From ambition to action:

making decarbonization a competitive advantage for Industry and Refining

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Today's key topics:

1	2	3	4	5
The starting point: decarbonization is now a strategic industrial and competitive decisión.	There is no single winning technology: we need to build a portfolio of solutions.	From PowerPoint to CAPEX: how do we turn all this into a real project?	Practical examples: three situations any industrial company will recognize.	Five lessons for moving from ambition to execution.

How can we turn decarbonization into a competitive advantage for industry and refining?

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1. The starting point: decarbonization is now a strategic industrial and competitive decision

The question is no longer whether we need to decarbonise. The questions are:

- *what we do FIRST ?*
- *which TECHNOLOGY we use?*
- *at what COST?*
- *with what level of RISK?*
- *with what RETURN?*

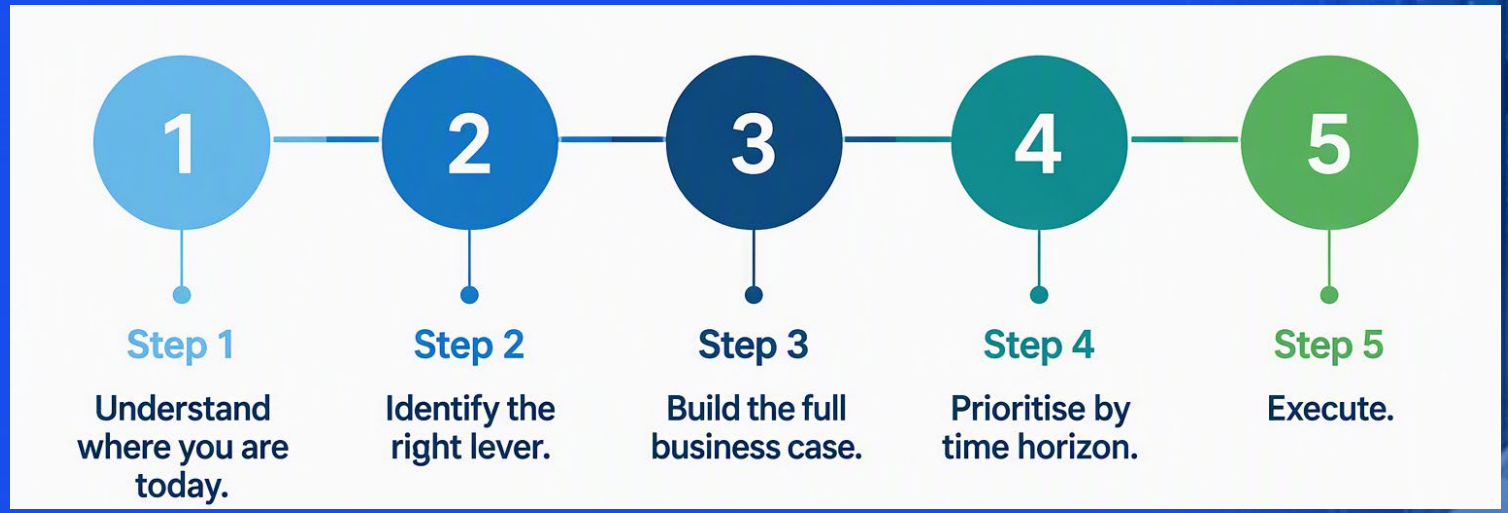


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2. There is no single winning technology: we need to build a portfolio of SOLUTIONS



3. From PowerPoint to CAPEX: how do we turn all this into a REAL PROJECT?





4. PRACTICAL EXAMPLES: three situations any industrial company will recognize

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1

Case 1

Use less energy before changing the energy source

Recover waste heat, optimise operations and improve efficiency before investing in new technologies.

Reduce demand first. Invest later.



2

Case 2

Electrify gradually, without putting the whole operation on the line

Combine electric and gas systems to reduce emissions without compromising production continuity.

Move forward, learn and reduce risk.




3
Case 3
Renewable hydrogen in a refinery: more than just a technology decision
A successful project requires renewable power, hydrogen production, integration into operations, financing and permitting to all work together.
Electrolyser
H_2
A technology may be ready while the project is not.
Renewable
Hydrogen
Financing
Permitting
Operations

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5. Five lessons for moving from ambition to execution

1. There is no single solution.

2. Electrify first where it makes sense.

3. Technology does not automatically mean a viable project.

4. Prioritising is just as important as investing.

5. Decarbonisation needs to create value.



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THANK YOU