech (Video address)** by *Adina Vălean, European Commissioner for Transport*

14:00 **Keynote speech** by *Kris Peeters, Vice-President of the EIB*

14:15 **SESSION 3: DECARBONISING HEAVY-DUTY TRANSPORT**

Introductory speech by *Glenn Llewellyn, VP Zero-Emission Aircraft, Airbus*

Moderator: *Herald Ruijters, Director, DG MOVE, European Commission*

Panellists:

Marc Granger, Chief Strategy Officer, Alstom

Marco Liccardo, Chief Technology & Digital Officer, IVECO

Giuseppe Coronella, EVP & Director Innovation, Fincantieri

Tomas Malango, Hydrogen Director, Repsol

Valerie Bouillon-Delporte, Hydrogen Ecosystem Director, Michelin

Mirela Atanasiu, Head of Operations and Communication, FCH JU

15:15 **Break**

15:30 **SESSION 4: STANDARDS FOR A HYDROGEN ECONOMY**

Introductory speech and moderation by *Joaquim Nunes de Almeida, Director, DG GROW, European Commission*

Panellists:

Paul Hodson, Head of Unit Energy Storage, JRC, European Commission

Françoise van den Brink, Senior Standardization Consultant, NEN

Bernard Gindroz, Vice Chairman of CEN/CENELEC SFEM

Paul Karzel, Head of External Partnerships, LIFTE H2 GmbH

Martin Zerta, Senior Consultant, Ludwig-Boelkow-Systemtechnik – LBST

16:40 **SMART TALK ON HYDROGEN CERTIFICATION**

Bernd Kuepker, Policy Officer Decarbonisation and Sustainability of Energy Sources, DG ENER, European Commission

Katrien Verwimp, Coordinator Sector Integration Energy Certificates, AIB

17:00 **Closing**

FCH JU Programme Review Days 2 – 3 December 2021 Virtual Event

THURSDAY, 2 DECEMBER

09:00 Welcome

Bart Biebuyck, Executive Director, Fuel Cells and Hydrogen Joint Undertaking (FCH JU)

09:05 FCH JU Programme Status

Mirela Atanasiu, Head of Unit Operations & Communication, FCH JU

09:25 FCH JU Projects Portfolio Analysis

Hydrogen Production

Nikolaos Lymperopoulos, Project Officer, FCH JU

Hydrogen Storage and Distribution

Dionisis Tsimis, Project Officer, FCH JU

Transport Applications

Lionel Boillot, Project Officer, FCH JU

Stationary Applications

Antonio Aguilo Rullan, Project Officer, FCH JU

Support for Market Uptake

Alberto Garcia Hombrados, Project Officer, FCH JU

10:35 Joint Research Centre of the European Commission support to FCH JU activities

Pietro Moretto, Deputy Head of Unit Energy Storage, Joint Research Centre

10:45 Break

11:00 Parallel Sessions

Electrolysers for Industrial Application (Part I)
moderated by Nikolaos Lymperopoulos, Project Officer, FCH JU

[HyBalance](#) – *HyBalance*

Jessie Ponce, Air Liquide

[Demo4Grid](#) - *Demonstration of 4MW Pressurized Alkaline Electrolyser for Grid Balancing Services*
Ewald Perwög, MPREIS Warenvertriebs GmbH

[Haeolus](#) - *Hydrogen-Aeolic Energy with Optimised Electrolysers Upstream of Substation*
Elodie Pahon, University Technology Belfort Montbeliard (UTBM)

[Djewels](#) - *Delfzijl Joint Development of green Water Electrolysis at Large Scale*
Rolf Vermeij, NOURYON

Transport Applications and Refuelling Infrastructure
moderated by Lionel Boillot, Project Officer, FCH JU

[H2ME / H2ME 2](#) - *Hydrogen Mobility Europe*

[ZEFER](#) - *Zero Emission Fleet vehicles For European Roll-out*

Lisa Ruf, Element Energy & Victor Lejona, Cenex

[JIVE / JIVE 2 / MEHRLIN](#) – *Joint Initiative for hydrogen Vehicles across Europe*

Madeline Ojakovoh, Element Energy & Dr. Stefan Eckert, Sphera

[Corridor H2 Occitanie](#) – *Green hydrogen for trucks, refrigeration units and coaches*

Raphael Schoentgen, Hydrogen Advisors

12:20 Break

13:00 Parallel Sessions

Electrolysers for Industrial Application (Part II)
moderated by Nikolaos Lymperopoulos, Project Officer, FCH JU

[MultiPLHY](#) - *Multimegawatt high-temperature electrolyser to generate green hydrogen for production of high-quality chemical products*

Julie Mougin, CEA

[GrInHy2.0](#) - *Green Industrial Hydrogen via steam electrolysis*

Simon Kroop, Salzgitter Mannesmann Forschung GmbH

[Testing Protocols for Electrolysers](#)

Alberto Pilenga, JRC

[Scaling-up Electrolysers under Green Deal Call](#)

Dana Dutianu, CINEA

Heavy Duty Transport Applications

moderated by Lionel Boillot, Project Officer, FCH JU

[H2Haul](#) - *Hydrogen fuel cell trucks for heavy-duty, zero emission logistics*

Andrew Flagg, Element Energy & Giovanni Giannelli, H2Energy

[FLHYSAFE](#) - *Fuel Cell Hydrogen System for Aircraft Emergency operation*

Guillaume Albouze, SPU

[ShipFC](#) - *Piloting Multi MW Ammonia Ship Fuel Cells*

Tore Boge, MARITIME CLEANTECH

[H2SHIPS](#) - *System-Based Solutions for H2-Fuelled Water Transport in North-West Europe*

Christian-Frédéric Berthon, EIFER

14:20 Break

14:30 Parallel Sessions

Next Generation Electrolysers

moderated by Dionisis Tsimis, Project Officer, FCH JU

[ANIONE](#) - Anion Exchange Membrane Electrolysis for Renewable Hydrogen Production on a Wide-Scale
Antonino Salvatore Arico, CNR-ITAE

[CHANNEL](#) - Development of the most Cost-efficient Hydrogen production unit based on AnioN exchange membrane Electrolysis

Luis Colmenares-Rausseau, SINTEF

[NEWELY](#) - Next Generation Alkaline Membrane Water Electrolysers with Improved Components and Materials

Aldo Gago, DLR

[SWITCH](#) - Smart Ways for In-situ Totally integrated and Continuous multisource generation of Hydrogen
Luigi Crema, FBK

Building Blocks for Heavy Duty Transportation (Tanks/Compressors/FC)

moderated by Pietro Caloprisco, Project Officer, FCH JU

[COSMHYC / COSMHYC XL](#) - COmbined hybrid Solution of Metal HYdride and mechanical Compressors for eXtra Large scale hydrogen refuelling stations
David Colomar, EIFER

[TAHYA](#) - TANK HYdrogen Automotive
Axel Seifert, OPTIMUM

[INN-BALANCE](#) - INNovative Cost Improvements for BALANCE of Plant Components of Automotive PEMFC Systems

José M. García Campos, FUNDACION AYESA

[DIGIMAN](#) - DIGItal MAterials CharacterisatioN proof-of-process auto assembly
Joël Pauchet, CEA

15:50 Break

16:00 Parallel Sessions

H2 Distribution and Storage/Carriers

moderated by Dionisis Tsimis, Project Officer, FCH JU

[HyCARE](#) - An innovative approach for renewable energy storage by a combination of hydrogen carriers and heat storage

Marcello Baricco, UNITO

[HySTOC](#) - Hydrogen supply and transportation using liquid organic hydrogen carriers

Ralf Ott, HYDROGENIOUS

[HIGGS](#) - Hydrogen In Gas GridS: a systematic validation approach at various admixture levels into high-pressure grids

Vanesa Gil, FHA

[HyGrid](#) - Flexible Hybrid separation system for H2 recovery from NG Grids

Fausto Gallucci, TU/e

(European) H2 Valleys

moderated by Pedro Guedes de Campos, Financial Engineering Officer, FCH JU

[BIG HIT](#) - Building Innovative Green Hydrogen systems in an Isolated Territory: a pilot for Europe

Jesus Simon, FHA

[HEAVENN](#) - Hydrogen Energy Applications for Valley Environments in Northern Netherlands

Patrick Cnubben & Janke Kappenburg, STICHTING NEW ENERGY COALITION

[GREEN HYSLAND](#) - Deployment of a H2 Ecosystem on the Island of Mallorca

María Jaén Caparrós, ENAGAS

[MULTICIT'HY](#) - Production and distribution stations of decarbonated hydrogen

Stephane Manginot, Hynamics/EDF Group

FRIDAY, 3 DECEMBER

09:30 Parallel Sessions

PNR for Standards and safety

moderated by Alberto Garcia Hombrados, Project Officer, FCH JU

[European Hydrogen Safety Panel \(EHSP\)](#)

Iñaki Azkarate, EHSP

[HyTunnel-CS](#) - PNR for safety of hydrogen driven vehicles and transport through tunnels and similar confined spaces

Vladimir Molkov, ULster

[PRESLHY](#) - Pre-normative research for safe use of liquid hydrogen

Thomas Jordan, KIT

[THyGA](#) - Testing Hydrogen admixture for Gas Applications

Patrick Milin, ENGIE

Stationary Applications: Gas to Power and Heat

moderated by Antonio Aguilo Rullan, Project Officer, FCH JU

[PACE](#) - Pathway to a Competitive European FC mCHP market

Gunter Grosch, SenerTec

[RoRePower](#) - Robust and Remote Power Supply

Jari Kiviaho, VTT

[CH2P](#) - Cogeneration of Hydrogen and Power using solid oxide based system fed by methane rich gas

Ilaria Mirabelli, HyGEAR B.V.

[REMOTE](#) - Remote area Energy supply with Multiple Options for integrated hydrogen-based Technologies

Massimo Santarelli, POLITO

10:50 Break

11:00 Parallel Sessions

Education and Training

moderated by Alberto Garcia Hombrados, Project Officer, FCH JU

[FCHgo](#) - Fuel Cells HydroGen educatiOnal model for schools

Tiziana Altiero, UNIMORE

[HyResponder](#) - European Hydrogen Train the Trainer Programme for Responders

Sile Brennan, ULster

[NET-Tools](#) - Novel Education and Training Tools based on digital applications related to Hydrogen and Fuel Cell Technology

Peter Holtappels, DTU

[TEACHy](#) - Teaching Fuel Cell and Hydrogen Science and Engineering Across Europe within Horizon 2020

Robert Steinberger-Wilckens, UoB

Fuel Cell Technology for Stationary Applications

moderated by Antonio Aguilo Rullan, Project Officer, FCH JU

[NewSOC](#) - Next Generation solid oxide fuel cell and electrolysis technology

Anke Hagen, DTU

[EMPOWER](#) - European methanol powered fuel cell CHP

Johan Tallgren, VTT

[MAMA-MEA](#) - Mass manufacture of MEAs using high speed deposition processes

Silvain Buche, Johnson Matthey Fuel Cells

[OxiGEN](#) - Next-generation Solid Oxide Fuel Cell stack and hot box solution for small stationary applications

John D. Pietras, SG SEPR

12:20 Break

14:00 Parallel Sessions

Tools for market development

moderated by Kostis Sakellaris, Knowledge Management Officer, FCH JU

[Project Development Assistance \(PDA\)](#)

Nadine Hoelzinger, Spilett

[Fuel Cells and Hydrogen Observatory \(FCHO\)](#)

Luca Bertuccioli, e4tech

[Mission Innovation Hydrogen Valley Platform](#)

Markus Kaufmann, Roland Berger

[CertifHy](#) - *Developing a European Framework for the generation of guarantees of origin for green hydrogen*

Wouter Vanhoudt, HINICIO

Early Research on alternative routes for Hydrogen production

moderated by Claudiu Pavel, Project Officer, FCH JU

[BIOROBURplus](#) - *Advanced direct biogas fuel processor for robust and cost-effective decentralised hydrogen production*

Massimiliano Antonini, HYSYTECH

[PECSYS](#) - *Technology demonstration of large-scale photo-electrochemical system for solar hydrogen production*

Sonya Calnan, HZB

[HYDROSOL-beyond](#) - *Thermochemical HYDROgen production in a SOLar structured reactor: facing the challenges and beyond*

Souzana Lorentzou, CERTH

[112CO2](#) - *Low temperature catalytic methane decomposition for COx-free hydrogen production*

Adélio Mendes, FEUP

15:20 Break

15:30 Hydrogen applications in the defence sector: research and project opportunities

Panagiotis Kikiras, Head of Unit Technology and Innovation at European Defence Agency

15:40 Future funding for research on H2 Closing Panel Discussion

Introduced and moderated by Bart Biebuyck, Executive Director, Fuel Cells and Hydrogen Joint Undertaking (FCH JU)

Panellists:

Christian Holzleitner - Head of Unit for Land Use and Finance for Innovation, DG CLIMA, European Commission

Olivier Silla - Head of Unit Transport Investments, DG MOVE, European Commission

Hélène Chraye - Head of Unit at European Commission - DG R&I

Stephen Jackson - Chief Funding and Intelligence Officer at Hydrogen Europe