

ENTIDADE NACIONAL PARA O SETOR ENERGÉTICO, E. P. E.

ARC Ratings, S.A. (“ARC Ratings”) has affirmed the final public long-term issue rating assigned to the EUR 360.0 million bond issued by Entidade Nacional para o Setor Energético, E.P.E. (ENSE), on 6 August 2008, and upgraded the outlook to Positive, from Stable.

ISSUER	ISSUE	AMOUNT	RATING CLASS	RATING	OUTLOOK
Entidade Nacional para o Setor Energético, E. P. E.	Bond Loan	EUR 360.0 million	Corporate Long-Term Issue	BBB+	Positive

Rating Date	13 September 2023
Initial Rating Date	2 June 2008
Last Review Date	13 September 2022
Next Review Date	13 September 2024
Criteria Applied	ARC Ratings’ Non-Financial Corporate Entities Rating Methodology

This rating action is based on the upgrade of the outlook of the Portuguese sovereign rating, which improved its implied support to the company, in a context of a comfortable coverage of the company’s net financial debt provided by the market value of its oil reserves. ARC Ratings will monitor the determinants of the assigned rating and the evolution of the definition and implementation of the extension of the ENSE’s duties to the natural gas strategic reserves and will take action as needed.

The rating was assigned by ARC Ratings, S.A. and endorsed by ARC Ratings (UK) Limited in accordance with Statutory Instrument 2019 n° 266 - The Credit Rating Agencies (Amendment etc.) (EU Exit).

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ISSUER PROFILE

After the 70s oil crisis, major consuming countries agreed to assume an obligation to maintain an adequate level of oil reserves in order to mitigate the effects of potential future supply problems. The founding of ENSE, formerly designated ENMC - Entidade Nacional para o Mercado de Combustíveis, E.P.E. and before that, EGREP - Entidade Gestora de Reservas Estratégicas de Produtos Petrolíferos, E.P.E., represented Portugal's assignment of the responsibility for maintaining all or part of their emergency oil reserves to a state entity. Therefore, ENSE, founded in 2004, is a State-owned entity with the following duties:

- To be the Portuguese central stockholding entity for the acquisition and maintenance of the strategic portion of national emergency reserves of oil and oil products (oil reserves) – this is its main activity.
- Supervision of all energy sectors.
- Management and monitoring of the storage activities for crude oil and its derivatives throughout the national territory, to guarantee the supply of crude oil and petroleum products, depending on consumption needs.

Additionally, the current context of conflict in Europe between Russia and Ukraine raised the need to implement a scheme of strategic reserves to be applied to natural gas, in addition to the existing emergency reserves (owned and managed by the incumbent operator of the country's gas transport, storage and regasification). According to the Decree-law nº 70/2022, from 14 October, ENSE's duties were extended to also be the Portuguese central stockholding entity for the acquisition and maintenance of the strategic portion of national reserves of natural gas. The decree-law attributed this duty to ENSE, but the full extent of the impact of this new duty in the company is dependent on a number of more specific definitions, part of which (volume, types of consumption to be considered and phasing of acquisition of reserves) are expected to be defined by a specific ordinance from the Portuguese Government. Meanwhile, the company is carrying out studies and implementing the necessary organizational measures, to ensure the performance of this new duty. Note that, similar to the oil products reserves activity, it will be the market operators responsibility to bear the costs related with the reserves, and this new duty and any related responsibilities will be completely segregated from the current role the company performs in terms of oil reserves. ARC doesn't expect this new duty to have a material impact in ENSE in the short term and will monitor the evolution of its definition and implementation.

ENSE'S KEY RATING DRIVERS:

- Government ownership – ENSE's share capital is wholly owned by the Portuguese Government and the bonds being rated have a continual ownership clause regarding the maintenance of this sole ownership by the Portuguese Government. Consequently, its rating is linked to the ratings of the Portuguese Republic, whose second-highest rating is BBB+/Positive. Note that there is no obligation of timely support, but the Portuguese Government, as established in the company's bylaws, is ultimately responsible for ENSE's liabilities ("in the case of dissolution of ENSE, the State assumes any losses arising from the liquidation of assets, as well as the residual responsibilities").
- Favourable debt profile – ENSE's debt level remains unchanged, still comprising solely the bond issue that is rated in an amount of EUR 360.0 million, maturing in 2028. Above all, ENSE's expenses (including bond interest) have been, as structurally intended, totally covered by revenues, mainly originated from the Portuguese oil market operators. ENSE's cash and deposits and investments in Portuguese Government issued debt securities showed an increasing trend to EUR 73.7 million in June 2023, reducing the company's net financial debt.
- Stable, long-term relationships with key customers – The entity has developed strong, mutually beneficial relationships with the main distributors of oil products in Portugal: Repsol, S.A. (Repsol), Galp Energia, SGPS, S.A. (Galp Energia), BP p.l.c. (BP), Prio Supply, S.A. (PRIO) and Compañía Española de Petróleos S.A. (CEPSA).

THE KEY CONSTRAINTS ON ENSE'S CREDIT RATING ARE:

- Oil price volatility and the coverage of the loan by oil reserves – The nature of ENSE's strategic role in the Portuguese oil market and of its operations leads to a very high concentration of its assets on oil and oil derivatives and renders its financial performance (in accounting terms, without cash flow impact, as the company doesn't actively trade oil or oil derivatives) heavily exposed to oil price fluctuations. The recovery in oil price in 2022 led to the improvement of the coverage of gross financial debt by reserves to 1.65 times at the end of 2022 (from 1.37 times at the end of 2021). The coverage of net financial debt by reserves also increased to 2.07 times at the end of 2022 (from 1.71 times at the end of 2021). Because of the decrease trend in oil price in the 1H 2023, these coverage ratios deteriorated to 1.39 times and 1.75 times (from 2.43 times and 3.04 times at end of 1H 2022), respectively, at the end of June 2023. In the long term the oil price may be impacted by the slow energy transition trend towards energy sources with lower environmental impact.
- Concentration of customer base – The majority of ENSE's revenues (79.3%) continues to be derived from five companies (reflecting the oil distribution market concentration in Portugal): Repsol (accounting for 21.8% of ENSE's 2022 revenues), Galp Energia (20.4%), BP (19.7%), PRIO (8.8%) and CEPESA (8.6%). It should however be noted that ENSE maintains stable relationships with them and there is no risk of losing customers. ARC Ratings notes specifically that three of the aforementioned customers carry investment grade credit ratings (the other two are not rated).

KEY TIPPING POINTS

Positive Turning Points

Triggers for a potential rating upgrade would come from an upgrade of the Portuguese Sovereign rating.

Negative Turning Points

Triggers that could prompt a rating downgrade would include:

- a downgrade of the Portuguese Sovereign rating; or
- a significant long-standing decrease of the coverage of the net financial debt by the market value of its oil reserves.

SHAREHOLDERS AND GOVERNANCE

ENSE's share capital is wholly owned by the Portuguese Government, being a "State corporate entity" with administrative, financial and patrimonial autonomy. A new Board of Directors was appointed in April 2023.

ENSE was assigned by law, since its foundation, with the duty of being the Portuguese central stockholding entity in the acquisition and maintenance of the strategic portion of national emergency reserves of oil and petroleum products. The company is responsible for maintaining the required level of strategic reserves and a continuously updated record of emergency reserves containing the information necessary for its respective control.

National emergency reserves of oil and petroleum products comprise ninety days of the nation's average daily net imports of crude oil and oil products from the preceding year and its acquisition and maintenance are an obligation of oil market operators, distributed according to each company's market share. The share of reserves to be held by ENSE (strategic reserves), in substitution of oil market operators, corresponds to "one-third of the reserves which the bound operators are obliged to maintain", i.e. 30 days of the nation's average daily net imports of crude oil and oil products from the preceding year.

As mentioned above, Decree Law 70/2022, from 14 October, extended ENSE's duties to also include being the Portuguese central stockholding entity for the acquisition and maintenance of the strategic portion of national reserves of natural gas, but the details of this new duty are still to be defined.

According to the terms of the law, the following continues to apply to ENSE:

- In the case of dissolution of the company, the State assumes any losses arising from the liquidation of assets, as well as the residual responsibilities.
- The expenses associated with the build-up and maintenance of strategic reserves by the company are fully supported by market operators which are obliged to build-up emergency reserves.
- ENSE is obliged to create a provision fund (recorded in equity), funded in annual increments, aiming to achieve at least an amount corresponding to 25% of the oil reserves' acquisition cost. At the end of June 2023, the provision fund was equivalent to 16.2% of the oil reserves' acquisition cost, a steadily rising percentage. The company doesn't have a pre-established timing to achieve the 25% goal and therefore has been reinforcing the fund balancing the need to achieve this goal and the impact on the costs for oil market operators.
- In the case of an energy crisis or severe supply disruption, if ENSE sells strategic reserves of oil products in a situation where proceeds obtained are insufficient to cover the average acquisition cost of product, less the amount resulting from the proportional use of the provision fund, the State assumes the corresponding loss by making an extraordinary contribution to the fund.

On 5 September 2023, ARC Ratings conducted a meeting with ENSE's senior management as part of the analytical review process. The new role assigned to the company in terms of natural gas strategic reserves, the recovery of the oil products quantities introduced for consumption in 2022 and 2023, the oil reserves and its storage, the impact from the increase of inflation and interest rates, the doubtful accounts receivables and the investment carried out and to be carried out were the main themes of discussion.

CASH FLOW GENERATION CAPACITY

OIL PRODUCTS INTRODUCED FOR CONSUMPTION AND RESERVES OF CRUDE OIL AND OIL PRODUCTS

In 2022, in a context of continuation of the post-pandemic economic recovery, with the Gross Domestic Product (GDP) increasing by 6.7% and surpassing the pre-pandemic level, the total volume of oil products introduced for consumption in Portugal increased by 17.1%, to 8.16 million tonnes (Mton), close to the 2019 level. All the oil products categories showed increases, particularly the B category (diesel and jet), of 18.8%, and the A category (gasoline), of 14.2%, while the C category (fuel oil and liquefied petroleum gas) rose more moderately, by 7.0%.

The sustained economic growth, with GDP increases of 2.5% in the first quarter 2023 (1Q2023) and 2.3% in 2Q 2023, led to a 9% increase of total volume of oil products introduced for consumption in Portugal in the 1H 2023. A and B oil products categories continued to drive the increase (10.1% and 9.1% respectively).

The volume mix of oil products introduced for consumption in Portugal slightly changed in 2022 and in 1H 2023. The B category accounted for 78.6% of the total in 2022 (77.4% in 2021) and 78.7% in 1H 2023 (78.7% in 1H 2022). The A category accounted for 13.4% (13.7%) and 13.2% (13.1%), while the C category decreased to 8.1% (8.8%) and 8.1% (8.3%) respectively.

As legally defined, the increase in the total volume of oil products introduced for consumption in Portugal in 2022 only impacts the calculation of the required oil products emergency reserves level in the 2H 2023 and in the 1H 2024.

It should be noted that the conflict between Russia and Ukraine, had no impact, so far, on the European regulation of reserves of crude oil and oil products. In addition, up to now, there was no need to use the national emergency reserves of oil and oil products in Portugal. Therefore, there was no change of the physical reserves owned by the company in 2022 and in the elapsed period of 2023.

ENSE maintains a flexible model of reserves, combining a level of physical reserves owned by the company for the long term and CSO tickets (Compulsory Stockholding Obligation) - short-term contracts that the company buys in the market (usually from European peers with excess of physical reserves) - as required to achieve the necessary level of emergency reserves. The level of physical reserves covered a large part of the needs, and the company just had to adjust the level of CSO tickets.

As a rule, the calculations of the required emergency reserves are only carried out at the end of the year, although their evolution is monitored by ENSE during the year. Thus, the analysis of ENSE's own physical reserves in the table below is reported as at the end of 2022.

ENSE's own physical reserves remained at 0.94 Mton at the end of 2022, while its reserves expanded under CSO Tickets increasing by 42.1% to 0.2 Mton. This increase of CSO Tickets was related with the expansion of the emergency reserves of crude oil and oil products, because of the rise in the total volume of oil products introduced for consumption in Portugal in the post pandemic context (this evolution is a proof of the flexibility of the physical reserves + CSO Tickets model used by the company). CSO Tickets are contracted according to market demand for ENSE to replace the oil market operators (namely small oil operators). As usual, strategically, ENSE acquired in advance CSO Tickets. ENSE continued to present substantial headroom between its own reserves and the legally required strategic reserves, with significant headroom in all categories, allowing ENSE to continue to replace part of the operators' own obligation.

The analysis of the composition of the reserves held by ENSE at the end of 2022 shows that: ENSE continues to own the majority of the reserves in physical products, although its share of total decreased to 81.4% (from 86.1% in 2021). The remainder was contracted under CSO Tickets (that increased as abovementioned). The totality of ENSE's own physical reserves continue to be stored in Portugal, according to applicable regulation, while the 18.6% of reserves contracted under CSO tickets were stored outside Portugal (in European countries with highly reputed entities). Finished products, without considering the CSO Tickets, accounted for 42.7% of the total stocks (this percentage was 34.7% considering the CSO Tickets) i.e. in both cases above the one third required by law. The percentage of finished products does not represent a concern in ARC's view, given there is oil refining capacity installed in Portugal. In addition, according to ENSE most reserves owned directly by oil market operators are finished products.

The storage of ENSE's own reserves in Portugal continued to be carried out under agreements with Galp Energia (mostly stored near Galp Energia's oil refineries in Sines, in the South of Portugal, and in Matosinhos, near Porto in the North of Portugal), and with the Portuguese Government (for the POL NATO deposits near Lisbon, which initially served to supply North Atlantic Treaty Organization operational assets). ENSE continues to study

ENSE'S RESERVES OF CRUDE OIL AND OIL PRODUCTS (IN TONNES AT END OF THE PERIOD)

	FYE Dec 2018	FYE Dec 2019	FYE Dec 2020	FYE Dec 2021	FYE Dec 2022
OWN RESERVES	938,603	938,459	938,476	938,483	938,483
CRUDE OIL	538,082	538,082	538,082	538,082	538,082
GASOLINE	51,400	51,400	51,400	51,400	51,400
DIESEL	298,122	297,978	297,994	298,001	298,001
FUEL OIL	45,000	45,000	45,000	45,000	45,000
LPG	6,000	6,000	6,000	6,000	6,000
OTHER	0	0	0	0	0
UNDER CSO TICKETS (*)	301,500	356,250	363,500	151,000	214,500
CRUDE OIL	246,500	320,000	363,500	151,000	214,500
GASOLINE	0	30,000	0	0	0
DIESEL	55,000	0	0	0	0
FUEL OIL	0	6,250	0	0	
LPG	0	0	0	0	0
OTHER	0	0	0	0	0
TOTAL ENSE'S RESERVES	1,240,103	1,294,709	1,301,976	1,089,483	1,152,983
CRUDE OIL	784,582	858,082	901,582	689,082	752,582
GASOLINE	51,400	81,400	51,400	51,400	51,400
DIESEL	353,122	297,978	297,994	298,001	298,001
FUEL OIL	45,000	51,250	45,000	45,000	45,000
LPG	6,000	6,000	6,000	6,000	6,000
OTHER	0	0	0	0	0
TOTAL ENSE'S RESERVES - FINISI	993,603				
TOTAL ENSE'S RESERVES IN DAYS OF CONSUMPTION					
GASOLINE	48	60	51	53	53
DIESEL	50	49	50	54	54
OTHER	54	60	59	59	63

Notes: (*) CSO Tickets = Compulsory Stockholding Obligation Tickets, which are international contracts for the maintenance at order of oil reserves owned by third parties.

Source: ENSE.

storage alternatives with the goal of further reducing the operational cost structure of storing reserves of crude oil and oil products and reduce the dependence on Portuguese refining capacity. However, this cost reduction goal will always be subordinated to the company main priorities: the safety and quality of products and conditions of use in case of need.

The maintenance of the quality of oil reserves stored under the agreements with Galp Energia is ensured by this company, while the quality of diesel reserves stored in POL NATO deposits is monitored by an external entity, the Bureau Veritas - Oil & Petrochemicals Laboratory.

Storage costs, which are passed on to the oil market operators, are updated based on the inflation rate of the previous year.

The annual utilisation fee paid for the POL NATO deposits can be reduced if the difference is spent by ENSE in the management and improvement of this infrastructure. Under this agreement ENSE has the obligation to make additional investments. The investment carried out in 2022 was EUR 0.5 million (EUR 0.7 million carried out in 2021), to prepare the POL NATO deposits for the rotation of diesel. The company plans to invest EUR 4.0 million in the POL NATO installations, which will allow significant improvements in the conditions of those strategic facilities, providing them with greater operational, maintenance and mobilization capacity. ENSE plans to finance these investments with its own funds (more than enough considering the strong liquidity position at the end of June 2023) and aims to start this investment as soon as possible.

ENSE'S OPERATIONAL PERFORMANCE

ENSE's 2022 financial statements were audited by Vitor Almeida & Associados, SROC Lda. without qualifications.

ENSE's revenues moderately decreased by 2.9% in 2022, to EUR 26.3 million. In opposite, in the 1H 2023 the company's revenues have grown by 34.9% year-on-year, to EUR17.6 million. Its main activity (holding and managing reserves of crude oil and oil products) driven ENSE's revenues evolution, accounting for 98.4% of total revenues in 2022 and 99.5% in the 1H 2023. ENSE's revenues from its main activity corresponds to the recovery of its expenses on this activity (operating and financing expenses) from oil market operators (see below for the respective ratings of these counterparties). The amounts to be received monthly are calculated every year based on the expenses forecasted by ENSE with the aim to have a net profit in this activity tending to zero (except for gains or losses in the valuation or in the sale of reserves). Its main revenue decreased by 3.0% in 2022, related to the reduction of CSO Tickets sales to the main oil market operators (at their request), but jumped by 40.1% in the 1H 2023. This significant increase in the 1H 2023 was driven by CSO Tickets sales raise, by the increase of emergency reserves following a recovery in total volumes of oil products introduced for consumption in Portugal, and by the higher value of expenses to be recovered (impacted by the expected high inflation and interest rates increase). ENSE's other revenues come from its other duties, and it aims to cover its expenses with them. These revenues included EUR 0.4 million in 2022 for the issuing of biofuel tickets, stabilizing compared with 2021 figure (biofuel tickets are a mechanism to facilitate the control of the compliance with the obligation to incorporate biofuels in fuels), and other fees.

ENSE's turnover continues to be mainly originated from the leading distributors of oil products in Portugal. In 2022 the five main customers accounted for 79.3% of its total turnover (compared with 74.4% in 2021). The increase was due to the higher need to purchase CSO Tickets with impact on the breakdown of ENSE's total turnover by its main customers, as indicated below:

- Repsol (21.8%; 20.2%), which is not rated by ARC (BBB+ / Stable / A-2 by S&P Global Ratings (S&P); Baa1 / Stable / P-2 by Moody's Investors Service, Inc. (Moody's); and BBB+ / Stable / F1 by Fitch Ratings, Inc. (Fitch));
- Galp Energia (20.4%; 16.2%), the market leader; Galp Energia is not rated; Galp Energia is also ENSE's main provider of oil reserves storage;
- BP p.l.c. (19.7% in 2022; 21.2% in 2021), which is not rated by ARC (A- / Positive / A-2 by S&P; A2 / Positive by Moody's; and A / Positive / F1+ by Fitch);
- Prio Supply, S.A. (8.8%; 8.3%), a Portuguese company, but not rated; and
- CEPSA (8.6%; 8.5%) which is not rated by ARC (BBB- / Negative / A-3 by S&P; Baa3 / Stable by Moody's; BBB- / Stable by Fitch).

ENSE's operational expenses mainly comprise supplies and services and staff costs. In 2022, supplies and services reached EUR 19.0 million, a 5.9% increase compared with 2021 figure, notwithstanding a decrease of subcontractors' costs related to the acquisition of CSO Tickets (by 45.9%, to EUR 0.6 million), mainly due to the increase of oil reserves storage costs (by 8.1%, to EUR 16.1 million). On the contrary, exceptionally the staff costs decreased by 10.4%, to EUR 2.2 million, because of a temporary reduction of staff, including the previous President from 30 April 2022. The company's internal skills and resources still allow it to replace some external specialized services. In the 1H 2023, supplies and services increased year-on-year by 28.2%, mainly because of higher costs related to the acquisition of CSO Tickets (increasing to EUR 2.0 million, from EUR 0.2 million) and 8.3% growth of storage costs (to EUR 8.6 million). In turn, staff costs declined by 8.7% year-on-year, to EUR 1.0 million, still reflecting the temporary reduction of staff (that was meanwhile normalized).

In 2022, following the trend set since 2019, there was an absence of rotation of diesel stocks in the POL NATO infrastructure, because of the existing operational constraints of the infrastructure. However, thanks to the very good storage qualities of this infrastructure, these diesel stocks still meet the quality requirements.

In 2022 the company recorded impairment costs, net of reversal of impairment, of EUR 0.8 million to fully cover doubtful customers (small market operators) and in the 1H 2023 it recorded a small reversal of impairment. To solve this problem, in 2023 the company has been negotiating agreements with these clients.

ENSE - FINANCIALS AND RATIOS I/II (THOUSAND EUROS)

	FYE Dec 2018	FYE Dec 2019	FYE Dec 2020	FYE Dec 2021	FYE Dec 2022	1H 2022	1H 2023	2023 (F)
TURNOVER	24,266	26,116	28,514	27,064	26,278	13,031	17,579	39,034
EBITDA	2,958	4,938	6,352	6,682	5,024	2,584	4,565	7,823
EBIT	(23,684)	48,971	(69,894)	86,710	3,816	2,489	4,375	7,411
FINANCIAL RESULT	647	654	276	(35)	(1,191)	(18)	(4,844)	(7,396)
NON-CURRENT RESULTS	(20)	(4,745)	(5,639)	(6,543)	(2,453)	(1,226)	0	0
NET PROFIT	(23,386)	44,862	(75,272)	80,115	162	1,244	(469)	15
OPERATING CASH FLOW (OCF)	3,219	5,439	6,287	7,118	3,094	414	1,220	5,723
CASH FLOW	3,372	5,945	6,968	7,235	3,068	395	(250)	(1,636)
FREE CASH FLOW	2,690	5,149	16,764	6,228	2,360	166	(294)	(7,270)
Contribution Margin (%)	18.5%	24.6%	27.8%	33.7%	27.7%	28.3%	31.8%	27.2%
EBITDA Margin (%)	12.2%	18.9%	22.3%	24.7%	19.1%	19.8%	26.0%	20.0%
Operating Return on Turnover (%)	(97.6%)	187.5%	(245.1%)	320.4%	14.5%	19.1%	24.9%	19.0%
Net Return on Turnover (%)	(96.4%)	171.8%	(264.0%)	296.0%	0.6%	9.5%	(2.7%)	0.0%
Payout Ratio (%)	0%	0%	0%	0%	0%	0%	0%	0%
Coverage of Interest Costs by EBITDA (x)	79.0	131.9	169.7	178.5	4.1	138.0	0.9	1.1
Coverage of Net Interest Costs by EBITDA (x)	-	-	-	191.3	4.2	141.3	0.9	-

Notes: Figures rounded. Accounts adjusted by ARC Ratings for analysis purposes. 2018 - 2022 annual accounts audited by Vítor Almeida & Associados, S.R.O.C., S.A..The interim accounts are unaudited. *Financial debt net from cash and deposits and also from investments in debt securities issued by the Portuguese Government. **Assumed by oil operators, not ENSE. n.av. = Not available ; F = Forecasts.

Source: ENSE.

The oil price volatility (an external factor) impacted ENSE's financial statements due to the book value of its reserves being recorded at the lower of its market value or the acquisition cost. Despite the fact that the price of oil was higher at the end of 2022 than it was at the end of 2021, the value of reversal of impairment was low (EUR 0.4 million), as it achieved the acquisition cost. Usually, ENSE only records an impairment loss or reversal of prior impairment losses in its inventories at the end of the year which limits the comparison between the annual and semi-annual accounts. However, in the 1H 2023 this impact would not have been significant, equivalent to c. EUR 1.2 million impairment due to an oil price decrease trend in the 1H 2023.

In 2022, ENSE increased the provision fund by EUR 2.5 million (EUR 6.5 million in 2021). For 2023 there won't be any increase in the provision fund as the company balanced the significant cost increases that the market operators have to accommodate, related with inflation, higher interest rates and acquisition of CSO tickets (following the recovery of the volume of oil products introduced for consumption), with the already significant level of the provision fund. Therefore, in the 1H 2023 there was no increase in the provision fund, compared with EUR 1.2 million done in the 1H 2022. As aforementioned, excluding the possible impairment (or reversal of impairment) on the book value of its reserves, the net profit of its main activity tends to be close to zero. ARC Ratings considers the provision fund credit positive and the costs of the provision fund as non-current, not affecting EBITDA and EBIT.

INTEREST COSTS AND COVERAGE RATIO

In 2022, in the context of increasing 6-months Euribor (it was still negative during the first five months of the year, but ended the year at 2.7%), interest expenses, rose to EUR 1.2 million (from EUR 0.04 million in 2021, a year when ENSE only paid fees and effectively no interest due to the negative floating rate). Note that the interest rate of ENSE's bond issuance is floored at 0% and is not capped, and the interest settlement dates are the beginning of February and of August. This increase will be sharply higher in 2023, reflecting the continuation of the rise in the 6-months Euribor rate. In the 1H 2023 interest expenses were already four times higher than what was recorded in the full year of 2022 (EUR 4.8 million in 1H 2023). The interest gains from the investments in debt securities issued by the Portuguese Government were almost nil in 2022, due to very low interest rate, therefore the financial result matched interest costs, as mentioned above (EUR -1.2 million). Similarly, in the 1H 2023 the financial result continued to deteriorate to EUR -4.8 million, due to increasing interest expenses and close to nil interest gains. Consequently, the coverage of interest and other associated bond costs (fees) by EBITDA deteriorated significantly to 4.1 times in 2022 (compared with 178.5 times in 2021) and to 0.9 times in the 1H 2023. However, considering that the company has meaningful cash and deposits of EUR 8.6 million and EUR 65.0 million of short-term investments in debt securities issued by the Portuguese Government as of June 2023, there is no liquidity risk. Also note that ENSE will be passing finance costs on to the market operators, as per its business model.

NET PROFIT

ENSE recorded a EUR 0.2 million net profit in 2022 (compared with EUR 80.1 million in 2021) mainly due to the significant decrease of the reversal of impairment on its reserves. Thus, the impact of the oil price volatility continued to be crucial for the level and volatility of the company's results, but the relevance of this volatility is clearly subdued by the strategic nature of its activity and the reason why it maintains oil products stockholdings for the long term. In the 1H 2023 the company presented EUR 0.5 million losses, in opposite to EUR 1.2 million net profit in the 1H 2022. These losses occurred as a result of higher increase in costs, namely from higher inflation than budgeted, than the increase in revenues and despite no increase in the provision fund. As mentioned before, the 1H results don't reflect any impact from impairment or reversal of impairment on the company's reserves.

Since 2016, under the Law 7-A/2016, ENSE's profits on the activity of managing strategic reserves of oil products became exempt of corporate taxes.

ENSE - FINANCIALS AND RATIOS II/II (THOUSAND EUROS)

	FYE Dec 2018	FYE Dec 2019	FYE Dec 2020	FYE Dec 2021	FYE Dec 2022	1H 2022	1H 2023	2023 (F)
RESERVES' BOOK VALUE	322,727	368,021	293,137	374,288	374,646	374,274	374,646	374,288
RESERVES' MARKET VALUE	327,926	435,007	293,310	492,555	594,228	875,353	507,897	n.av.
TOTAL ASSETS	381,729	430,955	362,651	450,464	454,397	451,852	460,416	452,978
NET WORKING CAPITAL (NWC)	364,383	413,806	354,803	440,886	443,719	443,356	443,442	438,469
NET WORKING CAP. REQUIREMENTS (NWCR)	323,294	366,966	292,199	373,760	374,745	374,911	378,253	376,736
NET CASH POSITION (NCP)	41,089	46,840	62,603	67,126	68,974	68,445	65,189	61,733
FINANCIAL DEBT	359,632	359,675	359,716	359,758	360,982	359,780	364,357	359,849
NET FINANCIAL DEBT*	305,716	300,608	294,343	288,152	287,010	288,012	290,684	285,831
RESERVES' MARKET VALUE / FINANCIAL DEBT	0.91	1.21	0.82	1.37	1.65	2.43	1.39	n.av.
RESERVES' MARKET VALUE / NET FINANCIAL DEBT	1.07	1.45	1.00	1.71	2.07	3.04	1.75	n.av.
Operating Return on Assets (%)	(6.2%)	11.4%	(19.3%)	19.2%	0.8%	1.1%	1.9%	1.6%
Gross Cost of Borrowed Funds (%)	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	2.6%	2.0%
Financial Debt / EBITDA (x)	121.6	72.8	56.6	53.8	71.9	69.6	39.9	46.0
Net Financial Debt/ EBITDA (x)	103.4	60.9	46.3	43.1	57.1	55.7	31.8	36.5
CASH FLOW Coverage of Net Financial Debt (%)	1.1%	2.0%	2.4%	2.5%	1.1%	0.3%	(0.2%)	(0.6%)
Equity / Assets (%)	4.3%	15.3%	(1.0%)	18.4%	18.8%	18.9%	18.5%	18.8%
Financial Debt Struc. (S.T. Fin. Debt as a % of Total Fin. Debt)	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	1.2%	0.0%
LIQUIDITY RISK (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest-Rate Risk (%)**	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes: Figures rounded. Accounts adjusted by ARC Ratings for analysis purposes. 2018 - 2022 annual accounts audited by Vitor Almeida & Associados, S.R.O.C., S.A..The interim accounts are unaudited. *Financial debt net from cash and deposits and also from investments in debt securities issued by the Portuguese Government. **Assumed by oil operators, not ENSE. n.av. = Not available ; F = Forecasts.

Source: ENSE.

FINANCIAL POLICY

ASSETS AND LIABILITIES

At the end of June 2023 ENSE's assets raised to EUR 460.4 million, primarily due to the increase in accounts receivables in the 1H 2023.

Oil reserves continued to be the main asset of ENSE, valued at EUR 374.6 million in June 2023.

The total amount of cash and deposits and short-term investments in debt securities issued by the Portuguese Government increased to EUR 73.6 million in June 2023 (EUR 71.6 million in December 2021), being ENSE's second biggest asset. EUR 60.9 million of which was for the coverage of the provision fund managed by the company, while the remainder EUR 12.7 million is free to use, namely, to finance the company's investments related to its current duties.

Receivables related to doubtful customers increased to EUR 3.5 million in December 2022 and stabilized in the 1H 2023, compared with EUR 2.7 million in June 2022, comprising of small oil market operators and remained fully covered by impairments. As mentioned before, ENSE is taking measures to recover this value, including negotiating payment agreements with these operators.

Current assets accounted for 99.6% of total assets (same as in December 2021).

In 2022 the company carried out EUR 0.7 million investment, a decrease compared with EUR 1.0 million in 2021, mostly concentrated in the POL NATO infrastructure. Investment in the 1H 2023 was very low, as usual in the company's first half of the years.

ENSE continued to show positive free cash flow in 2022, allowing it to reinforce its cash and deposits and investments in debt securities issued by the Portuguese Government. In the 1H 2023 the cash flow was negative, due to the big increase in interest paid and the delay in adjusting the market operators monthly instalment payment to the 2023 value.

FINANCING AND COVERAGE OF DEBT BY RESERVES

ENSE's debt level remains unchanged, still comprising solely the bond issuance that is rated in an amount of EUR 360 million, maturing in 2028. As abovementioned, this loan was contracted to finance the investment in oil reserves and thus the respective interest costs are recovered from oil market operators.

Thanks to the continued increase of cash and deposits and investments in debt securities issued by the Portuguese Government, ENSE's net financial debt has shown a decreasing trend until the end of 2022. However, it has now increased to EUR 290.7 million in June 2023 (a 1.3% increase compared to December 2022) due to increased interest expense, which stands as a current liability on the company's balance sheet.

The oil price volatility significantly impacted ENSE's reserves' market value and the coverage of debt and net financial debt by reserves. Therefore, according to information provided by the company, the coverage of its debt by reserves improved to 1.65 times in December 2022, from 1.37 times in December 2021. The coverage of the company's net financial debt by reserves also increased to 2.07 times, comparing with 1.71 times in December 2021. With the oil price decrease in the 1H 2023, these coverage ratios significantly dropped to 1.39 times and 1.75 times in June 2023.

To provide additional insight and enable useful comparison, the coverage ratios (financial debt by reserves) of two of ENSE's European peers, which have the same main strategic role and strong control from States, were also evaluated:

- The Spanish entity - Corporación de Reservas Estratégicas de Productos Petrolíferos (CORES) - which manages Spanish strategic oil reserves of petroleum products and assures oil and gas market had a coverage ratio of 3.37 times at the end of 2022 (3.43 times the net financial debt), an improvement compared with 2.52 times at the end of 2021 (2.55 times the net financial debt). CORES is not rated by ARC, being rated A/Stable/A-1 by S&P (the same level assigned to the sovereign), A-/Stable/F1 by Fitch (also the same level assigned to the sovereign).
- The French entity - Société Anonyme de Gestion de Stocks de Sécurité (SAGESS) - established on the initiative of oil French operators and under the aegis of public authorities with the purpose of building up and stockpiling strategic oil reserves improved the coverage ratio to 2.34 times at the end of 2022 (same for the net financial debt) from to 1.71 times at the end of 2021 (1.74 times the net financial debt). SAGESS is also not rated by ARC, being rated AA/Negative/A-1+ by S&P (the same level assigned to the sovereign).

CAPITAL STRUCTURE, LIQUIDITY, AND INTEREST RISK

The oil price volatility also has an accounting impact on ENSE's equity, through the full year net profit. The provision fund, also recorded in equity, was reinforced to EUR 60.9 million in 2022, from EUR 58.5 million in 2021. As above mentioned, the provision fund remains in EUR 60.9 million in June 2023, when the ENSE's equity was EUR 85.0 million. The oil prices drop in the 1H 2023 was not recognized in the company's equity at the end of June 2023, because the company only reflects the impact of the oil price changes on the value of its reserves at the end of each year (and caps that reflection on the cost of the reserves, that is, it doesn't reflect potential gains). However, if it had been reflected the impact would have been limited to a EUR 1.2 million decrease.

The equity / assets ratio of ENSE was 18.8% in 2022, a small improvement compared with 18.4% in 2021, and somewhat decreased to 18.5% in June 2023.

Considering the long-term maturity of the bond (due on 6 August 2028) and the significant value of cash and deposits and short-term investments, ENSE's liquidity risk is still virtually nil. The bond bears interest indexed to 6-months Euribor, with no floor, plus a spread of 0.12% until 7 August 2023 and 0.14% thereafter until the maturity. Thus, due to the negative values for EURIBOR for a long period, ENSE has not paid interest since February 2016 until August 2022. On contrary, in a context of continued interest rate increases, the company paid EUR 1.5 million in February 2023 and EUR 4.8 million in August 2023. In the next coupon due in February 2024

the company will pay interest considering the 6-months Euribor on 4 August 2023 plus the spread (0.14%), of circa EUR 7.3 million. However, as mentioned before, the interest costs of the bond are recovered from oil market operators and, thus, this risk is not assumed by ENSE.

INSURANCE

The prevailing legal framework requires the reserves held by ENSE to be protected by suitable insurance. Oil products owned by ENSE and stored in the POL NATO deposits are adequately covered by a multiple risks policy, including environmental risks. The insurance coverage of oil products owned by ENSE that are stored with Galp Energia is contracted by Galp Energia and the respective cost included in the storage costs paid by ENSE.

ENSE also maintains insurance policies covering its exploration civil liability and environmental liability. The entirety of its mentioned insurance policies was provided by Fidelidade - Companhia de Seguros, S.A., which is rated A (Insurer Financial Strength) and A- (Long-Term Issuer Default Rating), Stable outlooks, by Fitch.

ARC Ratings is not aware of any significant contingent liability of the company at the end of June 2023.

FORECASTS

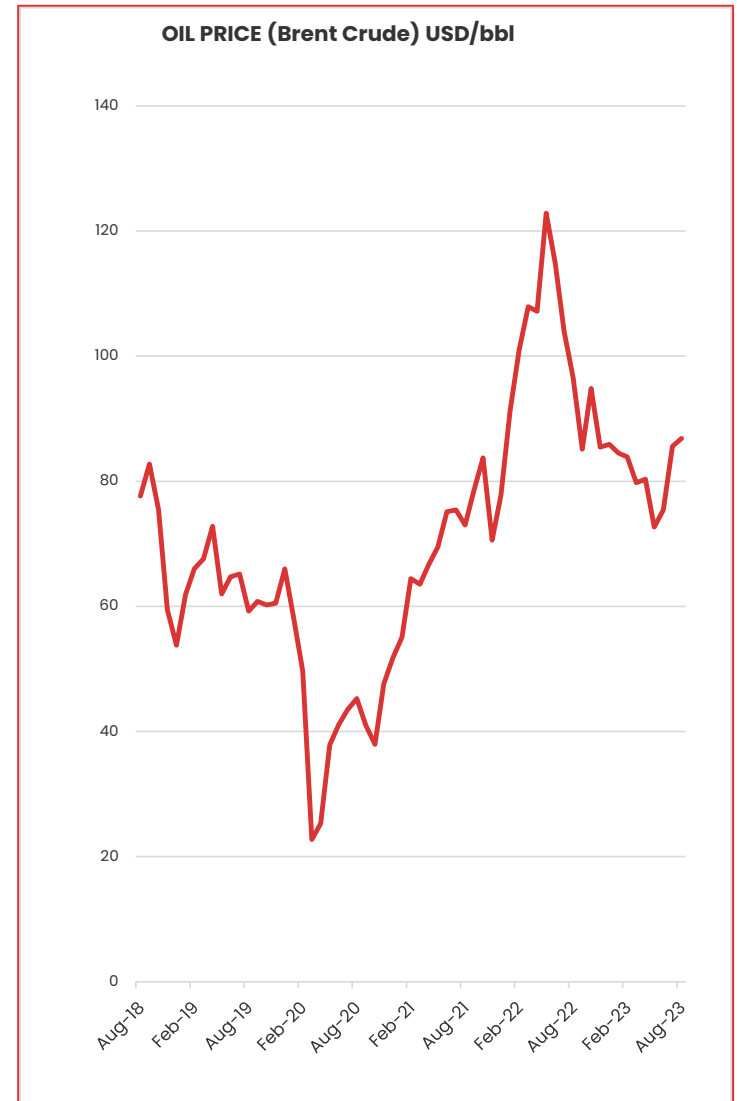
ENSE's 2023 budget prepared in October 2022, based on the 2022 estimates, was not yet approved, but it has been guiding the company's activity in 2023.

The 2023 budget considered the ENSE's duties before its recent extension to the natural gas strategic reserves. Regarding its main activity, it considered a 40.5% turnover increase, to EUR 36.3 million. Operational costs were expected to increase by 19%, because of projected growth of suppliers costs from the update of storage costs (by 4.7%, to EUR 16.6 million), higher acquisition costs of CSO Tickets (increasing to EUR 5.5 million, from EUR 0.6 million, due to higher quantities and prices, in a context of demand increase) and the start of diesel stocks rotation stored in POL NATO infrastructure (EUR 1.0 million operational cost, but it won't be implemented in 2023). Financial results were expected to be EUR -7.4 million, translating the interest rate hiking, but the actual interest expenses in 2023 will be even higher, c. EUR -12.0 million. This deviation from forecast is expected to be mostly offset by cost savings in other areas, with the company expecting to reach a net profit close to zero (without considering any effect of impairment/reversal of impairment in the book value of its reserves).

ENSE's 2024 budget is still in preparation and, therefore, is not available to be incorporated in the current review report. Still, the general principles that underlie this budget are the same of the previous budgets: achieve the equilibrium between income and costs in its activities (without considering the impact of any change in the book value of its reserves).

ENSE's net profit and the coverage of the company's net financial debt by the market value of its reserves depends on two key external factors: oil price and the EUR/USD exchange rate.

According to the World Bank Commodities Price Data, the average oil price (Brent crude) after having registered a 41.8% recovery in 2022, to 99.8 USD/bbl, presented a decrease trend in the 1H 2023. In July 2023, the monthly average showed some recovery compared with the previous months and for the full 2023 the World Bank forecasted an average of 84.0 USD/bbl, considering that



Source: Bloomberg.

the economic recovery in China will support demand growth in 2023-2024, while supply will be slower to pick up due to the Organization of the Petroleum Exporting Countries (OPEC) production quotas and limits on capacity in most other regions.

The EUR/USD exchange rate continued to show a downward trend, with fluctuations, in 2022 (to 1.07 on 31 December 2022, from 1.13 on 31 December 2021). There was some recovery in the elapsed time of 2023.

While not expected in the short-term, the possible significant unfavourable evolution of the market value of reserves in euros would have a negative accounting impact on the company's equity, and related ratios, but no impact on its cash flow, given that it does not trade in oil products. Although trading in oil products is not part of the company's activities, oil reserves may need to be partially sold to respond to any strategic need or, in the long term, as a result of lower consumption of oil products due to the energy transition trend. Above all, ENSE's credit quality is mainly dependent on the Portuguese Government's credit quality, given its sole ownership of ENSE and its ultimate responsibility for ENSE's liabilities defined by law, as well as the strategic goal the company has in the Portuguese oil market, a role assigned by the government. However, it should be noted that no formal guarantee is in place.

As mentioned before, the extension of ENSE's duties to the natural gas strategic reserves will follow a similar business model to the oil products strategic reserves activity (the market operators will bear the costs), but there are still several relevant aspects that need to be defined. Therefore ARC doesn't expect this new duty to have a material impact in ENSE in the short term. The evolution of the definition of these aspects and the implementation of this new duty will be closely monitored by ARC.

ISSUANCE CONDITIONALITY

The rating assigned applies specifically to the EUR 360.0 million bond issued by ENSE (under its previous name of EGREP - Entidade Gestora de Reservas Estratégicas de Produtos Petrolíferos, E.P.E.) on 6 August 2008, with these main terms:

- A 20-years maturity with full repayment of principal at maturity, which will occur on 6 August 2028.
- Variable interest rate at EURIBOR 6 months + 0.12% until 7 August 2023. This spread slightly increased to 0.14% until the maturity.
- The possibility of full but not partial early redemption at the issuer's initiative, on 7 August 2023 (option not taken), or: "in the event the following circumstances occur cumulatively:
 - o change, after the issue date, of tax regulations applicable in Portugal, or change in the official application or interpretation of such regulations, that impose upon the issuer the obligation to pay additional sums other than foreseen in the contractual documentation;
 - o the issuer is unable to avoid the referred imposition by taking measures available to it for the purpose, within reasonable criteria".
- Early redemption, among others, in the following cases:
 - o if the Portuguese Government ceases to hold, directly or indirectly, the entire share capital and voting rights of the issuer, or if the issuer ceases to have the legal status of an "entidade pública empresarial" (State corporate entity);
 - o if any change in the issuer's legal framework eliminates or restricts the Portuguese Government's current obligation to assume losses arising from the liquidation of assets, as well as any residual responsibilities;
 - o non-performance of pari passu and/or negative pledge clauses;
 - o change in the 0% weighting attributed by the Bank of Portugal to the liabilities of credit institutions to the issuer for the purpose of calculating the solvency ratio and the limits to major exposures.

RELATED CRITERIA AND RESEARCH

ARC Ratings' Non-Financial Corporate Entities Rating Methodology

Entidade Nacional para o Setor Energético, E. P. E. Initial Rating Report (2 June 2008)

Entidade Nacional para o Setor Energético, E. P. E. Previous Rating Report (13 September 2022)

PERIOD OF ANALYSIS AND INFORMATION ANALYSED

PERIOD OF ANALYSIS

Historic: 2018 to 1H 2023

Forecast: 2023

INFORMATION ANALYSED

Entidade Nacional para o Setor Energético, E.P.E. Annual Reports and Audited Accounts – 2018 to 2022

Entidade Nacional para o Setor Energético, E.P.E. 1H 2022 and 1H 2023 Interim Accounts

Entidade Nacional para o Setor Energético, E.P.E. 2023 Forecasts

Details on Entidade Nacional para o Setor Energético, E.P.E.'s Reserves

World Bank's Commodity Markets Outlook

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