**List of H2 IPCEI consortia**

**Rainbow Unhycorn**

* Focus: engineering industrialisation and deployment of Light Commercial Vehicle (mobility sector).
* Main participating countries – French, Germany, Italy, Spain

**Black Horse project – Marcel Podolak, Bioway**

* Main territory – V4 countries
* Aims: Use of RES (wind, solar), Green H2 production, storage and transport, building of H2 fuel stations, H2 trucks
* 4 major petrochemical partners, overall, 20 partners across 7 industries

**DOLPHIN – Transport project, Paolo Guglia – Manager  Fincantieri**

* Focus on power generation systems, H2 production, ports as support infrastructure and maritime applications: Ships - large/ passenger/ small/medium ships power by H2

**Green octopus, Adwin Martens, Waterstofnet**

* Participating countries – Belgium, Germany, Netherlands (cca 50 projects)
* Maritime are, focus on building infrastructure and applications in various industries, e.g. transport, steel industry, refinery etc.

**H2 SINES (formerly flamingo) – Portuguese project**

* Aim: to develop a hydrogen market based on production of green H2 from solar energy, to export green H2 from Sines to NL and to support sustainability. Offtakers are expected from different industries. 35+ EU entities involved in the development of further synergies.

**Silver frog, Denis Thomas, Cummins**

* Aim: GW scale H2 and fuel cell technology manufacturing, H2 storage tanks
* Main participating countries – Belgium, Germany,

**GREEN Crane (Former Green Spider), Alessio Bambato**

* Focus on building the South to North Green H2 routes
* Main participating countries – Spain, Netherland, Germany, and Italy

**White Dragon, Olivier Bucheli**

* Project in the region of western Macedonia (Greece).
* Aim: to install photovoltaics in large mining area, production of Green H2
* Main partners from Greece, Italy, Germany, Spain and Bulgaria - Intention to mobilize more partners from different industries.

**New Green Flamingo, Marc Rechter**

* Focus on FID, industrial scale up, supply chain & market formation – use of biomas, solar and wind RES for H2 production, industry and mobility decarbonisation, export.
* Main partners from Germany (cell manufacturing, electrolysers manufacturing), Spain (area of Barcelona - transportation sector), Portugal and Belgium (Spain + Portugal area – interregional Valley – supply partner of H2- participants: cities, towns, regions, SMEs, Universities.

**Green Hydrogen at Blue Danube, Zauner Rudolf, Klemens Schwartz**

* Aim – to cover Green H2 value chain in Danube region, technological risks remains
* Austria –focus on de-risk electrolysers, scale up
* Germany –focus on de-risk LOHC, scale up
* Spain - focus on electrolyser, scale up
* Project is split in 3 distinct areas of the operation: Supply, production, Transportation- Logistic along Danube, Demand/ consumption, two core technologies are needed.
* It is necessary to open calls for expression of interest and adjust calls in Austria, Germany and other MS.
* Need to find more partners to cover all fields.

**Danube H2 Valley in Ukraine**

* Region has potential for wind (offshore, on shore) and solar activity.
* There are two main deep water ports in Bessarabia regions in the Danube region. Potential has also a gas transportation system for transportation of H2, total capacity of pipeline 150 mil. ton H2.
* There are 8 potential zones for placement of production facilities (wind, solar plants).
* There is potential to participate in three IPCEIs.

**Air Liquide, Genevieve Samson**

* Aim: supply low-carbon and renewable H2 to decarbonise industry and mobility usages.
* The part is a HyTruck project (H2 trucks).
* All actors involved in mobility are supporting the expansion of a HRS network, especially for MD/HD mobility
* Main participating countries – France, Belgium, Germany, Netherlands

**McPhy GiGaFactory Approach, Berntrand Amelot**

* Aim – boost H2 competitiveness. Industrial plan involves large capacity Electrolyzes,
* refuelling stations (integrated and digital and first 2000 kg station), manufacturing scale-up (Giga factory in France =  1300 MW up to 2024).
* Cooperation was launched with Spain, Portugal, Italy, Netherlands, Belgium, Germany.
* Received 32 letters of support and contact with more than 12 large projects.
* Plans to strengthen bilateral discussions.

**Genvia – IPCEI project, Calella Festa**

* Genvia – solid oxide technology
* FID of large scale factory producing reversible high-temperature electrolysers in France.
* R&D&I to mature power solid oxide cell stack and develop modules for different use cases
* Expected use in various industries e.g.in Cementing, constructions..).
* Close collaboration with partners across the value chain to ensure Genvia technology is fit for purpose & fill order book.

**Quantum Leap in PEM-FC Production Technology**