



Transforming industry and global value chains with green hydrogen

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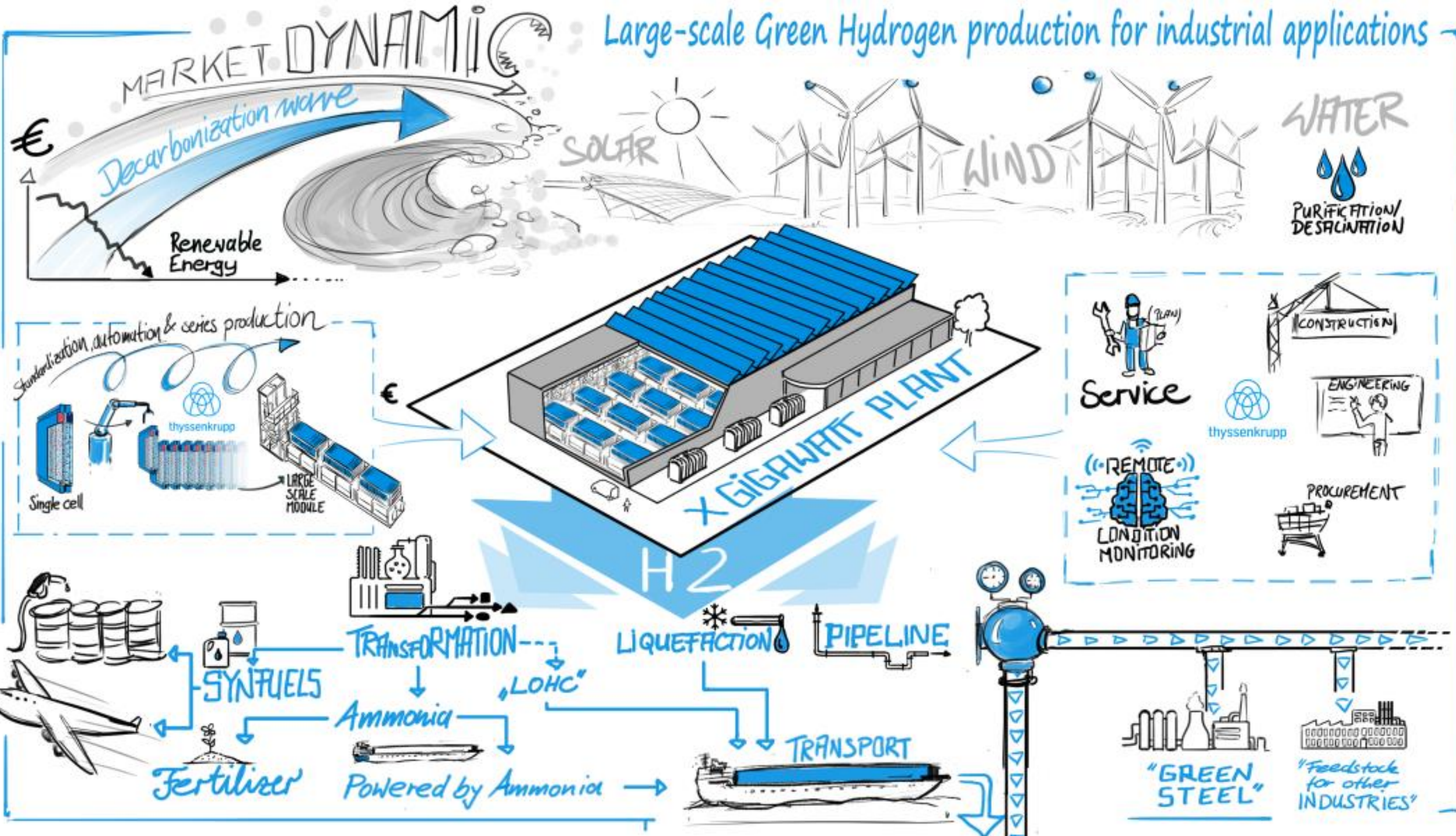
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engineering. tomorrow. together.

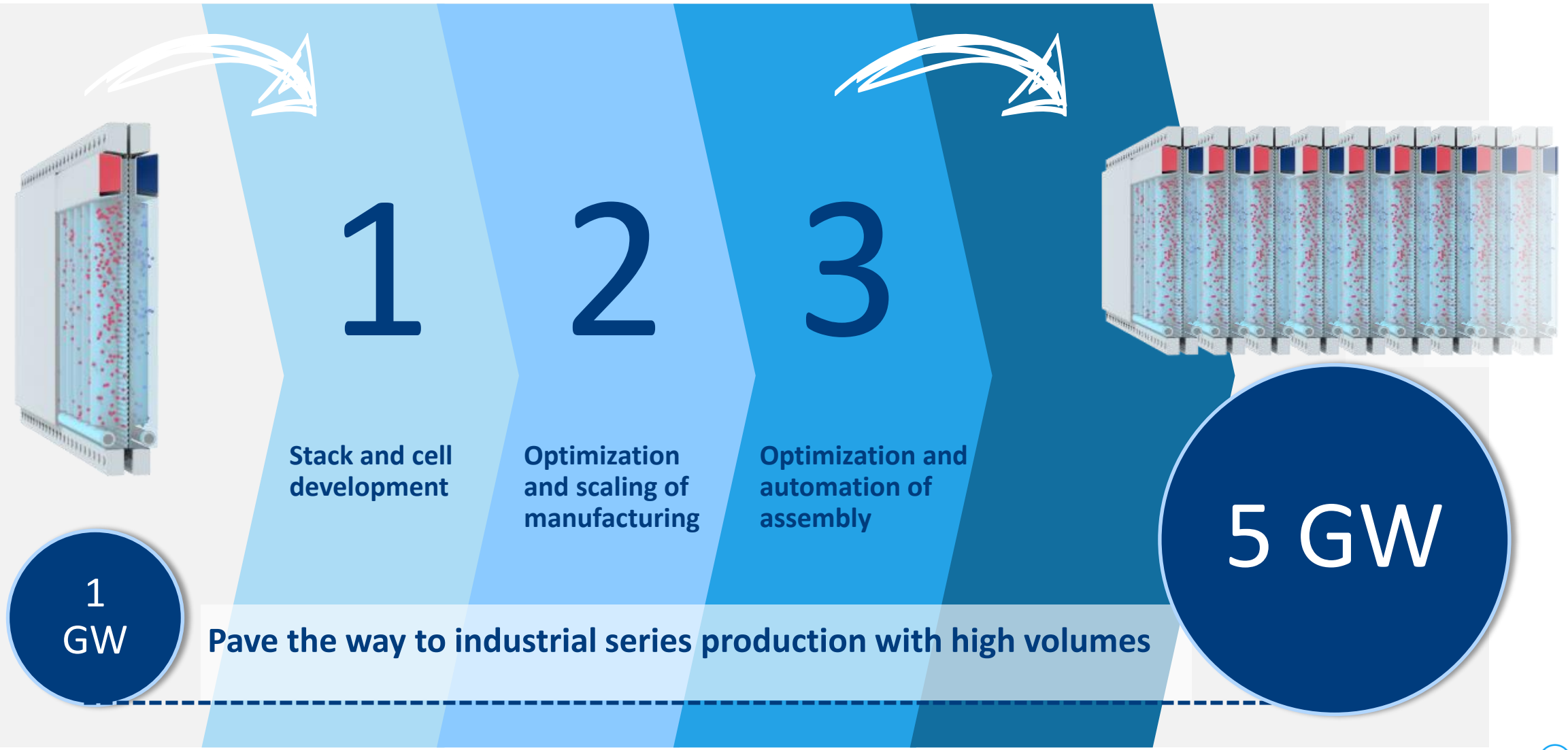


thyssenkrupp

Large-scale Green Hydrogen production for industrial applications

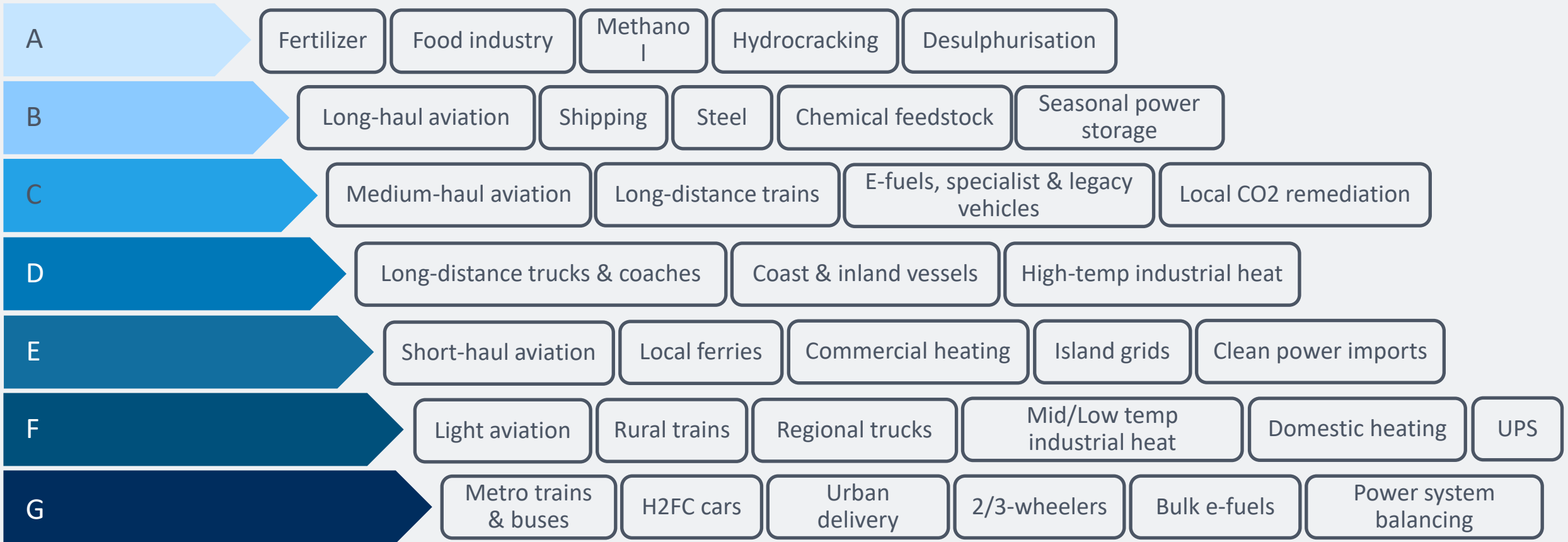


We prepare for an even more dynamic project market and aim for a 5 GW supply chain



Downstream applications of hydrogen

Unavoidable



Uncompetitive



Sustainable steel production via green hydrogen

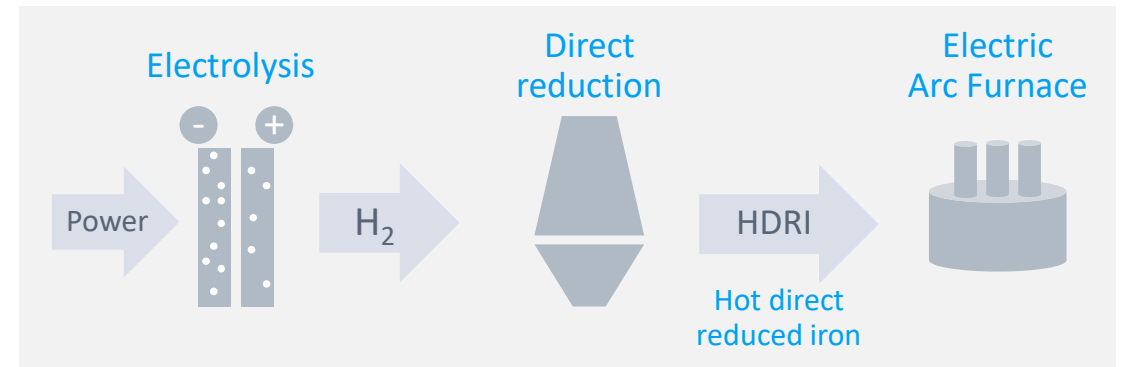
Today

Steel furnace Duisburg

- 20 Mt of the CO₂ emissions in Germany equivalent to 2.5% of the total emissions
- 10 Mt of annual production
- Target 2030: -30% emissions
- Hydrogen demand in 2050: 720.000 t H₂

Tomorrow:

Direct reduction of iron ore/ >1 TW potential world wide



1 770 Mt

Global steel production

~2 t CO₂

per ton of steel are emitted during conventional production

8%

steel production accounts for 8% of the global CO₂ emissions

25 t CO₂

avoided per ton of hydrogen

2.6 €/kg H₂

Break of 50 €/tCO₂ emission tax (Hydrogen Council)



THANK YOU FOR YOUR ATTENTION

