



BRAZILIAN CHAMBER
OF COMMERCE IN GREAT BRITAIN



Department for
Business & Trade

ALLEN & OVERY

Hydrogen in Brazil

1 March 2024





ALLEN & OVERY

Green Hydrogen: Opportunities & Challenges

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1 March 2024

A brief overview of challenges and opportunities

1

What is Allen & Overy seeing in the worldwide green hydrogen market?

2

Which use cases provide the main opportunities for green hydrogen?

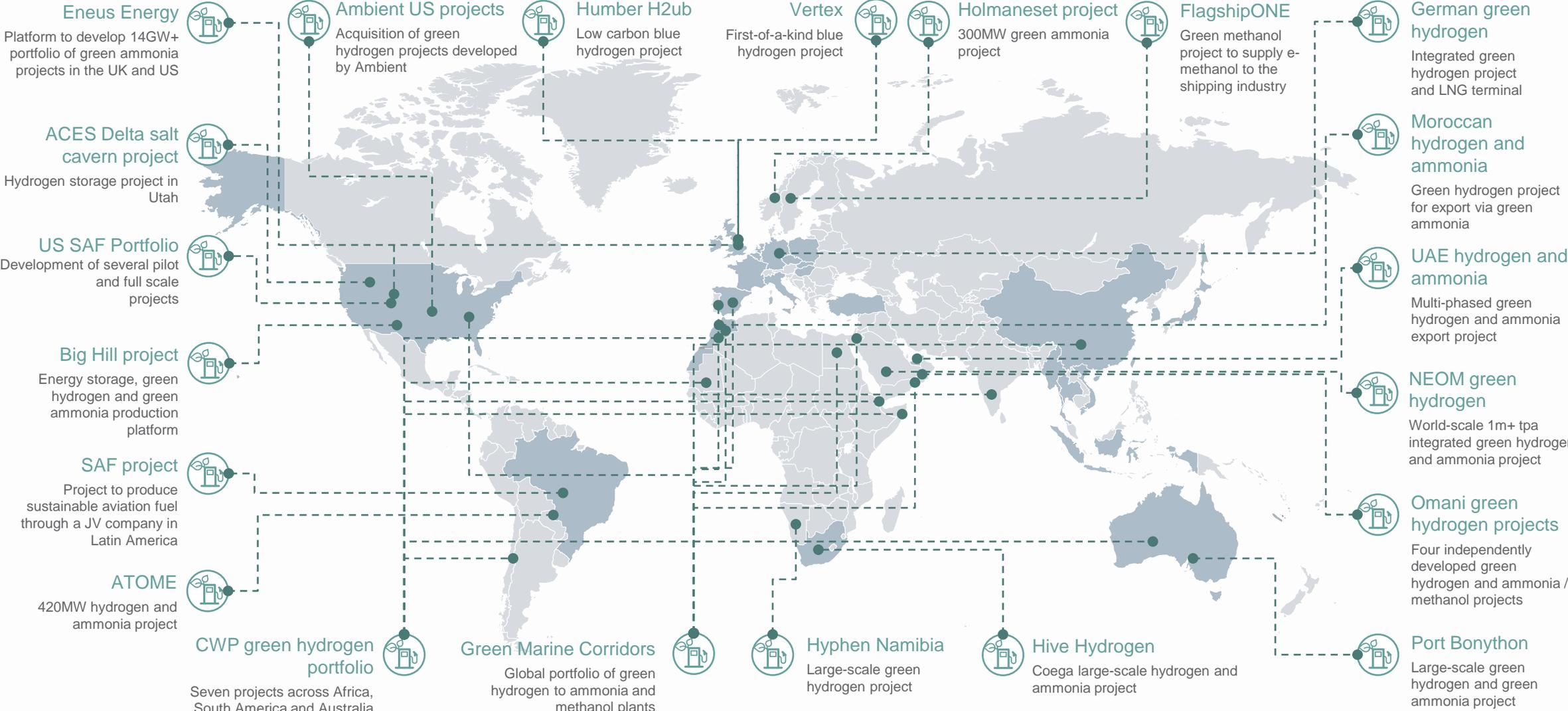
3

What are the key structuring and commercial challenges for green hydrogen projects?

What are we seeing and
where are the
opportunities?



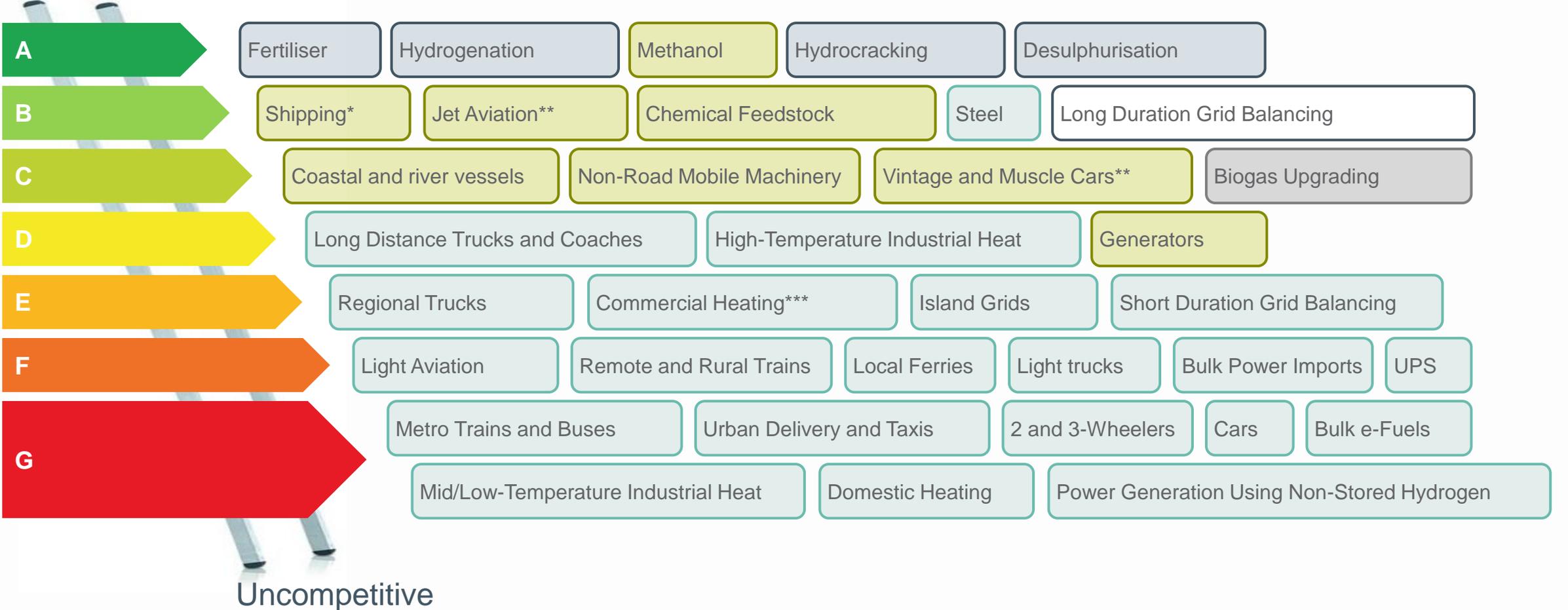
A snapshot of what we are seeing in the green H2 market



Liebreich's Hydrogen Ladder

Unavoidable

Key: No real alternative Electricity/batteries Biomass/biogas Other



*As ammonia or methanol **As e-fuel or PBTL ***As hybrid system

Source: Michael Liebreich/Liebreich Associates, [Clean Hydrogen Ladder, Version 5.0, 2023](#). Concept credit: Adrian Hiel, Energy Cities. [CC-BY 4.0](#)

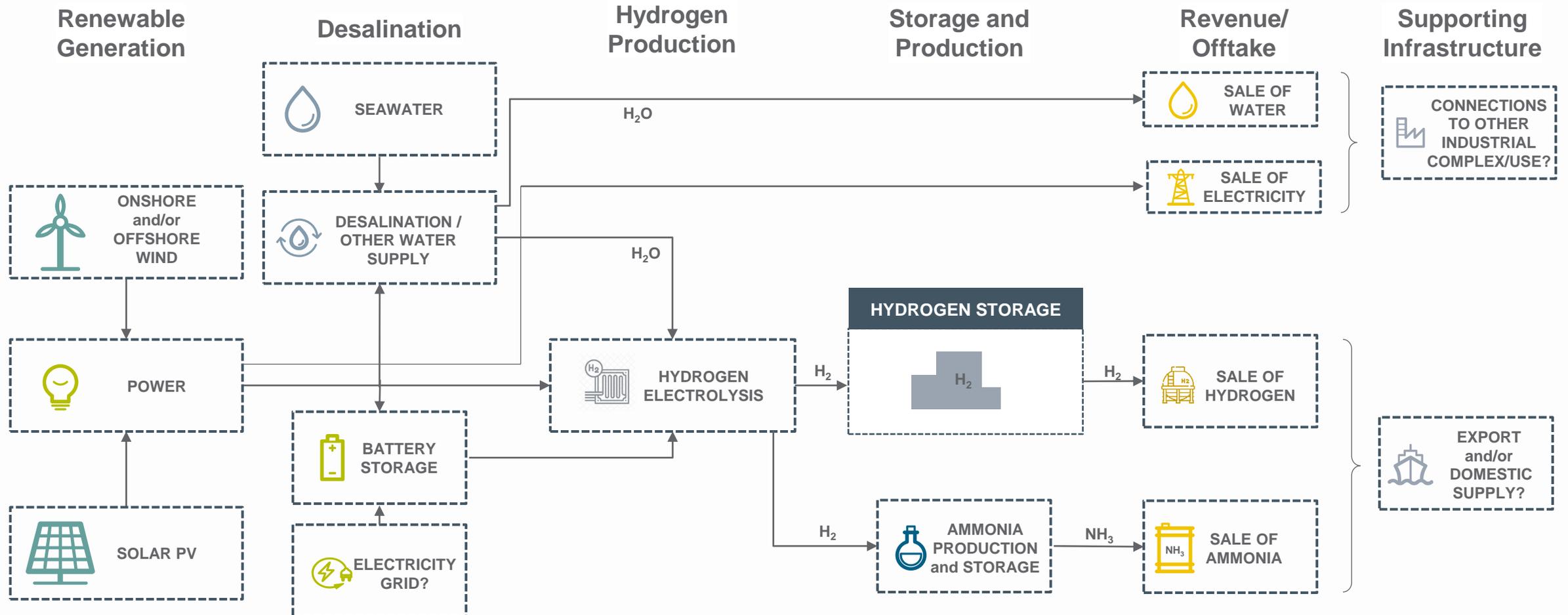
Key issues in
developing and
financing green
hydrogen projects



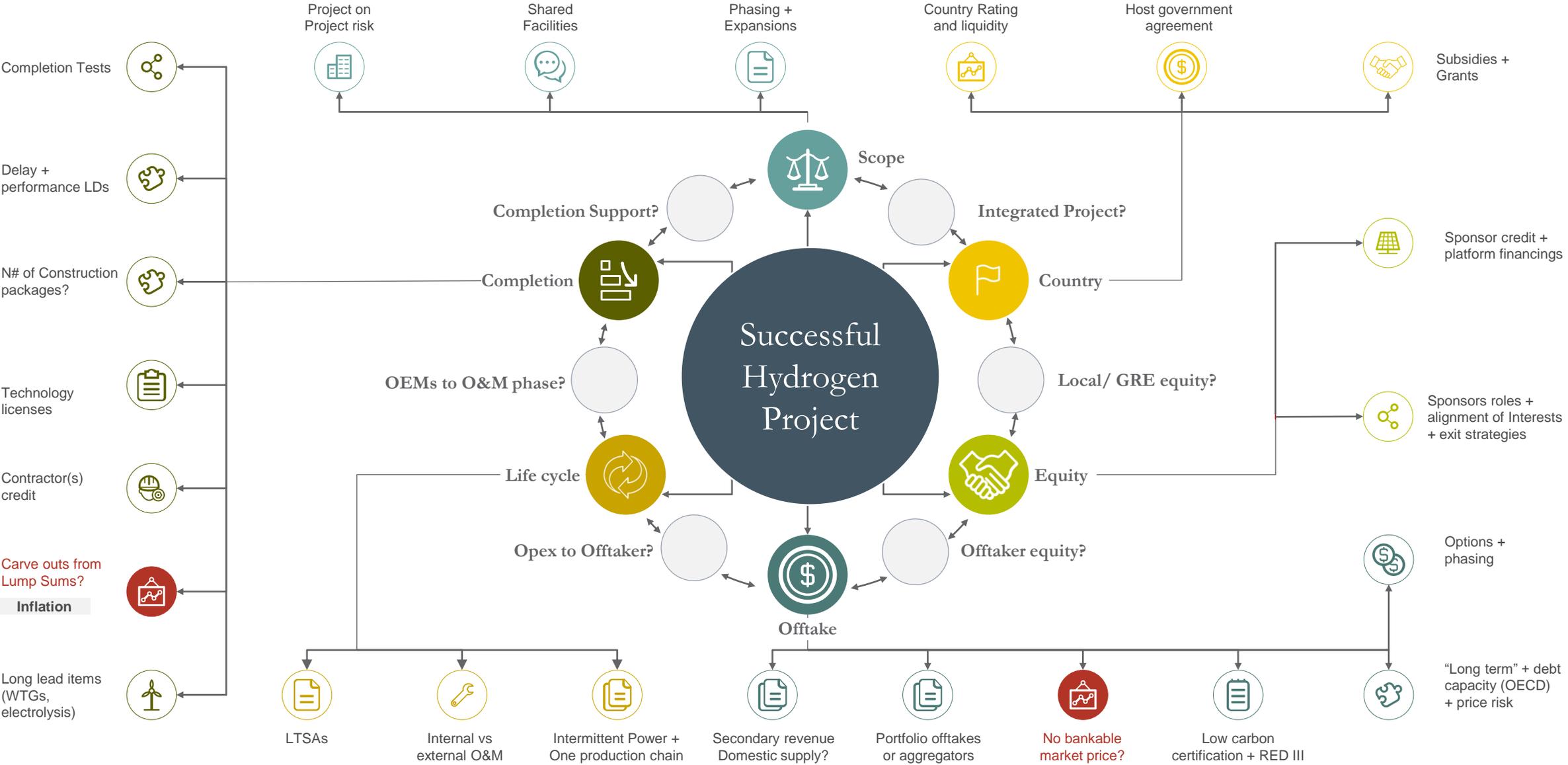
Green Hydrogen Project



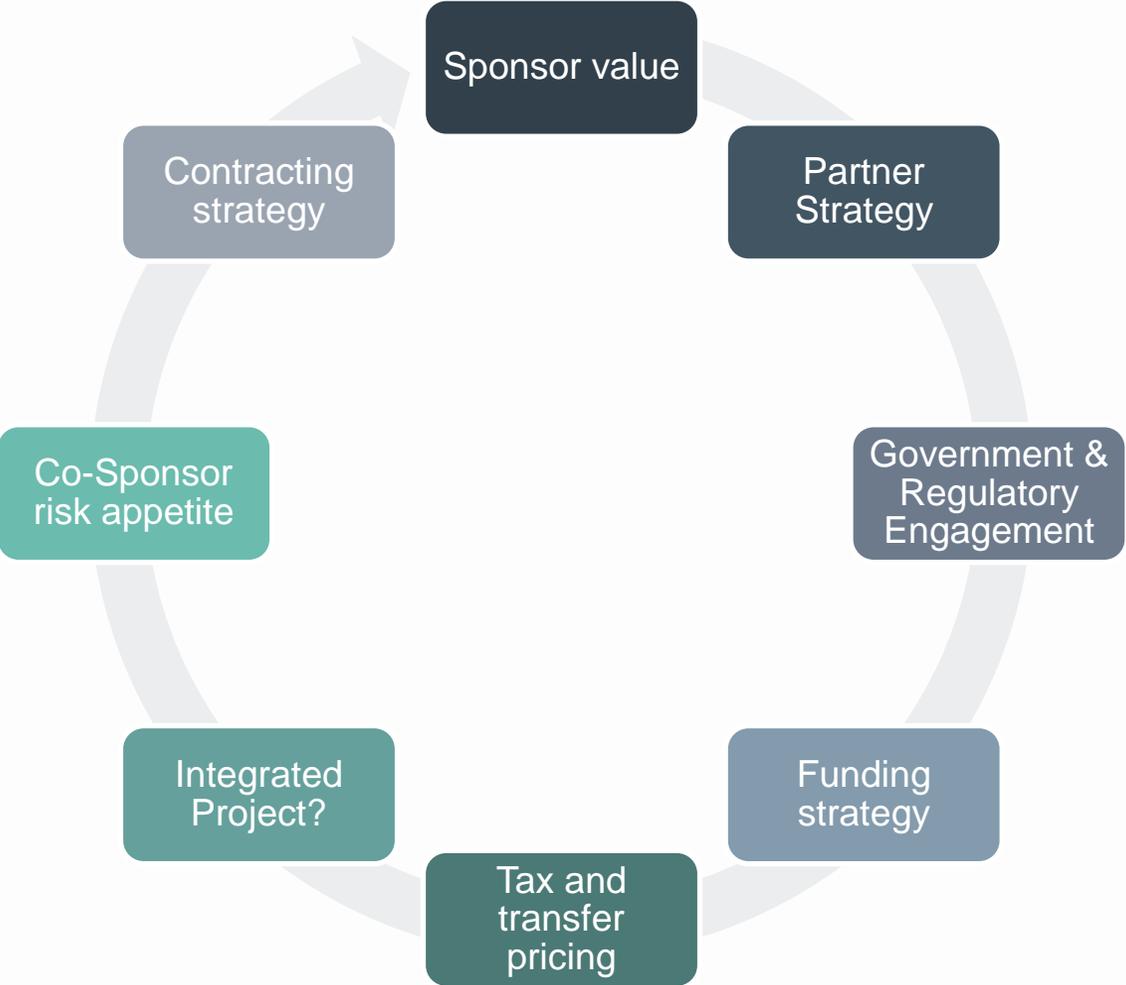
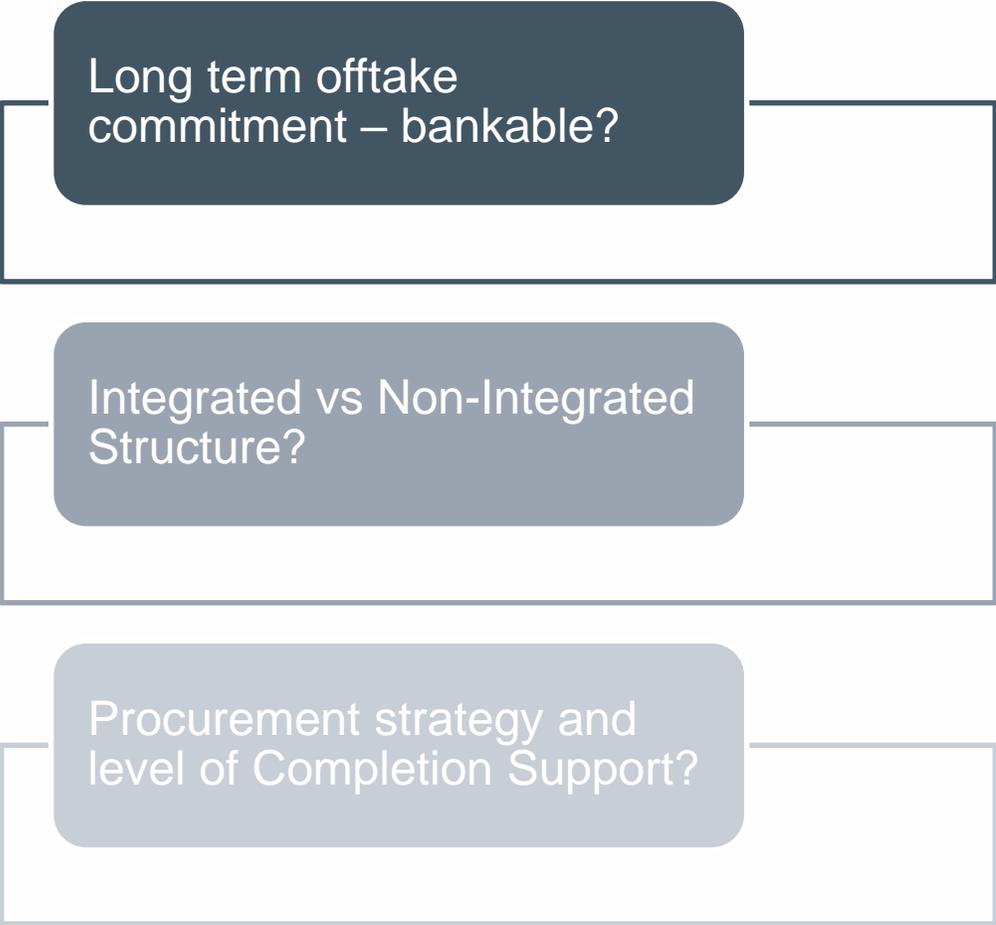
Defining scope and risk profile for all relevant project parties will drive overall structuring and approach to financing (including JV structures, project counterparty selection and risk allocation in project agreements)



Hydrogen projects hot topics



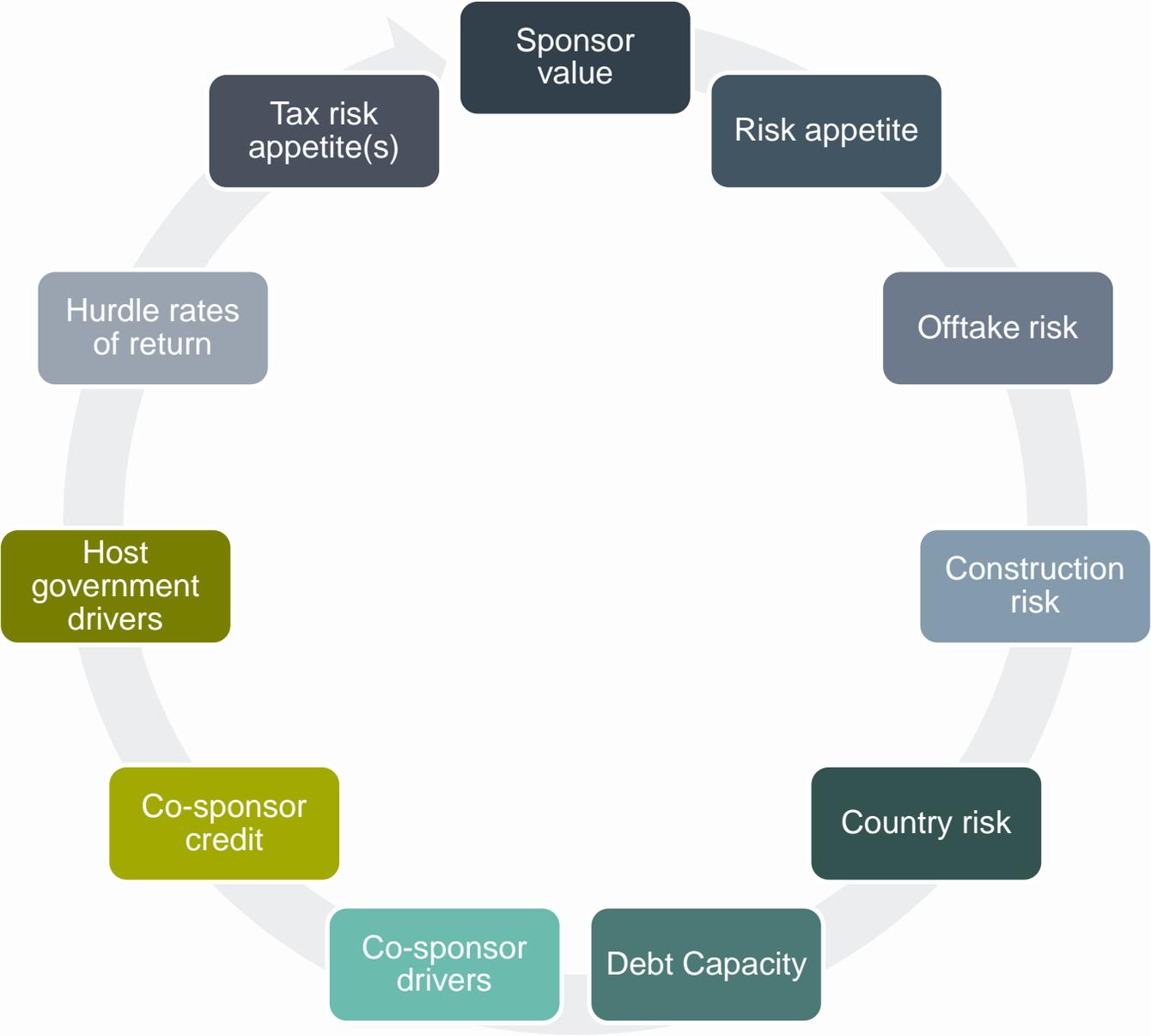
Three fundamental decisions to be made:



These 3 key decisions will lead to the next set of key structuring decisions through an iterative dialogue to drive an overall business model.

Interdependencies

Understanding and dialogue
Understanding interdependencies across the business model is a prerequisite for delivery
Understanding the overall risk appetite will drive speed of delivery and consistent messages to the market
Business model that works for the Project
Risk and its allocation will drive the structure(s) alongside an integrated financial model
Determining the business model will drive the tax and legal inputs (not the form of company or organization driving risk)
Dialogue between work streams is critical and involvement of cross work stream expertise (tax, transfer pricing, financing and legal) will assist in fast-track solutions



Offtake, offtake, offtake



Offtake is critical: what are the drivers & interdependencies?

A selection of key questions	
Investor risk profile?	Risk between the project and offtakers?
Who will bear sales price risk (downstream price risk)?	Procurement and plant capacity/ offtake volumes?
How many products or revenue streams?	How does an accelerated timetable impact fuel offtake structure and/or approach?
Consistency of offtake agreements?	How will lack of green index/ benchmark pricing impact the structure?
Tax, accounting and transfer pricing advice?	Green certification processes?
Domestic market obligation?	Intermittency risk and excess volumes (above ACQ)?
Can an aggregator offtake approach work?	Will different partners have different rights to offtake?
How to retain future flexibility?	Accounting treatment of long term offtake commitments?





Thank you