

REpower EU with zero emission energy

Tomoho Umeda

Hynfra, CEO

Hydrogen Poland, Board Member

**Hydrogen Technologies Committee at the Polish
Chamber of Commerce, Chairman**

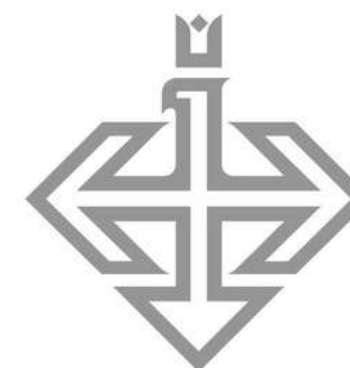


nfra

**Green Hydrogen
Infrastructure**



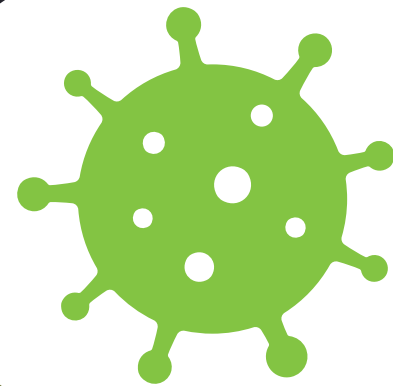
**Hydrogen
Poland**



POLISH CHAMBER OF COMMERCE



Net 0 by 2050 - it's as simple as that!



COVID-19 recovery accelerated the energy transition and clean hydrogen role in it.



Stronger, cleaner & more resilient EU is now more important than ever (Russian invasion factor).

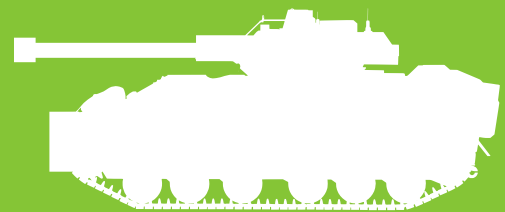
LATEST EU STRATEGY IS TO END ONCE AND FOR ALL ENERGY WEAPONIZATION ERA

- Decarbonization
- Cutting GHG emissions
- Removing pollution
- Replacing fossil fuels
- Supply resilience





Ursula von der Leyen argues that the transition to Renewable Energy Sources will be 'crucial' for the EU.



Russia's aggression only accelerated the process.



The share of renewable energy sources will double in the EU's energy balance and HYDROGEN is becoming the most important element of the EU's energy transition.

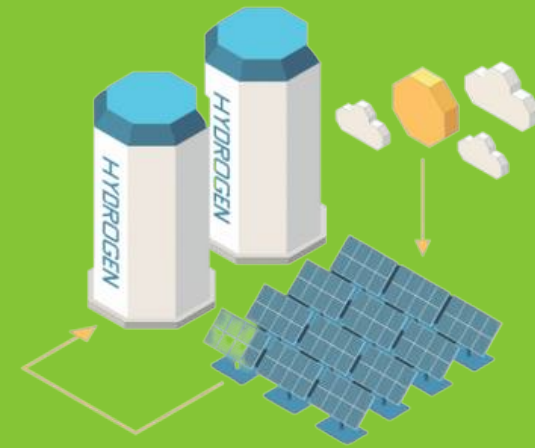


REPower EU is like putting Fit-for-55 on steroids



Renewables

Increase the EU's 2030 target for renewables from the current 40% to 45%. The REPower EU Plan would bring the total renewable energy generation capacities to 1,236 GW by 2030, in comparison to the 1,067 GW by 2030, envisaged under Fit-for-55 for 2030.



Solar energy

The EU Solar Energy Strategy will boost the roll-out of photovoltaic energy. As part of the REPowerEU plan, this strategy aims to bring online over 320 GW of solar photovoltaic newly installed by 2025, over twice today's level, and almost 600 GW by 2030.



Steel production

Around 30% of EU primary steel production is expected to be decarbonized on the basis of renewable hydrogen by 2030

10 mln

tons of renewable hydrogen by 2030

On May 5th EU Commission and 20 industry CEOs signed a Joint Declaration whereby industry committed to a tenfold increase of its electrolyser manufacturing capacities by 2025. This will enable the annual EU production of 10 million tons of renewable hydrogen by 2030.

17.5 GW

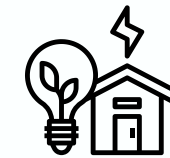
electrolyser manufacturing capacity per year

The Joint Declaration sets out a target agreed by electrolyser manufacturers in Europe to increase their manufacturing capacity tenfold to 17.5 GW per year. It also features Commission actions to put in place a supportive regulatory framework, facilitate access to finance and promote efficient supply chains.

REPower EU is not the end of the story... its just the beginning

HYDROGEN ROLE IN DECARBONIZATION WILL BE PROFOUND

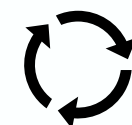
Hydrogen will empower the transition enabling:



Clean Energy & Heat generation



Energy Efficiency & Affordability



Circular Economy



Sustainable Mobility



Digitization & automation



Farm to Fork (agriculture transition)



Sustainable Industry



Ensuring Just Transition for ALL




Pollution Elimination

EU'S NEW TAXONOMY REGULATION WILL SKYROCKET H2 ROLLOUT

EU's new Taxonomy Regulation

Is designed to support the transformation of the EU economy to meet its European Green Deal objectives, including the 2050 climate-neutrality target



As a screening tool, it seeks to support investment flows into those activities, that are fitting to eligibility criteria for environmental sustainability

Screening criteria will apply for:



Obtaining debt funding



Insurance



Public tenders and procurement procedures

EU TAXONOMY IN LAYMAN TERMS

CUSTOMERS & TAXONOMY

Their customers (which are always right) will now demand from their suppliers to prove their transition activities (Environment Social Governance and Non-Financial Reporting Directive) and at the same time — Taxonomy compliance.




EXPOSURE TO TAXONOMY

As long as large industrial companies in V4 countries are part of supply chains in global corporates their exposure to Taxonomy is immense.

GO GREEN OR YOU ARE OUT

It might sound rough, but it is exactly what Taxonomy compliance is about.



HYDROGEN RENEWABILITY IS THE KEY

FULL COMPLIANCE

Decarbonization through renewable hydrogen is for many sectors the only viable solution that at the same time allows for full compliance with Taxonomy criteria.

RESILIENCE

It combines gaining competitive edge for energy intensive industries with lasting resilience from regulatory risk exposure.

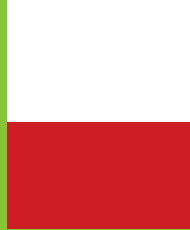
INDEPENDENCE

Energy independence from unreliable suppliers and volatile fossil fuels.

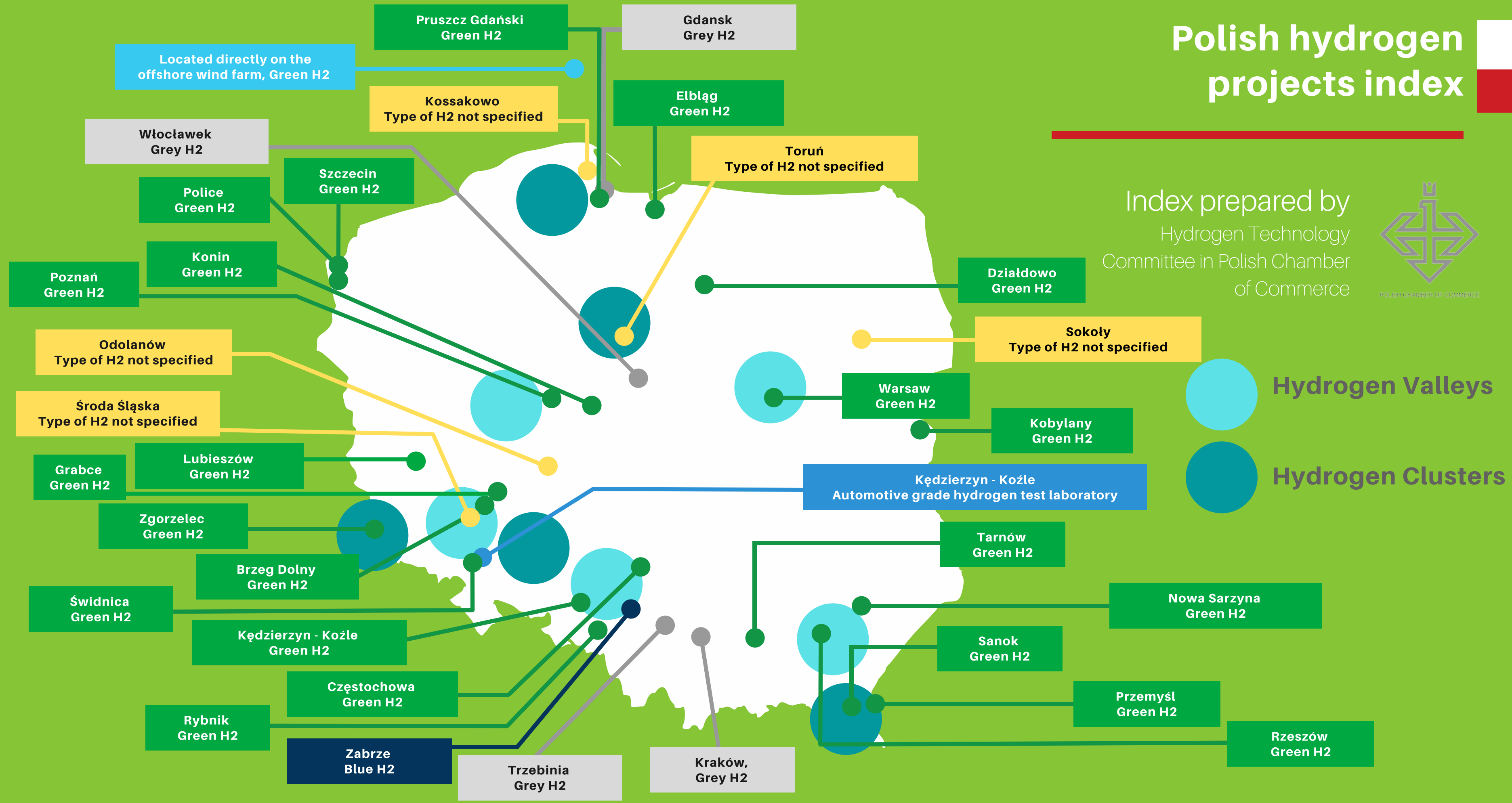
ACCELERATION

It accelerates Renewable Energy Sources in terms of their capacity and pace of deployment that until today was limited by transmission system operators (TSO) and distribution network operators (DSO).

Polish hydrogen projects index



Index prepared by
Hydrogen Technology
Committee in Polish Chamber
of Commerce



THANK YOU FOR YOUR ATTENTION



POLISH CHAMBER OF COMMERCE

Tomoho Umeda

e: tumeda@kig.pl

m: +48 500 657 327