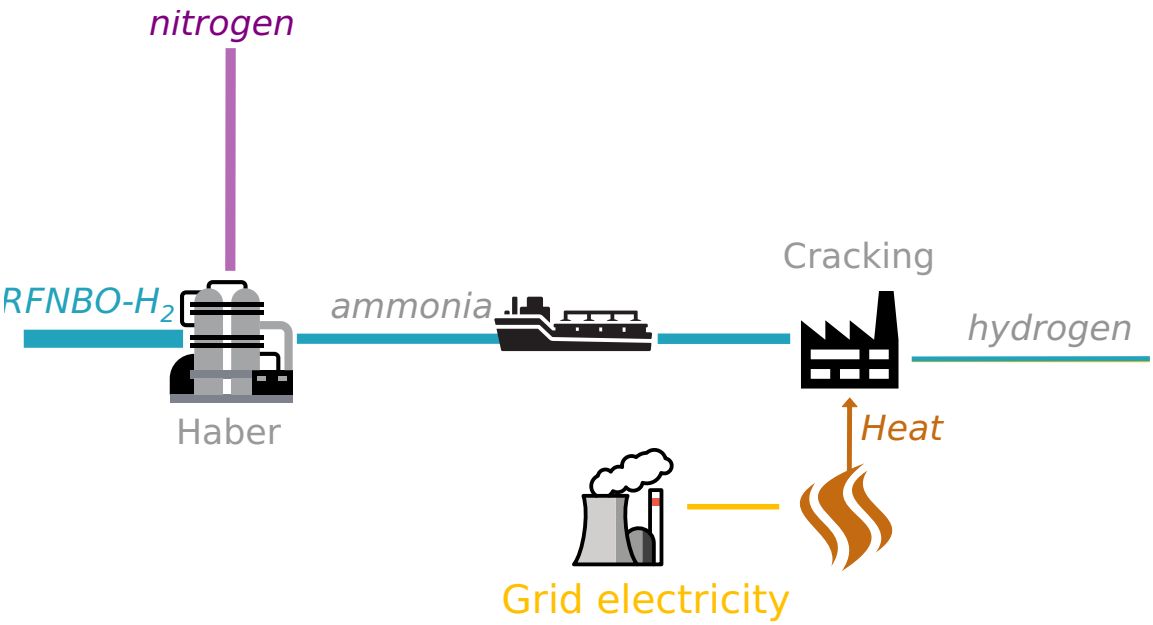
3: Ammonia + cracking

How to determine if an energy input is “relevant”



Cracking Ammonia is endothermic, the heat can be supplied electrically or by burning part of the ammonia. Here we assume that the energy is supplied electrically.

Assumptions

Transports

For this example, the transport process has been oversimplified. In reality, emissions caused by the transport need to be taken into account. This includes emissions from the ship, charging, uncharging and all other intermediate processes, including upstream emissions of the energy inputs.

Parameter	Symbol	Example value
Hydrogen demand Haber process (ammonia production)	\({hydrogen}_{input}\)	\(1.16\ \color{grey}{\left.MJ_{H_2}\middle/MJ_{{NH}_3}\right.}\)