

TAQA: capacity expansion puts transition to the test

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SUMMARY

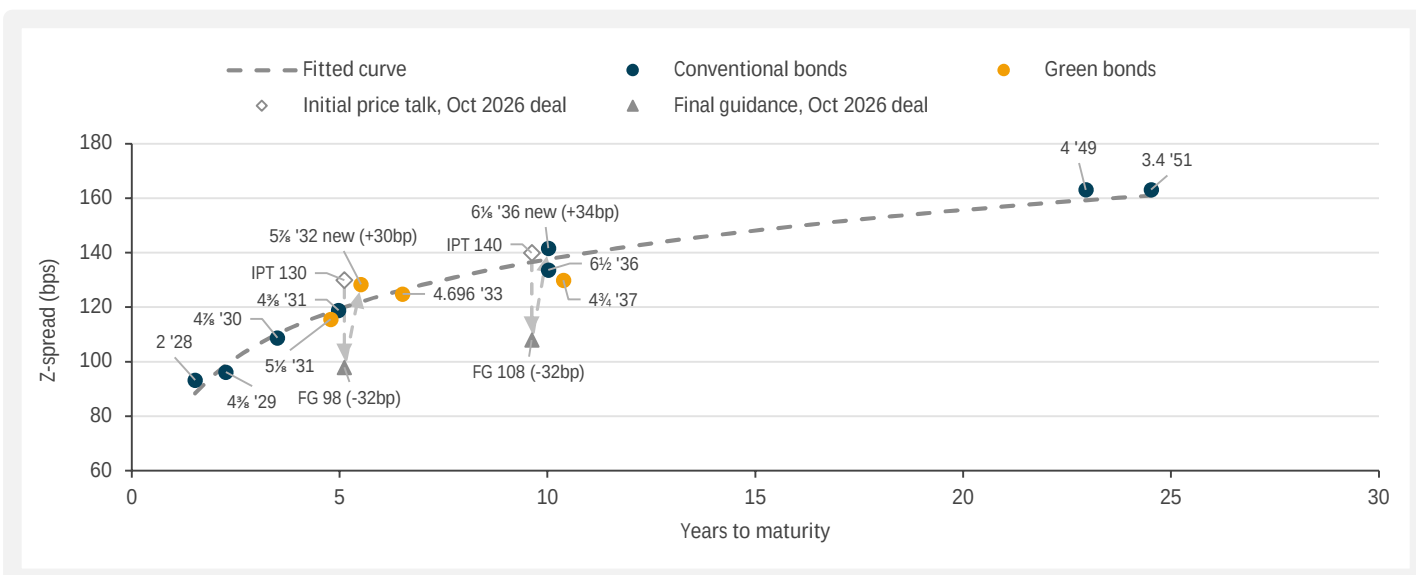
- TAQA priced its latest green bond on 19 Oct 2026 and blue bond on 22 Oct 2026 under a \$20bn bond program that funds a doubling of power generation capacity to 150GW by 2030.
- The updated Green & Blue Finance Framework ensures accountability and funding of more renewable projects, but lacks SBTi-backed targets.
- TAQA's ESG ratings have improved considerably, supported by the increase of renewable energy from 4% to 64% of production capacity.

The Abu Dhabi National Energy Company PJSC ("TAQA") has published plans to double its power generation capacity to 150GW by 2030. It is funding this expansion through a USD20bn bond programme, which includes green and blue bonds. We assess its latest green bond, priced on 19 October 2026, and its updated Green & Blue Finance Framework, and find the company's leverage to be high for an investment grade issuer (3.1x).

Sixty-five percent of the expanded capacity will use renewable energy, a marked improvement on the 4% contribution from renewables in 2020. That does, however, leave 35%, or 50GW, of electricity to be produced using non-renewables, mainly gas-fired power stations. TAQA is aiming for a 25% reduction in gross Scope 1-2 emissions over 2019-2050 to 43.3mn tonnes, a goal it almost achieved in 2025 by reaching 43.4mn tonnes. This paper analyses TAQA's sustainability targets and progress to date.

The company's third-party ESG ratings have improved since 2020: its MSCI grade has risen from CCC to A, and its Sustainalytics risk score from 49 to 18.1 (lower is better). More granular disclosures now let us test TAQA's progress against its targets.

Figure 1. TAQA USD bond curve, Z-spread by years to maturity, green bonds highlighted, with the move from initial price talk to final guidance to today for the October 2026 deal. Source: Bloomberg Finance L.P., AFII analysis, accessed 21 Oct 2026.



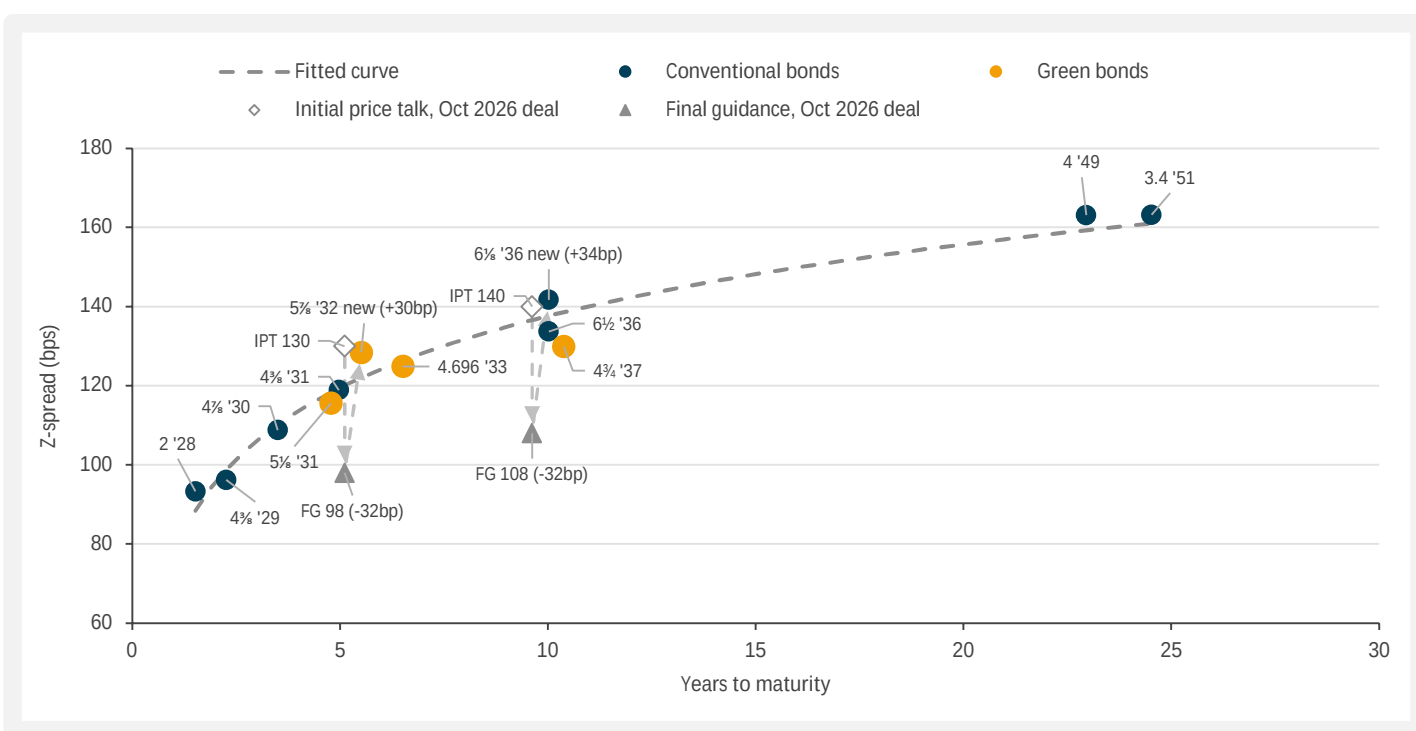
Introduction

TAQA is a state-backed, UAE-headquartered energy and water utility with operations in Europe, North America, Africa, and Central Asia. On 19 October 2026, it issued a USD1.1bn 5-yr green bond with a 5.875% coupon, maturing in April 2032 alongside a conventional 6.125% 2036 tranche. Green bond proceeds will finance eligible green projects under the company's Green & Blue Finance Framework.

The deal was issued under a USD20bn global medium term note programme¹ that funds TAQA's plan to double capacity by 2030.² The UAE emitted 222mn tonnes of CO₂ in 2024, or 20.1 tonnes per capita, the seventh highest globally.³ TAQA's Scope 1-3 emissions that year were equivalent to around 30% of the national total, although this amount includes emissions outside the UAE and Scope 3 emissions that do not appear in the national inventory.

We expect further green and blue issuance from TAQA and other Gulf utilities. Given the region's high and rising energy consumption, how these bonds are structured and reported is of consequence for the global transition.

Figure 2: TAQA USD bond curve, Z-spread by years to maturity, green bonds highlighted, with the move from initial price talk to final guidance to today for the October 2026 deal. Source: Bloomberg Finance L.P., AFII analysis, accessed 21 Oct 2026.



Primary market conditions have been supportive. Figure 2 shows TAQA's 12 USD bonds on a fitted curve, rising from a 93bps Z-spread at the short end (2% 2028) to 163bps at the long end (2049 and 2051). The steepest point is inside 1

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size has not been disclosed, but tightening of this magnitude points to strong demand. Both tranches have since widened 30-34bps, so the 2036 conventional now trades 2bps wider than initial price talk and the 2032 green bonds 2bps inside it, fully reversing the tightening achieved at pricing. The weaker secondary performance appears to reflect broader market conditions rather than issuer-specific concerns.

All outstanding green bonds are on average 2bps inside the curve, while the conventional are 1bp outside it. The 4.75% 2037 green bond is the biggest outlier at 9bps inside the curve. The new green 2032 is the exception at 6bps wide, consistent with a residual new-issue concession. Spreads are widest at the long end, reflecting duration and lower liquidity in 25-year-plus paper.

Strong demand for the paper likely reflects investor comfort and the reassurance of state backing. There may also be recognition that TAQA is undertaking mission critical energy and water infrastructure and that its bonds are a long-lived asset class. It does not appear that the green or blue bonds carry either a premium or discount, implying that investors consider these projects to be of equivalent credit strength to TAQA's conventional operations.

Demand outlook and funding plan

The IEA expects electricity demand in the Middle East to rise 50% by 2035,⁴ driven by increasing need for cooling as average temperatures continue to rise. Cooling already accounts for c.25% of the region's annual electricity consumption. Desalinated water output, at 12bn cubic metres in 2024, is expected to triple by 2035, adding further power demand. Other drivers include population growth, the build out of data centres, industrial expansion, and the electrification of transport.

This is the context for TAQA's USD20bn bond issuance program. The company forecasts AED75bn of spend by 2030, including AED40bn on grids, and AED35bn on generation (55% renewables, 41% gas, 4% water). To support its mission to be a "low carbon provider of energy and water",⁵ it has issued USD3.5bn of green and blue bonds since 2023, including USD1.6bn+ in 2026. A USD600m blue bond was priced at the time of writing this report.

TAQA's Green Finance Framework was first published in 2023, and defines eligible projects and exclusions. TAQA is also bound to report on its allocation of proceeds from green and blue bonds, while the alignment of fund allocations with the Framework must be reviewed by a third party. For example, the inaugural green bond, issued in 2023, raised USD1bn and was used to finance an equity investment in Masdar, a state-owned UAE renewable energy and clean technology company (an initial 43% stake was acquired in 2022).⁶ Impact metrics stated in 2024 include 7.9GW of renewable capacity added, an extra 23TWh of renewable energy production, and 10mn tCO₂e emissions avoided. These metrics were not put into context in the Green Bond report but represent 10.7% of TAQA's current gross capacity and 5.2% of its 2030 forecast capacity.⁷

The addition of blue bonds to the updated Framework is positive: the region suffers from chronic water scarcity, likely to become exacerbated as water demand grows. Still, TAQA's targets are not based on the

⁴ [The Future of Electricity in the Middle East and North Africa](#), International Energy Agency, accessed 21 Oct 2026.

⁵ [TAQA Investor Presentation Sep 26](#), TAQA IR site, accessed 21 Oct 26.

⁶ [TAQA Green Bond Report 2024](#), TAQA IR site, accessed 21 Oct 26.

⁷ [TAQA 2025 annual report](#), TAQA IR site, accessed 21 Oct 2026.

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Science Based Targets Initiative (SBTi) and could be more comprehensive, particularly as concerns water and waste treatment. We consider the Framework further in Appendix I - TAQA's updated Green & Blue Finance Framework.

We anticipate further green and blue bond issuance by TAQA to support greater renewable energy capacity and water generation. The company's progress and ambition make it an issuer to watch, with future issuance offering investors further opportunities to support its sustainable energy and water investment plans.

Behind the rating upgrades

TAQA's MSCI rating improved from CCC in 2020 to A by 2024, while its Sustainalytics risk score leapt from 49 in 2020 to 18.1 by 2024. The company has had unarguable success expanding the contribution of renewables to its energy mix from a meagre 4% in 2020 to 64% today. This will have had a significant effect on the ratings. Renewables are primarily geothermal, solar, and wind. We have analysed TAQA's reporting to understand the drivers of this renewables shift in more detail.⁸

TAQA's annual reports quantify sustainability progress from a 2019 baseline. As seen in Table 1, emissions have come down. Scope 1 emissions have dropped 25% in six years, but are still high on an absolute basis, with 63.5mn tonnes of Scope 1-3 CO₂ released in 2025. Almost all, 98.5%, of Scope 1 and 2 emissions, relate to fuel combustion; Scope 3 emissions are 55% linked to combustion of oil & gas products. Last year's emissions reduction was due to generation from UAE gas power plants being replaced by the new Fujairah F3 power plant that falls under TAQA's Scope 3. This power plant is fully gas powered. Emissions intensity has also improved over time, and by a greater degree: Scope 1 is 40% lower compared to 2019 and total emissions 38% lower.

Table 1. TAQA's Scope 1-3 emissions. Source: TAQA annual reports, accessed 21 Oct 2026.

	2019	2020	2021	2022	2023	2024	2025	2019 - 2025
Million tCO ₂ e								<i>Reduction 2019 - 2025</i>
Scope 1 emissions	57.58	62.55	60.1	54.7	50.0	45.2	43.3	-24.9%
<i>Intensity (tCO₂ per AEDmn)</i>	<i>1,311.7</i>	<i>1,520.0</i>	<i>1,327.8</i>	<i>1,093.5</i>	<i>966.4</i>	<i>824.7</i>	<i>789.4</i>	<i>39.8%</i>
Scope 2 emissions	0.12	n/a	0.3	0.3	0.3	0.1	0.1	0.0%
<i>Intensity (as % of revenue)</i>	<i>2.7</i>		<i>5.7</i>	<i>5.4</i>	<i>4.8</i>	<i>2.6</i>	<i>2.2</i>	<i>-19.9%</i>
Scope 3 emissions	24.18	n/a	24.3	23.8	21.4	21.6	20.1	-16.7%
<i>Intensity (as % of revenue)</i>	<i>550.8</i>		<i>535.6</i>	<i>474.7</i>	<i>412.8</i>	<i>394.1</i>	<i>367.3</i>	<i>-33.3%</i>
Total emissions	81.88	n/a	84.7	78.8	71.6	66.9	63.5	-22.4%
<i>Intensity (as % of revenue)</i>	<i>1,865.2</i>		<i>1,869.1</i>	<i>1,573.6</i>	<i>1,384.1</i>	<i>1,221.4</i>	<i>1,159.0</i>	<i>-37.9%</i>

TAQA consumes vast quantities of water in its desalination operations. 2025's 255trn gallons in 2025 was treated to supply domestic and business customers. TAQA aims to improve efficiency across all production, by reducing the amount of water used in cooling and conducting preventative maintenance. The desalination process results in wastewater or brine, with byproduct quantities from the reverse osmosis (RO) process

⁸ [TAQA 2025 annual report](#), TAQA IR site, accessed 21 Oct 2026.

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varying from 15% to 50%, depending on efficiency.⁹ TAQA intends to use RO in two-thirds of its desalination processes by 2030. It also aims to reduce losses in water distribution by 25% compared to a 2021 baseline, using smart metering to identify leaks more proactively. While it has reduced distribution losses by 16% compared to the base year 2021, these remain high at 10.2%.

TAQA's disclosure is now more granular, which improves transparency and accountability. The ratings upgrades are supported by most metrics, CO₂ intensity in particular, though absolute emissions remain high.

Dividends and rising capex constrain deleveraging

Separate from environmental concerns, bondholders may also want to scrutinise the company's shareholder distributions. Shareholders have approved extending the dividend policy to 2028¹⁰, consisting of AED4bn of fixed distributions plus a variable amount in 2026, rising to AED4.5bn fixed by 2028. These payouts will hinder cash flow available for debt service, especially in the context of elevated capex, which has risen from 8% in 2022 to 23.2% in the latest results (see Table 2). There has been insufficient cash available for servicing interest after accounting for dividends since 2025, and the gap widens as more debt is raised. With further issuance planned and EBITDA softening, net leverage of 3.1x, which is high for an investment-grade credit, is unlikely to fall.

Table 2. Financial Statement highlights. Source: TAQA annual reports, accessed 21 Oct 2026.

AEDmn	2022	2023	2024	2025	LTM Jun 26
Revenue	50,051	51,717	54,781	54,798	54,073
Annual growth	10.5%	3.3%	5.9%	0.0%	-1.3%
EBITDA	20,529	19,440	19,830	18,734	18,874
EBITDA margin	41.0%	37.6%	36.2%	34.2%	34.9%
Capex	-4,012	-5,086	-8,416	-11,879	-12,567
as % of revenue	8.0%	9.8%	15.4%	21.7%	23.2%
Dividends paid	-5,509	-5,907	-4,610	-4,894	-5,062
Cash available for debt finance	11,008	8,447	6,804	1,961	1,245
Cash interest paid	-2,957	-2,930	-2,707	-3,039	-3,081
Cash flow after interest	8,051	5,517	4,097	-1,078	-1,836
Net debt	50,635	46,862	55,668	58,441	58,766
Net leverage	2.47x	2.41x	2.81x	3.12x	3.11x

Sovereign backing works to reduce risk for a relatively highly levered investment-grade issuer. The dividend policy may restrain any deleveraging expectations, however, and there is more debt issuance to come, increasing the interest burden and adding pressure to cash flows.

⁹ Reverse Osmosis Desalination, Science Direct, accessed 21 Oct 26.

¹⁰ TAQA Investor Presentation Sep 26, TAQA IR site, Sep 26.

Conclusions

Bond issuance is well underway to finance TAQA's plans to double its power generation capacity to 150GW, 65% of which will be renewable energy. The most recent green bond priced 32bps tighter than initial price talk, suggesting strong book coverage.

TAQA's updated Green & Blue Financing Framework determines how this transition will be funded and provides accountability. Still, it lacks SBTi-based targets while quantified sustainability goals are limited in number. Targets could have been more ambitious to extend the improvements in performance as well as in disclosure, which in turn would have further bolstered the company's ESG ratings.

Separately, bond investors should keep in mind governance risks when engaging with TAQA, especially in the context of its approved dividend policy.

Demand for energy — predominantly for cooling purposes — is already high in the UAE and surrounding region and is set to increase further as climate changes worsens. Green bond issuance is commendable, but it should not distract from increasing energy consumption in UAE and TAQA's other operating countries. Reductions in GHG emissions are similarly laudable. However, total Scope 1-3 gross emissions are still high in absolute terms at 63.5mn tonnes of CO₂.

Although TAQA intends to reach net zero by 2050, if, as it plans, capacity is doubled, then a potential 127mn tonnes of CO₂ could be released by its assets, before further improvements and / or offsets are made.

Appendix I - TAQA's updated Green & Blue Finance Framework

TAQA's intention is to be a regional sustainability leader by accelerating growth in renewable energy and scaling its reverse osmosis water and wastewater services.¹¹ The company's Green & Blue Finance Framework¹² was updated in May 2026 to include blue bonds that target sustainable water projects. Key 2030 targets are 150GW of gross power generation capacity, 65% of which will be renewable, and 1,300MIGD gross water generation capacity, two-thirds of which will use RO technology.

TAQA aims for net zero emissions by 2050 and a 25% absolute reduction in Scope 1 and 2 GHG emissions compared to 2019, with a 33% reduction in the UAE. The absolute reduction is not accompanied by a specific date, and will be challenging to achieve given: a) the forecast doubling of power generation capacity; and b) the intention to maintain the 65:35 renewable:non-renewable mix. Quantitative targets on water are limited to a reduction in water distribution losses by 25% over 2021-2030. There are no targets on waste generation or treatment.

Green and blue securities will be aligned with market standards (ICMA and / or LMA principles) and may finance assets, capex, opex including R&D, and / or equity investments in entities. These must generate 90+% of revenue from the eligible blue and green categories. A maximum three-year look-back applies to already financed projects, and TAQA "will endeavour" to allocate proceeds within two years of issuance. Note that this is not a mandatory time period. The Framework identifies the following eligible projects:

Green Financing Categories:

- Transmission and distribution of renewable energy,
- Nuclear energy production, focusing on ongoing operations; financing new facilities is excluded,
- Development and implementation of energy efficiency measures,
- Projects that implement adaptations to climate change and improve TAQA's assets against acute or chronic events.

Blue Financing Categories:

- Construction and upgrade of sustainable water and wastewater management,
- Marine and offshore renewable energy, including offshore wind and floating solar.

These permitted projects will work to mitigate the impact of climate change, improve resilience, and support the transition to a greater share of renewable energy in a region where energy consumption is forecast to increase.

The exclusion criteria include any coal- or gas-fired power generation, landfill and incineration of waste, exploration and development of oil and gas fields, coal mining, desalination plants that supply fossil fuel power stations, mid- and downstream oil and gas activities, nuclear power stations, and military activity.

This iteration of the Framework has been verified by Moody's and resulted in an SQS2 ("very good") score. The ratings agency concludes that the Use of Proceeds is "aligned" with ICMA principles (this is one notch below the top score, "best practices"). It comments that there are eligible categories that could address water scarcity and reduce emissions, and that TAQA has committed to external verification. On the other

¹¹ [TAQA Investor Presentation Sep 26](#), TAQA IR site, Sep 26.

¹² [TAQA Green & Blue Finance Framework](#), TAQA IR site, May 26.

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hand, water management in desalination and “significant environmental risks related to several categories including nuclear power” have not been addressed.

The addition of blue bonds to the Framework is positive: the region suffers from chronic water scarcity as well as increasing water demand. However, the targets it has set are not SBTi-based and could be more comprehensive, particularly in water and waste treatment.

Appendix II – other emissions & waste performance

Table 3 shows that other air emissions, beyond CO₂, are considerably lower in volume, constituting around 2% of total. While sulphur oxide has fallen by 76% and particulate matter by 93%, nitrogen oxide has only been reduced by 20% and hazardous air pollutants have actually increased, by 40%, albeit from a very low base. TAQA was a much smaller business in 2019, so we are comparing intensity performance on a year-on-year basis (granular information was not reported before 2024). All metrics have improved with the exception of VOCs. There has been a notable improvement in SOx.

Table 3. TAQA's other air emissions. Source: TAQA annual reports, accessed 21 Oct 2026.

	2019	2024	2025	2019 - 2025
(tonnes)				
Nitrogen Oxide (NOx)	20,111	19,737	16,035	-20.3%
Sulphur Oxide (SOx)	33,544	40,021	8,018	-76.1%
VOCs	2,303	1,830	1,810	-21.4%
Particulate matter	3,468	3,594	246	-92.9%
Hazardous Air Pollutants	102	99	143	40.2%

On waste, TAQA is generating relatively less volume, and is improving the percentage being recycled or repurposed (see Table 4). Positive progress on reducing volumes sent to landfill reversed in 2025, however, and 39% of total waste being sent to landfill is high. By comparison, the EU Landfill Directive mandates a maximum of 10% of municipal waste landfilled by 2035.¹³

Table 4. TAQA's waste metrics. Source: TAQA annual reports, accessed 21 Oct 2026.

	2023	2024	2025	2019 - 2025
Waste generated (tonnes)				
Hazardous	120,531	123,073	104,778	-13.1%
Non-hazardous	217,362	236,698	235,401	8.3%
Fly ash	761,334	669,142	526,319	-30.9%
Total	1,099,227	1,028,913	866,498	-21.2%
Intensity (tonnes per AEDmn)	21.3	18.8	15.8	
Waste treatment (tonnes)				
Recycle, reuse, repurpose	599,205	652,080	528,267	
As % of total waste	54.5%	63.4%	61.0%	
Landfill	499,821	375,796	337,242	
As % of total waste	45.5%	36.5%	38.9%	
Incineration	201	1,036	990	
As % of total waste	0.0%	0.1%	0.1%	
Total	1,099,227	1,028,912	866,499	

¹³ [EU Landfill Directive](#), European Union Law, accessed 21 Oct 2026.

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Version log

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