

Total eclipse of the 2050 net zero deadline

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The oil majors have a challenging transition to net zero, for which research shows they are not credibly preparing for.[1] In earlier work, we have highlighted a growing maturity extension of oil companies' bonds,[2] increasing the duration of exposure for investors. Looking across 2024, we find a standout long-bond issuer – TotalEnergies (ticker TTEFP), the French oil major – which issued just under $10bn (see Table 1 overleaf). This includes $2.75bn 30-year and $2.5bn 40-year debt, both with maturity beyond 2050, the target year for net zero.

Net zero is, of course, the point at which no net emissions will be released. Aside from whether such long-dated investments in hydrocarbon production can be consistent with sustainability objectives, there is a growing realisation that they represent increased financial risk:

"The [oil & gas] sector faces significant transition risks […] Without major changes to their current business models, companies in the sector are expected to rapidly lose market value."[3]

By offering extended length financing, investors are both increasing their exposure to longer-term transition risk and reducing refinancing pressure on companies, thus removing future engagement opportunities.

It seems inconsistent to focus on a term structure of sustainability commitments (e.g. net zero 2050), but not consider term structure of risk in investment decisions.

- **Total has significantly increased the maturity of its senior issuance**. Between 2015-2019 it averaged 10.5 years, but in 2024 this increased to 27.9 years, with long bonds issued in April and September.
- **There is some evidence of reduced investor demand for the long bonds**, as shown by lower book cover for the longer maturity deals. This is in contrast to slightly higher book cover for longer deals across the broader market.
- This differentiated demand is further supported by an **observed slight steepening of the April bonds since issuance**; the 2054s and 2064 both having widened 20bp, and the 2034s just under 10bp. In general, we have found that transition risk does not seem priced into the steepness of bond curves, and so long-dated bonds present financial risks for investors.
- **A number of signatories of the Net Zero Asset Managers Initiative have invested in these long-dated bonds**, despite guidance from this initiative stating that "business-as-usual" investments in oil & gas infrastructure are inconsistent with a 1.5°C-aligned transition.[4]

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[1] "Research reveals no oil and gas companies have plans in place to phase out fossil fuels", World Benchmarking Alliance, 29 Jun 2023.
[2] "Buyers of long-dated oil bonds beware", AFII, 7 May 2024.
[3] "Climate Risks in the Oil and Gas Sector", UNEP FI, Apr 2023.
[4] "Position on the Oil & Gas Sector", Net Zero Asset Managers Initiative, Mar 2023.

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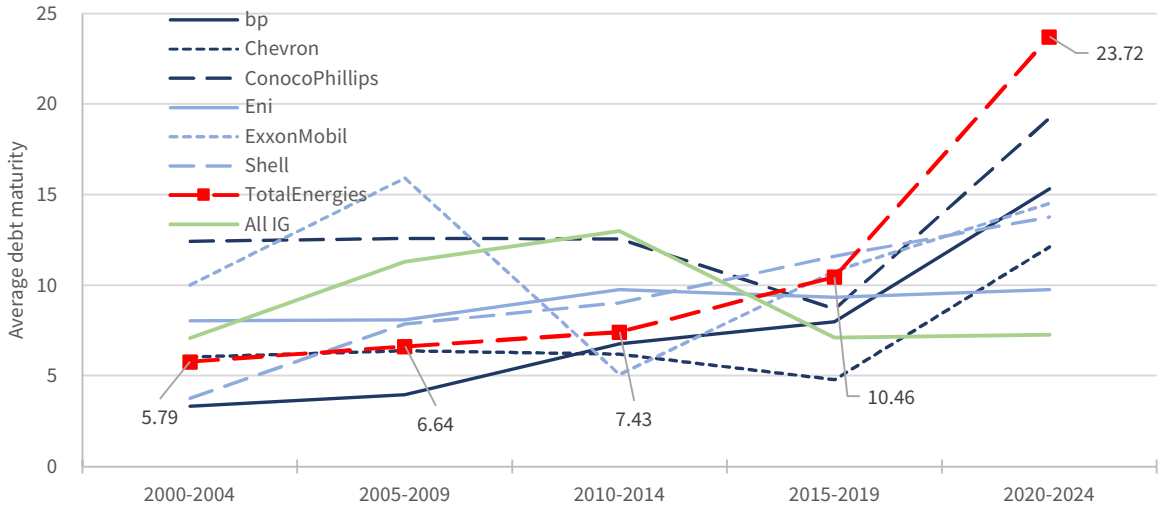
Maturity extension

Our earlier work has concluded that climate risk is unpriced by the bond market in the oil sector, by virtue of the curve steepness being unrelated to transition of the individual issuers.[5,6]

The maturity extension of oil major issuance was first analysed earlier in 2024 and concluded that oil majors had been increasing the duration of their bond issuance, against market trend, and this was alongside little spread steepening.[2,7]

Figure 1 updates the data to the end of 2024, confirming the overall trend, and highlighting that TotalEnergies has the most dramatic shift. After only small extensions from 2000-2014, the average maturity of its issuance has increased from 7.43 years in 2010-2014 to 23.72 years in 2020-2024.

Figure 1. Average maturity of non-hybrid bond issuance. Source: Bloomberg, accessed 8 Jan 2025.



Issuance dynamics

Table 1 shows full details of TotalEnergies' issuance in 2024, with a size-weighted average length of 27.9 years in the non-perpetual debt.

Table 1. Total bonds issued in 2024. Source: Bloomberg, accessed 9 Jan 2025.

ISIN	Issued Date	Currency	Size (bn)	Coupon	Maturity
US89157XAA90	05-Apr-24	USD	1.25	5.150%	05-Apr-34
US89157XAB73	05-Apr-24	USD	1.75	5.488%	05-Apr-54
US89157XAC56	05-Apr-24	USD	1.25	5.638%	05-Apr-64
US89157XAD30	10-Sep-24	USD	0.75	4.724%	10-Sep-34
US89157XAE13	10-Sep-24	USD	1.00	5.275%	10-Sep-54
US89157XAF87	10-Sep-24	USD	1.25	5.425%	10-Sep-64
XS2937308497	19-Nov-24	EUR	1.25	4.120%	Perp NC5
XS2937308737	19-Nov-24	EUR	1.25	4.500%	Perp NC10

[5] "Oil & Gas: climate performance and the cost of capital", AFII, 6 Mar 2023.
[6] "bp and ConocoPhillips: a bond spread curve ball", AFII, 23 Mar 2024.
[7] Indeed analysis from others confirms that climate risk does not seem to be a factor in the steepeness of yield curves, including in the oil & gas sector, as shown in "Higher climate risks don't yet translate into steeper credit curves", ABN AMRO Bank, 10 Dec 2024.

The book cover is the ratio of the total demand for a bond compared to the notional issued, and so is a measure of investor interest in a particular security at its issuance price.[8]

Table 2. Book cover ratio details for corporate bond deals issued in 2024 of size greater than $0.5bn. Source: Bloomberg, accessed 10 Jan 2025.

Maturity	2033-2035	2053-2055	2063-2065
TTEFP book cover	3.82	3.17	3.08
Market average book cover	3.99	4.53	4.61
Count of deals in market	516	204	33
Count of deals in market (with book cover data available)	401	170	25

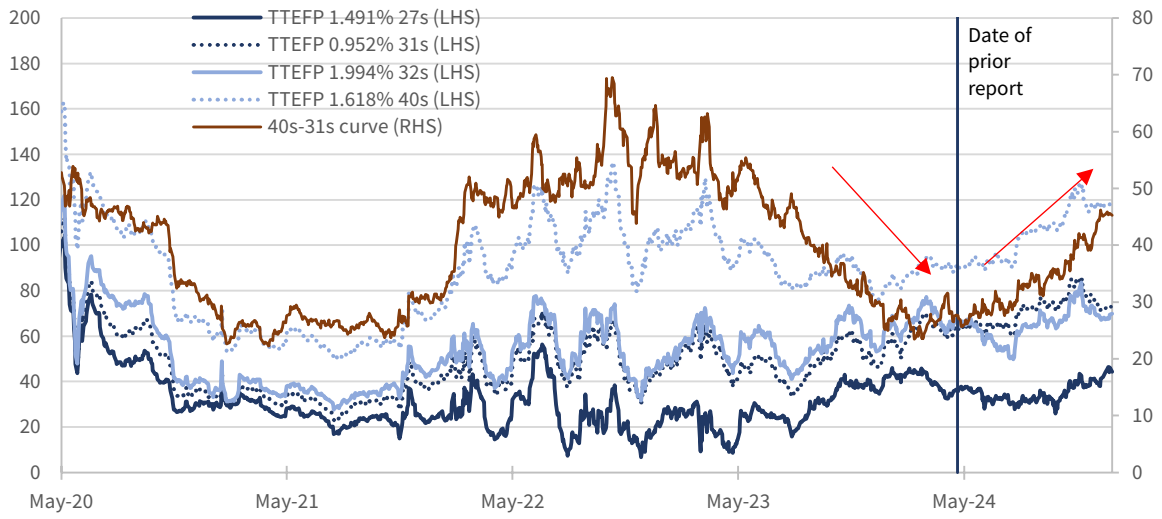
Table 2 compares figures for Total's issuance in 2024 to average market levels, for different maturities (note data is not available for all securities, as indicated).

What is interesting is that in the full market, looking at longer maturities where we see fewer deals, , there is higher investor demand, as demonstrated by an increase in average book cover from 3.99 for 10 year paper to 4.61 for 40 years. This may be due to the relatively reduced availability of long bonds. However, for TotalEnergies we see the opposite trend, where book cover reduces from 3.82 for 10-year bonds to 3.08 for the 40-year bonds. This could indicate that investors are adjusting their preferred exposure length for the oil & gas sector.

TotalEnergies bond moves

In our earlier report we analysed the movements of TotalEnergies's EUR bonds (that were issued longer ago, and so have more historic spread data).[2] As Figure 2 shows, there has been some slight steepening between the 31s and 40s since our earlier report, however this has been against a backdrop of overall yield steepening, and may well not be isolated to TotalEnergies spreads. In terms of duration, these are not the longest dated bonds.

Figure 2. Total historic EUR bond spreads. Source: Bloomberg, accessed 9 Jan 2025.



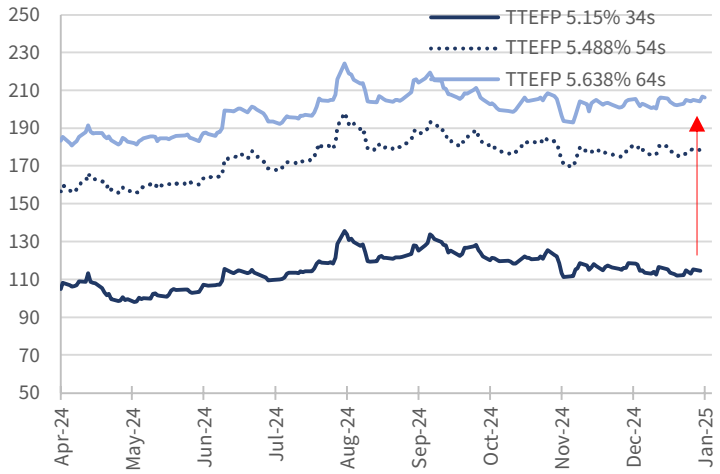
[8] Book cover ratios can have high variations, and are dependent on a number of factors, including the market dynamics on day of issuance and the final pricing of a deal; for example, if a very successful deal tightens its pricing significantly this can result in a lower cover ratio. However, this is a number which (where available) can be used to give information on investor interest.

Performance of April issuance

We can also review the performance of TotalEnergies's first tranche of long dated USD debt, issued in April, shown in Figure 3.

There has been some underperformance of the longest bond, the 2064s, which has widened around 20bp since issuance, compared with 9.6bp widening for the 34s.

Figure 3. Total historic USD bond spreads. Source: Bloomberg, accessed 10 Jan 2025.



Holders in the Net Zero Asset Managers Initiative

The Net Zero Asset Managers Initiative (NZAMI) is an international group of Asset Managers committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner.[9] It currently has over 325 signatories managing $57.5trn in AUM.

Its position paper on the oil & gas sector was published in Mar 2023, and outlines how to consider the sector in the context of net zero.[10] The document is clear, that no new oil or gas fields should be *financed, built, developed, or planned. Investment should be limited to existing [oil] fields."*[11]

TotalEnergies continues to invest in growing exploration and production activities, for example in the Republic of Congo[12] and South Africa.[13] A strict interpretation of this guideline could be that these are expansions of existing fields, and so not excluded. However, these investments serve to show TotalEnergies' commitment to expanding its production.

NZAMI does provide more general guidance: *"Nevertheless, we strongly caution against investment in long-lived assets that are likely to become stranded in a 1.5°C-aligned transition, and we underscore the reality that* "business-as-usual" *investments in oil and gas infrastructure are inconsistent with such a scenario."*

For a table of bondholders (where ownership is disclosed in Bloomberg), including which are signatories of the NZAMI, please see Table 3 in the Appendix.[14] In total, we estimate that nearly $0.5bn, of the recent found long issuances, is held by signatories.

The largest holder who has signed this initiative is Allianz SE, holder of all four long bonds to a total of $135mn. Other significant holders who are NZAMI signatories are Wellington Management, Capital Group and JPMorgan Asset Management.

[9] "Introduction", Net Zero Asset Managers Initiative, accessed 10 Jan 2025.
[10] "Position on the Oil & Gas Sector", Net Zero Asset Manager Initiative, Mar 2023.
[11] See Figure 5 on page 26.
[12] "TotalEnergies to invest $600 million in Republic of Congo's exploration production sector", 23 May 2024.
[13] "TotalEnergies targets new exploration area offshore South Africa", Reuters, 26 Nov 2024.
[14] "Signatories", Net Zero Asset Managers Initiative, accessed 10 Jan 2025.

Conclusions

Markets are still considered to be underpricing climate risk,[15] and given uncertainty grows with time, it is reasonable for high transition risk to drive steeper credit curves.

In the oil & gas sector, one with significant transitions to overcome, the fixed income market continues to offer long-term financing without meaningful curve steepening.

TotalEnergies has nearly tripled the average maturity of its issued bonds in the last decade, borrowing $5.25bn in 2024 beyond 2050, the target date for net zero emissions. The company continues to invest in new wells, albeit potentially in existing oil fields, which may allow them to be compliant with the letter of the Net Zero Asset Management Initiative (if not the spirit).

These long-dated bonds, at spread levels which do not include a premium for the transition uncertainty of the sector, present clear financial risks for investors. It can also be argued that their maturity renders them incompatible with net zero by 2050 commitments, and offering extended-length financing reduces ongoing engagement opportunities.

Appendix: largest holders of Total long bonds

Table 3 shows the largest bond holders from Bloomberg, which is based on voluntary disclosure and is therefore incomplete. This has been compared with the NZAMI signatory list for a manual check, and the potential mapped signatory included.

In total nearly $0.5bn is currently held by investors we believe to be signatories of the NZAMI.

Table 3. Largest bond holders and manual comparison with NZAMI signatory list. Source: Bloomberg, NZAMI, AFII, accessed 10 Jan 2025.

Investor	Apr54s	Apr64s	Sep54s	Sep64s	Total ($m)	NZAMI signatory
Vanguard Group Inc/The	130,909	66,600	103,729	58,827	360,065	
Teachers Insurance & Annuity Assoc	30,895	31,450	39,950	32,700	134,995	
Allianz SE	18,392	27,170	30,800	50,173	126,535	Allianz Global Investors
Northwestern Mutual Life Insurance	35,245	26,213	31,788	22,519	115,765	
Blackrock Inc	41,760	24,419	20,779	27,571	114,529	
Wellington Management Group LLP	29,165	42,095	14,255	20,105	105,620	Wellington Management
Capital Group Cos Inc/The	39,300	0	57,635	0	96,935	Capital Group
Yuanta Financial Holding Co Ltd	27,500	23,000	10,000	18,000	78,500	
New York Life Insurance Co	26,975	0	19,775	24,595	71,345	
Apollo Global Management Inc	0	7,250	17,100	44,200	68,550	
JPMorgan Chase & Co	24,357	17,415	11,790	183	53,745	J.P. Morgan Asset Management
Manulife Financial Corp	12,905	621	22,984	1,129	37,639	
Prudential Financial Inc	2,432	3,960	965	29,995	37,352	
General Electric Co	0	0	16,930	20,000	36,930	
CTBC Investments Co Ltd	17,500	7,000	4,700	4,000	33,200	
RGA Reinsurance Co	2,000	0	30,000	0	32,000	
Wells Fargo & Co	3,585	1,789	3,715	20,249	29,338	

[15] "Lex in depth: how investors are underpricing climate risks", Financial Times, 17 Aug 2023.

Investor	Apr54s	Apr64s	Sep54s	Sep64s	Total ($m)	NZAMI signatory
Capital Securities Investment Trus	10,230	14,570	80	2,280	27,160	
Cathay Securities Investment Trust	8,920	6,230	5,220	6,470	26,840	
Genworth Life and Annuity Insuranc	1,000	25,282	0	0	26,282	
Allspring Global Investments Holdi	4,058	2,218	1,201	18,208	25,685	
Gerber Life Insurance Co	0	0	0	25,000	25,000	
Hartford Financial Services Group	4,005	8,200	7,795	4,665	24,665	
Global Atlantic Financial Group Lt	0	22,670	0	0	22,670	
United Services Automobile Associa	0	15,000	0	7,000	22,000	
Robeco Schweiz AG	10,350	0	7,729	0	18,079	Robeco
Fuh Hwa Investment Trust Co Ltd	5,000	12,000	0	0	17,000	
OneAmerica Financial Partners Inc	0	16,824	0	0	16,824	
Ameriprise Financial Inc	1,666	5,846	1,418	7,699	16,629	
Peerless Insurance Co	0	0	8,900	7,000	15,900	
Minnesota Mutual Cos Inc	0	0	15,300	0	15,300	
State Street Corp	3,537	3,036	3,080	5,610	15,263	State Street Global Advisors
US BR SUN LIFE ASSUR CO OF CANAD	0	0	0	15,000	15,000	
FIL Ltd	1,940	1,270	0	11,374	14,584	Fidelity International (FIL)
Prudential PLC	3,516	8,810	0	2,000	14,326	
FMR LLC	7,163	6,231	330	0	13,724	
Genworth Financial Inc	0	12,500	0	0	12,500	
SEI Investments Co	1,221	5,078	1,208	4,605	12,112	
Swiss Life AG	10,900	0	0	0	10,900	Swiss Life Asset Managers
Thrivent Financial for Lutherans	9,000	0	1,367	0	10,367	
abrdn plc	1,950	1,300	5,794	1,250	10,294	abrdn

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