



Hydrogen in the Energy System

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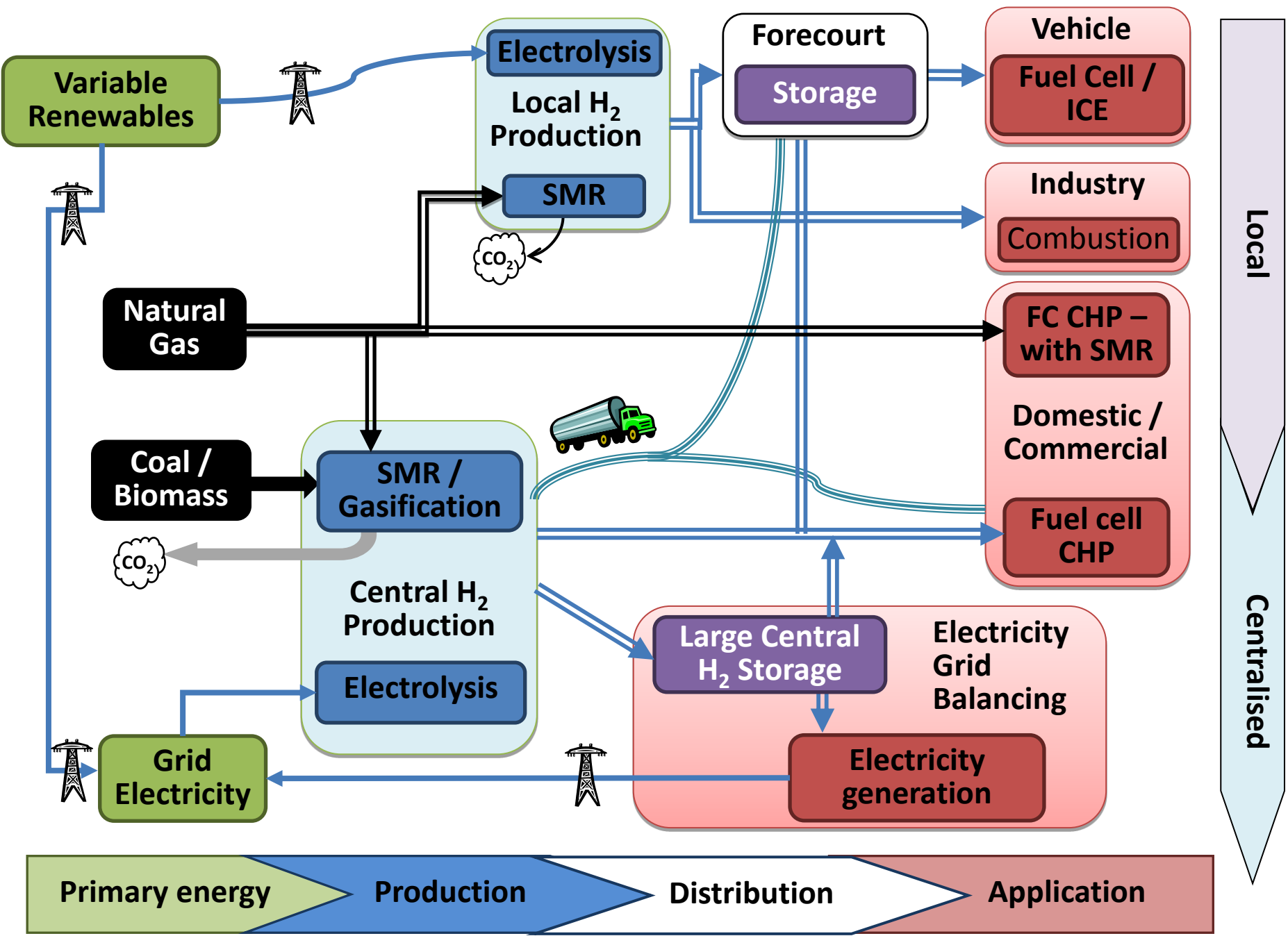
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ERP project on Hydrogen

Set out to consider the role hydrogen could play across the energy system.

- Transport
- Energy storage & electricity grid management
- Heat – domestic and industrial





Issues

- Benefits
 - Can provide various services and supply several markets.
 - Alternative to electrification.
- Volumes of hydrogen needed for each option.
- Where the primary energy will come from
 - ‘surplus’ electricity,
 - hydrocarbons,
 - new technologies.
- Dependencies – e.g. development of CCS
- What are the key costs?



What is needed

- Energy system modelling of hydrogen.
 - System-wide approach is necessary when comparing hydrogen with other energy options.
- Strategy for hydrogen development.
 - Need for pilot projects to understand the technologies and implications.
 - Support for UK expertise and companies.