

Renewable  
Hydrogen Coalition

Renewable electricity  
is the best hydrogen strategy

**New framework for renewables - will it be enough to meet the targets?**

November 9<sup>th</sup> 2021

# The Renewable Hydrogen Coalition

Promotes the critical role of **renewable hydrogen** to deliver the EU's long-term decarbonisation goals



Give a voice to the renewable hydrogen industry in Europe



Build a high-level & interdisciplinary network of innovators, investors, entrepreneurs, industrial off-takers and corporate



Inform the policy debate with concrete proposals for the scaling up & market uptake of renewable hydrogen



Position Europe as the global leader in renewable hydrogen



# A Coalition with a growing number of supporters



In collaboration with

**EGHAC**  
European Green Hydrogen  
Acceleration Center



# EU Market shares

Fossil-based hydrogen

96%

Renewable-based hydrogen

Less than 4%



# 830

Million tons of CO<sub>2</sub> emitted per year  
for fossil fuel hydrogen production  
equivalent to the combined  
emissions of the UK and Indonesia



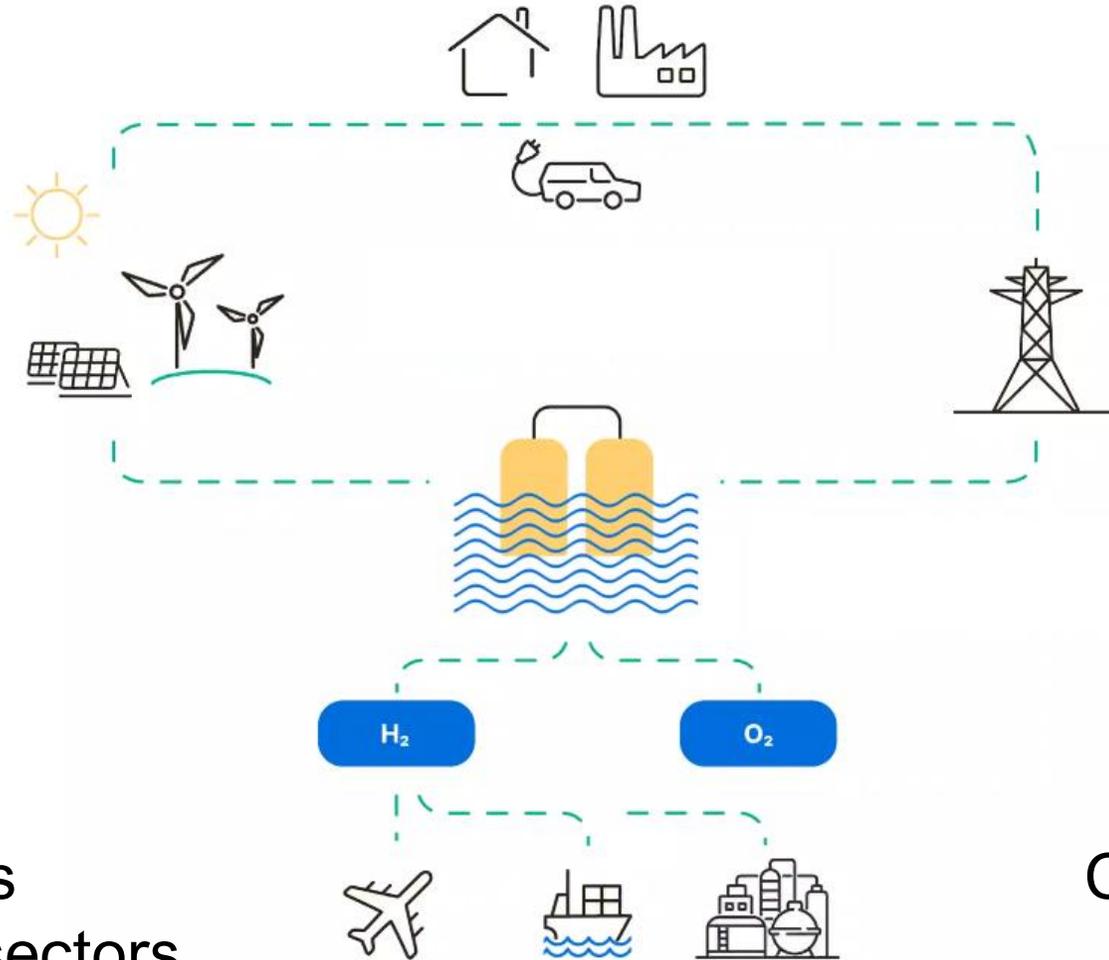
# €60bn

Europe's yearly spending in  
imported natural gas, also used for  
fossil-based hydrogen production



# Renewable hydrogen – The missing link

Brings Europe's **vast** wind and solar potential everywhere



Produces **carbon-free** energy with technology 'made in Europe'

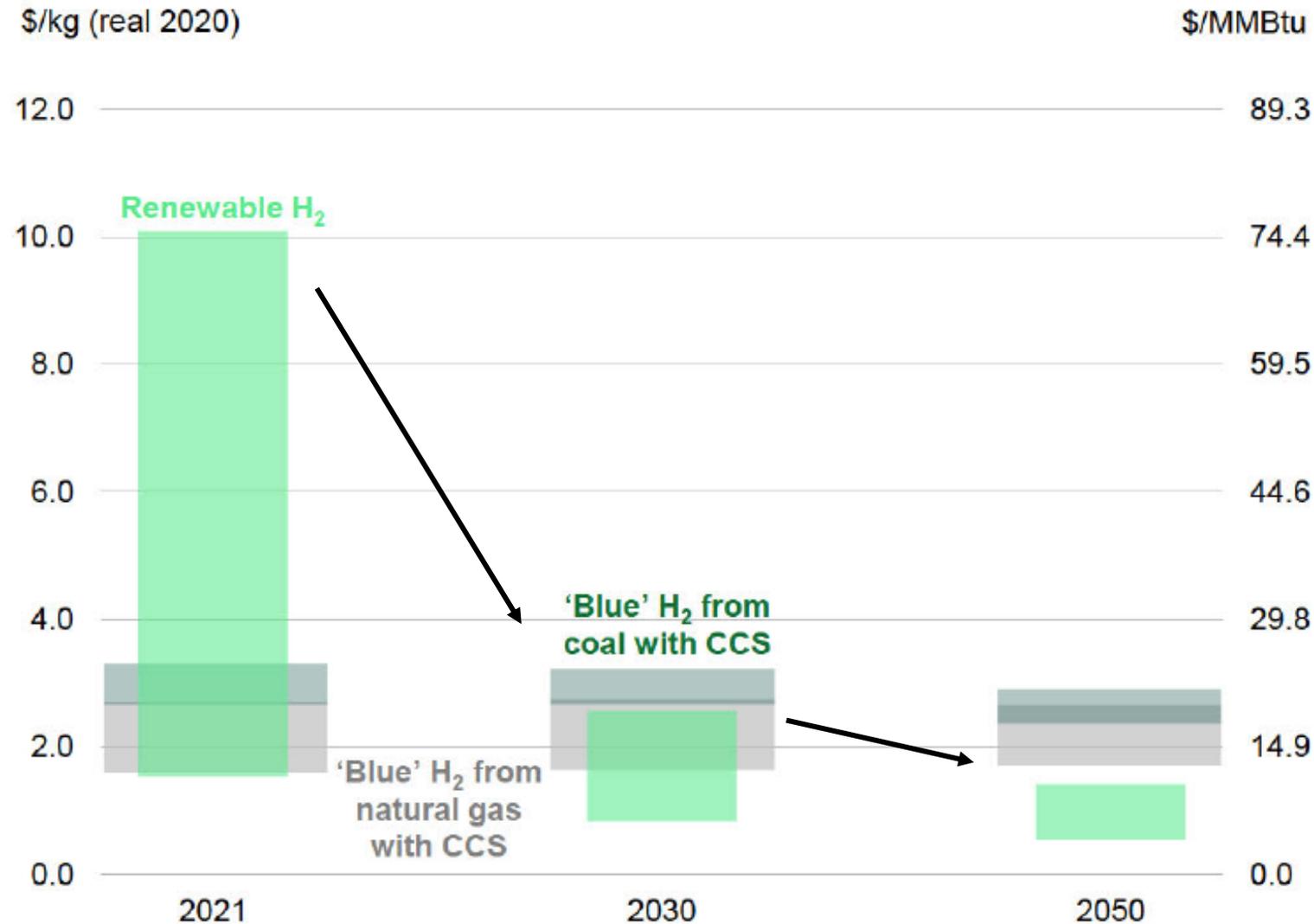
Decarbonises **hard-to-electrify** sectors

Creates **sustainable** jobs and products

Increases Europe's **resilience**



# Renewable hydrogen cheaper than 'blue' by 2030



Driven by cheaper

- electrolysers
- renewable electricity



# Clear targets for renewable hydrogen in Fit For 55 Package

## RENEWABLE ENERGY DIRECTIVE

50% of hydrogen used by industry to be renewable by 2030

2,6% renewable share in fuels for transport by 2030

## ALTERNATIVE FUELS INFRASTRUCTURE REGULATION

By 2030, public hydrogen refueling stations with a minimum capacity of 2 tons/day deployed every 150 km along the Trans-European Transport Network

## REFUEL EU AVIATION

From 2030, 5% sustainable aviation fuel target with a minimum 0.7% share of synthetic aviation fuels, increasing to 28% by 2050



# Ambitious targets call for equally ambitious support

- De-risking projects and bridging the “green premium” cost remain key challenges
- Streamline financial support until renewable hydrogen reaches cost parity with fossil-based hydrogen
  - **State Aid revision must deliver to unlock and accelerate private investment**
- Multiple instruments needed e.g:
  - Carbon Contracts for Difference
  - Government-supported Contract for Difference (CfD) reducing levies imposed on renewable electricity to reduce electrolyser OPEX (mainly electricity)
  - Preferential tax rate for renewable hydrogen over low-carbon hydrogen



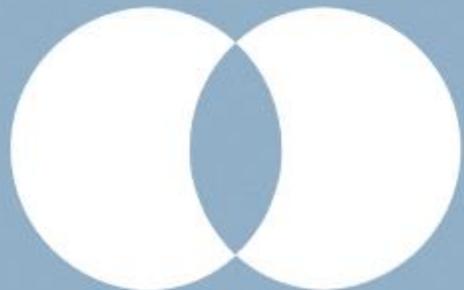
# The challenge of additionality

- Additionality, temporal and geographical correlation requirements should:
  - Avoid adding burden and complexity on RFNBOs producers only
  - Ensure flexibility to account for technical and economic realities of RFNBOs producers
  - Help make business case for electrolyzers to scale deployment
- Unleash electrolyzers' potential in providing system benefits: count curtailed electricity as additional and accommodate for stored electricity
- Even a balanced approach to additionality will not solve the fundamental problem i.e. **tackle the permitting bottleneck**

# Portugal : its unique potential to become a European champion in renewable hydrogen

- Access to very competitive renewable electricity production prices with vast wind and solar potential
- Access to strategic infrastructures (ports, grids)
- Strategic geographical location facilitating exports
- Dedicated funding for renewable hydrogen needed
- Unique opportunity to:
  - Modernise and reduce emissions of hard-to-electrify sectors
  - Reduce natural gas imports





Renewable  
Hydrogen Coalition

Thank you

Follow us    
@renewableH2EU

Get in touch  
info@renewableh2.eu