EXISTING ASSETS. NEW OPPORTUNITIES.

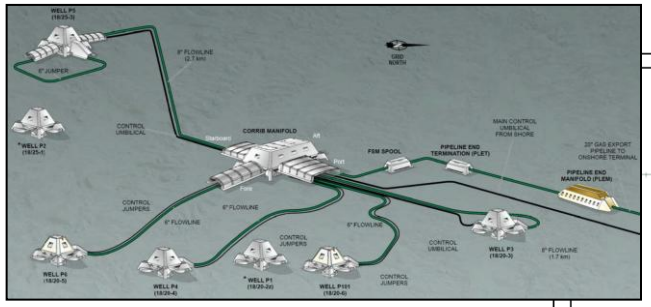
Enabling a First-Mover Project

Atlantic Energy @ Corrib: A First-Mover Case Study

HYDROGEN SUMMIT IRELAND 2026

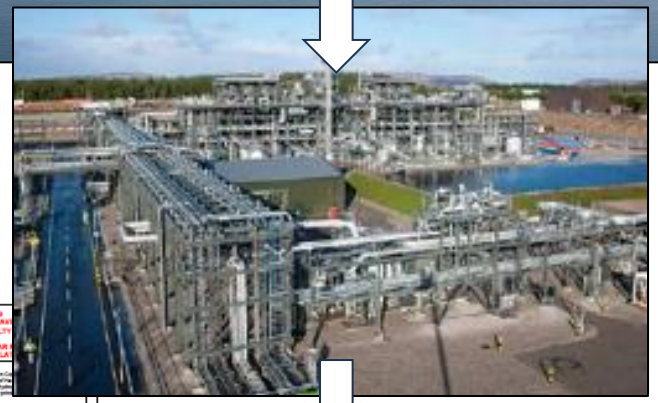


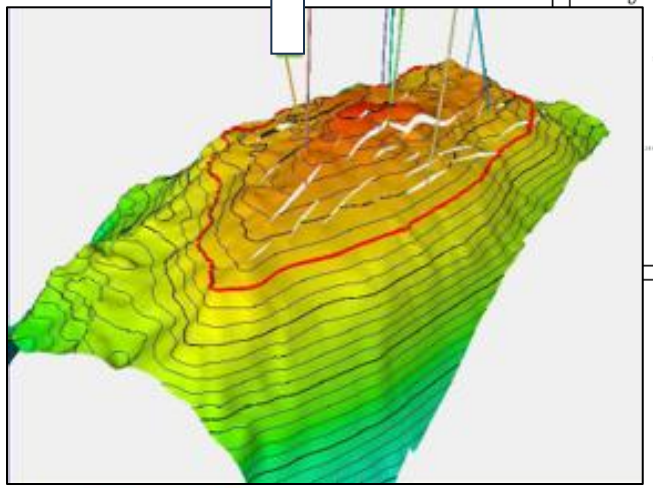
Corrib Development Overview

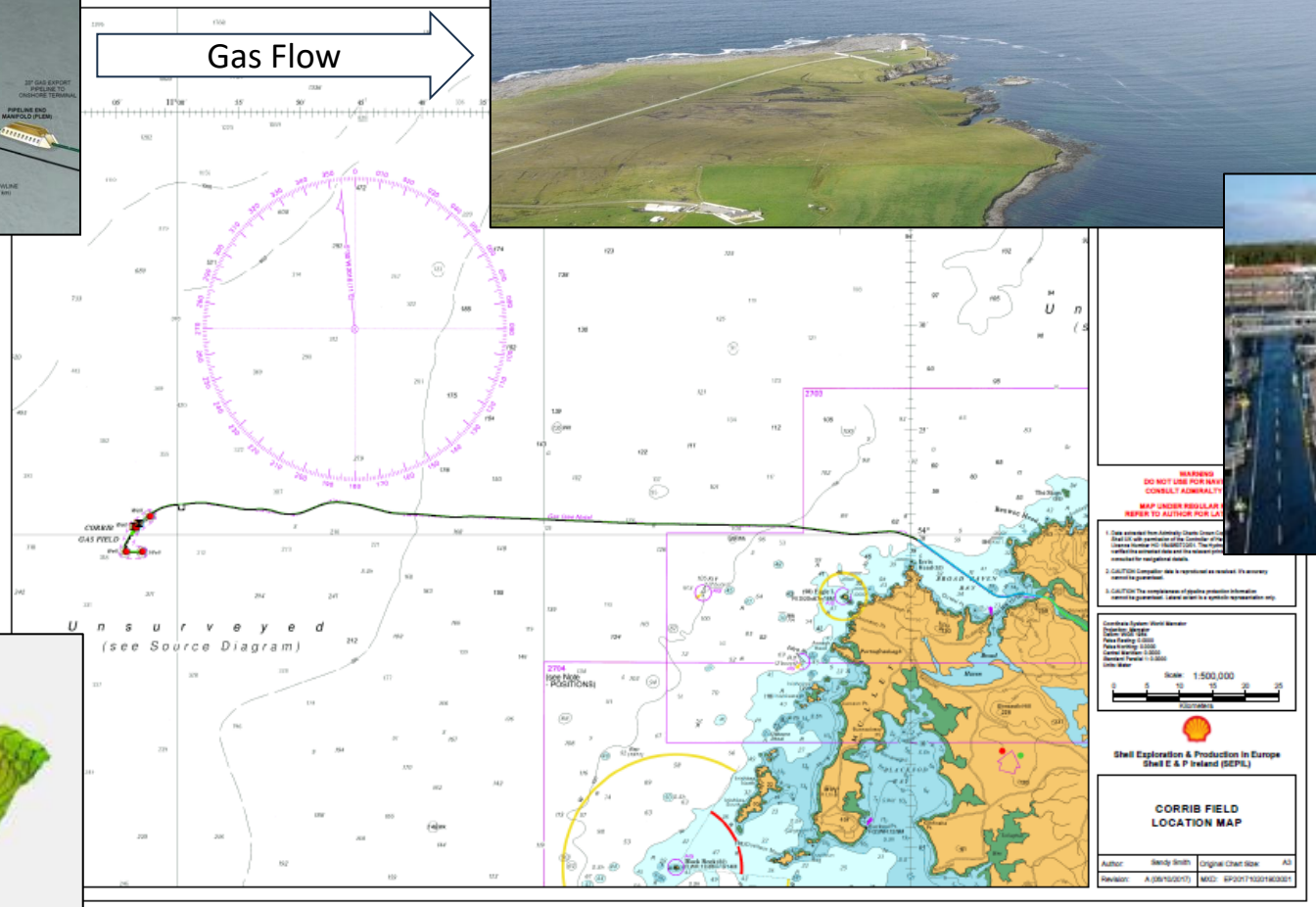


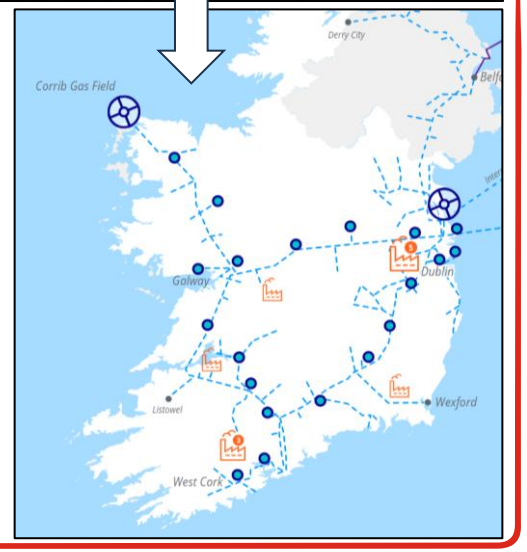


Gas Flow







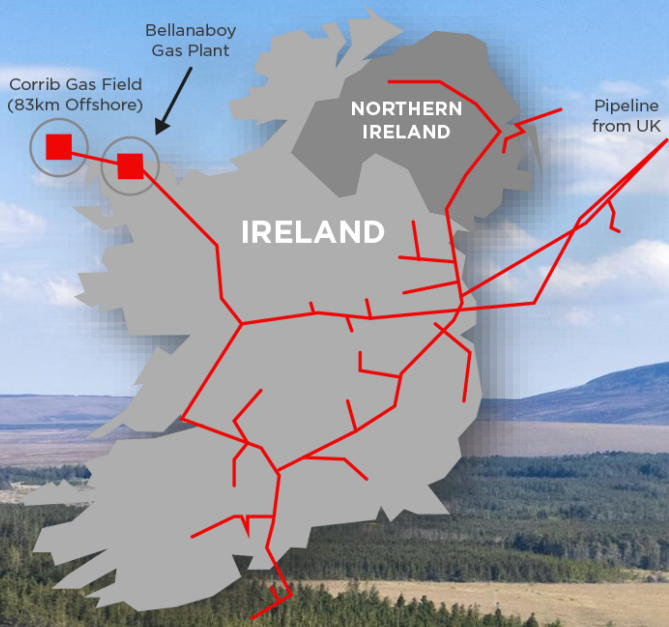


Reservoir → 83km pipeline → Bellanaboy Gas Terminal → Gas Network

Bellanaboy Bridge Gas Terminal: An established national energy asset

Existing Infrastructure and capability provide a platform for practical energy transition





162ha landholding. (13% utilized)

COMAH site & operations under **CRU safety framework**

Gas transmission pipeline capacity: **103GWh/d**

Skilled workforce - gas processing & offshore operation

High wind energy potential - onshore & offshore.

Existing 96-core **Fibre Optic** Connection

Atlantic Energy @ Corrib

Reusing an established energy asset for Ireland's renewable-energy future

Our Purpose

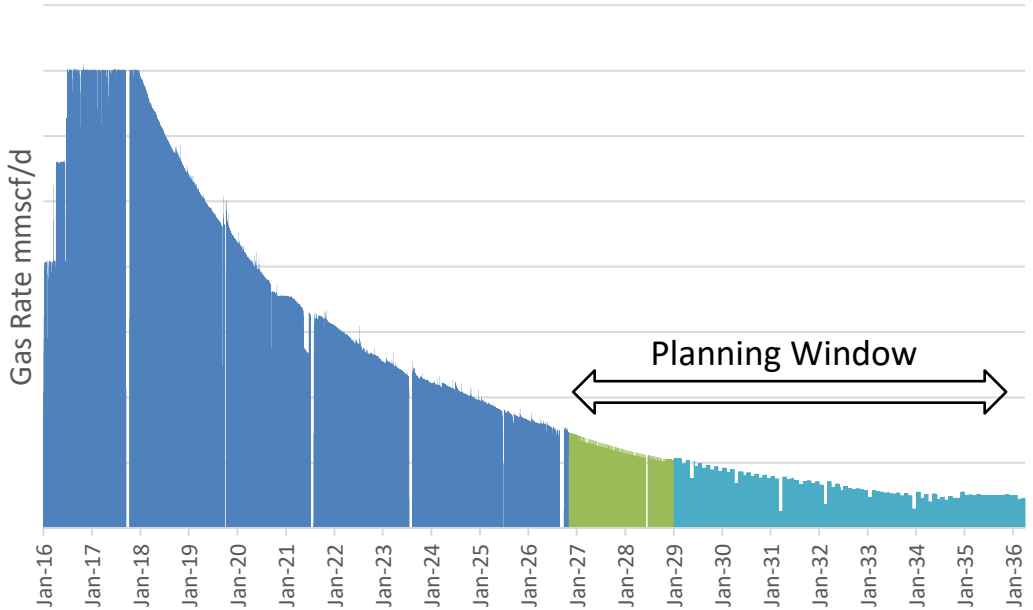
Evaluate how Corrib's existing infrastructure and capability can support new renewable-energy opportunities beyond natural-gas production

Our Aim

Transition Corrib towards a green energy hub by:

- Harnessing wind-energy potential of NW Mayo both on and offshore
- Building on our existing gas processing expertise
- Reusing the existing infrastructure to produce green hydrogen
- Using Gas Networks Ireland linkline infrastructure as a route to market
- Building a pathway from demonstration scale to offshore renewable hydrogen

Corrib Gas Production



EXISTING ASSETS → NEW ENERGY → LONG-TERM VALUE

A phased transition that preserves infrastructure, capability and regional employment while preparing Corrib for green hydrogen.

Vision & Alignment with GNI

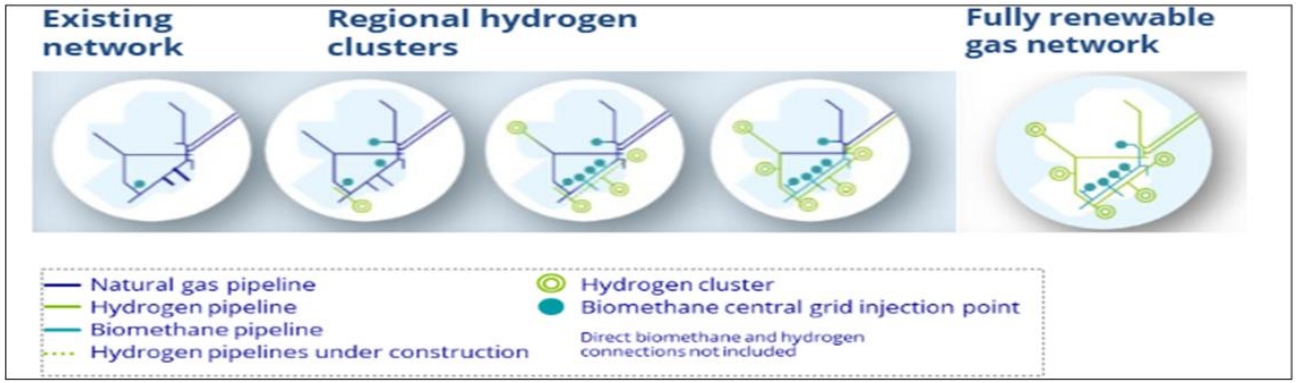
AE@C development can progress alongside GNI's transition from today's gas network towards renewable gases and hydrogen

GNI NETWORK PATHWAY

National system transition

Existing network → regional clusters → fully renewable gas network

AE@C can provide practical evidence as hydrogen capability develops across the network.



AE@C PHASED DEVELOPMENT

EXISTING ASSET



Gas Terminal

Infrastructure and capability

PHASE 1



Pilot & Learn

Demonstrate, integrate and generate evidence

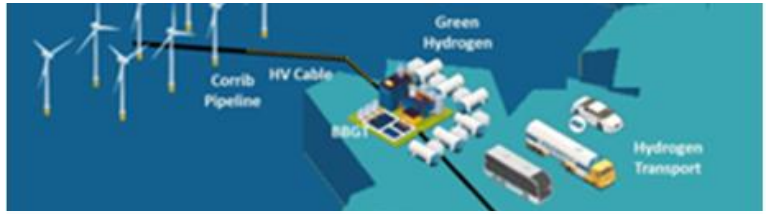
PHASE 2



Onshore Scale-Up

Increase renewable power, production and demand

PHASE 3



Floating Offshore Scale

Enable large-scale renewable hydrogen

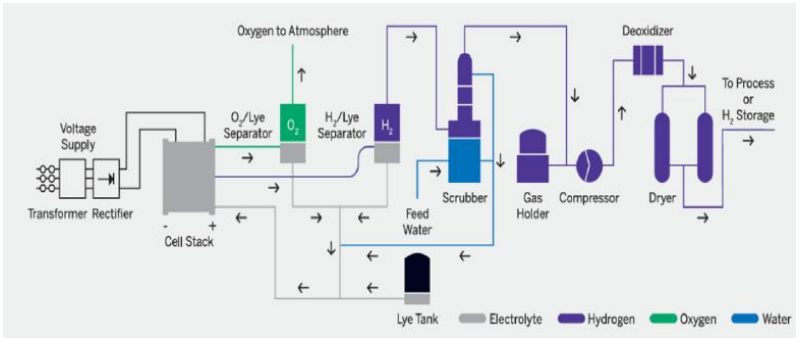
PILOT TODAY → BUILD CAPABILITY → ALIGN WITH NETWORK TRANSITION → ENABLE OFFSHORE SCALE

Pilot

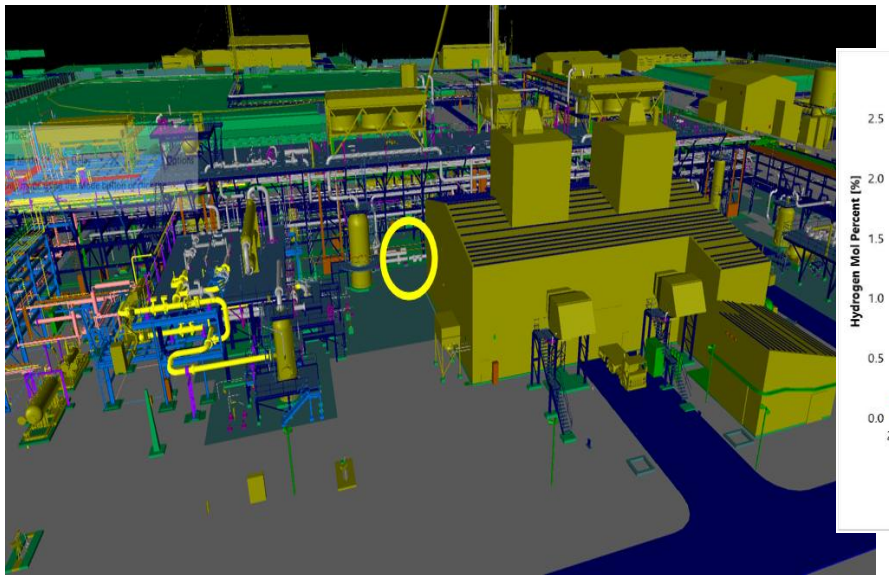
A practical step from existing infrastructure towards a wider hydrogen economy

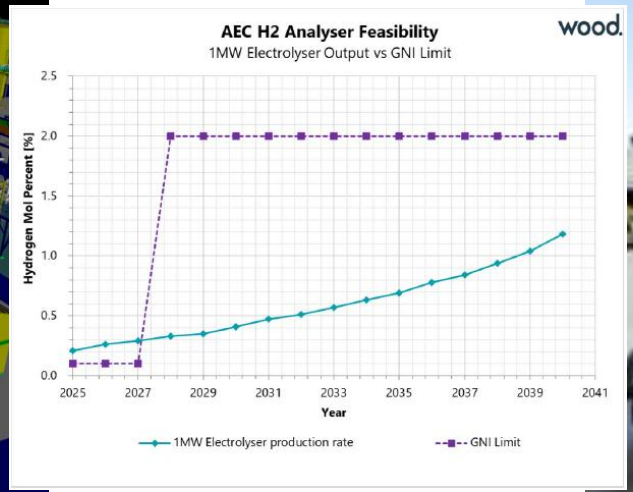






- Onsite hydrogen production
- Behind the meter power
- Blending with natural gas
- Road tanker export
- Technical, regulatory, commercial and operating learning







2.3 MW WIND

1.25 MW ELECTROLYSER

5 m³/day WATER

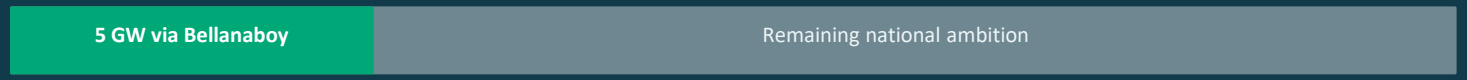
~100 tpa GH_2

Scale of the Opportunity

From first hydrogen injection to a potential route for 25% of Ireland's 2040 offshore wind ambition

IRELAND 2040 OFFSHORE WIND AMBITION

20 GW



25%
potential share

1 PILOT • BEFORE 2030

Establish the first route

- First H_2 entry into the Irish transmission system
- Prove blending, metering and gas quality on a live network
- Validate the Linkline as an early route to market

2 TRANSITION • CORRIB LATE LIFE

Build the template to scale

- Set the technical, commercial and regulatory precedent
- Increase H_2 volumes using onshore wind
- Build the operating record for future conversion

3 INDUSTRIAL SCALE • 2035–2040+

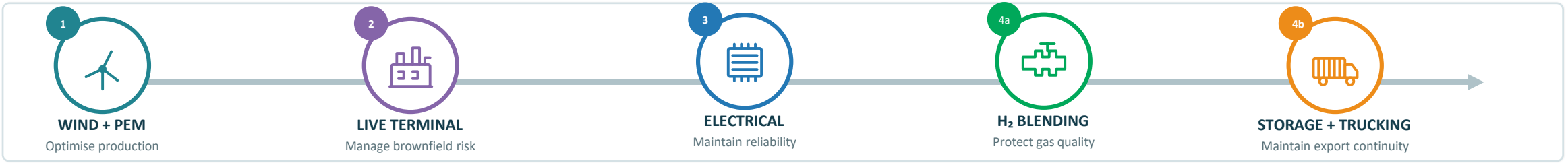
Enable a hydrogen corridor

- **~5 GW** offshore wind routed via H_2 at Bellanaboy
- **~400 kt H_2/year**
- Potential long-term repurposing of the Linkline for 100% H_2

100 tpa PILOT → **PROVE THE ROUTE** → **~400 ktpa INDUSTRIAL SCALE**

Main Engineering Challenges and Solutions

The pilot is technically feasible



01 Maximize electrolyzer uptime for GH2 production

- 2.3 MW wind → 1.25 MW PEM
- 50–60% electrolyser utilisation
- Flexible PEM operation

02 Install within a live gas terminal

- Modular Design
- SIMOPS / tie-ins in shutdown windows
- Technical Safety Assurance Plan

03 Electrical integration and terminal reliability

- Expedite detailed analysis early in design
- Model plant harmonics & protection

Export Mode A

04a Blend H_2 into the existing gas stream

- H_2 injection upstream of gas compression
- Control blend quality & metering

Export Mode B

04b Storage & trucking

- Compress H_2 to 300–500 bar
- Tube trailers = storage + transport
- Dual bays avoid production stops

Key Enablers

Create the conditions for first-mover hydrogen projects and Ireland's hydrogen future

The project can manage engineering and delivery. The wider system must enable the market.

REGULATORY & CERTIFICATION

Clear rules, ownership and traceability

Regulatory certainty

Clear lead authority • Coordinated approvals • Predictable requirements

Certification & value

H_2 on Renewable-gas registry • Practical RFNBO + Guarantee of Origin pathway

TECHNICAL

Enable safe integration and system access

Network access

Defined pathway from 0.1% towards 2% blending

Renewable power

Workable private-wire framework • DMAP + offshore-wind deployment

Hydrogen storage

National policy • Licensing and safety framework

COMMERCIAL

Build the business case and route to market

Funding & revenue

• Fund H_2 value chain & enabling infrastructure for first movers

Demand & offtake

Create bankable demand • Incentivise early industrial and transport users

REGULATORY CERTAINTY + TECHNICAL ACCESS + COMMERCIAL SUPPORT → FIRST-MOVER DELIVERY

Lessons Learnt

The pilot is technically feasible; delivery now depends on completing the regulatory and commercial pathways

AE@C has moved the discussion from “can it be done?” to “what conditions are needed to proceed?”

REGULATORY & CERTIFICATION

The framework must develop alongside the pilot

- **Clear regulatory pathway is essential**
- **Certification must create value**

TECHNICAL

Proven technologies; disciplined integration

- **No technical showstoppers for Pilot**
- **Smart sizing & co-location improves PEM uptime**
- **Possible to safely integrate within live gas facility**

COMMERCIAL

Route to market and support determine delivery

- **Blend first**
  Existing infrastructure and market make blending the preferred early route.
- **Smart sizing & co-location improves economics**
- **Trucking adds cost**
  Road export adds ~€2–3/kg;
- **First movers enable scale**
  Operating evidence and capability reduce risk for larger projects.

TECHNICALLY FEASIBLE → COMPLETE THE FRAMEWORK → CLOSE THE COMMERCIAL GAP → DELIVER