

MEDREG Hydrogen Strategy and Challenges for Southern Shore Members



Pedro Verdelho, ERSE Executive Board Member
MEDREG Hydrogen Workshop
3 November 2021



Foster local and decentralised energy and economies

- Clean Energy Package
- Renewables
- Self-consumption
- Energy communities
- Peer-to-peer

Continue work on integration of markets

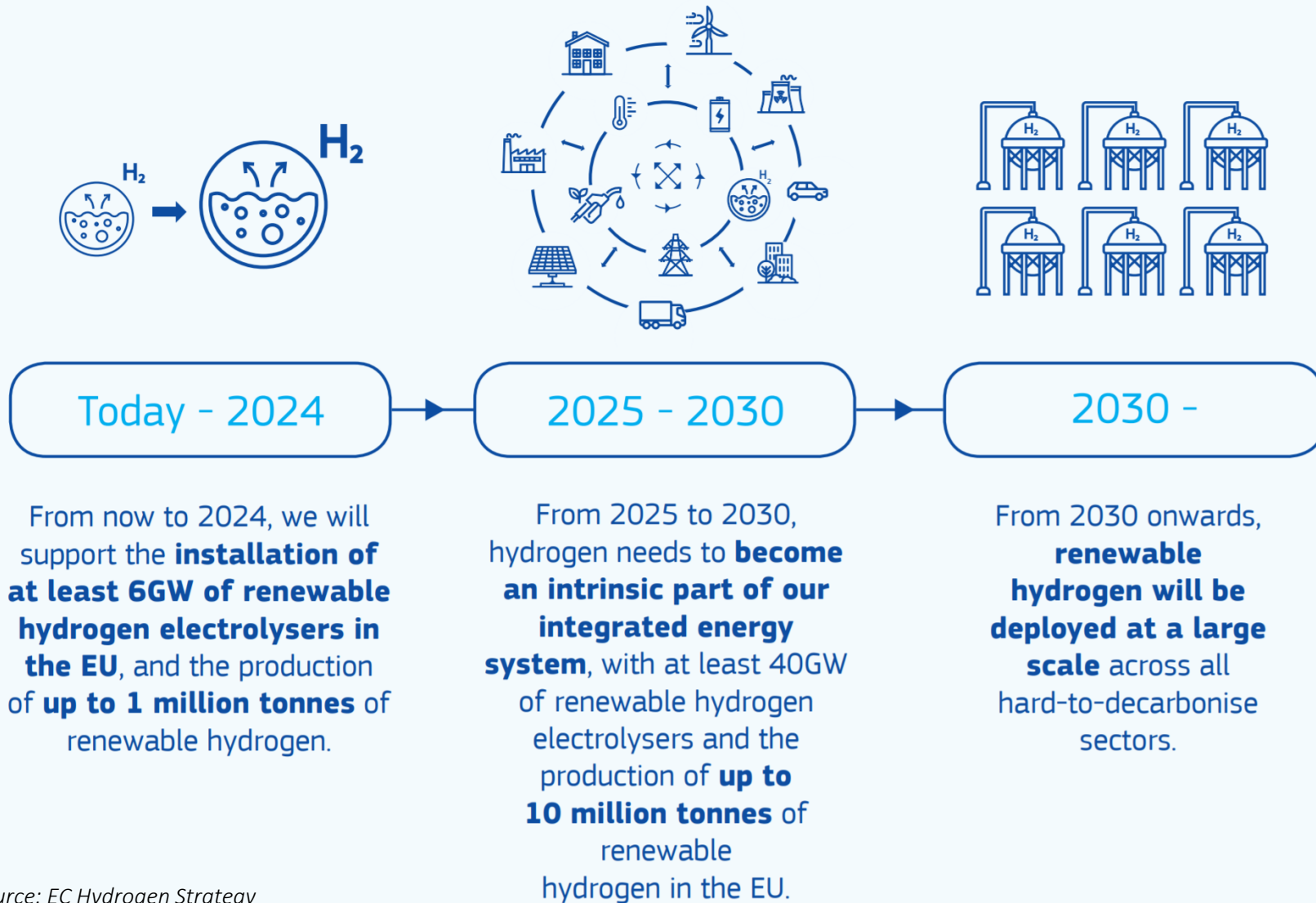
- 1, 2, 3 Packages
- Liberalisation
- Unbundling
- Internal energy market
- New EU entities & NCs



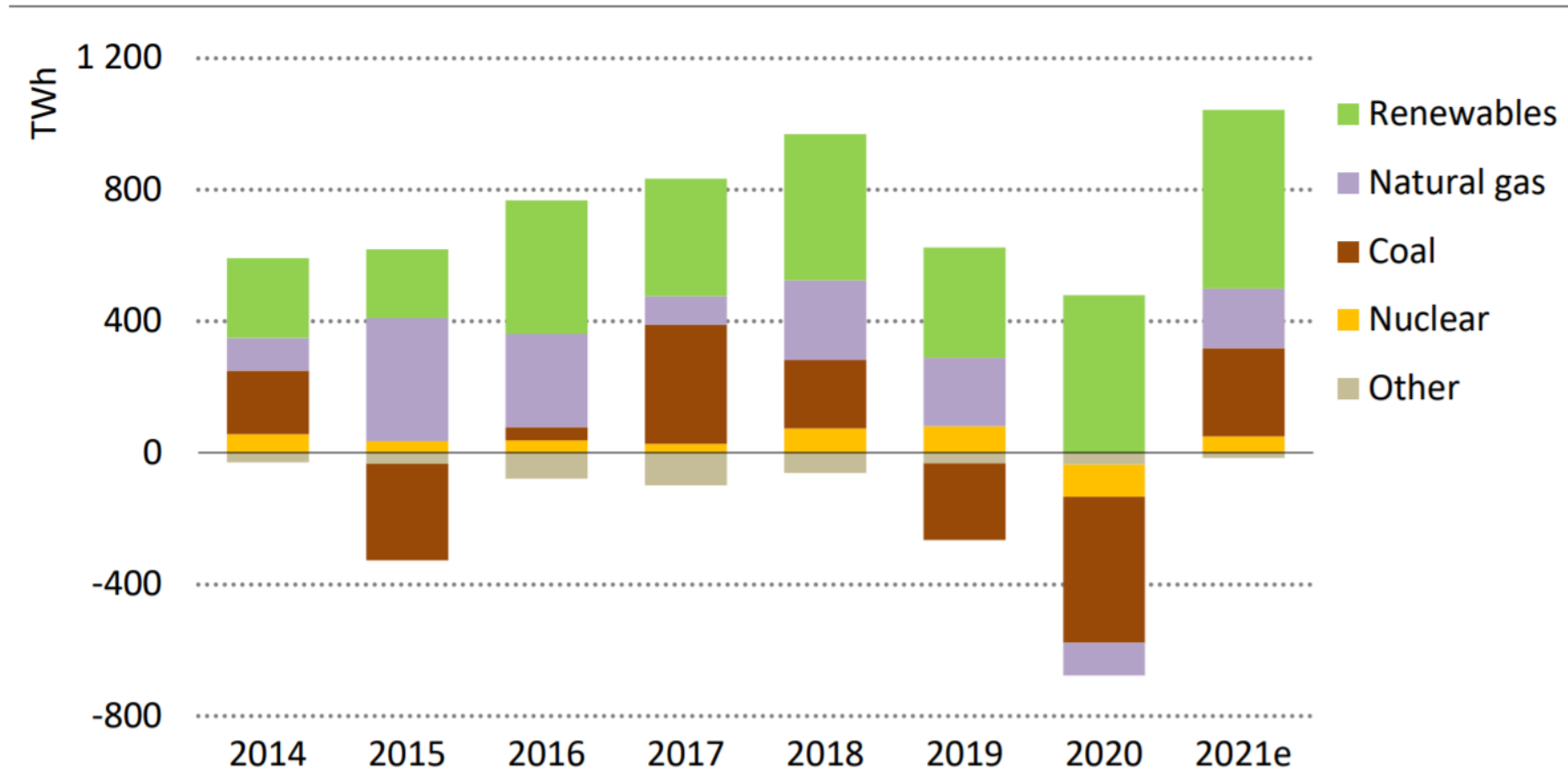
Enhance sector integration and energy circular economy

- New actors & technologies
- Whole system approach
- Carbon-neutral society
- Energy efficiency
- Hydrogen

The path towards a European hydrogen eco-system step by step :



Change in global electricity generation, 2014-2021

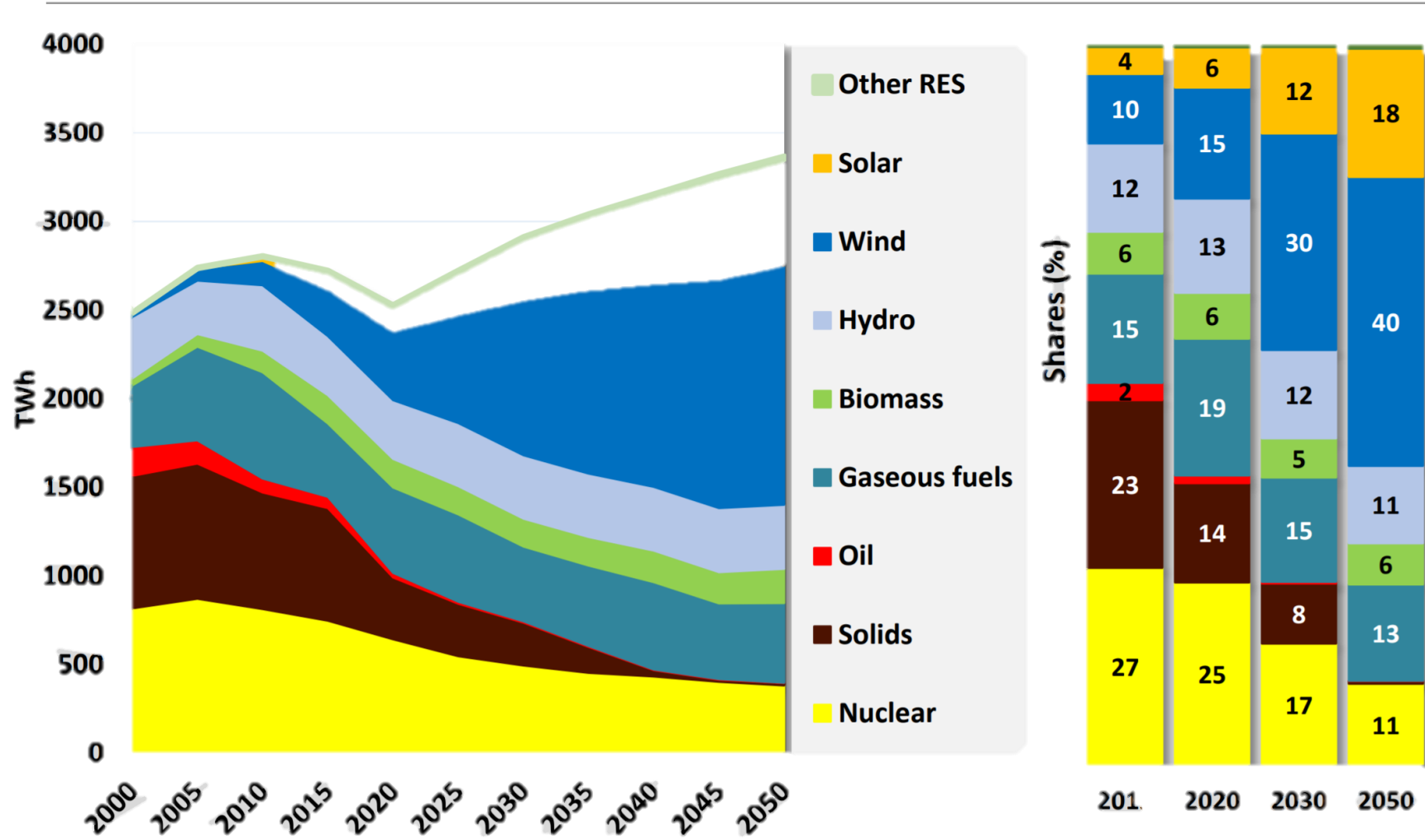


IEA. All rights reserved.

Source: IEA World Energy Outlook 2021



Electricity generation by fuel type



Source: EU Reference Scenario 2020, July 2021



ACER > MEDIA > NEWS

ACER and CEER recommend when and how to regulate pure hydrogen networks

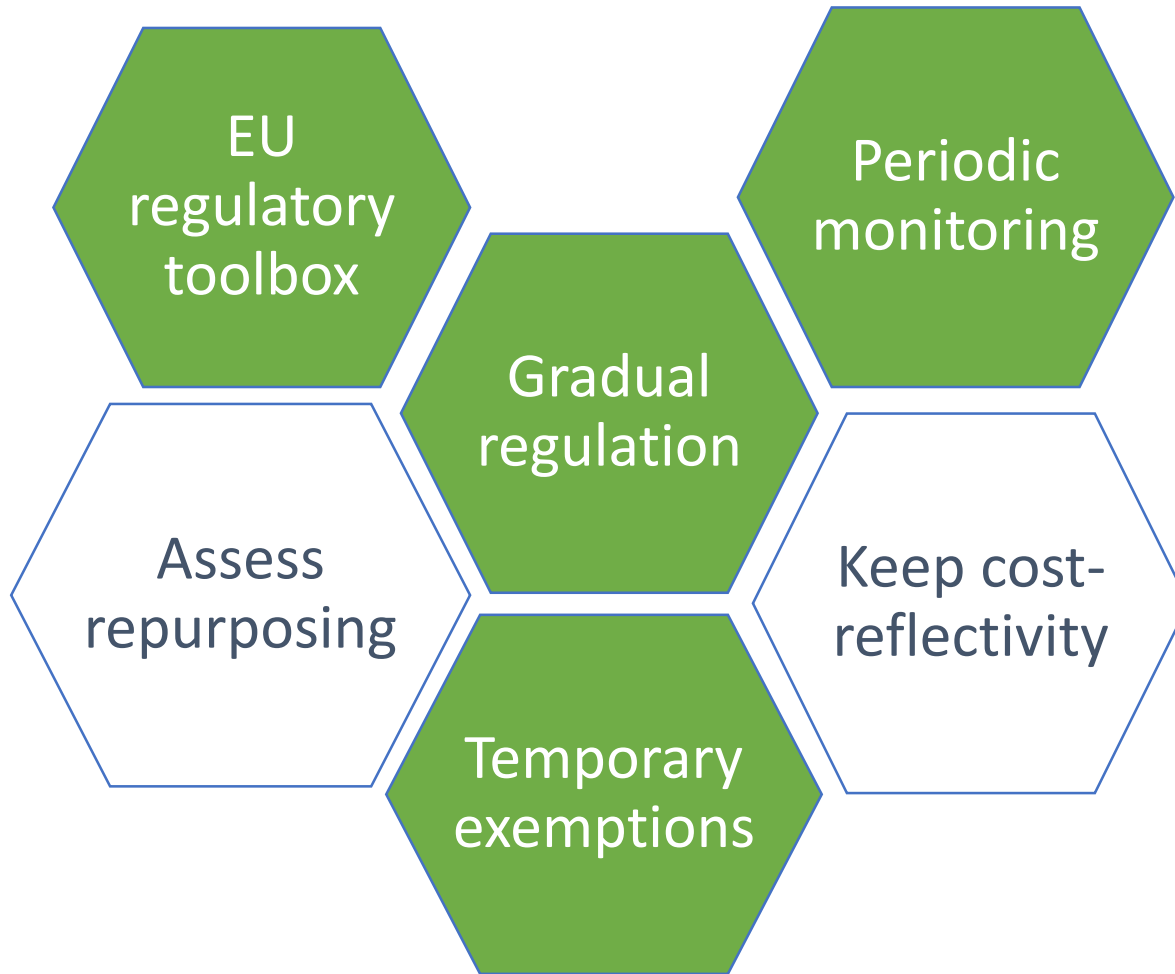
09.02.2021



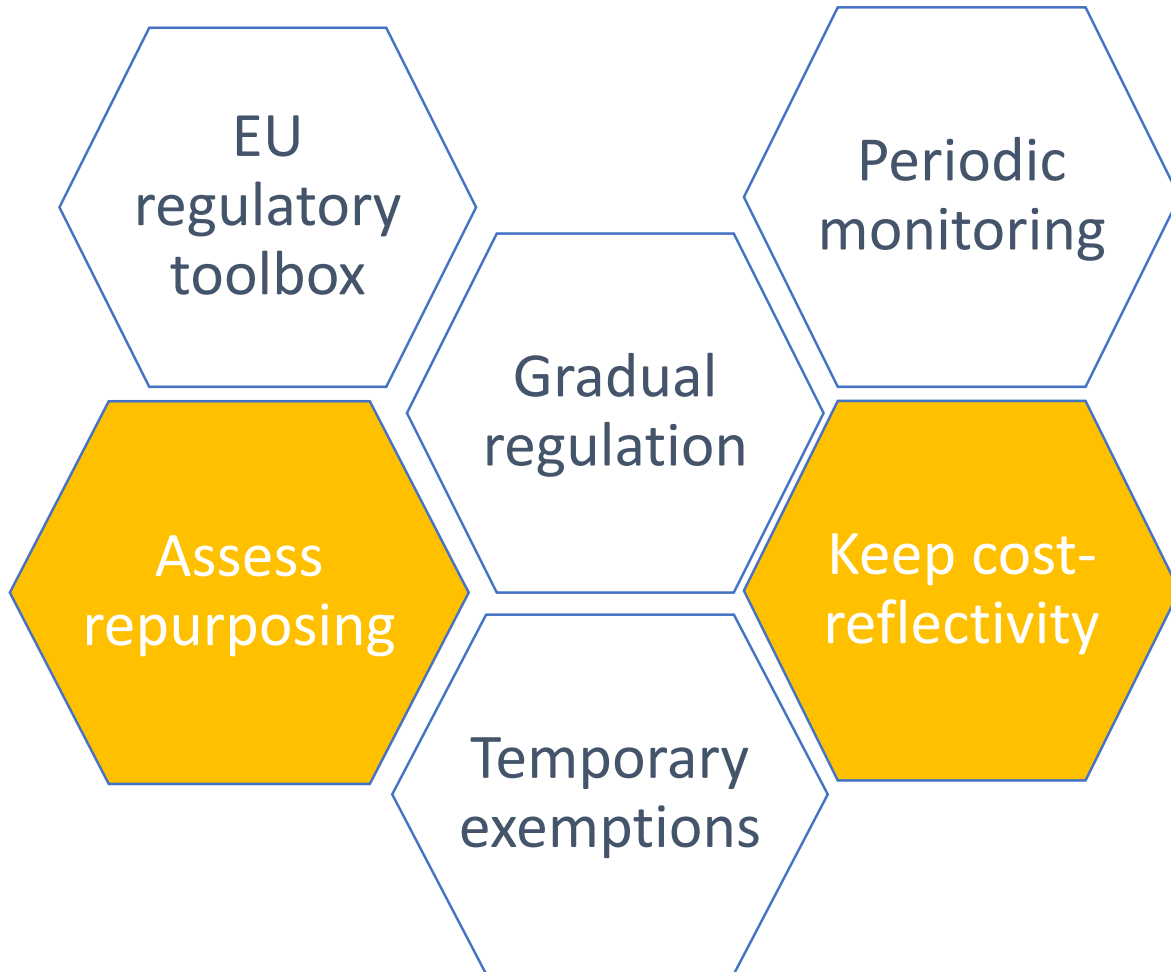
ACER 

European Union Agency for the Cooperation
of Energy Regulators

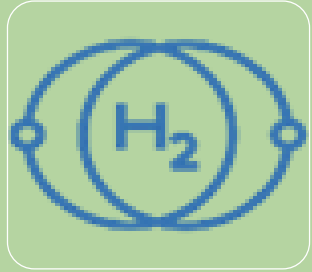




- **Gradual regulation** → offering sufficient certainty to investors, but flexibility for different stage of developments
- **Periodic monitoring** → with a focus on competition and key EU metrics
- **EU regulatory toolbox** → retain key basic principles:
 - NRAs supervision
 - Third-party access
 - Non-discrimination
 - Transparency
 - Customer protection
 - Unbundling
- **Temporary exemptions** → for business-to-business networks



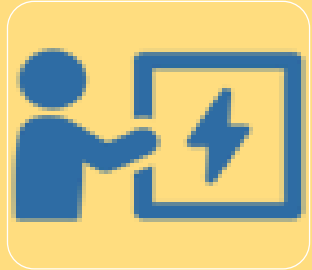
- **Assess repurposing** → To optimise investments
 - Repurposing can give value to potentially underutilised gas pipelines
 - Develop advanced cost-benefit analyses (CBAs) to incorporate societal values and avoided cost (e.g. for addressing electricity network congestion)
- **Keep cost-reflectivity** → avoiding cross-subsidisation
 - The gas/hydrogen network costs should be paid by their respective users
 - Sound practical rule: Don't make users 'pay twice' for the same pipe (once for gas, then again for hydrogen)



1. Enabling gradual and flexible regulation for hydrogen



2. Ensuring a level playing field in a decarbonised and integrated energy system



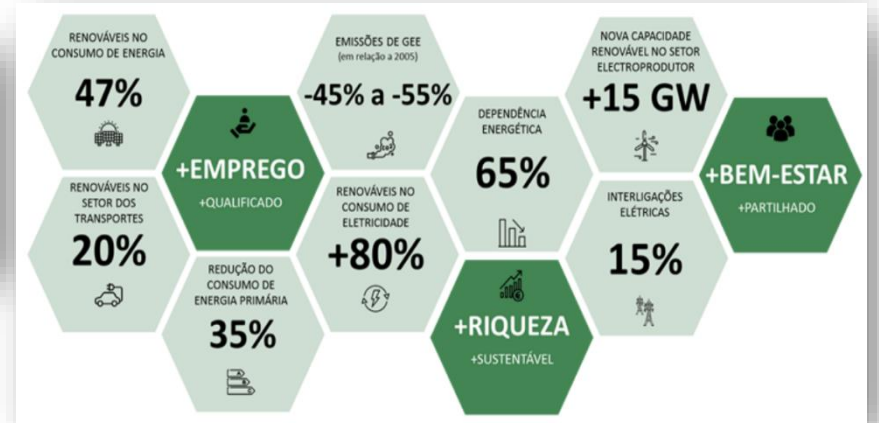
3. Empowering and protecting consumers for the energy transition





EN-H₂

ESTRATÉGIA NACIONAL PARA O HIDROGÉNIO



ECO portuguese economy

Economy Banking Markets Companies Opinions

Portugal will have two Hydrogen Valleys, one in Sines and the other in the country's north

ECO News 8 April 2021

[f](#) [in](#) [↻](#) [t](#)

REUTERS

World Business Legal Markets Breakingviews Technology Investigations

October 14, 2021 4:38 PM WEST Last Updated 15 days ago

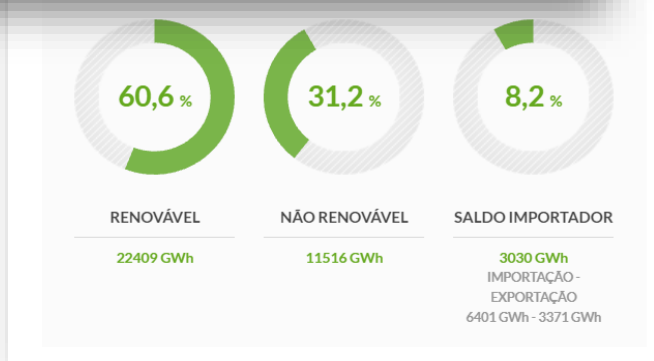
Sustainable Business

EDP to transform Sines coal plant into hydrogen hub by 2025



Other

EDPR, Repsol to jointly develop green hydrogen projects in Iberia





Thank you
very much
for your
attention!

EDIFÍCIO RESTELO
Rua Dom Cristóvão da Gama, 1, 3º
1400-113 Lisboa
Portugal
Tel: +(351) 21 303 32 00
Fax: +(351) 21 303 32 01 • **e-mail:** erse@erse.pt
url: <http://www.erse.pt>