Westminster Energy Forum

Annual UK Onshore Energy Transition Review – Progress in Context, and Risk of Derailment

Wednesday, March 5th, 2025

‘Key commercial and political challenges for transitioning the UK: opportunities to accelerate energy investments v. potential Derailment Risks’

Speaker: Ekaterina Kozinchenko

accenture

Challenges to UK's energy transition are primarily commercial

Our recent engagements with UK energy players have highlighted three common challenges

Key Challenges

Financial Constraints

- High capital investment for projects (inc. transitioning late-life assets)
- High technology development costs
- Uncertain returns for novel technologies

Examples

- **UK:** £3.9bn p.a reduction in BPs planned renewables investment citing returns focus *(2025)*
- **Global:** £476m write down of Orsted US wind portfolio due to interest rate rises *(2024)*

Tech Abundance & Contingency

- Uncertainty over specific technologies development prospects
- Confusion in technology selection / adoption
- Complexity integrating multiple technologies within existing infrastructure

Examples

- **UK:** c.10% of Britain's planned wind power generation was curtailed by insufficient storage / transmission capabilities *(2024)*
- **Global:** IEA revise down forecast 2022-28 hydrogen renewable capacity by 35% vs forecast one year prior *(2024)*

Stakeholder Co-ordination

- Insufficient incentive to decarbonise vs continue asset optimisation
- Lack of clarity on shared value propositions
- Avoidance of being a 'first mover'

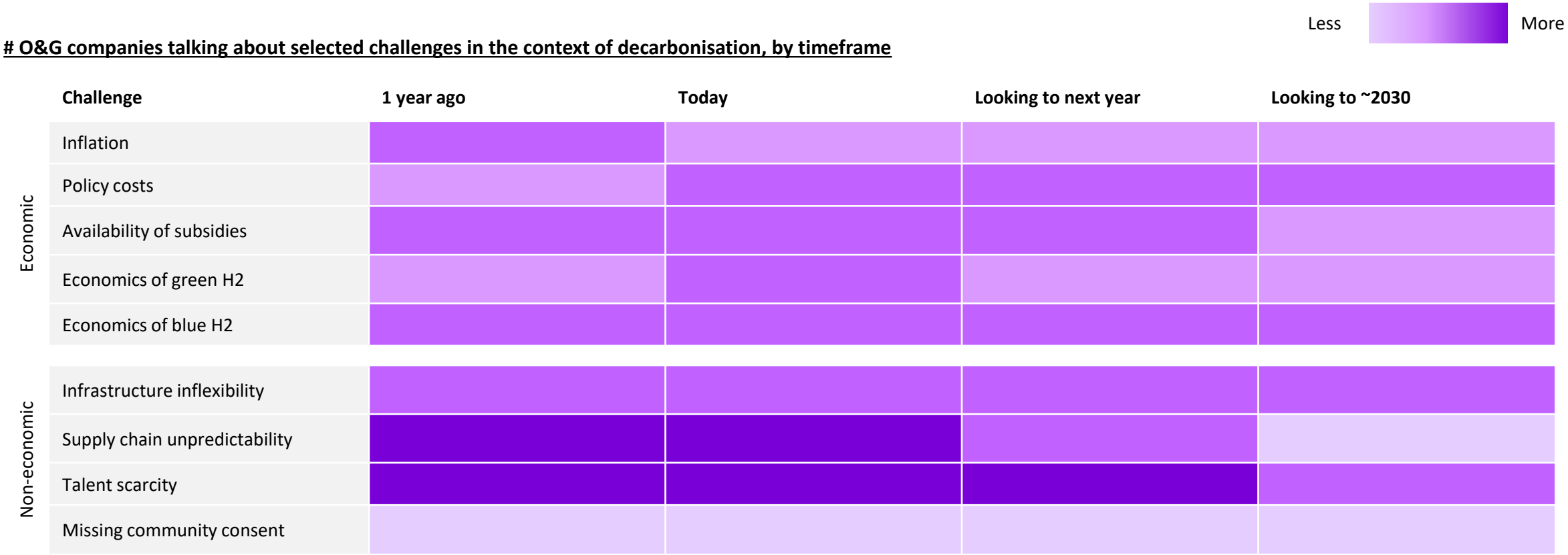
Examples

- **UK:** Drax power plant plans cuts to CCUS investment citing regulatory uncertainty (*2025)*
- **Global:** 78% of investors identified regulatory and policy risks as major challenges for the energy transition *(2025)*

Sources: Accenture workshop with North Sea operators / players, Orsted, BBC, Financial Times, Bloomberg, KPMG

Executives expect commercial challenges to persist into the future

 # O&G companies talking about selected challenges in the context of decarbonisation, by timeframe

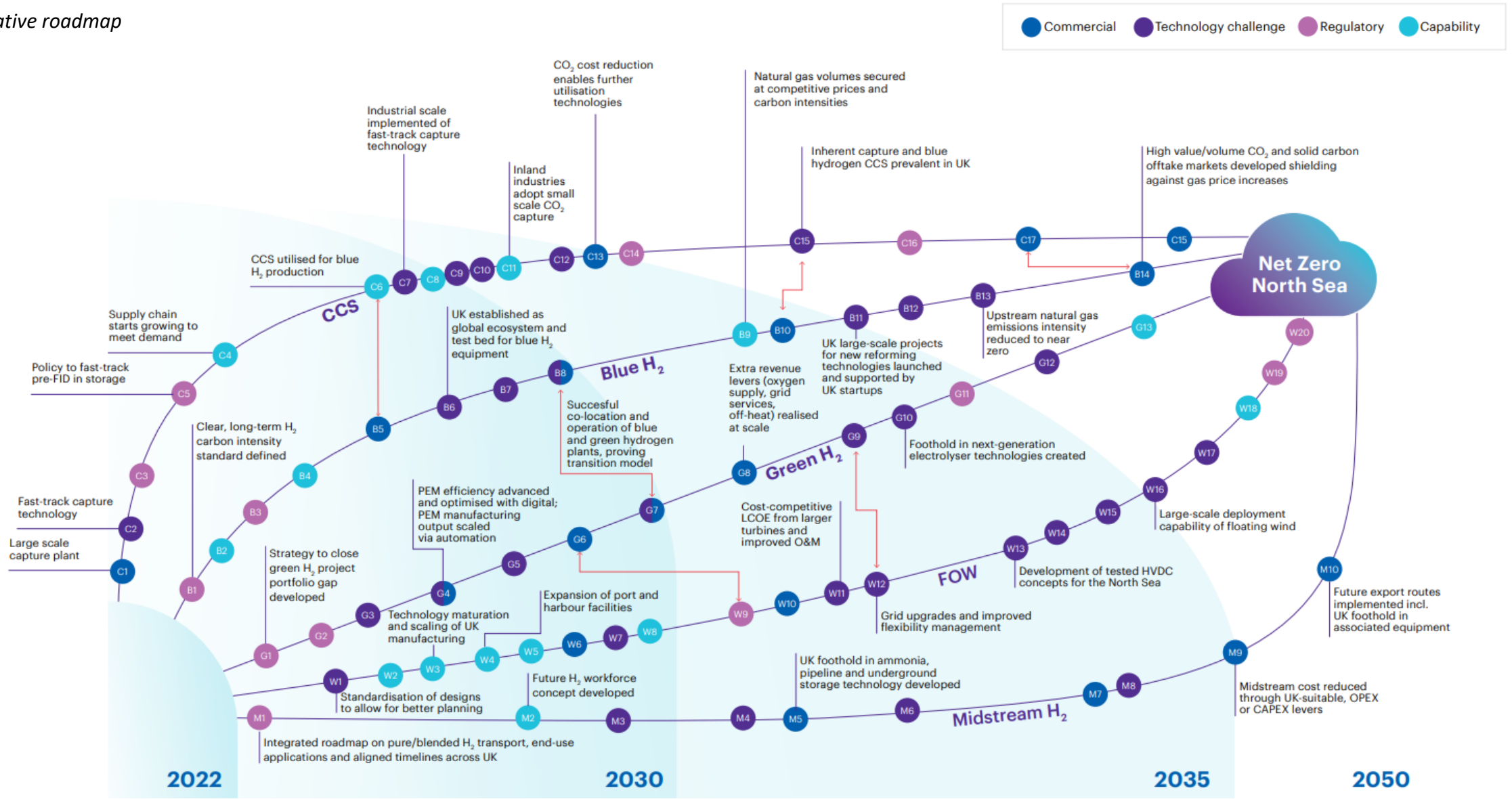


Within surveyed O&G executives

- 71% expect **'Supply chain disruption'** to have negative impact on the **development and delivery of their large capital projects by 2028**
- 45% see **'Talent scarcity and adopting to workforce changes'** among top three areas of concern for their organisation in 2024

So What? The UK energy transition is at risk of falling behind

**** Indicative roadmap*



Source: 'Technology driving green energy growth: The North Sea Transition Deal' 2023 paper

Look ahead: Decarbonising with Gen AI - real life inspiration for the UK

Latest learnings from companies using next-gen technology to accelerate a low-carbon, integrated energy system

Challenges Addressed

Financial Constraints | Technology Abundance | Stakeholder Co-ordination

	Power Generation	Transmission & Storage	O&G and Heavy Industry
Operations	**Improving asset performance** Company: Utility AI Use Case: Optimising blade angels in real time	**Optimising field work** Company: Gas Distributor AI Use Case: Simplifying reference manuals to step-by-step job guides, with live Q&A	**Operational performance** Company: O&G AI Use Case: Synthesising and analysing drilling plans, geological data and drilling time
	Streamlining office work Company: Utility AI Use Case: Energy-trained assistant for employee research and knowledge support	**Document management** Company: Gas Transport Operator AI Use Case: Simplify access to regulation and codes of conduct	**Accelerated exploration** Company: O&G AI Use Case: Generating quality subsurface images with less information
Development	**Permitting acceleration** Company: Technology provider AI Use Case: Visualisations of offshore wind projects to inform stakeholders	**Carbon capture simulation** Company: O&G (CCUS application) AI Use Case: Generating synthetic data to simulate CO2 capture success in reservoirs	**Streamlining regulatory processes** Company: Mining AI Use Case: Simplifying analysis of its 100+ page regulatory and environmental documentation

Source: Accenture Research