

# Electricity sector's long-term vision towards hydrogen and sector integration

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# The future is electric. In 2050:



Electricity in Energy demand

2021

~23%



2050

58%-71%



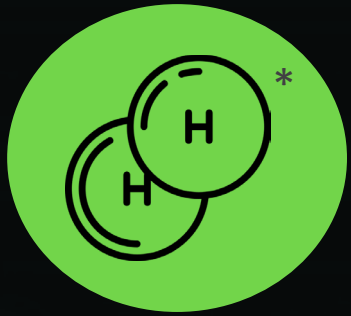
Electricity generation by renewable sources

~37%



75%-82%

## When electrification is not feasible or efficient?



~8-10% of final European energy demand



Buildings:  
2-3% H<sub>2</sub> Vs 71-84% electrification



Transport Sector:  
11-18% H<sub>2</sub> Vs 46-58% electrification



Industries:

- Light industry: 2% H<sub>2</sub> Vs 71-84% electrification
- Medium industry: 17% H<sub>2</sub> Vs 40% electrification
- Heavy industry: 31% H<sub>2</sub> Vs 25% electrification



# Hydrogen will play a role to balance the power system



Increased renewable generation

Decentralised and system highly dependent on flexibility

For electricity generation

2050

Gas

Hydro, Batteries and storage  
~7%

