Air Liquide S.A.

Republic of France, Chemicals

Rating composition

Business Risk Profile		
Industry risk profile	A	A+
Competitive position	A+	
Financial Risk Profile		
Credit metrics	A-	A-
Liquidity	+/-0 notches	
Standalone credit assessment		**A**
Supplementary rating drivers		
Financial policy	+/-0 notches	+/-0 notches
Governance & structure	+/-0 notches	
Parent/government support	+/-0 notches	
Peer context	+/-0 notches	
Issuer rating		**A**

Key metrics

			Scope estimates	
Scope credit ratios*	**2023**	**2024**	**2025E**	**2026E**
Scope-adjusted EBITDA interest cover	18.4x	18.6x	20.2x	17.1x
Scope-adjusted debt/EBITDA	1.5x	1.5x	1.4x	1.8x
Scope-adjusted funds from operations (FFO)/debt	54%	56%	56%	46%
Scope-adjusted free operating cash flow (FOCF)/debt	19%	19%	18%	15%
Liquidity	>200%	>200%	>200%	>200%

Rating sensitivities

The upside scenario for the ratings and Outlook is:

- Debt/EBITDA below 1.5x on a sustained basis

The downside scenarios for the ratings and Outlook are (collectively):

- Debt/EBITDA above 2.0x on a sustained basis
- A deteriorating business risk profile, e.g. through sustained pressure on operating profitability

*All credit metrics refer to Scope-adjusted figures.

Issuer
A

Outlook
Stable

Short-term debt
S-1

Senior unsecured debt
A

Lead Analyst

Mikel Zabala
m.zabala@scoperatings.com

Related methodologies

General Corporate Rating Methodology, Feb 2025
Chemicals Rating Methodology, Jun 2025

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1. Key rating drivers

Positive rating drivers	Negative rating drivers
• Position as a top industrial gas player globally provides substantial pricing power, operational leverage, and market influence, which support resilient cash flows across economic cycles • Strong diversification, as demonstrated by the company's broad global footprint, balanced production capacity across regional markets, and diversity of product lines and end-market exposures • Stable industrial gas demand across multiple sectors, including healthcare, electronics, and energy, supports predictable and recurring cash flow generation • Consistently strong EBITDA margins and high returns on capital employed underscore the company's operational efficiency and its ability to generate robust financial returns • Disciplined financial policy, reinforced by a public commitment to maintaining an 'A range' credit rating	• Significant portion of revenue (around 55% according to our estimates) from cyclical industries, exposing the company to fluctuations in economic activity, but contractual protection clauses help moderate margin volatility • Cash flow coverage can be constrained by above-normal growth capex, as substantial reinvestment in expanding project portfolio may temporarily limit financial flexibility • Recent acquisition of DIG in South Korea increases leverage and temporarily reduces pre-existing financial headroom

2. Rating Outlook

The **Stable Outlook** reflects our expectation of debt/EBITDA between 1.5x and 2.0x once the DIG acquisition is completed, while rising capex and shareholder distributions are supported by continued EBITDA growth.

3. Corporate profile

Specialty chemicals company

Air Liquide S.A., founded in 1902 and headquartered in Paris, is a global leader in industrial gases and related services. It operates in 60 countries, serving more than 4 million customers and patients across industries such as chemicals, metals, refining, electronics, healthcare, food, and energy.

Operating across four large divisions

The company operates through four primary business segments. Large Industries delivers bulk industrial gases via long-term contracts and pipeline networks to major players in metallurgy, refining, chemicals, and energy. Industrial Merchant supplies gases in small or medium volumes (cylinders, on-site generators, bulk) to a broad base of customers across many sectors. Healthcare provides medical gases, equipment, and services both in hospitals and for at-home use, supporting chronic care and respiratory therapy. The fourth segment, Electronics, focuses on ultra-high-purity gases, advanced molecules, and technical solutions for semiconductor, flat-panel, and photovoltaic manufacturers. Beyond these, Engineering & Construction designs and builds air-separation units, hydrogen plants, and other major industrial gas infrastructure, while Global Markets & Technologies develops cutting-edge technologies for energy transition (e.g. hydrogen, biomethane) and deeply technical markets such as space and deep science.

4. Rating history

Date	Rating action/monitoring review	Issuer rating & Outlook
2 Dec 2025	Outlook change	A/Stable
20 Dec 2024	Monitoring review	A/Positive
2 May 2024	Affirmation	A/Positive
5 May 2023	New	A/Positive

5. Financial overview (financial data in EUR m)

				Scope estimates		
Scope credit ratios	**2022**	**2023**	**2024**	**2025E**	**2026E**	**2027E**
EBITDA interest cover	20.0x	18.4x	18.6x	20.2x	17.1x	17.2x
Debt/EBITDA	1.7x	1.5x	1.5x	1.4x	1.8x	1.7x
Funds from operations/debt	50%	54%	56%	56%	46%	46%
Free operating cash flow/debt	16%	19%	19%	18%	15%	17%
Liquidity	>200%	>200%	>200%	>200%	>200%	>200%
EBITDA						
Reported EBITDA	6,757	7,054	7,451	7,942	8,395	8,640
add: recurring dividends from associates	14	15	18	10	10	10
Other items (incl. one-offs)[1]	463	276	209	-	-	-
EBITDA	**7,234**	**7,344**	**7,677**	**7,952**	**8,405**	**8,650**
Funds from operations (FFO)						
EBITDA	7,234	7,344	7,677	7,952	8,405	8,650
less: interest	(362)	(399)	(414)	(394)	(491)	(504)
less: cash tax paid	(910)	(1,032)	(1,129)	(1,139)	(1,196)	(1,234)
Other non-operating charges before FFO	143	214	161	-	-	-
Funds from operations	**6,104**	**6,128**	**6,295**	**6,418**	**6,719**	**6,912**
Free operating cash flow (FOCF)						
Funds from operations	6,104	6,128	6,295	6,418	6,719	6,912
Change in working capital	(397)	(154)	(155)	(171)	(75)	(67)
Non-operating cash flow	(349)	(290)	(309)	(150)	(150)	(150)
less: capital expenditures (net)	(3,181)	(3,330)	(3,445)	(3,730)	(3,980)	(3,970)
less: lease amortisation	(249)	(240)	(239)	(240)	(240)	(240)
Free operating cash flow	**1,929**	**2,113**	**2,147**	**2,127**	**2,274**	**2,485**
Interest						
Net cash interest per cash flow statement	270	262	264	261	358	371
add: Interest expense on pensions and asset retirement obligations[2]	43	88	83	83	83	83
Other capitalised interest	49	49	67	50	50	50
Interest	**362**	**399**	**414**	**394**	**491**	**504**
Debt						
Reported financial (senior) debt	13,452	12,112	12,448	11,723	14,951	15,098
less: cash and cash equivalents	(1,911)	(1,625)	(1,915)	(1,015)	(1,015)	(1,015)
add: non-accessible cash	155	146	148	148	148	148
add: pension adjustment[3]	419	449	415	415	415	415
add: asset retirement obligations[4]	208	219	229	229	229	229
add: other debt-like items	-	-	-	-	-	-
Debt	**12,322**	**11,300**	**11,324**	**11,499**	**14,727**	**14,874**

[1] Other items are related to gains and losses on the disposals of assets, and to impairments related to the Ukraine conflict (2022)

[2] Net interest exposure of pensions obligations and pension assets

[3] 50% of uncovered pensions after deferred tax asset due to large coverage of annual pension payments by dedicated pension assets

[4] 80% of long-term debt-like provisions

6. Environmental, social and governance (ESG) profile[5]

Environment	Social	Governance
Resource management (e.g. raw materials consumption, carbon emissions, fuel efficiency)	Labour management	Management and supervision (supervisory boards and key person risk)
Efficiencies (e.g. in production)	Health and safety (e.g. staff and customers)	Clarity and transparency (clarity, quality and timeliness of financial disclosures, ability to communicate)
Product innovation (e.g. transition costs, substitution of products and services, green buildings, clean technology, renewables)	Clients and supply chain (geographical/product diversification)	Corporate structure (complexity)
Physical risks (e.g. business/asset vulnerability, diversification)	Regulatory and reputational risks	Stakeholder management (shareholder payouts and respect for creditor interests)

ESG factors: credit-positive credit-negative credit-neutral

No company-specific ESG factors

While we acknowledge that chemicals companies are naturally exposed to environmental and social controversies and could face litigation risk, we have not identified any company-specific ESG factors at this stage that would have a credit impact.

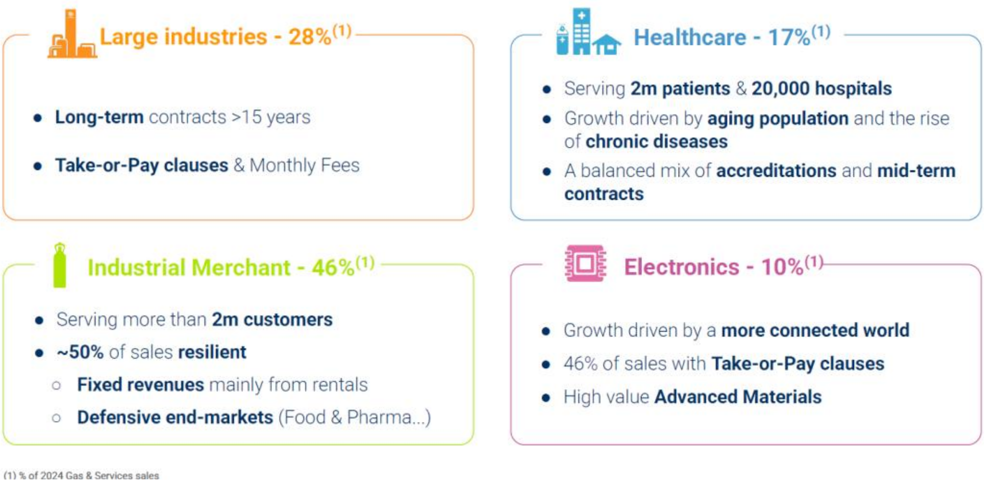
[5] These evaluations are not mutually exclusive or exhaustive as ESG factors may overlap and evolve over time. We only consider ESG factors that are credit-relevant, i.e. those that have a discernible, material impact on the rated entity's cash flow and, by extension, its credit quality.

7. Business risk profile: A+

Second largest company in the industrial gas sector, with substantial entry barriers

Large industrial gases companies like Air Liquide benefit from durable competitive moats, supported by medium cyclicality, high entry barriers, and low substitution risk. Their exposure to a diversified set of end markets, the specialised nature of their products and the tendency for prices to be negotiated individually help stabilise demand and support predictable, long-term cash flows. This stability enables sustained investment in capital-intensive infrastructure such as extensive pipeline networks, air separation units, and hydrogen plants. High capital requirements, stringent safety and regulatory standards, and long project lead times significantly limit new entrants, reinforcing incumbents' strong competitive positions. Furthermore, industrial gases have few viable substitutes, and customer processes are often engineered around suppliers' on-site plants and integrated distribution systems, creating substantial switching costs.

Figure 1: Air Liquide's business divisions overview



Source: Air Liquide

Air Liquide's credit profile is largely supported by its strong position in the concentrated industrial gas market, with a 27% market share based on our estimates. Together, the top three players control around 70% of the market, which reinforces pricing power and allows leading companies to benefit from economies of scale.

Early-mover advantage and scale in a capital-intensive sector provide a robust foundation

The company's leadership is the result of over a century of early entry and continuous expansion, establishing it as a trusted partner. Founded in 1902, Air Liquide was among the first to produce oxygen and other industrial gases at commercial scale, investing early in pipelines and on-site delivery systems for hospitals and industrial customers. These moves helped build an extensive and granular asset base in key industrial areas and to establish strong customer relationships, normally underpinned by long-term take-or-pay contracts. Strategic acquisitions, including North American peer Airgas in 2016, further strengthened the company's global presence. This combination of early-mover advantage and strategic scale provides Air Liquide with a robust foundation that peers find difficult to replicate and compete against.

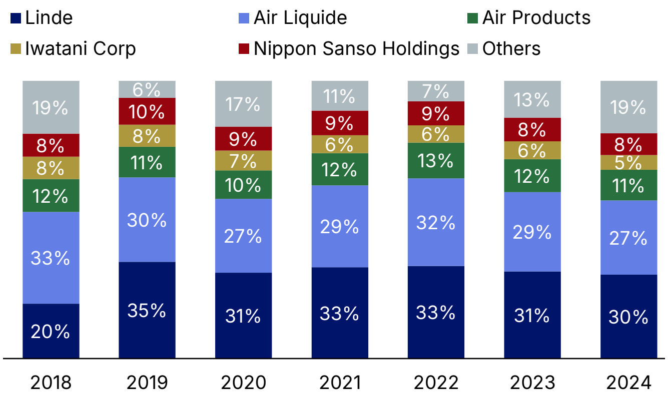
Air Liquide's competitive edge relies heavily on its capital-intensive infrastructure. It operates over 10,000 kilometres of pipelines, complemented by local and on-site production facilities. These assets are concentrated in industrial clusters across Europe, the Gulf Coast of the US, the Mississippi River region, Singapore, Korea, and China. The cluster approach allows Air Liquide to pool production assets, optimise operating costs, and deliver gases reliably at large volumes.

Revenue is well diversified across continents, balancing exposure to US, Europe and Asian markets

Sales are concentrated in industrially developed countries, but overall, Air Liquide's footprint is well balanced and diversified. Across continents, roughly 40% of revenue is from the Americas, 35% from Europe, 20% from APAC, and 4% from the Middle East and Africa. Demand is served locally through more than 600 production units and over 1,000 on-site generation units at customer locations.

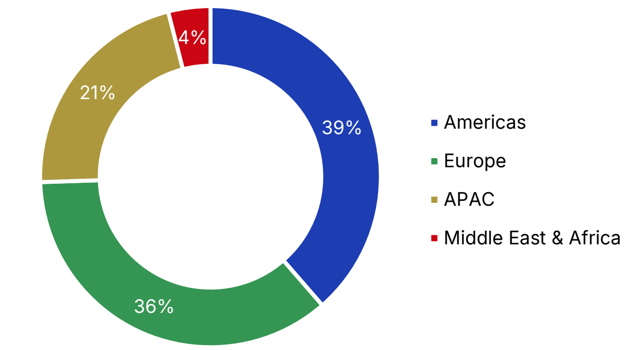
Air Liquide's product portfolio focuses on industrial gases such as oxygen, nitrogen, argon, hydrogen, carbon monoxide, CO2, and specialty gases. Although the range is narrower than that of large chemical peers, the same gases are used across many different applications. Product variety also comes from the delivery methods (e.g. pipeline networks for large industrials, on-site production for large-demand sites, cylinder or tanker delivery for small/medium industrials and healthcare use).

Figure 2: Market shares for the global industrial gas market



Sources: Scope estimates based on individual company reports

Figure 3: Revenue split 2024 (Pro-forma for DIG acquisition)



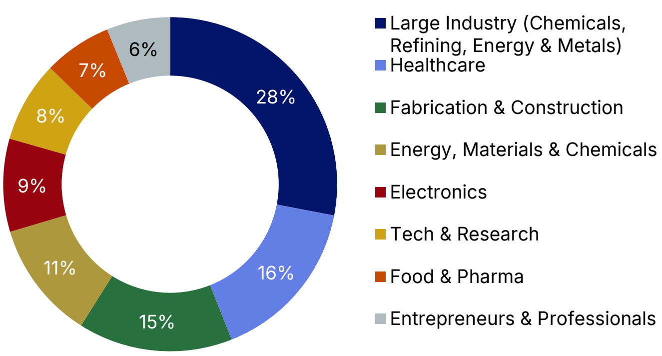
Sources: Air Liquide, Scope estimates

Despite its industrial focus, Air Liquide's sales are not heavily concentrated in any single customer sector. Large industrial customers make up about 28% of revenue and include chemicals, refining and energy, and metals. Around 54% of total revenue comes from cyclical industries, but over half of this is protected by take-or-pay contracts or equipment rental agreements, which provide revenue visibility. Exposure to cyclical industries without contractual protection is limited to roughly 24% of revenue. Revenue from defensive sectors, including healthcare, food, and pharmaceuticals, accounts for about 23%, further supporting cash flow visibility.

Diversified exposure to customer sectors; contracts limit risk from cyclical industries

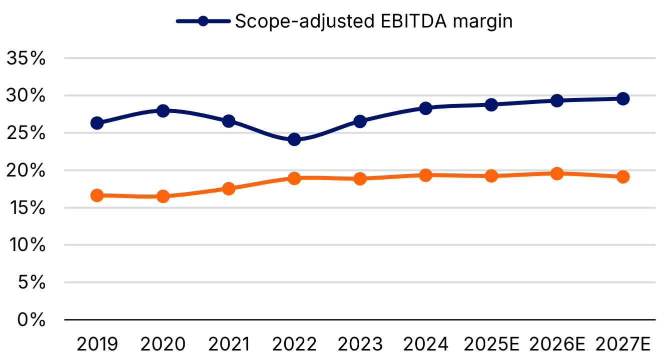
Air Liquide benefits from a highly diversified customer base across sectors and geographies, with no material concentration risk. The company serves around 2 million business customers, 2.1 million home healthcare patients and 20,000 hospitals and clinics. Its largest customer accounts for only 2.1% of total sales. Air Liquide works with roughly 80,000 suppliers worldwide. Its reliance on common feedstocks, combined with a large supplier base, limits supply chain risk and avoids overdependence on any single supplier.

Figure 4: Revenue split by customer industry



Sources: Air Liquide, Scope

Figure 5: Scope-adjusted EBITDA margin and ROCE



Sources: Air Liquide, Scope estimates

EBITDA margin improvement driven by efficiency measures and lower energy costs

Air Liquide's profitability, measured by the adjusted EBITDA margin, has rebounded from 2022 lows of around 24% to 28% in 2024. The improvement reflects a normalisation of pass-through energy costs, which reduces margin dilution, along with the successful implementation of cost-saving and efficiency measures. We expect these initiatives to continue contributing through 2026, potentially lifting margins to 29%–30% in our forecasts.

The return on capital employed (Scope-adjusted ROCE[6]) provides a clearer view of profitability independent of energy cost fluctuations. This metric has improved steadily from around 16.5% in 2019–20 to approximately 19% in 2024. High barriers in the industrial gas sector and Air Liquide's strong market position allow the company to command and sustain solid ROCE levels in absolute terms.

Very stable profitability thanks to long-term contracts and pass-through of energy costs

Air Liquide benefits from multi-year contractual terms with customers, including energy cost pass-through, inflation indexation, and take-or-pay clauses on minimum volumes for most large industrial clients, as well as portions of its industrial merchant and electronics business. Such contractual protection, together with a diversified customer footprint, has also contributed to stable margin patterns (excluding non-controllable energy factors).

[6] Scope-adjusted ROCE defined as per our latest Chemical Ratings Methodology (link)

8. Financial risk profile: A-

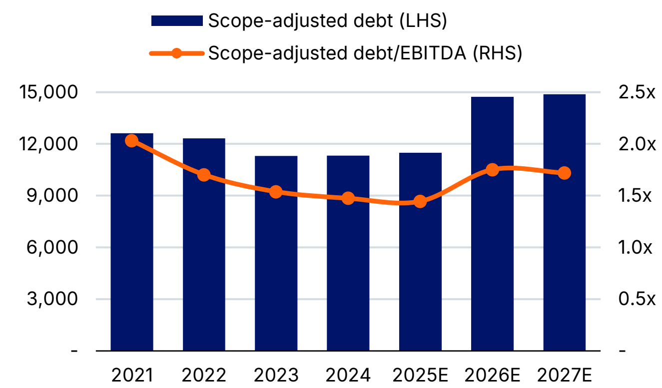
Air Liquide's credit metrics remain solid, even after accounting for the expected impact of the DIG acquisition. However, the company's A- financial risk profile continues to constrain its credit profile. We estimate pro-forma leverage of 1.7x-1.8x in 2026-27E and a broadly unchanged picture regarding interest cover (around 17x) and cash flow cover (upper-teens % range). Liquidity remains adequate, with ample access to committed undrawn credit lines and a well-diversified funding strategy.

Credit metrics shall remain solid following the DIG acquisition

Leverage remains manageable, although the DIG acquisition will reduce the buffer that Air Liquide enjoyed since 2023. We expect debt/EBITDA to rise to about 1.8x on a pro-forma basis (from around 1.5x) once the debt funding is fully reflected. Organic EBITDA growth of roughly 3% per year and a small margin improvement are expected to support only minimal deleveraging through 2027. Overall, leverage remains consistent with a strong credit profile, albeit with less headroom relative to recent years.

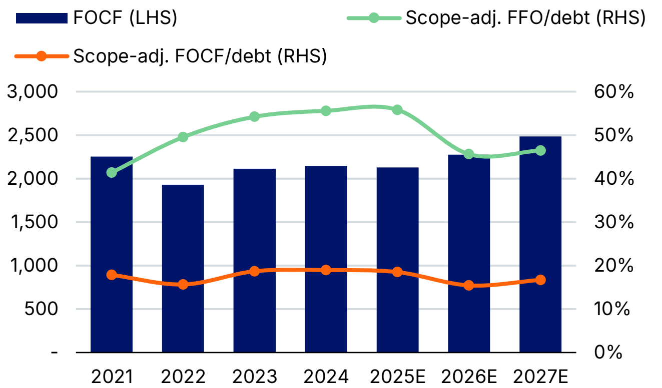
We now expect leverage in the 1.7x-1.8x range following the DIG deal

Figure 6: Moderate increase in Scope-adjusted debt (EUR m) and leverage following the acquisition of DIG



Sources: Air Liquide, Scope estimates

Figure 7: FOCF (in EUR m) remains firmly positive despite increasing organic capex and larger debt volume



Sources: Air Liquide, Scope estimates

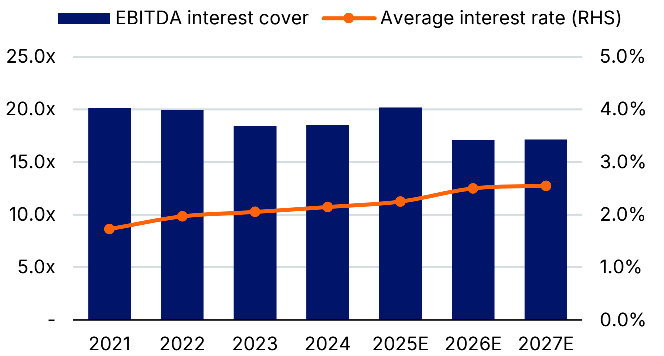
Interest coverage remains strong thanks to resilient EBITDA and the company's largely fixed-rate funding structure. About 88% of debt was fixed at the end of 2024, and we expect this share to stay around 90% going forward. Nevertheless, the larger gross debt balance post-acquisition should still cause a modest decline in coverage ratios to about 17x, versus 18x-20x recently. We forecast a slight increase in average funding cost as older, cheaper debt matures, although we do not expect this to materially affect the ratio thanks to expected EBITDA growth. Overall, interest cover remains very strong.

Solid interest coverage in the context of predominantly fixed-rate debt at low average cost

Cash flow cover – as measured by free operating cash flow (FOCF)/debt – has been broadly stable. We expect it to temporarily fall to 15% after the DIG acquisition, before recovering towards the upper teens range. Our expectations for EBITDA growth more than offset the higher capex requirements over the forecast horizon. Overall, the metric shows little volatility, reflecting steady earnings and predictable spending.

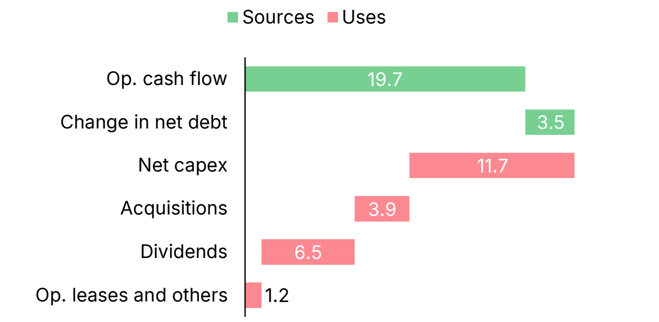
Cash flow cover should remain in line with its historical upper-teens % range after a 2026 low point

Figure 8: Very strong EBITDA interest cover



Sources: Air Liquide, Scope estimates

Figure 9: 2025-27E Cumulative cash flow (EUR bn)



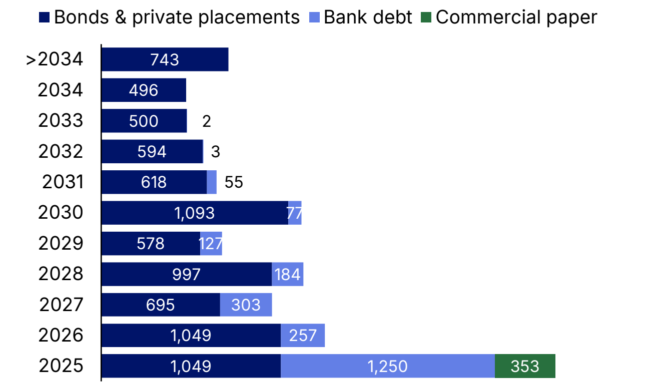
Sources: Scope estimates

Ample cash and committed lines buffer to cover 2025 and 2026 maturities

Air Liquide's credit profile is supported by ample liquidity and broad access to capital markets. As of June 2025, the company held EUR 1.6bn in cash (of which around EUR 0.15bn is restricted), alongside EUR 4bn in undrawn credit facilities. We expect the company to generate over EUR 2bn in FOCF annually, which, combined with cash and available facilities, comfortably covers debt maturities of EUR 1.3bn in 2026 and EUR 1bn in 2027. While our liquidity analysis (see Table 1 below) does not assume any credit lines renewals or extensions, we note that Air Liquide aims to renew these lines at least one year ahead of maturity, thus maintaining access to around EUR 4bn at all times.

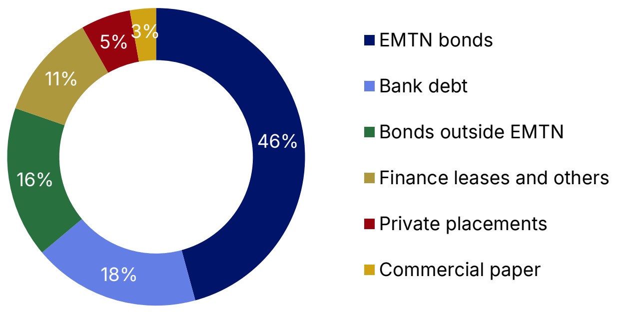
Additionally, Air Liquide benefits from a diversified funding strategy and strong relationships with over 20 international banks. The company regularly issues bonds in multiple currencies and tenors of up to 12 years, including offerings in both US public and private markets.

Figure 10: Maturity profile at YE 2024 (EUR m)



Sources: Air Liquide, Scope

Figure 11: Debt funding mix at YE 2024



Sources: Air Liquide

Table 1. Liquidity sources and uses (in EUR m)

	2025E	2026E	2027E
Unrestricted cash (t-1)	1,767	867	867
Open committed credit lines (t-1)	3,920	3,620	3,150
FOCF (t)	2,127	2,274	2,485
Short-term debt (t-1)	2,671	2,652	1,306
Liquidity	**>200%**	**>200%**	**>200%**

Sources: Air Liquide, Scope estimates

9. Supplementary rating drivers: +/- 0 notches

Public credit rating commitment and financially prudent track record provide additional comfort

The rating has no adjustments related to financial policy, peer group considerations, parent support, or governance and structure.

Nonetheless, we acknowledge Air Liquide's prudent financial policy, particularly the company's public commitment to an 'A range' credit rating.

Air Liquide's prudent approach to risk management is supported by:

- A track record of funding M&A within the constraints of its balance sheet, e.g. the recent DIG acquisition, using up pre-existing balance sheet headroom, or the approx. EUR 3.3bn rights issue in 2016 to fund part of the Airgas acquisition (enterprise value of around EUR 12.5bn)
- A flat maturity profile for bonds and private placement instruments
- Multiple backup credit facilities
- The large coverage of pension obligations with dedicated pension assets (over 50%)

10. Debt ratings

The rated debt is issued by Air Liquide Finance SA and Air Liquide US LLC. Senior unsecured bonds have standard bond documentation, including pari passu and negative pledge.

Senior unsecured debt rating: A

Following the affirmation of the underlying issuer rating, we have also affirmed the rating for senior unsecured debt at A.

Short-term debt rating: S-1

The short-term debt rating has been affirmed at S-1, which is based on the underlying A/Stable issuer rating and the company's consistently robust liquidity, as well as its strong access to external funding from banks and debt capital markets.

Scope Ratings GmbH

Lennéstraße 5, D-10785 Berlin
Phone: +49 30 27891-0
Fax: +49 30 27891-100
info@scoperatings.com

Scope Ratings UK Limited

52 Grosvenor Gardens
London SW1W 0AU
Phone: +44 20 7824 5180
info@scoperatings.com

in
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