

# The Greater Buchan Area Development

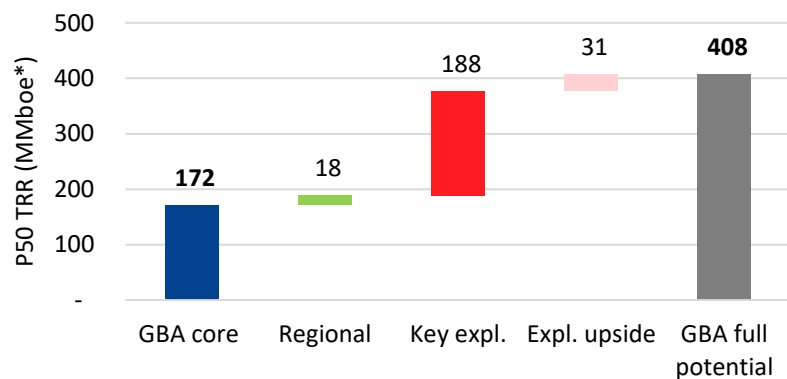
## Concept Select Update



March 2021

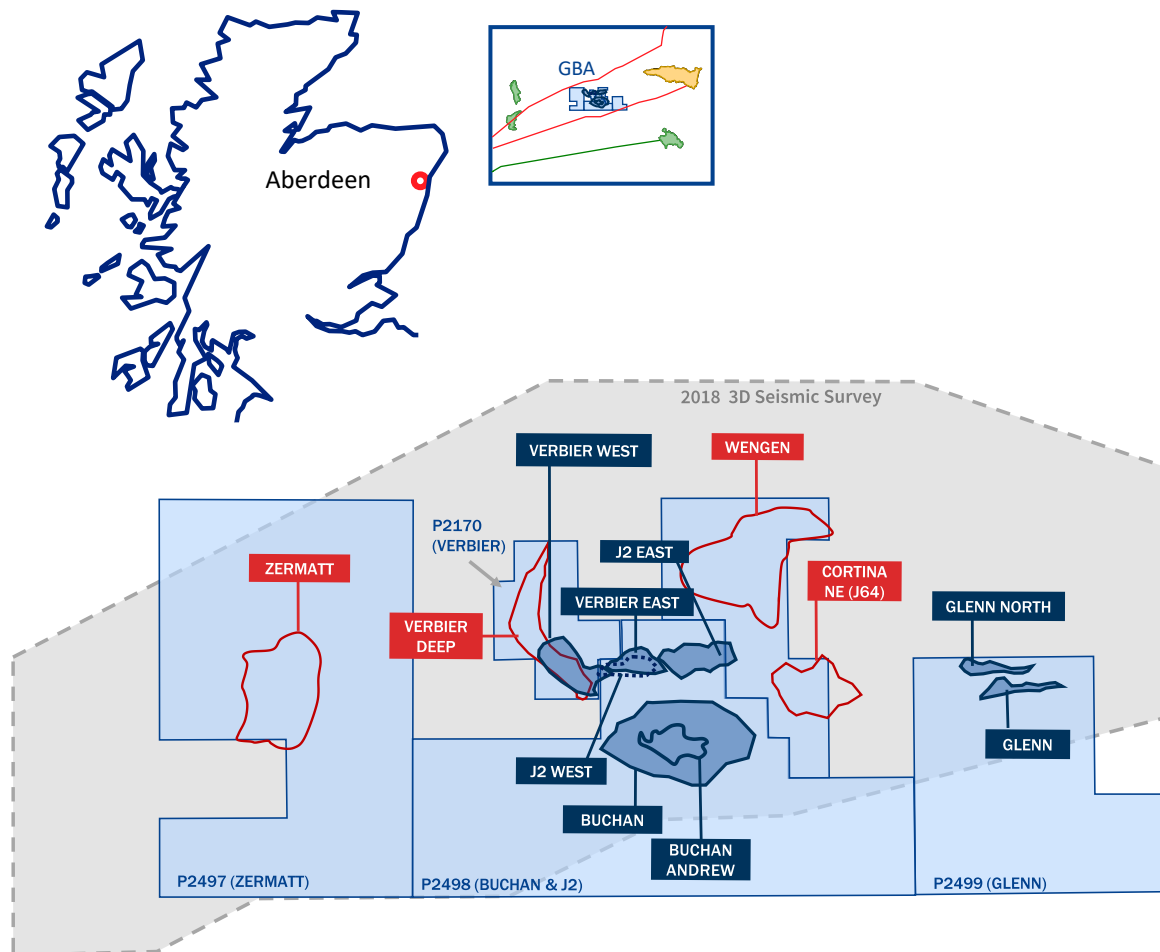
- AIM listed UK independent E&P company
  - ▶ Small cap (c.£50m) company with large cap asset base
  - ▶ Delivering on a strategy of focused growth

- Key asset is the Greater Buchan Area



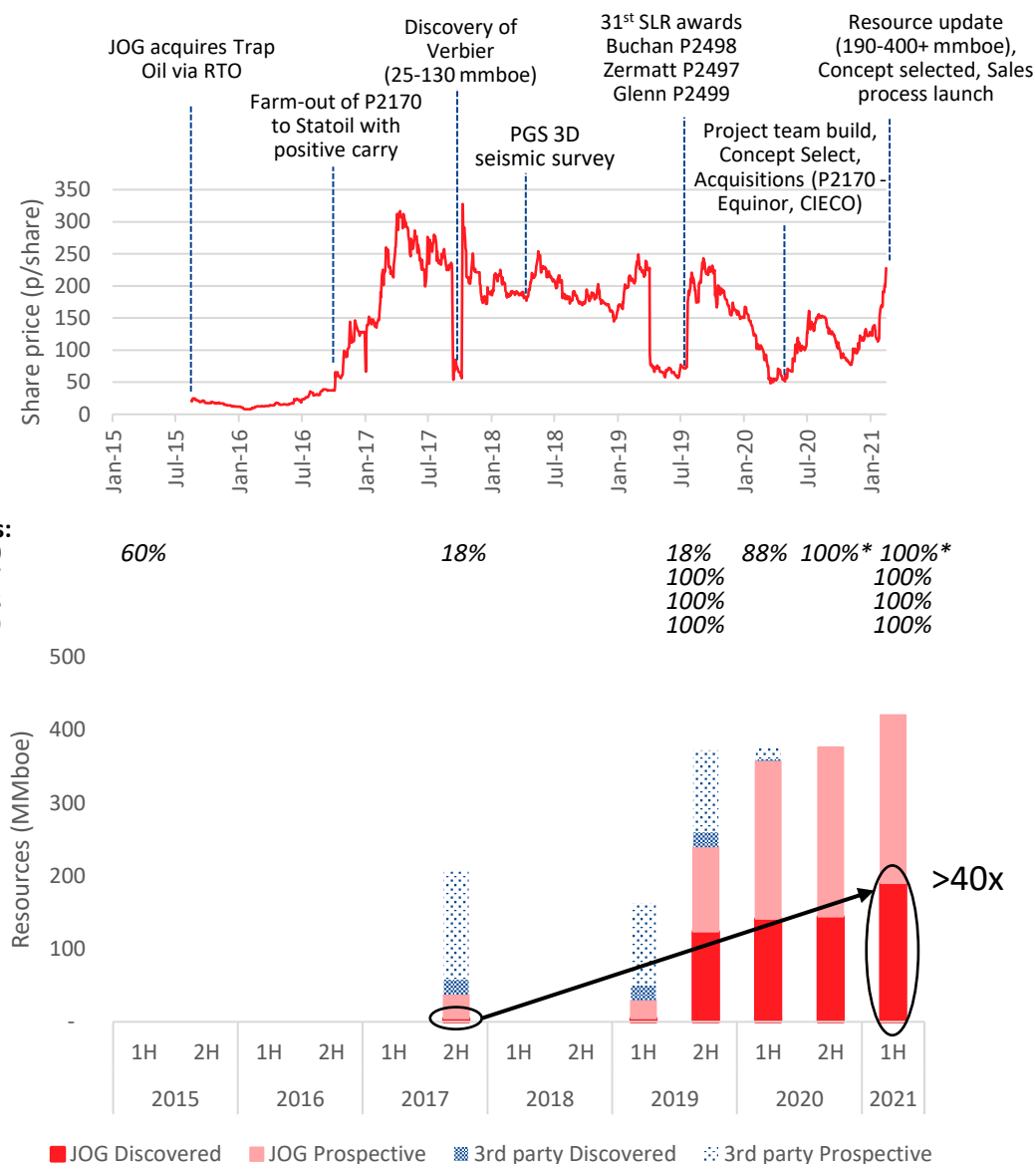
- Significant near-term value gates
  - ▶ Development concept selected
  - ▶ GBA farm out process launching in March 2021
  - ▶ FEED entry in Q3 2021
  - ▶ FID in H2 2022

## The Greater Buchan Area, UK Central North Sea



A pure play North Sea development opportunity with material upside

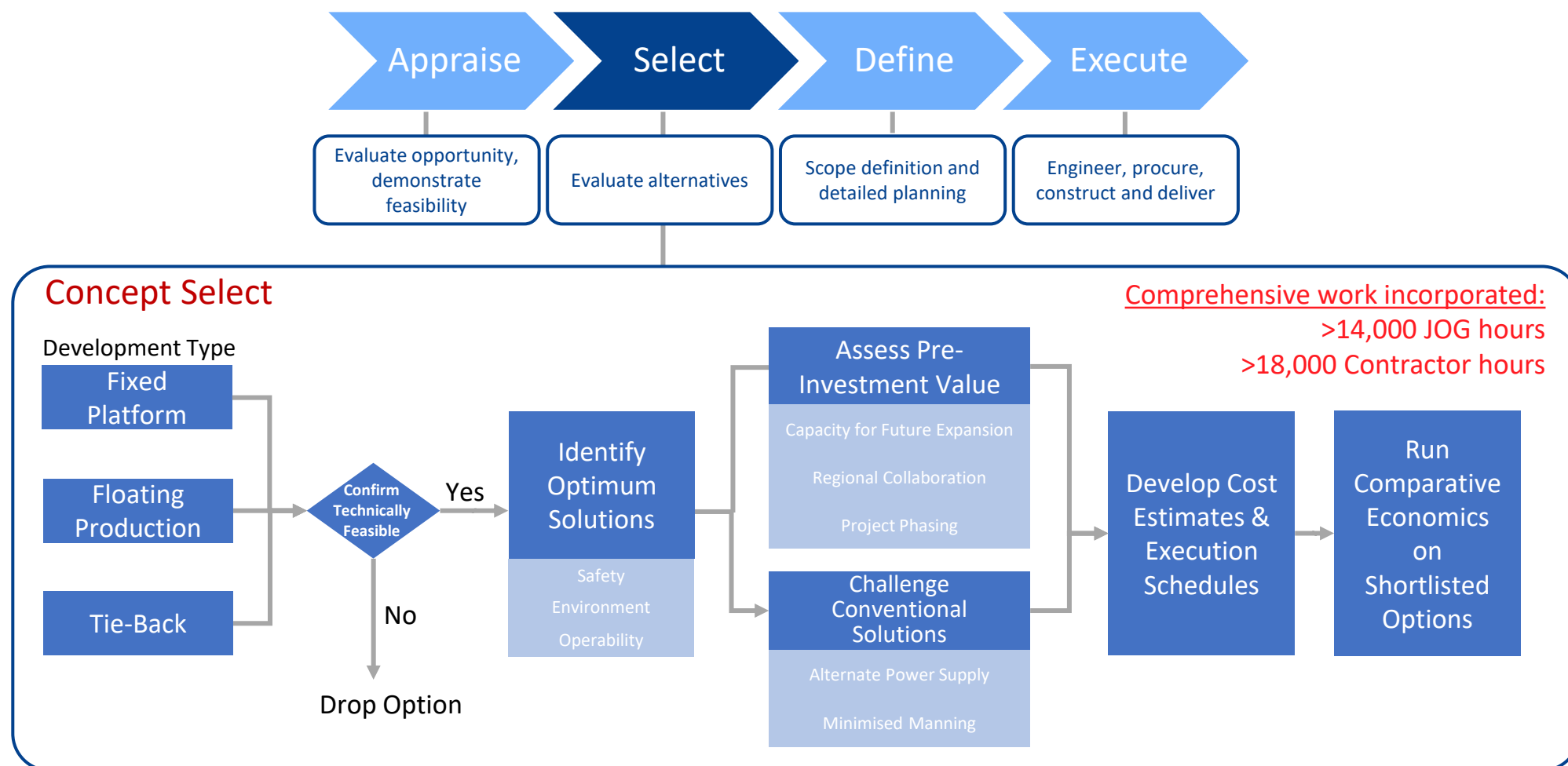
- Successfully aggregated a very significant portfolio
  - ▶ Successful exploration
  - ▶ Astute licensing
  - ▶ Targeted acquisitions
  - ▶ >40x increase in discovered resources in under 4 years
  
- Corporate Carbon Policy to be announced shortly
  - ▶ Establishing an energy company of the future
  
- GBA sales process launching imminently to bring in a partner
  - ▶ Major funding contribution for capex
  - ▶ Industry validation to de-risk equity story
  
- The GBA is now a major development opportunity in the North Sea
  - ▶ Significantly de-risked and material development
  - ▶ Multiple high margin, exploration opportunities adjacent to GBA
  - ▶ Longevity and scale of cashflows and value
  - ▶ Tax synergies for existing North Sea corporates
  - ▶ Carbon intensity reduction



## ...is delivering material growth

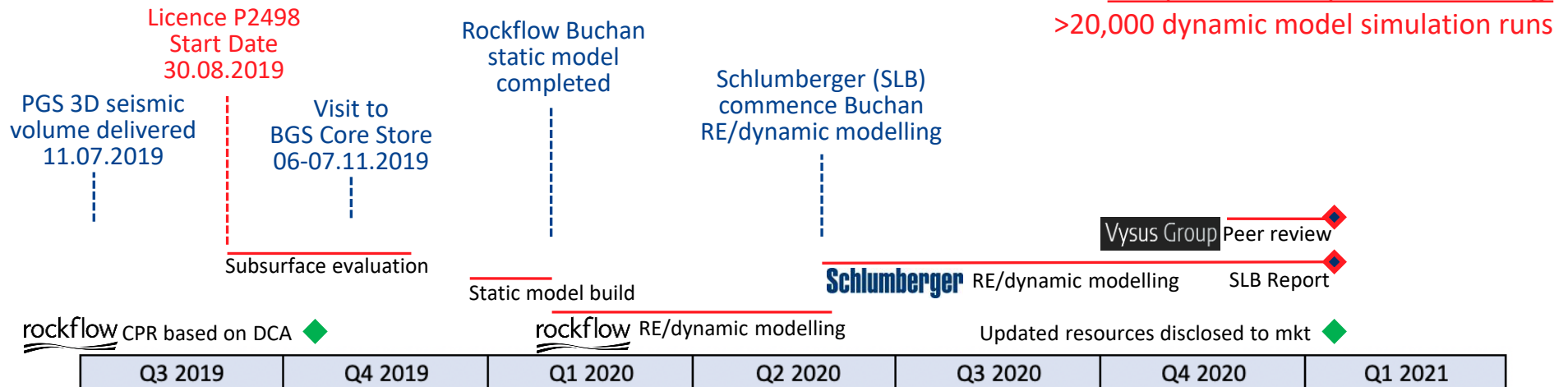


**Concept Select is a material milestone in the GBA Development stage gate process**



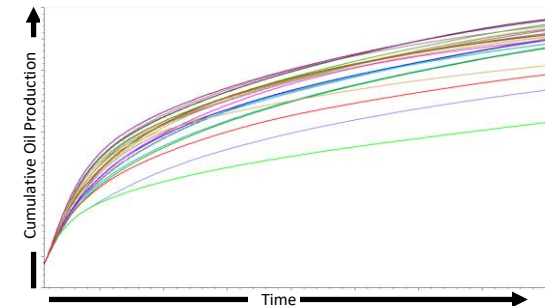
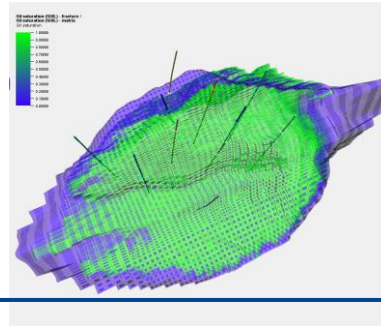
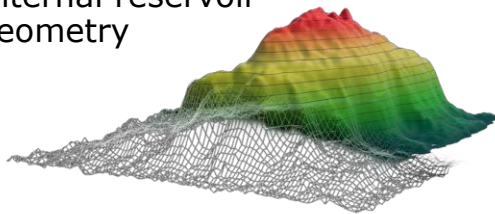
Concept Select has provided a robust, technically de-risked, low carbon and economically attractive development solution for the GBA

## Buchan subsurface timeline

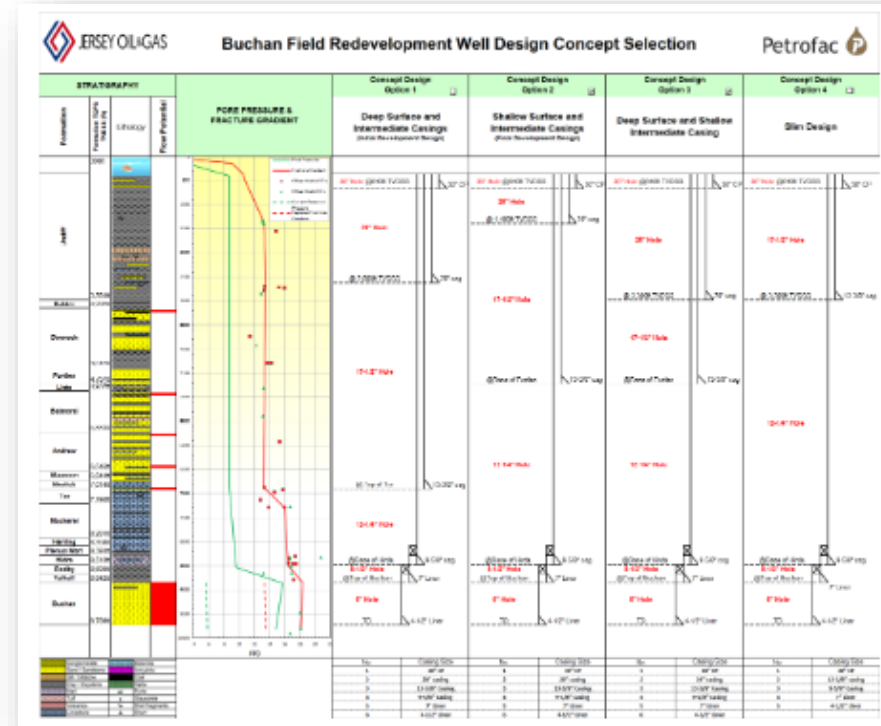
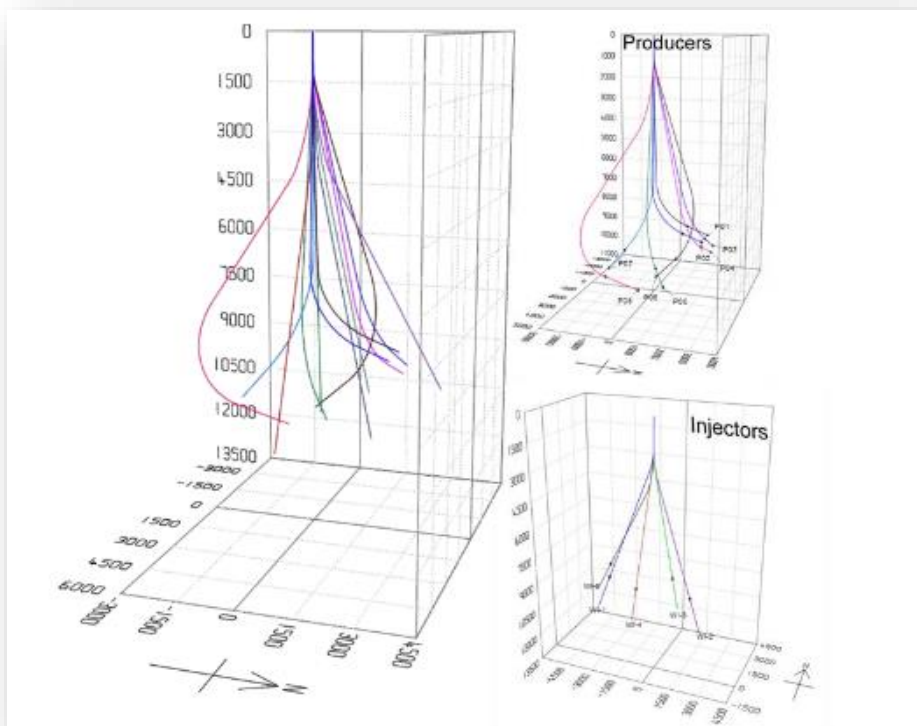


## Buchan subsurface modelling incorporated:

- Petrophysics of all Buchan wells
- Seismic interpretation and depth conversion
- Dipmeter logs
- Image logs
- Structural modelling
- Internal reservoir geometry
- Core analysis – porosity & fractures
- Reservoir correlation
- Sedimentological analysis
- Heavy mineral analysis
- Palynology, Chemostratigraphy
- Fluid and rock properties
- 36 years of historical production data
- Production logging data
- Reservoir pressure data

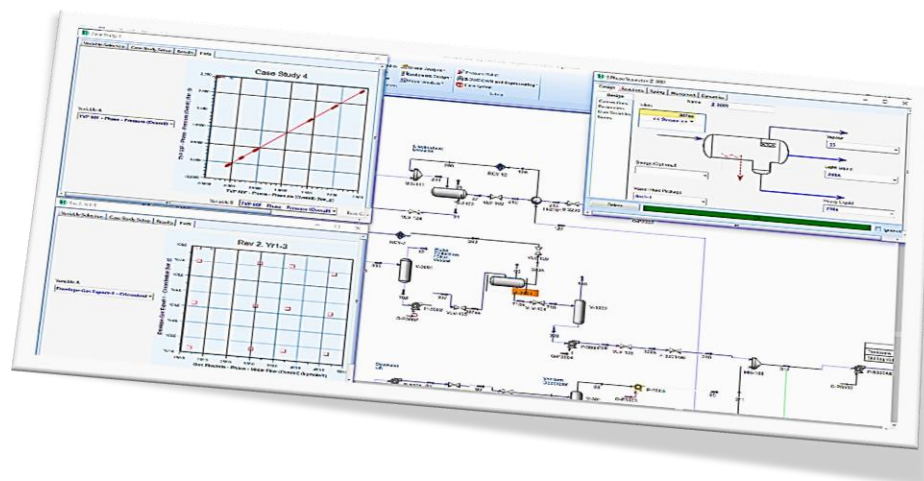


Successful match of 36 year production history provides far higher confidence in production forecasts than is usual for greenfield developments

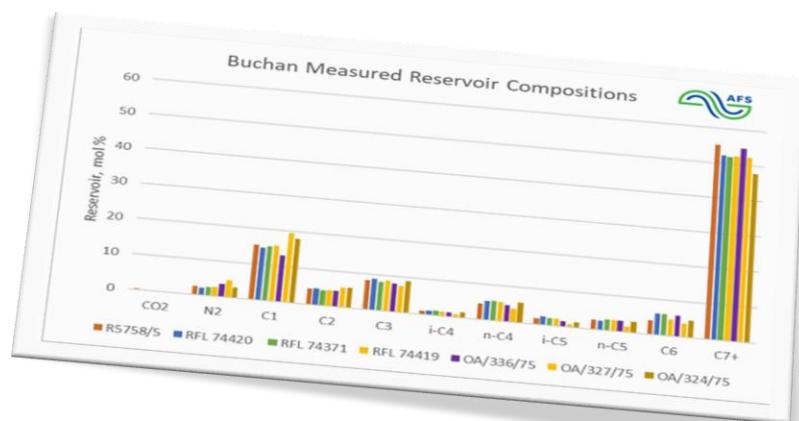


- Well trajectories examined for producers & injectors
- Time and cost ranges established

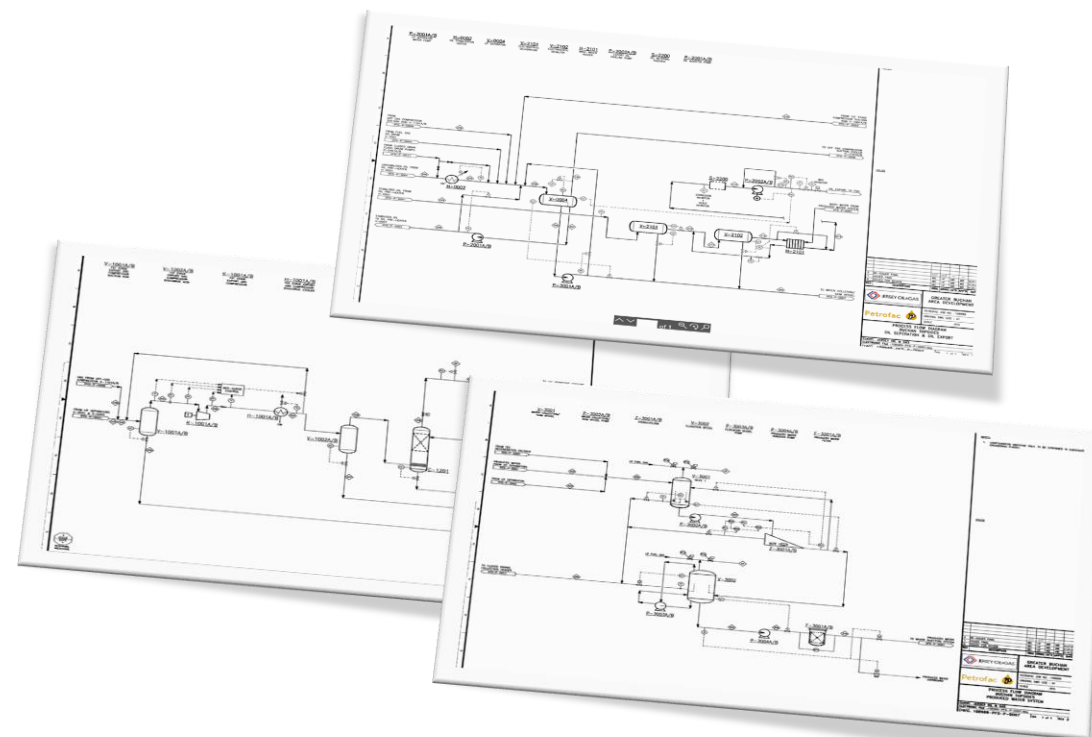
- Completion options developed, risked and costed



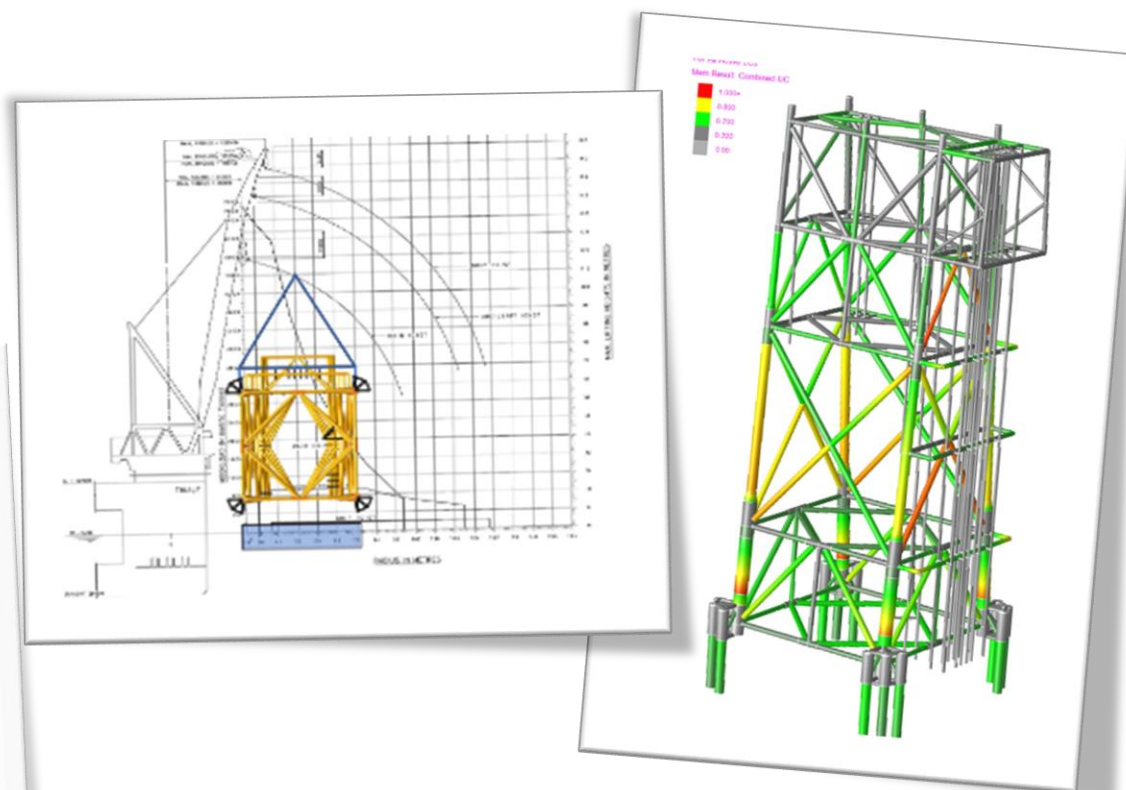
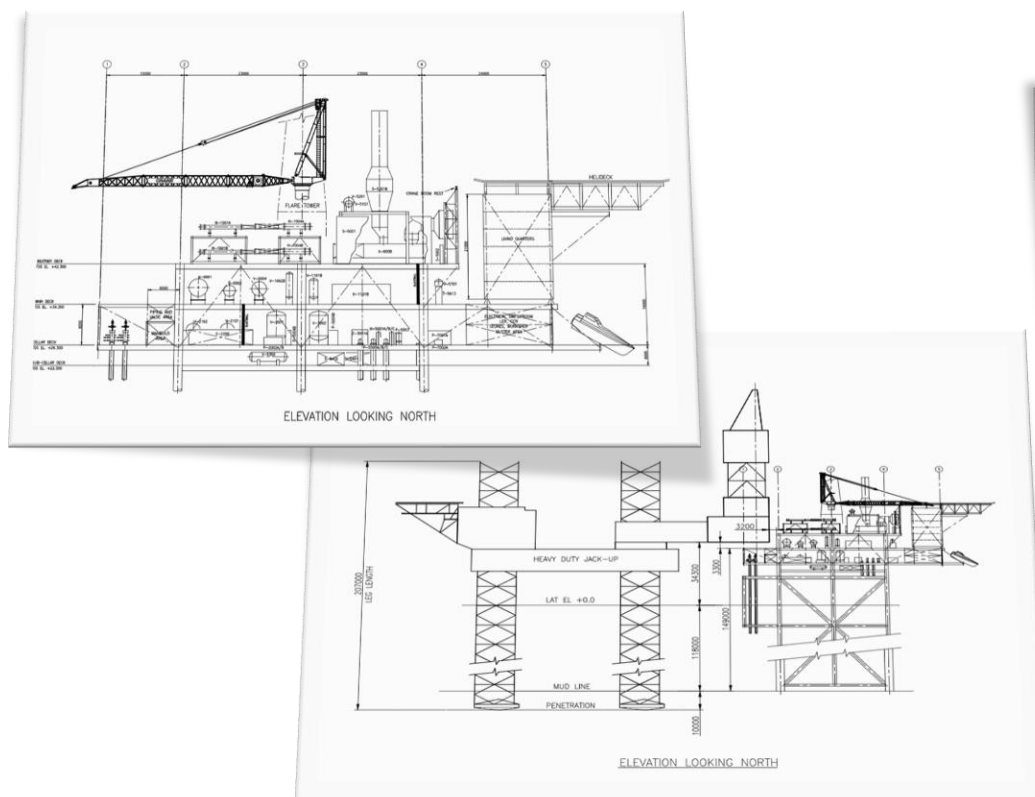
- Process simulations performed to establish production & utility system functional requirements
- Equipment count & sizes established to inform cost estimating



- Buchan, J2 & Verbiere hydrocarbon fluid characterisation completed
- Production chemistry assessments undertaken
- Flow assurance examined



- Process & Utility Flow Diagrams developed
- Impact of alternative oil & gas export options evaluated



- Topsides layouts developed for conventional & electrified options
- Facility sizing & weight calculated
- Market reviews of drilling rig availability for water depth
- Design interface requirements with platform established
- Substructure design developed
- Installation schemes reviewed
- Piling requirement examined

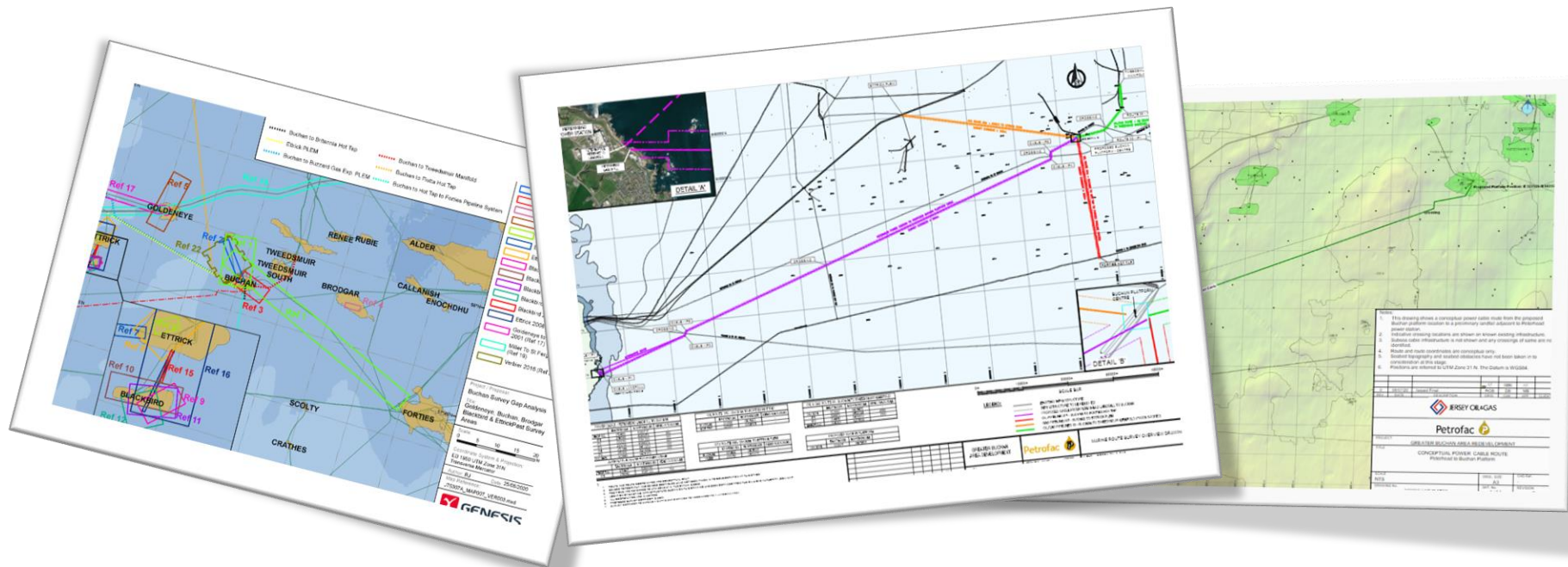
Single integrated deck, single lift, reducing offshore hook-up and commissioning to de-risk cost and schedule



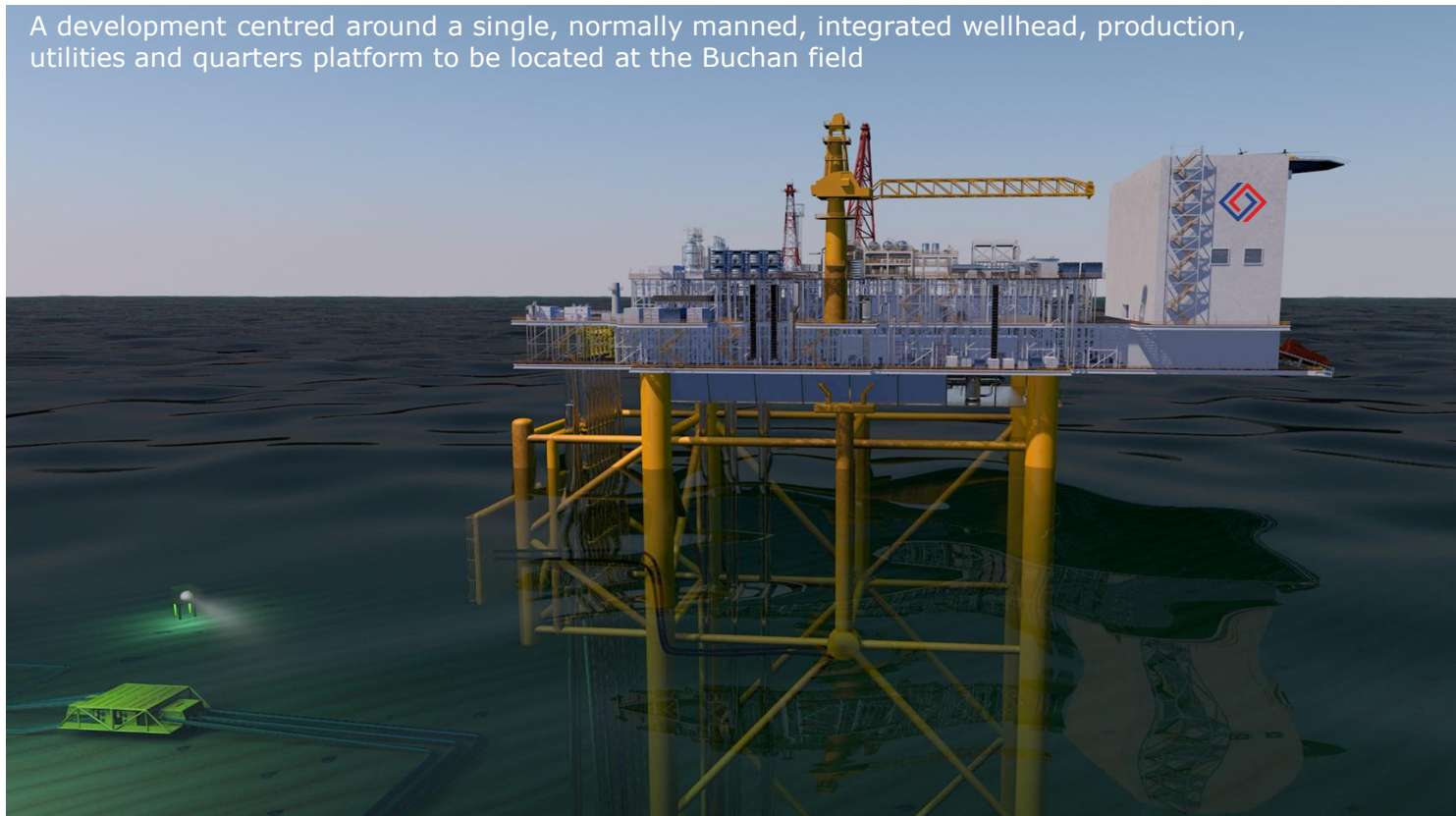
- Multiple options for oil & gas export
- Formal requests for service issued to pipeline operators
- Final selection subject to a detailed economic and risk assessment
- Scheduled to inform FEED engineering



- Pre-FEED offshore survey requirements defined and tendering underway
- Geotechnical soils data acquisition planned:
  - ▶ To inform substructure, pipeline & subsea cable design
- Environmental baseline data:
  - ▶ To support environmental impact assessments & submission of Environment Statement



A development centred around a single, normally manned, integrated wellhead, production, utilities and quarters platform to be located at the Buchan field



## Core GBA

### Phase 1

- GBA platform (host)
- Buchan wells
  - 5 producers
  - 2 injectors
  - ESPs
- Multiple oil and gas export routes\*
- Power from shore‡

### Phase 2

- Subsea tieback of J2 East, J2 West and Verbier East
  - 3 producers
  - 2 injectors
- Wells to be drilled post Phase 1 first oil

### Phase 3

- Subsea tieback of Verbier West
  - 2 producers
  - 1 injectors
- Wells to be drilled post Phase 2 first oil

## Key stats

- First Oil target dates
  - Phase 1 – Q4 2025
  - Phase 2 – 2027
  - Phase 3 - 2028
- 172 mmboe 2C TRR
  - 30+ year field life §
- Nameplate capacities
  - 40,000 bpd oil
  - 15 mmscfd gas
- Capex (incl. 20% contingency)
  - c.£1bn Phase 1
- Opex†
  - US\$8-9/boe at peak production rates
- Power solution
  - Power from shore preferred despite “green premium”
  - Significantly lower carbon emissions from production
  - Subject to commercial agreement and regulatory approvals

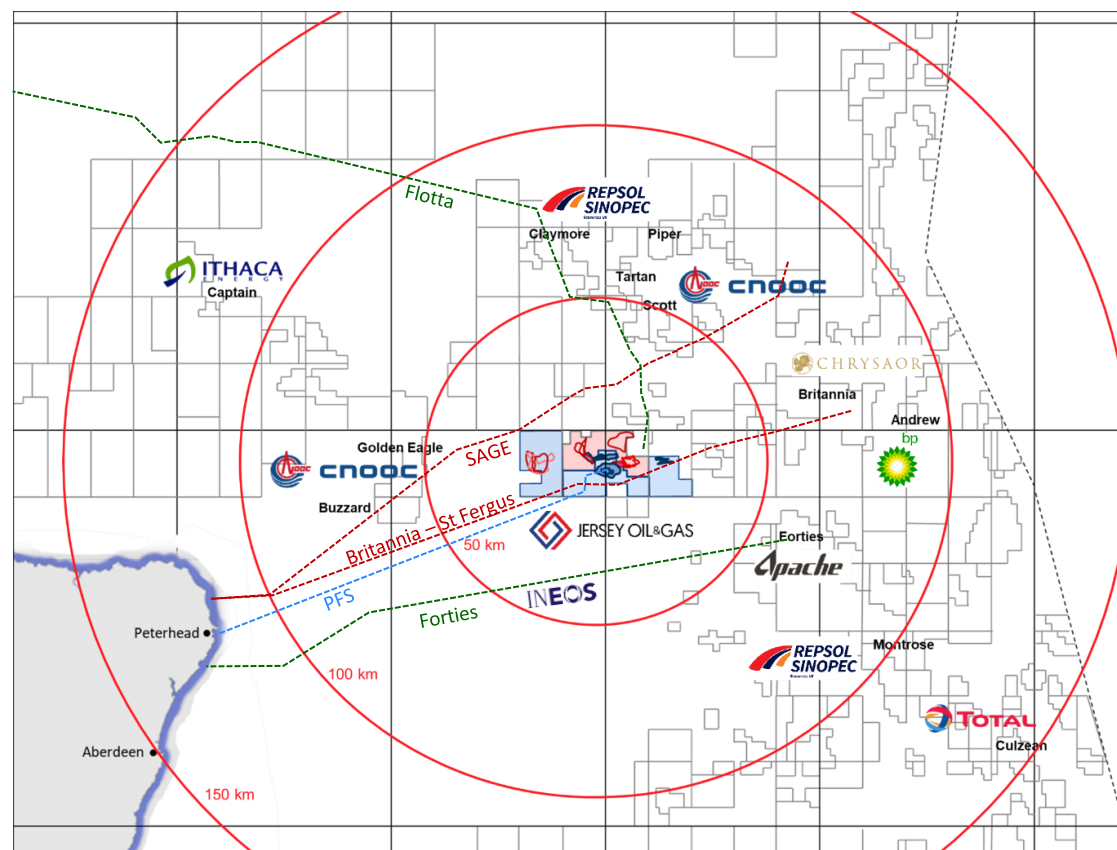
\*: final choices subject to further technical and commercial discussions

‡: subject to further commercial discussions and regulatory approvals

§: subject to prevailing commodity prices and costs

†: dependant on source of power/carbon tax - source of power is either electrification via power from shore (PFS) or gas turbine generators (GTGs), all scenarios include hydrocarbon export tariffs

- Proven technology capable of significantly reducing CO<sub>2</sub> emissions
  - ▶ Reduction in GBA production emissions from North Sea average of 20kg/boe (gas turbines) to <1kg/boe (PFS)
  - ▶ Material reduction in carbon tax exposure
  - ▶ Delivers the OGA and Government's strategy of Net Zero
  - ▶ Distance to shore technically feasible and economically viable
- Enhances investment attractiveness of the GBA
  - ▶ Low carbon barrels strategically important
  - ▶ Significantly widens investor pool
  - ▶ Opportunity for infrastructure funding
- GBA optimally located in heart of UK CNS to facilitate PFS
  - ▶ Potential enabler for regional electrification
  - ▶ Partnering with other developments would reduce costs compared to standalone scheme



Aiming to produce the lowest carbon barrels in the UK North Sea



	Brent Real / Nominal (2%)	Phase 1		
		\$55/bbl Nominal	\$65/bbl Nominal	\$75/bbl Nominal
Commodity Pricing				
Inflation				
Economic Resources	mmboe	117	122	125
Life of field	year	27	31	34
CO <sub>2</sub> / Production	kg/boe	<1kg	<1kg	<1kg
Pre-Tax cumul. cash flow	\$bn	3.2	4.7	6.2
Post-Tax cumul. cash flow	\$bn	2.2	3.1	4.0
NPV (Pre-Tax)	\$bn	0.9	1.3	1.8
NPV (Post-Tax)	\$bn	0.6	0.9	1.1
IRR	%	>20%	>25%	>30%
Payback from 1st oil (yrs)		2.3	1.9	1.6

		Phase 1		
		\$55/bbl Real	\$65/bbl Real	\$75/bbl Real
CAPEX	\$bn	1.4	1.4	1.4
OPEX	\$bn	2.3	2.6	2.8
CAPEX / boe	\$/boe	11.6	11.1	10.8
OPEX / boe	\$/boe	19.4	21.0	22.3
ABEX / boe	\$/boe	1.6	1.6	1.5

	Core GBA		
	\$55/bbl Nominal	\$65/bbl Nominal	\$75/bbl Nominal
	158	162	165
	28	31	34
	<1kg	<1kg	<1kg
	4.4	6.4	8.4
	3.1	4.2	5.3
	1.1	1.7	2.3
	0.7	1.1	1.5
	>20%	>25%	>30%
	3.3	2.8	2.4

	Core GBA		
	\$55/bbl Real	\$65/bbl Real	\$75/bbl Real
	2.1	2.1	2.1
	2.5	2.7	3.0
	13.4	13.1	12.8
	15.9	16.9	17.9
	2.6	2.6	2.5

## Key assumptions

- Oil price of US\$55/bbl, US\$65/bbl or US\$75/bbl
- Gas price 46.2p/therm
- US\$:GB£ - 1.30
- Economics for all shown cases use power from shore to reduce CO<sub>2</sub> emissions
- Nominal economics run inflation at 2% for both prices and costs
- Discount rates are all at 10%
- Capex and Opex are Class 4 estimates
  - ▶ +/- 30% accuracy
  - ▶ Include 20% contingency
- Opex includes tariff assumptions
  - ▶ Tariff assumptions not disclosed pending outcome of commercial discussions given multiple routes for both oil and gas export

**A robust, technically de-risked and low carbon development concept provides highly economic returns**

## Current market value



GBA discovered  
resources  
(190 mmboe)

US\$0.31/boe



Total  
resources  
(408 mmboe)

US\$0.14/boe



£2.30/share

## Post-tax NPV @ US\$65/bbl – US\$1.1bn



Economic  
discovered  
resources  
(162 mmboe)

US\$6.81/boe

Unrisked, pre-farm-out



£38.88/share

## Pre-tax NPV @ US\$65/bbl – US\$1.7bn



Economic  
resources  
(162 mmboe)

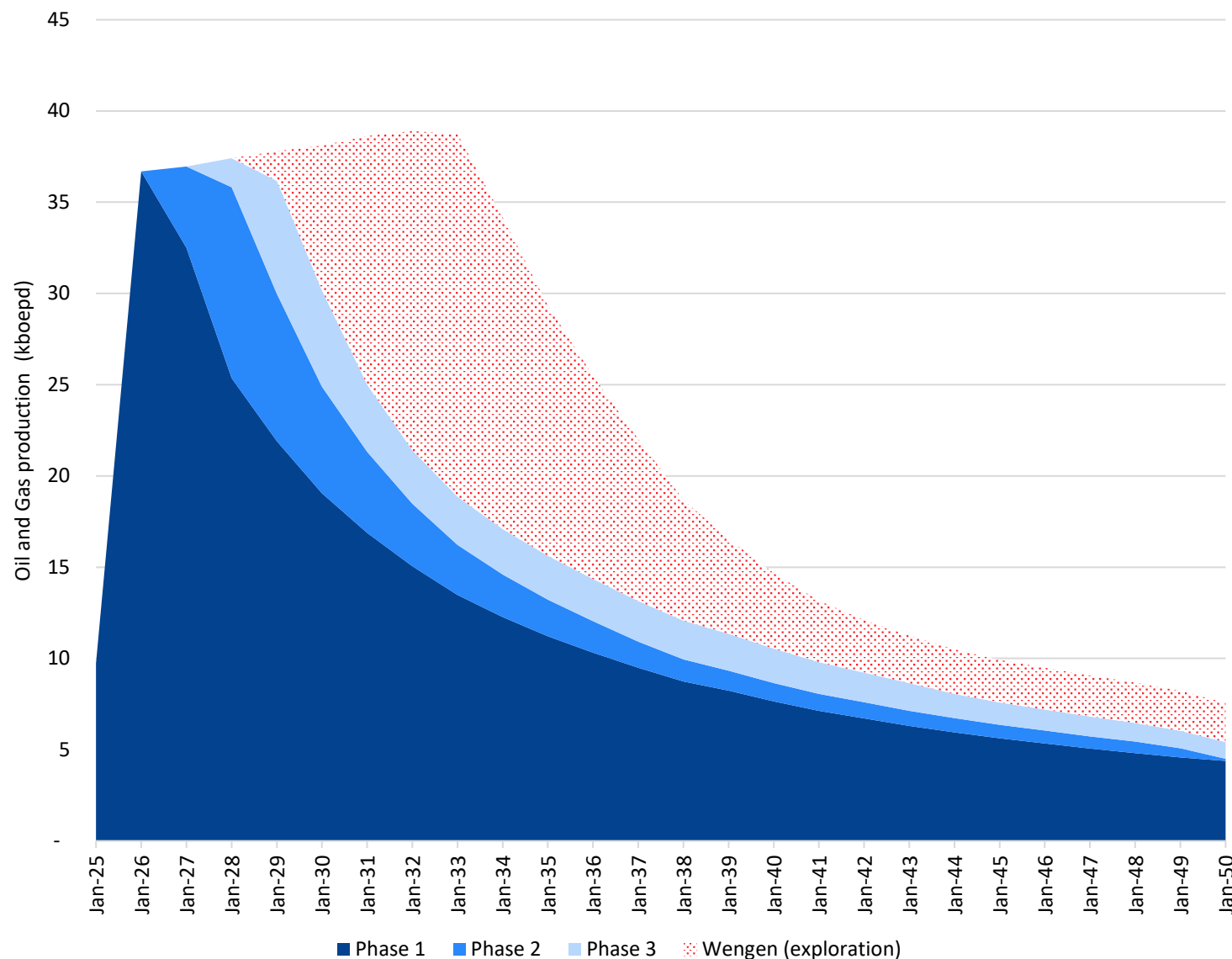
US\$10.54/boe

Unrisked, pre-farm-out



£60.15/share

# Illustrating the GBA exploration upside value potential



**Exploration success would extend plateau production and add significantly to overall GBA economics**

## **Wengen success case\***

Pre-tax cash flow would increase

■ **Adds US\$3.3bn**

Post tax cash flow would increase

■ **Adds US\$2.0bn**

Post-tax NPV

■ **Adds US\$0.5bn**

\*: JOG management estimates based on P50 TRR volumes of 61 MMboe run at an oil price of US\$65/boe and 46.2p/therm escalated at 2.0% p.a. and all other assumptions as per p13

## Drivers



### Tax synergies

- Tax shield against decommissioning spend
- Acquirer tax loss monetisation from GBA cash flow
- Capex spend offset against acquirers' current tax paying position



### Infrastructure owners/users

- Tariff income
- Opex share reduction
- Opex share delay / life extension



### Near field asset owners

- Tieback opportunities
- Life extension opportunities
- Alternative export routes



### Carbon intensity reduction

- UKCS CO<sub>2</sub> metrics
- Power from shore

## Value

### GBA:

£1.6bn of capex  
40% tax rate

### Acquirer tax losses:

£0-£2bn+

160 mmbbls of oil  
60 Bcf of gas

Reserves/Resources\*  
yet to be produced  
within 50km of GBA

>80 mmboe in production  
>275 mmboe resources

North Sea  
average emissions<sup>‡</sup>

GTGs: c. 20kg CO<sub>2</sub>/boe  
PFS: < 1kg CO<sub>2</sub>/boe

\* Source: Wood Mackenzie (UDT) >80 MMboe of onstream reserves yet to be produced and >275 MMboe resources (Good Technical/Probable development) all within 50km of Buchan (excludes volumes attributable to the GBA development)

‡ Source: Rystad Energy, Management calculations for Power From Shore solution at \$65/bbl



The information contained in this document (the "Corporate Presentation") has been prepared by Jersey Oil and Gas Plc ("JOG"). JOG is a UK company quoted on AIM, a market operated by London Stock Exchange plc. This Corporate Presentation has not been fully verified and is subject to material updating, revision and further verification and amendment without notice. This Corporate Presentation has not been approved by an authorised person in accordance with Section 21 of the Financial Services and Markets Act 2000 (as amended) ("FSMA") and therefore it is being provided for information purposes only. Information in this Corporate Presentation relating to the price at which relevant investments have been bought or sold in the past or the yield on such investments cannot be relied upon as a guide to the future performance of such investments.

This Corporate Presentation does not constitute or form part of any offer or invitation to purchase, sell or subscribe for, or any solicitation of any such offer to purchase, sell or subscribe for, any securities in JOG nor shall this Corporate Presentation or any part of it, or the fact of its distribution, form the basis of, or be relied on in connection with, any contract therefor. The distribution of this presentation or any information contained in it may be restricted by law in certain jurisdictions, and any person into whose possession any document containing this Corporate Presentation or any part of it comes should inform themselves about, and observe, any such restrictions.

While the information contained herein has been prepared in good faith, neither JOG nor any of its directors, officers, agents, employees or advisers give, have given or have authority to give, any representations or warranties (express or implied) as to, or in relation to, the accuracy, reliability or completeness of the information in this Corporate Presentation, or any revision thereof, or of any other written or oral information made or to be made available to any interested party or its advisers (all such information being referred to as "Information") and liability therefore is expressly disclaimed. Accordingly, neither JOG nor any of its directors, officers, agents, employees or advisers take any responsibility for, or will accept any liability whether direct or indirect, express or implied, contractual, tortious, statutory or otherwise, in respect of, the accuracy or completeness of the Information or for any of the opinions contained herein or for any errors, omissions or misstatements or for any loss, howsoever arising, from the use of this Corporate Presentation.

The views of JOG's management/directors and/or its partners/operators set out in this document could ultimately prove to be incorrect. No warranty, express or implied, is given by the presentation of these figures here and investors should place no reliance on JOG's or any operator's estimates cited in this document.

No assurance can be given that hydrocarbon resources and reserves reported by JOG, will be recovered at the rates estimated or that they can be brought into profitable production. Hydrocarbon resource and reserve estimates may require revisions and/or changes (either up or down) based on actual production experience and in light of the prevailing market price of oil and gas. A decline in the market price for oil and gas could render reserves uneconomic to recover and may ultimately result in a reclassification of reserves as resources. There are uncertainties inherent in estimating the quantity of resources and reserves and in projecting future rates of production, including factors beyond JOG's control. Estimating the amount of hydrocarbon resources and reserves is an interpretive process and, in addition, results of drilling, testing and production subsequent to the date of an estimate may result in material revisions to original estimates. Any hydrocarbon resources data contained in this document are unaudited management estimates only and should not be construed as representing exact quantities. The nature of reserve quantification studies means that there can be no guarantee that estimates of quantities and quality of the resources disclosed will be available for extraction. Therefore, actual production, revenues, cash flows, royalties and development and operating expenditures may vary from these estimates. Such variances may be material. Any reserves estimates contained in this document are based on production data, prices, costs, ownership, geophysical, geological and engineering data, and other information assembled by JOG (which it may not necessarily have produced). The estimates may prove to be incorrect and potential investors should not place reliance on the forward looking statements contained in this document concerning JOG's resources and reserves or potential production levels. Hydrocarbon resources and reserves estimates are expressions of judgement based on knowledge, experience and industry practice. They are therefore imprecise and depend to some extent on interpretations, which may ultimately prove to be inaccurate. Accordingly, two different independent parties may not necessarily arrive at the same conclusions. The views of management/directors as set out in this document could ultimately prove to be incorrect. Estimates that were reasonable when made may change significantly when new information from additional analysis and drilling becomes available.

This Corporate Presentation may contain "forward-looking statements" that involve substantial risks and uncertainties, and actual results and developments may differ materially from those expressed or implied by these statements. These forward-looking statements are statements regarding JOG's intentions, beliefs or current expectations concerning, among other things, JOG's results of operations, performance, financial condition, prospects, growth, strategies and the industry in which JOG operates. By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. These forward-looking statements speak only as of the date of this Corporate Presentation and JOG does not undertake any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this Corporate Presentation. This Corporate Presentation should not be considered as the giving of investment advice by JOG or any of its directors, officers, agents, employees or advisers. In particular, this Corporate Presentation does not constitute or form part of any offer or invitation to subscribe for or purchase any securities and neither this Corporate Presentation nor anything contained herein shall form the basis of any contract or commitment whatsoever. No reliance may be placed for any purpose whatsoever on the information or opinions contained in these slides or the Corporate Presentation or on the completeness, accuracy or fairness thereof. In particular, any estimates or projections or opinions contained herein necessarily involve significant elements of subjective judgment, analysis and assumptions and each recipient should satisfy itself in relation to such matters.

Neither this Corporate Presentation nor any copy of it may be (a) taken or transmitted into Australia, Canada, Japan, the Republic of Ireland, the Republic of South Africa or the United States of America (each a "Restricted Territory"), their territories or possessions; (b) distributed to any U.S. person (as defined in Regulation S under the United States Securities Act of 1933 (as amended)) or (c) distributed to any individual outside a Restricted Territory who is a resident thereof in any such case for the purpose of offer for sale or solicitation or invitation to buy or subscribe for any securities or in the context where its distribution may be construed as such offer, solicitation or invitation, in any such case except in compliance with any applicable exemption. The distribution of this document in or to persons subject to other jurisdictions may be restricted by law and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the relevant jurisdiction.