



Financial Case

April 2024

Private & Confidential

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4.1 Introduction

The purpose of the financial case is to ensure that the project is affordable and can be securely financed.



Understanding

A high level of understanding of the expected costs and revenue requirements of the project



Funding

The extent of available and potential funding sources



Affordability

Whether the funding required is affordable and whether there are any 'affordability gaps'

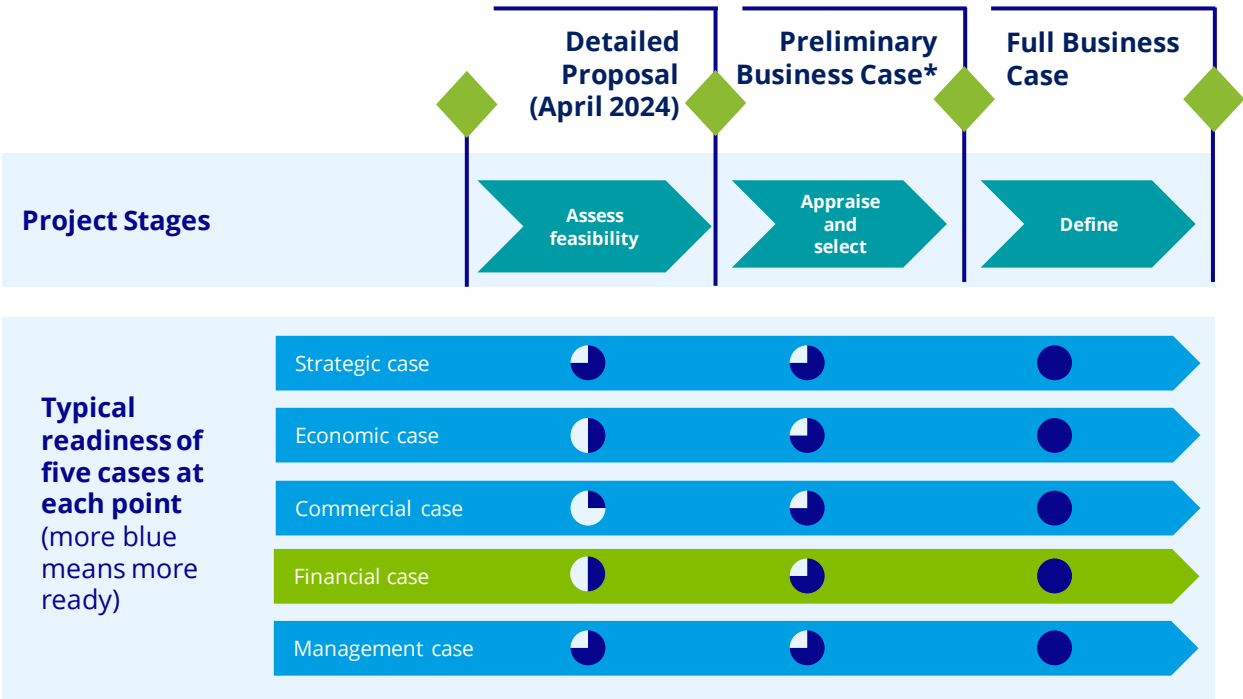
Financial modelling of revenue and costs is carried out for the period 2025 to 2050, but for presentation purposes the slides show annual profiles up to 2035.



4.1 Introduction

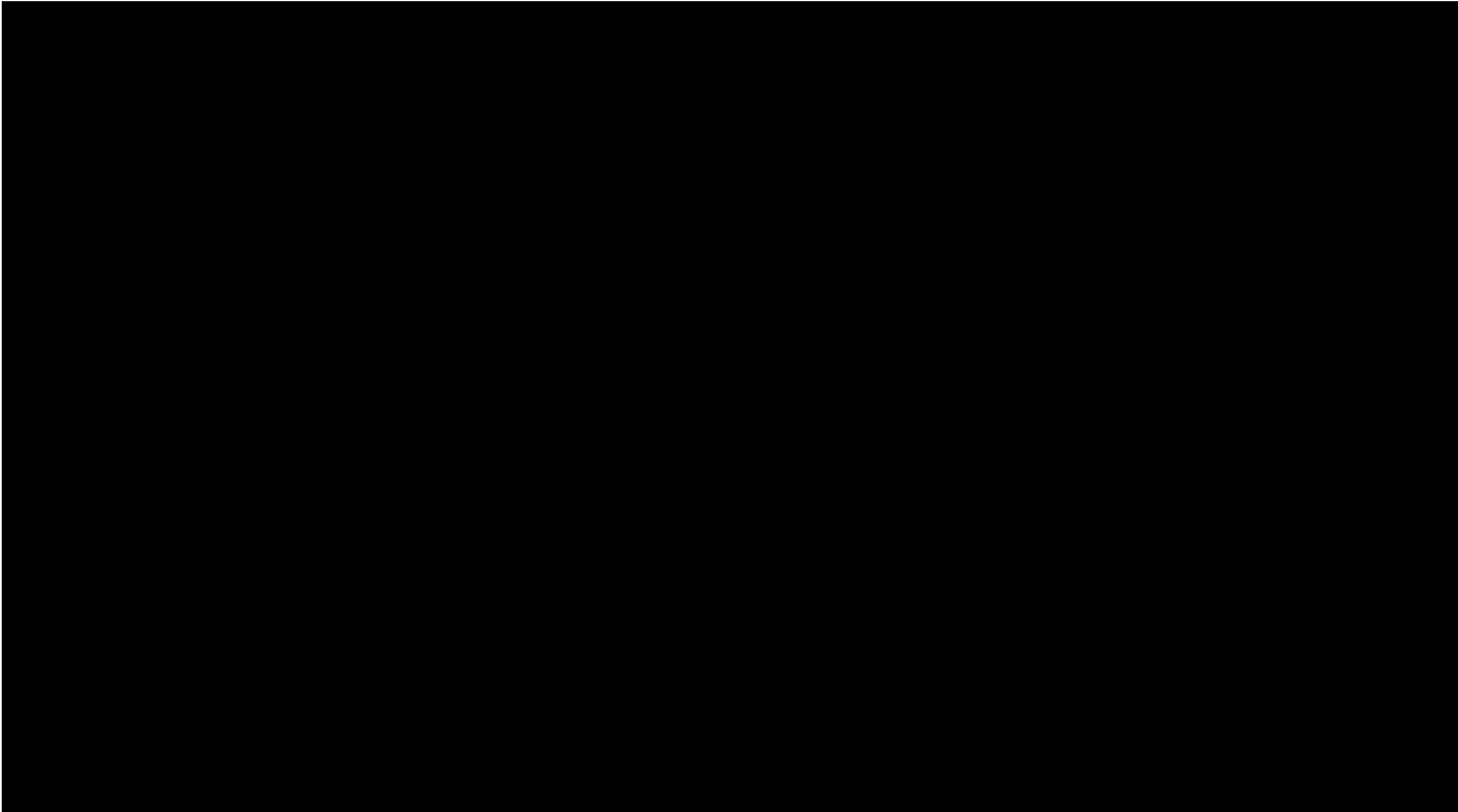
Business Case structure:

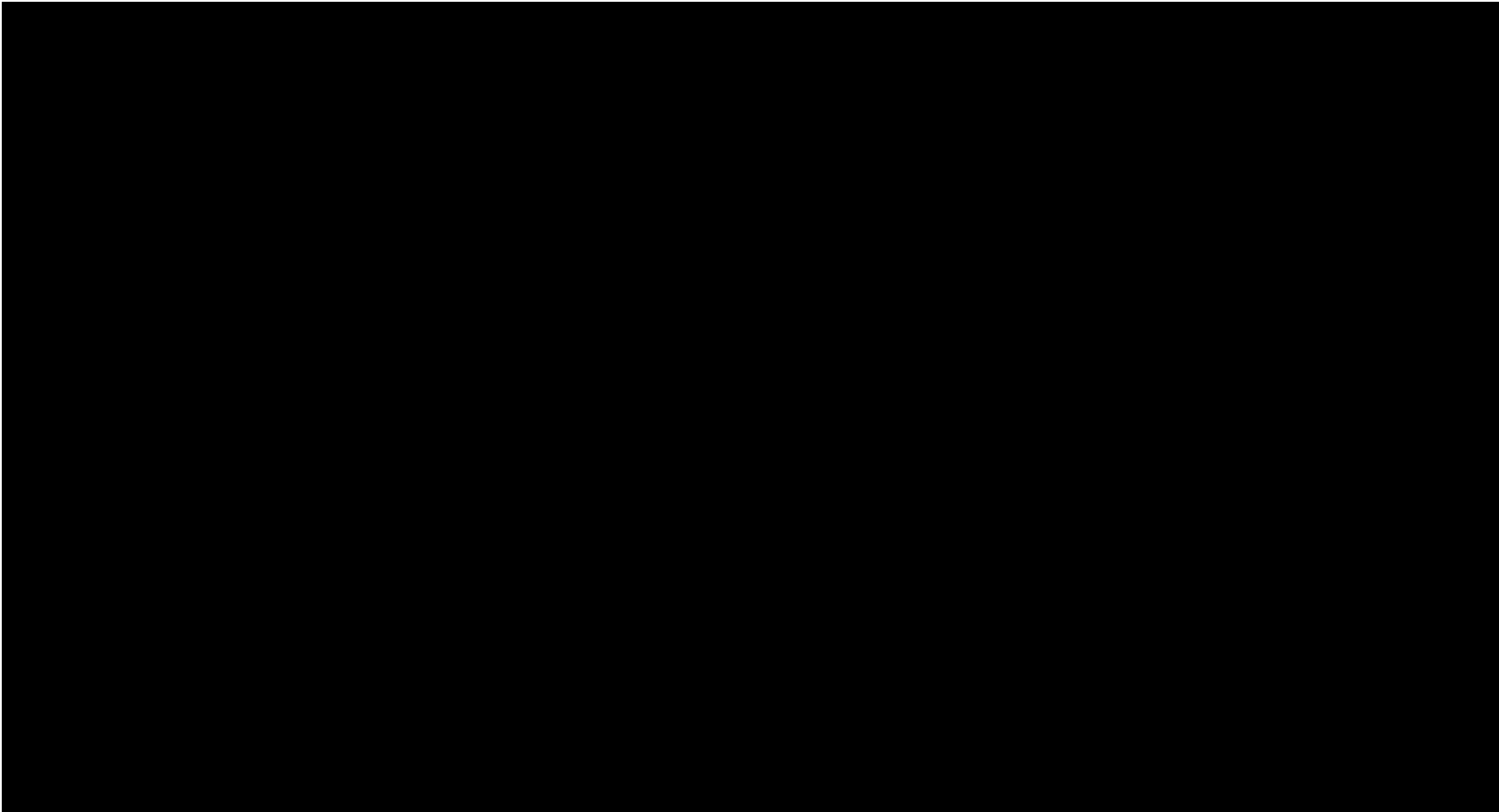
- The business case has been prepared in compliance with both the Infrastructure Guidelines: Strategic Assessment and Preliminary Business Case, December 2023 and the Infrastructure and Projects Authority's Infrastructure Business Case five-cases model. The business case includes: strategic, economic, commercial, financial and management cases – the five dimensions of the case.
- The Project is currently at the Preliminary Business Case stage, which if approved, will enable the Project to proceed to Final Business Case, where detailed design and procurement activities will determine the final scope, cost and schedule for the project.
- At Preliminary Business Case stage the Financial Case should:-
 - Demonstrates that capital investment and operating costs are affordable;
 - Provide indicative whole-life costs for the emerging preferred option(s);
 - Consider potential funding and financing options.



Source: Infrastructure Project Authority (2022) Project Routemap

*Target for Government submission in June





Leased FSRU

Build FSRU

FSRU & Salt Cavern

Leased FSRU

Build FSRU

FSRU & Salt Cavern

Leased FSRU

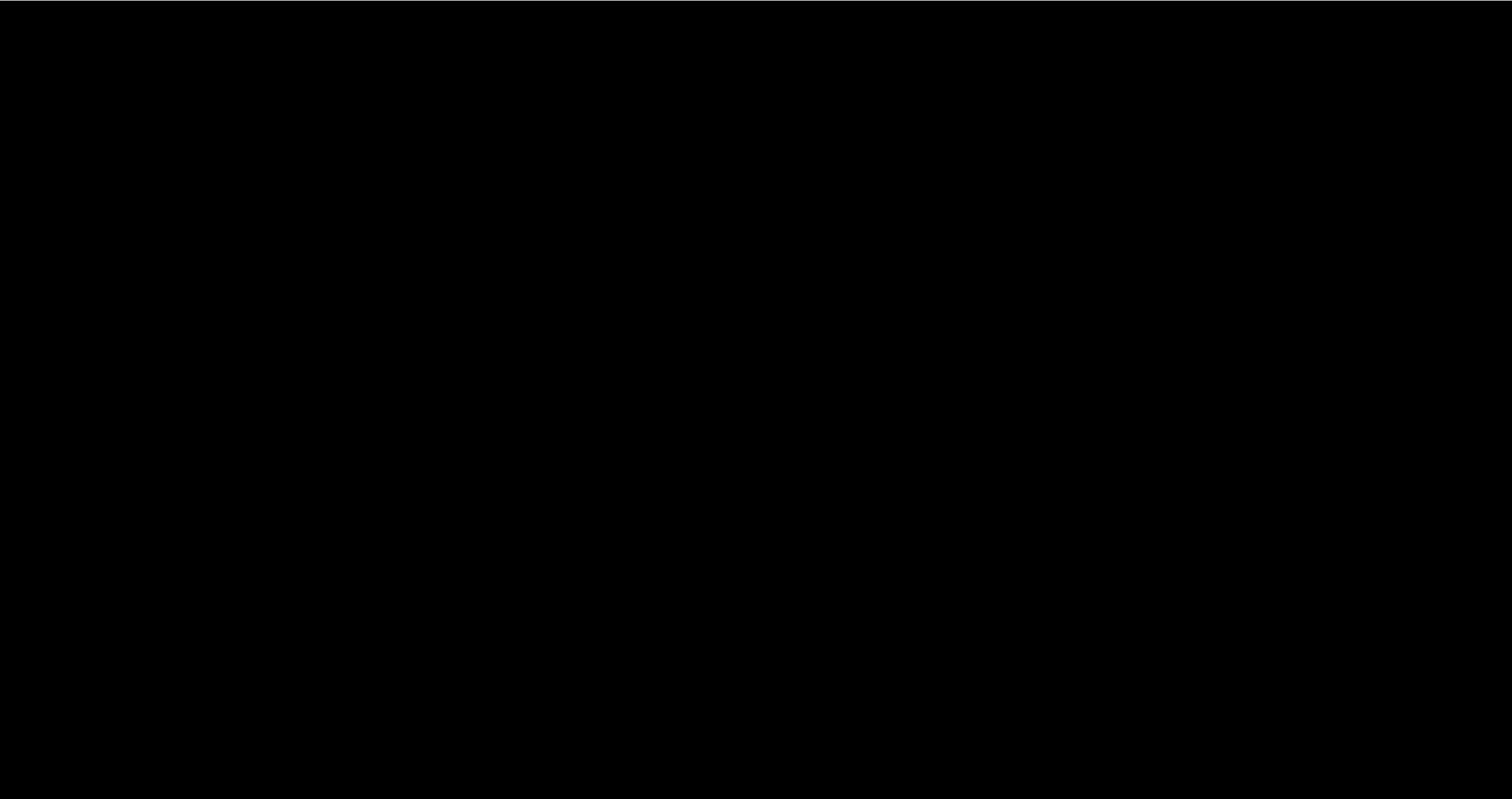
Build FSRU

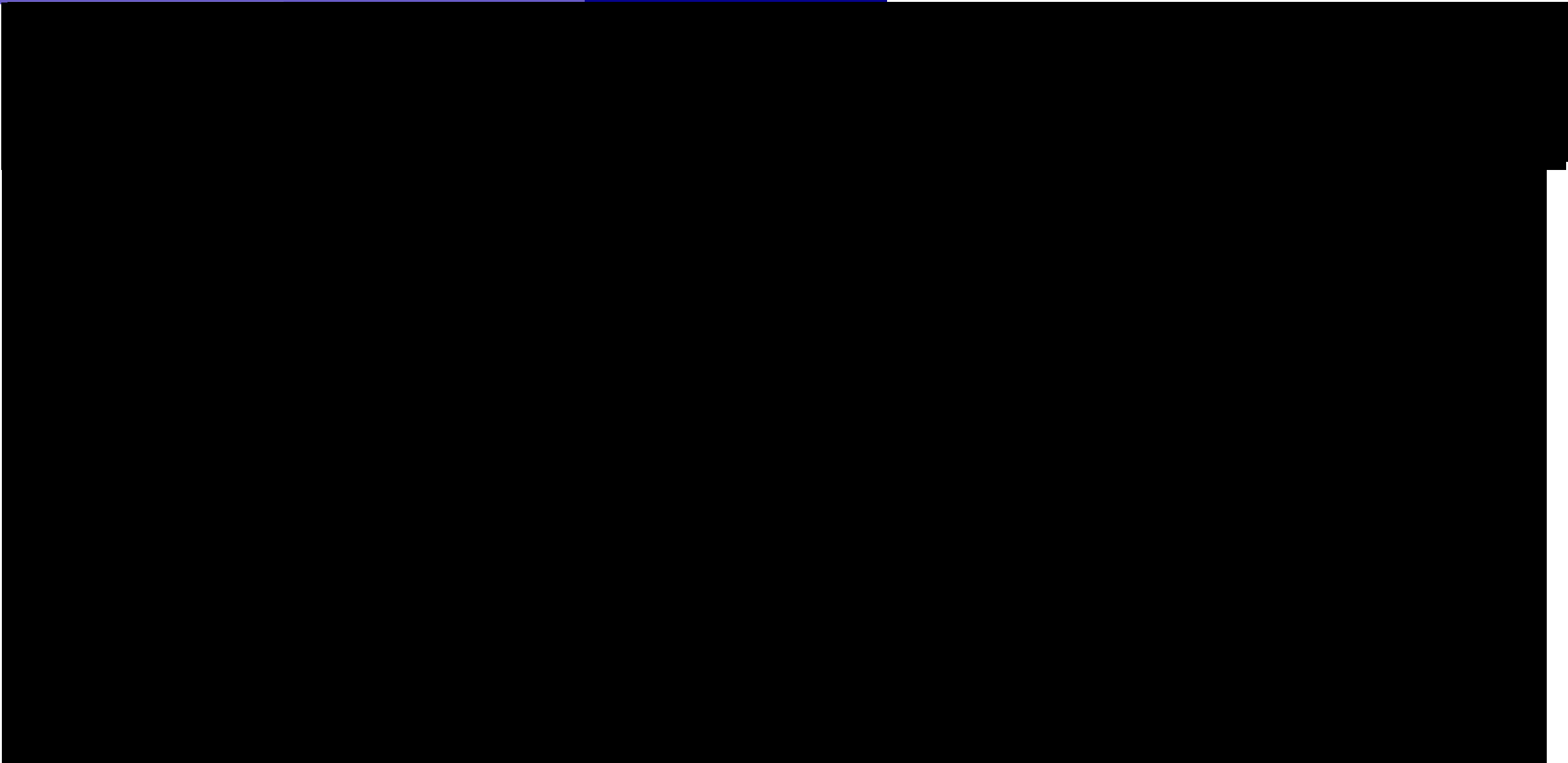
FSRU & Salt Cavern

Leased FSRU

Build FSRU

FSRU & Salt Cavern





Leased FSRU

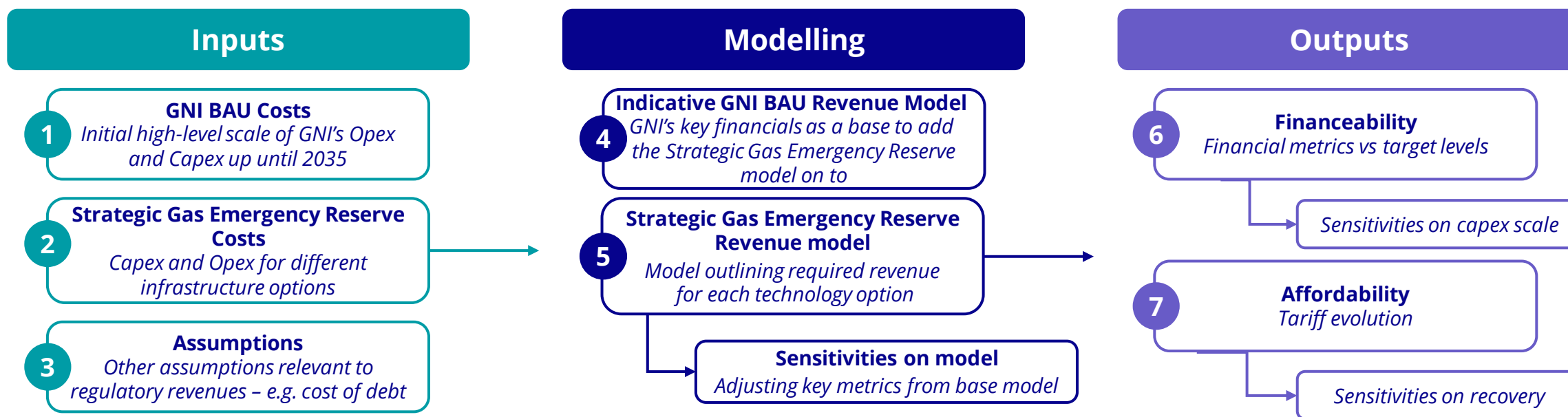
Build FSRU

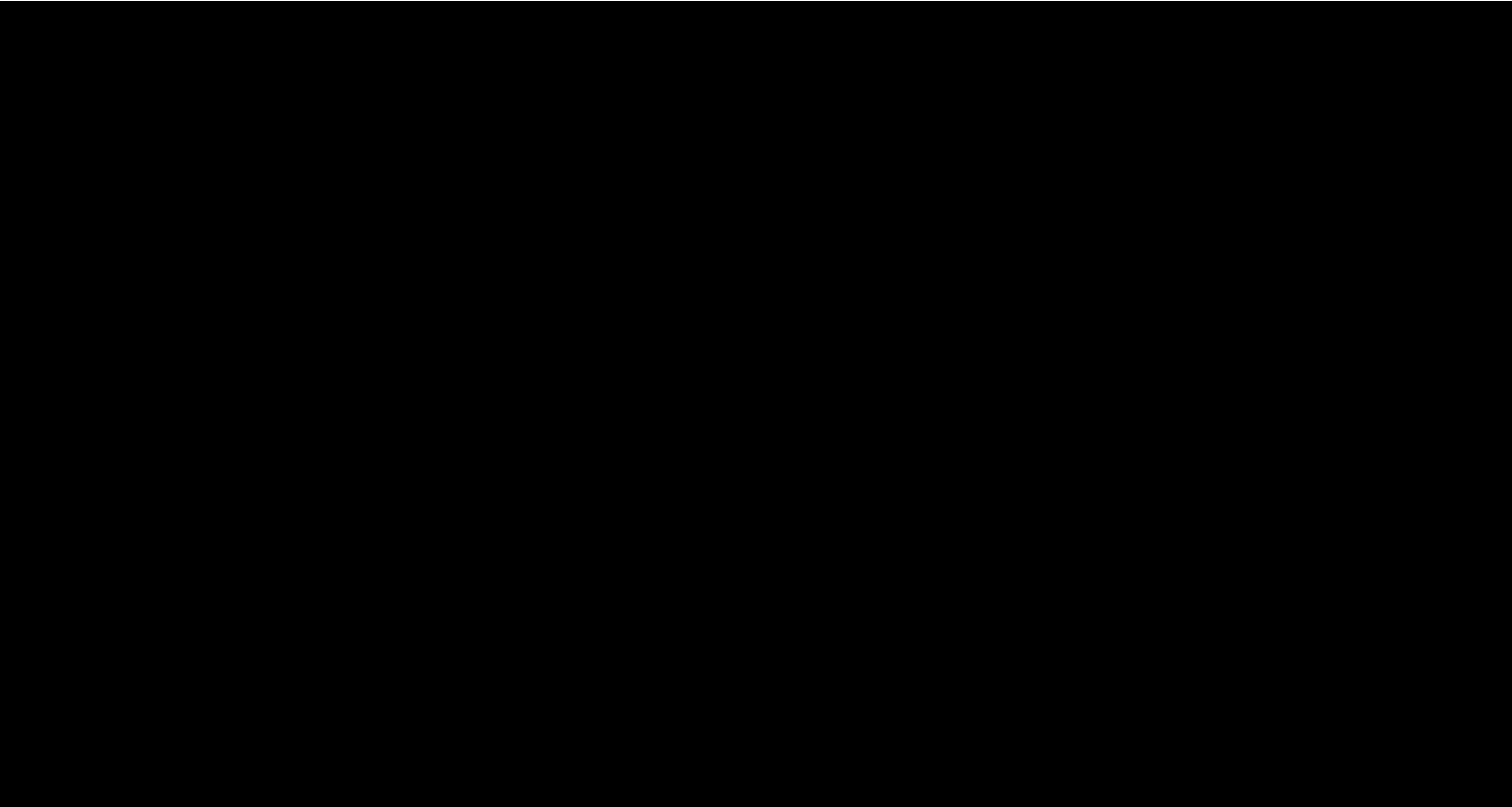
FSRU & Salt Cavern

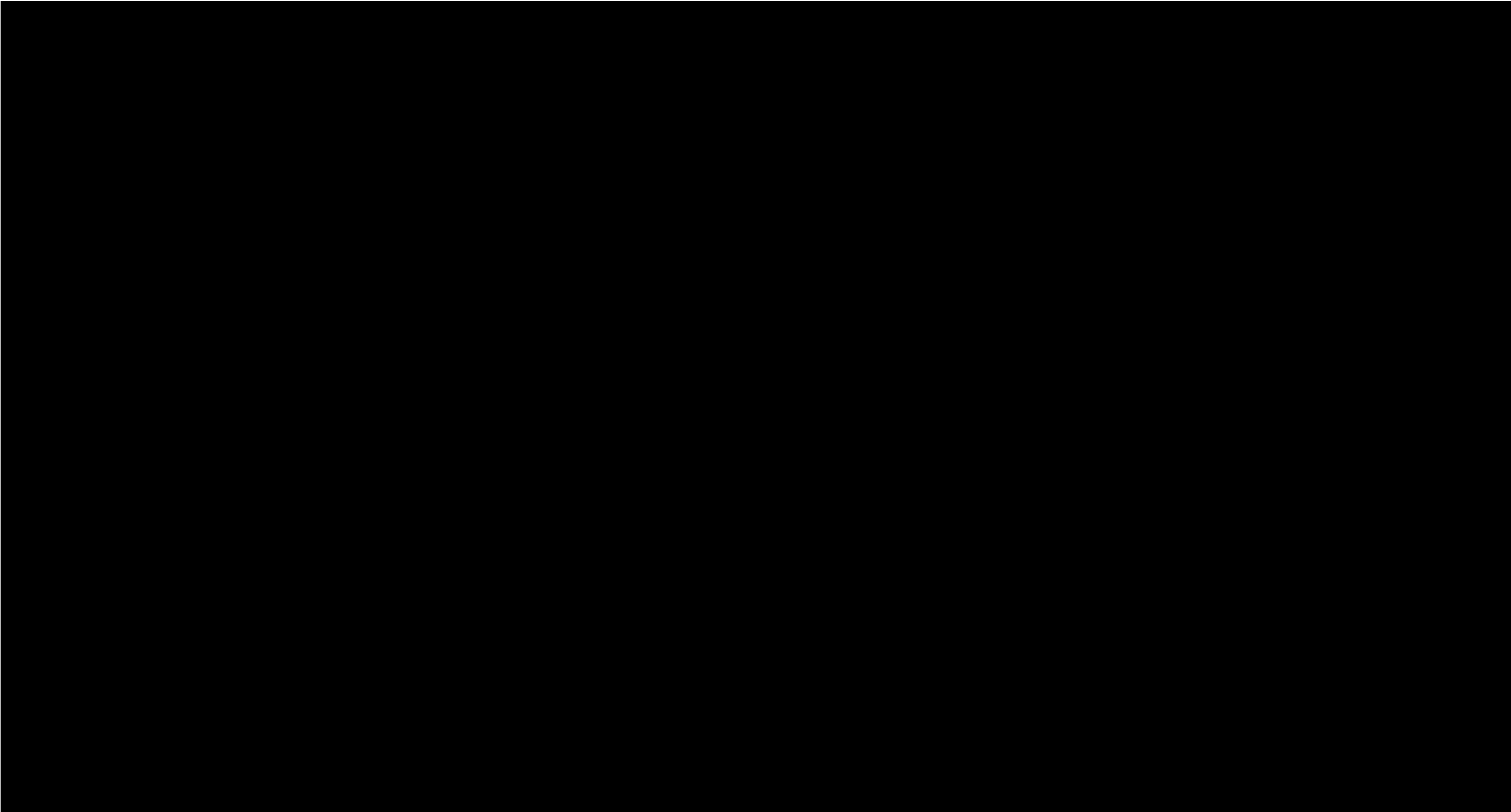
4.4 Financial Model Overview

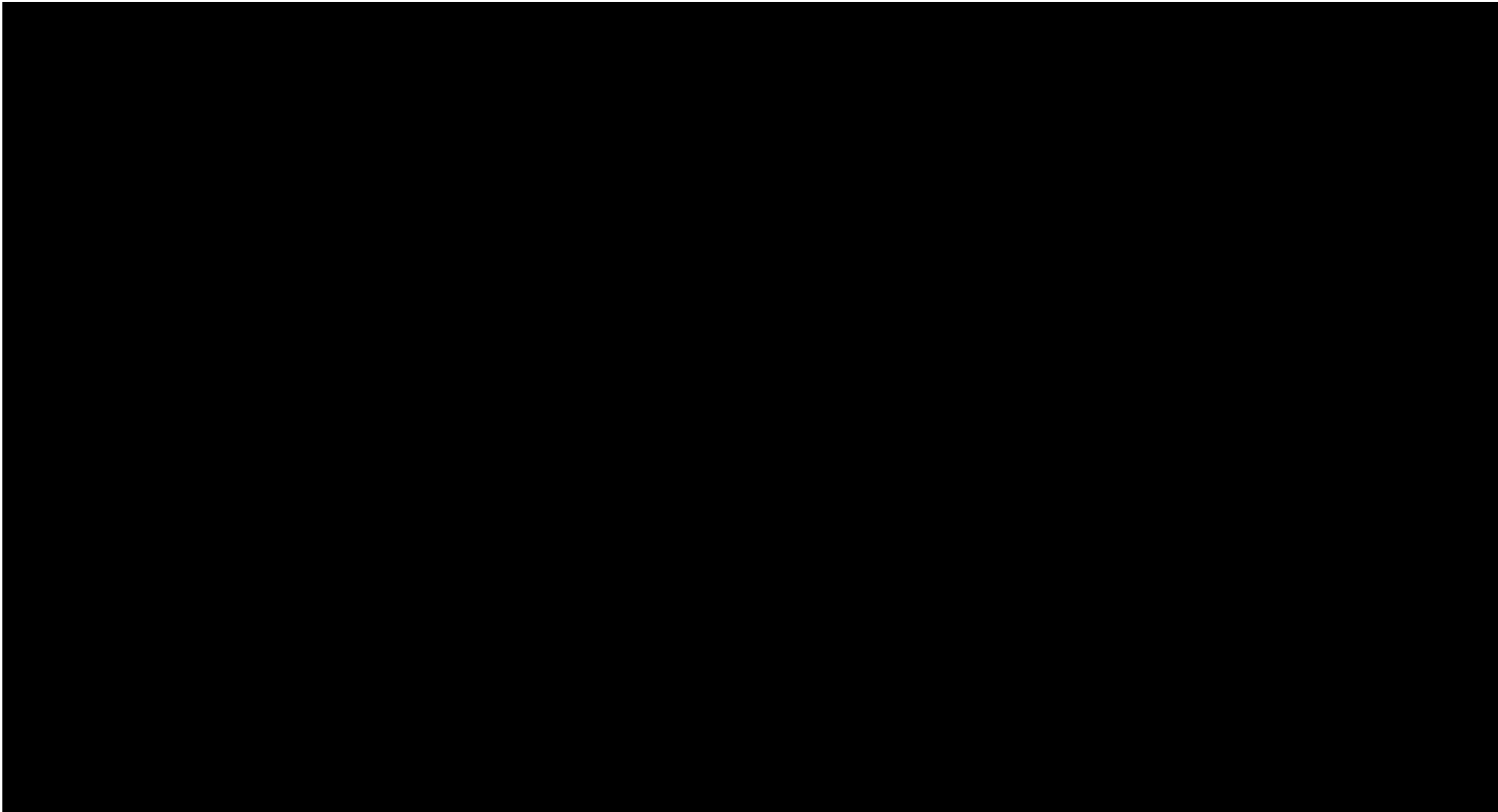
The purpose of the financial analysis is to assess the impact of the Strategic Gas Emergency Reserve cost projections on GNI's financial metrics up to 2035 but also assess indicative impacts to customer bills.

- This initial indicative financeability analysis is tested on the basis of financing the project through corporate financing, it does not include grant funding or alternative potential financing options at this juncture.
- This high-level analysis is used to derive insights on whether the options are considered feasible, given affordability and financeability considerations.









4.6 Financial Sources

The preliminary financeability assessment is based on GNI securing corporate financing for the project. However, other potential financing sources could be accessed, as detailed below, and a full review and assessment will be carried out.

Exchequer financing	Project financing	GNI corporate financing	PPP	JV
<ul style="list-style-type: none">• Description: Government provides financing for project.• Key Benefits: Financing through the Government is likely to incur the lowest costs, attributed to the minimal risk associated with government debt.• Key Risks: This approach carries significant risks related to political, public, and market acceptability.	<ul style="list-style-type: none">• Description: GNI raises funding through project financing, which could be a mixture of debt raised and injection of equity from GNI; or could be purely debt.• Key Benefits: Potentially reduces the burden on GNI's balance sheet, subject to rating agency assessments. Unlikely to face public opposition.• Key Risks: Cost higher than corporate financing, attributed to the increased risk, with potential that GNI may not get rating benefit. Lenders may require secured interest / step in rights over assets.	<ul style="list-style-type: none">• Description: Project financed through an extension of GNI's existing corporate financing. Could include a mixture of increased debt via bonds; corporate debt placement and/or supranational finance such as EIB.• Key Benefits: Depending on scale of investment, offers lower cost due to GNI's strong balance sheet position. The financing mechanism is already established and is unlikely to face public opposition.• Key Risks: May put pressure on GNI's financial metrics, contingent on the project's specifics, scale of investment, revenue certainty and return on investment.	<ul style="list-style-type: none">• Description: Project financed by the private sector as part of wider PPP arrangements.• Key Benefits: Reduces the burden on GNI's balance sheet, and some risks are internalised.• Key Risks: Would require some change to the regulatory regime to ensure incentives and financing align. Higher cost of capital versus exchequer finance. Lenders may require secured interest / step in rights over assets. PPP Co. must be viewed to bear a significant amount of risk and management responsibility.	<ul style="list-style-type: none">• Description: GNI undertakes the project as part of a joint venture, where the joint venture partner contributes at least a proportion of the financing. This option could be combined with other options, although most likely with corporate financing.• Key Benefits: Reduces the burden on GNI's balance sheet subject to a rating agency assessment.• Key Risks: Would be a first of a kind, requiring additional arrangements and governance (corporate and regulatory).

4.7 Affordability Considerations

A preliminary affordability assessment has been prepared by simplified assumption of analysing the potential impact on customers using two comprehensive recovery mechanisms:

1 Existing tariff structure – peak capacity based

- Under GNI's current tariff structure, 90% of tariffs are based on end gas users' peak loads, with the remaining 10% based on gas consumption volume.
- This mechanism directly charges domestic gas customers for the project, while electricity customers are indirectly charged through tariffs on gas-fired electricity generators, which are then passed on to end users.
- The primary concern with this approach is that it distorts the wholesale electricity market and may result in undercharging electricity customers.
- The latter is driven by the fact that unlike domestic customers, gas generators can opt out of capacity charges by not booking capacity. In addition, since they rarely increase their gas consumption significantly above the average, their load factors are lower.

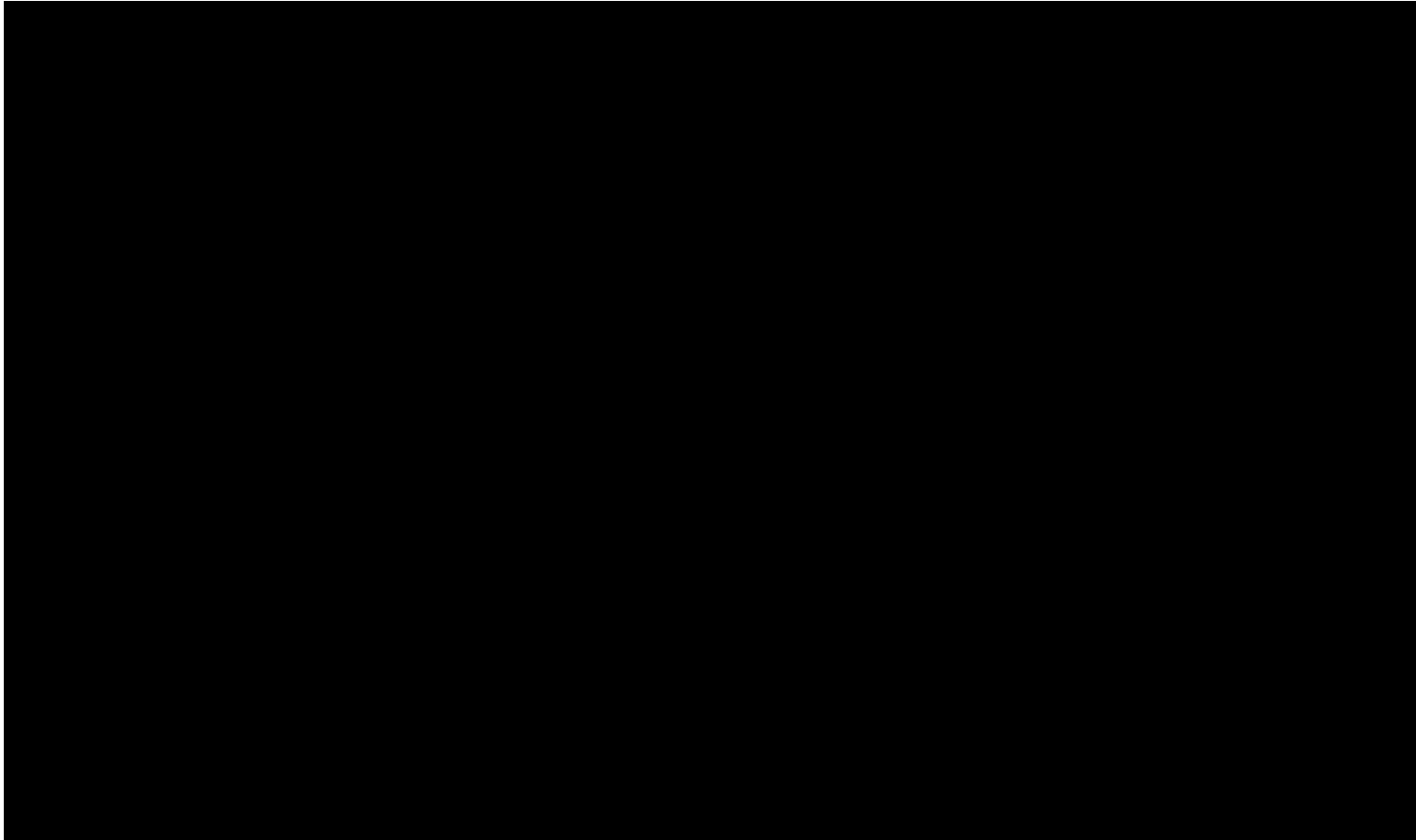
2 A notional gas/ electricity levy – volume based

- At the opposite end of peak-based tariffs are volumetric levies, which charge customers based on the volume of gas used.
- This approach generally leads to a fairer distribution of costs among customer groups.
- Additionally, since electricity customers cannot effectively opt out of these charges when gas generators are idle, volume-based metrics shift a higher share of costs to electricity customers compared to the tariff recovery mechanism.

The ultimate funding mechanism is to be determined and may be one or a combination of peak/capacity, volumetric and obligation. The values presented on the following slides are subject to further input and methodology refinements and should be interpreted with caution and as indicative.

4.7 Affordability Considerations

High-level affordability metrics – existing tariff & potential levy funding domestic gas customers



- Opting to lease an FSRU, rather than purchasing it, incurs an additional revenue requirement.
- Thus, while options involving a leased FSRU present a relatively lower initial capex, the net present value (NPV) of their required revenues is higher.

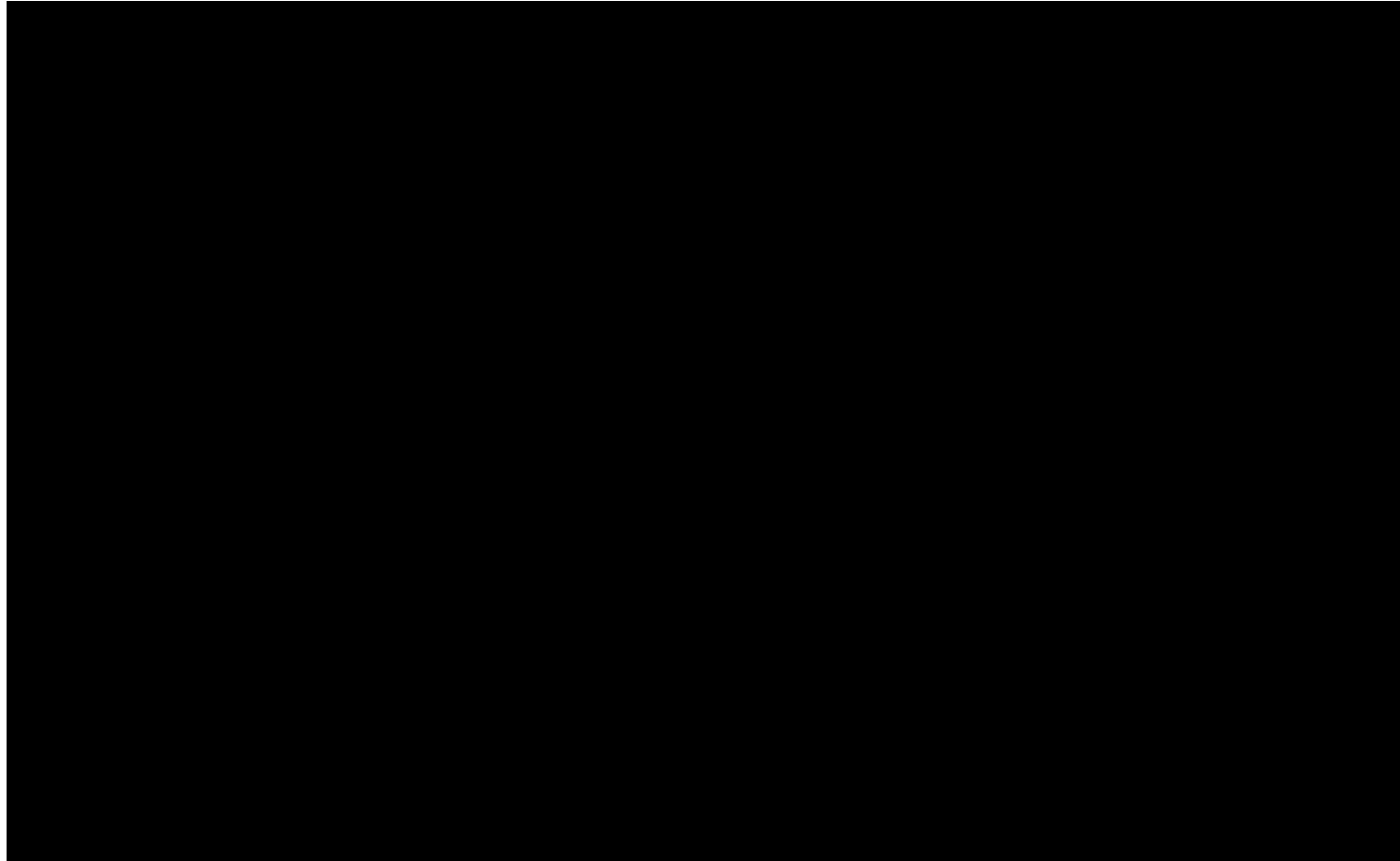
- The full GB outage option is forecasted to raise annual bills for both gas and electricity customers under the existing tariff regime. However, some of this increase is likely to be negated by grants and a wider customer base.
- Volumetric levy relatively favourable to gas customers as a proportionately higher burden is carried by electricity customers.

Note:

No CBCA - assumption of modelling to date is that the RoI customers pay for the infrastructure costs – i.e. NI customers are excluded. Findings presented are subject to further input and methodology refinements and should be interpreted with caution and as indicative. In addition, options exclude recovery of residual value at the end of the project lifetime (2050).

4.7 Affordability Considerations

High-level affordability metrics – existing tariff & potential levy funding Domestic Electricity Customers (via gas generators)



- The division of costs between gas and electricity customers is determined by the average end-use consumption and the assumption that 46% of electricity demand is met through gas-fired generation.
- The difference relative to the gas customers' bill increase is driven primarily by the lower effective peak capacity bookings required by electricity customers .
- It is assumed that any increase in the single electricity market ("**SEM**") marginal price will be passed on to all customers.

- The allocation of costs between electricity and gas customers under existing tariff regime is mainly influenced by peak capacity.
- Under a volumetric mechanism, electricity customers are charged relatively more.

Note:

No CBCA - assumption of modelling to date is that the RoI customers pay for the infrastructure costs – i.e. NI customers are excluded. Findings presented are subject to further input and methodology refinements and should be interpreted with caution and as indicative. In addition, options exclude recovery of residual value at the end of the project lifetime (2050).

4.7 Affordability Considerations

1

Emerging N-1 Solution FSRU

RAB based model. Regulated Asset and paid for via existing regulatory tariffs and/or Levy (tbc).

- Further analysis to be done on technology in terms of send out or not.
- Any send out scenario could result in revenue stream to offset costs.

2

Emerging Full GB Outage Solution Salt Cavern + FSRU

RAB based model. Regulated asset and scenario modelling below shows indicative cost if paid for via existing regulatory tariffs and/or Levy (tbc).

- Larger cost but more grant opportunities (not included).
- Suggests wider customer base (not included).
- As a result indicative costs below likely to be lower after further analysis.

3

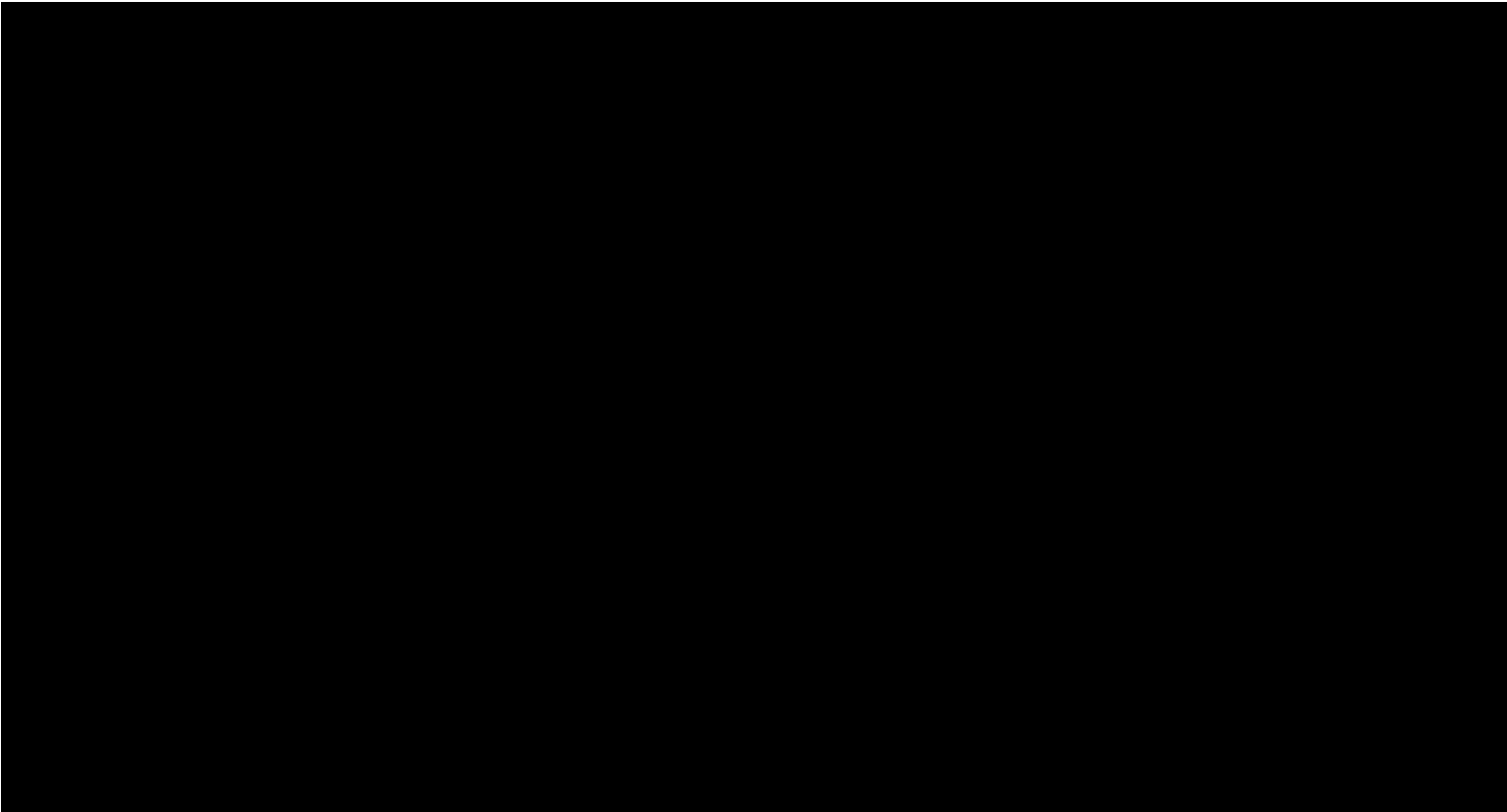
Sensitivities not modelled at present (next phase)

- Exchequer or state funding.
- Opportunities for EU and other funding with the salt cavern given transition to hydrogen.
- Salt cavern costs/revenues likely via some form of obligation and via supplier charges (EU norm).
- FSRU utilisation for minimum send out could have revenue stream.
- Further funding and allocation methods from cross-border CBA.
- Further engagement with power generation stakeholders and regulators re fuel switch/ secondary fuel policy.



Note:

Findings presented are subject to further input and methodology refinements and should be interpreted with caution and as indicative. Illustration of indicative residential costs are draft and are subject to further review and analysis dependent on actual costs, funding and final allocation mechanism (subject to consultation). All scenarios indicate a broad incremental cost in the range which is in line with current and historic norms of similar levies (e.g. Electricity PSO and NORA levy). The illustrative values are the simple average of the impacts across the recovery mechanisms modelled



Appendix F1 Miscellaneous



Appendix F1: Project Acronyms (1/2)

Acronym	Description	Acronym	Description	Acronym	Description
ABP	An Bord Pleanála	DECC	Department of the Environment, Climate and Communications	FIDIC	International Federation of Consulting Engineers
ACER	Agency for the Cooperation of Energy Regulators	DG COMP	Directorate General for Competition	FSRU	Floating Storage and Regasification Unit
AGI	Above Ground Installation	DHLGH	Department of Housing, Local Government and Heritage	FTE	Full Time Equivalent
ALARP	As Low As Reasonably Practicable	DofE	Department of Energy (Northern Ireland)	GB	Great Britain
AMP	Asset Management Plan	DofF	Department of Finance (Northern Ireland)	GDP	Gross Domestic Product
ARC	Audit & Risk Committee	DPENDR	Department of Public Expenditure, NDP Delivery and Reform	GHG	Greenhouse Gas
BAT	Best Available Techniques	DPER	Department of Public Expenditure and Reform	HSA	Health and Safety Authority
BAU	Business as Usual	EAC	Expenditure Approvals Committee	HVO	Hydrogenated Vegetable Oil
BIM	Building Information Management	EC	European Commission	IAAP	Integrated Assurance and Approvals Plan
BIMCO	Baltic and International Maritime Council	EGIG	European Gas Pipeline Incident Group	IBP	Integrated Business Planning
BOG	Boil Off Gas	EIA	Environmental Impact Assessment	IC	Interconnector
CAP	Climate Action Plan	EIAR	Environmental Impact Assessment Report	IChemE	Institution of Chemical Engineers
CAPEX	Capital Expenditure	EP	Equator Principles	IEA	International Energy Agency
CBA	Cost Benefit Analysis / Assessment	EPA	Environmental Protection Agency	IED	Industrial Emissions Directive
CBCA	Criteria Based Content Analysis	EPC	Engineer Procure Construct	IoM	Isle of Man
CEPA	Cambridge Economic Policy Associates	EPO	Emerging Preferred Option	IPA	Infrastructure and Projects Authority (UK)
CLO	Community Liaison Officer	EPRS	Emergency Pipeline Repair System	ISO	International Organisation for Standardisation
CoDG	Cost of Disruption of Gas	ESBN	ESB Networks	KPI	Key Performance Indicator
COMAH	Control of Major Accident Hazards	ESG	Environmental Social and Governance	LNG	Liquefied Natural Gas
CPO	Compulsory Purchase Order	ESG	Energy Security Group	LNGC	Liquefied Natural Gas Carrier
CRU	Commission for Regulation of Utilities	ESP	Engineering Services Provider	LSO	LNG System Operator
CSF	Critical Success Factors	FBC	Final Business Case	MAC	Maritime Area Consent
CSO	Central Statistics Office	FEED	Front End Engineering Design	MARA	Maritime Area Regulatory Authority
D&A	Depreciation & Amortisation	FFO	Funds From Operations	MSCM	Millions of Standard Cubic Metres
DAERA	Department of Agriculture, Environment and Rural Affairs	FID	Final Investment Decision	Msm	Mega Standard Cubic Metres
DB+OM	Design Build + Operate Maintain				

Appendix F1: Project Acronyms (2/2)

Acronym	Description	Acronym	Description	Acronym	Description
NDP	National Development Plan	RACI	Responsible Accountable Consulted Informed	TEG	Temporary Emergency Generation (Act)
NEC4	New Engineering Contract 4	RAG	Red, Amber, Green	TOC	Table of Contents
NGEM	Natural Gas Emergency Manager	RCF	Reference Class Forecasting	TPA	Third Party Access
NGEP	National Gas Emergency Plan	RED	Renewable Energy Directive (EU) 2023/2413	TPER	Total Primary Energy Requirement
NI	Northern Ireland	RES	Renewable Energy Source	TSO	Transmission System Operator
NPF	National Planning Framework	ROI	Republic of Ireland	UGS	Underground Gas Storage
NPV	Net Present Value	RPE	Real Price Effect	VfM	Value for Money
NPWS	National Parks and Wildlife Service	RTP	Route to Procurement	VoLL	Value of Lost Load
NSO	National Strategic Objective	S&P	Standard & Poor's	WACC	Weighted Average Cost of Capital
O&M	Operation & Maintenance	SBC	Strategic Business Case		
OJEU	The Official Journal of the European Union	SCRT	SCR + CRT (Selective Catalytic Reduction + Continuous Regenerating Technology)		
OOM	Order Of Magnitude	SDG	Sustainable Development Goal		
OPEX	Operating Expenditure	SEM	Single Electricity Market		
PDA	Planning and Development Act 2000 (as amended)	SGER	Strategic Gas Emergency Reserve		
PID	Piping Instrumentation Diagram	SGERP	Strategic Gas Emergency Reserve Project		
PLT	Project Leadership Team	SGR	Sustainable Growth Rate		
PMO	Project Management Office	SID	Strategic Infrastructure Development		
PP JV	Public-Private Joint Venture	SME	Small and Medium-sized Enterprises		
PPP	Public-Private Partnership	SNIP	Scotland-Northern Ireland Pipeline		
PRAM	Project Risk Analysis and Management	SNP	South North Pipeline		
PSO	Public Service Obligation	SoLR	Supplier of Last Resort		
QA	Quality Assurance	SoS	Security of Supply		
QRA	Quantitative Risk Assessment	SRO	Senior Responsible Owner		
QSRA	Quantitative Schedule Risk Analysis	SWOT	Strengths, Weaknesses, Opportunities, Threats		
RAB	Regulated Asset Base	TBC	To Be Completed		