

Wind hydrogen to refineries at the Port of Rotterdam

Main messages

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Port of
Rotterdam

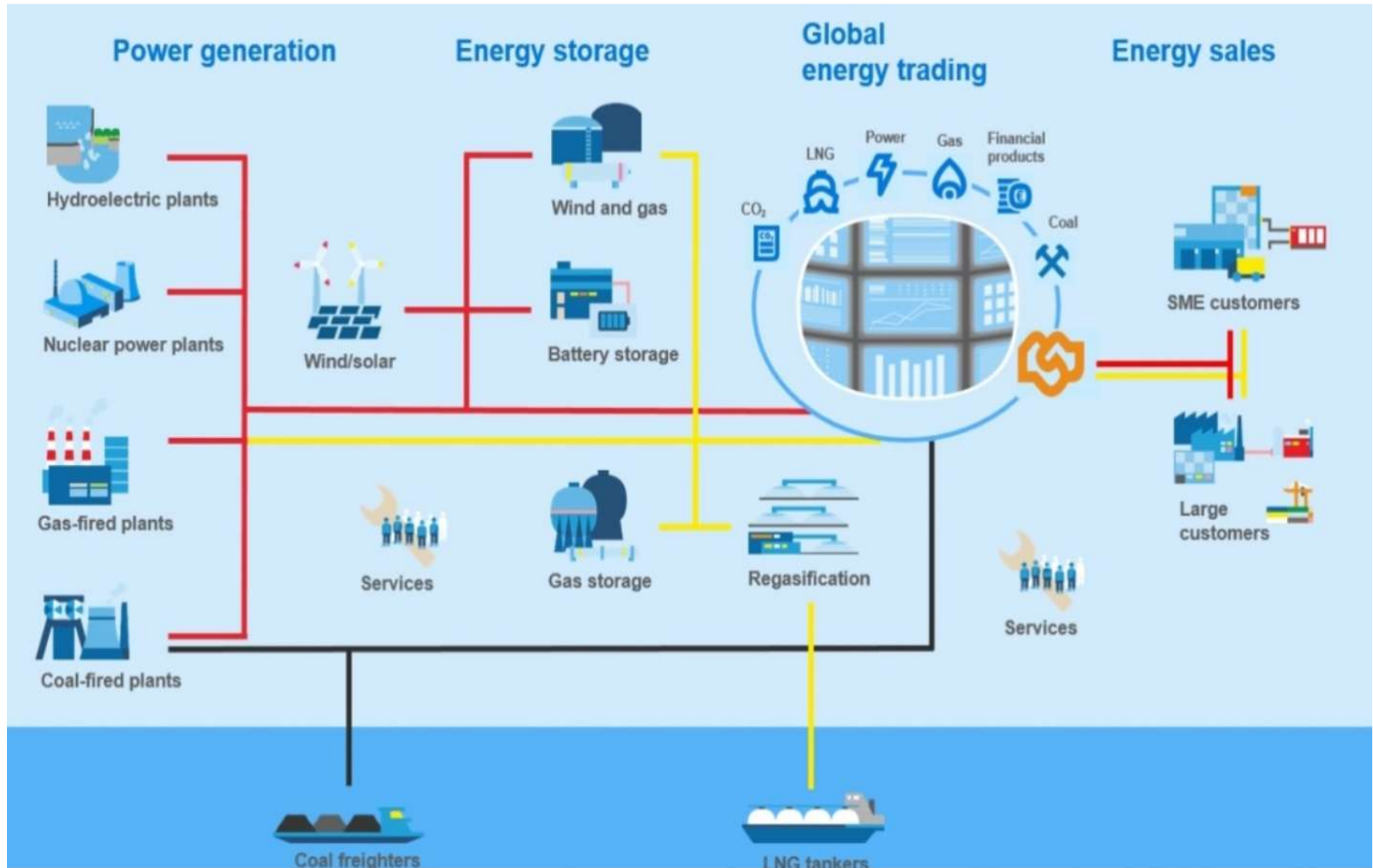


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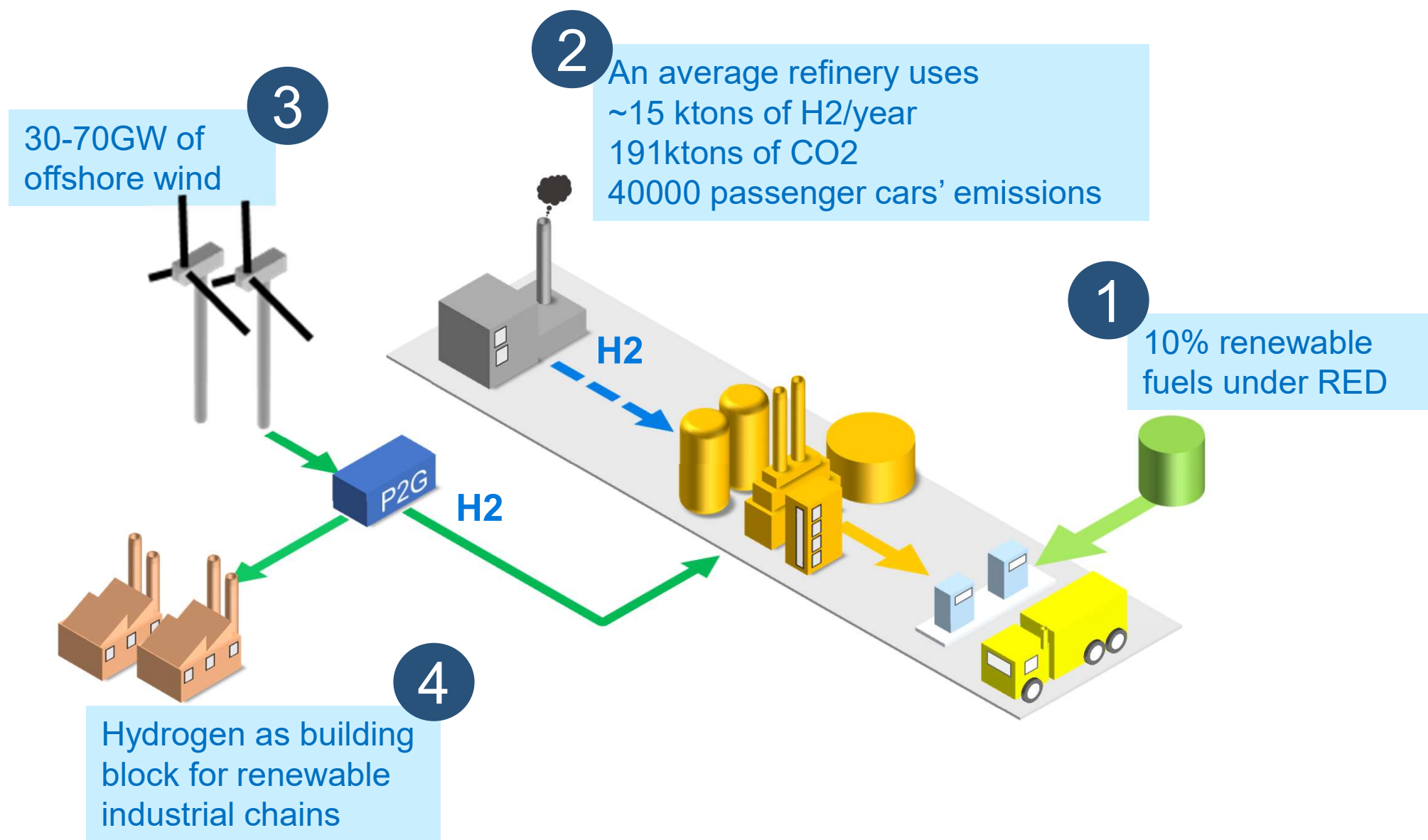
Joulez



Providing security of supply, we make the energy transition possible



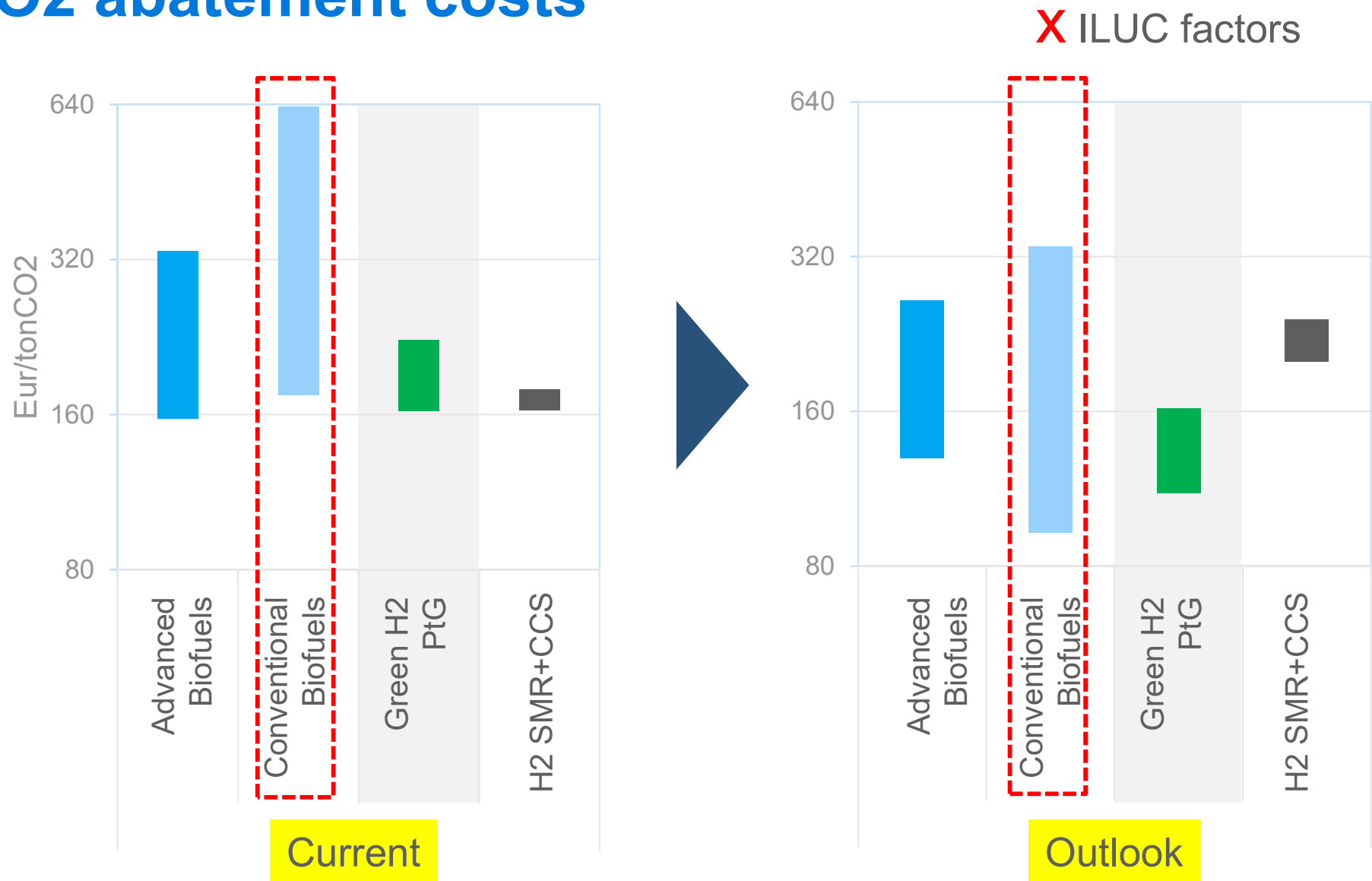
Power to gas to refineries: the concept



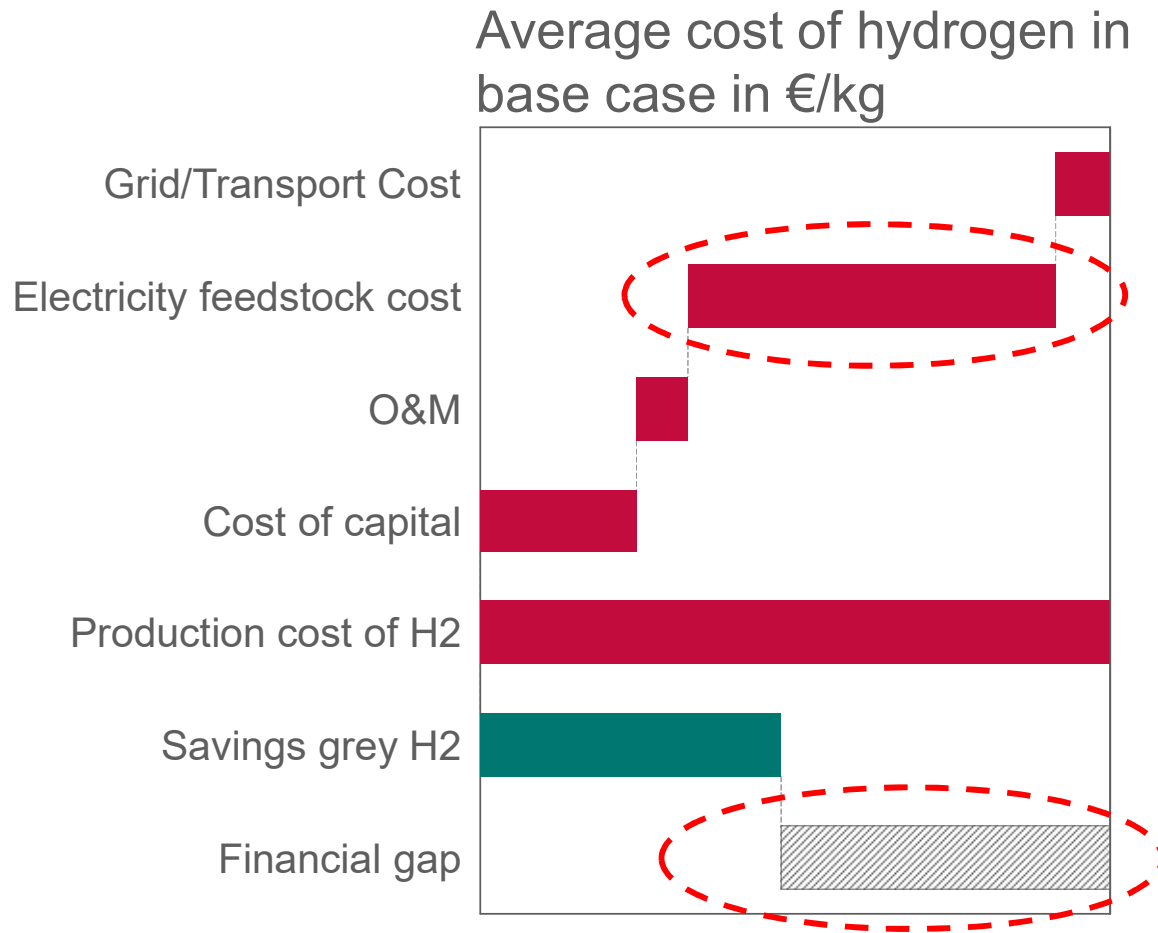
**Study to explore feasibility of supplying green hydrogen to BP refinery at the Port of Rotterdam.
Is it a feasible route to CO2 abatement in transport fuels chain?**



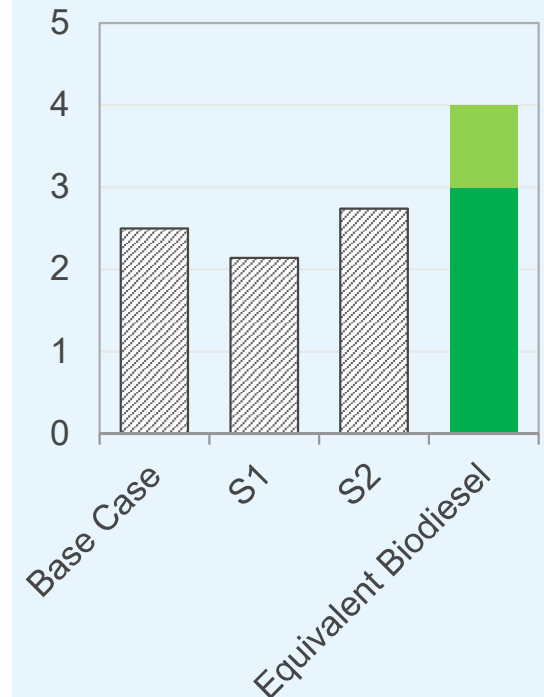
Green hydrogen from PtG is competitive on CO2 abatement costs



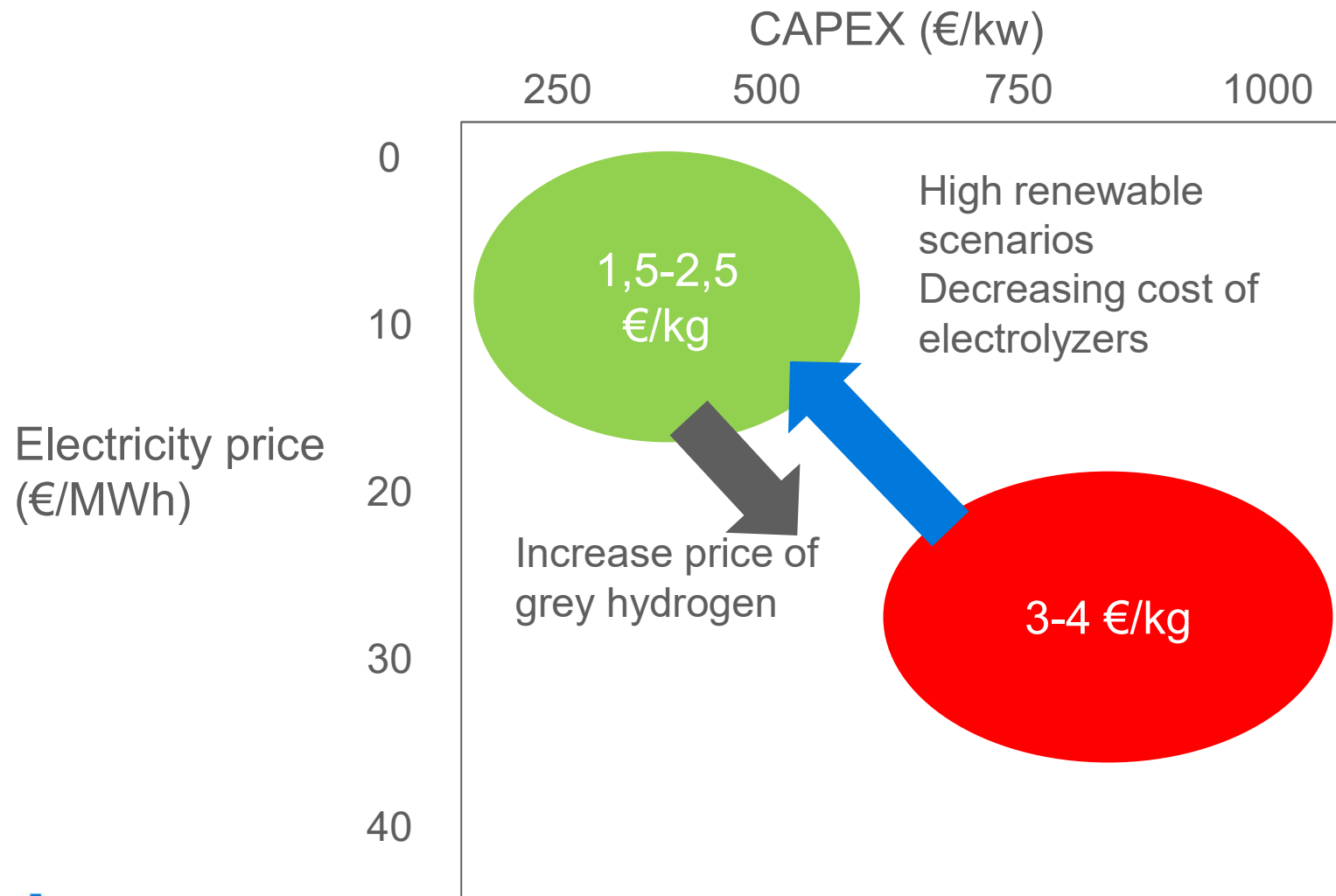
Economic case is viable once regulatory framework in place



Additional willingness to pay if level playing field



Green hydrogen can even be competitive with grey hydrogen in the long run



Summary

- No major technical challenges. Implications of higher volumes on the refinery and hydrogen grid need to be investigated
- Green hydrogen is a competitive CO₂ abatement route and can play crucial role in reducing CO₂ emissions in the transport fuels.
- Removing barriers to new market entrants. Need of a hydrogen market. Implications for the organization of hydrogen grid.
- If regulatory framework is in place, there is an interesting business case

Thank you!

Contentions

- Autonomous industrial switch to electrification and supportive regulatory framework are not sufficient to meet the 2030 targets (Dutch coalition agreement). We can't wait for policy-making at EU level.
- Current business models and market mechanisms dis-incentivize investments in P2X. A strong leadership role is required to overthrow the current business-silos and technology lock-ins.