Oil&Gas

29/06/2023

Prospex Energy PLC

European gas opportunity

Price target (12m) 17p

Key Data

Listing:	LSE
Ticker:	PXEN
Shares Outstanding:	285,020,669
Share Price:	£0.080
Market Cap:	£27.7m
Estimated Valuation:	£59.2m
Asset Location:	Italy, Spain

Reserves (MMBOE) *(100%)*		
1P	2P	3P
0.3	0.9	1.9

Resources (MMBOE) *(100%)*		
1C	2C	3C
0.6	1.3	2.6

Prospective Resources (MMBOE) *(100%)*		
Low Est.	Best Est.	High Est.
7.5	13.3	25.4

Price Graph

Summary

- **Gas assets with immediate access to infrastructure, located in southern European gas markets with significant supply deficit and a potentially softening regulatory attitude regarding oil & gas exploration and production.**
- **Although 2P reserves of 5.1BCF are modest, there is an immediate upside of 7.7BCF (2C) and additional short-term potential of 77.4BCF (Prospective).**
- **Strategic opportunity to acquire gas assets within and outside its geographical footprint, with access to the European market, to capitalise on its robust pricing.**
- **Positive momentum with imminent start of production from Italy after recent approval from Central Ministry.**
- **12-month target of 17p based on our estimate of fully diluted risked NAV.**

Prospex Energy PLC ("**Prospex**") is a UK oil and gas investment company publicly listed on the AIM market of the London Stock Exchange, with non-operating interest in several gas assets in Italy and Spain. In Spain, Prospex is already generating positive cash flows from gas-to-power whilst in Italy the start of production is imminent.

Prospex has an opportunity to build its portfolio in its existing geographical footprint as the supply deficits in Spain and Italy are resulting in a softening regulatory attitude toward oil & gas exploration and production. More broadly, we believe that management can also capitalise on the robust European gas market by acquiring assets outside of their existing footprint albeit with good access to the European gas market.

We believe the current share price already accounts for success for about 75% of the 2C portfolio, in addition to Core NAV. We estimate that within 6 months Prospex should be able to prove the initiate monetisation of the 2C portfolio.

In the next 12 months, we expect Prospex to de-risk its existing prospects portfolio in Italy and Spain, as well as potentially take part in M&A for gas assets and access some value accretive deals.

Analyst

40 years' experience in oil industry and finance, heading Extel top-rated energy franchises on both buyside and sell-side. Previous roles with RD Shell, JPMorgan, and Standard Bank.

Lionel Therond lionel@fox-davies.com

Table of Contents

Investment case

Prospex Energy PLC ("**Prospex**") is a UK oil and gas investment company publicly listed on the AIM market of the London Stock Exchange, with non-operating interest in several gas assets in Italy and Spain.

These gas assets have immediate access to infrastructure and are located in southern European gas markets with significant supply deficit.

In Spain, Prospex has positive cash flows from gas-to-power generation at a power plant in which it has a working interest of 49.9%. Although the 2P reserves are small (0.15BCF), there is immediate upside (2C resources: 2.5BCF) from two undeveloped gas discoveries which can be monetised in the currently under-utilised existing power plant, as well as material short-term potential from 13 prospects (2U Prospective resources: 44.8BCF) which could be either sold into the Enagas gas pipeline or used for gas-to-power from existing and new generation capacity.

In Italy, start of production is imminent from 5BCF of 2P reserves, with immediate upside (2C resources: 5.2BCF) from two undeveloped gas discoveries and material short-term potential from 3 prospects (2U Prospective resources: 32.6BCF).

Prospex's existing footprint in these two markets and their most likely opening to gas exploration and production provide an opportunity to build on this portfolio. More broadly, we believe that management can also capitalise on the robust European gas market by acquiring assets outside of their existing footprint albeit with good access to the European gas market.

We set a 12-month price target of 17p based on our estimate of fully diluted risked NAV [1], which uses the recent futures curves for Brent crude prices and TTF gas prices.

We believe the current share price already accounts for success for about 75% of the 2C portfolio, in addition to Core NAV. We estimate that within 6 months Prospex should be able to prove the initiate monetisation of the 2C portfolio.

In the next 12 months, we expect Prospex to de-risk its existing prospects portfolio in Italy and Spain, as well as potentially take part in M&A for gas assets and access some value accretive deals.

[1] There are 348.49 million fully diluted shares.

Strategy and assets

For a detailed description of the reserves, resources, current and future operations, please refer to **Appendix C** for the Italian assets and **Appendix D** for the Spanish assets. For detail on the European gas price environment, please refer to **Appendix E**.

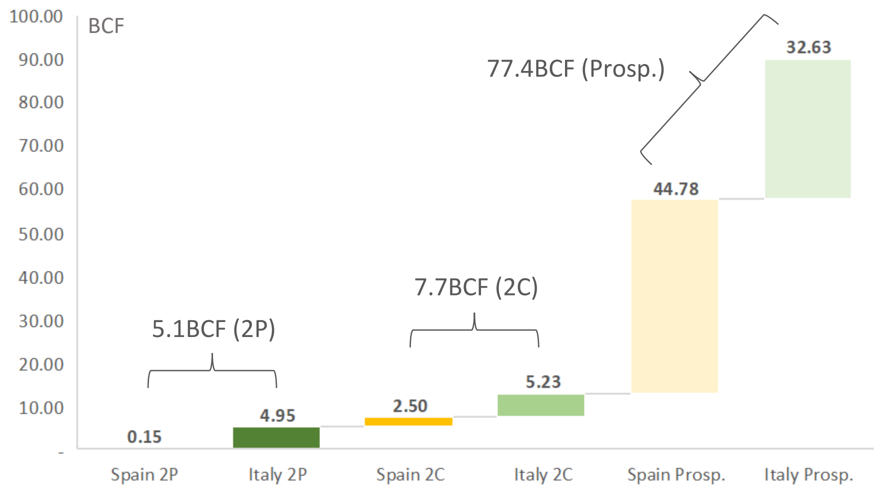
Prospex strategy is to capitalise on the supportive European gas pricing environment likely to continue for the foreseeable future by:

- Developing its exiting reserves in Italy and Spain in the short-term;
- Taking advantage of favourable policy changes, described in the following, in Italy to acquire reserves and resources, and in Spain to explore existing licences currently suspended; and
- Consolidating other potential gas opportunities outside of Italy and Spain with good access to the European gas market.

Prospex holds non-operating interests in gas assets in Northern Italy, in partnership with Po Valley Energy ("PVE"), and in Southern Spain, in partnership with Warrego Energy Limited.[2]

The Italian assets have a reserves/resources ratio of 95% and all resources are contingent. In contrast, the Spanish assets have a reserves/resources ratio of 0.3%, with only 5.6% of resources being contingent and 94.4% being prospective (excluding the Tesorillo area), as shown below (Figure 1).

Figure 1: Prospex net reserves and resources (BCF)



Source: CGG, NSAI

[2] Warrego was recently acquired by Hancock Energy, a subsidiary of Hancock Prospecting Pty Ltd, a private Australian company.

Although the Spanish assets are less mature and have a higher resources upside, both the Italian and Spanish assets have access to mature gas markets with greater than 95% domestic gas supply deficits. All gas resources quoted above for Prospex are situated within production licences in both Italy and Spain, and not within exploration licences in which new drilling is forbidden in both countries.[3]

Indeed, so far unconstrained Russian gas supply and green attitude in both countries discouraged efforts to increase domestic gas supply. As a result of the drop in Russian imports and energy crisis due to the war in Ukraine, the Italian government has recently announced a change in policy to authorise new drilling and award new licences. If the shift to the right observed in recent local elections in Spain is replicated in the forthcoming national elections, then a change of policy toward hydrocarbons may also be afoot in Spain.

More broadly, we believe that management has an opportunity to build on the current portfolio and, through acquisition, aggregate other high value gas assets with access to the European gas markets, to capitalise on robust gas demand and pricing.

Northern Italy

Prospex holds a 37% economic interest in the Podere Gallina Exploration Permit, located in the prolific onshore Po Valley Basin, with operating partner PVE holding the remaining 63%. The permit produced 83BCF for operator ENI from 1960 to 1984 and contains the Selva Malvezzi Gas-Field ("Selva") production concession.

PVE proved the undrained potential up-dip of the Selva gas field with the successful Podere Maiar-1 well (2017-18) and intends to start production imminently from this redevelopment project. PVE also identified two prospects on the North and South crest of the old Selva gas field, which rely on the same stratigraphic trap concept successfully proven viable in Podere Maiar-1. CGG certified reserves for the Selva redevelopment and contingent resources for the two prospects in a CPR dated 2022 (Figure 2).

Figure 2: Prospex share of Selva reserves and resources (BCF)

	1P	2P	3P
Reserves	1.53	4.95	11.05
	1C	**2C**	**3C**
Contingent Resources	2.05	5.23	11.38

Source: CGG

Prospective resources for 3 prospects together with geological chances of success ("Geol. CoS") have also been certified in the CPR. We summarise below the aggregated resources volumes and Geol. CoS (Figure 3).

[3] We have excluded the Tesorillo and Ruedalabola licences in Spain from our analysis as they remain suspended.

Figure 3: Prospex share of Selva prospective resources (BCF)

	Low	Best	High	Geol. CoS
	19.34	32.63	70.32	31%

Source: CGG

Southern Spain

Prospex acquired a 49.9% non-operating interest in the El Romeral gas power project located in the onshore Guadalquivir Basin and a 15% non-operating interest in the Tesorillo licence area, located in the onshore Cadiz Province, through its Spanish affiliate Tarba Energía SL ("Tarba") with partner Warrego.

The El Romeral Area is situated in the upper to middle slope regions where sediment deposition is largely trapped within confined channel complexes. The Tesorillo Area, to the south, is located on the southern margin of the basin in the thrust belt of the Betic Cordillera.

Ongoing production of 510 mscm per month from two wells is used for power generation at the wholly project-owned 8.1MW El Romeral power station. Local infrastructure nearby includes the Maghreb-Europe 48-inch gas pipeline and the 26-inch pipeline operated by ENAGAS, the leading domestic national gas distributor.

The El Romeral Licence Area contains excellent prospectivity and multiple development opportunities from two discoveries with up-dip potential for contingent and prospective resources, as well as several turbiditic channel prospects with high geological chances of success. These offer low cost and very low risk opportunities, that can be easily tied-in to the El Romeral power station or alternatively to the national gas grid. Reserves and contingent resources have been certified by CPR (NSAI 2019) as follows (Figure 4).

Figure 4: Prospex share of El Romeral reserves and resources (BCF)

	1P	2P	3P
Reserves	0.06	0.15	0.21
	1C	**2C**	**3C**
Contingent Resources	1.55	2.50	3.76

Source: NSAI

Prospective resources together with geological chances of success ("Geol. CoS") have also been certified in the CPR. We summarise below the aggregated resources volumes and Geol. CoS (Figure 5).

Figure 5: Prospex share of El Romeral prospective resources (BCF)

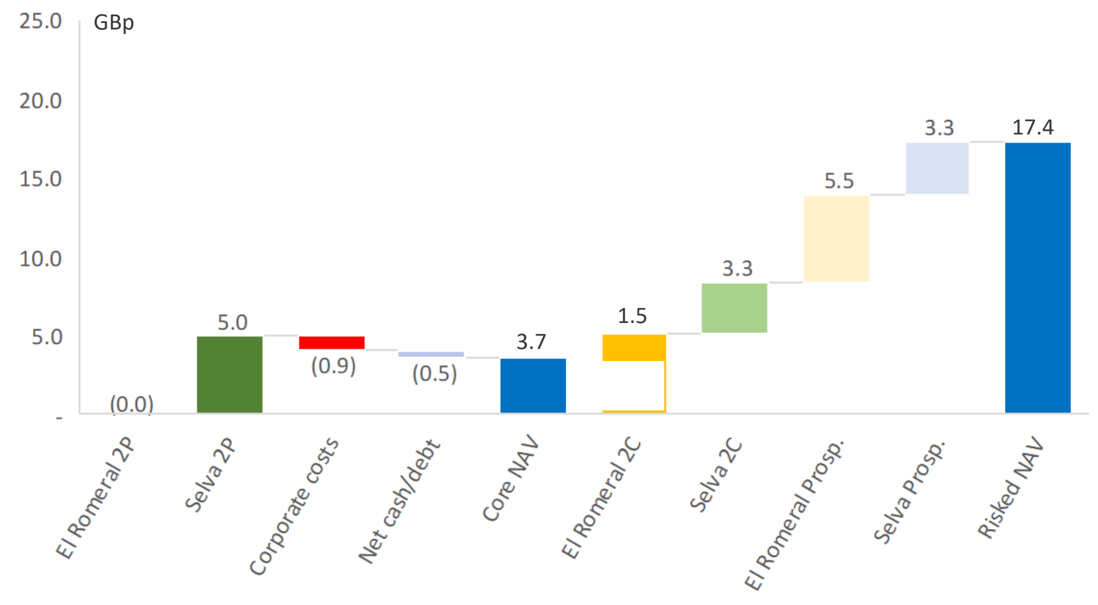
	Low	Best	High	Geol. CoS
	24.13	44.78	76.81	78%

Source: NSAI

Valuation

We set a 12-month price target of 17p for Prospex, based on our risked NAV estimate of 17.4p from a sum-of-the-parts ("SOTP") valuation, consisting of a Core NAV of 3.7p, based on 2P reserves, plus 2C NAV of 4.9p, based on 2C resources, plus an Exploration NAV of 8.9p, based on prospective resources identified in the El Romeral and Selva Permits, which are assigned a risk of commercial failure ("ROCF") and a geological chance of success ("Geol.risk") (Figure 6 and Figure 7).

Figure 6: SOTP waterfall (GBp per share)



Source: FDC

Figure 7: SOTP valuation

Asset	Net res. (BCF)	ROCF (%)	Net risked (BCF)	Net NAV (US$/mscf)	Net NAV (US$M)	Geol.risk (%)	Risked NAV (US$M)
El Romeral 2P	0.1	0.0%	0.1	(1.1)	(0.2)	0.0%	(0.2)
Selva 2P	5.0	0.0%	5.0	4.5	22.4	0.0%	22.4
Corporate costs							(4.2)
Net cash/debt							(2.0)
Core NAV	5.1	0.0%	5.1	4.4	22.3		16.1
per share (diluted)							3.7
El Romeral 2C	2.5	0.0%	2.5	3.0	7.5	12.5%	6.6
Selva 2C	5.2	0.0%	5.2	3.2	17.0	12.5%	14.8
2C NAV	7.7	0.0%	7.7	3.2	24.5		21.4
per share (diluted)							4.9
El Romeral Prospective	44.8	60.0%	17.9	1.8	31.5	22.0%	24.6
Selva Prospective	32.6	25.0%	24.5	1.9	47.4	69.0%	14.7
Exploration NAV	77.4	45.2%	42.4	1.9	78.9		39.3
per share (diluted)							8.9
Total NAV			55.2		125.6		76.8
per share (diluted)							17.4

Source: FDC

We use the recent futures curves for Brent crude prices and TTF gas prices.

Geological risk (“Geol.risk”):

We have assigned no risk to 2P reserves and an equally low risk of 12.5% for 2C resources in both Spain and Italy. For prospective resources we have used the size-weighted average chance of success of the prospects identified in the CPR, i.e. a risk of 22% in Spain and 69% in Italy.

Commercial risk (“ROCF”):

We have assigned no risk for either 2P or 2C resources in either Spain or Italy. In Spain, the power plant has enough spare capacity to accommodate the gas production from discoveries out of 2C resources. In Italy, the gas discoveries from 2C resources would be monetised through the existing pipeline.

We have assigned a ROCF of 60% for prospective resources in Spain, reflecting the difficult regulatory environment for permitting exploration wells, even within exploitation permits. However, there might be a shift within government which might result in a softening stance toward oil and gas exploration and production.

We have assigned a ROCF of 25% for prospective resources in Italy, reflecting the fact that new gas sales agreements might have to be signed for the additional volumes from new discoveries.

We estimate an unrisked NAV of 41.4p.

Peer group valuation

Prospex trades at a premium to the median multiples of a peer group of comparable companies for both EV/2P and EV/2P+2C multiples (Figure 8).

Figure 8: Peer group multiples

Company	Price 28/06/23	EV (US$M)	2P (MMboe)	2C (MMboe)	EV/2P (x)	EV/2P+2C (x)
Po Valley Energy	0.07	52.7	7.6	4.5	7.0	4.4
Europa Oil&Gas	1.53	18.5	0.5	2.8	35.6	5.5
Capricorn Energy	183.80	190.2	91.0	-	2.1	2.1
Energean	1,015.00	4,467.8	956.0	-	4.7	4.7
Enquest	14.53	1,590.7	194.0	402.0	8.2	2.7
Genel Energy	102.40	189.6	104.2	-	1.8	1.8
Harbour Energy	224.10	4,040.7	488.0	-	8.3	8.3
IOG	4.80	124.7	24.3	18.9	5.1	2.9
Serica Energy	226.40	474.5	62.0	-	7.7	7.7
Serinus Energy	5.25	2.4	8.6	2.2	0.3	0.2
Median					**6.0**	**3.6**
Prospex	8.0	28.6	0.9	1.4	33.7	12.5

Source: FDC

If we were to convert all 2C resources into 2P reserves and all prospective into 2C resources and apply the median EV/2P+2C of the peer group, we obtain a value of 12.5p for Prospex (scenario 1).

If we were to convert all 2C and prospective resources into 2P reserves and apply the median EV/2P of the peer group, we obtain a value of 20.8p for Prospex (scenario 2).

We show the results for scenario 1 and scenario 2 below (Figure 9).

Figure 9: Peer group valuation

Company	Price 28/06/23	EV (US$M)	2P (MMboe)	2C (MMboe)	EV/2P (x)	EV/2P+2C (x)
Median					**6.0**	**3.6**
Prospex	8.0	28.6	0.9	1.4	33.7	12.5
Scenario 1	12.5	55.1	2.3	12.9	-	3.6
Scenario 2	20.8	91.8	15.2	-	6.0	-

Source: FDC

Appendix A: Board of Directors

Mark Routh: CEO and Managing Director

Mark is a Petroleum Engineer with more than 40 years of experience in the oil & gas industry and joined Prospex in 2021. In 2011-2018 he was CEO/Chairman of AIM-listed IOG PLC. In 2002, Mark founded CH4 Energy, focused on gas in NW Europe and sold it for £152M after four years. Prior to CH4, Mark spent ten years with Hess, six years with BP and five years with Schlumberger in SE Asia and the North Sea. Mark has an MSc in Petroleum Engineering from Imperial College London.

Grant Glanfield: Group Head of Finance

Grant is a Chartered Accountant with 35 years' experience in a broad range of financial, project and general management roles within Finance and Energy. Following a successful career in the City, in 2012 he moved into venture capital and to a CFO role for a pan-European E&P group of companies with operations primarily in the United Kingdom and Poland. He joined Prospex in 2018 and, aside from managing day-to-day group finance and administration aspects, contributes to the investment decision-making, execution and ongoing management processes.

Carlos Venturini: Exploration Manager

Carlos has 40 years of experience in G&G, interpretation and prospect generation gained with Schlumberger, ENI, Sipetrol and from his own Libya-based consultancy working for Petrobras, GDF, OMV amongst others. He joined Prospex in 2015. Carlos has worked in more than 30 basins and three continents and is an expert in Mediterranean and African petroleum geology. Carlos has a BSc in Geology from Universidad Nacional de La Plata in Buenos Aires, and an MSc in Structural Geology from Imperial College London.

Bill Smith: Non-Executive Chairman

Bill is a Canadian solicitor with 40 years of experience in corporate finance, including several start-up ventures in the sector. He is a director of several listed and private companies including Pacific Bay Minerals (TSXV-listed) and PFB Corporation. Bill was a senior partner of McCarthy Tetrault LLP in Canada and subsequently Executive Vice President of two listed international oil companies and a listed investment firm.

Alasdair Buchanan: Independent Non-Executive Director

Alasdair has over 40 years of experience in upstream oil & gas. Most recently, he was Global Energy Director at Lloyds Register and was COO and a director of Senergy Group PLC. Alasdair was a NED of Warrego Energy 2012-2019 prior to public listing on the ASX. He worked for Halliburton for three years in Aberdeen and Texas, most recently as Vice President UK and worked for BJ Services for 28 years both in the UK and internationally. Alasdair has a BSc in Chemical Engineering from The University of Edinburgh.

Andrew Hay: Independent Non-Executive Director

Andrew is a graduate of Oxford University and has more than 30 years of experience in corporate banking, the debt & equity capital markets and international M&A in London and New York. Currently a Senior Adviser at Smith Square Partners. Formerly Chairman of LGB Corporate Finance and led the corporate finance business of Edmond de Rothschild in London. Previously, Andrew held senior positions at ING Barings and Schroders. Until May 2017, Andrew was a Non-Executive Director of Aminex plc and was a Non-Executive Director of Independent Oil & Gas plc, until February 2018. Currently a Non-Executive Director of Lloyd George Advisory and since 2020, the senior Non-Executive Director and chair of audit committee at Great Western Mining Corporation PLC, the AIM quoted mineral exploration and development company with licences and operations in Nevada.

Appendix B: Shareholding

Main shareholders and Directors currently hold a 28.56% equity interest, with free float representing 71.44% (Figure 10).

Figure 10: Shareholders

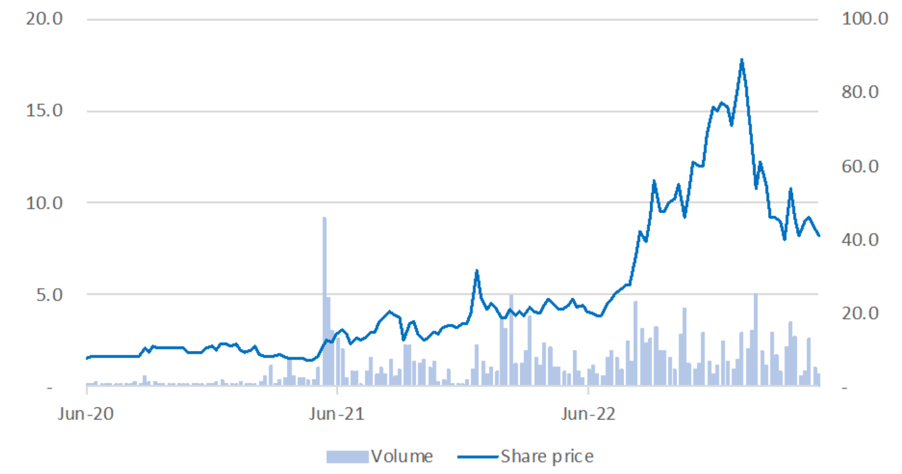
Name	# shares	% interest
Colin Wilson	20,073,557	7.04%
James & Olga Simmons	17,150,000	6.02%
Simon Chantler	14,158,029	4.97%
James Smith	9,874,483	3.46%
Grant Glanfield	8,847,500	3.10%
Bill Smith (*)	6,447,517	2.26%
Alasdair Buchanan (*)	3,428,571	1.20%
Mark Routh (*)	1,428,571	0.50%
Sub-total	81,408,228	28.56%
Free float	203,612,441	71.44%

Source: Prospex

(*) Director

We show below the recent share price and trading volume history (Figure 11).

Figure 11: Share price and liquidity



Source: Yahoo Finance

Appendix C: Italian assets

Prospex holds a 37% economic interest in the Podere Gallina Exploration Permit, located in the Po Valley of Northern Italy, with operating partner PVE holding the remaining 63%. The block produced 83BCF for operator ENI from 1960 to 1984 and contains the Selva Malvezzi Gas-Field ("Selva") production concession (Figure 12).

Figure 12: Podere Gallina location map

Source: CGG

The assets are Miocene and Pliocene reservoir sands, stacked vertically, and include both thick, good quality gas sands and thin-bedded gas reservoirs.

These sands are interbedded with shaley and marly fine-grained sediments. In many cases, the sands are pressure isolated from each other and may be drained in succession according to well designs and completion strategies.

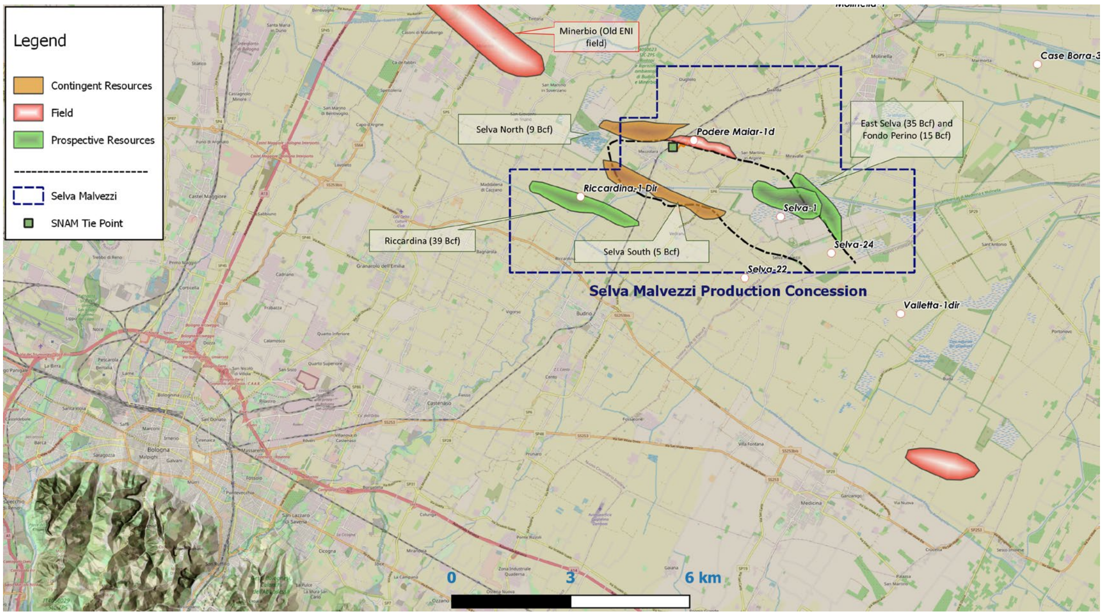
Selva Stratigraphic redevelopment

The Selva Stratigraphic redevelopment represents a portion of the former ENI-operated Selva gas field. The extension of the Selva Field was interpreted by PVE and recent modelling, based on depth maps from seismic interpretation and well data at Upper Mid Pliocene level, suggested a potential undrained up-dip gas volume.

This concept was successfully tested by the Podere Maiar-1 well in late 2017 / early 2018 (Figure 13).

The well encountered two gas-bearing two reservoir sand intervals, the C1 and C2 Sands. The C1 Sand has gross thickness of 22m, 70% net-to-gross, porosity of 22-26% and 65% gas saturation, whilst the deeper C2 Sand has gross thickness of 40.5m, 63% net-to-gross, porosity of 21-25% and 70% gas saturation.

Figure 13: Selva Malvezzi location map



Source: CGG

The reserves estimated by CGG for these two reservoir sands use a recovery factor of 60-70% across the 1P to 3P cases (Figure 14).

Figure 14: Prospex share of Selva re-development reserves (BCF)

	1P	2P	3P
C1 Sand	0.63	1.69	2.73
C2 Sand	0.90	3.27	8.32
Total	**1.53**	**4.95**	**11.05**

Source: CGG

Further prospectivity

Following the successful Podere Maiar-1 well, PVE firmed up two further prospects on the North and South crest of the old Selva gas field. They rely on the same stratigraphic trap concept successfully proven viable in Podere Maiar-1.

Although these are named prospects, they fall into the Contingent Resource category because they have already produced gas to surface in commercial quantities leaving a remaining up-dip gas volume (Figure 15).

Figure 15: Prospex share of Selva contingent resources (BCF)

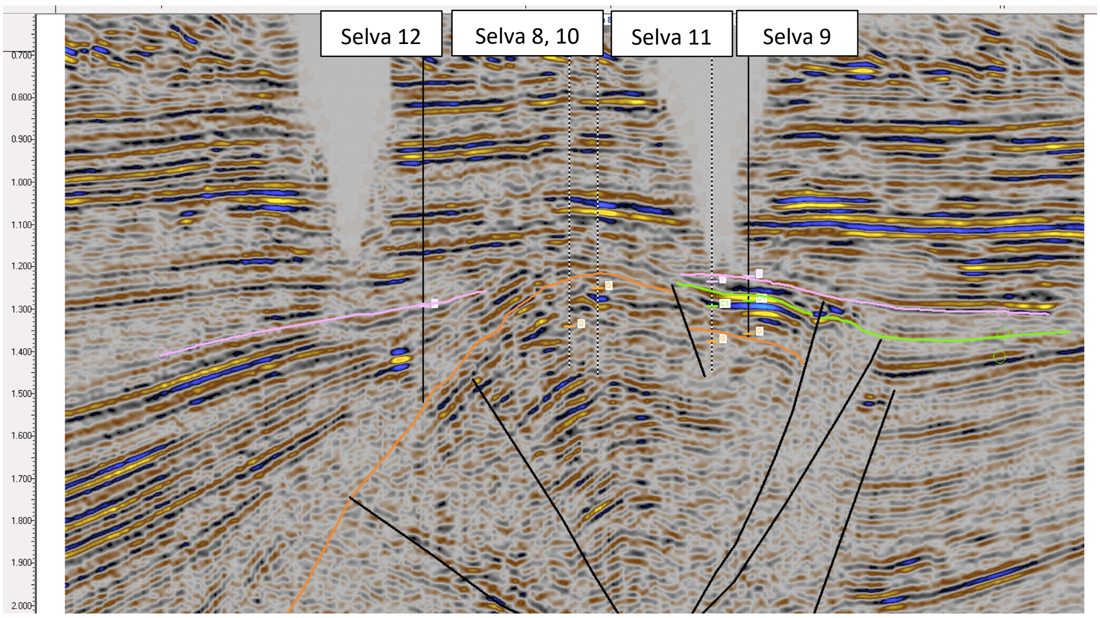
	1C	2C	3C
Selva North	1.30	3.30	6.59
Selva South	0.74	1.93	4.79
Total	**2.05**	**5.23**	**11.38**

Source: CGG

Comparable reservoir properties are anticipated than in Podere Maiar-1 and the sand thickness is known from some of the old Selva producing wells, particularly Selva-9 for Selva North and Selva-12 for Selva South. For Selva North, only one sand is expected (Level B), whereas for Selva South a shallower Level A is also considered.

Selva North was assigned a 70% chance that the volumes will be commercially extracted, whilst the less well-defined Selva South is assigned a 60% chance of success. The main risks are the gas water contact elevation and sand architecture, both of which can be established by the drilling and flow testing of a well. The definition of the potential volumes remaining in the up-dip stratigraphic trap relies on the lateral extension of the sands, which is difficult to determine using the available 2D seismic data. Nevertheless, CGG believes that there is good potential for success in pursuing the concept in this area (Figure 16).

Figure 16: Selva North and Selva South



Source: CGG

Other prospects include the Riccardina, East Selva and Fondo Perino, with prospective resources certified by CGG as follows (Figure 17).

Figure 17: Prospex share of Selva prospective resources (BCF)

	Low	Best	High	Geol. CoS
Riccardina	4.80	14.34	47.71	21%
East Selva	10.77	12.88	15.02	40%
Fondo Perino	3.77	5.40	7.59	34%
Total	**19.34**	**32.63**	**70.32**	**31%**

Source: CGG

Riccardina lies ca. 5km from Podere Maiar-1 and was previously tested by ENI with the Riccardina-1 well (2004) which encountered water-bearing sands and was abandoned. New interpretation by PVE suggested the previous well just missed the prospect, on the wrong side of the bounding fault and outside of the high amplitude linked to gas presence. The structure is reasonably well defined from 2D seismic, and the main risk is the seal capacity of the bounding fault on the northern side of the trap.

The East Selva structure is identical in concept in the Selva Stratigraphic structure but has not previously been drilled. The main risk is the definition of the gross rock volume based on only a small number of seismic lines, plus the presence of good quality reservoir sands.

The Fondo Perino prospect is a hanging-wall anticline located between the Selva-1 and Selva-23 wells. The trap is interpreted on two NNE-SSW oriented seismic lines located 1.3km apart and a WNW-ESE line. The limits of the prospect closure exist between smaller faults in the core of the anticline.

There are currently no firm plans to drill wells on the Fondo Perino, Riccardina and East Selva prospects. The 3D seismic planned across the Selva Field will also cover the East Selva, Riccardina and Fondo Perino prospects, which should help to de-risk these structures.

The Italian gas industry

Gas is produced from onshore fields predominantly in the Po Valley and offshore fields in the Adriatic Sea, with some production from Sicily. The domestic gas markets were liberalised in 1998, ending ENI's production monopoly and opening licences to independent oil and gas companies.

Natural gas is Italy's main source of energy, accounting for 43% of primary consumption in 2021. Gas consumption was down 10% y-o-y to 68.6BCM in 2022, with domestic production supplying less than 5% after a steady decline from 9.3BCM in 2007 to 3.2BCM in 2021.

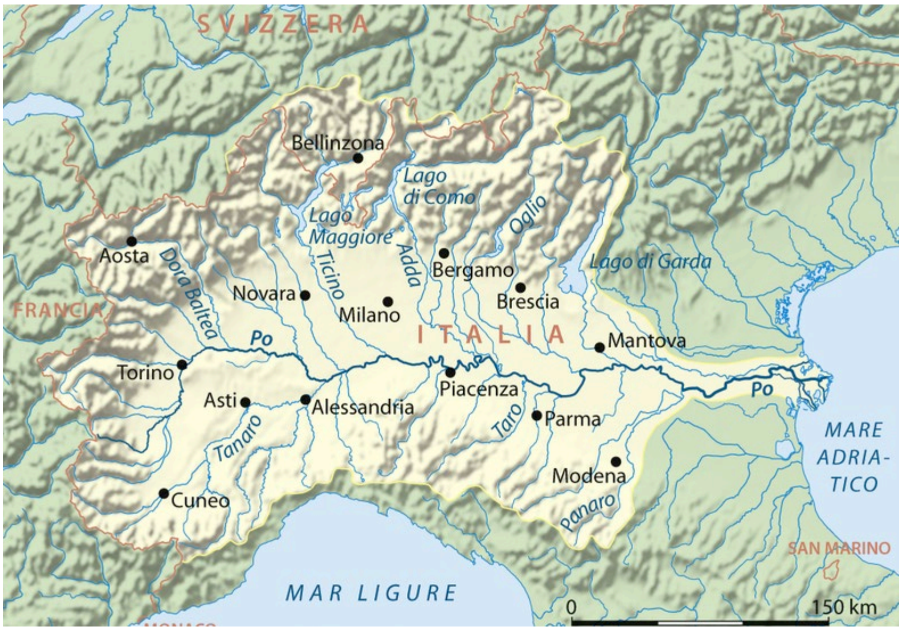
In 2022, Italy's new government announced its plan to double domestic gas production and authorise new offshore drilling in the Adriatic Sea, in a reversal of a moratorium introduced in 2019 to suspend the processing of permits for exploration licences and new exploitation concessions.

Italy is extensively served by national and local gas pipeline networks, facilitating the export and sale of production.

Po Valley Basin

The Po Valley Basin is situated in Northern Italy between the Alpine chain to the North and the Apennine chain to the South. It opens into the Adriatic Sea to the East (Figure 18).

Figure 18: Po Valley location map



Source: Wikipedia

Compression associated with the building of the Alpine and Appenine mountain belts created a large deep basin into which large thicknesses of sediment were shed from the surrounding uplands. As the basin deepened, turbidite sands and high sediment supply began to fill the basin.

At least 6km of Pliocene sediments were deposited in the basin and, as it was filled, the Po River drainage system became established, depositing marine sands in a delta front environment. These may be overlain by fluvial sands as subsidence slowed and the basin filled.

Pliocene reservoirs include marine sands and turbidites of significant lateral extent, which are folded over faulted structures that were formed during the compressional phases. Many of these reservoirs are gas-bearing, including long-established reservoirs discovered and developed by ENI, as well as thin-bedded reservoirs that are becoming new targets at the present time.

A proven and prolific hydrocarbon system, the Po Valley Basin is a major hydrocarbon province in Italy where over 5,000 wells have been drilled historically.

Gas has been produced in the Po Valley since the Second World War, initially exclusively by ENI. The source of the gas is Miocene and Pliocene shales that are interbedded with turbidites and other sediments; the gas is predominantly biogenic, i.e. related to the activity of bacteria acting on organic matter buried with the shales rather than associated with deep burial of the shales. Biogenic gas is generally associated with shallower depths than is required for the generation of gas by burial; however, the deepest known bacterial gas generation is recorded in the Po Basin at a depth of 4500m.

Biogenesis of gas can generate large gas volumes and may continue to be active at the present time, which led to the hydrocarbon richness of the Po Basin. Many structures and many reservoirs have proven to be gas bearing, which explains the 263 developed fields in the Po Basin.

The US Geological Survey have estimated approximately 16TCF of ultimately recoverable gas to be present in the Po Basin (Lindquist, USGS, 1999), meaning that potential for new discoveries remains as well as for field re-development targeting missed pays and remaining gas in old fields.

Appendix D: Spanish assets

Prospex has non-operated interests in the El Romeral and Tesorillo licence area situated in the Guadalquivir Basin, onshore southern Spain (Figure 19).

Figure 19: Spanish assets location map

Source: NSAI

The Guadalquivir Basin was initially created by continental rifting and extension during the Mesozoic and further subsidence in the Tertiary was related to the convergence of Eurasia and Africa. It is bounded to the south by the Betic Cordillera and to the north by the Sierra Morena range.

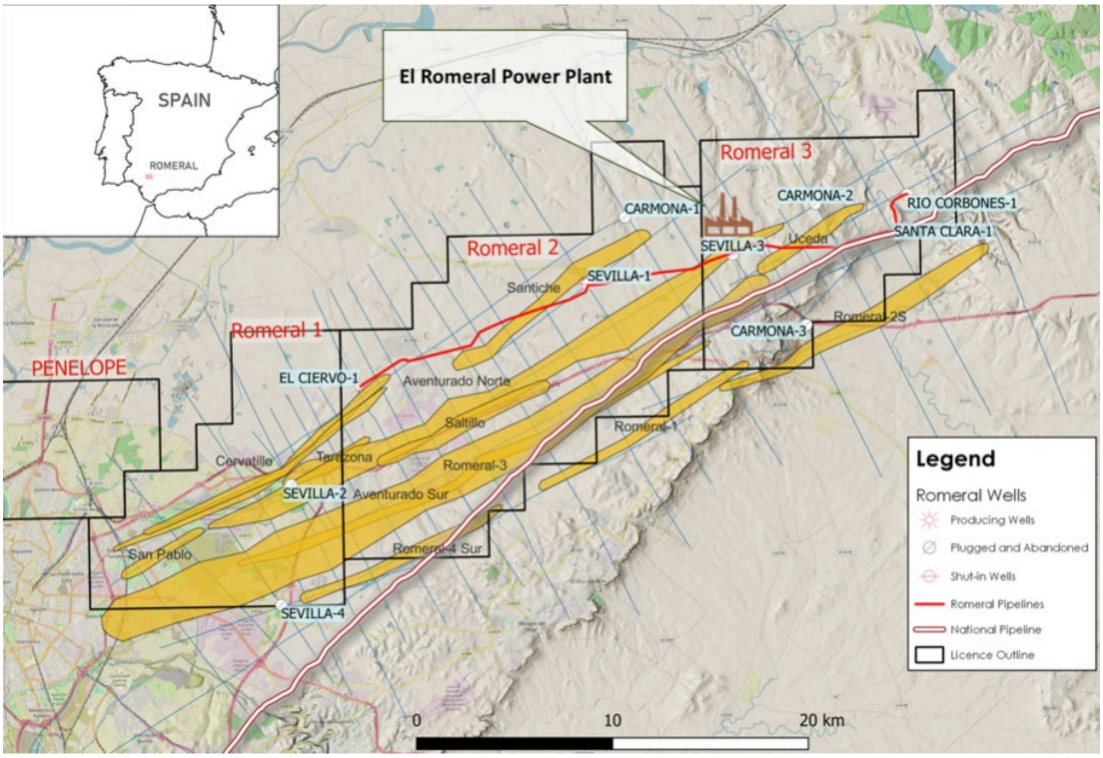
During the Miocene, turbidite sediments were deposited into the basin, backfilling a series of basin-floor incised valleys and channels broadly parallel to the Betic Orogeny (NE-SW). During basin subsidence, the channel sequences migrated to the north, resulting in a series of overlapping channel fill and levee deposits forming structural-stratigraphic traps. The turbidite channel trends are truncated to the north by a deep and elongated erosional submarine canyon of Pliocene age that is predominantly filled with argillaceous Sevilla Group sediments.

The El Romeral Area is situated in the upper to middle slope regions where sediment deposition is largely trapped within confined channel complexes. The Tesorillo Area, to the south, is located on the southern margin of the basin in the thrust belt of the Betic Cordillera.

El Romeral

In Southern Spain, Prospex acquired a 49.9% interest in the El Romeral gas power project through its Spanish affiliate, Tarba Energía SL (“Tarba”) with partner Warrego (Figure 20).

Figure 20: El Romeral location map



Source: Prospex

The licence was acquired for a total initial consideration of €750,000 from Petroleum Oil and Gas España, a subsidiary of leading Spanish electricity company, Naturgy Energy Group. It consists of three permits El Romeral 1-3 and seven historical gas discoveries (Figure 21).

Figure 21: Historical wells

Well	Operator	Date	Result
El Ciervo-1	Chevron	1983	Gas discovery
Sevilla-1	Chevron	1984	Gas discovery
Sevilla-2	Chevron	1985	Sub-commercial gas
Sevilla-3	Chevron	1985	Gas discovery
Sevilla-4	Chevron	1989	Sub-commercial gas
Santa Clara-1	Repsol	1998	Gas discovery
Rio Corbones-1	POGESA	2007	Gas discovery

Source: NSAI

The El Romeral power station was constructed in 2001 at a cost of c.a.€10M and has a low-cost maintenance contract in place with General Electric. It provides immediate revenues of c.a. €4.2M and, with spare capacity of 78%, is also a low-cost route to commercialisation for future gas discoveries.

Reserves and production

Ongoing production currently averages 510 mscm per month from three wells: El Ciervo-1, Santa Clara-1, and Sevilla-1. Sevilla-3 produced gas 2022-2008 and is now shut-in due to water influx, whilst Rio Corbones-1 produced gas 2012-2017 is also shut-in for the same reason.

Local gas pipelines of 25km in total connect existing production to (i) the wholly project-owned 8.1MW El Romeral gas-to-power station, housing three Jenbacher engines, and (ii) to the Maghreb-Europe gas pipeline, operated by ENAGAS, the leading domestic national gas distributor.

Producing wells were estimated by NSAI to have the following reserves as of June 30, 2019 (Figure 22).

Figure 22: Prospex share of El Romeral reserves (BCF)

	1P	2P	3P
	0.06	0.15	0.21

Source: NSAI

Further prospectivity

The El Romeral Licence Area contains excellent prospectivity and multiple development opportunities. Several DHI supported prospects have been identified and prospective resources quantified in a CPR (NSAI 2019). The prospects are turbiditic channels, typically encountered in the Guadalquivir Basin.

In addition, the Sevilla-2 and Sevilla-4 wells are two proven undeveloped discoveries (“PUD”) which were not completed as producing wells despite penetrating positive DHI signatures subsequently confirmed as gas-bearing reservoir intervals from logs and/or tests.

These two wells are interpreted to have penetrated gas-water contacts (“GWC”) where seismic data indicate a continuous reservoir likely to extend up-dip of the GWC. The CPR has subdivided the area up-dip of the GWC into contingent and prospective resources.

These PUDs and prospects offer low cost and very low risk opportunities, that can be easily tied-in to the El Romeral power station or alternatively to the national gas grid. The planning and permitting of a three well drilling campaign have already been carried out and currently awaiting final approvals.

Romeral-4 Sur is a 4km2 area located up-dip of Sevilla-4, whilst Tarazona is a DHI supported area up-dip of Sevilla-2; both have been assigned contingent resources in the CPR (Figure 23).

Figure 23: Prospex share of El Romeral contingent resources (BCF)

	1C	2C	3C
Romeral-4 Sur	0.53	0.86	1.31
Tarazona	1.55	2.50	3.76
Total	**2.07**	**3.36**	**5.07**

Source: NSAI

The prospective resources area up-dip of Sevilla-4 is designated as the Romeral-1 prospect. This SW-NE channel complex extends across the southern licence boundary and possibly has a reservoir connection to Romeral-4 Sur. Other prospects listed in the CPR are summarised below together with estimated prospective resources and geological chance of success ("Geol. CoS") (Figure 24).

Figure 24: Prospex share of El Romeral prospective resources (BCF)

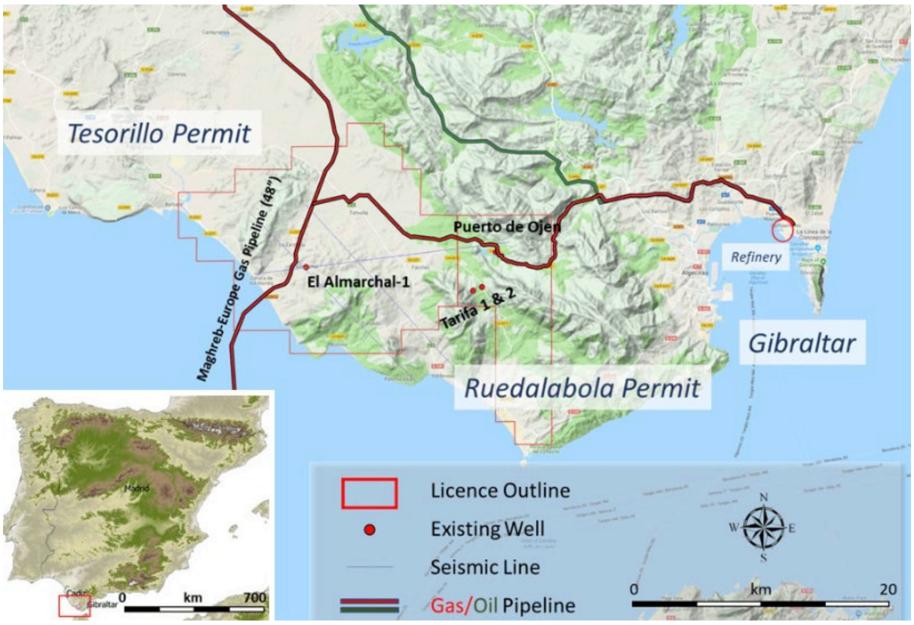
	Low	Best	High	Geol. CoS
Aventurado Norte	0.30	1.24	3.82	50%
Aventurado Sur	0.33	0.71	1.41	70%
Cervatillo	1.05	1.81	2.83	70%
Gamo	7.32	12.46	19.55	75%
Rio Corbones Oeste	6.02	10.24	16.09	75%
Romeral-1 Sand 1	0.42	0.68	1.01	75%
Romeral-1 Sand 2	0.55	0.90	1.37	81%
Romeral-2 Sur Sand	2.27	4.53	8.02	81%
Romeral-2 U. Sand	0.76	1.50	2.66	81%
Romeral-3	1.53	3.18	5.78	81%
Saltillo	0.82	1.40	2.20	85%
San Pablo	0.70	1.51	2.86	85%
Santiche	2.07	4.64	9.21	90%
Total	**24.13**	**44.78**	**76.81**	**78%**

Source: NSAI

Tesorillo Area

The Tesorillo Area in the Cadiz Province comprises two petroleum exploration licences, the Tesorillo and Ruedalabola Permits, which cover 38,000 ha in total. Both permits enjoy excellent access to infrastructure, as the project is located 3.9km from the North African Maghreb 48-inch gas pipeline European landing point, providing easy access to the European gas market (Figure 25).

Figure 25: Tesorillo Area



Source: NSAI

The Tesorillo Permit contains the Almarchal-1 discovery drilled in 1956-57 by Spanish operator Valdebro. The well tested a 70km2 anticline and intersected a 48m gas pay from two Miocene sandstone intervals, which flowed gas to surface on testing, as well as a further 492m of potential gas pay interpreted from logs yet unconfirmed by testing.

A CPR by NSAI in 2015 estimated gross unrisked Best Estimate Prospective Resources of 830BCF of gas, with upside greater than 2TCF.

Prospex expects to use the Almarchal-1 discovery to obtain a reclassification of the Tesorillo area from an exploration to a production permit.

Ruedalabola

Ruedalabola contains the 1957 Puerto de Ojan-1 well, located 15km to the east of Almarchal, which displayed similar gas shows to Almarchal-1 but couldn't be tested for mechanical reasons.

Appendix E: European gas market

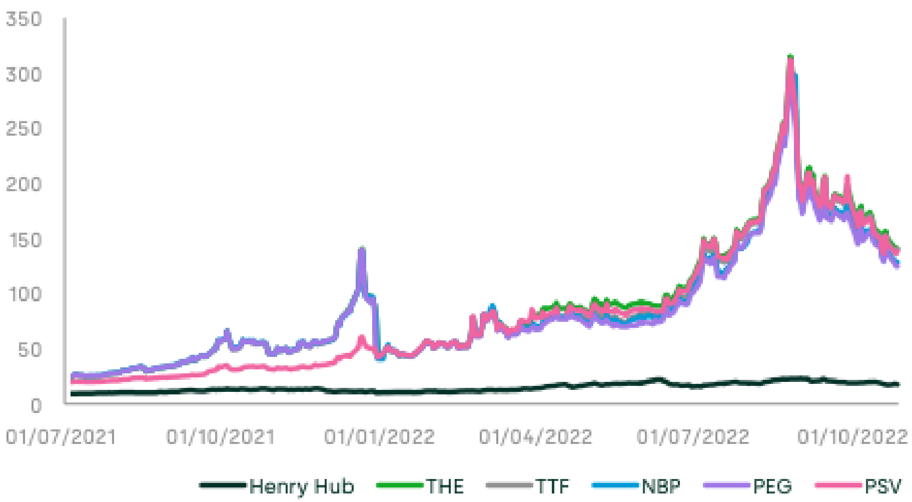
Trading hubs

Over the last two decades, natural gas prices in Europe have moved towards hub pricing, where prices are based on supply and demand rather than indexed to crude oil prices. Hub pricing accounted for 77% of gas volumes in 2021, according to a study by Oxera Consulting. In NW Europe, hub pricing dominates whilst Mediterranean gas trading tends to use more oil indexation.

As of 2021, there were 28 gas trading hubs in Europe with the Dutch Title Transfer Facility (TTF) and the UK National Balancing Point (NBP) being the two 'mature' European hubs where gas trading markets are widely considered as transparent, liquid, and deep. Other active hubs include the Italian Punto di Scambio Virtuale (PSV), Spanish hub PVB, German Trading Hub Europe (THE), French hub Point Exchange Gaz (PEG), Belgian hubs Zeebrugge Beach (ZEE), Austrian hub Virtual Trading Point (VTP) and Czech hub VOB.

The TTF is by far the largest hub by volumes traded and number of available products, accounting for 79% of total traded volumes in 2019. Historically, prices of all European hubs have been highly correlated with the TTF as it has the largest number of LNG cargoes of all European benchmarks (Figure 26).

Figure 26: Gas prices at major trading hubs



Source: Oxera Consulting

Gas price differential between hubs resulted from the sudden shift in gas import flows from Russia in the east, to LNG in the west. Markets with better access to LNG re-gas capacity see the cheapest gas prices, leading to price differentials across power markets as gas-fired plants are dominant in setting marginal power prices. Spain has the continent's largest LNG import capacity at 44.1Mmtpa (65.0BCM), compared to Italy's 2.5Mmtpa (3.75BCM).

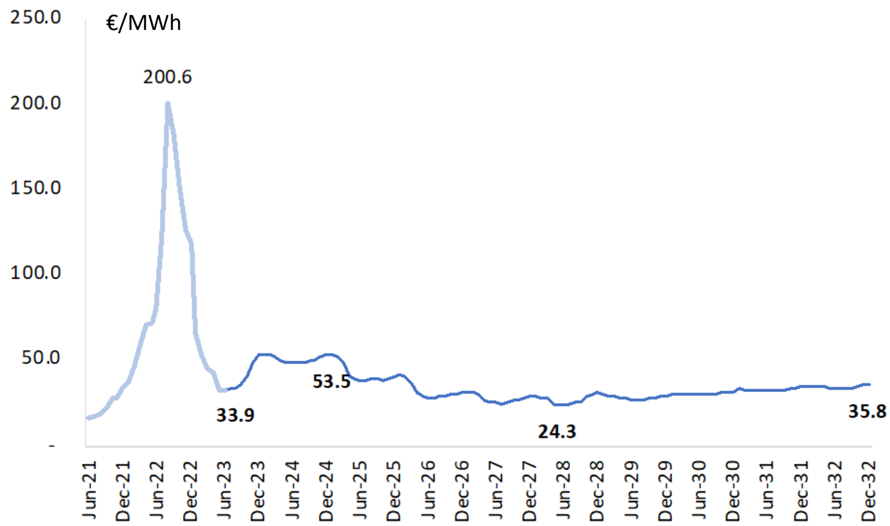
Price expectations

Natural gas prices in Europe fell at the end of 2022, with the Dutch TTF priced at €76 /MWh, close to pre-Ukraine war levels of €75 in December 2021. Before that in August 2022, prices jumped to an all-time high of €350/MWh in response to supply shortages from Russia. As prices rose, European buyers increased LNG imports from the US and elsewhere as alternatives to meet mandated reserves ahead of the winter.

Mild winter temperatures and a decrease in European gas consumption by 19.3% between August 2022 and January 2023 allowed Europe to fill gas storages, keep prices down and secure more energy supplies. European gas prices fell to an 18-month low of €49/MWh in mid-February 2023 with gas storage across the European Union at 65% capacity, well above the average of 45% for this time of year. From March to April 2023 prices remained €40-45/MWh and in May they fell below €30 /MWh. Experts believe the worse of the energy crisis may be over; however, next winter could still be difficult.

Indeed, the lack of supply from offshore gas in Europe, low Russian supplies not expected to increase, and more costly LNG with increased demand will likely cause prices to remain elevated and unlikely to revert to historic levels for the foreseeable future even if demand comes down and there is more LNG supply from the US (Figure 27).

Figure 27: TTF future prices



Source: Barchart

Gas imports from Russia are averaging just 2.0BCM p.m. compared to 5.0BCM p.m. in 2022 and 13.0BCM p.m. in 2021. Hence, gas prices in the next 12 months will depend on Chinese demand and LNG availability, as well as the weather and a potential further decrease in consumption.

China National Offshore Oil Corp has forecast that China's natural gas imports will be 7% higher y-o-y in 2023. The additional demand could test Europe's efforts to bring in more cargoes, as buyers work to restock inventories for the next winter without much Russian imports.

The EU decision to cap gas prices could jeopardize these efforts. The cap would be triggered if the month ahead TTF contract moves over €180/MWh for three consecutive business days. If activated, the cap would stay in place for at least 20 working days. Critics say the price cap would allow Asian buyers like China and India to become more competitive in the spot market.

Research Disclosures

Research disclosure as of 14th June 2023

Company Name (the Relevant Issuer)	Disclosure
Prospex Energy PLC	2, 7

Investment Research Disclosure Legend:

1. In the past 12 months, Fox-Davies Capital Limited or its affiliates have had corporate finance mandates or managed or co-managed an offering of the Relevant Issuer's securities or received compensation for Corporate Finance services from the Relevant Issuer.

2. Fox-Davies Capital Limited expects to receive or intends to seek compensation for Corporate Finance services from this company in the next six months.

3. The Investment Analyst or a member of the Investment Analyst's household has, or expects to receive, a long position in the shares or derivatives of the Relevant Issuer.

4. The Investment Analyst or a member of the Investment Analyst's household has a short position in the shares or derivatives of the Relevant Issuer.

5. As of the month end immediately preceding the date of publication of this report, or the prior month end if publication is within 10 days following a month end, Fox-Davies Capital Limited and / or its affiliates beneficially owned 1% or more of any class of common equity securities of the Relevant Issuer.

6. A senior executive or director of Fox-Davies Capital Limited or a member of his or her household is an officer, director or advisor, board member of the Relevant Issuer and / or one of his subsidiaries.

7. Fox-Davies Capital Limited acts as a corporate broker for the Relevant Issuer.

The Investment Analyst who is responsible for the preparation of this Investment Research is a consultant to Fox-Davies Capital, a securities broker-dealer.

The Investment Analyst who is responsible for the preparation of this Investment Research has received (or will receive) compensation linked to fees generated by Fox-Davies Capital from the Relevant Issuer.

This report has been commissioned by the Relevant Issuer and prepared and issued by Fox-Davies Capital Ltd, in consideration of a fee payable by the Relevant Issuer.

Research Disclaimers

Disclaimer - Important Information

This document is not independent and should not be relied on as an impartial or objective assessment of its subject matter. Given the foregoing, this document is deemed to be a **marketing communication** for the purpose of the European Markets in Financial Instruments Directive (MiFID), the Financial Conduct Authority's Rules and Dubai Financial Services Authority's Conduct of Business Rules and as such has not been prepared in accordance with legal requirements designed to promote the independence of investment research and Fox-Davies Capital is not subject to any prohibition on dealing ahead of dissemination of this document as it would be if it were independent investment research.

In Fox-Davies Capital's view this document is considered an "acceptable minor non-monetary benefit" under MiFID II as it is either: (i) "non-substantive short-term market commentary"; and/or (ii) making a brief reference to existing Fox-Davies Capital research and, as such, is in-and-of-itself non-substantive; and/or (iii) paid for by a corporate issuer or potential corporate issuer as part of a contractual engagement with Fox-Davies Capital.

This document is protected by international copyright laws and is for the recipient's use in connection with considering a potential business relationship with Fox-Davies Capital only. This document and any related materials are confidential and may not be distributed or reproduced (in whole or in part) in any form without Fox-Davies Capital's prior written permission.

This document should not be construed in any circumstances as an offer to sell or solicitation of any offer to buy any security or other financial instrument, nor shall it, or the fact of its distribution, form the basis of, or be relied upon in connection with, any contract relating to such action.

This document is not based upon detailed analysis by Fox-Davies Capital of any market; issuer or security named herein, has not been independently verified and does not constitute a formal research recommendation, either expressly or otherwise. This document has no regard for the specific investment objectives, financial situation or needs of any specific entity. Fox-Davies Capital and/or connected persons may, from time to time, have positions in, make a market in and/or effect transactions in any investment or related investment mentioned herein and may provide financial services to the issuers of such investments.

The information contained herein is based on materials and sources that we believe to be reliable, however, Fox-Davies Capital makes no representation or warranty, either express or implied, in relation to the accuracy, completeness or reliability of the information contained herein. Opinions expressed are our current opinions as of the date appearing on this material only. Any opinions expressed are subject to change without notice and Fox-Davies Capital is under no obligation to update the information contained herein or to correct any inaccuracies in this document which may become apparent. Neither Fox-Davies Capital nor any of its directors, members, advisers, representatives, officers, agents, consultants, or employees makes, or is authorised to make any representation, warranty or undertaking, express or implied, with respect to the information or opinions contained in it and none of them shall have any liability whatsoever for any indirect or consequential loss or damage arising from any use of this document. This document is being provided to you for information purposes only. This document has been prepared by the author based upon information sources believed to be reliable and prepared in good faith.

All statements of opinion and/or belief contained in this document and all views expressed and all projections, forecasts or statements regarding future events or possible future performance represent Fox-Davies Capital's own assessment and interpretation of information available to it as at the date of this document. This document and any related materials may include certain forward-looking statements, beliefs, or opinions. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There can be no assurance that any of the results and events contemplated by the forward-looking statements contained in the information can be achieved or will, in fact, occur. No representation is made, or any assurance, undertaking or indemnity given to you that such forward looking statements are correct or that they can be achieved.

This report has been approved in the UK by Fox-Davies Capital Limited solely for the purposes of section 21 of the Financial Services and Markets Act 2000. In the UK, this report is directed at and is for distribution only to persons who (i) fall within Article 19(1) (persons who have professional experience in matters relating to investments) or Article 49(2) (a) to (d) (high net worth companies, unincorporated associations, etc.) of the Financial Services and Markets Act 2000 (Financial Promotions) Order 2005 (as amended) or (ii) are professional clients or eligible counterparties of Fox-Davies Capital (all such persons together being referred to as "relevant persons"). This report must not be acted on or relied up on by persons in the UK who are not relevant persons. In accordance with the Dubai Financial Services

of this disclaimer including, without limitation, the obligation to keep information contained in this document and any related materials confidential.

Prospex Energy PLC

Fox-Davies Capital Ltd
Devonshire House
1 Mayfair Place
London W1J 8AJ
United Kingdom