

Winning Business Models for CCUS: From Risk to Bankability

Navigating owner uncertainty in Swedish CCUS projects towards the second round of the reverse auction

Implement Consulting Group
March 2026



Founded
in **1996**

Employee-
owned

Average
CAGR of **20%**

Working
globally



Raleigh, NC

Nordic roots Global perspective

Born in Denmark with offices in Copenhagen, Aarhus, Stockholm, Malmö, Gothenburg, Oslo, Zurich, Munich, Hamburg, Düsseldorf and Raleigh, NC. With 1,800+ employees, multinational clients and worldwide projects, we offer expertise with a global perspective.

We believe that great organisational impact leads to great impact for humanity. Implement was created to help make true expertise turn into real change.



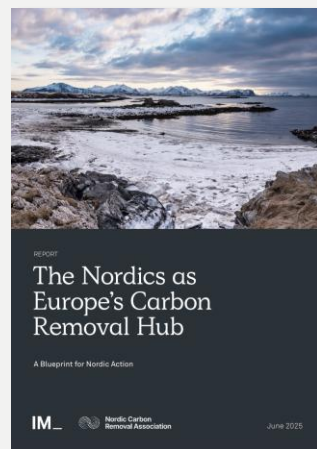
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We develop large-scale CCUS projects

- We are **nearly 100 consultants** working with CCUS projects
- We have assisted **more than 60 CCUS related projects** across the value chain
- We designed and executed **the first and largest subsidy scheme** in the world for the Danish Energy Agency
- We have secured **more than +600 mEUR in funding** for various CCUS projects across Europe
- We have supported **projects with a collective potential to realize 15 mtpa in CO₂ reductions** from 2030 and onwards
- We even helped actors **try shape the market and political landscape** for CCS in the Nordics



Select CCUS project references since 2020

Denmark



Sweden



Rest of Europe



In January, only 2 of the 10 most mature Swedish CCUS projects clearly stated that they will apply for the reverse auction and since then 2 have paused their projects

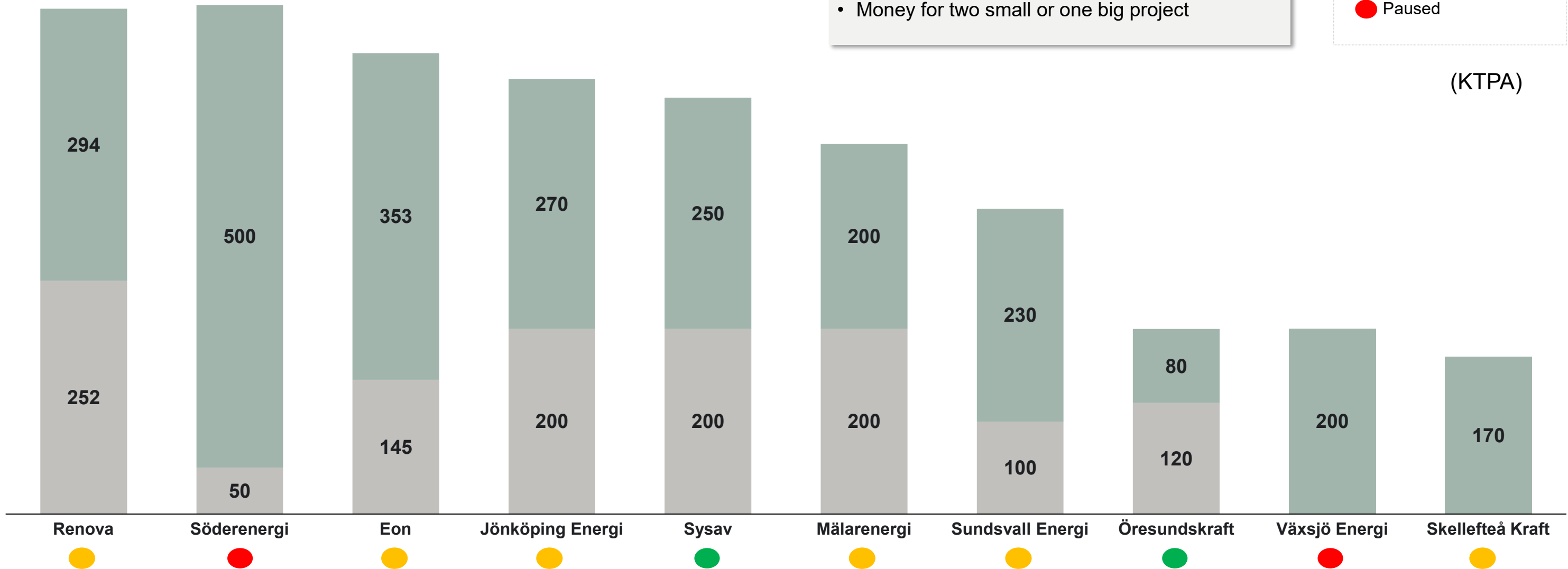
Project status on reverse auction (KTPA)

Biogenic CO₂
Fossil CO₂

- 10 bnSEK left in the budget for Reverse Auction
- Enough for around 400 KTPA CO₂
- Money for two small or one big project

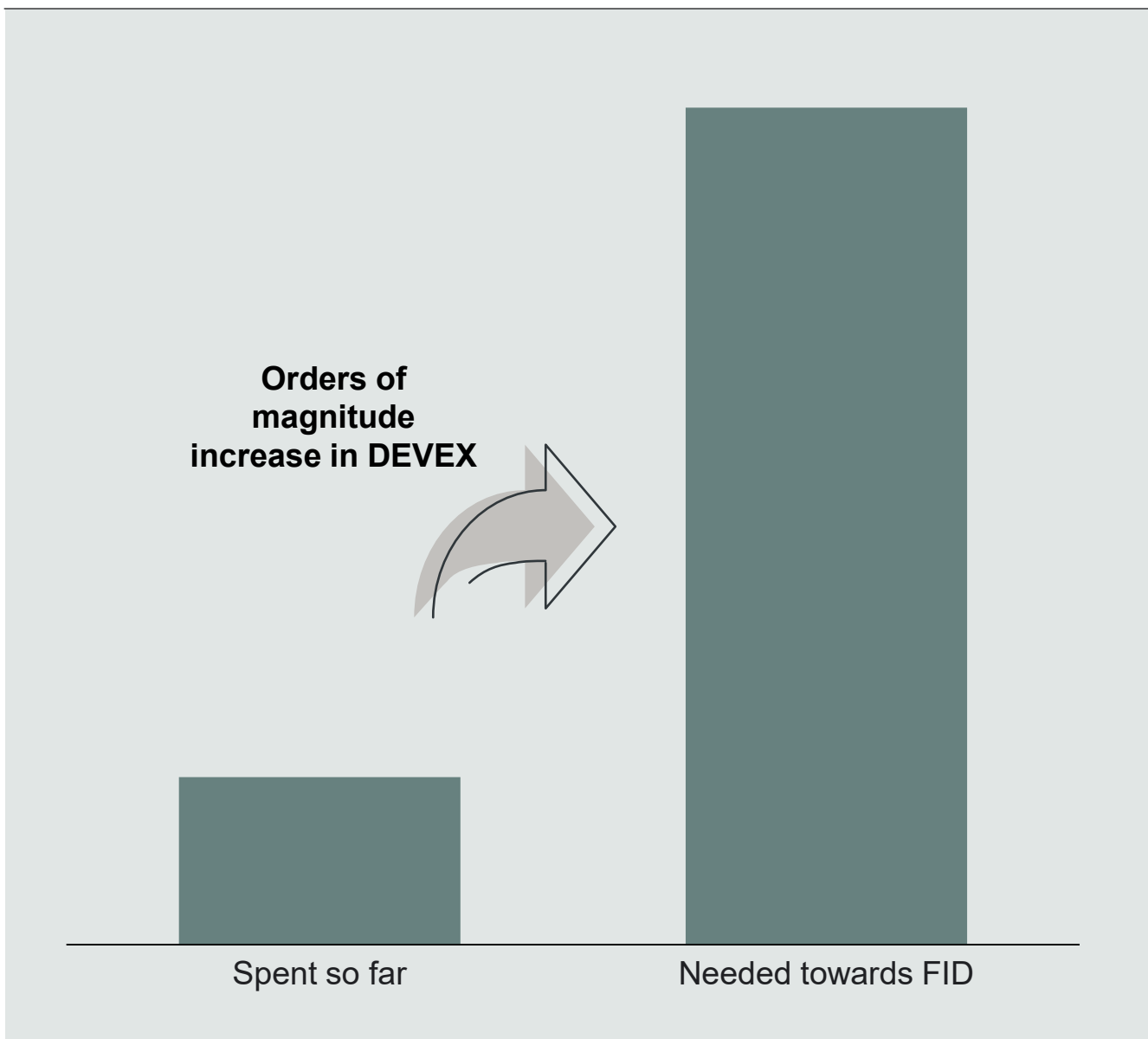
Stated participation status in reverse auction

- Yes
- Not decided
- Paused



Projects are entering the expensive development phases and high risk, immature storage market and weak CDR demand are making owners sceptical

Need more DEVEX



Drivers of hesitance



Political Concerns

Political pressure around taxpayer money spend



Market Uncertainty

Uncertainty across CDR offtakes, transport costs, storage solutions

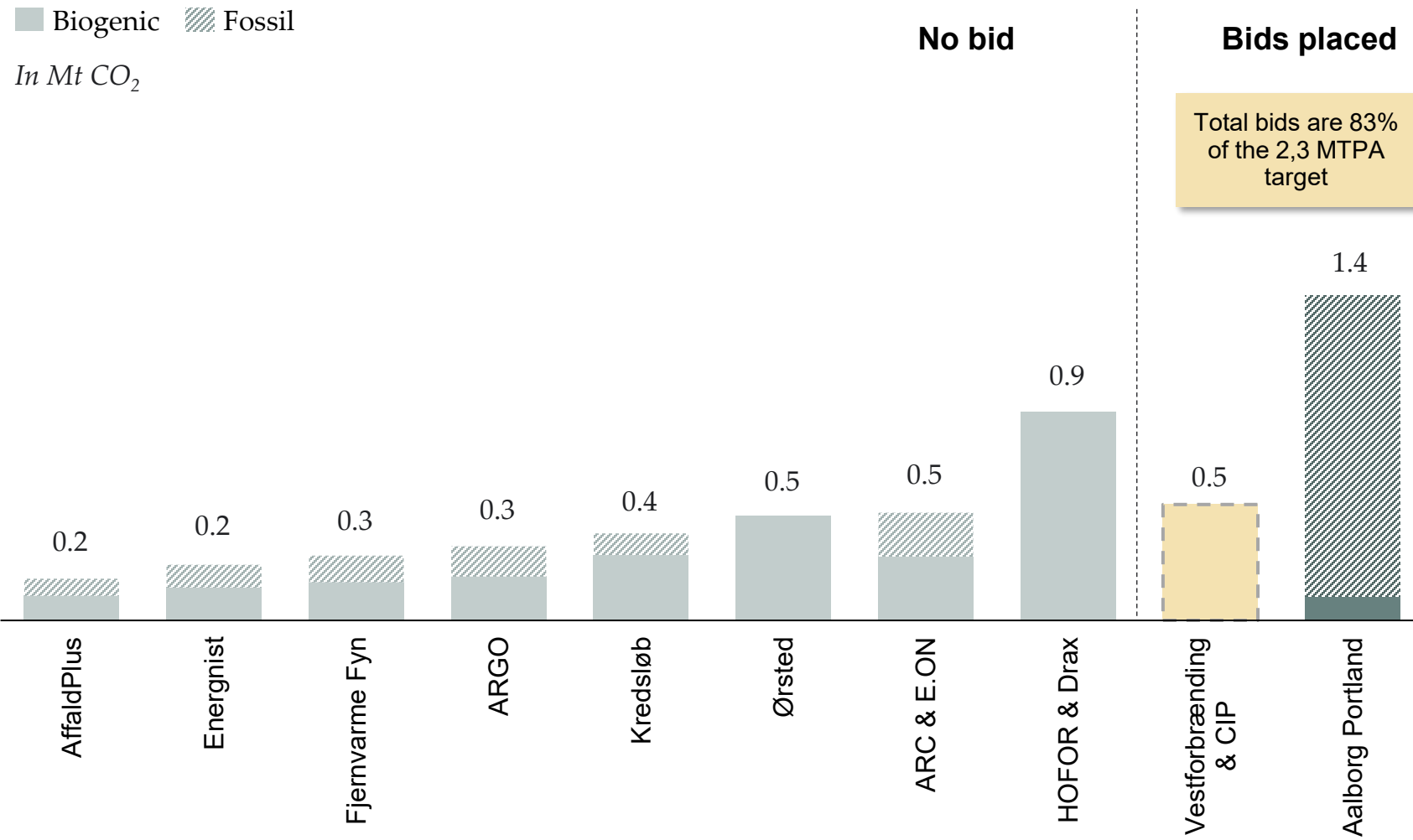


Risk Levels

Concerns about the risk exposure to the owners from the large amount of CAPEX

Danish CCS subsidy scheme only got 2 bids due to aggressive timeline, price cap, immature markets and too much risk, but the outcome could get close to the target of 2,3 MTPA

Only 2 of 10 pre-qualified projects bid



Four main factors caused projects not to bid



Full-operation requirement by 1 January 2030 exceeded market readiness



The bid price cap strained project economics



Insufficient market maturity and low competition



Risk allocation exceeded bidders' risk-bearing capacity

Reverse
auction is more
flexible leaving
Swedish
projects with
more options

AUCTION DESIGN

- Danish subsidy scheme had significant penalty for non-delivery which could amount to several hundred million SEK
- Applying to the Danish subsidy scheme was a de facto FID contingent on winning the subsidy
- Swedish reverse auction is more flexible than the DK scheme, with **no penalties** for delay or non-delivery.



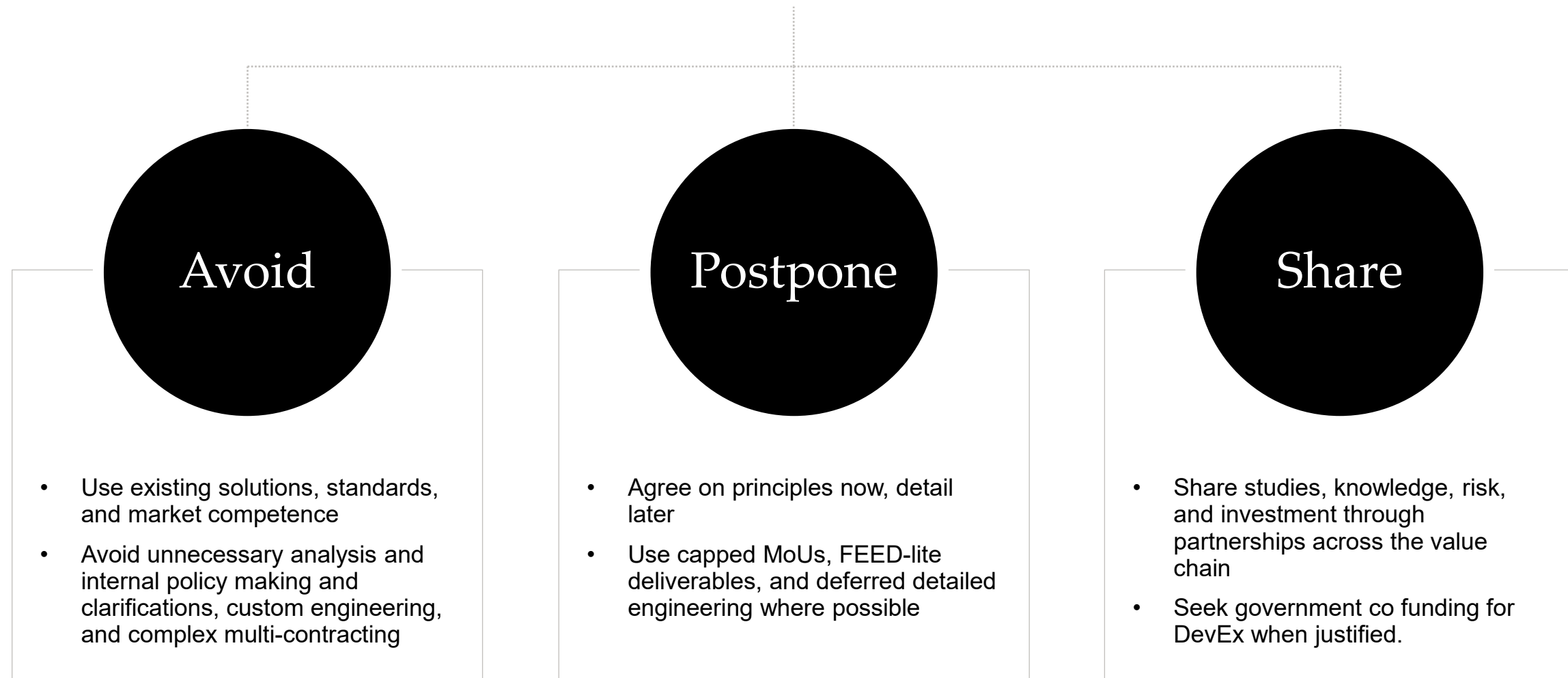
STRATEGIC IMPLICATIONS

- Bids for the Swedish reverse auction are not binding
- This **requires less certainty** at the time of application for reverse auction
- This leaves room to design your path to FID depending on the commitment you have from your owners

Three levers to manage and reduce DevEx

CCS projects trigger many complex activities, so early prioritization and active DevEx management are critical

Levers to *manage* and *reduce* DevEx



CCS developers can choose between two approaches – committing early to full project development or reducing risk through a phased approach

1 Full Commitment

- Develop the CCS project to a **high level of maturity before submitting a bid** in the Reverse Auction
- Include **detailed FEED studies** and deep **supplier engagement**.

Advantages

- + Maximum cost/timeline certainty
- + Stronger supplier readiness

Trade-offs

- High upfront dev-ex
- Owner hesitation in current market

2 Phased approach

- Advance project development **only to the level required to submit a bid** in the Reverse Auction
- Detailed engineering, supplier negotiations, and final design decisions are **deferred until funding support is secured**.

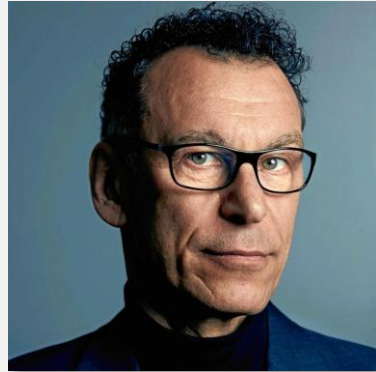
Advantages

- + Lower upfront risk
- + Tests market before full commitment

Trade-offs

- Trades some precision
- Potentially higher total project cost

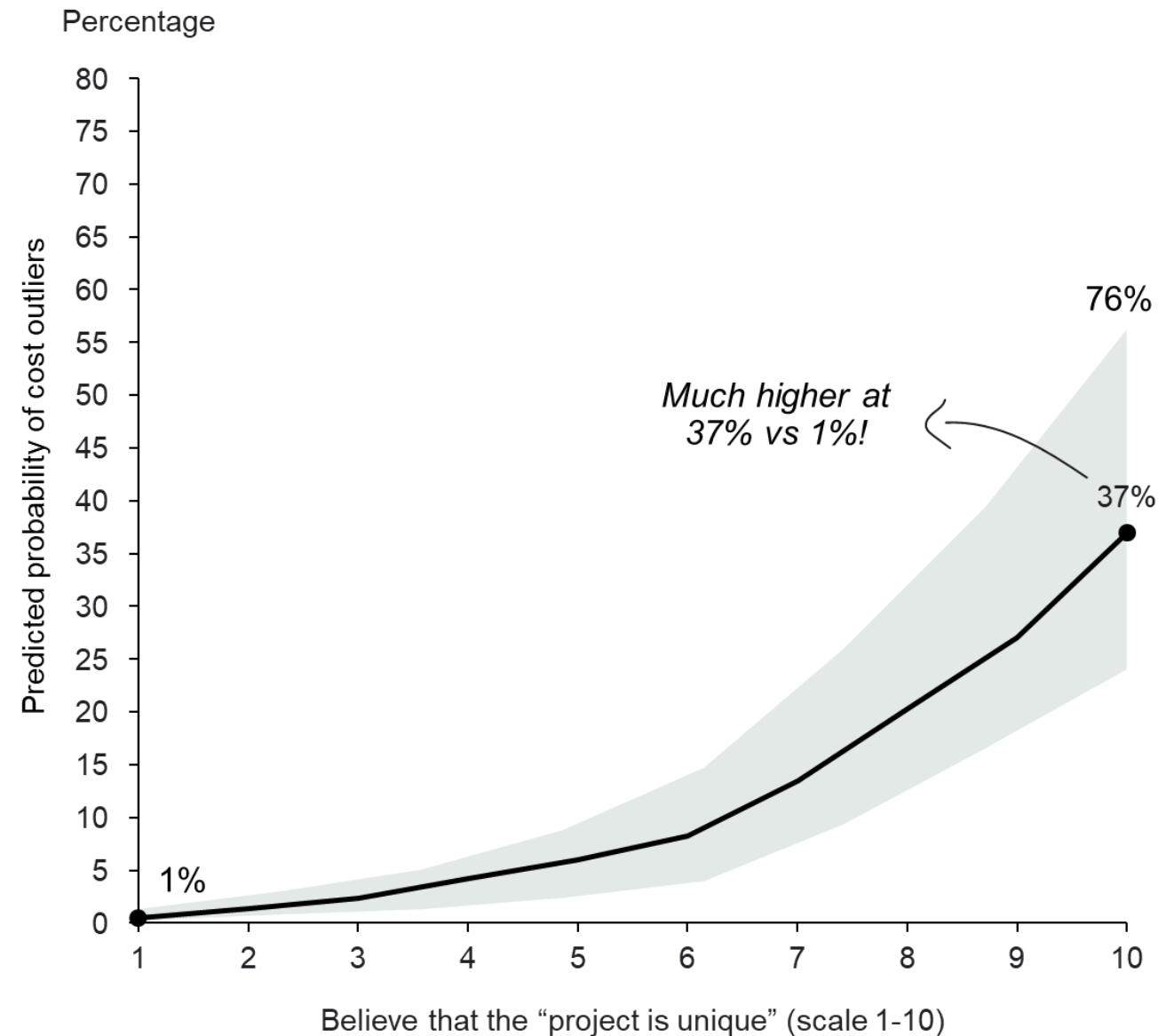
Large-scale, first-of-a-kind projects are significantly more likely to face complications if the project team think the project is unique



Bent Flyvbjerg

- Danish professor at Oxford University (Saïd Business School) and IT University of Copenhagen
- World's most cited researcher on megaprojects
- Maintains the largest global database of large-scale project performance (thousands of projects across 104 countries)
- Author of How Big Things Get Done (2023, with Dan Gardner) and the "iron law of megaprojects": over budget, over time, under benefits, over and over again.

The Uniqueness bias: The more people believe their projects are unique, the worse the projects performs.



Break-out session

- Want to assess your organization's *risk appetite*?
- Join our *break-out session* from 15:00 to 16:00 to explore further.
- Here you can meet more of our colleagues



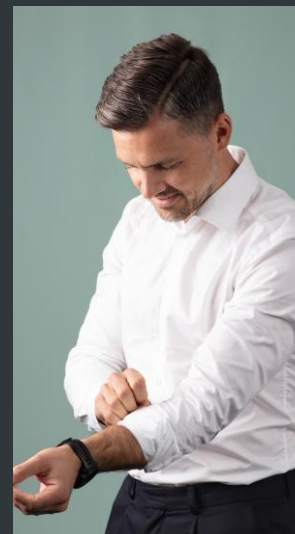
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