Forum Hydrogen Business For Climate

Belfort,
3-4 Oct, 2023

PRESS PACK

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Contents

A venir

Editorials

MARIE-GUITE DUFAY

Présidente de la Région Bourgogne-Franche-Comté

En organisant la troisième édition du Forum Hydrogen Business for Climate à Belfort, la Bourgogne-Franche-Comté se place résolument au cœur des enjeux d'avenir autour de l'hydrogène. Présente sur toute la chaîne de valeur de la filière, la Bourgogne-Franche-Comté est aujourd'hui une place forte de l'hydrogène en Europe. Ce positionnement phare a été reconnu par la Commission européenne l'an dernier qui a autorisé les financements nationaux de plus de 300 millions d'euros pour le Nord Franche-Comté, dans le cadre du Projet Important d'Intérêt Européen Commun « PIIEC » dédié à l'hydrogène.

Notre région dispose de cette légitimité toute particulière, notamment grâce au véritable écosystème créé dans le Nord Franche-Comté, associant chercheurs, pouvoirs publics et entreprises, start-up et multinationales. L'hydrogène est aujourd'hui plus que jamais un levier d'innovation en faveur de la protection de notre environnement, de la consolidation de notre filière industrielle, et de création d'emplois de demain. Consciente de ces enjeux majeurs, la Région Bourgogne-Franche-Comté accompagne l'ensemble des territoires qui développent la technologie hydrogène, et s'apprête à franchir un nouveau cap en créant l'école nationale de l'hydrogène.

DAMIEN MESLOT

Président de Grand Belfort

Le Forum Hydrogen Business For Climate viendra conclure une année 2023 importante pour l'écosystème hydrogène sur le territoire du Grand Belfort. Avec la construction de l'usine de McPhy, l'annonce de l'installation d'Inocel, la mise en service des premiers bus à hydrogène et de la station hydrogène, la filière du Nord-Franche-Comté s'est renforcée de manière considérable ces derniers mois. Le Grand Belfort est heureux de pouvoir accueillir un tel Forum rassemblant de nombreux acteurs de cette énergie d'avenir. Il présentera la richesse et la dynamique de l'ensemble des protagonistes qui œuvrent au développement de cette nouvelle industrie.

CHARLES DEMOUGE

Président de Pays de Montbéliard Agglomération

Fort de la présence sur son territoire du centre d'expertise mondial de recherche Hydrogène de FORVIA et de deux universités, le Pays de Montbéliard chef de file du programme « Territoires d'innovation » est fier d'être partenaire cette année du Forum Hydrogen Business For Climate. La recherche publique du Nord Franche-Comté travaille à la chaine de valeur hydrogène depuis près de trente ans.

La filière H2 s'oriente sur notre territoire tant dans les mobilités que dans le stationnaire. On peut citer le projet « living lab H2 Bois » lauréat de l'appel à manifestation d'intérêts France 2030 « démonstrateur de la ville durable », la création d'une station de production et de distribution, l'acquisition de bus, la réalisation d'un centre de certification de réservoirs, la construction de logements sociaux… L'écosystème est solide et se densifie dans le Nord Franche-Comté ; c'est une terre propice au développement des projets hydrogène, comme en témoigne l'installation de nouvelles entreprises telles McPhy, Inocel et GEN-Hy.

Je souhaite à toutes et à tous un forum enrichissant.

RÉGION BOURGOGNE FRANCHE COMTÉ

BOURGOGNE-FRANCHE-COMTÉ

Territoire Hydrogène

L'hydrogène constitue un facteur de développement économique et un vecteur énergétique incontournable pour s'engager concrètement dans la transition énergétique. L'Europe, l'Etat et de nombreuses régions européennes s'impliquent d'ores et déjà pour développer la filière. La Bourgogne-Franche-Comté fait partie des territoires identifiés au niveau européen comme « territoire hydrogène d'avenir » grâce à ses nombreux atouts : une recherche d'excellence, notamment sur la pile à combustible et le stockage hydrogène, des outils de transfert de technologie comme le FC Lab et les nombreux projets portés par les entreprises (Forvia, Mac Phy, Inthy, GenHy, Inocel et bien d'autres ...) et les collectivités.

La Région Bourgogne-Franche-Comté a ainsi souhaité faire de la filière Hydrogène une priorité au regard de l'urgence du défi climatique. La stratégie régionale est mise en œuvre dans le cadre de « la feuille de route Hydrogène Bourgogne Franche-Comté », qui mobilise 100 millions d'euros sur la décennie 2020-2030.

Pour la déployer, la Région s'appuie sur des acteurs clés comme l'agence économique régionale (AER), le Pôle véhicule du futur et la chambre de commerce et d'industrie, ainsi que sur les territoires partenaires qui ont choisi de s'engager dans des écosystèmes territoriaux hydrogène.

Depuis 2019, la filière a connu une accélération, faisant de la Bourgogne-Franche-Comté le siège de nombreux acteurs souhaitant acquérir et développer un savoir-faire sur cette technologie d'aujourd'hui et de demain. Gageons que la Région se révélera un terreau favorable pour en accueillir d'autres.

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CCI BOURGOGNE FRANCHE-COMTÉ

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FC LAB

femto-st
SCIENCES & TECHNOLOGIES

COALITION RETROFIT H2

EACN
European Automotive Cluster Network

France Hydrogène
Engagée pour la transition écologique

Hydrogen Europe

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la gazette

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HYDROGEN

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Le journal des Flottes

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Troiz

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Les Génies de l'Innovation

Traces Ecrites NEWS
L'ACTUALITÉ ÉCONOMIQUE DU GRAND EST

Discuss. Decide. Deploy.

Hydrogen Business For Climate is the **transnational forum for making the H2 energy transition a reality in France and Europe**. Climate, geopolitical and economic emergencies are all converging to put hydrogen at the heart of the debate. The infrastructure is being put in place, the industrial dynamic is underway, and new avenues are opening up, yet the brakes are still in place: technological? economic? regulatory?

For its 3rd edition, the Forum Hydrogen Business For Climate will bring together 400 European decision-makers from both the private and public sectors; politicians, experts, academics, disruptors and investors, in order to:

- Clarify reflexions
- Compare positions
- Provoke decisions
- Accelerate transformations

through a program at the heart of the news, focused on eco/business or techno, and constructed by a committee of experts in the h2 sector.

10

plenaries to compare points of view, discuss, debate and move forward

Strategy, prospective, debats, our Eco/Business or Tech oriented conferences will give the floor to experts, and international disruptors. Divergence? Convergence? Opinions will be expressed, questions will be asked.

The objective: to accelerate decarbonisation

6

Collaborative moments to progress and innovate

Led by specialists and catalyzed by our expert guests, our workshops will mobilize your vision and your talent, to move forward and create synergies.

The objective: to meet the challenges of tomorrow

2

+5 days of B2B meetings to accelerate

Pre-organized and pre-qualified, these targeted meetings will allow you to initiate business and collaborations. With 3 extensive, in-person sessions during the forum and 5 days of virtual meetings through our platform.

The objective: to support the decarbonisation of the European economy.

9

networking moments to seize every opportunity

An Ice breaker upon your arrival at the Forum, breaks, lunches, a networking evening, everything will be conducted in order to promote your exchanges.

The objective: to strengthen the H2 collective dynamic

1

annual strategic compass to progress?

Within 10 days, an executive summary (text and graphic) of the plenary-debates and collaborative moments will retrace the strategic environment, the challenges, the opportunities and the proposals for action which will emerge during the Forum.

The objective: to make H2 projects and solutions sustainably competitive

1

exhibition space to show and demonstrate

At the heart of the Forum, the dedicated space will bring together 40 exhibitors representing the entire H2 value chain (companies, startups, academics and territories).

The objective: to promote European excellence

2

"In Situ" visits for real-world inspiration

Le Nord-Franche-Comté avec son écosystème industriel et académique de pointe, vous offre la possibilité de voir concrètement technos et réalisations H2.

- The hydrogen platform (FCLAB, FEMTO-ST) tour

- Presentation of Grand Belfort's future hydrogen production and distribution station and the RTTB maintenance centre

Programme

3 october

8:30 AM • Welcome coffee and Ice breaker

10 AM > 10:30 AM
Opening plenary
Political speeches

10:30 AM > 11:00 AM
Introduction to the Large Format Plenary – Eco/business
Greenback for green hydrogen

11:00 AM > 12:30 AM
Large Format Plenary - Eco/business
Europe: strong ambitions. Roadmaps to align ?

12:30 PM > 1:45 PM • Lunch
tour of the exhibition area

Plenary-Debates

13:45 PM > 14:45 PM
Eco/business
E-fuels and H2 ICE: the future for thermal engines?

2:45 PM > 3:45 PM
Techno
Liquid hydrogen: what kind of applications in transportation?

3:45 PM > 4:45 PM
Techno
The challenge of low-cost hydrogen

4:45 > 5:15 • Coffee break

5:15 PM > 6 PM
Eco/business
Can hydrogen help to solve the energy crisis?

Workshops

1:45 PM > 3:15 PM
Techno
Production hubs to decarbonise industry

4:30 PM > 6 PM
Eco/business
Experts' Best practices for a successful scale up

1:50 PM > 6 PM
BtoB meetings

5 PM > 6 PM
Science Corner
H2 and AI

6:05 PM > 6:35 PM – The national hydrogen academy
A major challenge for the skills of tomorrow

6:45 PM > 7:15 PM –"Grand Témoin" : Jean-Louis Étienne

7:15 PM > 10 PM – Networking evening

4 october

8:30 AM • Welcome coffee

9:00 AM > 9:30 AM
Introduction to the Strategic Plenary – Techno
Blue hydrogen: so useful to start the market

9:30 AM > 10:30 AM
Strategic Plenary – Techno
Hydrogen transportation and storage: how to make it more affordable?

Plenary-Debates

11:00 AM > 12:00 AM
Eco/business
How to speed up the refueling infrastructure?

12:00 AM > 12:45 AM
Techno
Hydrogen from sea water?

12:30 PM > 1:45 PM • Lunch
tour of the exhibition area

1:45 PM > 2:45 PM
Eco/business
Natural hydrogen: a land of milk and honey?

3:30 PM > 4:30 PM
Techno
Too much diversity for hydrogen technologies?

Workshops

9:00 AM > 10:30 AM
Eco/business
Stationnary applications: examples and prospects around the world

10:30 AM > 11 AM • Coffee break

11:00 AM > 12:00 AM
Techno
How to reduce the use of critical materials?

1:45 PM > 3:15 PM
Techno
What are the next steps for hydrogen vehicules?

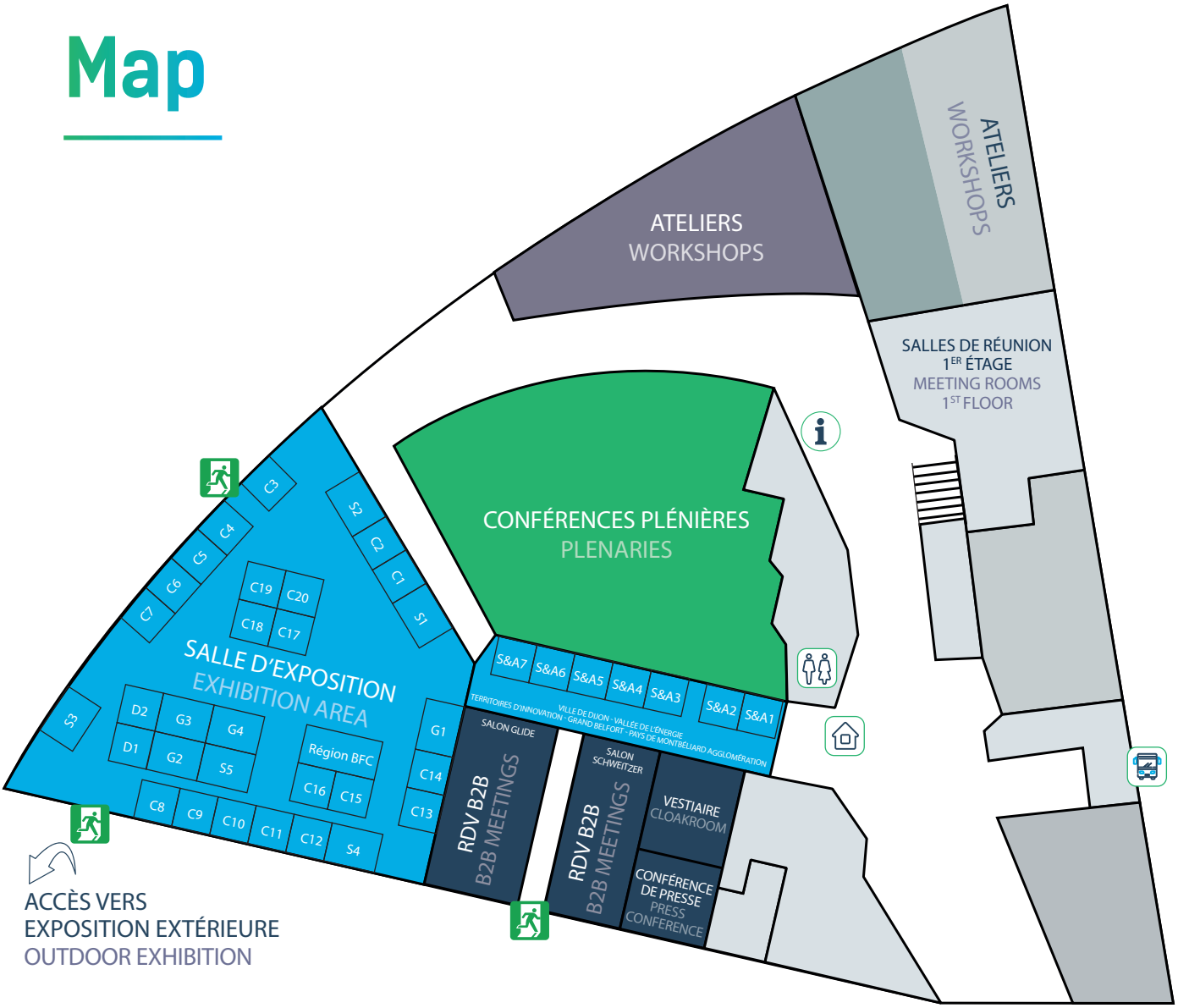
3:15 PM > 3:45 PM • Coffee break

2:30 PM > 5:00 PM – Visits
- FCLAB
- Hynamics hydrogen production, and distribution station at Danjoutin + bus maintenance, RTTB

9:00 AM > 12:20 AM
BtoB meetings

1:45 PM > 4:40 PM
BtoB meetings

Map



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ENTRÉE PRINCIPALE
MAIN ENTRANCE

EXPOSANTS
EXHIBITORS

G1	INOCEL
G2	ENGIE
G3	HYNAMICS
G4	McPHY
S1	FORVIA
S2	SETFORGE
S3	ATAWEY
S4	ENEDIS
S5	SATT CONECTUS,SATT SAYENS, SATT NORD
C1	FEMTO-ST / FCLAB
C2	KST MOTORENVERSUCH
C3	EIFFAGE ÉNERGIE SYSTÈMES
C4	Q ENERGY
C5	HYDAC
C6	DIMECO
C7	BONTAZ
C8	APL GmbH
C9	APAVE
C10	JR AUTOMATION
C11	ECOBOME INDUSTRIE
C12	CITELE
C13	ORECA
C14	INTHY
C15	H2SYS
C16	MINCATEC ENERGY
C17	ISOLA COMPOSITE FRANCE
C18	GEN-HY
C19	HAFFNER ENERGY
C20	HYDROGEN REFUELING SOLUTIONS
S&A1	UTBM
S&A2	NEEXT ENGINEERING
S&A3	UNIVERSITÉ DE FRANCHE-COMTÉ
S&A4	CLHYNN
S&A5	WATTANYWHERE
S&A6	SOLUTIONS HYDROGÈNE
S&A7	UNIVERSITÉ DE LORRAINE
D1	GAUSSIN
D2	SAKOWIN

POINT INFO
TOILETTES
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Inspiring Grand témoin

Jean-Louis ÉTIENNE
Inspiring Grand témoin

Extraordinary adventure, exploration, technological prowess, dreams, commitment, perseverance...

"Hydrogen is an energy carrier that I have used on expeditions, notably on the Polar Observer in 2002, more than 20 years ago. I was equipped with a fuel cell, a prototype manufactured by Axane, a subsidiary of Air Liquide, which was powered by a tank of hydrogen at 300 bars that I had taken to the ice pack. Today, the production of green hydrogen is an efficient and agile means of storing alternative renewable energies. But in the near future, the discovery of native hydrogen deposits could make this gas an exceptional and much-awaited low-carbon energy resource in the face of global warming".

A tireless defender of the planet and a renowned explorer, Jean-Louis Etienne was the first man to reach the North Pole solo in 1986 and to make the first complete crossing of the Antarctic in 1989-90.

A tireless defender of the planet, his many educational and scientific expeditions aim to raise awareness of the polar regions and understand the role they play in life and the Earth's climate.

His love of great adventures will take him to the Southern Ocean in 2025 for an unprecedented exploration aboard the zero-emission oceanographic platform Polar Pod, an expedition worthy of Jules Verne that brings together 43 scientific institutions from 12 countries.

Tuesday 3rd October
From 6.30pm to 7.15pm

Plenaries

Plenary 1 – Europe: strong ambitions. Roadmaps to align ?

Eco / Business

To keep its energy sovereignty, Europe bets on green hydrogen. However, some countries prefer to import large volumes instead of a local production. In addition, we can see many pipelines projects to carry hydrogen with no real concertation, starting from North Africa or Norway. And on the other hand, Europe faces a tax dumping from the USA (Inflation Reduction Act) and a stronger competition (with nearly 60 countries in the world having now a e roadmap). How to stay in the race in a fast changing world ?

Conference – Debate in french and english with an introduction "Greenback for green hydrogen" with Philippe BOUCLY, President of France Hydrogène, Alexandru FLORISTEAN, Operating Partnerat Hy24 and Mikaa MERED, Lecturer in hydrogen markets, diplomacy and geopolitics at Sciences Po / HEC Paris.

Faouzi ANNAJAH, NamX
Marie-Claire AOUN, Téréga, Gas for Climate
Philippe BOUCLY, France Hydrogène
Jorgo CHATZIMARKAKIS, Hydrogen Europe
Ralph DASSONVILLE, Alpiq
Vasyl DORONIN, Ukrainian Hydrogen Association
Patrick DUFOUR, Wirtschaftförderung Raum Heilbronn GmbH
Roland HEQUET, John Cockerill
Jean-Baptiste LUCAS, McPhy
Dominique MATHERN, Port of Antwerp Bruges
Matt MURDOCH, Raven SR
Khaled NAGEIB, Hydrogen Egypt
Marc PERRAUDIN, Plastic Omnium
Samir RACHIDI, IRESEN

Plenary 2 – E -fuels and H2 ICE: the future for the thermal engine?

Eco / Business

Needed for hard to abate sectors, such as aviation and maritime transport, e-fuels will help to start the hydrogen industry. They may also appear in car racing and for sport cars for niche applications. The European Commission has accepted to integrate those neutral-carbon fuels after 2035 in thermal engines, beside electric and hydrogen powertrains. How clean are e-fuels ? Will they be one day cost-effective ? And is there room for the combustion of hydrogen in thermal engines, instead of fuel cells, especially for heavy-duty mobility ?

Géraldine ANCEAU, Hynamics
Dominique MATHERN, Port of Antwerp Bruges
Fanny POINTET, Transport et environnement
Stefano SCALABRINI, Punch Hydrocells
Armin SCHNETTLER, HIF EMEA
Pierre-Jean TARDY, Alpine Racine

Plenary 3 – Liquid hydrogen: what kind of applications in transportation?

Techno

Commonly used as a gas, hydrogen is more convenient as a liquid for mobility applications needing large volumes on board. It's the case for aviation, maritime and eventually road transport. What are the challenges to integrate this kind of storage? Has some progress been made since spatial programmes? What are the other uses cases with liquid hydrogen?

Peter GERSTL, Chart Industries
Jean-Claude JOYEUX, Air Liquide
Robin LE CORRÉ, Fives
Dr. Daniela Lindner, DLR
Olivier SAVIN, Blue Spirit Aero
Pierre-Jean TARDY, Alpine Racine

Plenary 4 – The challenge of low-cost hydrogen

Techno

In order to scale up and be a game changer, hydrogen must be cost effective. It's an issue for electrolysis, the main process to generate green hydrogen, due to electricity cost. However, some progress can be made. There are also alternative processes, based on biomass and waste with a low (or negative) carbon footprint. The aim is to be lower than 5 € per kilo.

Frédéric GERARD, H2V
Philippe HAFFNER, Haffner Energy
Joao MARQUES, INEOS
Matt MURDOCH, Raven SR
Bruno SALQUE, Gen-Hy
Giovanni TRIMBOLI, SAKOWIN

Plenary 5 – Can hydrogen help to solve the energy crisis?

Eco / Business

In a context of high oil and energy prices, hydrogen appears as a promising solution around the world. It's not the only one. But, for sure, it will be part of the mix. Thanks to off-shore wind, solar and maybe for some time blue hydrogen, it will be possible to decarbonize industry and mobility and to establish sovereignty. Hydrogen can also be a way to store for a long time energy from renewable energies and contribue to a grid stability.

Jean-Luc FUGIT, Conseil supérieur de l'énergie
Aurélie PICART, CSF Nouveaux systèmes énergétiques

Plenary 6 – Hydrogen transportation and storage: how to make it more affordable?

Techno

Cost effective production is not enough. Then, hydrogen needs to be stored and transported to final customers. One of the solutions is the pipeline, that needs to be adapted from gas to H2, or to be H2 dedicated. Underground storage is also a key, for large volumes. This panel session will discuss other solutions such as liquid storage at ambient pressure, ammonia conversion and hydrogen carriers.

Conference – Debate in french and english with an introduction "Blue hydrogen: useful to start the market?" with Hubert GIRAULT, Director of H2 Valais and Emeritus professor at EPFL, Georges ROUHANA, Europe decarbonization program Leader at GE and Giovanni TRIMBOLI, Deputy technical director of Sakowin.

Emmanuel BOUTELEUX, Mincatec Energy
Pierre-Emmanuel CASANOVA, HSL Technologies
Hubert GIRAULT, H2 Valais / EPFL
Jérome GUICHARD, GRT Gaz
Charlotte Roule, Storengy
Georges ROUHANA, GE

Plenary 7 – How to speed up the refueling infrastructure?

Eco / Business

To escape from chicken and egg dilemma, some companies deploy temporary refueling stations, or provide combined offers with vehicles and private stations. Production hubs (in ports, industrial areas) should also help to start to build a meshed network. Another key point is the mutual use of stations to address cars, buses, lorries, trains and boats. The panel session will also discuss the AFIR targets for 2030.

Erwan COTARD, Engie
Julien ETIENNE, Hyvia
Bertrand LEROY, TSG Group
Marc MORTUREUX, PFA
Hechem NADJAR, Enhywhere
Marie-Cécile PARDON, Hynamics

Plenary 8 – Natural hydrogen: a land of milk and honey?

Eco / Business

Also called white hydrogen, you can find it on earth. It's a game changer because you only need to extract it from their ground, as for oil. Some natural hydrogen has already been found in Africa and exploration has started in the US. It seems that Europe has a potential, in particular in France. The panel will gather researchers, start-ups and major energy providers.

Olivier LHOTE, Storengy
Mikaa MERED, Science Po / HEC Paris
Isabelle MORETTI, Université de Pau / Académie française des technologies
Nicolas PELISSIER, 45-8
Viacheslav ZGONNIK, Natural Hydrogen Energy LLC

Plenary 9 – Hydrogen from sea water?

Techno

To make an alectrolysis, you need pure water. But, what if it was possible to do so with just sea water ? Water splitting is a very promising solution, led by several researchers. Is it a way towards an endless source of energy ?

Sébastien LECOZ, Sea4life **Mikaa MERED**, Sciences Po / HEC Paris

Plenary 10 – Too much diversity for hydrogen technologies?

Techno

In competition with batteries, always in progress, hydrogen has to prove that it can be a game changer. But, with which technologies ? Hydrogen combustion engine is gaining interest, compared to the fuel cell. Electrolysis is also facing cheaper modes to produce hydrogen and based on biomass or waste. Breakthrough innovations are coming too, such as a reactor in the US using water and scrap aluminum to produce hydrogen. Who's going to win the race ? Should we explore all opportunities or to make choices ? In industry and for mobility, the diversity of solutions could have an impact on investments.

Jules BILLIET, INOCEL
Valérie BOUILLON-DELPORTE, France Hydrogène
Jean-Luc BROSSARD, PFA
Jürgen GULDNER, BMW

Workshops

Workshop 1 – Production hubs to decarbonise industry

Techno

We propose a collaborative experience to learn, share experiences, discuss and exemplify this topic ! Some experts will share the state of the art at the beginning of the workshop. Then, in small sub groups, you will have the opportunity to discuss, share experiences and ideas on a specific angle of this topic**: technologies, infrastructures, public and private foundings, decarbonized energy...** During the report-out, some pragmatic, short-term actions will emerge. Your participation is more than welcome to shape a more diversified and effective hydrogen landscape.

A workshop in English, led by: Aurélie PICART, General Delegate of the "New Energy Systems" Strategic Sector Committee, **Heathcliff DEMAIE,** Projects and Partnerships Manager – Hydrogen and Energies and **Clément AUDOUIN,** Principal decarbonation at Roland Berger.

Workshop 2 – Experts' Best practices for a successful scale up

Eco / Business

Engage with global thought leaders at the "Industrial Scale Up" workshop. We propose a collaborative experience to learn, share experiences, discuss and exemplify this topic ! Some experts will share the state of the art at the beginning of the workshop. Then, in small sub groups, you will have the **opportunity to discuss and share experiences and ideas on a specific angle of this topic : from funding models, recruitment and onboarding, settlement and ecosystems management, roadmap development, passing by project management, actionable strategies, benchmark, supply chain to total quality, customer feedback and industrialisation / co-development strategies...** During the report-out, some pragmatic tips and best practices will emerge. Join us to contribute to propelling hydrogen's scale up towards a sustainable future !

A workshop in English, led by Antoine RESSICAUD, Chief Operating Officer at McPhy, **Jules BILLIET,** CEO of Inocel and **Richard RIHOUET,** Manufacturing Director at Inocel.

Workshop 3 – Science Corner – H2 and AI

Techno

Artificial intelligence and hydrogen are now independently identified as highly strategic sectors for economic development, at both national and European levels. The aim of the science corner will be to take stock of how artificial intelligence can help accelerate the development and market launch of hydrogen energy systems.
Testimonials from both academia and industry will highlight the benefits of co-development at the interface between AI and H2. Tools for implementing such co-developments will also be discussed. Solution providers, research laboratories, R&D centers and end-users are all welcome to join in the discussions!

A workshop in English, led by Christophe GEISSLER, partner Advestis and **Daniel HISSEL**, Vice-President of the University of Franche-Comté, Senior Member, Institut universitaire de France, Deputy Director, Fédération nationale Hydrogène (FRH2 CNRS), SHARPAC research team leader, FEMTO-ST.

Workshop 4 – Stationnary applications: examples and prospects around the world

Eco / Business

Join leading experts in the "stationary applications" workshop. We propose a collaborative experience to learn, share experiences, discuss and try to answer some key questions regarding this topic ! Some experts will share the state of the art at the beginning of the workshop. Then, in small sub groups, you will have the opportunity **to discuss, share experiences, ideas and propose answers to burning questions : what are the contextual conditions that make hydrogen relevant in stationary applications ? Exemplify relevant use cases of hydrogen in stationary applications, PEMFC/SOFC: which technology for which uses ? What can be done to promote hydrogen in stationary applications ? what about hydrogen production, transport, and storage ? ...**

A workshop in english, animated by Heathcliff DEMAIE, Project manager Hydrogen-Energy at université de Lorraine and **Brigitte VU**, Brigitte Vu, researcher, UTBM.

Workshop 5 – How to reduce the use of critical materials?

Techno

Description à venir

Workshop 6 – What are the next steps for hydrogen vehicules?

Techno

Join our collaborative workshop, meet our experts. We propose to learn, share experiences, discuss and exemplify this topic ! Some experts will share the state of the art at the beginning of the workshop. Then, in small sub groups, you will have the opportunity to discuss and share experiences and ideas on a specific angle of this topic : **competitive outlook for storage and powertrain technologies, key issues to be tackled to make H2 mobility more democratic and user-friendly, protecting the value chain in Europe, key use cases and priorities ....** . Don't miss insights shaping the future of clean transportation !

Un atelier en anglais, animé par Bruno JAMET, Directeur de programmes Energie et Propulsion au Pôle Véhicule du Futur.

Educational area

"Hyckathlon"
Discover hydrogen energy thanks to the University of Franche-Comté

For the third year running, students from the CMI H3E* at the UFR STGI – Université de Franche-Comté will be presenting an educational trail for schoolchildren and the general public, alongside the Forum. In the heart of the gardens of the Belfort prefecture, an exciting public event will be taking place for the general public, schoolchildren and secondary school students. Organised by students on the Engineering, Hydrogen Energy and Energy Efficiency Masters Course (CMI H3E) at the UFR STGI, in partnership with the IUT NFC and the Pavillon des sciences for the 2023 edition, a series of captivating workshops will enable everyone to plunge into the world of Hydrogen Energy. The main aim of these workshops is to make technical concepts related to the renewable energy mix more accessible.

Opening times for schools and the general public

Tuesday 3rd October: 9:00-12:00, 13:30-17:00
Wednesday 4 October: 9:00-12:00, 13:30-17:00

Site visits

The hydrogen platform (FCLAB, FEMTO-ST) tour

The hydrogen platform (FCLAB, FEMTO-ST) tour gives you the opportunity to visit our facilities. The platform hosts 600m2 of equipments and testbench dedicated to the test of hydrogen components and systems. It has also the ability to reproduce indoor some environmental constraints like temperature and vibrations. It is also involved in the design and realization of prototypes.

Presentation of Grand Belfort's future hydrogen production and distribution station and the RTTB maintenance centre

At the end of 2021, Greater Belfort decided to equip itself with a renewable hydrogen production and distribution station to develop clean mobility on its territory, in Danjoutin.

The station, developed by Hynamics, a subsidiary of the EDF Group, will produce renewable hydrogen (100% of the electricity used to power the station will be of renewable origin), emitting neither CO2 nor fine particles. Equipped with a 1 MW McPhy electrolyser, the station will have a production capacity of 400 kg of hydrogen per day.

It will be used to fuel the first 7 hydrogen-powered buses operated by the Régie des Transports du Territoire de Belfort (RTTB) on behalf of the SMTC, on the Optymo urban transport network, as well as other private or public vehicles, and industrial and university vehicles in the area.

Maintenance centre

The entry into service of 7 hydrogen-powered buses operated by the Régie des Transports du Territoire de Belfort (RTTB) on behalf of the SMTC, on the Optymo urban transport network, involved major changes to the maintenance workshop located in Danjoutin.

Adapting a building dating from the 1980s to the risks associated with hydrogen mobility involved upgrading the existing safety systems and installing new ones.

The aim of the visit is to explain the thinking that went into the project and the choices made to arrive at the current building.

Demonstrators

Outdoors

Foenix H2, a GT racing car powered by a hydrogen combustion engine

Description to come

FOENIX H2 FORVIA faurecia

Demonstrators - info to come

GAUSSIN Be Faster... Safer & Cleaner — Gaussin demonstrator

H2SYS — H2SYS generator set

STELLANTIS — Stellantis vehicle

Demonstrators

In the exhibition space

Hydrogen engine

Description to come

SHYAM educational tools

SHYAM: Station HYdrogène Autonome Multifonctions, an educational tool covering the entire green energy value chain, including the production of green hydrogen and its storage in solid form, developed by Mincatec Energy. The tool is dedicated to the acculturation of hydrogen and the training of hydrogen systems from CAP/Bac pro to engineer.

Exhibitors

Our GOLD partners

- ENGIE
- hynamics GROUPE EDF
- inocel Hydrogen Powered Solutions
- McPhy Driving clean energy forward

Our SILVER partners

- atawey ANYTIME, ANYWHERE, ENERGY
- ENEDIS
- FORVIA faurecia
- CONECTUS
- SAYENS CATALYSEUR D'INNOVATIONS
- SATT Nord
- Setforge

- apave
- APL
- BONTAZ
- CL HYNN
- DIMECO
- ÉCOBOME INDUSTRIE POUR UN MONDE PLUS PROPRE
- EIFFAGE ÉNERGIE SYSTÈMES
- femto-st SCIENCES & TECHNOLOGIES
- FC LAB
- GAUSSIN Be Faster... Safer & Cleaner
- gen-hy HYDROGEN SOLUTIONS

- GROUPE CITELE
- H2SYS
- Haffner Energy Making Hydrogen Super Green
- HRS HYDROGEN REFUELING SOLUTIONS
- HYDAC
- KST.
- INTHY
- isola COMPOSITE THERMAL & ELECTRICAL SAFETY
- JR AUTOMATION A Hitachi Group Company
- Mincatec Energy

- NEXT engineering
- ORECA THE MOTORSPORT COMPANY
- FOENIX H2
- qenergy
- sakowin GREENenergy
- UNIVERSITÉ DE FRANCHE-COMTÉ
- UNIVERSITÉ DE LORRAINE
- utbm université de technologie Belfort-Montbéliard
- WattAnyWhere

Forum Hydrogen Business For Climate

Evénement d'envergure transnationale, le Forum Hydrogen Business For Climate est organisé par le **Pôle Véhicule du Futur,** avec le soutien de **l'Etat, l'ADEME, la Région Bourgogne-Franche-Comté, Grand Belfort, Ville de Belfort et Pays de Montbéliard Agglomération,** et en partenariat avec **AER BFC, ADN FC (Invest in Nord Franche-Comté), CCI Bourgogne Franche-Comté, EEN_Enterprise Europe Network, FCLAB, Institut FEMTO-ST, ministère de l'économie, PFA - Plateforme automobile.**

Sa vocation consiste à concrétiser la transition énergétique hydrogène en France et en Europe.

Contacts presse

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