TOWARDS AN EU ROADMAP FOR HYDROGEN VALLEYS

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Grande Region Hydrogen

Our European Economic Interest Grouping (EEIG) aims to develop and support a renewable hydrogen ecosystem on an unparalleled scale so far, available for all in the “Grande Region” made up of Saarland and Rhineland-Palatinate in Germany, Lorraine (Grand-Est) in France, and the Grand Duchy of Luxembourg. The “Grande Region Hydrogen” is composed of interconnected projects that are relying on each other. This fully integrated energy system will help balance hydrogen production and consumption, by connecting hydrogen valleys in Europe. Furthermore, it will foster synergies to develop the whole value chain of the hydrogen market...
Grande Region Hydrogen: a crossborderer H2 ecosystem

Objective: to promote a hydrogen economy along the entire value chain

11 Members along the value chain

In 2027, 450 MWe of production capacity

Repurposed & new pipeline: 55 000t of transported H2/y

Integrated into hydrogen european development plan

980 000t/y of CO2 avoided by 2030
### Bottom up approach & European energy integration

**GRH EEIG**
- Founded by CREOS, GRTgaz, Encevo, H2V
- Wave of new GRH members: Gazel Energies, Steag, SHS, HDF

**Commissioning common objective for GRH projects**
- Wave of new GRH members: Villeroy & Boch; VERSO Energy; RWE

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<table>
<thead>
<tr>
<th>Year</th>
<th>Event/Announcement</th>
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<tr>
<td>2019</td>
<td>Green Deal</td>
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<td>Carbon Neutrality by 2050</td>
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<td>Treaty of Aachen</td>
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<td>Industrial cooperation, investments (IPCEI)</td>
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<td>2020</td>
<td>EU Hydrogen Strategy</td>
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<td>Creation of an international H2 ecosystem to scale up production &amp; infrastructure</td>
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<td>Pentalateral Energy Forum</td>
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<td>2021</td>
<td>Fit for 55</td>
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<td>-55% CO2eq by 2030</td>
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<td>2022</td>
<td>RepowerEU</td>
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<td>Production &amp; Import of 10 Mt H2 by 2030</td>
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<td>(+45% Renewables)</td>
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<td>2023</td>
<td>Joint declaration on energy solidarity</td>
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<td>2027</td>
<td>60th anniversary of Elysee Treaty</td>
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“a common strategic roadmap to develop large-scale hydrogen production and build a resilient European hydrogen market based on the strength of local production and the sustainability of necessary imports.”

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- **Carbon Neutrality by 2050**
- **Elysee Treaty**
Grande Region Hydrogen

Pioneer

A **first of its kind initiative** willing to share information, shape a common vision & frameworks

Non-profit organization

Open to new parties sharing the same interests

Nucleus of European energy transformation

A crossborder H2 **pipeline grid** enabling investments in H2 **production via electrolysis** & gigafactories, **industrial consumption** (e.g. DRI for steel production), **mobility** services

Reindustrialization & **Decarbonization** of the Grande Region

Chicken & Egg Dilemma solved

Common **objective** for projects **commissioning** in 2027

Powerful investments

Applied for funding programs (CCfD, CEF, CEAG) & promoted as IPCEI
Project status

- **Common vision:** Projects along the entire value chain will go into operation from 2027 and H2 ramp-up will then start.

- The projects are at an **advanced planning stage**.

- The projects applied to **different financing concepts** (e.g. funding from various European and national programmes like IPCEI, CCfd or Ademe).

- After approval of the funding from the various programmes, a **final investment decision** is expected for the majority of projects in the second half of 2023.
THANK YOU!

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