

# AGM Presentation

8<sup>th</sup> December 2021



# Overview

## Growth through diversification

- Currently high impact exploration, core value underpinned by production from UK onshore assets

- Europa strategy is acquiring appraisal/development assets to rebalance its portfolio leading to sustainable growth

- Onshore UK operations:

- Successful production from 4 oilfields in East Midlands has doubled net production to over 200 bopd. Wressle the standout performer with capacity to produce significantly higher rates
- Development – Wressle’s break-even oil price of \$17.6/bbl (current oil price of c\$71) underpins the asset base. Significant additional Wressle resources (Penistone Flags) awaiting development
- Clean energy transition: MOU with Causeway Geothermal to assess transformation of oilfield into geothermal production site

- Offshore Morocco and Ireland assets:

- Oil Exploration – Inezgane Licence in Agadir Basin: Farmout launched in August 2021. Large, highly prospective licence with potential to hold over 2 billion barrels of resource
- Gas Exploration (infrastructure led) – Irish Licences FEL 3/19 and FEL 4/19 with aggregate unrisks resources of over 2 TCF and adjacent to the producing Corrib Gas Field, subject to regulatory approval

### Area of interest:

Atlantic seaboard, North Africa and NW Europe

### Target Assets:

High impact exploration opportunities and low risk appraisal development opportunities in countries with:

- Low political regulatory and security risks
- Transparent licensing processes
- Good commercial terms



# Geothermal opportunity: Collaboration with Causeway GT

Unlocking value in our portfolio



- Geothermal energy is the largest source of clean energy on earth – it has zero greenhouse gas emissions and a low surface land footprint

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- Causeway Geothermal was established to combine technologies from multiple industries to deliver clean geothermal heat

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- MOU signed with Causeway Geothermal (NI) Ltd to undertake studies to assess the latent potential of Europa's West Firsby field as a test site for sustainable, clean geothermal energy systems

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- Industrial companies commonly use fossil fuels with some biomass - this brings the opportunity to consider geothermal energy to help decarbonise their operations

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- Due to comprehensive dataset, existing well bores and geothermal gradient West Firsby is regarded as an ideal geothermal energy test site

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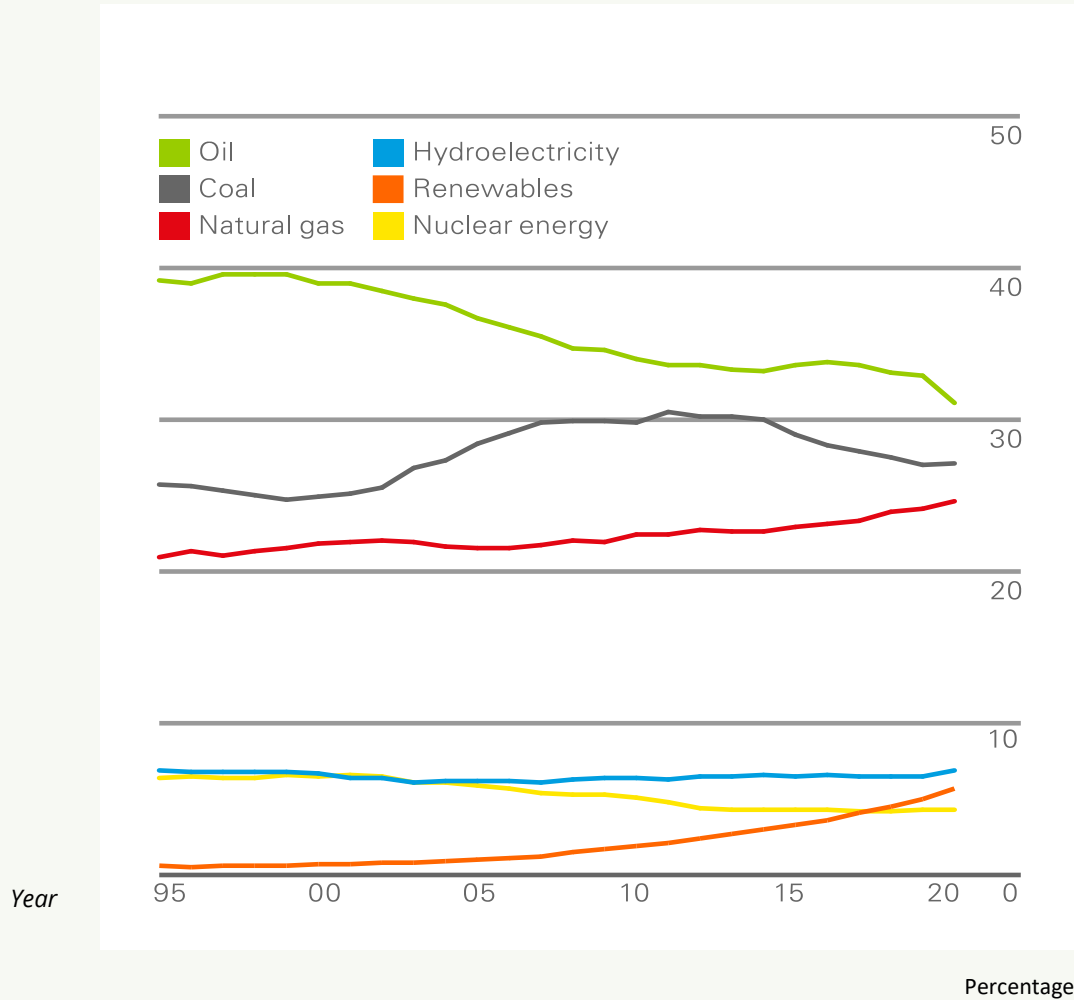
- Potential to convert onshore legacy oilfields into sources of clean and reliable energy – this will form part of the ESG strategy for Europa



- Oil & Gas key to the global energy transition
- Robust demand for fossil fuels, prices soaring
- Europa ideally placed to capitalise on our existing UK/ Moroccan assets and contribute localised supply
- Developing highly productive Wressle oilfield in East Midlands + building localised supply to markets – cutting Co<sup>2</sup> emissions
- Exploring a third leg in the North Sea Farm-outs of Irish and Moroccan assets in play
- Portfolio rebalancing and uplift production/revenue profile
- Diversification of portfolio – exploring the conversion of West Firsby oilfield into geothermal asset



## Shares of global primary energy



“The reality is that without companies like us who are significant providers of energy...the transition will be a whole lot more difficult and may not even happen at the pace needed.”

Shell Chief Executive Ben Van Beurden

- The reality is, the world needs oil and gas to transition to net zero emissions
- Oil & gas accounted for 55% of global energy mix in 2020 (Source: BP)

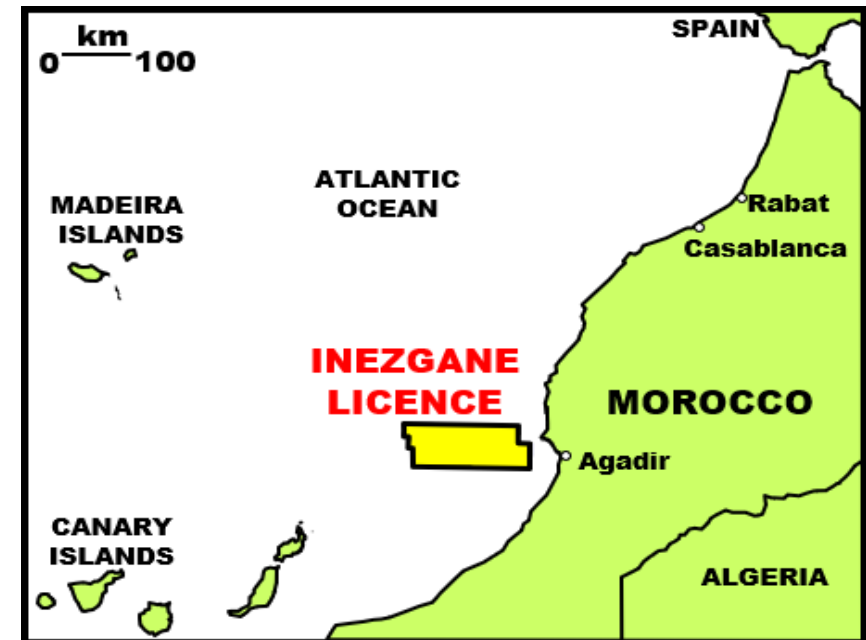
“Oil and gas currently provide around three quarters of total UK energy consumption. All forecasts, including the independent Climate Change Committee- point to them being required for heat, power and transportation for the foreseeable future.”

OGA Chairman Tim Eggar

### Inezgane Licence

- Inezgane Licence – 11,228 km<sup>2</sup> awarded Nov 2019
  - Europa Oil & Gas (operator) 75%
  - ONHYM 25% by 2025
- High impact exploration opportunity offshore Morocco – water depths 300m to 2.5km
- Initial Phase comprises low cost WP with drill or drop at end of phase  
(now 3-years following grant of a 1-year extension by ONHYM)
- 30 Prospects and Leads
- Approaching 10 billion barrels of unrisks resource
- Wide range of play types and trapping styles
- Direct hydrocarbon indicators
- Analogues to West Africa
- Low cost opportunity to farm-in for significant equity

Location Inezgane Licence Morocco

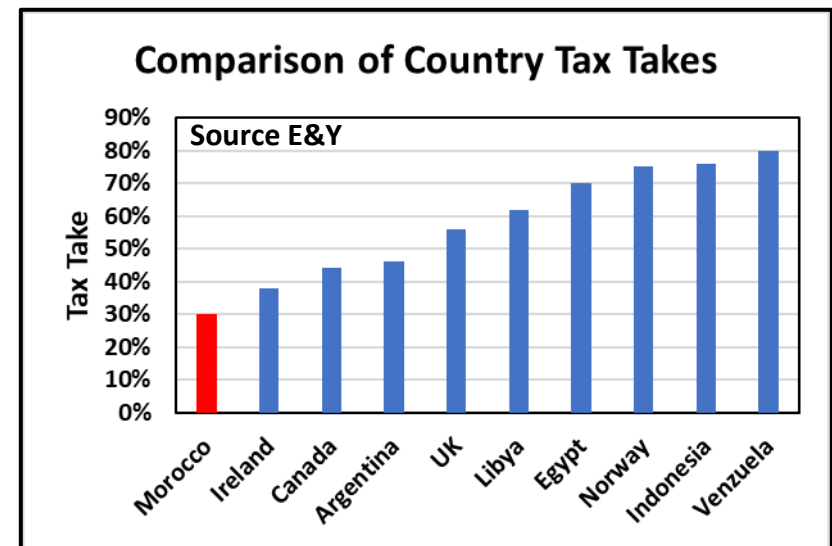


# Why Morocco?

- Stable country with a transparent business environment and excellent ESG credentials (wind, solar & hydro-electric)
- Highly under-explored region – 10 deepwater wells have been drilled across a 3000km coastline = Huge Opportunity
- Desire to develop national energy supplies
- Aims to source half of its electrical energy from renewable sources by 2030 and become a net exporter to Europe. Excellent fiscal terms – low tax take
- Low cost of entry including access to all legacy high quality seismic and well data
- Recent relaunch of farmout of its newly enlarged strategic position in the Slyne Basin – this will help accelerate high impact development activity
- Several major and midcap companies with Moroccan acreage: Shell, ENI, Repsol, Hunt, ConocoPhillips
- Good fit with Europa’s strategy of seeking a balanced portfolio of assets

## Fiscal Terms

- No Rentals
- 10-year tax corporate holiday on commercial discoveries
- 10% Oil Royalty
- 5% Gas Royalty



# Farmout Launch of Inezgane Licence

- Official launch of farmout initiative on 3 August 2021

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- Inezgane is a high-impact exploration opportunity in a highly underexplored area of the world with only two wells drilled on the licence

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- Licence is located on the same geological trend that has led to major oil and gas discoveries along the west coast of Africa

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- Recent evaluation has identified significant volume of licence resource – in excess of 2 billion barrels (oil equivalent) in the top five ranked prospects alone: Alpha, Charlie, Falcon, Turtle & Sandpiper

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- Morocco offers excellent fiscal terms with a low tax take and several major and mid-cap companies holding acreage

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- Provides investors with exposure to impactful activity while minimising risk

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- Very encouraging interest received to date

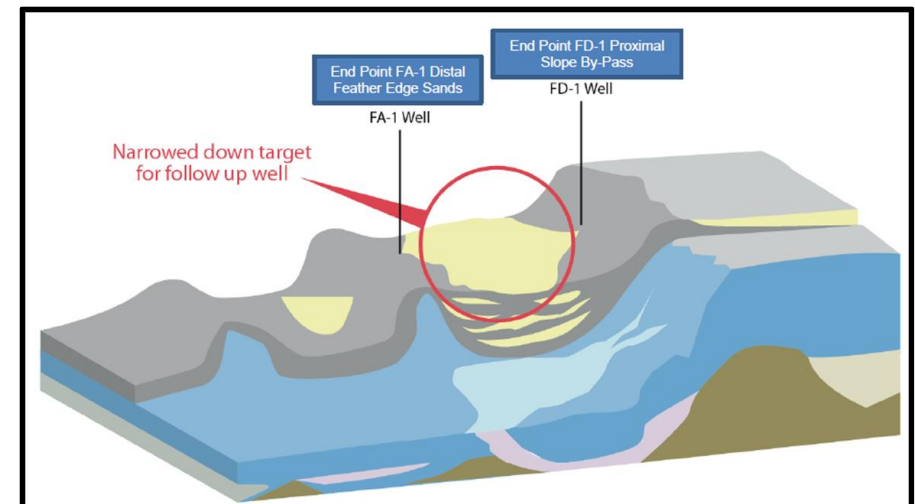
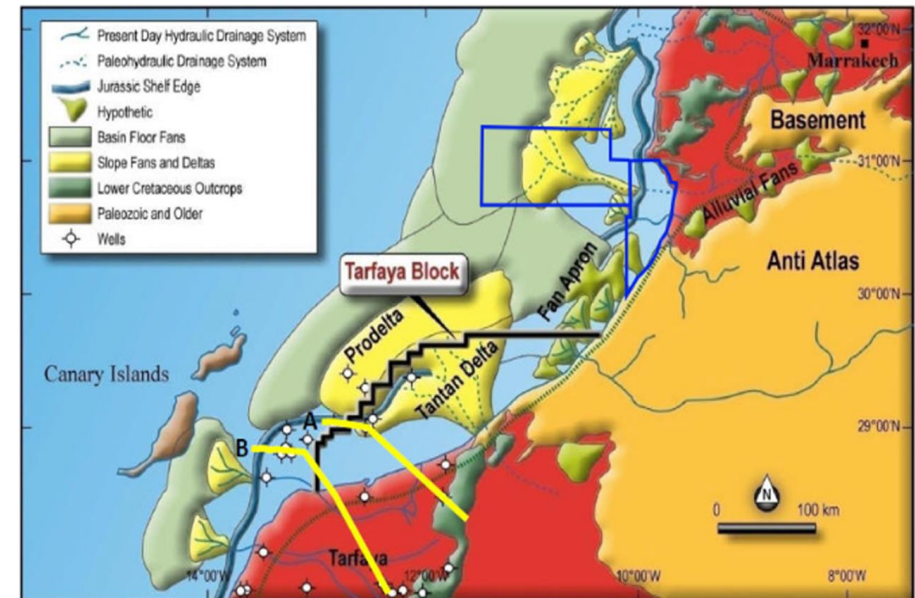




# Lower Cretaceous Play

High under-explored play

- Early deepwater drilling focused on Upper Cretaceous and Tertiary plays
- Number of wells targeted mostly salt piercement structures. Wells drilled very close to salt domes with disappointing results.
- Most wells have targeted sands where the Lower Cretaceous **has thinned or the Lower Cretaceous was not reached.**
- The Albian-Aptian-Barremian fairway has not been effectively tested by any wells in deep water Morocco.
- Late Jurassic/ Early Cretaceous salt diapirism created mini-basins with accommodation space for capture of slope and basin sands.
- Source rocks are extensive within the basin at a number of horizons and many wells have drilled source rocks and/or seen hydrocarbon shows.



# Lower Cretaceous Reservoir

Good evidence for the presence of Lower Cretaceous sand

DSDP 416: Thick sequence of stacked thin turbidite ssts of Albian to Valanginian age

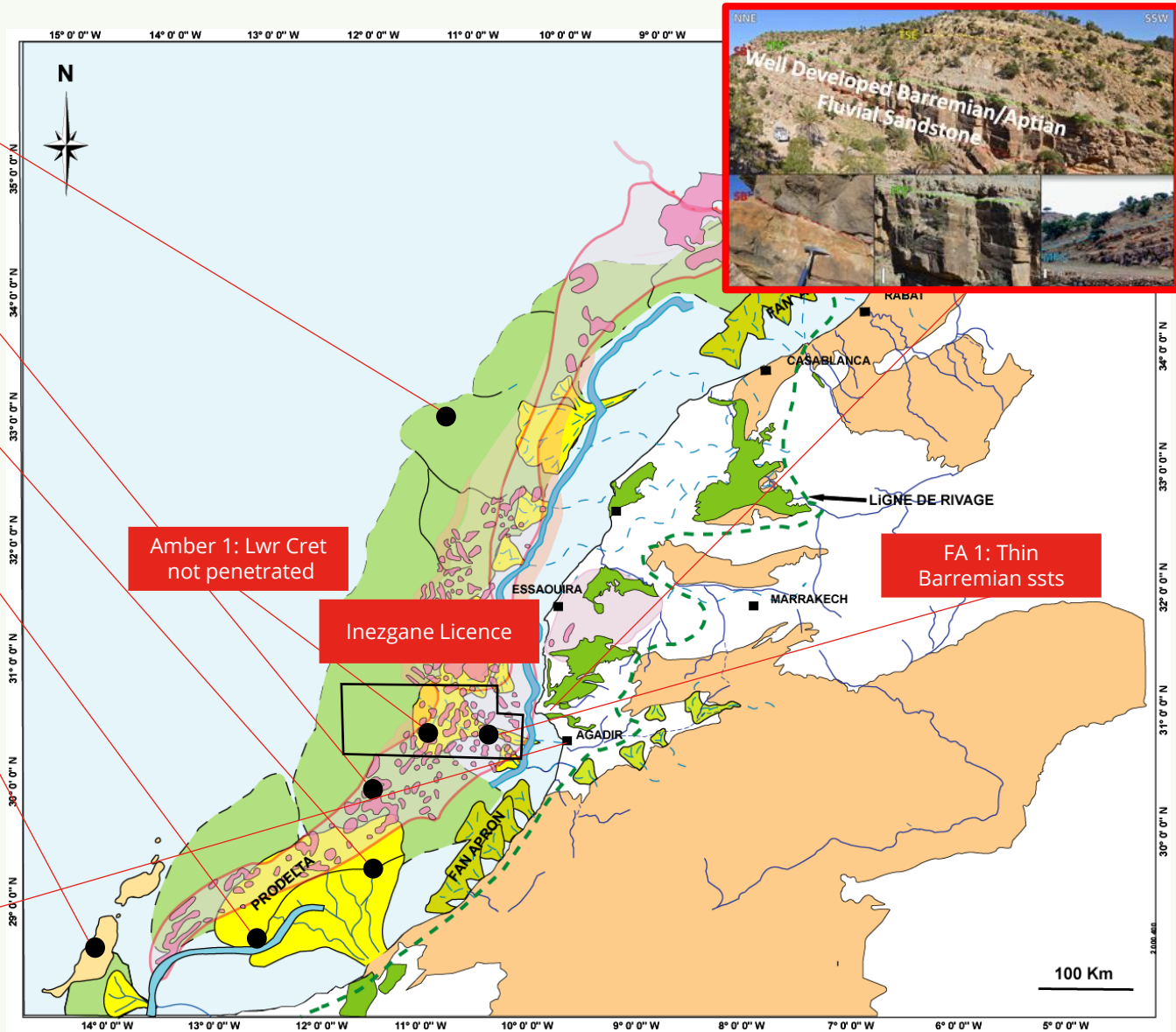
Rak-1: 25m net of Albian ssts - av Ø 22.3%

FD-1: 10m single sst within Albian section - av Ø 24%

MO-1: Lower Cretaceous delta-top and channel ssts in Tan Tan delta. Feeder system?

Fuerteventura: Thick sequence of stacked thin turbidite ssts of Aptia to Valanginian age

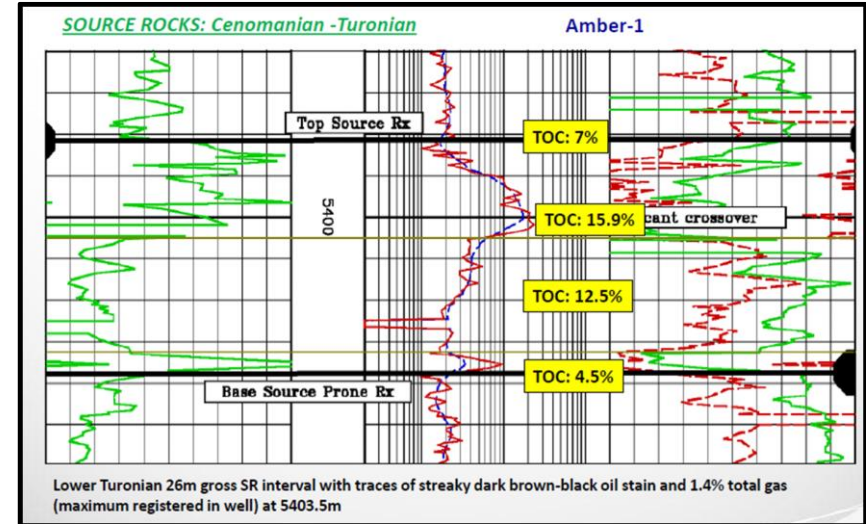
Field mapping onshore has shown large scale fluvial sand systems with westerly paleo-current directions. New model for source to sink for Lwr Cretaceous



# Source Rock

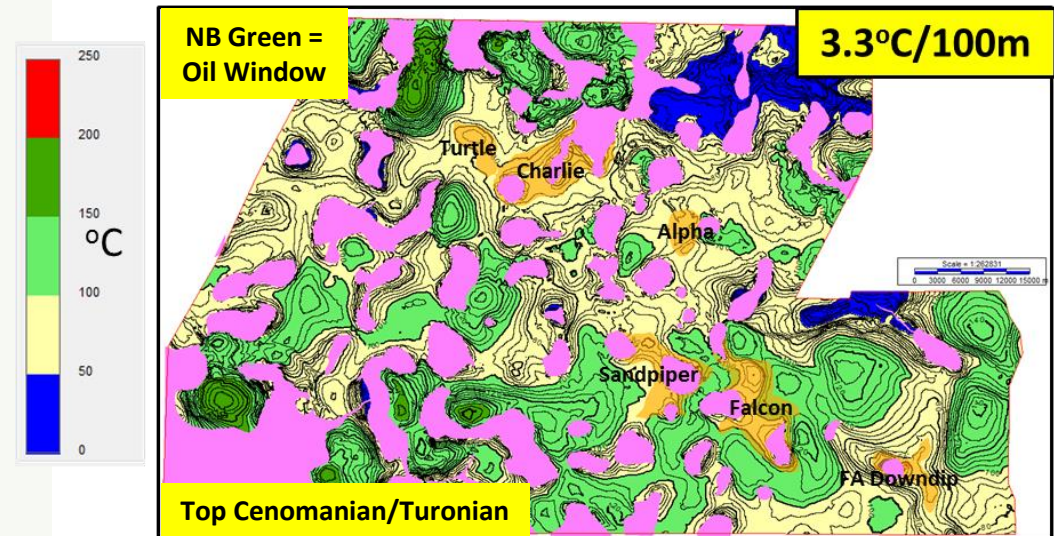
Two viable source rocks in licence area

- Several source rocks have been proven in the greater basin area either by well or outcrop
- The classic west African "Jubilee" type play was drilled on much less favourable information
- Two key sources rocks of interest: the Upper Cretaceous (Cenomanian/Turonian) and the Lower Cretaceous Albian source rocks
- Cenomanian Turonian- proven world class oil prone source rocks present in many wells and found onshore
  - Rich source rock – TOC up 16% believed to be mature in parts of the licence area (e.g: next to Turtle, Charlie, Falcon & Sandpiper prospects)
- Also Albian- drilled by wells within the area & regionally
  - Not as rich as the Cenomanian/Turonian source rock but sits within the oil window over much of the Licence area



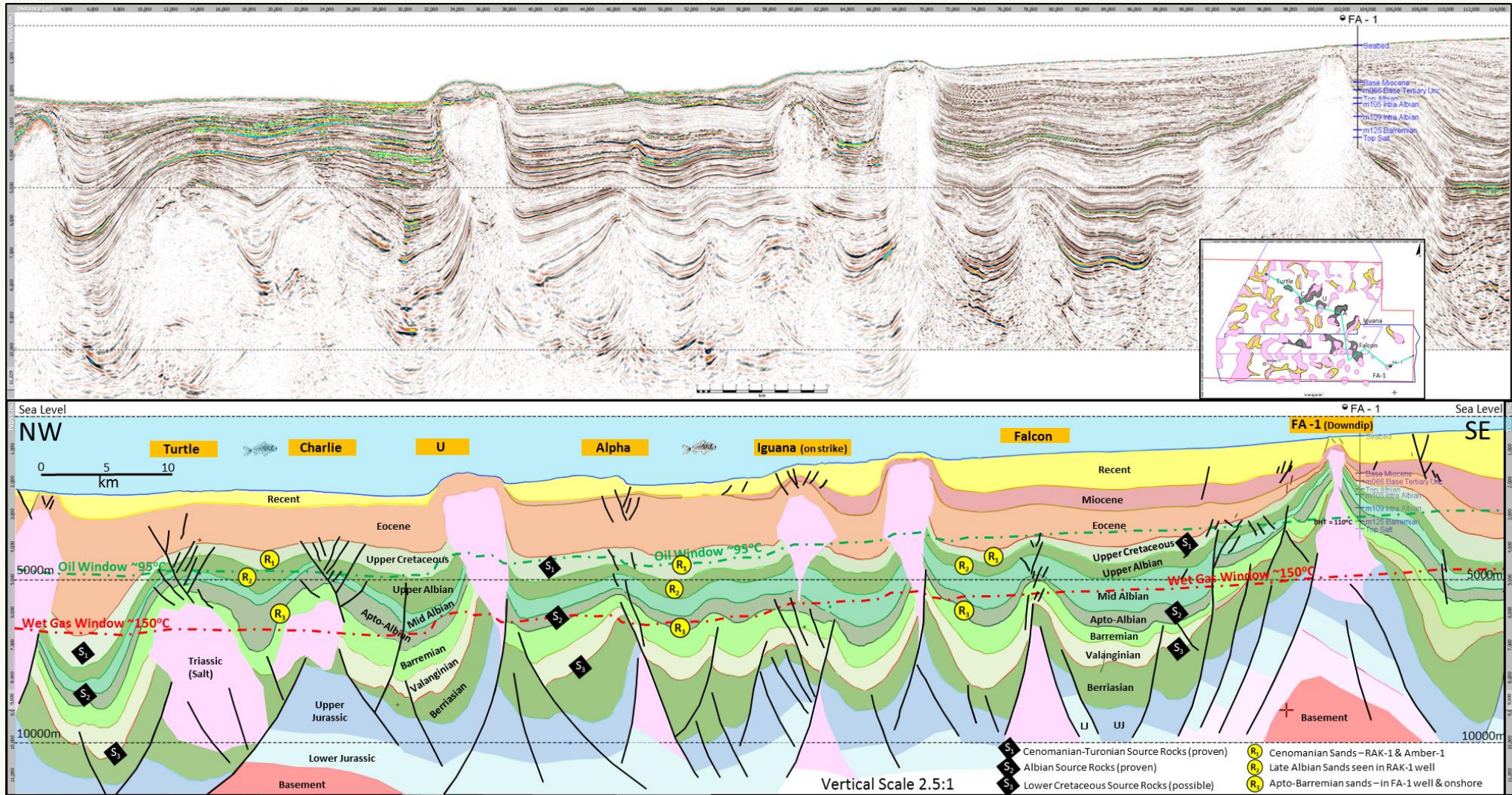
**Cenomanian Inputs = HI 600,  
Thickness 50m, TOC 10% C-T  
Expulsion Potential 38  
MMBLS/km<sup>2</sup>**

**Cenomanian SR  
proven on block**



# Regional seismic line

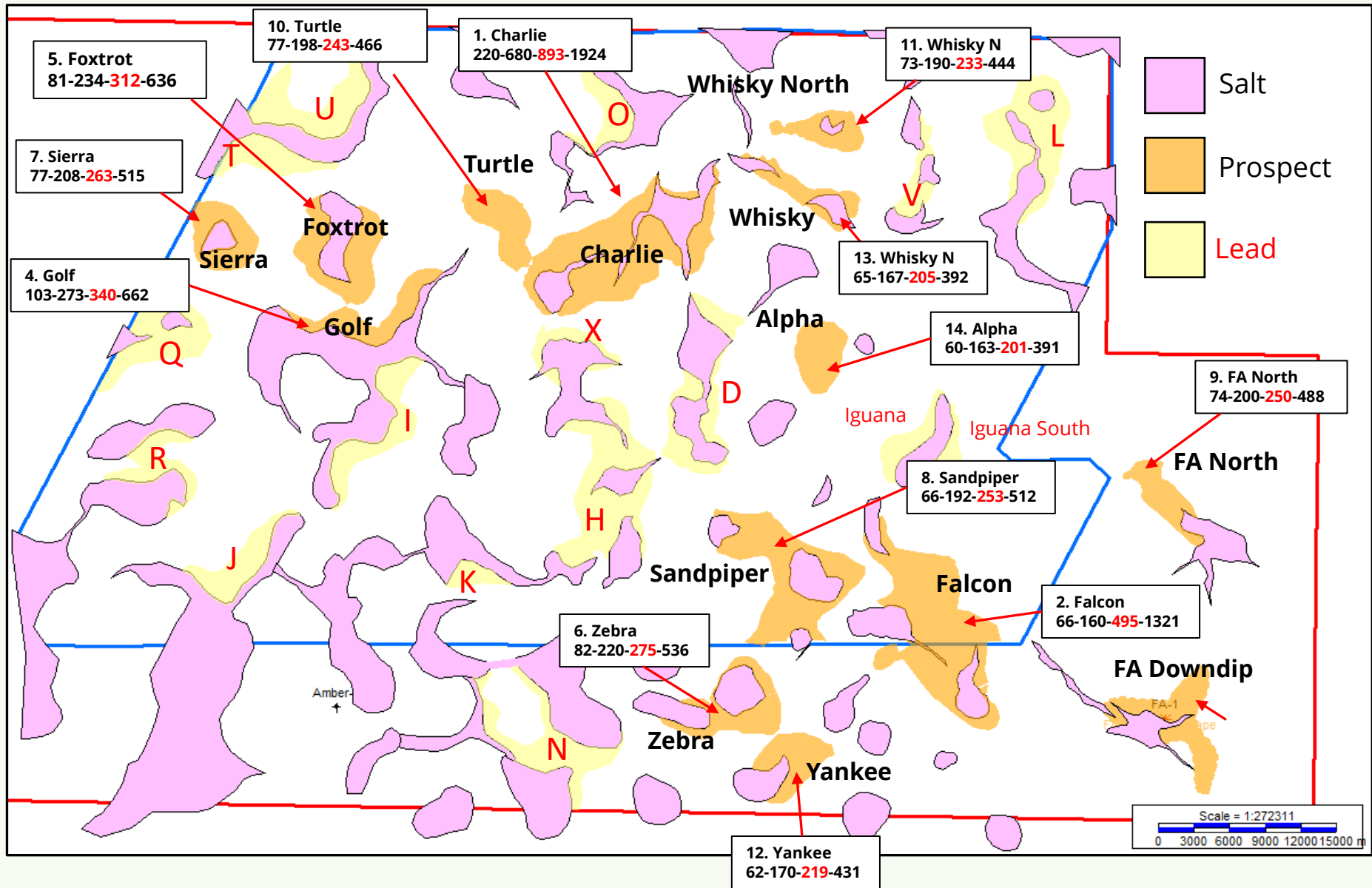
Multiple prospects with varied trapping styles, multiple reservoirs & source rocks



Inezgane licence Arbitrary NW to SE line PSDM line (Combination of RTM & Kirchhoff)

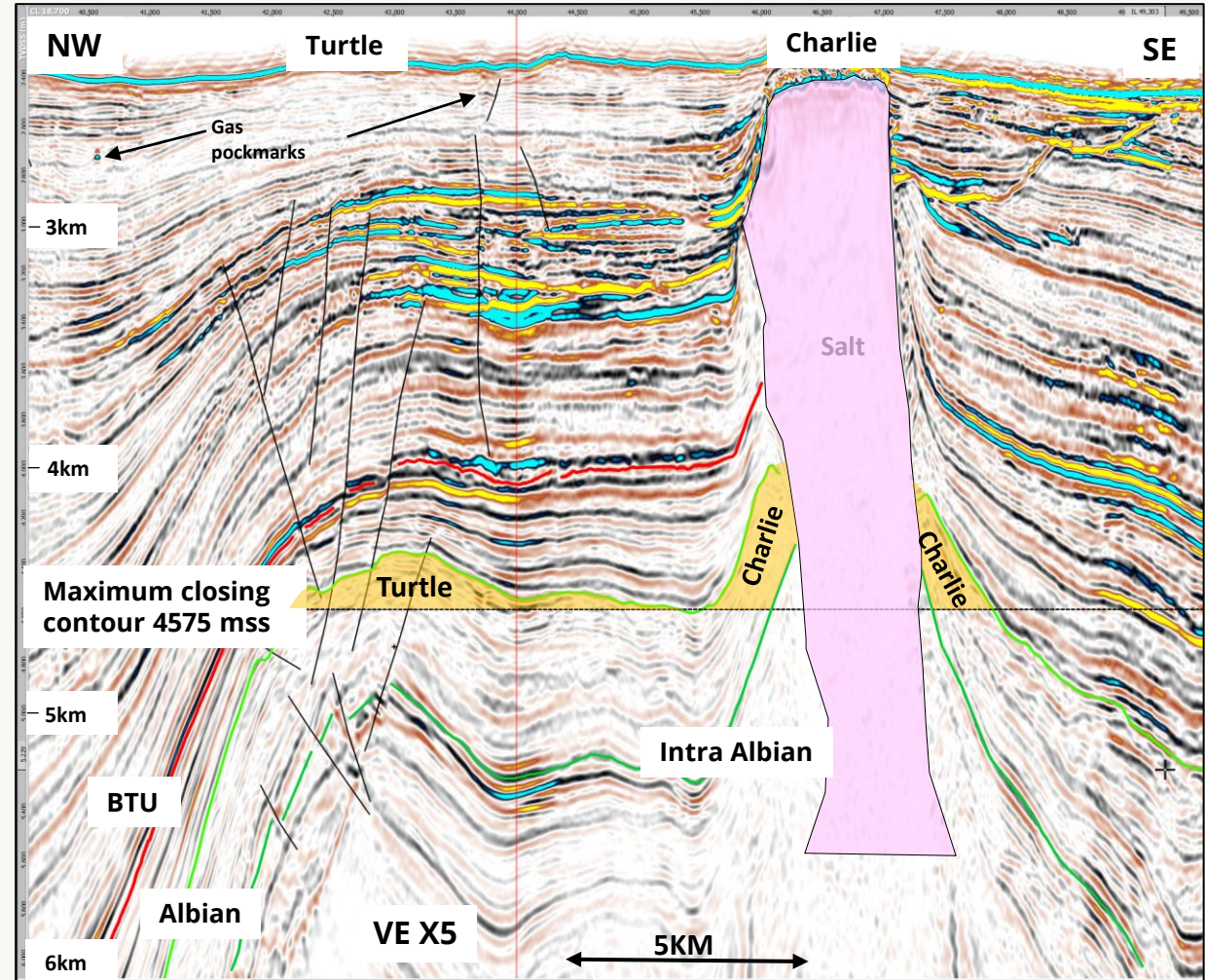
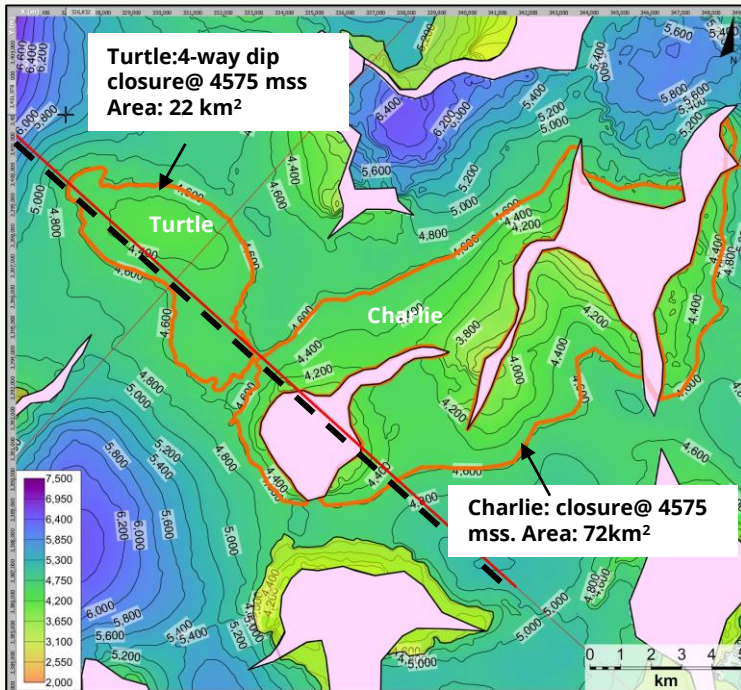
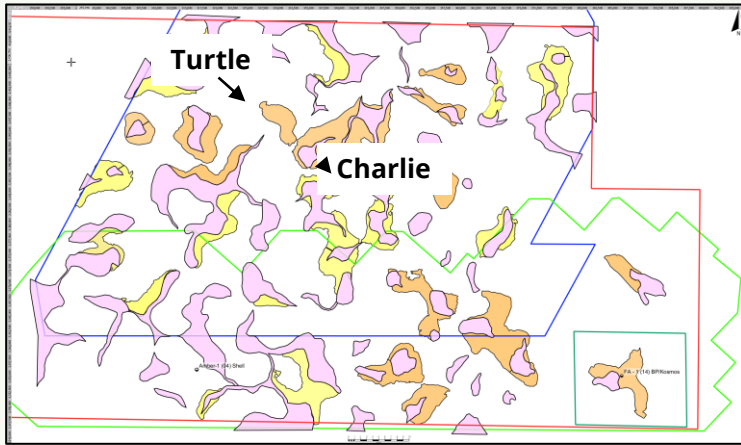
# Prospect Inventory (Prospective Resources)

Albian Level only (One Sand)



# Turtle Prospect:

Mean Prospective Resources 243 mmboe



# Size of the prize – Top 5 prospects

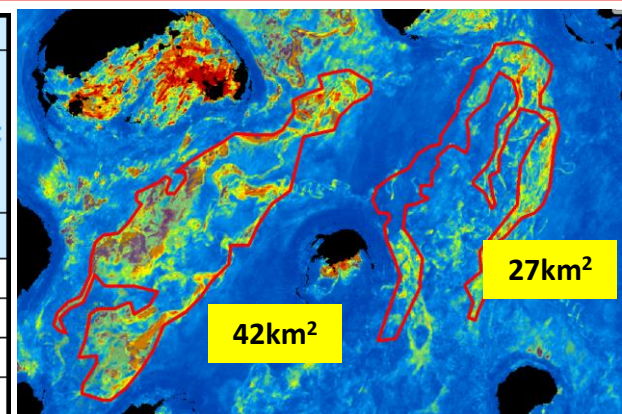
Top 5 Prospects		PRIMARY TARGET				SECONDARY TARGET				TERTIARY TARGET			
		Area of Closure	Unrisked Prospective Resources (mmboe) at Albian Level			Area of Closure	Unrisked Prospective Resources (mmboe) at Campanian Level			Area of Closure	Unrisked Prospective Resources (mmboe) at Barremian Level		
No.	Name	km <sup>2</sup>	P <sub>90</sub>	P <sub>mean</sub>	P <sub>10</sub>	km <sup>2</sup>	P <sub>90</sub>	P <sub>mean</sub>	P <sub>10</sub>	km <sup>2</sup>	P <sub>90</sub>	P <sub>mean</sub>	P <sub>10</sub>
1	Alpha	20	60	201	391	9	20	53	98	25	39	150	302
2	Charlie	72	220	893	1924	61	57	271	582	49	36	216	498
3	Falcon	66	66	495	1321	72	45	281	635	40	37	197	432
4	Sandpiper	22	66	253	512	10	34	112	221	15	44	229	504
5	Turtle	33	77	243	466	76	35	89	160	52	26	104	211
<b>Total (mmboe)</b>				<b>2085</b>				<b>806</b>				<b>896</b>	

## Top 5 Prospects

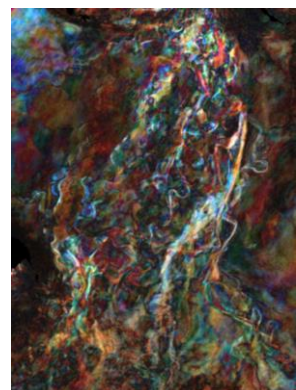
- Wide range of structural styles including 4-way dip, salt flank and salt under-hang
- Stacked potential at Albian, Campanian and Barremian
- All prospects have mean resources in excess of **200 mmboe** at Albian level – primary target
- Total mean resource in excess of **2 billion barrels (oil equivalent) at Albian level**
- Significant additional reserves potential at Campanian and Barremian- Secondary & tertiary targets
- Prospect risk estimates between 22% and 33% for Albian and improve when prospects are consolidated

# Size of the prize – Other Prospects

Other Prospects		PRIMARY TARGET				SECONDARY TARGET				TERTIARY TARGET			
		Area of Closure km <sup>2</sup>	Unrisked Prospective Resources (mmboe) at Albian Level			Area of Closure km <sup>2</sup>	Unrisked Prospective Resources (mmboe) at Campanian Level			Area of Closure km <sup>2</sup>	Unrisked Prospective Resources (mmboe) at Barremian Level		
No.	Name		P <sub>90</sub>	P <sub>mean</sub>	P <sub>10</sub>		P <sub>90</sub>	P <sub>mean</sub>	P <sub>10</sub>		P <sub>90</sub>	P <sub>mean</sub>	P <sub>10</sub>
6	FA Downdip	34	93	356	722	27	34	108	208	MAPPING NOT YET COMPLETE			
7	FA North	14	74	250	488	63	26	96	196	MAPPING NOT YET COMPLETE			
8	Foxtrot	30	81	312	636	21	32	127	262	MAPPING NOT YET COMPLETE			
9	Golf	20	103	340	662	30	97	325	618	7	18	62	124
10	Sierra	15	77	263	515	19	26	110	232	MAPPING NOT YET COMPLETE			
11	Whisky	13	65	205	392	9	9	26	48	25	46	197	410
12	Whisky North	14	73	233	444	VERY SMALL CLOSURE				7	29	87	166
13	Yankee	24	62	219	431	16	17	57	113	MAPPING NOT YET COMPLETE			
14	Zebra	25	82	275	536	29	40	178	375	MAPPING NOT YET COMPLETE			
<b>Total (mmboe)</b>				<b>2453</b>				<b>1027</b>				<b>346</b>	



**AVO Anomaly Recognised in Eocene section**



## Other Prospects

- Significant additional potential in Albian, Campanian and Barremian in 9 other prospects on licence
- Further work ongoing to mature these prospects and complete mapping on Barremian and Eocene (see maps top right)

## Other Leads

- 16 additional leads identified requiring further work to mature to prospect level



- Onshore geology reveals Lower Cretaceous turbidite sands are very likely to have been deposited in the Inezgane licence

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- Lower Cretaceous sands have been encountered in wells drilled offshore but the presence of thick turbidite sands has so far proved to be elusive

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- Europa believe this may be due to wells mostly being drilled on the flanks of salt diapirs and having drilled 'bald highs'

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- Latest work (using PaleoScan) by Europa has imaged the presence of turbidite channels in both the Tertiary and Cretaceous thus reducing risk on sand presence previously seen as a significant risk

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- Prospect Inventory with large prospects with varied trapping styles – 14 identified so far with >200mmboe at Albian level alone. Possible stacked pay outcomes.

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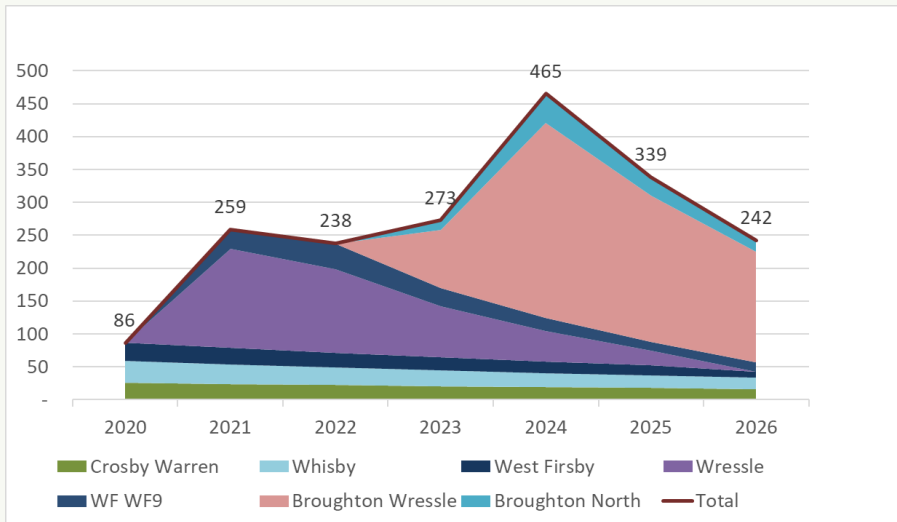
- Next steps
  - Integrate PaleoScan work with conventional mapping, source rock modelling and calculate volumetrics for additional reservoir intervals
  - High grade the best prospects for drilling

# UK East Midlands & Cleveland Assets

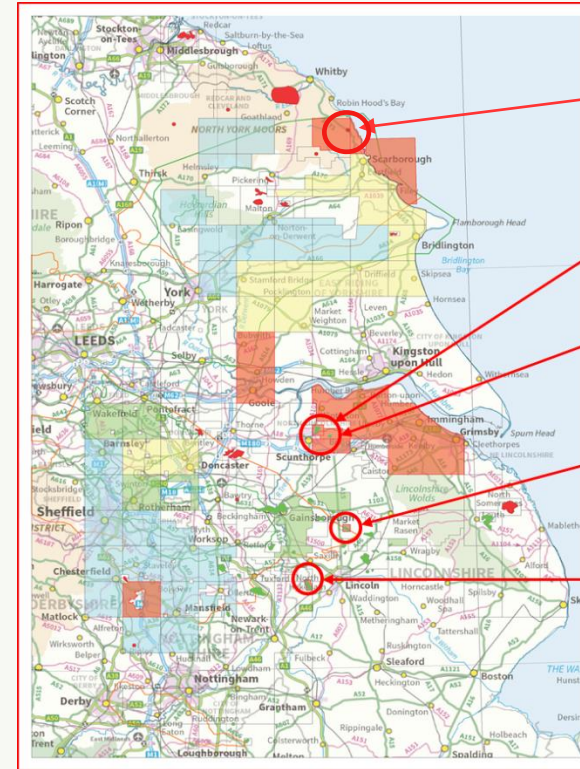
- Broughton Wressle Penistone development

- Broughton North Prospect

Europa Net Annual Average bopd



\*Source: Penistone ERCE 2016 / WF9 DCA submission 2020



Cloughton  
PEDL343

Crosby Warren  
DL001

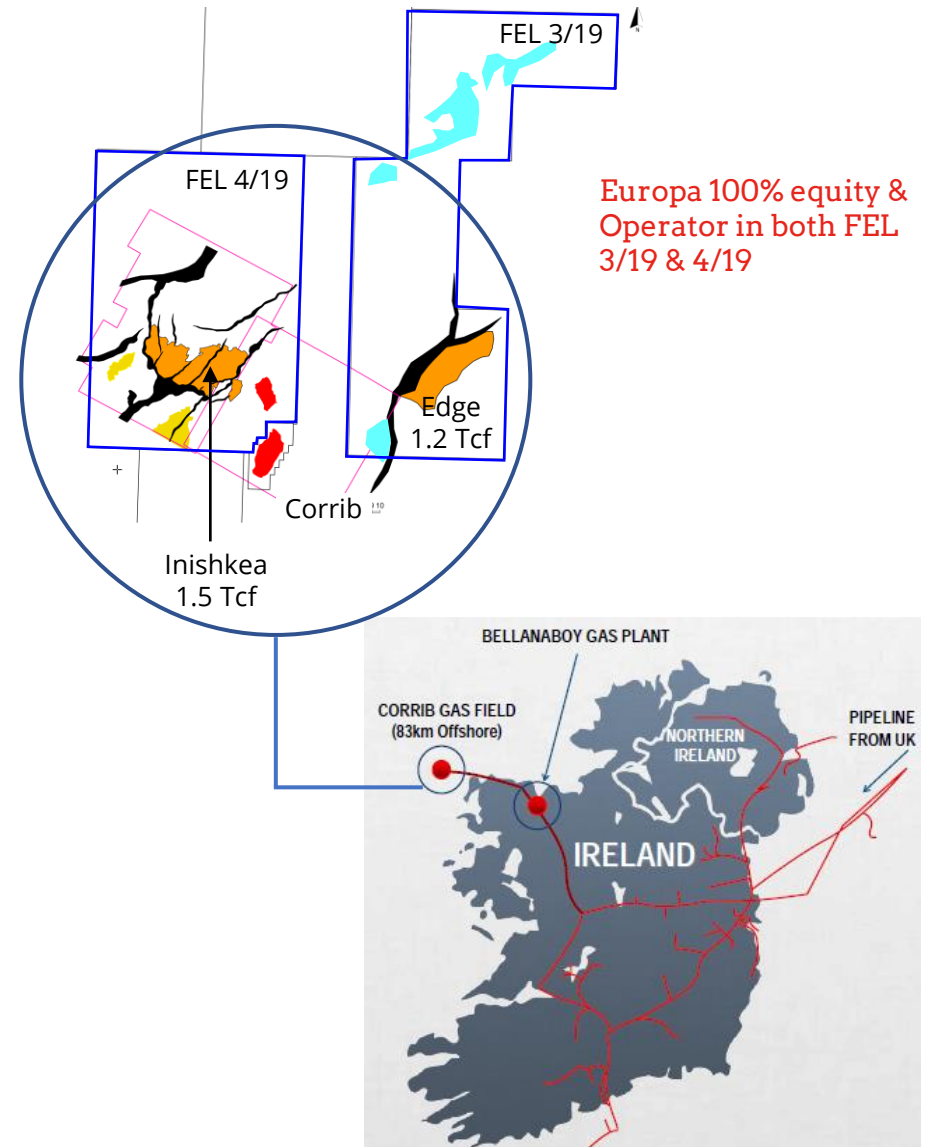
Wressle PEDL180

West Firsby  
DL003

Whisby-4  
PL199/215

## Corrib & Europa's Strategic Position

- Corrib discovered in 1996 and producing gas since 2015
- In 2018 Corrib provided 60% of Ireland's gas needs but expected to decline to 20% by 2025
- Gas will inevitably be part of Ireland's energy mix for some years to come
- With no new domestic sources of supply there is the real danger of electricity blackouts
- Europa has two drill-ready, Tcf plus prospects (Inishkea & Edge) close to Corrib and in a pivotal position (good proximity to existing infrastructure) to add to Ireland's security of gas supply
- Recent relaunch of farmout of its newly enlarged strategic position in the Slyne Basin – this will help accelerate high impact development activity



- High impact exploration assets underpinned by increasing UK production from existing fields – further potential exists in other reservoirs

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- Strong oil & gas portfolio: appraisal/development assets established by steady production in a stable jurisdiction with added high risk exploration upside

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- Farmout process underway for valuable Inezgane licence in Morocco – early indications are positive

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- ESG ambitions are advancing – MOU signed with Causeway Geothermal to investigate mature oilfield site to establish a potential geothermal production site

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- A third leg in North Sea being explored via the potential acquisition of appraisal/development assets – likely to focus on late-stage appraisal and development ventures

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- Expectation is to create an improved portfolio balance and production/revenue profile, leading to sustainable growth

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- Philosophy of the business driven by overriding ESG principles and assisting the UK and its trading partners achieve their Net Zero 2050 goals by increasing domestic production and reducing hydrocarbon imports

- Currently high impact exploration underpinned by UK onshore production

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- Europa looking to acquire appraisal/development assets to balance the portfolio

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- Future improved portfolio balance and production/revenue profiles leading to sustainable growth

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- Strong market fundamentals – robust oil/gas prices, robust demand

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- Oil & gas key to the global energy transition – Europa ideally placed to maximise existing assets and leverage new opportunities

