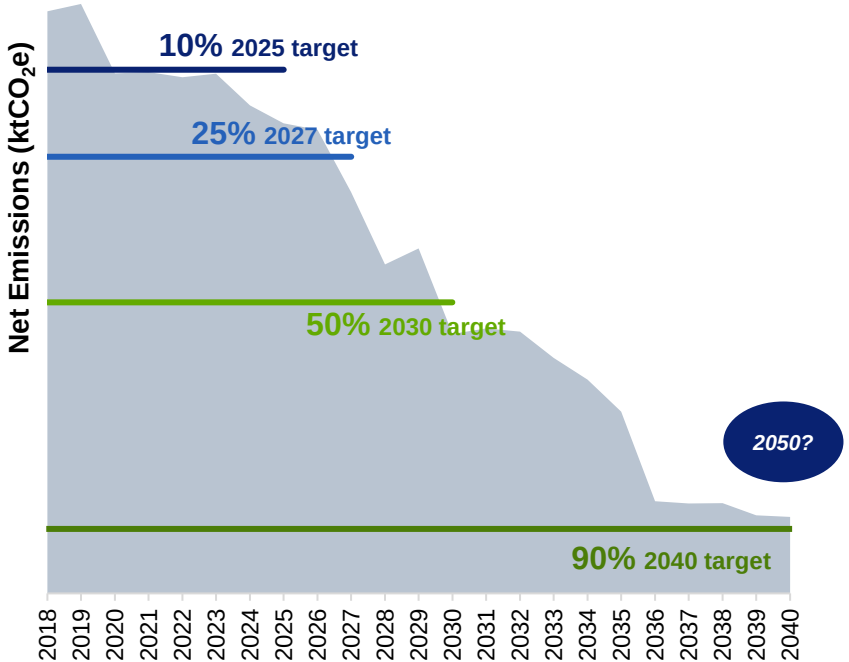
Decarbonising hydrocarbon supply: How far can you get?

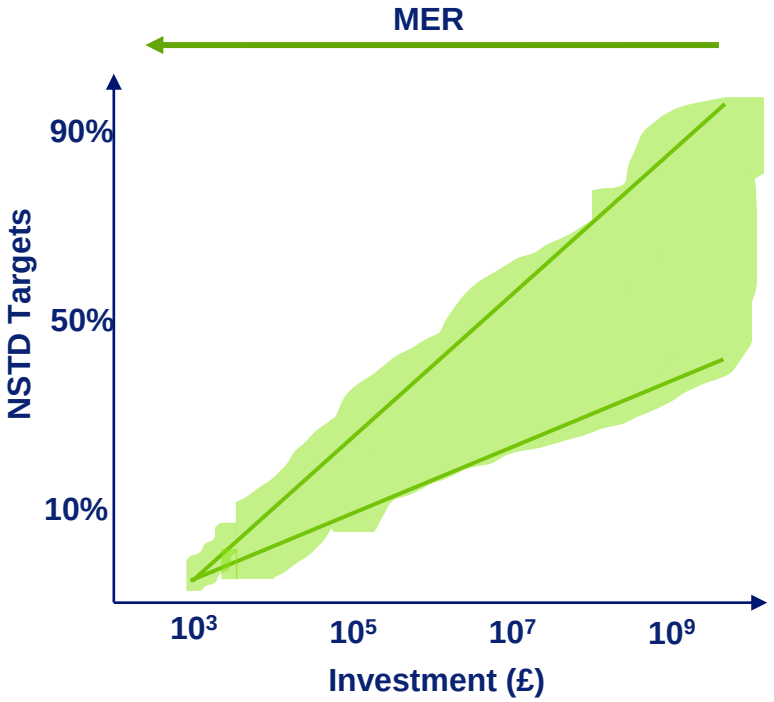
Alex Johnstone, Energy Transition Lead

How far can an Operator get?

Goal: The North Sea Transition Deal



What does it take?



Your first 10%

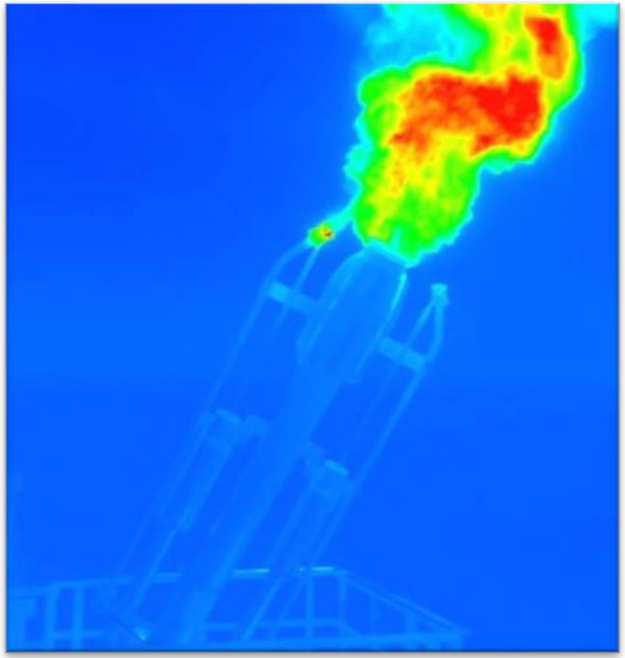
Deploy the process engineers

Classical optimisation

- One train vs. two
- Purge rates
- Loop tuning
- Prioritise repairs

Quick, “easy”, generally economic

You probably should’ve been doing these already!



UAV thermal imaging of flare tip

The Harder 10-25%

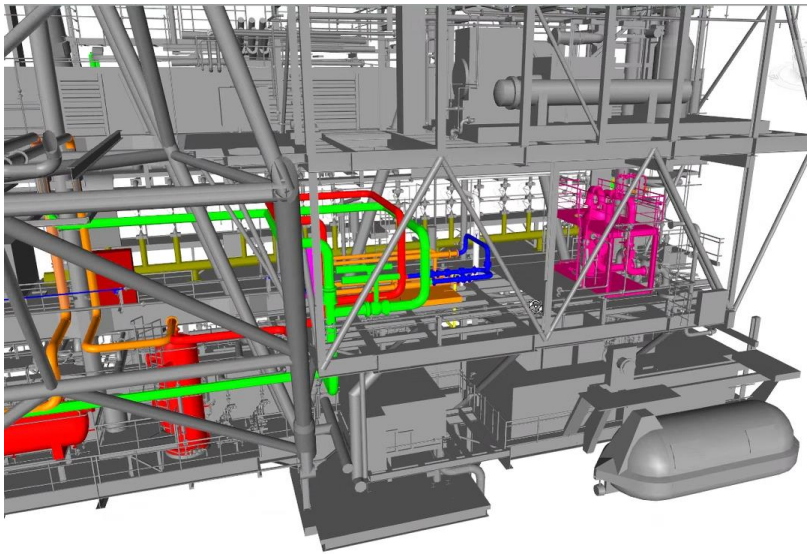
EPCI Contractors: Go! 🛠️👷

Reservoir and export route dictates options – Where are you starting from?

Larger scopes, longer timeframe, marginal economics, asset life choice

Typical options:

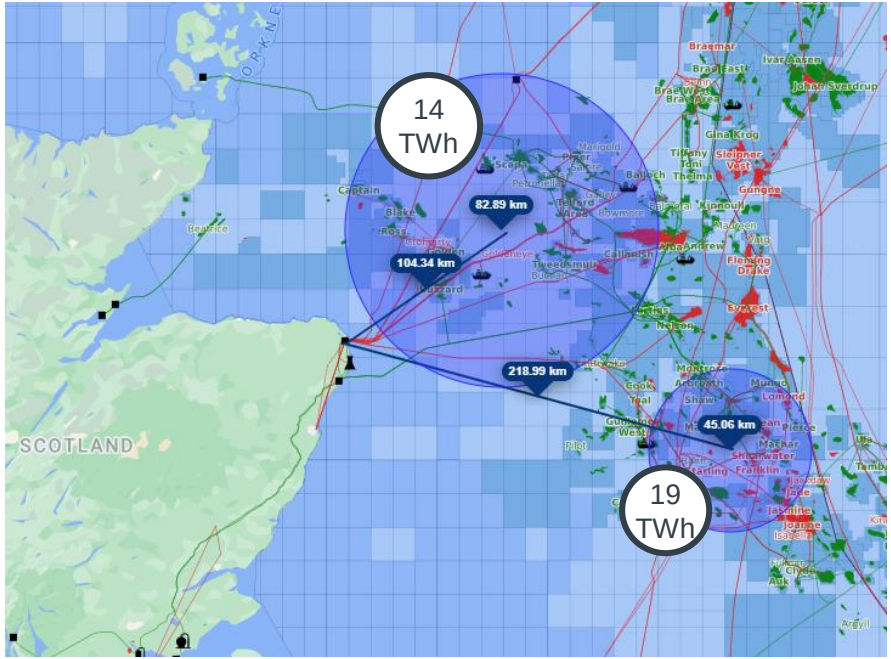
- Flare gas recovery
- Rewheeling / destaging
- Right sizing equipment



Flare gas recovery

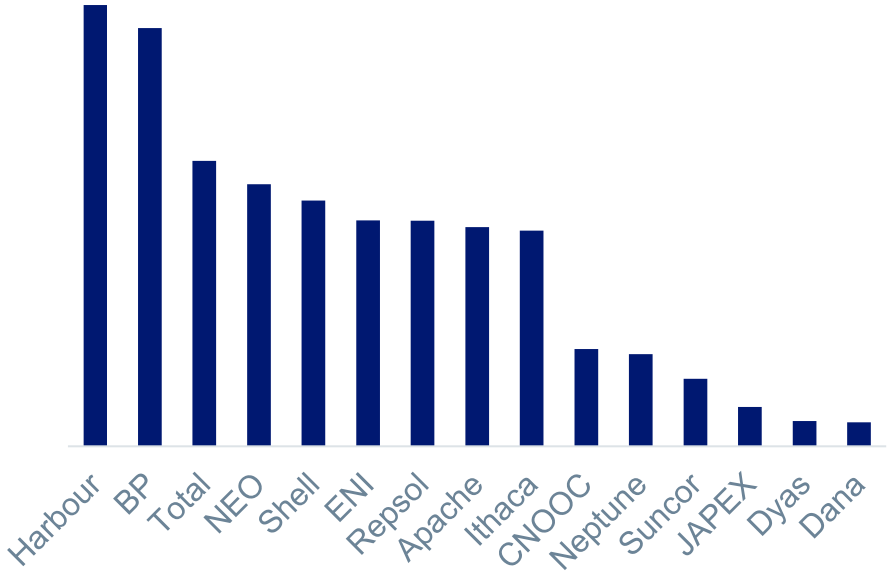
Electrification in CSNE and OMFE

The only pathway to the 50% targets for most assets



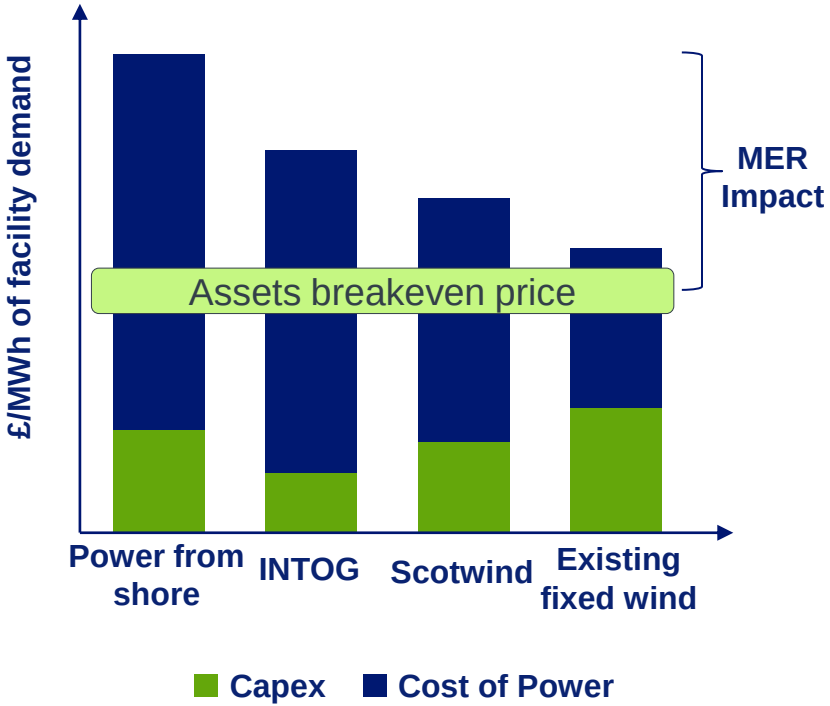
TWh Potential 2027-2042 Energy Demand

Who pays the bill?



Electrification in OMFE

The only pathway to the 50% targets for most assets



Barriers to decarbonisation

Power Price

- Infrastructure is small portion of total cost
- Sourcing lower cost power is key

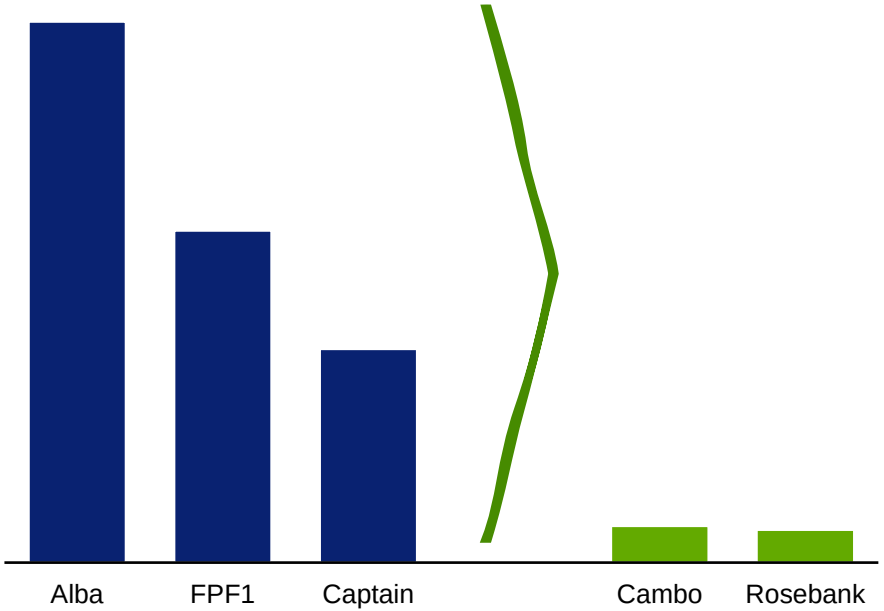
Solution Timing

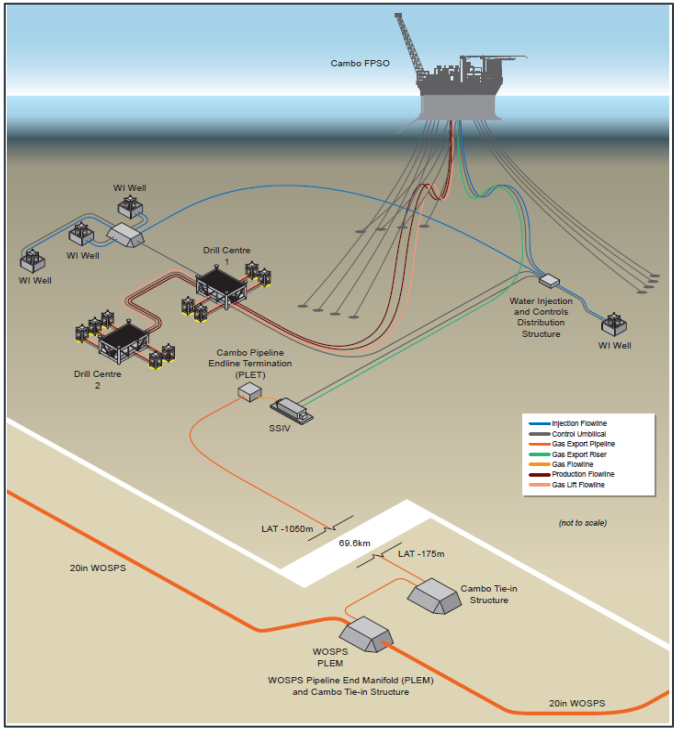
- Asset life
- Wind leasing timeframe
- Grid connections and offshore network

Towards Net Zero

Portfolio transformation will drive lower carbon intensity

Emissions Intensity for Select Ithaca Assets ($kgCO_2e$ / boe)

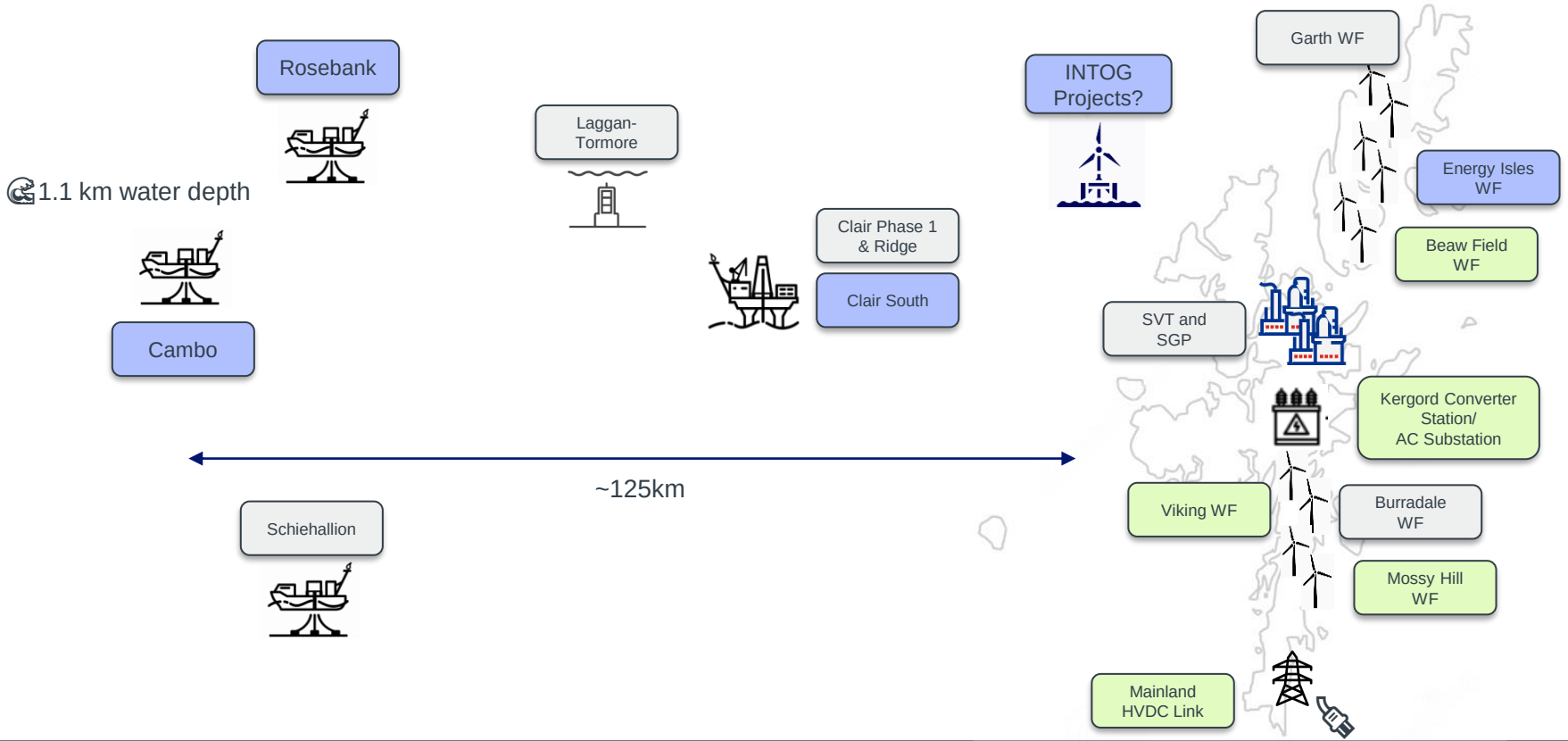




Cambo Development Concept

Towards Net Zero

Decarbonising West of Shetlands: WoSE



Operating | Consented | Pre-Consented

ITHACA ENERGY

Decarbonising hydrocarbon supply: How far will you get?