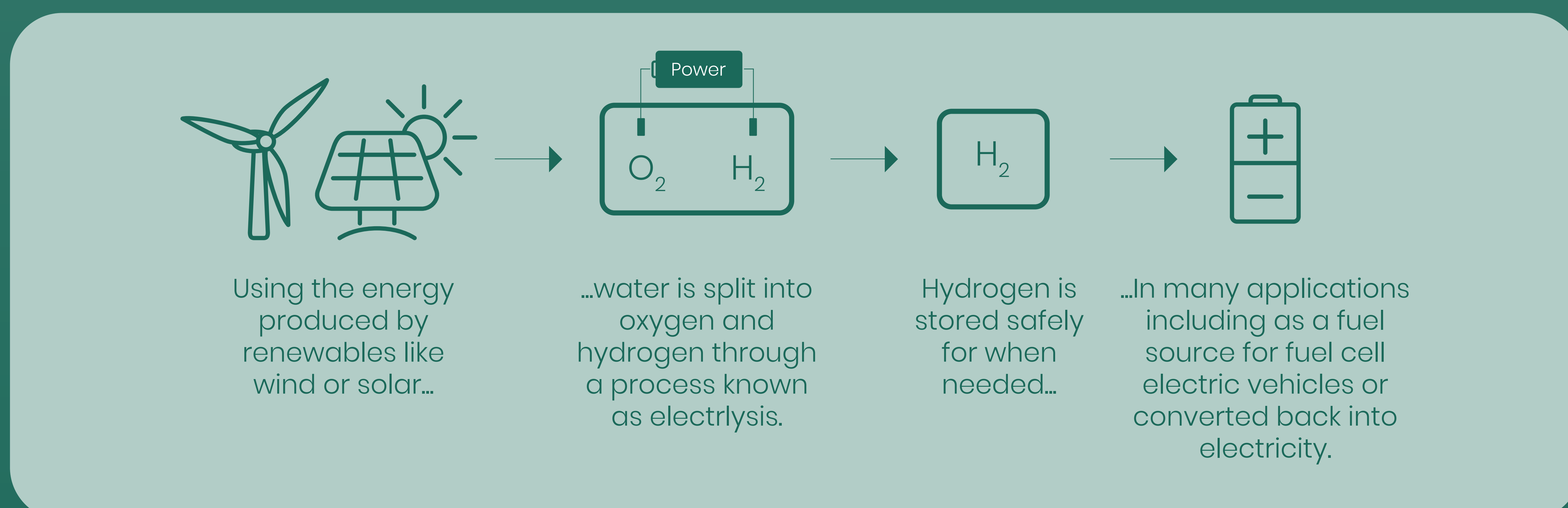
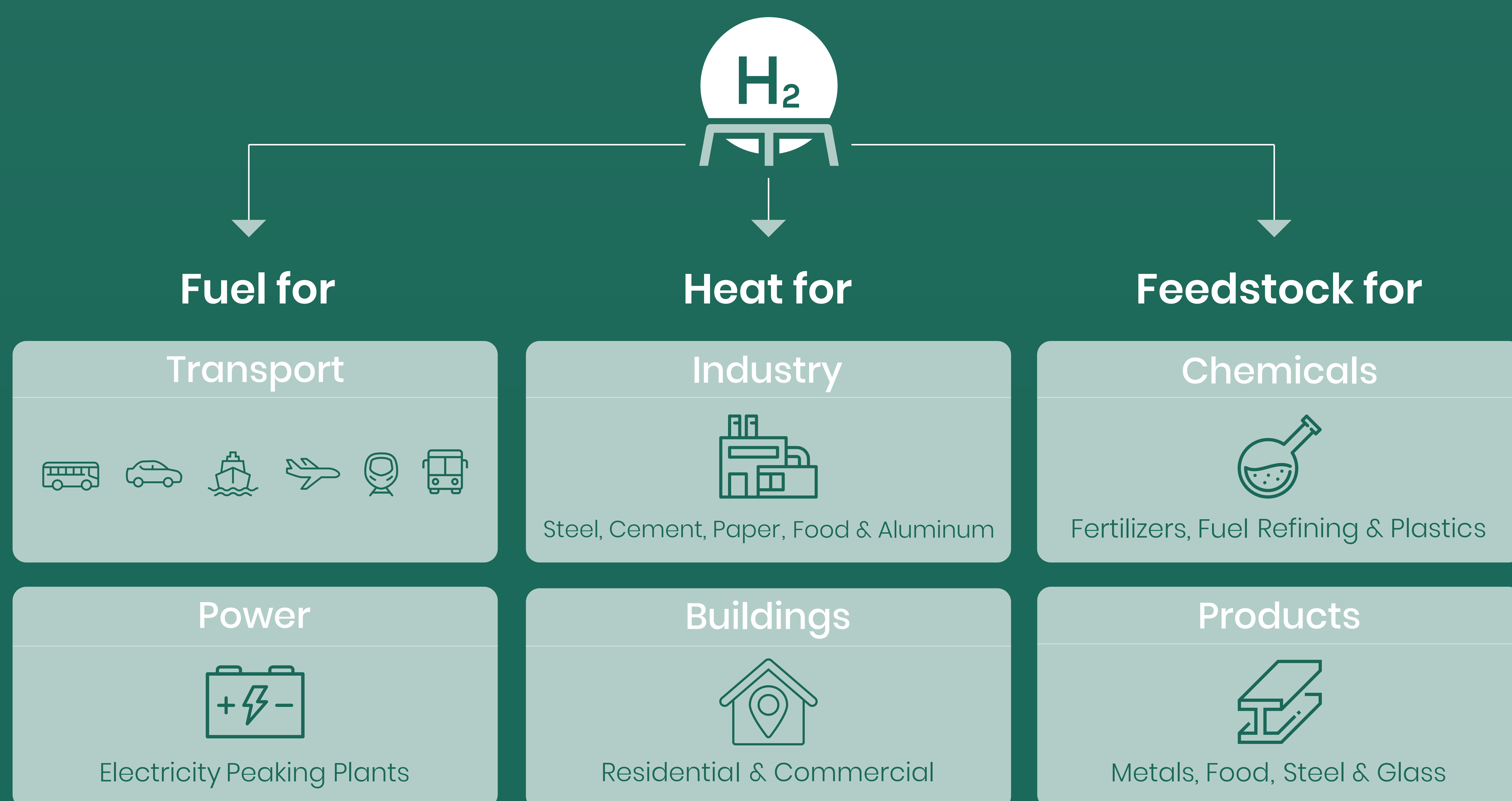


WHAT IS GREEN HYDROGEN?

Green hydrogen is produced using power supplied from renewable or clean sources such as wind or solar. Electricity generated by the Firlough Wind Farm will be used in a process called electrolysis which splits water into hydrogen and oxygen. This hydrogen is considered green as the process does not create any harmful emissions.



HOW GREEN HYDROGEN CAN BE USED



WHY PRODUCE GREEN HYDROGEN IN THE WEST OF IRELAND?

REDUCING EMISSIONS

- Key sectors such as transport are heavy polluters and require an alternative to full electrification.
- Transport was responsible for nearly 18% of Ireland's emissions in 2021.
- Heavy Duty Vehicles account for only 5% of vehicles on the road, yet are responsible for 25% of CO₂ road transport emissions.

SECURITY OF SUPPLY

- Ireland depends heavily on imported fossil fuel with 69% of our energy needs coming from abroad.
- Green Hydrogen is a locally produced fuel that can replace fossil fuels to power industry, commerce and the needs of everyday life.

PRICE CERTAINTY

- Unlike global oil and gas markets, a locally produced green fuel can be produced at a fixed cost for 15 years or more.
- In 2019 the cost of imported fossil fuels was €4.5 billion. This is expected to increase dramatically in 2022 and beyond due to increased oil prices.

JOB CREATION AND ECONOMY

- MaREI estimates that a net-zero economy could create 50,000 jobs in Ireland.
- Delivering 290 MW of electrolyser capacity by 2030 would create 600 new jobs for Ireland, with a further 1,200 indirect jobs according to a recent study completed by Gavin & Doherty Geosolutions.