

Enel SLBs: update on 2023 observation date

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Enel, an Italian utility company, is the largest issuer of Sustainability-Linked Bonds (SLBs), with nearly four times more volume than Chile, which is in second place. As it has been using this structure since 2019, four bonds have already met their Sustainability Performance Targets (SPTs), and a further ten bonds have their observation date at the end of this year. The KPI in question is to reduce Scope 1 emissions intensity for power generation to 148 gCO₂e/kWh.

There has been a shift in trajectory driven by policy changes. The invasion of Ukraine has left European governments unwilling to transition to gas, and so extended the life of coal generation assets. This should not be viewed as a shift in sustainability strategy from Enel, but rather a bump in the road driven by exogenous factors.¹

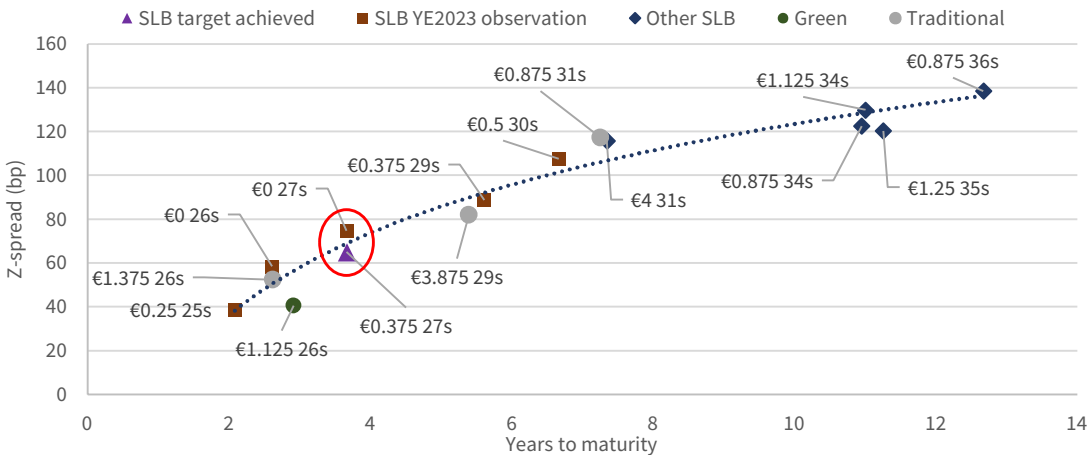
Our analysis concludes it is highly unlikely that Enel will achieve its SPT at the end of 2023, and it is therefore likely that the ten bonds in question, with total notional of \$10.8bn, will pay a step-up coupon. This would be the largest step-up coupon paid in the SLB market to date.

Current bond pricing implies a different story. SLBs which we expect to pay a step-up are trading wider than bonds which will not receive an increased coupon.

As an example, ENELIM €0 27s (which we expect to pay a step-up) is pricing 10bp wider than ENELIM €0.375 27s (which met its target in 2021 and so will not pay a step-up). They have the same maturity, and are both low coupon bonds. The step-up coupon is equivalent to 20bp running across the life of the bond.

The materiality of this potential step-up makes this important for SLB investors. Market pricing suggests not all participants are analysing this event, and this presents opportunities.

Figure 1. Enel EUR bond z-spreads with maturity between 2 and 14 years. Source: Bloomberg, accessed 18 Oct 2023.



¹ Greek utility PPC already missed a target due to similar policy adjustment. The fallout for bondholders was limited, “[Limited fallout forecast for bondholders as first index-eligible SLB missed target](#)”, RI, 22 Mar 2023.

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Introduction

Enel is the flagship issuer of SLBs. They were first to use the structure in Sep 2019, and have been a consistent issuer since, with no non-SLB senior unsecured debt issued since then. They lead the pack in terms of total issuance, with nearly 4x more than second largest issuer Chile (see Table 1).²

As its sustainability journey has progressed, Enel has updated its Sustainability-Linked Financing Framework

(SLFF), with four separate documents. Table 2 shows a summary of the KPIs chosen for each. The first three SLFF in Oct 20 / Jan 21 / Jan 22 used the same two KPIs, Scope 1 emissions intensity coming from power generation and installed renewables capacity. Each SLFF introduced incrementally more ambitious targets. The fourth SLFF issued in Feb 23 introduced new KPIs including Scope 1 + 3 emissions intensity coming from integrated power, absolute Scope 3 emissions from gas retail, and EU Taxonomy aligned CAPEX. This SLFF also provided more interim targets on Scope 1 emissions intensity.

Table 1. Total SLB issuance by issuer. Source: Bloomberg, accessed 17 Oct 2023.

Issuer	Ticker	Count of SLBs	Total SLB issued (\$bn)
ENEL FINANCE INTL NV	ENELIM	30	31.1
REPUBLIC OF CHILE	CHILE	5	8.1
TEVA PHARM FNC NL II	TEVA	8	7.5
ENI SPA	ENIIM	4	5.2
ENBRIDGE INC	ENBCN	5	5.1
JBS USA/FOOD/FINANCE	JBSSBZ	4	3.9
ASTM SPA	ATIM	3	3.4
TELUS CORP	TCN	5	3.3
FORVIA SE	EOFP	3	3.2
CARREFOUR SA	CAFP	4	3.0

Table 2. Enel SLB Key Performance Indicators with Targets. Source: Enel.

SLFF	Oct-20	Oct-20	Jan-21	Jan-21	Jan-22	Jan-22	Feb-23	Feb-23	Feb-23	Feb-23	Feb-23	EU Taxonomy aligned CAPEX
KPI	Scope 1 (power generation)	Renewable Capacity	Scope 1 (power generation)	Renewable Capacity	Scope 1 (power generation)	Renewable Capacity	Scope 1 (power generation)	Scope 1 + 3 (integrated power)	Scope 3 (gas retail)	Renewable Capacity		
Unit	gCO2e/kWh		gCO2e/kWh		gCO2e/kWh		gCO2e/kWh	gCO2e/kWh	MtCO2e			
2021		55%		55%								
2022		60%		60%								
2023			148	65%								80%
2024					140	66%	140				66%	80%
2025							130	135	20.9	76%		80%
2030	125		82			80%	72	73	11.4	85%		
2040					0	100%	0	0	0	100%		

It is fantastic to see a deep and frequently updated commitment to sustainability. However, when investing in Enel SLBs, this does introduce a layer of complexity. The different vintage bonds have different Sustainability Performance Targets (SPTs), depending on which SLFF they were issued

² Please see “[Chile’s Peso SLB issuance](#)”, AFII, 27 Jul 2023 and “[Offi-Chile the largest sovereign SLB issuer](#)”, AFII, 29 Jun 2023.

under. This can introduce bases between bonds, where some may be more likely to receive a step-up coupon than others.

In this note, we review the targets at the end of 2023 coming from the SLFF in Jan 21. We review recent sustainability reporting and its impact on the probability of a step-up coupon. We then consider current bond pricing, to understand implications for investors.

Enel SLBs

Since 2019, Enel has issued 30 SLBs. A full list is shown in the Appendix in Table 8. As an early issuer, Enel has some bonds whose SPT observation dates have passed.

Enel has met the two original targets in its first SLFF, of 55% renewable installed capacity by YE 2021, and 60% by YE 2022. Installed capacity is a KPI reasonably within an issuer’s control, as it depends on investment and acquisition, and not on generated capacity. Despite policy changes coming from the Ukraine invasion, investment and divestment ensured these targets were achieved.³

Table 3. Enel SLBs with observation date at Year End 2023. Source: Bloomberg, AFII.

Description	ISIN	Issue Date	Maturity	Currency	Amount Outstanding(bn)
ENELIM \$4.25 25s	US29278GAV05	15-Jun-22	15-Jun-25	USD	0.75
ENELIM \$6.8 25s	US29278GAZ19	14-Oct-22	14-Oct-25	USD	0.75
ENELIM €0.25 25s	XS2432293673	17-Jan-22	17-Nov-25	EUR	1.25
ENELIM €0 26s	XS2390400633	28-Sep-21	28-May-26	EUR	1.25
ENELIM \$1.375 26s	US29278GAM06	12-Jul-21	12-Jul-26	USD	1.25
ENELIM €0 27s	XS2353182020	17-Jun-21	17-Jun-27	EUR	1.00
ENELIM \$1.875 28s	US29278GAN88	12-Jul-21	12-Jul-28	USD	1.00
ENELIM €0.375 29s	XS2390400716	28-Sep-21	28-May-29	EUR	1.00
ENELIM €0.5 30s	XS2353182293	17-Jun-21	17-Jun-30	EUR	1.25
ENELIM \$2.25 31s	US29278GAP37	12-Jul-21	12-Jul-31	USD	1.00

Table 3 shows the bonds with observation date at the end of the year. They all reference the same KPI, Scope 1 emissions intensity over power generation. They all have the same target of 148 gCO₂e/kWh, with a 0.25% step-up if missed.

The total notional at risk to this SPT is \$10.8bn suggesting there could be an annual increase of \$27mm to Enel’s interest cost if missed. That makes this the most material observation date for the SLB market to-date.

This is substantial for the company, and significant for investors. The increased materiality should intensify any market reaction, and so this is a chance to observe and understand SLB pricing.

³ For our previous work on Enel SLBs please see “[A review of SLBs approaching KPI observation dates](#)”, AFII, 17 Nov 2022 and “[Enel – Market update on 2022 KPI observation](#)”, AFII, 8 Feb 2023.

KPI performance

The KPI in question is Scope 1 emissions intensity over power generation, with a unit of gCO₂ equivalent per kWh. Historic and target levels are shown in Figure 2.

The KPI trended up between 2020-2022, with a 10% increase. H1 2023 reporting shows a significant decrease of -26.7%,⁴ attributed to a reduction in thermal generation from Russia and Argentina. We note the sale of PJSC Enel Russia was finalised in Oct 2022,⁵ which was a significant divestment.

Figure 2. Scope 1 emissions intensity over power generation for Enel. Source: Enel.

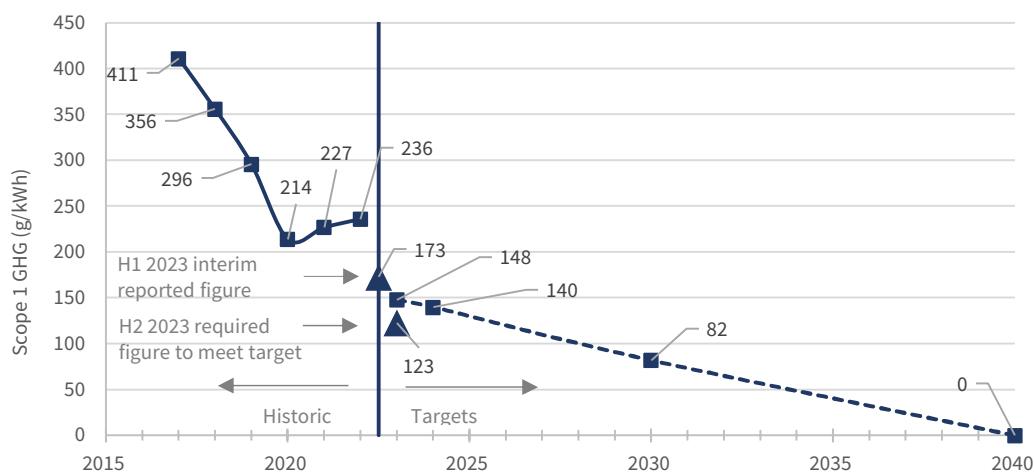


Table 4 shows more details on the historic generation and emissions, sourced from Enel’s financial and sustainability disclosures. The H2 2023 intensity required to achieve the KPI on average for the year is an additional 28.9% reduction, a H2 figure of 123 gCO₂e/kWh.

Table 4. Enel generation and emissions intensity. Source: Enel.

Date	Renewables (GWh)	Nuclear	Russia (non renewables) (GWh)	Other (GWh)	Total power generated (GWh)	Percentage renewables generation	Scope 1 Intensity (gCO ₂ e/kWh)
H1 2021	54,748	12,815	9,722	28,534	105,819	51.7%	207
H2 2021	54,070	12,689	11,526	38,501	116,786	46.3%	247
H1 2022	54,741	13,447	10,056	37,262	115,506	47.4%	237
H2 2022	57,708	13,061	0	41,492	112,261	51.4%	221
H1 2023	60,460	12,441	0	29,098	101,999	59.3%	173

To understand the likelihood of achieving this, we analyse the reduction from H1 2022 to H1 2023, as shown in Table 5. The most significant drivers were the divestment of Russian conventional assets, and the increase in renewables. The Russia divestment is non-repeatable. Extrapolating the rate of increase in renewables may drive a reduction of half the annual value, but we are not aware of any significant investment or acquisition which could drive a higher number in H2 2023. More concerning is the fact that total generation dropped significantly in H1 2023 (see Table 4). H2 have tended to be higher. Assuming that marginal demand is typically met by conventional

⁴ “[Enel Sustainability reporting](#)”, Enel, accessed 18 Oct 2023.

⁵ “[Enel finalized the sale of its entire stake in PJSC Enel Russia](#)”, Enel, 12 Oct 2022.

methods of generation (nuclear is very hard to adjust so typically run at full capacity, and renewables as a free source of energy is also typically maximised), any increase in conventional generation will make it hard to achieve the target reduction.

Table 5. Analysis of change in emissions intensity from H1 2022 to H1 2023. Source: AFII.

	Renewables (GWh)	Nuclear (GWh)	Conventional (GWh)	Total power generated (GWh)	Implied Intensity / conventional (gCO2/kWh)	Implied Scope 1 Intensity (gCO2e/kWh)
H1 2022	54,741	13,447	47,318	115,506	579	237
Russia divestment	54,741	13,447	37,262	105,450	579	204
Increased renewables (to H2 2022 level)	60,460	13,447	31,543	105,450	579	173
Increased Coal (as percentage of Conventional)	60,460	13,447	31,543	105,450	606	181
Reduced generation	60,460	13,447	28,092	101,999	606	167
H1 2023	60,460	12,441	29,098	101,999	606	173

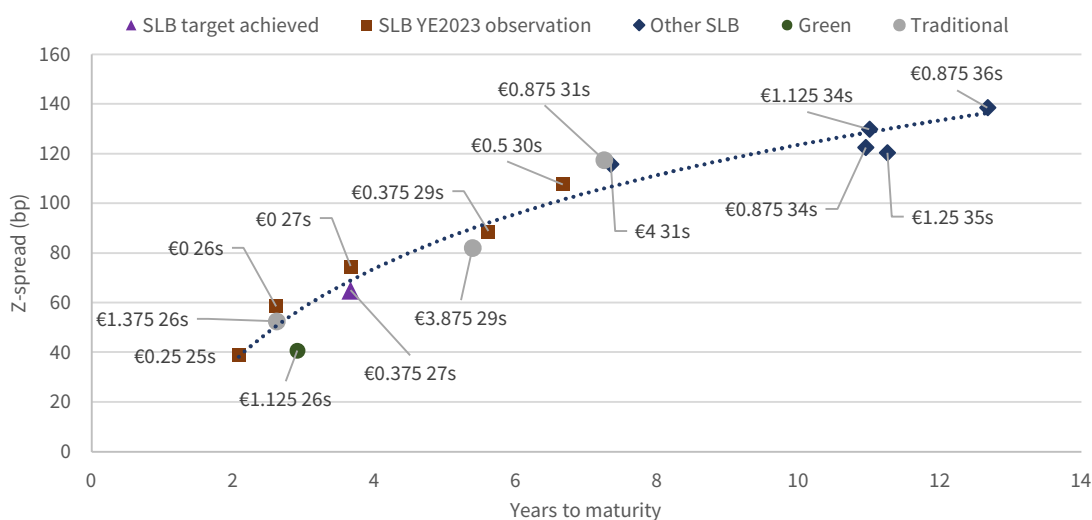
In H1 2023 Enel’s KPI improved considerably due by divestment of Russian fossil assets. The continued reduction needed to achieve the SPT, as an average for the whole of 2023, is significant, and potentially unachievable.

This analysis leads us to the conclusion that it will be highly probably that Enel will miss its target at YE 2023, and this will trigger a step-up on affected SLBs.

Bond pricing

Figure 3 shows current bond spreads for Enel’s EUR bonds. The SLBs are split into bonds whose target has been achieved, bonds with observation date at YE 2023, and SLBs with a future observation.

Figure 3. Enel EUR bond z-spreads with maturity between 2 and 14 years. Source: Bloomberg, accessed 18 Oct 2023.



In general, the SLBs with an observation this year, are trading wide of the curve. Using the AFII option pricing framework,⁶ this implies a low / negative probability of the step-up being paid. Our analysis indicates a very high probability of the step-up being paid, and this would imply the bonds should be trading at a tighter spread. This is a manifestation of the value to issuers of ambitious targets; an ambitious target gives a high probability of investors receiving the step-up, which in a risk-neutral framework should make investors happy to receive a lower yield today. In this situation, the step-up according to our analysis is very likely to happen, very soon, and so this gives the maximum model price possible. Table 6 gives estimates of the option value.⁷

Table 6. Estimated running value of the SLB coupon step-up. Source: AFII.

Description	ISIN	Issue Date	Maturity	KPI observation	Currency	Start of step-up accrual	Running value of step-up (bp)
ENELIM \$4.25 25s	US29278GAV05	15-Jun-22	15-Jun-25	31-Dec-23	USD	15-Jun-24	15.1
ENELIM \$6.8 25s	US29278GAZ19	14-Oct-22	14-Oct-25	31-Dec-23	USD	14-Apr-24	18.8
ENELIM €0.25 25s	XS2432293673	17-Jan-22	17-Nov-25	31-Dec-23	EUR	17-Nov-24	12.0
ENELIM €0 26s	XS2390400633	28-Sep-21	28-May-26	31-Dec-23	EUR	28-May-24	19.2
ENELIM \$1.375 26s	US29278GAM06	12-Jul-21	12-Jul-26	31-Dec-23	USD	12-Jan-24	22.9
ENELIM €0 27s	XS2353182020	17-Jun-21	17-Jun-27	31-Dec-23	EUR	17-Jun-24	20.5
ENELIM \$1.875 28s	US29278GAN88	12-Jul-21	12-Jul-28	31-Dec-23	USD	12-Jan-24	23.7
ENELIM €0.375 29s	XS2390400716	28-Sep-21	28-May-29	31-Dec-23	EUR	29-May-24	22.3
ENELIM €0.5 30s	XS2353182293	17-Jun-21	17-Jun-30	31-Dec-23	EUR	17-Jun-24	22.5
ENELIM \$2.25 31s	US29278GAP37	12-Jul-21	12-Jul-31	31-Dec-23	USD	17-Jun-24	22.6

There have been some concerns in the market that the introduction of ‘force majeure’ clauses may give issuers the chance to restate baselines or targets subject to events outside of their control (such as change in government policy coming from the Ukraine invasion). This could explain the market not pricing the step-up coupon. Enel however has publicly stated they will not invoke such a clause.⁸

2027 maturity bonds

In particular, there is a bond pair with the same maturity in July 2027. ENELIM €0 27s, issued in 2021 with strong demand,⁹ has an observation at the end of the year. ENELIM €0.375 27s observed its KPI at the end of 2021, and the target was achieved so no step-up was paid.

⁶ We view the coupon step-up as an option to receive higher coupon step-ups in the future. A high ambition level means a higher probability for this payout. Pricing the coupons would therefore give a higher option premium built into the SLB price. For full details of this methodology please see “[An option pricing approach for sustainability-linked bonds](#)”, AFII, 8 Nov 2022.

⁷ For simplicity we have ignored discounting, i.e. we have distributed the expected step-up over the full maturity of the bond. Given the step-ups all being to be paid within a year, we expect limited difference to this method. It shows that longer bonds have higher step-up values, as the step is being paid for a larger proportion of the debt.

⁸ “[New EU law ratches up corporate deforestation risk](#)”, FT, 15 Feb 2023.

⁹ The EUR issuance was a three-tranche deal which was comfortably oversubscribed, “[Enel beefs up SLB curve with triple trancher](#)”, GlobalCapital, 8 Jun 2021. We observe it was followed quickly by a USD deal, which priced with only a 2bp premium, “[Enel prints SLB whopper](#)”, GlobalCapital, 8 Jul 2021.

The market is pricing the bonds with a 10bp spread differential, the 2023 trigger wider. Our calculation estimates that the expected step-up is worth a 20.5bp differential in the opposite direction.

Table 7. Estimated returns for Enel 2027 SLBs. Source: AFII.

Bond	ISIN	Maturity	Z-Spread (bp)	Spread vs DBR 0.25% 27s (bp)	Cash Price	Risky Annuity	Total coupon	Total step-up coupon	Pull to par	TOTAL return
ENELIM €0.375 27s	XS2066706909	17-Jun-27	66.5	129.7	87.2%	3.2	1.21%	0.00%	11.15%	12.36%
ENELIM €0 27s	XS2353182020	17-Jun-27	76.3	138.9	85.7%	3.2	0.00%	0.69%	12.49%	13.18%

Table 7 shows estimated returns for these two bonds, with identical maturity, if the step-up is triggered.

At current market levels, the expected return between the two bonds, especially if the step-up coupon is paid, is quite different.

Conclusions

Given Enel’s widespread use of SLBs, from an early date, its bond curve is complex and it can be difficult to decipher the impact of different financing frameworks and targets.

The observation date at the end of this year, where Enel has committed to reducing its Scope 1 emissions intensity for power generation to 148 gCO₂e/kWh, is the most material for the SLB market to-date. Ten bonds will potentially pay a step-up, if the target is missed.

Our analysis suggests it is likely to be missed, and this would increase coupons for affected bondholders by 25bp, and increase interest costs for Enel by \$27mm per year.

Current bond pricing implies this event has not been digested by the market; SLBs which we expect to pay a step-up are trading wider than bonds which will not receive an increased coupon.

Enel has provided a valuable hedge option for investors in terms of carbon emissions. We believe Enel will benefit from beneficial funding conditions based on this level of transparency and consistency.

Appendix

Table 8 shows all Enel SLBs grouped by which Sustainability-Linked Finance Framework was used.

Table 8. Enel SLBs with SLFF details and observation date. Source: Bloomberg, Bond Prospectuses, AFII.

Description	ISIN	Issue Date	Maturity	SLFF used	KPI observation	Currency	Amount Outstanding (bn)
ENELIM €0.24s	XS2066706818	17-Oct-19	17-Jun-24	1	31-Dec-21	EUR	1.00
ENELIM \$2.6 24s	US29278GAL23	10-Sep-19	10-Sep-24	1	31-Dec-21	USD	1.50
ENELIM €0.375 27s	XS2066706909	17-Oct-19	17-Jun-27	1	31-Dec-21	EUR	1.00
ENELIM £1.27s	XS2244418609	20-Oct-20	20-Oct-27	1	31-Dec-22	GBP	0.50
ENELIM \$4.25 25s	US29278GAV05	15-Jun-22	15-Jun-25	2	31-Dec-23	USD	0.75
ENELIM \$6.8 25s	US29278GAZ19	14-Oct-22	14-Oct-25	2	31-Dec-23	USD	0.75
ENELIM €0.25 25s	XS2432293673	17-Jan-22	17-Nov-25	2	31-Dec-23	EUR	1.25
ENELIM €0.26s	XS2390400633	28-Sep-21	28-May-26	2	31-Dec-23	EUR	1.25
ENELIM \$1.375 26s	US29278GAM06	12-Jul-21	12-Jul-26	2	31-Dec-23	USD	1.25
ENELIM €0.27s	XS2353182020	17-Jun-21	17-Jun-27	2	31-Dec-23	EUR	1.00
ENELIM \$1.875 28s	US29278GAN88	12-Jul-21	12-Jul-28	2	31-Dec-23	USD	1.00
ENELIM €0.375 29s	XS2390400716	28-Sep-21	28-May-29	2	31-Dec-23	EUR	1.00
ENELIM €0.5 30s	XS2353182293	17-Jun-21	17-Jun-30	2	31-Dec-23	EUR	1.25
ENELIM \$2.25 31s	US29278GAP37	12-Jul-21	12-Jul-31	2	31-Dec-23	USD	1.00
ENELIM \$4.625 27s	US29278GAW87	15-Jun-22	15-Jun-27	3	31-Dec-24	USD	0.75
ENELIM \$7.1 27s	US29280HAA05	14-Oct-22	14-Oct-27	3	31-Dec-24	USD	1.00
ENELIM €3.875 29s	XS2531420656	09-Sep-22	09-Mar-29	3	31-Dec-24	EUR	1.00
ENELIM £2.875 29s	XS2466363202	11-Apr-22	11-Apr-29	3	31-Dec-24	GBP	0.75
ENELIM €0.875 31s	XS2432293756	17-Jan-22	17-Jan-31	3	31-Dec-24	EUR	0.75
ENELIM €4 31s	XS2589260723	20-Feb-23	20-Feb-31	4	31-Dec-25	EUR	0.75
ENELIM \$5 32s	US29278GAX60	15-Jun-22	15-Jun-32	2	31-Dec-30	USD	1.00
ENELIM \$7.5 32s	US29278GBA58	14-Oct-22	14-Oct-32	2	31-Dec-30	USD	1.25
ENELIM €0.875 34s	XS2390400807	28-Sep-21	28-Sep-34	2	31-Dec-30	EUR	1.25
ENELIM €1.125 34s	XS2066706735	17-Oct-19	17-Oct-34	1	31-Dec-30	EUR	0.50
ENELIM €1.25 35s	XS2432293913	17-Jan-22	17-Jan-35	2	31-Dec-30	EUR	0.75
ENELIM €0.875 36s	XS2353182376	17-Jun-21	17-Jun-36	2	31-Dec-30	EUR	1.00
ENELIM \$2.875 41s	US29280HAB87	12-Jul-21	12-Jul-41	2	31-Dec-30	USD	0.75
ENELIM €4.5 43s	XS2589260996	20-Feb-23	20-Feb-43	4	31-Dec-40	EUR	0.75
ENELIM \$5.5 52s	US29278GAY44	15-Jun-22	15-Jun-52	3	31-Dec-40	USD	1.00
ENELIM \$7.75 52s	US29278GBB32	14-Oct-22	14-Oct-52	3	31-Dec-40	USD	1.00

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