2024 – A YEAR OF TRIALS AND TRIBULATIONS

ONLY CORDIANT AND PANTHEON BUCK THE TREND

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FEBRUARY 2025

Table of contents

Executive summary ... 3
Overview of 2024 ... 6
The UK macro environment ... 10
Infrastructure investment companies (IICs) ... 12
European energy background ... 25
UK Energy market ... 27
Wholesale power prices in the UK ... 31
Power costs in the UK ... 32
Renewable energy infrastructure funds (REIFs) ... 35
Fundraisings ... 53
Current market ratings ... 56
Valuation issues ... 57
Dividends ... 58
Environmental Investment Trusts (EITs) ... 61
Databoxes ... 63
Conclusion ... 74
Appendix 1 ... 75
Glossary ... 75
Appendix 2 ... 76
Possible questions ... 76
Disclaimer ... 78
Status of Hardman & Co's research under MiFID II ... 78

Please note:

1. *Closing stock market prices, as at 31 December 2024, have been used, unless otherwise specified. Subsequent to that date, shares in Digital 9 Infrastructure have fallen heavily as it undertakes its Managed Wind Down.*

2. *The exchange rates used are: £ to € – €1.20; £ to $ – $1.25; and £ to Brazil Real – 7.8. The above exchange rates have been used throughout, although the fundraising table on pp.54-55, including its historical data, has not been adjusted to reflect the latest rates.*

3. *The number of shares in issue for many IICs and REIFs has varied of late due to numerous share buyback schemes that are being undertaken.*

4. *In terms of the plant capacity figures cited in this publication, the data is based – with some adjustments – on information published by the relevant REIF.*

Executive summary

- This Hardman & Co publication is an update of its February 2024 equivalent, assessing the nine quoted Infrastructure Investment Companies (IICs) and the 20 Renewable Energy Infrastructure Funds (REIFs). In both 2023 and 2024, interest rates sharply reduced sector valuations to produce, in most cases, substantial discounts to NAV, instead of the premiums that had been commonplace just a few years previously.
- As a 29-strong group, its combined market capitalisation is now £21.6bn. During 2024, the sector shed more than 15% of value, while the FTSE 100 rose by almost 6% and the FTSE 250 rose by a similar percentage.
- Between 2022 and 2024 inclusively, no IIC/REIF IPOs were undertaken: in 2021, there were nine such IPOs. For a combined sector that has raised ca.£10.3bn of new funds since 2020, the 2023 and 2024 fundraising levels were paltry – there were no major equity fund-raises in the sector last year.
- Currently, the most valuable IICs are 3i Infrastructure and HICL – capitalised at £2.9bn and £2.4bn, respectively. The equivalents in the REIF sector are Greencoat UK Wind and TRIG, which are capitalised at £2.9bn and £2.1bn, respectively.
- During 2024, there were sector casualties. Asian Energy Impact is now de-listed and moving into voluntary liquidation, while Atrato Onsite Energy was taken over. Some smaller REIFs had a dire 2024, with falls of ca.60% recorded for both Gresham House Energy Storage and HydrogenOne Capital Growth; the latter has experienced two very difficult years. In addition, Digital 9 Infrastructure's heavy borrowings became unsustainable, and it is now in Managed Wind-Down (MWD).
- Several "Continuation Votes" featured in both 2023 and 2024. The upshot is that Aquila Energy Efficiency, Aquila European Renewables, Digital 9 Infrastructure, Ecofin US Renewables Infrastructure and Triple Point Energy Transition are all in MWD; the latter fund has effectively completed its MWD sale of assets, within just 13 months and – reassuringly – is set to realise "89% of the portfolio carrying value".
- Despite some initiatives on the merger front, Aquila European Renewables has spurned the approaches of Octopus Renewables Infrastructure. A further possible scenario in 2025 is a merger between two quoted Foresight funds – one of which is the re-named JLEN.
- Most IICs/REIFs have avoided nominal dividend cuts, but dividend increases, generally, have been modest. However, Greencoat UK Wind, which links its dividend payments to RPI movements, has raised its dividend per share by almost 30% since 2022. 3i Infrastructure plans to raise its dividend by 6.3% this year, while – at the other end of the scale - HICL, a leading IIC, now seems set to pay the same dividend of 8.25p per share, for a sixth successive year.
- Underlying prospective dividend yields for the more established IICs and REIFs now lie within ranges of 4.5%-7.5% and 6.5%-9.5%, respectively. Lower dividend cover has become a notable trend, with GCP Infrastructure and HICL Infrastructure being among those preferring to build up their cover by holding their dividend payments on a nominal basis.
- Around 60% of the REIF sector's £10.0bn valuation is accounted for by wind power generation. Partly due to generous subsidies, the UK wind power sector has expanded: it now exceeds 28GW of capacity, while UK solar capacity is currently more than 13GW. With the recent election of a Labour government, there may be opportunities to build more UK onshore wind farms and more

solar sites, such as the Sunnica project, becoming available as planning constraints are eased.

- Until recently, offshore wind power was set to boom, with the government seeking a quintupling of its capacity by 2030. However, the surge in costs, notably of turbines, has seen the "Contracts for Difference" (CfD) strike prices for offshore wind projects almost double in two years.
- By contrast, gas prices, although still volatile, have fallen back markedly from their Ukraine-driven 2022 peaks. However, this market development has adversely affected some REIF valuations since long-term power price assumptions are an integral factor – along with the more important discount rate figure – in determining the NAVs of most REIFs.
- Three Environmental Trusts – Impax Environmental Markets, Jupiter Green and Menhaden Resource Efficiency – are also discussed briefly in this document. Along with the 29 IICs and REIFs, they lie within the Association of Investment Companies (AIC) universe.
- Please note that BBGI, one of the 29 IICs and REIFs analysed in this report, was – until quite recently – a client of Hardman & Co. Our Research Principles can be found here.

Current market ratings of UK IICs

IIC	Share price (p)	Shares in issue (m)	Market cap. (£m)	Year-end	NAV per share (p)	Prem./ disc. to NAV	Prosp. dividend (p)	Prosp. yield
3i Infrastructure	317	922	2,924	Mar	374.7	-15.4%	12.65	4.0%
BBGI	125	715	894	Dec	147.4	-15.2%	8.40	6.7%
Cordiant Digital Infrastructure	90	762	686	Mar	124.4	-27.7%	4.20	4.7%
Digital 9 Infrastructure	19	865	164	Dec	46.6	-59.2%	0.00	0.0%
GCP Infrastructure	70	866	606	Sep	105.2	-33.5%	7.00	10.0%
HICL	119	2,000	2,380	Mar	156.5	-24.0%	8.25	6.9%
INPP	121	1,880	2,275	Dec	149.5	-19.1%	8.36	6.9%
Pantheon Infrastructure	89	469	417	Dec	116.2	-23.4%	4.20	4.7%
Sequoia Economic Infrastructure	78	1,570	1,225	Mar	94.9	-17.8%	6.88	8.8%
Total			**11,571**					

Source: Hardman & Co Research

Current market ratings of UK REIFs

REIF	Share price (p)	Shares in issue (m)	Market cap. (£m)	Year-end	NAV per share (p)	Prem./ disc. to NAV	Prosp. dividend (p)	Prosp. yield
Aquila Energy Efficiency	52	81	42	Dec	95.1	-45.3%	6.14	11.8%
Aquila European Renewables	55	378	207	Dec	74.9	-26.9%	4.80	8.8%
Bluefield Solar	94	592	556	Jun	126.1	-25.5%	9.00	9.6%
Downing Renewables and Infrastructure	77	171	132	Dec	117.3	-34.4%	5.80	7.5%
Ecofin US Renewables Infrastructure	24	138	33	Dec	52.0	-53.8%	0.56	2.3%
Foresight Environmental Infrastructure (ex JLEN)	73	647	472	Mar	109.8	-33.5%	7.80	10.7%
Foresight Solar	77	565	435	Dec	112.6	-31.6%	8.00	10.4%
Gore Street Energy Storage	48	505	242	Mar	100.5	-52.2%	7.00	14.6%
Greencoat Renewables (ex €)	67	1,110	746	Dec	91.6	-26.6%	5.59	8.3%
Greencoat UK Wind	128	2,250	2,880	Dec	158.6	-19.3%	10.00	7.8%
Gresham House Energy Storage	45	569	256	Dec	109.1	-58.8%	0.00	0.0%
Harmony Energy Income	65	227	148	Oct	88.5	-26.6%	0.00	0.0%
HydrogenOne Capital Growth	20	129	26	Dec	100.8	-80.2%	0.00	0.0%
NextEnergy Solar	66	581	383	Mar	97.8	-32.5%	8.43	12.8%
Octopus Renewables Infrastructure	67	556	373	Dec	103.8	-35.5%	6.02	9.0%
SEEIT	54	1,090	589	Mar	90.6	-40.4%	6.32	11.7%
TRIG	86	2,460	2,116	Dec	121.6	-29.3%	7.47	8.7%
Triple Point Energy Transition	45	100	45	Mar	77.2	-41.7%	5.50	12.2%
US Solar	32	308	98	Dec	60.0	-46.7%	1.80	5.6%
VH Global Energy Efficiency	65	396	257	Dec	111.2	-41.5%	5.68	8.7%
Total			10,036					

Source: Hardman & Co Research

Overview of 2024

Most dispiriting for sector investors

For the IICs/REIFs, 2023 was a dreadful year, while 2024 was little better for most of the sector, especially for the less well-established REIFs. During 2024, the FTSE 100 Index rose by a relatively modest 5.7%, while – over the same period – the FTSE 250 rose by a similar level. In fact, only two of the remaining 29 IICs/REIFs under review – Cordiant Digital Infrastructure and Pantheon Infrastructure – were able to report an increase in their share price during 2024.

Dire year for some funds

Some REIFs did particularly badly in 2024. Asian Energy Impact (formerly ThomasLloyd Energy Impact) had seen its shares first suspended in late April 2023. In June 2024, the public quotation was removed and voluntary liquidation beckoned. Atrato Onsite Energy also lost its public quotation in December 2024, as a bid from Brookfield and Real Asset Investment Management was accepted. Five other funds, Aquila Energy Efficiency, Aquila European Renewables, Digital 9 Infrastructure, Ecofin and the re-named Triple Point Energy Transition, are now in "Managed Wind-Down" (MWD), following the loss of crucial "Continuation Votes".

BESS funds go backwards

Elsewhere in the sector, shares in some other REIFs also fell sharply during 2024: the worst performer of all was HydrogenOne Capital Growth, whose shares fell by 38% during 2023 and a further 60% in 2024. Two Battery Energy Storage System (BESS) stocks, Gresham House Energy Storage and Gore Street Energy Storage, both saw their shares plummet in 2024 – by 59% and 46%, respectively. Shares in the US-based Ecofin US Renewables Infrastructure were also very weak, losing almost 45% during 2024.

The Digital 9 Infrastructure plunge

Among the IICs, Cordiant Digital, up by 18.4%, and Pantheon Infrastructure, up by 6.2%, prospered in difficult markets. But the most arresting outperformance – sadly on the downside for its shareholders – were Digital 9 Infrastructure's shares, which plunged by 66% during 2023 and by a further 36% in 2024. The latter's move to MWD seemed somewhat inevitable.

Effective market closure for new equity – as per Cordiant Digital

Raising new – and, in some cases, much-needed – equity finance during 2024 for both IICs and REIFs was a virtual non-event, as the market, driven low by large discounts to NAV, was totally unreceptive. While some minor sums of money were raised, they added virtually nothing to the ca.£10.3bn of new funds raised by the 31, now 29, IICs/REIFs since January 2020. With high interest rates and major discounts to NAVs still prevailing, there is no obvious reason for this trend to reverse in the short term.

High interest rates were the real villain

At a general level, there were many negative financial factors impacting the IICs/REIFs during 2024. Inevitably, the sector has been heavily affected by high inflation, although some IICs, such as HICL and INPP, have particularly strong inflation linkage prescribed in many of their contracts. With UK inflation now back at 2.5%, the concerns about persistently high inflation may have receded – they have not, though, been eliminated, as the government's borrowing costs continue to escalate.

Trading discounts from NAV widen

More specifically, the progressive rise in interest rates, starting from 2022, has adversely affected discount rates and thereby depressed the sector's NAVs. Almost all 29 IICs/REIFs have made upward adjustments to their discount rates to reflect this trend. Not only have NAVs been cut – although, in some cases, this has been offset by other factors – but also the trading discounts for virtually all IICs/REFs have widened. The largest IIC discount currently applies to Digital 9 Infrastructure, which is trading at a 59% discount to its June 2024 NAV – and is principally based on assumptions about how much its remaining assets, notably the Arqiva stake, can realise from their planned sales. The widest NAV discount for the REIFs applies to

HydrogenOne Capital Growth, where the discount to its latest NAV is a massive 80%.

Share buybacks were the 2024 flavour of the year

Against this background, it is hardly surprising that share buybacks were very much flavour of the year in 2024 and will probably remain so in 2025. Most leading REIFs have undertaken some share buybacks as their renewable energy investment programmes have been curtailed, in some cases, because additional equity funds are needed. Several IICs have gone down the same route on the share buyback front, including HICL and INPP. While share buybacks do tend to add some value to NAV, the figures are generally quite modest.

Dividends – few nominal dividend cuts

The current low ratings for the sector, and especially for the REIFs, have resulted in enhanced dividend yields. Despite the challenges that they have faced, nominal dividend cuts have been surprisingly few. Both Aquila Energy Efficiency, now running down its asset portfolio, and the financially stretched Digital 9 Infrastructure have suspended their planned dividend payments, and BESS stocks have responded accordingly to the cutting of their revenue expectations in 1H'24. Others have adjusted their dividend payments, including the two US-based REIFs. Following tornado-related damage to a sub-station near its 60MW Whirlwind plant in Texas, Ecofin US Renewables Infrastructure has substantially cut its quarterly dividend payments. US Solar, too, has reduced its expected dividend flow.

Greencoat UK dividend stands alone

Within the 29 IICs/REIFs, two stocks stand out – on the upside – in terms of their dividend policies. 3i Infrastructure plans to raise its dividend by 6.3% for 2024/25 compared with its 2023/24 payment. Greencoat UK Wind paid a 10.0p per share dividend payment in 2023 – an increase of almost 30% over its 2021 payment of 7.18p per share. Hence, there was a very impressive 39% increase in just two years. For 2024, Greencoat UK Wind has flagged a minimum 10p per share dividend.

HICL's flat six-year dividend

At the other end of the scale are those IICs/REIFs that have either cut their dividend or maintained a held dividend, even when inflationary trends have been pronounced. HICL epitomises this approach. In 2024/25, it is expected to pay an 8.25p per share dividend for the sixth year in succession. The contrast between the latter and both 3i Infrastructure and Greencoat UK Wind, in terms of their respective dividend profiles, is self-evident.

Continuation votes abound – cf votes of confidence in football managers

A notable feature of 2023 – and especially in 2024 – for the IICs/REIFs has been the frequency of "Continuation/Discontinuation Votes". In some cases, they are prescribed by the terms of the investment trust; Sequoia Economic Infrastructure, which secured overwhelming backing from its shareholders, is one such example. In other cases, shareholders have a right to move a resolution that such a vote should take place. Within the IICs, they are less of an issue, except for Digital 9 Infrastructure, where there was a 99% vote in favour of MWD, as borrowing levels became excessive.

Vote losers – and relegation to the MWD division

In the REIFs sector, several of the worst-performing funds were subject to a "Continuation Vote", including Greencoat Wind, which – hardly surprisingly – emerged unscathed, with ca.93% of shareholders voting for its continuation. Less successful on that front have been Aquila Energy Efficiency and Triple Point Energy Transition. Both REIFs were dilatory in investing the funds raised at their IPOs, and both failed to survive the crucial vote. As such, along with Aquila European Renewables and Ecofin US Renewables Infrastructure, they are now in MWD. It should be added that it was little more than a formality for Asian Energy Impact's public listing to be removed following the long – and bitter – disagreement regarding the construction of the planned Rewa Ultra Mega Solar plant in India and its eventual move into voluntary liquidation.

UK General Election – Labour powers to 411 seats

More generally, two major political events have had an impact on the IIC/REIF sector. First, the July 2024 General Election was held, at which the Labour Party secured 411 parliamentary seats and simultaneously an overwhelming majority.

The very costly quest for Net Zero

Secondly, in opposition, the Labour Party had proposed a £28bn green investment programme. However, in the lead-up to the General Election, this commitment was pared back, mainly due to the huge costs involved in meeting it. But the Labour government is already working aggressively towards Net Zero, a pledge that – almost inevitably – requires massive investment in new renewable generation plant and far less output from Combined Cycle Gas Turbine (CCGT) plants. In theory, the latter policy should be positive news for the REIFs, but the very long delays in securing grid connections for most new wind and solar farms in the UK, allied to the challenging financial environment at present, means that relatively few new renewable plants in the UK are planned – this scenario could, of course, change.

Sunnica and wind build-outs

However, soon after entering office, the Labour government approved the highly controversial £600m Sunnica solar project on the Cambridgeshire/Suffolk border. To build it, some 2,500 acres of land will be required. Furthermore, various wind generation projects, mainly on the West Lancashire and East Yorkshire coasts are expected to secure planning approval in coming years.

The Public/Private Partnership (PPP) market is central to the activities of several IICs, such as BBGI and HICL. The Labour government may seek to expand the use of such financing arrangements, including the Private Finance Initiative (PFI); however, to date, little has been said on the matter. Retrospective changes to existing PPP projects are unlikely but certainly cannot be ruled out.

Ukraine – peace talks to re-start?

On the energy front, despite the likelihood of substantive peace talks being convened shortly, the war in Ukraine is now entering its fourth year. The impact on the energy sector has eased of late, as prices have adjusted to the new gas supply market in western Europe, which has seen imports of Russian gas significantly reduced in recent years.

Russian gas imports into Europe down by 70% since 2021

Recent figures show that gas imports from Russia in 2021 exceeded 150bn cubic metres. The current annual figure is below 45bn cubic metres, with volumes likely to fall further as the major pipeline across Ukraine will no longer transport Russian gas into the EU. As the international gas market has adjusted since 2021, with more gas contracts being signed with non-Russian suppliers, prices have fallen sharply from their peak. In fact, the main impact of lower gas prices in the wholesale energy sector is to make CCGT plants rather more competitive than previously – gas input costs make up a very high percentage of a CCGT's operating cost base.

The table, below, highlights the – in many cases, depressing – share price performance of the 29 IICs/REIFs funds during the 2024 calendar year.

IIC/REIF share price performance during 2024

IIC/REIF	Share price performance during 2024
Cordiant Digital Infrastructure	+18.4%
Pantheon Infrastructure	+6.2%
3i Infrastructure	-1.2%
GCP Infrastructure	-1.7%
Sequoia Economic Infrastructure	-7.7%
Aquila Energy Efficiency	-10.9%
INPP	-11.8%
BBGI	-12.0%
HICL	-14.3%
Downing Renewables & Infrastructure	-14.4%
VH Global Energy Efficiency	-15.6%
Greencoat UK Wind	-15.7%
Harmony Energy Income	-17.7%
SEEIT	-18.2%
Greencoat Renewables	-18.8%
Bluefield Solar	-20.6%
Aquila European Renewables	-22.5%
Octopus Renewables Infrastructure	-24.4%
TRIG	-24.6%
Foresight Solar	-24.7%
US Solar	-25.6%
Foresight Environmental Infrastructure (ex JLEN)	-27.5%
NextEnergy Solar	-29.1%
Triple Point Energy Transition	-33.8%
Digital 9 Infrastructure	-36.5%
Ecofin US Renewables Infrastructure	-44.8%
Gore Street Energy Storage	-45.6%
Gresham House Energy Storage	-58.7%
HydrogenOne Capital Growth	-60.0%

Source: Bloomberg

The UK macro environment

Macroeconomic issues, as they relate to the UK economy, affect the 29 IICs/REIFs to varying degrees: this document assesses their most important implications.

Energy price valuation driver

UK inflation now 2.5%

High energy costs have been a major factor in recent inflation trends; until quite recently, the UK inflation rate had exceeded 10%. While such a figure is negative for most other sectors – although banks are an obvious exception – many IICs and REIFs derive real benefit from such trends given that a high proportion of their revenues are effectively inflation-linked, especially those in the electricity and water sector. However, with UK inflation now at 2.5%, investor concerns about persistent inflation have abated, although they may well reappear as public net debt reaches £2.8tr and the yield on 10-year gilts moves closer to 5%.

Rise in 10-year gilt yields

The graph below shows the yield on the government's 10-year gilts and how it has increased very sharply since 2020. Inevitably, high gilt yields help to underpin inflationary trends.

UK 10-year gilt yield

Source: FT.com

HICL and INPP's 70%+ inflation protection

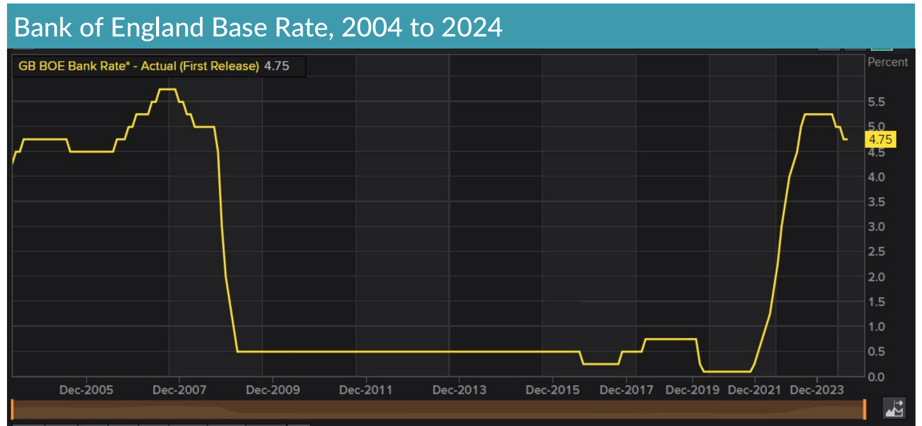
Nevertheless, many IICs/REIFs enjoy significant protection from inflation. In the cases of HICL and INPP, their inflation hedges are 80% and 70%, respectively. HICL has more than 100 assets while INPP is a major investor in the much-lauded Thames Tideway Tunnel (TTT) sewerage scheme; it is also heavily involved in electricity transmission links, through Offshore Transmission Owners (OFTOs), to offshore wind farms.

Hardly surprisingly, after a sustained period of low interest rates, the increases in interest rates, since 2022, have adversely affected some IICs and REIFs, especially those with high gearing, such as Digital 9 Infrastructure.

The interest rate worm turned in 2022

The sharpness of the interest rate upturn is highlighted by its very pronounced increase since 2022, as rising UK inflation became a serious concern. The graph below shows the Bank of England's official Base Rate from late 2004 to 2024. The near-zero levels, which prevailed between the onset of the financial crisis in 2009 and prior to the post COVID-19 rise in inflation in 2021, have been replaced by the rise in the Base Rate to the current figure of 4.75%. Whether further Base Rate cuts are feasible is debatable, to say the least.

Bank of England Base Rate, 2004 to 2024



Source: LSEG, 2025

Rising discount rates – HICL's 90bp increase since March 2023

Inevitably, higher interest rates have driven up the discount rates of many IICs/REIFs. Consequently, their NAV valuation has fallen as future revenues are marked down in real terms value. Several IICs/REIFs have already responded to this trend; HICL, for example, raised its discount rate from 7.2% in March 2023 to 8.0% in September 2023; it now exceeds 8.1%.

Infrastructure investment companies (IICs)

Nine quoted IICs

Currently, there are nine quoted UK IICs; they are capitalised at a total of £11.6bn, with 3i Infrastructure at £2.9bn and HICL at £2.4bn being the most valuable in the sector.

Core IIC grouping

The core IIC grouping consists of HICL, INPP and BBGI. HICL owns more than 100 assets across a wide range of sectors. INPP focuses more on the regulated energy and water sectors, while BBGI has a portfolio of low-risk assets in both the UK and in North America across many sectors, including roads and bridges.

Both the long-established GCP Infrastructure and the US-based Sequoia Economic Infrastructure are effectively major lenders. In the former's case, energy and PPP/PFI investments are key. In the latter's case, its lending is wide-ranging. In 2022, it struggled, facing some major bad debts. However, more recently, real progress has been made in settling them.

3i Infrastructure – *sui generis*

The highly successful 3i Infrastructure is very much a one-off within the IIC subsector, with a greater risk profile and materially higher dividend growth.

The three other IICs – all of which are recent sector arrivals – are either very, or partly, focused on the digital infrastructure market. In two cases, those of Cordiant Digital Infrastructure and Digital 9 Infrastructure, their core business is self-evident from their corporate names.

Binary outcome between Cordiant and Digital 9

The contrast between these two telco-orientated funds over the course of 2024 has been binary – the former was the best stock market performer of the 29 IICs/REIFs, while the latter is in MWD.

The Pantheon pitch

For Pantheon Infrastructure, floated in 2020, its investment remit is wide-ranging, with digital and energy infrastructure investments being considered priorities, as its recent investments have demonstrated.

Shown below are details of the nine IICs and the key aspects of their business operations.

3i Infrastructure (market cap. £2,924m)

3i Infrastructure plc

Investment sectors: In 2007, 3i Infrastructure was demerged from the 3i Group. Throughout the subsequent 17 years, it has thrived and delivered an 11.5% TSR over that time, well above that of any of its peers over a prolonged period. In terms of the sectors covered, 3i Infrastructure's investments have become increasingly diverse over the years. Yet, its "sweet spot" remains mid-market economic infrastructure investments within a typical equity range of £100m to £300m. Importantly for investors, 3i Infrastructure periodically recycles its portfolio assets – often generating substantial returns on its original investment. The now completed sale of its 33% stake in the Valorem renewable energy business is a case in point: the sale proceeds of €309m (£256m)) indicate a 31% premium to the September 2023 valuation.

Portfolio: 3i Infrastructure owns a portfolio of ca.20 investments. In terms of sectors, based on asset value, the energy business is a key component, although communications – in various guises – have also become more prominent. Importantly, in recent years, several deals have given rise to material changes in the portfolio. Three investments – TCR, an airport services business, ESVAGT, an offshore services operator, and Infinis, a waste and re-cycling undertaking – now

account for more than 40% of total equity value to 3i Infrastructure: the trading performance of all three of these businesses has been reassuring of late, as indicated by the interim results report for 2024/25. In terms of legal jurisdictions, 3i Infrastructure's assets are split quite widely throughout the EU and the UK. Also, some of the operations have become more international, extending well beyond mainland Europe.

Financial/share price data: 3i Infrastructure's share price performance in 2024 showed a very modest decline over the year. In its half-year results for 2024/25, the figures were impressive, with the reported NAV rising to 374.7p per share – the comparable March 2024 figure was 362.3p. Even with the latest NAV figure being derived from a conservative 11.3% discount rate, the shares are currently trading at a 15% discount to NAV. With the various initiatives in recent years to raise its stakes in such companies as GCX, ESVAGT and SRL, it is no surprise that the once formidable net cash balance has been eroded. Indeed, 3i Infrastructure was one of the few sector members to undertake an equity issue in 2023 when it raised net proceeds of £100m: the discount, based on the pre-equity-raise announcement, was just 3.4%. Such an issue for most IIC/REIFs would not be feasible today. On the dividend front, 3i Infrastructure is well ahead of its peers in announcing a dividend target of 12.65p per share for 2024/25, which represents an impressive 6.3% increase on the 2023/24 dividend per share figure. 3i Infrastructure's latest income statement is shown in the table below.

3i Infrastructure – half-year income statement, 2024/25

(£m)	to 30/09/24	to 30/09/23
Net gains on investment	**40**	**117**
Investment income	**98**	**97**
Interest receivable	0	1
Investment return	138	215
Movement in FV of derivative instruments	58	14
Management and performance fees	(25)	(24)
Operating expenses	(1)	(1)
Finance costs	(17)	(16)
Exchange movements	16	3
Profit before tax	**169**	**191**
Income taxes	0	0
Profit after tax and profit for the year	**169**	**191**
Total comprehensive income for the year	**169**	**191**
EPS (basic and diluted, p)	**18.3**	**20.7**

Source: 3i Infrastructure, Hardman & Co Research

3i Infrastructure has recently published a table of its leading value contributors, led by the TCR business, which operates at ca.160 airports. The relative valuations are set out below – assuming the sale of the Valorem stake is closed shortly.

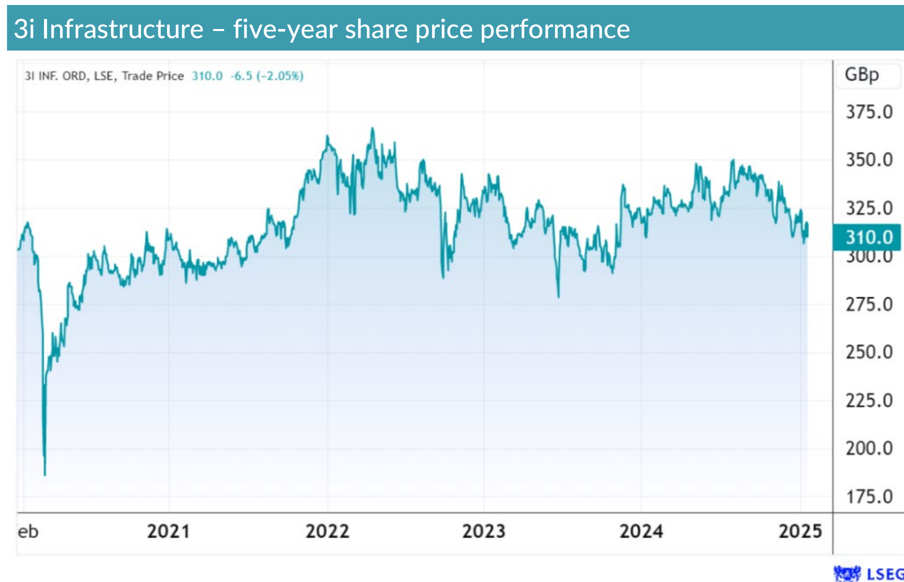
3i Infrastructure – leading value contributors

Company	Main markets	% of valuation to 3i Infrastructure at 30/09/24
TCR	Airport ground services	16%
ESVAGT	Offshore wind vessels	14%
Infinis	Waste/recycling	11%
GCX	Global data/sub-sea networks	9%
Tampnet	Offshore comms.	8%
Ionisos	Sterilisation facilities	8%
Joulz	Energy infrastructure	8%
Oystercatcher	Liquid storage terminals	6%
SRL	Traffic systems	6%

Source: 3i Infrastructure

Overall, most long-term investors in 3i Infrastructure should have benefited considerably, as the five-year graph highlights – its outperformance against other IICs, and especially most REIFs, has been noticeable.

3i Infrastructure – five-year share price performance



Source: LSEG, 2025

BBGI (market cap. £894m)

Investment sectors: BBGI is a diversified social infrastructure company, which seeks to invest in long-term, low-risk essential infrastructure investments that deliver solid and predictable cashflows. Most of its investments are via PPPs or derivatives thereof: they are underpinned by government-backed revenues. The strategy fully embraces availability-based assets. As such, there are no investments in higher-risk, demand-based or regulatory-based sectors, such as energy. Overall, BBGI has the lowest risk profile of all nine IICs under review. Moreover, it consistently reports the lowest ongoing charges among the IICs to its shareholders – in most cases, the figure is well below those of its peers.

Portfolio: Within its global 56-strong asset portfolio, investment in transport and health features prominently, accounting for 54% and 20% of the portfolio, respectively. Reassuringly, BBGI's portfolio concentrates on low-risk, public sector-financed, availability-based infrastructure investments. Its two leading markets are Canada and the UK; they account for 35% and 33%, respectively, of BBGI's overall portfolio valuation. BBGI has two investments that are worth 10% or more of its portfolio – namely, the Golden Ears Bridge in Canada and the Ohio River Bridge in the US. BBGI is single-minded in its policy of not investing in availability-based infrastructure assets; consequently, it avoided – unlike some other IICs, including HICL and INPP, which had invested in demand-based transport projects – any materially negative impact from COVID-19. Indeed, BBGI's assets are available for a remarkable 99.9% to its public sector clients. Furthermore, none of its existing 56 investments has reported either defaults or distribution lock-ups.

Financial/share price data: The 10% share price fall in 2023, along with the 12% equivalent in 2024, saw the healthy 25% trading premium in mid-2022 being converted into a current trading discount of 15%. In August 2024, BBGI announced its results for its half-year ending in June 2024: the key figures, with mark-to-market adjustments being very prominent, are reproduced below. Even if NAV growth has proven to be elusive of late, BBGI's overall NAV record, despite the recent rise in its discount rate to 7.3%, remains solid, although its June 2024 NAV figure – at 147.4p per share – was slightly lower than during the corresponding period in 2023. Also,

with net cash of £21m, its finances are far stronger than those of many of its competitors. BBGI's TSR since its flotation in 2011 has fallen sharply and is now 7.0%, well below the comparable figure of 10.4% in 2021. A full-year dividend of 8.40p per share is expected for 2024. For 2025, BBGI has re-confirmed its target dividend, namely 8.57p per share. With cash dividend cover of 1.47x, BBGI's dividend payment capacity is sound – it boasts that its "current portfolio could sustain a progressive dividend for 15 years without any further investment". Few members of its peer group could claim likewise.

BBGI – half-year income statement, 2024

(£m)	to 30/06/24	to 30/06/23
Income from investments at FVPL	35.0	21.2
Other operating income	0.2	1.5
Operating income	**35.2**	**22.7**
Administrative expenses	(6.9)	(6.3)
Other operating expenses	(0.8)	(1.8)
Net finance result	(0.7)	(1.4)
Net loss on balance sheet hedging	(0.7)	0
Profit before tax	**26.4**	**13.2**
Tax expense (net)	(0.3)	(2.1)
Profit for the year	**26.1**	**11.1**
Other comprehensive income	(0.1)	1.1
Total comprehensive income	**26.0**	**12.2**
EPS (basic, p)	**3.65**	**1.55**

Source: BBGI, Hardman & Co Research

BBGI's availability-based business model is centred upon assuming very low risks and generating good returns – a policy that has proved successful in recent years. While BBGI has 56 investments currently, this figure is set to grow. However, the new mantra is "disciplined capital allocation", so there is unlikely to be a heavy flow of new investments: consolidation will be paramount for 2025, and possibly beyond.

The image below provides an example of BBGI's 25 investments in the UK; namely, the Mersey Gateway Bridge, which is located in the north-west of England.

Mersey Gateway Bridge

Source: https:/www.bb-gi.com

Cordiant Digital Infrastructure (market cap. £686m)

Cordiant DIGITAL INFRASTRUCTURE

Investment sectors: Of the 29 IICs/REIFs under review, Cordiant Digital Infrastructure's share price was the best – or the least bad performer – in 2024, actually rising by 18%. Its business model is very focused on digital infrastructure and enhanced connectivity; these rapidly developing markets, especially in the EU, lie at the heart of its business operations. Major acquisitions in Poland and in the Czech Republic have indicated that Eastern Europe is its core market – and one

where the opportunities for revenue growth, especially in Poland's booming economy, are self-evident.

Portfolio: Cordiant Digital Infrastructure's most valuable business is the Polish-based, Emitel, which is a multi-asset digital information undertaking; it is sited in Warsaw and owns more than 550 communication towers. The Emitel acquisition cost more than £350m, but it was valued in the half-year accounts, ending in September 2024, at £559m. Cordiant Digital Infrastructure's other key business – bought at a cost of £306m – is Ceske Radiocomunikace (CRA) in the Czech Republic. This company owns a thriving business comprising 660 broadcast towers, an optical backbone network and a portfolio of strategically located data centres. In the half-year accounts ending in September 2024, CRA had a book value of £403m. Two other post-IPO deals also merit comment – the acquisition of the New York City-based Hudson Interchange for $74m (£59m) and of Speed Fibre, which is located in the Republic of Ireland (RoI). Recently, Cordiant Digital has announced the planned acquisition of a 37.2% economic stake in a group of data centre operations in Belgium at a cost of more than ca.€72m (£60m): completion of this deal is due shortly. Undoubtedly, the Emitel and CRA operations in Eastern Europe will be pivotal in driving the finances of Cordiant Digital, especially through strong year-on-year EBITDA growth.

Financial/share price data: With its shares down by 10% during 2023, Cordiant Digital Infrastructure's performance in 2024 was rather more impressive – up by 18%: this figure contrasts with the sorry plight of the sector's other telco player, Digital 9 Infrastructure, whose shares fell by 66% during 2023 and by 36% in 2024 – it is now in MWD. Cordiant Digital's NAV, as at September 2024, was 124.4p per share, compared with 112.7p per share at September 2023: its latest discount rate is 9.5%. EBITDA continues to grow strongly and should exceed €160m (£133m) by the year-end. However, its shares are now trading at a 28% discount to NAV. Cordiant Digital Infrastructure has been quite aggressive – although less so than Digital 9 Infrastructure – in building up its portfolio, having raised ca.£800m of funding from equity markets in under four years, including the £370m of gross proceeds at its IPO in February 2021. While further equity fundraising has been discounted for the present, due to the parlous state of the market for new capital, Cordiant Digital still has some headroom for additional borrowing, especially given its strongly rising EBITDA: its latest net debt/GAV ratio is a far from excessive 38%. Cordiant Digital Infrastructure plans to pay a 4.20p dividend per share for its 2024/25 financial year.

Cordiant Digital Infrastructure – half-year income statement 2024/25

(£000)	to 30/09/24	to 30/09/23
Income		
Net gain on investments at FV through P/L	54,155	21,050
Total income	**54,155**	**21,050**
Operating expenses		
Investment acquisition costs	(1,327)	(1,198)
Other expenses	(3,951)	(6,869)
Operating profit	**48,877**	**12,983**
Foreign exchange movement of working capital revaluation	2,886	332
Finance income	1,077	988
Finance expenses	(3,826)	(4,902)
Profit before tax for the period	**49,014**	**9,401**
Tax charge	0	0
Profit and total comprehensive income for the period	**49,014**	**9,401**
Basic EPS from continuing operations (p per share)	**6.40**	**1.22**
Diluted EPS from continuing operations (p per share)	**6.40**	**1.22**

Source: Cordiant Digital Infrastructure, Hardman & Co Research

Digital 9 Infrastructure (market cap. £164m)[1]

Investment sectors: In March 2021, Digital 9 Infrastructure undertook its well-received IPO – it emerged from the same stable as Triple Point Energy Transition. Digital 9 Infrastructure focusses on building out digital infrastructure, including networks, undersea cables and data platforms, mainly in Europe. However, since 2023, it has been downhill all the way for the company, as financial pressures have caused its share price to plunge – and made new equity raising impossible. Following an overwhelming 99% vote in favour of an MWD, Digital 9 Infrastructure is now proceeding – somewhat unsteadily – to this end. Nevertheless, completion of the ca.$440m (ca.£352m) sale of the key business, Verne Global, was eventually confirmed in March 2024: the disposal value includes deferred consideration payments but excludes a medium-term earn-out provision.

Portfolio: During 2021 and 2022, Digital 9 Infrastructure had made major progress in building its portfolio, with a series of investments. Its first substantial acquisition was that of Aqua Comms., an Irish-based business that operates capacity services across fibre-optic telecoms networks. Subsequently, Verne Holdings, which operates data centres in Iceland, was acquired for £231m and then incorporated into Verne Holdings. The former was sold recently – at well below expectations – for just €48m (£39.8m), while the sale of the latter was completed in March 2024. Digital 9 Infrastructure also bought a 48% stake in Arqiva, a UK data, networks and communications service provider, at a formidable cost of ca.£460m. Selling this business is more problematic, with the sales process being put on the "backburner" – for the moment at least – in the quest to maximise shareholder value.

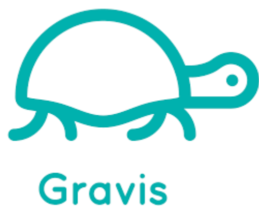
Financial/share price data: Digital 9 Infrastructure's share price performance has been dire – it now trades at a 59% discount to its much-written-down NAV, at June 2024, of 46.6p per share: its NAV, at June 2023, exceeded 100p per share, so the decline really has been precipitous. Dividends will no longer be paid, although there will be returns of capital as the MWD yields sales proceeds. Key to the ongoing valuation will be the level of proceeds generated by the expected – albeit deferred – sale of the valuable 48% stake in Arqiva.

[1] Since the compilation of this data, shares in Digital 9 Infrastructure have fallen heavily, along with its market capitalisation

Digital 9 Infrastructure – half-year income statement, 2024		
(£000)	to 30/06/24	to 30/06/23
Income		
Income from investments held at FV	0	27,972
Gains on investments held at FV	(279,463)	(81,520)
Interest income	1,352	1,211
Other income	190	433
Total income	**(277,921)**	**(51,904)**
Expenses		
Acquisition expenses		0
Investment management fees	(3,329)	4,486
Other operating expenses	(2,022)	(977)
Total expenses	**(5,351)**	**(5,463)**
Operating profit	**(283,272)**	**(57,367)**
Finance expenses	0	0
Profit on ordinary activities before taxation	(283,272)	(57,367)
Profit and total comprehensive income attributable to shareholders	(283,272)	(57,367)
EPS (basic and diluted, p per share)	**(32.73)**	**(6.63)**

Source: Digital 9 Infrastructure, Hardman & Co Research

GCP Infrastructure (market cap. £606m)



Investment sectors: GCP Infrastructure, along with GCP Asset Backed, is one of two quoted Gravis Capital closed-ended investment funds: their market capitalisations are £606m and £164m, respectively – at one time, a merger was mooted. GCP Infrastructure's declared aim is "to create a diversified portfolio of debt and similar assets secured against UK infrastructure projects". It focuses on debt investments in the renewable generation sector and on PPP/PFI schemes: the portfolio split is currently 62% and 26%, respectively.

Portfolio: Within GCP Infrastructure's portfolio, there are currently 50 investments, with an average life of 11 years – all are UK-based. The core business remains the renewable energy investments, especially solar generation (both commercial and rooftop) and wind generation: they account for 25% and 13% of the portfolio's value, respectively. The biomass plants add a further 10%. Outside the energy sector, GCP Infrastructure has 26% of its asset value tied up within PPP/PFIs, a financing model that the UK government is seeking either to phase out or at least to reform fundamentally. Supported living, a sector in which further investment by GCP Infrastructure now seems unlikely, accounts for a further 12% of underlying asset value.

Financial/share price data: With a share price fall of under 2% in 2024, GCP Infrastructure outperformed a struggling sector. In its full-year results for the period ending in September 2024, GCP Infrastructure reported a NAV of 105.2 per share, compared with 109.8p per share in September 2023: the former figure was derived from a discount rate of 7.9%. Its shares are currently trading at a 34% discount to its NAV. To maximise the use of capital and to boost its NAV per share, GCP Infrastructure has announced a major asset recycling policy of up to £150m – around 25% of its total share capital. The first element of this initiative is the sale of its debt interest in the 53MW Blackcraig wind farm. Although with net debt of ca.£45m – a relatively modest figure given its market capitalisation – the Blackcraig deal may well be the precursor of many more disposals in coming years. In 2019/20, GCP Infrastructure's dividend was cut to 7.00p per share, a figure that has been held subsequently. It seems that only a very successful asset recycling policy could boost it materially.

GCP Infrastructure – full-year income statement, 2023/24		
(£000)	to 30/09/24	to 30/09/23
Income		
Net income/gains on FV financial assets	37,340	29,301
Net gains on FV derivative financial instruments at FV	496	12,860
Other income	493	9,544
Total income	**38,329**	**51,705**
Expenses		
Investment advisory fees	(8,300)	(8,670)
Operating expenses	(3,038)	(2,752)
Total expenses	**(11,338)**	**(11,422)**
Total operating profit before finance costs	26,991	40,283
Finance costs	(7,477)	(9,378)
Total profit and income for the period	**19,514**	**30,905**
EPS (basic and diluted, p)	**2.65**	**3.50**

Source: GCP Infrastructure, Hardman & Co Research

HICL (market cap. £2,380m)

Investment sectors: In its extensive portfolio, HICL holds over 100 investments across many sectors. Indeed, irrespective of various overseas acquisitions, including a recent investment in New Zealand, HICL's portfolio remains heavily slanted towards the UK, which accounts for 65% of its investments: a further 21% arise from the EU. Due to the acquisition of a 46% stake in the Texas Nevada Transmission business – now its fourth most valuable holding – the North American exposure is growing. Transport and health investments, which now account for just under 50% of the overall value, are key sectors – along with electricity and water, at 19% – in HICL's increasingly diverse portfolio.

Portfolio: HICL owns the largest – and widest – portfolio of investments of the nine IICs under review. Since its IPO in 2006, its portfolio has been built up over a sustained period. Significantly, in terms of the risks faced by investors, contracted revenues, such as those under PPP/PFI schemes, are now earned from 58% of these assets. The demand-based revenue segment, which includes some revenue risk, is now down to 13%, while regulated revenues account for the remainder. Importantly for investors, HICL's portfolio currently offers inflation linkage of ca.80% – a reassuring figure during a period of possibly rising – rather than falling – inflation, and above that of other quoted IICs. Compared with previous half-years, HICL had a relatively quiet period in terms of portfolio changes during 1H'24. However, the sale of the Northwest Parkway toll road in the US was completed in April 2024, yielding proceeds of $232m (£186m). Furthermore, during the following month, HICL completed its sale of part of its stake in the Hornsea 2 OFTO. Looking ahead, Ofwat's final price determination for Affinity Water – HICL's most valuable holding – covering the five-year regulatory period between 2025 and 2030, will be pivotal; Affinity retains the right to appeal against this determination to the Competition and Markets Authority (CMA), a decision that will need to be made shortly.

Financial/share price data: Shares in HICL have fallen by almost 15% during both 2023 and 2024: the long-held dividend would have been one factor for this unimpressive trend. The latest NAV figure was 156.5p per share – down from 164.9p per share at March 2023. The share trading discount is now 24%, while the latest weighted average discount rate is 8.1%. Recently, HICL published its half-year results for 2024/25. Overall, they were sound, with few obvious operational challenges to overcome. However, underlying dividend cover, on a cash basis, remains very tight, at 1.07x. The dividend is set to be held at 8.25p per share for the 2024/25 financial year – meaning six years of a flat nominal dividend for the sector's bellwether.

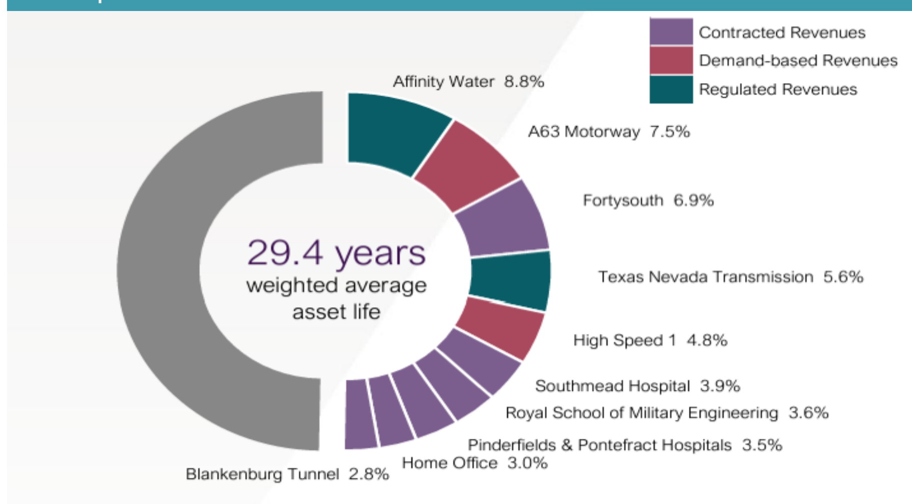
HICL – half-year income statement, 2024/25

(£m)	to 30/09/24	to 30/09/23
Dividends received	280.8	53.9
Interest income	69.7	64.0
FV movement	(273.2)	(108.9)
FV movement on investments	(29.4)	(11.3)
Loss on forex derivatives	17.6	7.9
Other income	6.2	5.3
Total income (IFRS basis)	**71.7**	**10.9**
Expenses/finance costs	(26.7)	(38.5)
Profit before tax	**45.0**	**(27.6)**
Tax	0	0
Total return	45.0	(27.6)
Earnings per share (basic and diluted, p)	**2.2**	**(1.4)**

Source: HICL, Hardman and Co Research

In its 2024/25 half-year results, HICL updated key data for its current portfolio; details are set out in the chart below. Transport, at 27%, remains the most favoured sector for HICL. There are also five individual investments, each accounting for more than 4% of the portfolio's value, namely: Affinity Water (8.8%); the A63 motorway in France (7.5%); Fortysouth, a New Zealand-based towers business (6.9%); Texas Nevada Transmission in the US (5.6%); and High Speed 1 in the UK (4.8%).

HICL's portfolio 2024



Source: HICL Infrastructure's 2024/25 half-year results presentation

INPP (market cap. £2,275m)

Investment sectors: INPP's origins date back to Babcock & Brown, an Australian Investment Bank. INPP adopts a long-term investment horizon – of well over 30 years. It has delivered a creditable TSR of 6.4% per year since its IPO in 2006. Its core investments are in the energy sector, especially in gas transportation – its 7.0% stake in the price-regulated Cadent is its prime asset – and electricity transmission. Indeed, investment as an OFTO – illustrated by the ca.£77m completion of the Moray East OFTO in February 2024 – is becoming increasingly important to INPP.

Portfolio: Utilities' infrastructure is central to INPP's investment strategy. The Cadent gas distribution network is the UK's largest and supplies 11m homes and businesses – it accounts for 16% of INPP's portfolio value. Its second-largest investment is the 25km TTT super sewer, which is designed to capture 95% of London sewer overflows. The latest cost figure is ca.£4.5bn, which is very close to the original estimate and, as such, an obvious – and very successful – template for financing large utility projects. Much of the remainder of INPP's portfolio comprises transport and education investments, including more than 260 schools; these two sectors account

for 19% and 16% of the portfolio, respectively. Furthermore, due to its price regulation exposure, INPP offers impressive inflation linkage of ca.70%; among its peer group, only HICL quotes a higher figure. Geographically, the UK remains INPP's key market, with 72% of its portfolio being located here. Of the remainder, Belgium (with its Diabolo rail link contract to service Brussels airport) and Australia now account for 8% and 7%, respectively, of the portfolio's value. In 2024, INPP, through the acquisition of Abelio Germany by its fully owned subsidiary BeNEX, became a major provider of local railway services in Germany.

Financial/share price data: Despite a share price fall of almost 12% in 2024, INPP continues to perform well operationally, as its latest half-year results highlighted. However, the rise in its weighted average discount rate from just over 7.5% at December 2022 to 8.7% at June 2024 has adversely affected its NAV returns of late. INPP's NAV has fallen from 159.1p per share at December 2022 to 149.5p per share at June 2024; as such, its shares are currently trading at a near 19% discount to its NAV. In terms of dividends, INPP's policy is clearcut; it plans an 8.36p per share distribution for 2024. In addition, an 8.58p dividend per share figure is being targeted for 2025. Thereafter, INPP aims to revert to a long-term policy of a 2.5% annual increase in its dividend. Significantly, over the past 18 months, cash conservation has become a priority – ca.£260m has been raised from divestments since mid-2023. Furthermore, an ongoing share buyback programme has been implemented as INPP seeks to narrow the pronounced NAV trading discount.

INPP – half-year income statement, 2024

(£000)	to 30/06/24	to 30/06/23
Interest income	55,863	51,688
Dividend income	35,994	34,012
Net change in investment at FV via P&L	(55,344)	(67,116)
Total investment income	**36,513**	**18,584**
Other operating income/expenses	790	3,341
Total income	**37,303**	**21,925**
Management costs	(15,649)	(16,004)
Administration costs	1,2365	(1,095)
Transaction costs	1,208	(1,621)
Directors' fees	(254)	(235)
Total expenses	**(18,347)**	**(18,955)**
Profit before finance costs and tax	**18,956**	**2,970**
Finance costs	(2,286)	(2,711)
Profit before tax	**16,670**	**259**
Tax credit	(58)	(39)
Profit for the period	**16,612**	**220**
EPS (basic and diluted, p)	**0.87**	**0.01**

Source: INPP, Hardman & Co Research

Pantheon Infrastructure (market cap. £417m)

Investment sectors: Pantheon Infrastructure was one of two IICs/REIFs, along with Cordiant Digital, whose shares rose in 2024 – by over 6%. At its IPO, in November 2021, Pantheon Infrastructure identified the following sectors as possible targets: digital infrastructure; renewables and energy efficiency; power and utilities; transport and logistics; and social investment. In the event, the first three sectors of this quintet have featured prominently in Pantheon Infrastructure's subsequent investment; the latter pair less so. At its IPO date, Pantheon Infrastructure had been seeking to acquire between eight and 12 assets by the autumn of 2022 – a target that was achieved: it now has 13 such investments. Undoubtedly, the pulling of its proposed £250m C shares issue in September 2022 – at the height of the mini-Budget controversy – was something of a harbinger for the IIC/REIF sector, by suddenly making fundraising far more difficult. As such, it was a serious setback and has been a constraint as Pantheon Infrastructure seeks to expand its portfolio. However, the 13 investments have all performed well, with no long-lasting shortcomings.

Portfolio: As the table below shows, Pantheon Infrastructure boasts a portfolio worth £512m, at June 2024. These investments have been spread across several sectors – power/utilities/renewables and digital infrastructure, each accounting for well over 40% each of the portfolio's value. In terms of markets, 80% of Pantheon Infrastructure's assets are located either in Europe, with 44%, or in North America, with 36%: the UK element is now 16%. Encouragingly for Pantheon Infrastructure, there have been few material operating issues from its 13 investments, albeit Cartier Energy faced some challenging times in 2023, from which it has now recovered.

The table below lists the acquisitions completed by Pantheon Infrastructure since its IPO along with their June 2024 investment value, which totalled £512m. Two investments have been the subject of substantial rises in their asset value – both Calpine and CyrusOne have seen their value rise by over 60% since December 2022. In the former's case, Pantheon Infrastructure is expected to sell all, or part, of its shareholding in 2025 or in early 2026, possibly adding ca.3p per share to NAV.

Pantheon Infrastructure acquisitions since IPO

Company	Date	Subsector	Region	6/2024 Value (£m)
Primafrio	3/22	Transport/logistics	Spain	47
CyrusOne	3/22	Digital data centre	North America	37
National Gas	3/22	Gas transmission	UK	46
Vertical Bridge	4/22	Digital towers	North America	26
Delta Fiber	4/22	Digital fibre	Netherlands	27
Cartier Energy Holdings	5/22	District heating	North America	30
Calpine	6/22	Electricity generation	North America	76
Vantage Data Centers	7/22	Digital data centre	North America	29
Fudura	7/22	Renewables	Netherlands	48
National Irish Broadband	11/22	Digital fibre	RoI	48
GD Towers/Digital Bridge	1/23	Digital towers	Germany/Austria	41
Global Connect	6/23	Digital infrastructure	Sweden	21
Zenobe	9/23	Battery storage	UK	36
Total				**512**

Source: Pantheon Infrastructure plc

The investment in Calpine is, arguably, Pantheon Infrastructure's most significant – and most profitable - project to date: it was also the most expensive. Calpine is the largest generator of electricity from natural gas and geothermal resources in the US. Looking forward, Pantheon Infrastructure's portfolio may begin to resemble that of 3i Infrastructure – but with less risk, lower returns and higher US exposure.

Financial/share price data: Pantheon Infrastructure's NAV, as at September 2024, was 116.2p per share compared with 106.6p per share at September 2023. Unlike most IICs/REIFs, its NAV has been on an upward trajectory of late. Even with its shares rising by over 6% during 2024, they are still trading at a discount of 23% to its latest NAV. Furthermore, the discount rate used by Pantheon Infrastructure is 13.6%, a figure that is way above that of its peer group – it may also indicate some hidden shareholder value. In November 2021, Pantheon Infrastructure's IPO had been very strongly supported in that its £300m fundraising target was easily reached; eventually, a figure of £400m was prescribed – a very different scenario from the pulled C shares issue in September 2022. Clearly, timing was everything. Subsequently, Pantheon Infrastructure has been focusing on delivering further shareholder value from its portfolio as well as undertaking a share buyback programme, suggesting that consolidation – rather than expansion – has become more of a priority. In terms of dividends, Pantheon Infrastructure plans to pay 4.20p per share for 2024.

Pantheon Infrastructure half-year income statement 2024		
(£000)	To 30/06/2024	To 30/06/2023
Gain on investments at FV via P&L	22,837	7,193
Gains on financial instruments at FV via P&L	3,944	9,724
Forex gains on cash and non-portfolio investments	32	116
Investment income	19,910	0
Investment management fees	(2,608)	(2,386)
Other expenses	(781)	(951)
Profit/loss before finance and tax	**43,334**	**13,696**
Finance income	366	1,762
Interest payable and similar charges	(970)	(560)
Profit/loss before taxation	**42,730**	**14,898**
Tax paid	0	0
Profit/loss for the period	42,730	14,895
Earnings per share (p) – basic and diluted	9.09	3.11

Source: Pantheon Infrastructure, Hardman & Co Research

Sequoia Economic Infrastructure (market cap. £1,225m)

Investment sectors: Sequoia Economic Infrastructure operates as a specialist investor in the infrastructure debt market. It manages a portfolio of debt – virtually all of which is private – and bond investments, with generally shorter timeframes than those of other quoted IICs. At present, Sequoia Economic Infrastructure has ca.56 investments, with an average life of ca.3.6 years.

Portfolio: Recent reports indicate that Sequoia Economic Infrastructure's portfolio is taking a slightly more cautious stance, with 55% of its investments being defensive. Defined within this latter category are – very questionably – lending to digitalisation businesses, along with loans to accommodation, utility and renewable generation undertakings. In terms of jurisdictions, just under half of Sequoia Economic Infrastructure's assets are located in North America, with a further 28% being in the UK and 23% being in Europe. A key priority is to minimise non-performing loans (NPLs) – three have occurred of late. First, having faced sizeable potential losses via its indirect exposure to the collapsed BULB Energy – a victim of the UK's shambolic energy supply market – Sequoia Economic Infrastructure has now recovered most of the outstanding loans. Secondly, the Glasgow-based Clyde Street Hotel bad debt has also been resolved. Thirdly, the long-running 4,000 Connecticut Avenue (previously Whittle School) loan remains outstanding: it equates to 2.2% of NAV.

Financial/share price data: Sequoia Economic Infrastructure's share price fell by almost 8% in 2024, despite discernible progress being made in addressing its problems, including recovering bad debts. Nevertheless, NAV per share has been broadly flat of late. At November 2024, it was 94.9p per share compared with 100.5p per share in March 2022, thereby showing a current 18% trading discount to NAV. Investors, however, will welcome both the ongoing share buyback programme and the revised dividend policy since 3Q'22. Although dividend cover, at 1.06x, is very tight, Sequoia Economic Infrastructure's dividend for the 2024/25 full-year is expected to be 6.875p per share – the same figure as 2023/24.

Sequoia Economic Infrastructure – half-year income statement, 2024/25		
(£)	to 30/09/24	to 30/09/23
Revenue		
Net gains on non-derivative financial assets at FV	(67,483,092)	17,186,265
Net losses on derivative financial assets at FV	50,330,671	(201,704)
Investment income/deficit	94,858,567	35,188,198
Net foreign exchange loss	257,226	4,231,846
Total revenue	**77,963,372**	**56,404,605**
Expenses		
Investment adviser fees	4,918,696	4,763,410
Investment manager fees	207,695	199,851
Directors' fees and expenses	163,292	177,806
Other professional fees	2,160,094	1,577,320
Other expenses	334,327	228,047
Total operating expenses	**7,784,104**	**6,946,434**
Loan finance costs		3,784,731
Total expenses	**9,804,495**	**10,731,165**
Loss/profit and comprehensive loss/income for the year	**68,158,877**	**45,673,440**
EPS (basic and diluted, p)	**4.26**	**2.68**

Source: Sequoia Economic Infrastructure, Hardman & Co Research

European energy background

Europe lures the larger REIFs

Mainland Europe has attracted investment from many REIFs. Hence, it is appropriate to address the common energy issues that apply, especially in the larger markets – Germany, Italy and France – as well as in those, including Iberia and the Nordic countries, which are particularly favoured by REIFs: the former is ideal for solar generation and the latter for wind generation.

With the widespread expectation of a rapidly expanding EU renewable generation market, many REIFs, most notably TRIG, the RoI-based Greencoat Renewables, Downing Renewables and Infrastructure, Foresight Solar, Octopus Renewables Infrastructure and Aquila European Renewables, have all embraced mainland EU countries.

Gas supplies and prices are key issues in European energy

Inevitably, the issue of gas prices has been all-consuming since Russia's invasion of Ukraine in 2022, especially in Germany – much of whose heavy industry had been fuelled by Russian gas for many years – and in leading Eastern Europe states, such as Hungary and Slovakia. For many years, these countries have depended heavily on large volumes of imported gas from Russia. Following the invasion of Ukraine and the sanctions applied by the EU, price levels soared and import volumes from Russia have plummeted. In any event, very serious damage to the Nord Stream 1 and 2 pipelines has put both out of action for the foreseeable future and Ukraine has refused to roll over a gas transportation access agreement with Gazprom, Russia's monopoly gas supplier.

Germany's *Energiewende*

More specifically, the *Energiewende* in Germany, which envisages a very significant upsurge in renewable generation investment, remains a key driver. In November 2024 – and not for the first time – Germany suffered from periods of *Dunkelflaute* – its English equivalent is "dark doldrums" – when no wind and a lack of irradiation severely curtail the output of the two major sources of renewable energy, wind and solar. Major investment, assuredly, will be required in the Baltic Sea region to finance new renewable plant, much of which – despite recent price rises – will consist of offshore wind turbines.

Moreover, with the closure of Germany's last remaining nuclear power plant in April 2023, heavy investment will be required to wheel power from the north of Germany to the south of the country: Bavaria, which has been highly dependent on nuclear power for decades, will face a particular challenge over the next decade in securing sufficient power resources.

Italy is of less interest to REIFs, save NextEnergy Solar

Gas supply issues are also a major challenge for Italy, which, historically, has imported large volumes of gas. ENEL dominates the Italian electricity sector, since it is both the leading generator as well as being a supply company. In fact, relatively few REIFs operate in Italy, although NextEnergy Solar has operated a 35MW solar generation portfolio in the Puglia region in recent years.

The French nuclear conundrum – dated plants riddled by outages

Since the 1970s, it has been self-evident that France's energy generation has been dependent on a massive nuclear power portfolio. Hence, renewable generation has been significantly slower to take off in France than elsewhere. However, the age of many French nuclear power stations is such that many technical problems, mainly reactor cracks, have emerged across the portfolio. Indeed, over the past 30 months, up to half of EdF's nuclear power portfolio has been offline at any one time – a most unsatisfactory situation, given the Russian gas supply constraints.

Increasing REIF involvement in France

For the REIFs, France offers some renewable energy investment opportunities: after all, its wind power capacity is just one third of the almost 70GW in Germany. TRIG and Octopus Renewables Infrastructure do have significant renewable generation capacity in France, although Foresight Environmental Infrastructure (then JLEN) sold its small French wind portfolio in 2021.

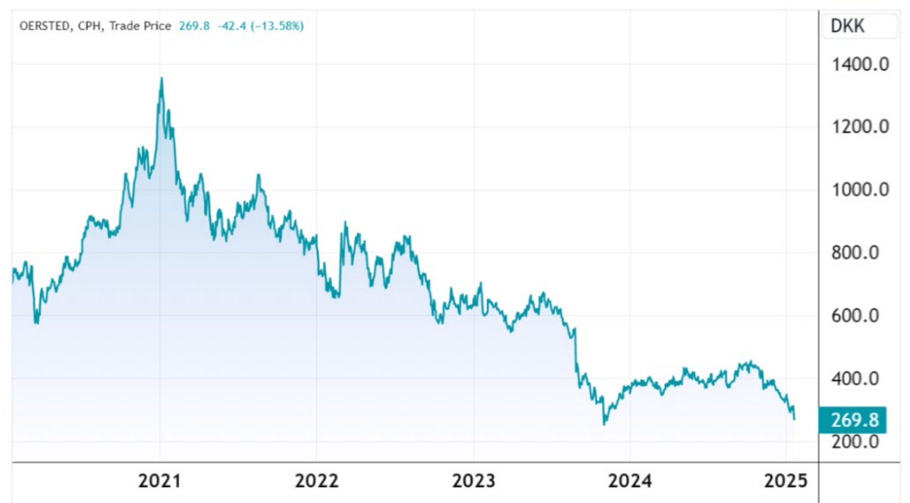
Sweden for wind, Iberia for solar – the Aquila European Renewables' mantra

Outside the three largest European energy consumers, Sweden, Spain and, to a lesser extent, Portugal have emerged as the preferred markets for REIF investment. In fact, a discernible pattern, although a hardly surprising one, is emerging from EU investment by REIFs, as exemplified by the strategy of Aquila European Renewables – the Nordic countries for wind generation investment and Iberia for solar generation investment. With respect to the former, key long-term changes will take place since Sweden has recently announced a major nuclear new-build programme, which will become the focus of its ongoing energy policy.

The Nordics

Aside from Sweden, other Nordic countries, such as Norway and Finland, are favoured for onshore wind investment – TRIG is a heavy investor in the region. Furthermore, Downing Renewables and Infrastructure has been quietly building up a small hydro portfolio in Sweden, while Greencoat Renewables is also active in pursuing investment opportunities there. The major renewable generation company in the Nordic Region is the Danish-based Orsted, currently valued at ca.£1.5bn. Its shares have been volatile over the past five years, as the graph below shows.

Orsted – five-year share price performance



Source: LSEG, 2025

Iberia's solar attractions

The two Iberian countries – Spain and Portugal – are markedly less affected, mainly for climatic reasons, by the challenging gas supply issues in Northern Europe. Both countries have been attracting significant solar investment of late: Spain's Andalucía province, with its high levels of irradiation, is especially favoured by potential investors. TRIG, notably in Cadiz, Foresight Solar, and Aquila European Renewables are all active in the Iberian solar generation market, although Octopus Renewables Infrastructure has terminated its planned involvement in a key 175MW solar project in Andalucia.

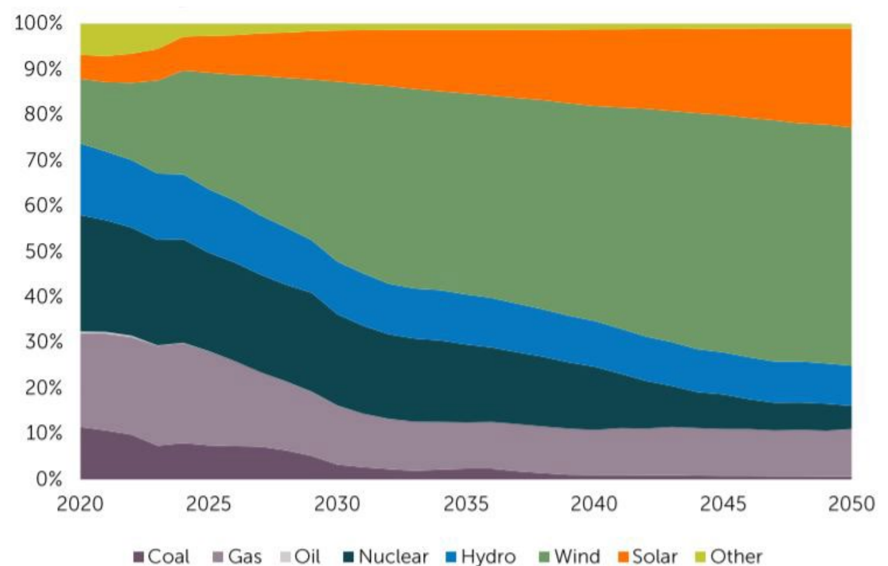
Poland – set to be the EU's next big wind energy market?

Poland, whose economy – unlike most EU members – is booming, remains a target for renewable generation investment, especially wind power projects on its northern coast. However, Octopus Renewables Infrastructure has now sold – admittedly at attractive prices – its two wind plants, at Kuslin and Krzecin, in Poland. Importantly, in common with Sweden, Poland has recently announced an aggressive nuclear new-build programme, which will be key to its long-term energy policy. The first such plant is due to be built at Lubiatowo Kopalino on Poland's northern coast.

Bloomberg's long-term renewable energy projections

In looking to the future, the chart below sets out the European generation projections of Bloomberg New Energy until 2050; these show a major expansion of both wind and solar generation in coming years.

European power generation mix to 2050 (Bloomberg New Energy)



Source: Bloomberg New Energy/Foresight Environmental Infrastructure (ex JLEN), September 2020 interim results presentation

UK Energy market

Ukraine and gas

Over the past three years, the Ukraine crisis, and more specifically, gas prices, have dominated debates in the UK energy sector. There have been many initiatives to reduce the role of gas in energy generation, which have been driven by the underlying concerns about future gas supplies – Norway and Qatar remain at the top of the list for new gas contracts.

Gas prices have fallen back sharply from their 2022 peaks

Significantly, during 2024, gas prices fell back sharply from their peaks of 2022. Whether this scenario will endure throughout the ongoing winter is debatable; it will be highly dependent upon whether any prolonged periods of very cold weather are experienced. It should also be noted that the closure of the Ukraine gas transportation link between Russia and western Europe will place additional strains on gas supplies and the prices at which they are sold.

The £2bn Rough guide – as proposed by Centrica

Since Ukraine was invaded in February 2022, various initiatives to boost UK gas supplies have been undertaken. The re-opening – at very considerable cost – of the Rough gas storage facility in the North Sea, which was controversially closed in 2017, provides some important protection against interruptions in gas supplies. Its owner, Centrica, has confirmed that it is prepared to invest up to £2bn to quadruple Rough's capacity and turn it into the world's biggest methane and hydrogen storage facility. However, the regulation of the Rough facility, both financially and operationally, must be acceptable to Centrica.

North Sea gas projects struggle on several fronts

In respect of longer-term energy supplies, there had been a notable increase in approval levels, under the previous government, for new North Sea oil and, most significantly, gas projects. Clearly, it will be some years before this trend bears fruit, in the form of enhanced output. Moreover, the current Labour government takes a very different stance on North Sea oil and gas development, which has already seen some companies, such as Apache Oil, announce the planned closure of their operations there. Adverse North Sea tax policies – under the existing government as well as its predecessor – have also taken their toll in deterring investment.

Norway, Qatar, the US and the Netherlands are key EU gas suppliers

The uncertainties attached to gas supplies has also meant a pronounced rise in imports – a trend that is common to other EU members, including Germany. Norway has long been a loyal gas supplier; recently, new supply contracts have been signed. Furthermore, in the Middle East, Qatar will continue to be a major gas exporter to the UK, along with the US and the Netherlands.

£1,738 per year average consumer price cap

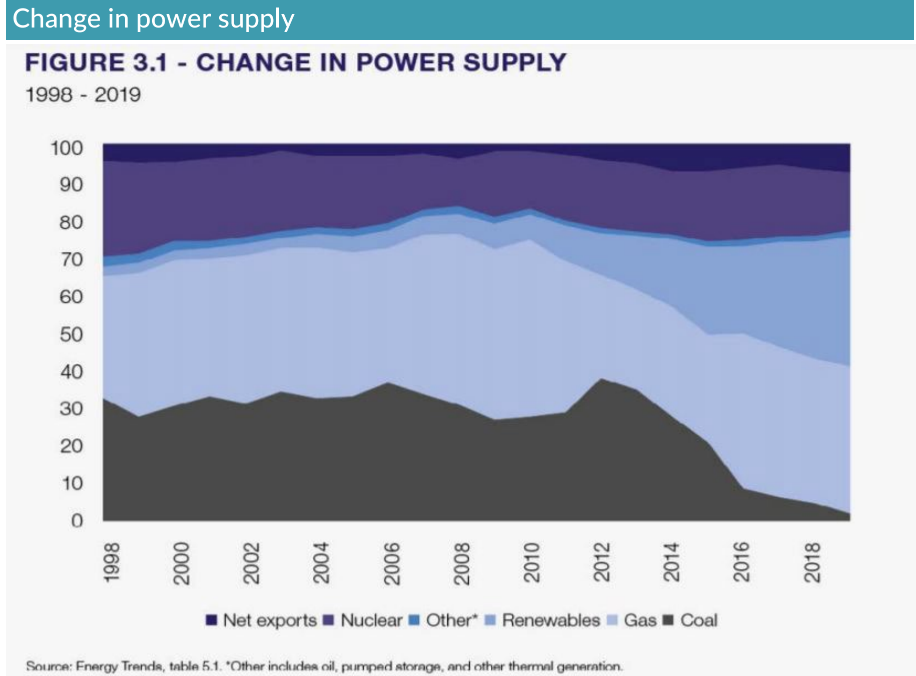
The energy crisis has had a marked impact on UK consumers, both in terms of gas heating and cooking costs but also in terms of electricity prices, which have been driven higher by higher gas input costs. In recent months, this trend has eased and current electricity prices are well below their 2022 and 2023 levels. Ofgem recently announced details of the controversial energy price cap for the January-March 2025 period. The cap has been set at a unit rate that is calculated to cost the average household £1,738 per year. For the previous October-December 2024 period, the figure was £1,717 per year.

King coal's final twitch

Over the past two decades, there has been a sea-change in electricity generation as output from renewable sources has progressively replaced coal-fired output, which produces substantial CO_2 emissions. The UK's last remaining coal-fired plant, at Ratcliffe, closed in September 2024.

This pronounced shift in generation sources is vividly illustrated in the graph below, which was published in the Energy White Paper 2020. It shows how electricity generation sources have changed so starkly since 1998. Indeed, since the outbreak of the war in Ukraine and the surge in gas prices that it brought about, the percentage of output allocated to gas-fired generation in 2018 will have fallen back sharply.

Change in power supply



Source: Energy White Paper 2020

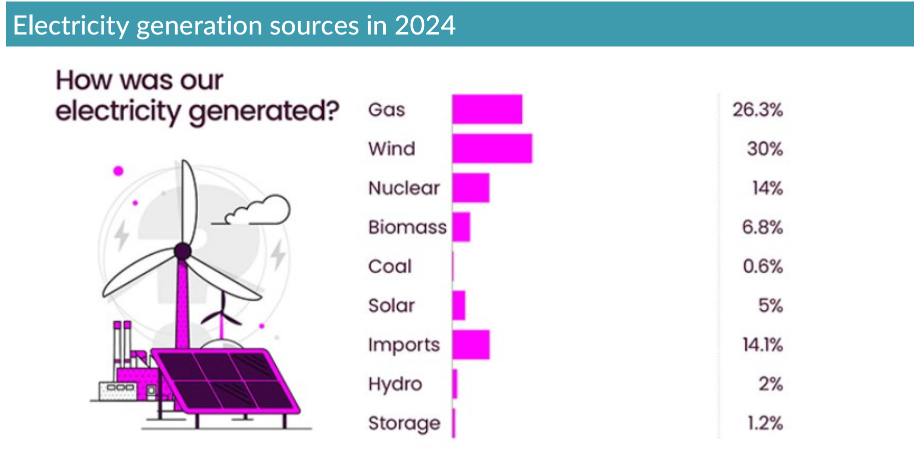
Renewables share rose from 7% in 2010 to a third by 2020 – a big shift

This switch in electricity generation sources was highlighted in the *Energy White Paper 2020*, which confirmed that the contribution from UK renewable generation was ca.33%, compared with just 7% in 2010 – a very sharp rise in a decade. Subsequently, renewable generation has continued to expand, especially in terms of the wind sector, both onshore and offshore.

The up-to-date NESO generation data

Indeed, the government-owned National Energy System Operator (NESO) has just published data covering GB generation sources in 2024, during which renewable power generation exceeded 50% for the first time. The chart, which showed that wind contributed a record 30% of total generation last year and that the share of gas had fallen to just under 30%, is reproduced below.

Electricity generation sources in 2024



Source: NESO

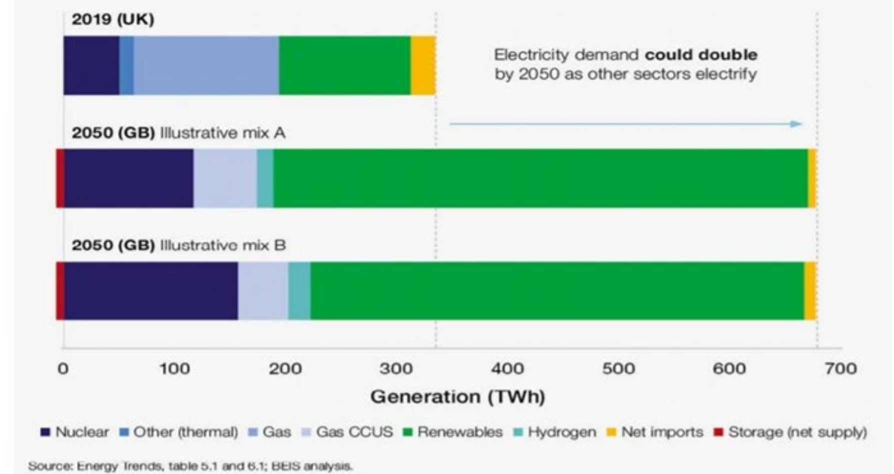
In 2024, 275TWh of demand met via the network – and a 3x peak/trough ratio

NESO also published key electricity demand data. It showed that total GB demand reached 275TWh during 2024. Interestingly, too, it identified the 30-minute period of the highest demand – 45GW at 5.30pm on 15 January 2024 – and the lowest – at 15GW at 3.30pm on 22 August 2024. The tripling of demand during a peak period, when compared with the most fallow period, illustrates the complex challenge of ensuring that demand is met and that the electricity supply network system remains stable when stand-by plants are called up, often at short notice.

Long-term projections from *Energy White Paper 2020*

Looking much further forward, the *Energy White Paper 2020* confirmed that there is significant scope until 2050 – and beyond – for new investment in wind power and solar power for deployment in the GB market. Unquestionably, the tranches earmarked for renewable generation, mostly from wind, may seem very ambitious – but, as 2024 has demonstrated, not totally unattainable.

Future generation mix projections



Source: Energy White Paper 2020

Wholesale power prices in the UK

The 1973/74 oil precedent for the 2022 gas price surge

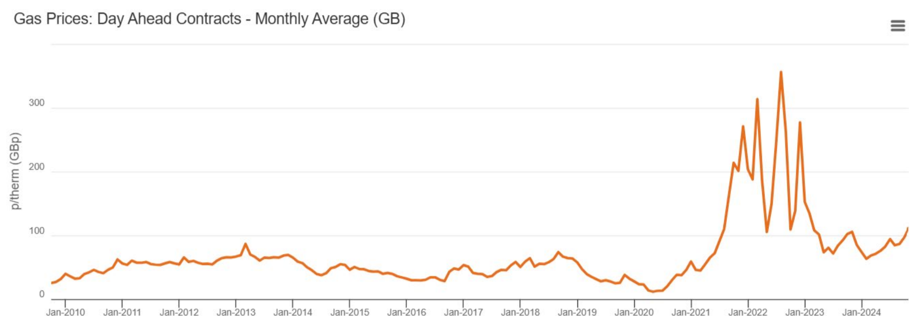
The past three years of wildly fluctuating spot gas prices have had a pronounced impact on UK energy prices. Undoubtedly, they have also affected the underlying valuations of REIFs; although, the recent rises in interest rates have been more influential in depressing REIF valuations and widening their trading discounts to their NAV.

The spiking of spot gas prices from the latter part of 2021, which was driven by Russia's invasion of Ukraine, is virtually unprecedented in terms of the UK energy market. Only the OPEC-driven surge in oil prices in the mid-1970s – up fourfold between October 1973 and January 1974 – bears comparison.

Spot gas prices soared in 2022 and 2023 – and have now declined

The graph below, published by Ofgem, shows both how alarmingly gas prices have risen since 2010 but also how steeply they have fallen from their short-term peaks in 2022.

Gas prices per therm – forward delivery contracts (GB)



Source: https://www.ofgem.gov.uk/

Market forces come into play on the gas supply front

In time, the operation of market forces should enable more supply to come on stream and for the demand for gas to be reduced. However, it seems unlikely – at least for some years – that wholesale gas prices will return close to the levels seen prior to mid-2021.

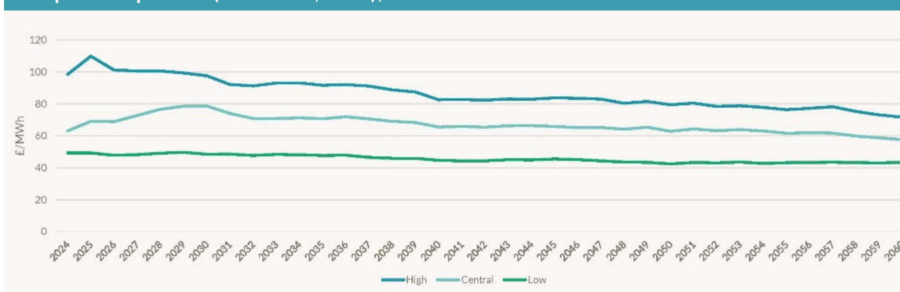
As a result of much higher gas input costs, CCGT plants have become far less competitive than previously. In practice, virtually every generator sells part of its projected output – over a defined period – on a forward basis, at locked-in prices. However, some output is sold on a merchant basis; this provides exposure to the benefits of higher prices to the generator, who also becomes susceptible to the risks of lower prices.

Downing's long-term power price projections

Looking forward, there is disagreement about long-term energy prices. Interestingly, at its recent Capital Markets' Day Presentation, Downing Renewables and Infrastructure published a graph that indicated a forecast reduction of energy prices from £75 per MWh in 2030 to £60 (real) per MWh in 2050: the figures were based on data compiled by leading industry consultants.

The graph is shown below.

GB power prices (£/MWh, real), 2024-60



Source: Downing Renewables and Infrastructure

How high will long-term gas prices be?

Price projections from Cornwall Insights, a well-known energy consultancy, indicate that long-term energy equilibrium prices are well above those quoted prior to mid-2021 – a sharp ongoing premium is projected by Cornwall Insights, although other industry experts consider this projected premium to be on the high side.

In fact, higher energy prices are generally good news for the 20 REIFs, in that they boost their revenue line – not necessarily immediately - but over time. But, in the real world, higher inflation, which is often fuelled by increased energy prices, is likely to bring about a rise in interest rates; the latter, given the impact on discount rates, is a distinct negative for REIF valuations. As interest rates have risen significantly since 2022, IIC/REIF valuations have fallen, partly due to the application of higher discount rates: sector share prices have responded accordingly.

Power costs in the UK

Volatility prevails

In recent years, volatility has been a central element of energy generation costs, especially in the spot market, where sudden changes of weather often bring about major price changes.

Due to high input costs, increased gas prices generally mean lower CCGT output ALIGN

A key consequence of the Ukrainian-driven gas price surge has been the impact on the competitiveness of CCGTs, whose gas input costs are a sizeable element of their overall cost base: the subsequent decline in gas prices over the past 18 months, however, has helped restore their competitiveness.

On the nuclear front, the operating costs of such plants have been far more predictable, although many – excluding Sizewell B – are now near the end of their operating lives. Media headlines have focused, not surprisingly, on further extensive cost overruns – with costs soaring to up to £40bn as well as persistent delays – at Hinkley Point C.

With respect to renewable generation in the UK, onshore wind and solar investment persists – although below the levels prior to 2017, when the subsidy payments for new onshore wind and solar plant were abolished.

Greencoat UK's £320m investment in subsidy-free South Kyle

Nevertheless, in 2023, Greencoat UK Wind invested heavily in the unsubsidised 235 MW South Kyle wind farm in Scotland, which it bought for ca.£320m from its developer, Sweden's state-owned Vattenfall. While NextEnergy Solar has invested in some subsidy-free solar plants in the UK, such as the Staughton project, it is now undertaking a capital recycling initiative with various plant sales.

Sea change afoot in the North Sea

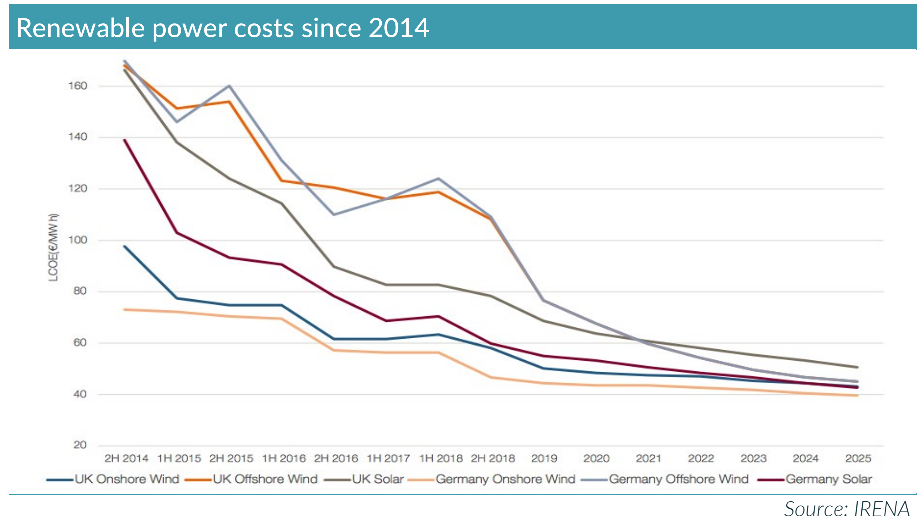
Undoubtedly, offshore wind development will be a major growth area, with a sea change in costs, far larger turbines and minimal environmental concerns – the *Energy White Paper 2020* was unequivocal in its support for offshore wind.

Rollercoaster offshore wind costs

In fact, on the cost front, offshore wind generation had performed extremely well – until recently. The rapidly falling cost base prior to 2021 has seen a major reversal, with a heavy increase in costs being incurred since the end of COVID-19, especially for wind turbines, as well as for the associated wind generation equipment, notwithstanding higher financing costs.

Interestingly, the graph below – compiled by IRENA, originally established by the United Nations – highlights the pronounced falls in generation costs since 2014 for onshore and offshore wind, as well as for solar, in both the UK and Germany.

Renewable power costs since 2014



Source: IRENA

Inevitably, both the offshore wind lines in the graph will rise above IRENA's projections to reflect the pronounced cost increases over the past 30 months, especially for offshore turbine costs. Nevertheless, the noticeable fall in offshore wind generation costs had – until 2021 – provided a kick-start for more aggressive offshore wind developments.

Gap between offshore wind costs and the £92.50 per MWh CfD strike price for Hinkley Point C has narrowed very quickly…

Undoubtedly, the 2019 Dogger Bank winning bid of £39.65p per MWh (2012 prices) compares very favourably with the 35-year £92.50 per MWh (2012 prices) CfD for the desperately expensive Hinkley Point C nuclear plant. In the 2022 offshore wind auction, the lowest successful CfD bid was even lower – at just £37.35p per MWh.

…then the worm turned

Subsequently, following the major upsurge in costs for offshore wind projects, the government's maximum index-linked CfD price (at 2012 prices) rose steeply to £73 per MWh – almost double the price of winning bids in 2022.

Big Oil to participate?

Less certain is the long-debated participation of Big Oil in North Sea offshore wind projects. Despite the further imposition of energy-related taxes, which depress the projected rate of return, major oil sector players, including BP and Shell, may still participate, through taking stakes in offshore wind development. Nevertheless, there is no doubt that enthusiasm for doing so has waned of late, partly due to shareholder pressure.

Irrespective of recent price increases, it seems inevitable that the government, whether Labour or Conservative, will focus on rolling out offshore wind projects;

the politics of doing so are very straightforward when set against controversial – and financially very challenging – new nuclear-build.

National Grid pushing out the capex boat

Furthermore, National Grid, whose activities are pivotal to exploiting North Sea energy resources, has announced a massive £54bn investment budget for expanding its network, which is targeted at building more wind generation infrastructure, especially offshore. Despite its current net debt exceeding £39bn, much of this £54bn budget is expected to be deployed before 2030.

Renewable energy infrastructure funds (REIFs)

SSE dominates UK renewables

In terms of renewable generation in the UK, SSE is the market leader. It was privatised, as Scottish Hydro-Electric, in 1991 and inherited a substantial portfolio of hydro-electric plants. Subsequently, it merged with Southern Electric, one of the 12 Regional Electricity Companies (RECs), privatised in 1990. Currently, SSE's market capitalisation is a formidable £16.8bn.

SSE's 5GW+ capacity

SSE's operational capacity of renewable plant currently exceeds 5,000MW. Its three main sources of renewable energy are: onshore wind, at 2,500MW; hydro-electric, at 1,500GW; and offshore wind, at 1,000MW. Furthermore, it has substantial additional renewable generation capacity under construction or development.

By comparison with SSE, most REIFs have relatively modest generation capacity figures, but there are exceptions. Sector leader, Greencoat UK Wind, operates more than 2,000MW of capacity – all of which are wind plants – while TRIG boasts of more than 1,600MW of capacity in the UK, virtually all of which is wind plant. Both REIFs have market capitalisations currently exceeding £2.0bn.

Seven big REIF players

The three largest quoted wind generators – including the RoI-based Greencoat Renewables – combined with the three solar generators form the backbone of the quoted REIF sector, which now comprises 20 funds. In market capitalisation terms, these six REIFs account for ca.70% of the sector's overall value.

In analysing their portfolios, the three quoted (almost pure) solar companies – Bluefield Solar, Foresight Solar and NextEnergy Solar – are included in the wind and solar data table below, along with Greencoat UK Wind and TRIG. The latest plant capacity data of these five REIFs is also highlighted in the table.

UK wind and solar data

REIF	Installed capacity (MW)	UK	Solar	Wind
Bluefield Solar	834	100%	93%	7%
Foresight Solar	1,044	77%	100%	0%
Greencoat UK Wind	2,017	100%	0%	100%
NextEnergy Solar	983	84%	100%	0%
TRIG	ca.2,700	59%	13%	82%

Source: Hardman & Co Research

The quest for BESS

BESS, as an energy source, has come to the fore in recent years, as the quest to design a viable storage system for power generated from renewable energy sources persists. The leading REIF in this field is Gresham House Energy Storage. The RoI-based Gore Street Energy Storage is also a significant player in this growing energy subsector, along with Harmony Energy Income. Furthermore, some prominent wind and solar generators, including TRIG, Bluefield Solar, Foresight Solar and NextEnergy are also investing – at a comparatively modest level to date – in this developing field.

The infamous February 2024 profit warning

However, the market reacted particularly badly to a major profit warning from Gresham House Energy Storage in early February 2024 when its shares plummeted; they were down by 59% in 2024. Gore Street Energy Storage fared little better with its shares down by 46% over the same time period.

Aquila Energy Efficiency (market cap. £42m)

Investment sectors: At its IPO in May 2021, Aquila Energy Efficiency emphasised its commitment to delivering energy efficiency projects in both the public and private sectors. Key markets included Italy, which now accounts for ca.50% of its asset value, Spain, Germany and the UK. However, these aspirations have been superseded by subsequent corporate events. The pivotal "Continuation Vote" was lost in February 2023. Consequently, Aquila Energy Efficiency has been placed in a MWD status. The very challenging aim now is to sell its assets at acceptable prices, while eschewing any further investment (with a few minor exceptions). Despite an over-subscribed tender offer in May 2024, which saw 18.6m shares being re-purchased, the process of dismantling Aquila Energy Efficiency seems likely to be arduous – further tender offers are planned.

Portfolio: Securing profitable energy efficiency deals had been painstakingly slow for Aquila Energy Efficiency – a key issue for the defeat of the "Continuation Vote" in February 2023. Compared with other REIFs, Aquila Energy Efficiency was very slow in deploying the £100m (gross) of proceeds that was raised at its May 2021 IPO. The portfolio, which is now being dismantled, includes various energy efficiency-related assets, such as solar PV installations and lighting systems. The value of its investments, as at June 2024, in its four key markets, was as follows:

- Italy – £32.9m;
- Germany – £20.0m;
- Spain – £8.0m; and
- UK – £3.9m.

Disengaging from the committed Spanish investment may prove to be particularly challenging. Furthermore, many of Aquila Energy Efficiency's investments are beholden to long-term contracts, which will probably require renegotiation.

Financial/share price data: Despite a sharp increase in its discount rate – from 7.70% at December 2023 to 8.44% at June 2024 – Aquila Energy Efficiency's NAV figure has been relatively static. At June 2024, its NAV was 95.1p per share, while the book value of its assets in its key markets was £64.8m; there was also a net cash balance of over £13m. A 6.139p per share dividend for the 2024 half-year was paid. Future dividends will be very dependent upon cash receipts and, specifically, payments from the Superbonus business in Italy, from which tax credits remain outstanding. In 2024, Aquila Energy Efficiency's share price fell by 11%: it is currently trading at a 45% discount to its NAV – as MWD process continues.

Aquila European Renewables (market cap. £207m)

Investment sectors: Aquila European Renewables is based in Hamburg, Germany, a country that is undergoing major energy changes. Offshore wind generation plant, despite rapidly rising costs, is set to replace many of the now decommissioned nuclear power plants. Importantly, wind power and solar power are Aquila European Renewables' preferred technologies, which have been central to the business since the IPO in May 2019. But, in common with Aquila Energy Efficiency, there has been serious shareholder discontent. As such, it has been decided to place Aquila European Renewables into MWD – a policy that appears to have attracted near shareholder unanimity. Previously, the larger Octopus Renewables Infrastructure had publicly proposed a combination of the two REIFs' assets: a Scheme of Reconstruction under section 110 of the Insolvency Act 1986 was mooted as a possible solution – such overtures were spurned.

Portfolio: Up to 2023, Aquila European Renewables had expanded aggressively. Prior to the €27.0m (£22.4m) sale – at a premium of over 10% to its book value – of its 25.9% stake in the Tesla wind plant, it had an operational generation capacity of 464MW (the 13.7 % stake in the controversial 400MW Rocks plant in Norway – the subject of a recent court case – is included in this figure). In terms of technology, its capacity is split on a 231MW solar and 214MW wind basis, with the remaining 19MW being supplied by hydro power in Portugal. On a country basis, Spain is, by some way, its key market, accounting for more than 40% of capacity. Aquila European Renewables owns both the 100MW Greco and the 50MW Albeniz solar plants in Spain. Its assets in Norway, Portugal and Denmark account for much of the remaining capacity. Unusually, unlike any other REIF, Aquila European Renewables has invested directly in Greece where it owns 89% of the 40MW solar generation plant at Desfina. With the MWD process now under way, Aquila European Renewables seems very unlikely to undertake further major investment – selling its assets at acceptable prices is the new priority.

Financial/share price data: Aquila European Renewables' NAV has been falling of late – low electricity prices and below budget output have been problematic. At September 2024, its NAV was 74.9p (c90.3) per share, with its shares currently trading at a 27% discount: during 2024, the shares were down by 23%. Following its IPO in 2019, Aquila European Renewables had raised further funds in both 2020 and 2021 as it expanded its generation portfolio. By contrast, in 2023, it embarked upon a share buyback programme as it sought to raise its NAV per share. With respect to dividends, a target payment of 4.80p (c5.79) per share has been confirmed for 2024. Most attention, though, will focus on the asset disposal programme, which was boosted by the 10%+ premium achieved on the sale of the 25.9% Tesla stake in Norway.

Bluefield Solar (market cap. £556m)

Investment sectors: Bluefield Solar, which undertook its IPO in July 2013, is the oldest of the three quoted solar generation stocks on the UK market – its peer group includes Foresight Solar and NextEnergy Solar. In common with Greencoat UK Wind, but unlike Foresight Solar, Bluefield Solar's entire portfolio is based in – and is dependent upon – the UK. In recent years, it has acquired a modest amount of wind generation capacity. Prior to the recent increase in interest rates, its share price performance had been impressive. After all, Bluefield Solar unquestionably derives major benefits from the various generous subsidies offered by the UK government, including Renewable Obligation Certificates (ROCs) and Feed-in-Tariffs (FiTs). Importantly, a substantial proportion of its revenues are fixed and inflation-linked for the next decade.

Portfolio: Bluefield Solar's total capacity figure, as at December 2024, was 834MW, with virtually all its plants – like other solar generation operators – being located south of Yorkshire; the 5MW wind farm at Wormit in north-east Fife is somewhat anomalous. Despite recently acquiring a 58MW wind portfolio, 93% of Bluefield Solar's capacity – 776MW – are solar generation assets. Its major solar plants include Bradenstoke in Wiltshire, accounting for 9% of its portfolio, and the two solar farms at West Raynham in Norfolk and Welborne in Hampshire; the latter account for 6% of the portfolio apiece. Looking ahead, Bluefield Solar boasts a reassuring development pipeline of 93MW under construction and a further 375MW of potential capacity in the planning process. However, financing the building of additional capacity may not be straightforward given Bluefield Solar's declared priority to reduce its Revolving Credit Facility (RCF).

Financial/share price data: Having raised £150m of new equity in June 2022, Bluefield Solar's finances remain robust, despite a share price that has fallen by more than 13% during 2023 and by a further 21% during 2024. Its shares are currently trading at a discount of 26% to its latest NAV, as at September 2024, of 126.1 per share; by comparison, its NAV, at June 2022, was 140.4p per share. A key factor for

this decline has been the movement in Bluefield Solar's discount rate, which was 6.75% in June 2022 and is now 8.0% – quite a pronounced increase with negative valuation implications. Furthermore, Bluefield Solar has been undertaking a share buyback programme of late that is intended to reduce the share trading discount to its NAV. Bluefield Solar's dividend position, especially in terms of its dividend cover of ca.1.4x, is reassuring – and certainly compared with some other REIFs. In 2023/24, an 8.80p per share dividend was paid, with a minimum 9.00p per share dividend pencilled in for 2024/25.

Bluefield Solar's shares rallied strongly after the end of COVID-19 but have slumped of late – despite a strong dividend record – following the upward surge in interest rates, as its five-year share price graph highlights.

Bluefield Solar – five-year share price performance

Source: LSEG, 2025

Downing Renewables and Infrastructure (market cap. £132m)

Investment sectors: Since its IPO in 2020, Downing Renewables and Infrastructure has been quietly assembling a portfolio of generation investments in its key European market of Sweden, where it has been focusing on small hydro-electric generating plants. It has also invested in the UK solar market. Further corporate activity, including additional "tuck-in" acquisitions in Sweden, looks likely.

Portfolio: Central to building up its generation capacity to over 203MW (prior to recent disposals) was the £60m deal with Fortum AB to buy eight – mainly run-of-river – hydro plants in Sweden, with a capacity of 26MW. Subsequently, Downing Renewables and Infrastructure has acquired further hydro plants there as well as Blasjon Nat AB, a regulated grid business in Sweden. Crucially, though, it has just sold – for €36.0m (£29.9m) – the Gabrielsberget Syd Vind onshore wind farm. With a capacity of 46MW, it was Downing Renewables and Infrastructure's largest single asset. Furthermore, on the solar front, Downing Renewables and Infrastructure invested £42m to acquire additional capacity of 96MW in the UK. With regard to power sources, the latest split – post the Gabrielsberget Syd Wind disposal – shows both solar and hydro-power accounting for almost 50% apiece.

Financial/share price data: Downing Renewables and Infrastructure's shares have performed poorly in 2024 – down by 14%; currently, they trade at a 34% discount to the latest NAV of 117.3p per share, as at September 2024. The assumed portfolio valuation discount rate maintains a weighted average of 7.7% – ranging from 6.5% for the unlevered Swedish wind assets to 8.0% for levered UK solar and Swedish hydro-plants. For 2024, Downing Renewables and Infrastructure has reaffirmed a

dividend of 5.80p per share – an impressive 7.8% increase on the 2023 figure. In recent months, a major share buyback programme has been under way as it seeks to shrink the share trading discount to NAV. Even though Downing Renewables and Infrastructure raised more than £122m of proceeds (gross) at its IPO in December 2020 and a further £53m (gross) in June 2022, additional funds may, in time, be needed as it seeks to expand further in Sweden and elsewhere in the Nordic region. Downing Renewables and Infrastructure has publicly confirmed that co-investors could become involved.

Ecofin US Renewables Infrastructure (market cap. £33m)

Investment sectors: In 2020, a successful IPO on the LSE was undertaken by Ecofin US Renewables Infrastructure: it was followed by a build-out of a solar generation portfolio across eight states. However, in common with its struggling US counterpart, US Solar, Ecofin US Renewables Infrastructure has faced challenging times, both in terms of US solar generation policy and of other issues adversely impacting the fund. Importantly, after a year-long strategic review, Ecofin US Renewables Infrastructure has decided – once the appropriate legal requirements have been satisfied – to undertake an MWD. Indeed, Ecofin US Renewables Infrastructure has already agreed to sell – to a subsidiary of Tree Green Capital – some 64MW of its 177MW total capacity, which lie within its DG solar generation portfolio; the latter is based on a projected EV of ca.$54m (ca.£43.2m) and on expected receipts of ca.$38.4m (ca.£30.7m).

Portfolio: Currently, Ecofin US Renewables Infrastructure owns capacity of 177MW of renewable generation. Its operations extend across eight states, including Texas, California and Massachusetts. Central to its portfolio are 65 separate assets, almost all of which are solar generation plants. However, the largest capacity unit is the 60MW Whirlwind Energy wind farm in Texas. Following a tornado in June 2023, it was taken offline but has been re-energised subsequently. Given its size – over one-third of Ecofin US Renewables' total capacity – its outage, not surprisingly, had adverse implications on the fund's finances, especially regarding dividend payments.

Financial/share price data: With a share price that fell by 45% in 2024 and a current trading discount of 54% to its June 2024 NAV of 52.0p ($0.65) per share, these are very challenging times for Ecofin US Renewables Infrastructure. While the prolonged Whirlwind outage saw a dividend cut in 2023, dividend payments have now been suspended from 2Q'24 onwards – the 1Q'24 dividend was 0.56p ($0.70) – as the focus moves to raising cash from sales as part of the MWD process. Looking forward, completing the sale of both the DG portfolio and that of the remaining solar generation plants, as well as finding an acceptable buyer for the wind generation assets, especially for the Whirlwind Energy stake, will be paramount. With Ecofin's US Renewable's discount rate up sharply from 7.40% in December 2023 to 8.51% at June 2024, securing favourable sales prices will not be easy, even if the discount rate change gives rise to a lower discount to NAV being achieved.

Foresight Environmental Infrastructure (market cap. £472m)

Investment sectors: Foresight Environmental Infrastructure (formerly JLEN and initially the John Laing Environment Fund), which was floated in March 2014 out of the eponymous housebuilder, now has over 40 assets, 90% of which are UK-located; its few EU investments are modest. With 161MW of wind capacity, accounting for 28% of the portfolio value, it is a significant wind generator. However, other modes of renewable generation are also to the fore; notably, waste and bioenergy at 26%, solar generation at 15% and anaerobic digestion (AD), which, at 13%, now accounts for a lower share of the portfolio value. Unquestionably, Foresight Environmental Infrastructure's portfolio provides a credible template for a renewable energy start-up business – at least in terms of achieving diversification across the UK renewables sector.

Portfolio: Foresight Environmental Infrastructure's operational capacity, as at September 2024, was 359MW. Almost 50% of its generation capacity is dependent on onshore wind; following the sale of the small French wind portfolio in 2022, virtually all the operating capacity is now sited in the UK. Foresight Environmental Infrastructure also owns six UK solar plants, with a capacity of 80MW. Waste and bioenergy account for a further 64MW of capacity. Almost uniquely among the other REIFs, bar SEEIT, Foresight Environmental Infrastructure has invested in AD facilities; it operates capacity of 50MW in this segment. These AD plants have earned impressive returns, since plant revenues are underpinned by substantial payments from the Heat Incentive Scheme. In common with other REIFs, Foresight Environmental Infrastructure has struggled to find renewable energy projects that can achieve its desired financial returns commensurate with assuming the appropriate risks. While the Cramlington CHP acquisition met those criteria, the hydrogen-based HH2E investment in Germany has failed: due to its effective insolvency, Foresight Environmental Infrastructure's £19.3m book value has been written down to zero.

The table below shows the key elements of Foresight Environmental Infrastructure's current generation portfolio, which totals 359MW.

Foresight Environmental Infrastructure – generation portfolio, as at September 2024

Resource	Capacity (MW)
Wind	161
Solar	80
Waste/bioenergy	64
Anaerobic digestion	50
Hydro	4

Source: Foresight Environmental Infrastructure

Financial/share price data: During 2023, Foresight Environmental Infrastructure's shares fell by more than 15%; in 2024, a further 27% of shareholder value was lost. The shares are now trading at a 34% discount to the September 2024 NAV of 109.8 per share, which was well ahead of the depressed NAV of 92.2p per share at the March 2021 year-end. Foresight Environmental Infrastructure's recent NAVs have been reduced by the application of a higher discount rate, which is now 9.5%, the highest figure since the IPO back in 2014. With dividend cover above 1.2x, the dividend forecast for 2024/25 is 7.80p per share, a 3% increase over the 2023/24 payment. While Foresight Environmental Infrastructure's gearing remains below 30%, reducing its RCF still remains a priority, along with the ongoing £20m share buyback share scheme. It should be noted, too, that the "Discontinuation Vote", held under a special resolution in September 2024, showed just 7.3% of votes in favour: overwhelming support was shown for Foresight Environmental Infrastructure's existing management and its policies.

Foresight Solar (market cap. £435m)

Investment sectors: As the second-most valuable quoted solar generation REIF – after Bluefield Solar – Foresight Solar offers some distinguishing characteristics. Almost 25% of its declared 1,044MW solar generation capacity is sited overseas, either in Spain or Australia. While more disposals are planned, Foresight Solar's expansion seems set to continue both in the UK under the current solar-friendly government and in Spain, where solar power is widely favoured. Some co-ownership of assets may also be on the agenda, following the 50% sell-down of the 99MW Lorca portfolio in Spain, which raised €26.9m (£22.3m), at an impressive 21% premium over book value. Importantly, Foresight Solar has finally decided – after some years of difficulty – to put its troublesome Australian portfolio up for sale: its declared capacity is 170MW.

Portfolio: With the exception of some small BESS investments, all Foresight Solar's capacity is comprised of solar plants, over 75% of which are based in the UK. The largest UK plant, at 72MW, is located at Shotwick, which lies on the southern part of the Wirral peninsula. Overseas, Foresight Solar has focused on southern Spain as a favoured market. Even after the recent partial divestment of the Lorca assets, it owns capacity of 76MW there, a figure that may rise in the future. By contrast, its prospects in Australia have receded sharply, now that Foresight Solar has officially announced the planned sale of the 170MW portfolio, which has been beset with issues during the past five years. Outside the solar sector, Foresight Solar has quietly entered the BESS market, despite the latter's serious problems of late.

Financial/share price data: On the operational front, Foresight Solar has faced some challenges, notably with below-average irradiation levels. In fact, Foresight Solar's share price fell by almost 15% in 2023 and by a further 25% in 2024. The shares now trade at a near 32% discount to its NAV, which was 112.6p per share at September 2024 – a weak performance although it was as low as 91.9p per share at March 2021. The ongoing £50m share buyback seeks to narrow the trading discount to NAV. Importantly, in its September 2024 NAV calculation, Foresight Solar's global weighted discount rate was 7.89%. With regard to its dividend policy, Foresight Solar has confirmed a planned 8.00p per share dividend target for 2024 – a 6% increase over its 2023 payment: dividend cover is expected to be a reassuring 1.4x. A "Discontinuation Vote" was held in June 2024, but – unlike some other REIFs – it was opposed by just over three-quarters of the votes cast.

The graph below shows how Foresight Solar's shares have performed over the past five years – the earlier years were adversely affected by COVID-19.

Foresight Solar– five-year share price performance

Source: LSEG, 2025

Gore Street Energy Storage (market cap. £242m)

Investment sectors: Gore Street Energy Storage, which is based in the RoI, continues to invest in a diversified portfolio of utility-scale BESS projects – it operates in the same space as the larger Gresham House Energy Storage. Irrespective of its RoI base, the key revenue drivers for Gore Street Energy Storage are the two 50MW plants in Northern Ireland (NI). Aside from its GB and RoI operations, the fund also owns a 90% stake in the Cremzow plant in Germany. Most importantly, though, substantial investment continues in the US, especially in Texas and California. On the commercial front, Gore Street Energy Storage uses battery cell technology to provide frequency-balancing services to grid operators – undoubtedly an expanding market as renewable energy output grows and supply constraints persist.

Portfolio: At its IPO in 2018, Gore Street Energy Storage focused on the UK and on the RoI, where it had assembled a portfolio of BESS investments. With the recent energisation of its 80MW Stony plant, near Milton Keynes, Gore Street Energy Storage now owns 421MW of operating assets. The bulk of its EBITDA returns are derived from the two 50MW NI plants at Drumkee and Mullavilly – with their distinctly favourable margins on the D53 revenues. In the RoI, the two BESS plants – Porterstown and Kilmannock – are poised to increase their capacity in the medium term. Internationally, Gore Street Energy Storage continues to expand. Aside from its major stake in a project at Cremzow in Germany, Gore Street Energy Storage operates three plants, with modest capacities, in Texas. However, its US returns should rise markedly, with the 200MW Big Rock plant in California, which was recently energised: its 75MW Dogfish plant in Texas is also nearing completion. Given the current financial climate and its weak share price, Gore Street Energy Storage is expected to rein in some of its investment plans.

Financial/share price data: With a share price that fell by over 45% in 2024 alone – and is now trading at a 52% discount to its NAV – Gore Street Energy Storage is clearly facing challenges. Its latest NAV, as at September 2024, was 100.5p per share; a figure that has been falling of late due, in part, to a higher discount rate being applied – and one more in line with that of Gresham House Energy Storage, its nearest comparator. Importantly, over the coming months, Gore Street Energy Storage expects to receive \$60m-\$80m of Investment Tax Credits (ITCs) relating to its US investments – receipts that are probable but not guaranteed. For 2024/25, Gore Street Energy Storage is planning to pay a dividend of 7.00p per share: the 2023/24 equivalent payment was 7.50p per share. To finance its aggressive expansion, Gore Street Energy Storage raised £150m of gross proceeds in April 2022; subsequently, it has negotiated loans to fund the Big Rock project.

Greencoat Renewables (market cap. £746m)

Investment sectors: Greencoat Renewables' focus is on the expanding wind generation sector, both within the Republic of Ireland (RoI) – its home territory – and in mainland Europe: it does not operate in Northern Ireland (NI). Since its IPO in 2017, the RoI market has been pivotal. However, Greencoat Renewables has also spent heavily overseas, with offshore wind investment in German waters; Sweden and Spain are the other preferred markets. More recently, it has focused on the rapidly developing demand for power in the RoI from inward investment and especially from Big Tech: signing long-term PPAs with such organisations is a priority.

Portfolio: At June 2024, Greencoat Renewables' operational plant capacity amounted to almost 1,500MW, almost all of which were wind generation assets; clearly, the RoI market, boosted by inward investment, remains the core business. However, in recent years, major investment has been undertaken elsewhere in the EU: nine operating assets were acquired in 2022 and €275m (£228m) was invested in 1H'23. In the German area of the North Sea, Greencoat Renewables owns a 50% stake in the 312MW Borkum Riffgrund project along with a 22.5% stake in the 288MW Butendiek offshore wind farm – these are sizeable investments. Given its suitability for efficient wind-power generation, the Nordic Region is also a favoured market. As such, Greencoat Renewables has invested heavily in the Erstrask projects in Sweden – initially, in the more advanced southern section but also in the northern section: their combined capacity is 235MW. However, with relatively high net debt, Greencoat Renewables is now focusing more on cash generation and signing favourable long-term PPAs – and, despite last year's acquisition of a 50% stake in the South Meath wind farm in the RoI, rather less on acquisitions. Furthermore, the 43MW Kokkoneva wind plant in Finland was recently sold – at a decent 6% premium to NAV.

Financial/share price data. In 2024, Greencoat Renewables' shares performed similarly to those of its erstwhile stable-mate, Greencoat UK Wind – down by

between 15% and 20%. Currently, Greencoat Renewables' share price is trading at a discount of 27% to its September 2024 NAV of 91.6p (c110.40) per share. In seeking to narrow the NAV trading discount, a £20.8m (€25m) share buyback programme was undertaken. Greencoat Renewables' latest gross debt figure of ca.£1.08m (ca.€1.3bn) is 51% of its Gross Asset Value (GAV) – a markedly higher figure than that of most of its peer group: heavy investment in 2022 and 2023 has been the key factor. For its 2024 full-year dividend, Greencoat Renewables is targeting a payment of 5.59p (c6.74) per share, which is underpinned by a reassuringly high dividend cover. Such a dividend payment would represent an increase of 5% over its 2023 equivalent. Unusually in the IIC/REIF sector, Greencoat Renewables' shares are quoted on a €-denominated basis and, since its IPO in 2017, they had performed solidly until interest rates rose sharply in 2022.

Greencoat UK Wind (market cap. £2,880m)

Investment sectors: Greencoat UK Wind, the REIF sector leader, focuses almost exclusively on the UK wind sector. Due to its high investment in recent years, it now boasts a 6% UK market share. Its capacity, as at October 2024, amounts to 2,017MW. Overall, around 40% of its capacity is sited in Scotland, with virtually all of the remainder in England. Its inflation-linked dividend policy, which has prevailed since its IPO in 2013, stands alone within the renewable generation sector.

Portfolio: During 2024, a year of retrenchment in the sector, Greencoat UK Wind's portfolio barely increased. The previous year had seen a major rise in capacity, following the acquisition of the 240MW South Kyle wind farm in south-west Scotland, which was bought in September 2023 from the Swedish-based Vattenfall, at a cost of ca.£320m. Importantly, too, following its 12.5% investment in the 1,200MW Hornsea 1, Greencoat UK Wind secured a 13.7% stake in the 630MW London Array project from Orsted – the cost was a substantial £444m, of which £394m was equity. In recent months, a major share buyback programme has been under way. With higher debt than the sector average, Greencoat UK Wind has curbed its expansion plans. And, during 2025 and beyond, it will also be focusing on raising its generation output – low wind speeds continue to be an issue about which it warned investors recently.

Financial/share price data: Due in part to its RPI-linked dividend policy, Greencoat UK Wind's shares have outperformed a weak sector in recent years. In 2024, its shares fell by just under 16%, although they are still trading at a discount of 19% to Greencoat UK Wind's NAV per share of 158.6p per share, as at September 2024; the latest discount figure applied is ca.10%. With net debt at £2.3bn, equivalent to 39% of GAV, Greencoat UK Wind is seeking to boost its cash generation: the major re-financing of its debt, including the reduction of its RCF from £600m to £400m, reflects this priority. Undoubtedly, Greencoat UK Wind's shares have been boosted by a minimum annual RPI-adjusted dividend increase as prescribed under its fund principles. Recently, it confirmed its plans for a minimum 10.00p dividend per share for 2024. Against that background, it was no surprise that the "Continuation Vote" held in April 2024 attracted almost 90% of votes in favour.

Unquestionably, Greencoat UK Wind remains the bellwether for the nascent – and in many cases struggling – UK renewable generation sector. If the COVID-19-related share price plunge is disregarded, Greencoat UK Wind's five-year performance chart shows a relatively consistent performance, highlighted by the graph below.

Greencoat UK Wind – five-year share price performance

Source: LSEG, 2025

In terms of Greencoat UK Wind's overall financial performance since 2013, the figures are impressive, especially the formidable 2022 cash generation figure, as demonstrated by the table below.

Greencoat UK Wind's financial performance – 2013-23

Period	Output (GWh)	Cash generation (£m)	Dividend (p)	Dividend cover (x)	RPI increase	NAV growth
2013 (9m)	292	21.6	4.50	1.8	1.9%	2.5%
2014	565	32.4	6.16	1.6	1.6%	2.5%
2015	799	48.3	6.26	1.7	1.2%	0.5%
2016	978	49.0	6.34	1.4	2.5%	4.0%
2017	1,457	80.1	6.49	1.5	4.1%	2.4%
2018	2,003	117.3	6.76	1.6	2.7%	10.8%
2019	2,385	127.7	6.94	1.4	2.2%	-1.4%
2020	2,952	145.2	7.10	1.3	1.2%	0.6%
2021	2,933	256.8	7.18	1.9	7.5%	9.4%
2022	4,362	560.1	7.70	3.2	13.4%	25.4%
2023	ca.4,700	405.5	10.00	2.1	4.9%	-1.8%

Source: Greencoat UK Wind

Gresham House Energy Storage (market cap. £256m)

Investment sectors: With a ca.20% GB market share, Gresham House Energy Storage is the leader of the three quoted REIFs – Gore Street Energy Storage and Harmony Energy Income are the others – whose core business is the UK/RoI BESS subsector. BESS plants enable the provision of short-term frequency-balancing services to grid operators. Central to the revenue model are the activities of the now government-owned – formerly part of National Grid – NESO, by far the largest client for BESS operators. Delays and a weak revenue environment over the last year have been primarily responsible for the severe under-performance of the three BESS funds – a process that was triggered by Gresham House Energy Storage's revenue-driven profit warning in early February 2024. The sector's stock market rating for BESS businesses still has to recover.

Portfolio: As a result of a pronounced plant build-out over the past few years, Gresham House Energy Storage now operates utility-scale BESS assets at many different sites in England and Scotland. With the recent energisation of the 50MW Elland plant in Yorkshire, Gresham House Energy Storage's latest plant capacity figure, at November 2024, is 845MW. Although the plant build-out is nearing completion, further new capacity will come on stream shortly. Gresham House

Energy Storage seeks to benefit from the many arbitrage opportunities that have arisen as UK renewable generation output rises in a volatile energy trading market, although the delays – caused, in part, by technical issues – in NESO's launching of the Open Balancing Mechanism (OBM) have undoubtedly been frustrating.

Financial/Share price data: During 2024, Gresham House Energy Storage's share price fell by almost 60% – a major reverse from its outstanding performance in 2023. Consequently, its shares are now trading at a discount of 59% to its NAV of 109.1p per share, as at September 2024. In February 2024, the "very depressed revenue environment" was cited by Gresham House Energy Storage as the prime factor for its shock profit warning – revenues have recovered subsequently. Indeed, EBITDA is now projected to reach £29m for 2024/25 and, with enhanced margins, should be considerably higher in 2025/26. Furthermore, the conservative 10.6%-10.8% blended discount rate – way above the sub-8.0% figure still used by some REIFs – suggests some material hidden value. However, the revenue-based profit warning in early 2024 saw all planned dividends for 2024 scrapped. Nevertheless, it is planned to re-instate dividends for 2025, which will be partly performance-related. With debt not currently expected to exceed 20% of GAV and with the plant build-out nearing completion, Gresham House Energy Storage's cashflow should improve, especially since substantial re-financing initiatives have been undertaken. Since January 2020, Gresham House Energy Storage has raised ca.£450m of new equity finance, including £50m (gross) for the Californian Iliad project – now on hold – in May 2023, although up to £80m was sought.

Harmony Energy Income (market cap. £148m)

Investment sectors: Developing and operating commercial-scale BESS plants has been an unambiguous policy of Harmony Energy Income: Gresham House Energy Storage and Gore Street Energy Storage have adopted a similar build-out strategy. The Yorkshire-based Harmony Energy Income's current operating BESS capacity totals 395MW: all these plants are located in the UK. Given the major challenges of securing new finance in the current market, the build-out is now effectively complete.

Portfolio: Out of its 395MW operating plant capacity, two plants dominate. The lead project has been at Pillswood, near East Cottingham in East Yorkshire: its total capacity is 196MWh, 98MW of which is attributable to Harmony Energy Income. The other key asset is the Bumpers Farm facility in Buckinghamshire with a capacity of 198MWh/99MW; the latter capacity figure is similarly owned by Harmony Energy Income. Moreover, two smaller projects at Hawthorn Pit in County Durham and at Wormald Green in Yorkshire have also been recently energised. But, following its revenue and profit warning in early February 2024, Harmony Energy Income has faced major challenges, as its share price plunged. The revenue side of the business is very sensitive to NESO's operations in the increasingly crowded market for the provision of balancing mechanism services – a segment that Harmony Energy Income, with its two-hours+ batteries, is well positioned to supply.

Financial/share price data: Harmony Energy Income's NAV, at October 2024, was 88.5p per share, some 23% below the corresponding figure of 115.4p per share in October 2023. A higher discount rate, at 10.25% for operating projects, has been partly responsible. Not surprisingly, for most of 2024, Harmony Energy Income's share price has been on a downward curve, recording an 18% decline over the calendar year: its shares are now trading at a discount to its NAV of 27%. Furthermore, Harmony Energy Income has decided to pay no dividends for 2023/24; for 2024/25, a dividend may be re-instated if the cashflow can justify it. At its IPO in November 2021, Harmony Energy Income had raised proceeds of £210m (gross), much of which was deployed in completing the building of its seed assets. Subsequent fundraising initiatives have been far more challenging. The planned fundraising in the autumn of 2022 was very poorly supported, with just £15m of proceeds (gross) being raised out of a maximum of £130m (gross) being

sought. Subsequently, decisions were taken to sell some assets, including the Rye Common plant, to raise funds. More recently, discussions regarding other possible disposals have taken place. Most importantly, though, Harmony Energy Income confirmed, in November 2024, that there is a potential "bidder for the full portfolio", a statement that – not surprisingly – produced a much-needed rally in its share price: exclusive negotiations are under way.

HydrogenOne Capital Growth (market cap. £26m)

Investment sectors: While the hydrogen market has excited many investors, the share price performance of the sector in 2023 was dire. The 2024 experience has been even worse, with HydrogenOne Capital Growth's share price plunging by almost 60% during the year. While HydrogenOne Capital Growth may look well-positioned to deliver significant benefits to shareholders, it has not identified a single specific element of the emerging hydrogen market on which to focus, although well over half of its exposure is currently related to the supply chain. At a general level, the hydrogen market is beset with uncertainties, not least with current government policy, both in the UK and in the EU. The scope for inserting hydrogen, up to a certain level, into the UK domestic gas network remains – despite considerable interest – an aspiration: two recent planned trials on the Wirral and in Redcar have now been abandoned.

Portfolio: HydrogenOne Capital Growth has provided an update of its leading investments. Three of these investments now represent more than 60% of its NAV. The largest is the stake in Sunfire, a German industrial electrolysis producer, which accounts for 25% of NAV. Secondly, around 19% of NAV is attributable to HiiROC, a UK-based thermal plastic electrolysis developer. Thirdly, a further 18% of NAV derives from Estonia-based Elcogen, which supplies solid oxide fuel cells and electrolysis components. Importantly, the South Korean conglomerate, HD Hyundai, has confirmed a €45m (£37m) investment in Elcogen – undoubtedly, this has been a major boost. Whilst Strohm Holdings, a hydrogen pipeline business, previously accounted for 15% of NAV, its share has fallen in the past year to just 10%. Furthermore, HydrogenOne Capital Growth has recently confirmed that its 11% shareholding in HH2E – Foresight Environmental Infrastructure is another REIF shareholder – is probably worthless as the latter has failed to raise sufficient funds to avoid going into administration. Looking forward, the proposed acquisition of its investment adviser by Cordiant – out of whose stable Cordiant Digital emerged – may herald major changes.

Financial/share price data: Over the past two calendar years, 2023 and 2024, shares in HydrogenOne Capital Growth have fallen by 38% and by 60%, respectively. Given its September 2024 NAV of 100.8p, this indicates an enormous discount of over 80% to NAV. In terms of its discount rate, this has been reduced recently, from 14.2% in December 2023 to 13.3% at June 2024 – a figure that exceeds that of virtually every other IIC/REIF, except for the average 13.8% discount rate used by the struggling Digital 9 Infrastructure. In terms of dividends – never a priority for HydrogenOne Growth Capital – we have assumed a zero payment per share for 2024 and 2025. At its IPO in July 2021, HydrogenOne Capital Growth raised proceeds of £107m (gross) as investor interest soared: a further £21m (gross) was raised in April 2022. Subsequently, the fortunes of HydrogenOne Capital Growth have plunged, although it has confirmed that sufficient funds are available for it to operate until at least November 2025. No doubt, many shareholders, who have not benefited from the growth implied by the fund's name, may respond by opposing any "Continuation Vote" that might be tabled over the coming months.

NextEnergy Solar (market cap. £383m)

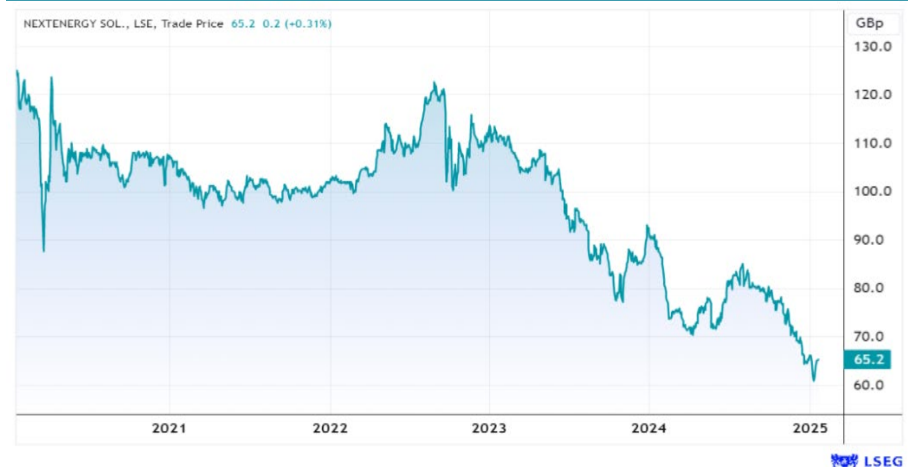
Investment sectors: NextEnergy Solar, which focuses on operating solar plants, undertook its IPO in April 2014. At that time, longer-term energy price projections were considerably higher than proved to be the case, until late 2021, when gas input prices began their upward surge following Russia's invasion of Ukraine in February 2022. During the past decade, NextEnergy Solar has built up a generation portfolio of more than 100 solar assets. As at September 2024, its installed capacity was 983MW. While most of this capacity is located in the UK, there is both a small solar generation portfolio located in southern Italy, and – through NPIII – a 13.6% interest in the Santarem plant in Portugal along with a modest investment in a generation plant near Cadiz, Spain. Acquisitions, of late, however, have been sparse as NextEnergy Solar has increasingly focused on reducing its debt. Central to the latter priority is its recently established Capital Recycling Programme (CRP), which has already seen two major plant disposals.

Portfolio: The overriding majority of NextEnergy Solar's 983MW of generation capacity is UK-based. Despite the end of the Renewable Obligation (RO) for new solar plants in 2017 and – more specifically – the end of the subsidies to which it gave rise, NextEnergy Solar had continued to invest in subsidy-free solar plants. However, this policy has now been superseded by the CRP, which has seen the sale of the key 50MW subsidy-free plant at Staughton in Cambridgeshire: an impressive 21.5% premium over its holding value was achieved. Also sold under the CRP was the 35MW Whitecross plant in Lincolnshire. Combined, the pair yielded proceeds of over £57m. On the BESS front, NextEnergy's first such plant, in Fife, Scotland, has recently begun commercial operations. Overseas, the Italian solar plants, with a total capacity of 35MW, and the shareholding in the Santarem plant are the most obvious value drivers.

Financial/share price data: With shares in NextEnergy Solar having fallen by nearly 30% during 2024 and currently trading at a 33% discount to the NAV of 97.8p per share, as at September 2024, challenges abound: at March 2024, the NAV was 104.7p. Moreover, the latest weighted average discount rate is 8%, below that of many other REIFs. In attempting to narrow the trading discount to NAV, Next Energy Solar has undertaken a £20m share buyback programme. On the dividend front, the expected dividend cover, at the full year-end, lying between 1.1x and 1.x3, is thin. However, the dividend target for 2024/25 remains at 8.43p per share; in 2023/24, the dividend was raised by 11% to a higher base. Moving forward, NextEnergy's main priority is generating increased cash resources, partly through improved plant returns, partly via completion of its CRP and partly through judicious re-financing. After all, if the preference shares are treated as debt, NextEnergy's gearing, based on GAV, is 48% – a comparatively high figure for the sector.

The graph below shows how NextEnergy Solar's share price has performed over the past five years. Unlike some other REIFs, its share price has failed to reach the levels achieved prior to the COVID-19 plunge in early 2020.

NextEnergy Solar – five-year share price performance



Source: LSEG, 2025

Octopus Renewables Infrastructure (market cap. £373m)

octopus renewables

Investment sectors: Octopus Renewables Infrastructure undertook its IPO in December 2019. Subsequently, it has built up a strong portfolio of renewable generation assets, with a capacity of 802MW (post the sale of the 48MW wind farm at Ljungbyholm in Sweden but including the recent plant acquisitions in the RoI). Its investment strategy is very pan-European as Octopus Renewables Infrastructure continues to focus on the wind and solar generation markets – and especially the latter. However, its current policy is undoubtedly less expansionist than previously, with cashflow now being paramount. Furthermore, its recent proposal to combine its business with the smaller Aquila European Renewables, now in MWD, was rejected: talks on the possible merger have apparently ceased.

Portfolio: After the sale of its two Polish plants in 2023 and of the 48MW Ljungbyholm wind farm, Octopus Renewables Infrastructure owned, as at October 2024, total generation capacity of 802MW: more than 60% of this capacity is solar generation plant. In the UK, the 67MW Breach Solar acquisition in Cambridgeshire is now operational. Importantly, Octopus Renewables Infrastructure has recently acquired substantial solar assets in the RoI, with 199MW of capacity sited near Dublin. PPAs, over a 15-year period, have been signed with Microsoft – offering high-quality long-term earnings. Offshore, the stake in the 270MW Lincs project has been increased to 15.5%. Elsewhere, and aside from the RoI, Octopus Renewables Infrastructure is now active in many leading EU markets, including France, Sweden and Finland. Indeed, its 120MW solar portfolio in France remains key. However, the option to acquire 175MW of ready-to-build solar capacity in Spain has been terminated.

Financial/share price data: Octopus Renewables Infrastructure's share price, down by 10% in calendar 2023 and by 24% in 2024, has performed rather less poorly than many of its peers. Nevertheless, its shares are currently trading at a 36% discount to its NAV, as at September 2024, of 103.8p per share: the latest adjusted average discount rate is now 8.2%. The dividend profile, though, is distinctly positive. For 2024, a 6.02p dividend per share, linked to changes in the CPI, is being targeted while dividend cover is comparatively reassuring. Having raised equity proceeds of £774m (gross) between its IPO in 2019 and 2022, there appears to be no immediate need for Octopus Renewables Infrastructure to raise additional funding, especially as consolidation – rather than expansion – has become the new *mantra*. Indeed, a major share buyback programme has been under way for some months – up to a maximum 14.9% of its issued share capital.

SEEIT (market cap. £589m)

Investment sectors: Following its IPO in 2018, SEEIT has focused on investing in solar and storage businesses, such as the US-based Onyx, energy efficiency projects as well as Combined Heat and Power (CHP) schemes. The US operations now account for around two-thirds of its GAV. Until recently, SEEIT had been very active in closing deals that met its investment criteria, especially in the US and, to a lesser extent, in Europe. Despite the dominance of its US businesses, SEEIT has also invested in both the EU, notably in the gas network in Sweden and in Spain, as well as in the UK. However, with a weak share price of late, SEEIT's period of expansion has been replaced by one of consolidation and cash conservation, especially given the apparent lack of access currently to new equity capital.

Portfolio: With the US as its core market, SEEIT has undertaken several acquisitions there. More specifically, it bought the district energy system, Red Rochester, based around the extensive Eastman Industrial Park in Rochester, New York. This business remains SEEIT's most valuable single investment, accounting for 18% of GAV. Elsewhere in the US, SEEIT owns – via ONYX – a successful solar generation and energy storage business, with off-takers spread across many sites. Onyx's current book value accounts for 17% of SEEIT's GAV, just below the Red Rochester investment. SEEIT has also secured full ownership of Primary Energy, which operates several co-generation projects within the US steel industry: its valuation, now accounting for 9% of GAV, is lower than previously. In Europe, SEEIT has invested ca.£100m in the Stockholm-based Driva (formerly Vartan Gas) whose main subsidiaries are Gasnatet, a Swedish gas distribution business, and Stockholm Gas; these businesses account for ca.6% of SEEIT's overall GAV. SEEIT's 125MW co-generation Oliva portfolio in Spain, comprising five CHP plants, two olive-processing plants and two biomass plants, is also trading better than previously.

Financial/share price data: Despite a solid operating performance, SEEIT faces various challenges. In 2023, its share price fell by no less than 32%, mainly on account of interest rate factors – a very unsatisfactory scenario given the £860m of new equity that it had raised since January 2020. And, in 2024, the shares price fell back by a further 18%. As such, SEEIT's share price discount to its latest NAV figure of 90.6p per share, as at September 2024, is now 40%. Its NAV remains flat and has also been held back by a higher discount rate – SEEIT's levered figure is 9.4%, having been 8.5% as recently as March 2023: the valuation implications are self-evident. For 2024/25, SEEIT's dividend is set to rise marginally to 6.32p per share: dividend cover is just 1.1x. SEEIT's total gearing is high – it amounts to 35% of Enterprise Value (EV) and 53% of NAV. which explains why cash consolidation has become the priority: capex for this year is expected to fall to between £75m and £125m. SEEIT has also conceded that both Onyx and EVN, its UK-based electronic charging platform business, both need additional funding. With further equity proceeds unlikely to be forthcoming, some form of co-investment may be undertaken.

TRIG (market cap. £2,116m)

Investment sectors: While TRIG has ceded REIF sector leadership to Greencoat UK Wind, the former has an increasing international reach, notably in northern Europe. Investment in offshore wind generation, now accounting – post the sale of its 15.2% stake in the Gode project – for a sizeable 35% of capacity, had become a priority, but sharply higher costs are an undoubted deterrent. In terms of generation sources, TRIG has focused on the wind sector, both onshore and offshore; it has also invested in solar farms, most notably in Spain. Having expanded quite aggressively in the past, consolidation has now become much more of a priority, with further sales expected, along with some modest investment in BESS projects.

Portfolio: TRIG's latest operational capacity figure is ca.2,700MW. Currently, over 60% of TRIG's capacity is sited in the UK, with the exposure in Scotland being slightly short of that in England. Offshore wind generation investment has been a very prominent feature of late, with the Hornsea 1 offshore wind project shareholding being the largest; it accounts for an 11% share of the portfolio. The Beatrice field shareholding, at 9%, is the next most valuable. In mainland Europe, Sweden, principally via the 213MW Jadraas plant, is TRIG's most important overseas market. However, low Swedish power prices and grid-related outages have reduced returns from Jadraas. France and Germany are TRIG's next most important European markets. Until the recent surge in costs, which have seen some offshore wind projects either "parked" or cancelled, TRIG had been expected to invest heavily in both the Baltic Sea and in the North Sea over the next decade. On the solar front, recently, TRIG has commissioned 234MW of new wind capacity at Cadiz in the Spanish province of Andalucía. In time, post the acquisition of Fig Power, a leading BESS plant developer, TRIG will expect to become a leading player in this subsector.

Financial/share price data: With its share price down by 13% during 2023 and almost double that figure in 2024, TRIG's shares are now trading at a discount of 29% to its NAV of 121.6p, as at September 2024: the current discount rate used by TRIG is 8.3%. In seeking to reduce the trading discount to NAV, a £50m share buyback programme was announced in August. Clearly, TRIG has experienced various issues, many price-related, from its operations. Investors will be particularly concerned about the major cost increases in offshore wind farm development, which will undoubtedly reduce projected returns. In terms of dividends, TRIG is expecting to pay a dividend of 7.47p per share, a 4% increase over its 2023 payment. With cash generation now a priority, TRIG has made several disposals, including part of its stake in the 330MW Gode offshore project and the RoI-based 52MW Pallas wind plant in County Kerry – both sales yielded decent premiums over book value.

The chart below shows movements in TRIG's share price over the past five years as it sought to recover from the COVID-19-induced plunge in March 2020.

TRIG – five-year share price performance

Source: LSEG, 2025

Triple Point Energy Transition (market cap. £45m)

Investment sectors: Triple Point Energy Transition (formerly Triple Point Energy Efficiency) undertook its IPO in October 2020 and raised £100m (gross) of proceeds at the same time. The promotion of energy efficiency was the underlying aim of the fund, while also providing good shareholder returns. Achieving these aims proved very problematic. Indeed, just three and a half years later, it was confirmed that almost 99.9% of shareholders had voted in favour of MWD. This process has been under way for some months subsequently and at a rate that surpasses that of other REIFs in similar MWD circumstances. With confirmation of the recent sale of the TENT Holdings portfolio of hydro-electric plants and of the related finance facility, full MWD has almost been completed – within just 13 months. Triple Point Energy Transition has also stated that "89% of the portfolio carrying value" has been realised – an impressive achievement, given the difficult circumstances.

Portfolio: In the past, Triple Point Energy Transition had sought acquisitions within its preferred £5m to £30m band. Specifically, it had focused on small hydro plants in the UK, most of whose revenues were underpinned by Feed-in-Tariffs (FiTs). Much of the remaining investment has been in CHP-related assets and in BESS plants. With the near completion of the MWD process, these plants have either been sold or will be shortly.

Financial/share price data: Triple Point Energy Transition's share price has fallen by 34% during 2024, with a sharp decline being registered on 19 September 2024 when the 25p special dividend went ex. Furthermore, following a downward valuation revision to the TENT Holdings investment, the NAV at September 2024 fell to 77.2p per share, compared with 86.7p per share at March 2024. As such, the shares are currently trading at a 42% discount to the former NAV figure. In terms of dividends, a full-year payment of 5.50p per share is expected for the 2024/25 financial year. Within the next year, another special dividend may be paid, depending on the level of cash inflow arising from disposals, as well as a residuary payment to shareholders once the MWD process is complete.

US Solar (market cap. £98m)

Investment sectors: At its IPO in April 2019, US Solar set out its policy to invest in solar power assets, predominantly in the US, where many states offer attractive financial incentives for renewable generation investment. A solar generation portfolio was subsequently assembled, mainly on the east and west coast of the US, as well as in Utah. But, in common with several other REIFs, including Ecofin US Renewables Infrastructure, there has been major disquiet among leading shareholders. In US Solar's case, an AGM motion proposed "Discontinuation" of the fund, but it was rejected on a 35%/65% split. However, every effort is now being made to enhance shareholder value. A tender auction was held in April 2024, which was heavily over-subscribed and saw the fund buy back 24.4m shares at c76.4 (0.61p) per share – well above the current depressed share price.

Portfolio: Until recently, US Solar's focus had been on investing in states on the US east and west coasts, as well as operating its core 128MW Milford plant in Utah. Following the $52m (£42m) sale, in June 2023, of its 50% stake in the Californian-based Mount Signal 2 plant, US Solar now has a portfolio of 443MW of solar generation capacity across four states, with 41 operating plants. Its largest investment – 28 plants in all – is in North Carolina, with a capacity of 168MW. Aside from the Milford facility, the 10 plants in Oregon are also pivotal to US Solar's underlying valuation. Over the past 18 months, for varying reasons, including excessive cloud cover and inverter issues, output has consistently been significantly below budget – with the accompanying financial shortfalls. Fixing these problems is a priority.

Financial/share price data: In April 2019, US Solar had raised proceeds of $200m (£160m) (gross) at its IPO. However, its share price has been particularly weak during 2023 and 2024, falling by 26% over the past year alone. It is currently trading at a 47% discount to its NAV figure of 60.0p (c75.0) per share, as at September 2024. Its NAV has fallen back of late, partly due to poor plant performance but also due to the increase in its discount rate to 9.2%. Despite these uncertainties, a 1.8p (c2.25) dividend per share – a 60% dividend cut was announced last April – is planned for the 2024 financial year. Undoubtedly, US Solar's overtly expansionist strategy of the past has been reined in both by material structural changes adversely affecting the US solar sector and by its own less favourable commercial and financial returns. US Solar's focus is now on securing senior debt refinancing at favourable rates, while also carefully assessing shareholders' views regarding the "Discontinuation Vote" issue, which may recur – and produce a different outcome.

VH Global Energy Infrastructure (market cap. £257m)

Investment sectors: At its IPO in January 2021, VH Global Energy Infrastructure (previously named Victory Hill GSEO) planned to "invest in a diversified portfolio of global sustainable energy infrastructure assets" – it has certainly done so across several continents. Its targeted investments may seem somewhat eclectic, except for their prime emphasis being on the energy sector. Four years after its IPO, VH Global Energy Infrastructure now has major investments in Brazil – notably, the Mascarenhas hydro-plant – as well as in the US. So far, the UK, European and Australian portfolios remain quite modest.

Portfolio: In Brazil, VH Global Energy Infrastructure has acquired the 198MW run-of-river hydro-plant at Mascarenhas, in Espirito Santo state, which was previously owned by EDP, the leading Portuguese utility. The cost was ca.£115m – around two-thirds of which was payable upfront; the remainder was deferred. The plant has been operational since 1974. Elsewhere in Brazil, VH Global Energy Infrastructure is investing in a portfolio of remote solar distribution plants spread across several states. Its US investments are also material, notably the ca.$96m (ca.£77m) that was spent on acquiring two terminal storage sites on the Texan coast. In the UK, VH Global Energy Infrastructure is investing in carbon reduction projects. Its lead UK investment is the funding of two flexible CHP plants, with a combined capacity of 45MW, one of which is a 10MW plant in Nottingham and the other, at 35MW, in County Durham; after some delays, the former plant is due to be commissioned shortly. Investing in renewable power assets in Australia is also an aspiration for VH Global Energy Infrastructure, but it is still early days. In Europe, too, wind and solar generation assets are being acquired, mainly in Spain – a rare example of capacity enhancement by sector funds in 2024.

Financial/share price data: With a share price fall of 16% during 2024, VH Global Energy Infrastructure shares are now trading at a discount of 42% to its latest NAV, as at September 2024, of 111.2p. It is planning to pay a 5.68p per share dividend in respect of the 2024 financial year. Having raised more than £460m of gross proceeds over the past four years, VH Global Energy Infrastructure's finances are more robust than those of other smaller REIFs. And, to boost its NAV, a share buyback programme has been undertaken, albeit at a distinctly modest level. Looking forward, the key Mascarenhas hydro-plant in Brazil will be pivotal in driving the cashflow of VH Global Energy Infrastructure – with 60% of its revenues subject to long-term PPAs. During 2023, it was reported that this plant had performed over budget. More recently, it suffered from a drought, the financial effects of which were partially offset by higher merchant prices. Elsewhere, VH Global Energy Infrastructure is expected to direct more of its focus to mainland Europe and, especially to Spain whose renewable energy market it has recently entered.

Fundraisings

Paltry sector fundraisings – just £152m in 2023 and a near blank sheet in 2024…

The year 2023 was a distinctly barren year for IIC/REIF fundraising, with just £152m (gross) of proceeds being raised. Two-thirds of this figure – £102m (gross) – was attributable to 3i Infrastructure and the remaining £50m (gross) to Gresham House Energy Storage. In 2023, there were no IPOs in the sector, despite the efforts, on several occasions, of AT85 Global Mid-Market Infrastructure to raise equity through a public listing. The 2024 experiences were even worse for the sector, with no major equity fundraisings being undertaken; nor were there any IPOs during the year. There were, though, two sector exits – Asian Energy Impact and Atrato Onsite Energy – and various moves into MWDs.

…and very few deals

Furthermore, during 2024, very few deals took place, aside from the occasional "tuck-in" acquisition. In fact, given the low level of corporate activity, there were few reasons to raise further equity funds. In reality, the reverse was probably true – the inability to raise new equity precluded many possible deals from proceeding.

Caustic views about the sector market

This scenario was encapsulated by Foresight Solar when it highlighted the…

"challenges facing the listed infrastructure sector with equity markets likely to remain inaccessible in the short to medium term".

Moreover, the IIC/REIF sector's leading performer in 2024, Cordiant Digital, spoke in very similar terms:

"Capital markets for new equity investment remain effectively closed for many investment trusts, including the Company."

Nevertheless, judging by the table below, which shows that the IICs and REIFs have raised ca.£10.3bn of new money since January 2020, investor appetite had been reasonably strong – until the fallow period of late 2022 and 2023, when interest rates rose sharply. Several REIFs experienced serious problems as their share prices fell, their trading discounts to NAV widened and, in some cases, their shareholders demanded quite radical solutions.

No IPOs since 2021

Previously, many investors had been prepared to accept the IIC/REIF risk profiles. Nine sector IPOs had taken place in 2021 – three IICs and six REIFs but none since. Furthermore, many secondary fundraisings had been undertaken at very modest discounts to the then prevailing share price.

From late 2022, it was downhill…

From late 2022, the outlook changed quite quickly. Pantheon Infrastructure's proposed £250m C share issue was pulled in September 2022: "extreme volatility" due to the much castigated mini-Budget of 2022 was cited as the reason. In the case of Harmony Energy Income, its last equity offering raised just £15m, way below the maximum £130m that was sought. A similarly lacklustre response greeted the November 2022 fundraise of Asian Energy Impact (then ThomasLloyd Energy Impact), which yielded just over £30m (gross) of proceeds. Subsequent events, namely its planned move into voluntary liquidation, vindicated the cautious stance of many investors.

The poor response to these equity fundraises – and to others that were not officially undertaken – explain the subsequent paucity of equity fundraising by the IIC/REIF sector. Undoubtedly, the interest rate rises from 2022 did major damage to sector valuations, and especially to those of the less mature funds. Not surprisingly, in 2023, the focus moved to consolidation – and away from expansion – of the IIC/REIF asset bases.

...and some IICs/REIFs need more equity

Looking forward, many of the smaller REIFs, especially given the current large trading discounts to NAV, may face a real challenge to raise additional equity funding – and, in some cases, debt. In truth, most such IICs/REIFs are awaiting better times; in other cases, assets have been sold off to generate much-needed funds.

The struggling class of 2021

For the nine IIC/REIF funds who undertook their IPOs in 2021 – Aquila Energy Efficiency, Asian Energy Impact (formerly ThomasLloyd Energy Impact), Atrato Onsite Energy, Cordiant Digital Infrastructure, Digital 9 Infrastructure, Harmony Energy Income, HydrogenOne Capital Growth, Pantheon Infrastructure and VH Global Energy Efficiency (formerly Victory Hill GSEO) – the past few years have been challenging. For most of these IICs/REIFs, their financial performance, such as that of HydrogenOne Capital Growth, will have been very different from their mid-case modelling assumptions prior to their IPOs four years ago.

Core asset sales – needs must by both Digital 9 Infrastructure and by Harmony Energy Income

The most obvious example is Digital 9 Infrastructure's painful – but eventually successful – efforts to sell its core Verne Global business in order to strengthen its very weak balance sheet. And in Harmony Energy Income's case, the sale of its Rye Common "shovel-ready" project was completed on the basis that the funds generated could finance its ongoing BESS programme elsewhere; the latter sale has bolstered both its balance sheet and its share price.

Share buybacks now all the rage

Many IICs and REIFs, including the formerly deal-hungry SEEIT and VH Global Energy Efficiency, have implemented share buyback programmes, both to raise their NAVs as well as to boost their share price; success on the latter front has been limited to date.

Two fund exits

The table below shows the major fundraisings by the 31 IICs/REIFs – this includes the now de-listed Asian Energy Impact and Atrato Onsite Energy – since January 2020. The total new equity raised over the four years exceeds £10.3bn. However, a meagre £152m was raised in 2023, as higher interest rates made an impact. And, in 2024, only minimal amounts of equity were raised.

Major IIC and REIF fundraises since January 2020

IICs and REIFs	Date	New shares (m)	Price (p)	Gross proceeds (£m)
3i Infrastructure	Feb'23	30.9	330	102
Aquila Energy Efficiency	May'21	100.0	100	100
Aquila European Renewables	Sep'21	87,4	89	76
	Oct'20	122.9	89	107
	Mar'20	38.1	90	34
Asian Energy Impact (*now de-listed*)	Nov'22	34.3	89	31
	Dec'21	115.4	100	85
Atrato Onsite Energy (*now de-listed*)	Nov'21	150.0	100	150
BBGI	Jul'21	45.2	166	75
	Nov'20	32.5	169	55
Bluefield Solar	Jun'22	115.4	130	150
	Jul'21	89.1	118	105
	Nov'20	36.5	124	45
Cordiant Digital Infrastructure	Jan'22	188.7	106	200
	Jun'21	185.0	100	185
	Feb'21	370.0	100	370
Digital 9 Infrastructure	Jul'22	54.5	110	60
	Jan'22	88.1	108	95
	Sep'21	255.8	107	275
	Jun'21	166.6	105	175
	Mar'21	300.0	100	300
Downing Renewables and Infrastructure	Jun'22	47.6	111	53
	Oct'21	14.5	103	15
	Dec'20	122.5	100	123
Ecofin US Renewables Infrastructure	May'22	10.7	101	10
	Dec'20	125.0	100	99

Major IIC and REIF fundraises since January 2020 (continued)				
Foresight Environmental Infrastructure (ex JLEN)	Jan'22	60.1	101	61
	May'21	54.7	104	57
	Feb'20	49.7	115	57
Foresight Solar	NIL			0
GCP Infrastructure	NIL			0
Gore Street Energy Storage	Apr'22	136.4	110	150
	Sep'21	68.8	107	74
	Apr'21	132.3	102	135
	Dec'20	60.0	100	60
	Jul'20	24.6	96	24
	Feb'20	3.6	96	3
Greencoat Renewables	Apr'22	251.4	95	240
	Oct'21	148.6	95	139
	Dec'20	110.6	97	105
Greencoat UK Wind	Nov'21	341.0	132	450
	Feb'21	150.9	131	198
	Sep'20	305.3	131	400
Gresham House Energy Storage	May'23	32.2	155	50
	May'22	103.4	145	150
	Jul'21	89.3	112	100
	Nov'20	114.3	105	120
	Feb'20	30.0	104	31
Harmony Energy Income	Oct'22	14.8	100	15
	Nov'21	210.0	100	187
HICL	Jul'22	94.7	169	160
	Jul'20	73.2	164	120
HydrogenOne Capital Growth	Apr'22	21.5	100	21
	Jul'21	107.4	100	107
INPP	Apr'22	203.8	160	325
	Jul'20	81.8	165	135
NextEnergy Solar	NIL			0
Octopus Renewables Infrastructure	Nov'21	70.0	105	74
	Jun'21	144.9	104	150
Pantheon Infrastructure	Nov'21	400.0	100	400
SEEIT	Sep'22	118.4	114	135
	Mar'22	87.0	115	100
	Sep'21	226.2	110	250
	Feb'21	150.9	106	160
	Oct'20	100.0	105	105
	Jun'20	105.8	104	110
Sequoia Economic Infrastructure	Mar'21	105.0	105	110
	Feb'20	267.9	112	300
TRIG	Mar'22	210.1	132	277
	Sep'21	161.3	124	200
	Mar'21	195.0	123	240
	Nov'20	160.0	125	200
	May'20	100.0	120	120
Triple Point Energy Transition	Oct'20	100.0	100	100
US Solar	May'21	132.0	72	98
VH Global Energy Efficiency (ex Victory Hill GSEO)	Jun'22	111.0	110	122
	Dec'21	69.0	101	70
	Feb'21	242.6	100	243
Total				**10,312**

Source: Hardman & Co

Current market ratings

The latest market ratings for the 29 IICs and REIFs, based on prices at the close of business on 31 December 2024, are set out below. Most, though not all, NAV figures are those published at the end of either June 2024 or September 2024.

Dividends, yields and NAVs

The tables below covering dividends, yields and NAVs show:

- A prospective underlying dividend yield for the 29 IICs/REIFs of between 5.0% and 9.5%, with a few noticeable outliers, such as 3i Infrastructure, whose prospective dividend yield of 4.0% is far lower.
- A total market capitalisation for the 29 IICs and REIFs of £21.6bn, split as follows: IICs at £11.6bn and REIFs at £10.0bn.

Following the sharp rise in interest rates from 2022, all IICs/REIFs are currently trading at discounts to their NAVs. In some cases, these discounts are substantial – Digital 9 Infrastructure, at 59%, and HydrogenOne Capital Growth, at 80%, being the most notable.

NAV discounts are both wide and wide-ranging

The NAV figures reported by each of the 29 IICs and REIFs – in most cases, at the end of June 2024 or September 2024 – are shown below, along with their prospective yields, based on our dividend projections for the coming period.

NAVs and dividend yields of IICs and REIFs

IICs and REIFs	Share price (p)	Market cap. (£m)	NAV per share (p)	Prem./Disc. to NAV	Prospective yield
3i Infrastructure	317	2,924	374.7	-15.4	4.0%
Aquila Energy Efficiency	52	42	95.1	-45.3	11.8%
Aquila European Renewables	55	207	74.9	-26.9	8.8%
BBGI	125	894	147.4	-15.2	6.7%
Bluefield Solar	94	556	126.1	-25.5	9.6%
Cordiant Digital Infrastructure	90	686	124.4	-27.7	4.7%
Digital 9 Infrastructure	19	164	46.6	-59.2	0.0%
Downing Renewables and Infrastructure	77	132	117.3	-34.4	7.5%
Ecofin US Renewables Infrastructure	24	33	52.0	-53.8	2.3%
Foresight Environmental Infrastructure	73	472	109.8	-33.5	10.7%
Foresight Solar	77	435	112.6	-31.6	10.4%
GCP Infrastructure	70	606	105.2	-33.5	10.0%
Gore Street Energy Storage	48	242	100.5	-52.2	14.6%
Greencoat Renewables (ex €)	67	746	91.6	-26.6	8.3%
Greencoat UK Wind	128	2,880	158.6	-19.3	7.8%
Gresham House Energy Storage	45	256	109.1	-58.8	0.0%
Harmony Energy Income	65	148	88.5	-26.6	0.0%
HICL	119	2,380	156.5	-24.0	6.9%
HydrogenOne Capital Growth	20	26	100.8	-80.2	0.0%
INPP	121	2,275	149.5	-19.1	6.9%
NextEnergy Solar	66	383	97.8	-32.5	12.8%
Octopus Renewables	67	373	103.8	-35.5	9.0%
Pantheon Infrastructure	89	417	116.2	-23.4	4.7%
SEEIT	54	589	90.6	-40.4	11.7%
Sequoia Economic Infrastructure	78	1,225	94.9	-17.8	8.8%
TRIG	86	2,116	121.6	-29.3	8.7%
Triple Point Energy Transition	45	45	77.2	-41.7	12.2%
US Solar	32	98	60.0	-46.7	5.6%
VH Global Energy Efficiency	65	257	111.2	-41.5	8.7%
Total	**n/a**	**21,601**	**n/a**	**n/a**	**n/a**

Note: Based on prices as at 31/12/24. Source: Bloomberg, Hardman & Co Research

Valuation issues

NAV movements are key valuation tool – despite anomalies

It is clear that, in valuing IICs and REIFs, movements in their NAVs are pivotal. In fact, for much of 1H'22, there were significant premia over NAV for most quoted IICs and REIFs. These premia have been eliminated – and replaced by, in most cases, substantial, discounts – over the past two and a half years, as 10-year gilt yields and interest rates moved upwards. Yet, the defensive characteristics of most IICs and the larger REIFs, especially at a time of economic uncertainty and inflation concerns, have appealed to some income-seeking investors.

3i Infrastructure and Greencoat UK Wind lead their subsectors

On a longer-term perspective, the table below tracks the latest published NAVs for the leading IICs and REIFs; it also compares them with those reported back in late 2018 or early 2019, prior to the outbreak of the COVID-19 pandemic. The 2024 NAV figures quoted below are based mostly on the latest published data, from either June 2024 or from September 2024. The two outstanding performances, in terms of NAV growth over almost six years, have been delivered by 3i Infrastructure, whose NAV has risen by almost 60%, and by Greencoat UK Wind, whose NAV and dividend growth have comfortably exceeded that of any other REIF. At the other end of the scale are NextEnergy Solar and Sequoia Economic Infrastructure; their NAVs are down by 11.8% and 8.2%, respectively, over the near six-year period.

Latest NAVs for leading IICs and REIFs

IIC and REIF	Latest NAV figure (p)	NAV at either 12/18 or 03/19 (p)	Current prem./disc. to 12/18 or 03/19 NAV
3i Infrastructure	374.7	234.7	+59.6%
BBGI	147.4	133.5	+10.4%
Bluefield Solar	126.1	114.4	+10.2%
Foresight Environmental Infrastructure (ex JLEN)	109.8	104.7	+4.9%
Foresight Solar	112.6	111.2	+1.2%
GCP Infrastructure	105.2	112.5	-6.5%
Greencoat Renewables	c110.4	c103.4	+6.8%
Greencoat UK Wind	158.6	123.1	+28.8%
HICL	156.5	157.5	-0.6%
INPP	149.5	148.1	+0.9%
NextEnergy Solar	97.8	110.9	-11.8%
Sequoia Economic Infrastructure	94.9	103.4	-8.2%
TRIG	121.6	108.9	+11.7%

Source: Company accounts, Hardman & Co Research

Lack of data consistency undermines NAV read-across analysis

In analysing the IICs and REIFs, there is a pronounced lack of consistency in setting individual fund valuation methodologies. Many of the key valuation tools, such as discount rates, future power price assumptions, inflation projections, asset lives and energy yields, *inter alia*, are – in many cases – inherently subjective. To that extent, they increase distortions from read-across comparisons.

Dividends

Many IIC/REIF funds will find it challenging to deliver real increases in dividends. 3i Infrastructure, with its aggressive dividend projections, should be an exception in this respect – for 2024/25, it is targeting a 6.3% increase. Greencoat UK Wind – in the light of its RPI-linked dividend policy – is now expected to pay a dividend for 2024 of a minimum 10.00p per share, which is almost 30% above its 2022 payment of 7.7p per share. Given the current financial environment, this is an impressive rise – driven by its formidable cashflow.

HICL's "flat-as-a-pancake" dividend

At the other end of the dividend scale is leading IIC, HICL. For 2024/25, it plans to hold its dividend at 8.25p per share before increasing it – for the first time in six years - to 8.35p per share. Some REIFs cut their dividends during 2024, most notably Gresham House Energy Storage following its heavy profit warning in February 2024. Investors in both US stocks, Ecofin US Renewables Infrastructure, which suffered from collateral damage to the local electricity network following a tornado in Texas, and US Solar have also seen marked dividend cuts. The only IIC to pass its dividend in 2024 was Digital 9 Infrastructure, which is now in MWD.

Thinning dividend cover for several REIFs

In recent years, dividend cover levels for many IICs/REIFs have been eroded. Such a scenario does not apply, though, to 3i Infrastructure, a major outlier in this respect. In fact, several leading funds, such as HICL and IPP, are paying dividends that are barely covered, which clearly has implications for future dividend growth. In other cases, notably those of Foresight Environmental Infrastructure (ex JLEN), Foresight Solar, HICL and NextEnergy Solar, raising dividend cover had become a priority: all four have achieved some success in that respect. In framing their future dividend policies – many of which are described as "progressive" – IICs and REIFs will be very mindful of their level of projected dividend cover and how it might fluctuate going forward.

Most prospective yields now lie in the 5.0% to 9.5% range – 3i Infrastructure is a sector outlier with a 4.0% yield

The table below lists our projected dividend payments and the relevant prospective yields for the quoted IICs and REIFs. The underlying yields vary quite considerably, but most lie within the 5.0%-9.5% range. Despite several IICs and REIFs having quite low dividend cover, most are targeting modest nominal dividend increases. While such a scenario may seem unexciting – when compared with the shock 58% per share dividend cut imposed by the UK's leading gas supply company, Centrica, back in 2019 – such increases are arguably acceptable.

Prospective dividends

IICs and REIFs	Financial year-end	Prospective dividend (p)	Prospective yield
3i Infrastructure	Mar	12.65	4.0%
Aquila Energy Efficiency	Dec	6.14	11.8%
Aquila European Renewables	Dec	4.80	8.8%
BBGI	Dec	8.40	6.7%
Bluefield Solar	Jun	9.00	9.6%
Cordiant Digital Infrastructure	Mar	4.20	4.7%
Digital 9 Infrastructure	Dec	0	n/a
Downing Renewables and Infrastructure	Dec	5.80	7.5%
Ecofin US Renewables Infrastructure	Dec	0.56	2.3%
Foresight Environmental Infrastructure (ex JLEN)	Mar	7.80	10.7%
Foresight Solar	Dec	8.00	10.4%
GCP Infrastructure	Sep	7.00	10.0%
Gore Street Energy Storage	Mar	7.00	14.6%
Greencoat Renewables	Dec	5.59	8.3%
Greencoat UK Wind	Dec	10.00	7.8%
Gresham House Energy Storage	Dec	0	n/a
Harmony Energy Income	Oct	0	n/a
HICL	Mar	8.25	6.9%
HydrogenOne Capital Growth	Dec	n/a	n/a
INPP	Dec	8.36	6.9%
NextEnergy Solar	Mar	8.43	12.8%
Octopus Renewables Infrastructure	Dec	6.02	9.0%
Pantheon Infrastructure	Dec	4.20	4.7%
SEEIT	Mar	6.32	11.7%
Sequoia Economic Infrastructure	Mar	6.88	8.8%
TRIG	Dec	7.47	8.7%
Triple Point Energy Transition	Mar	5.50	12.2%
US Solar	Dec	1.80	5.6%
VH Global Energy Efficiency (ex Victory Hill GSEO)	Dec	5.68	8.7%

Source: Company accounts, Hardman & Co Research

Dividend resilience

Looking back, the recent dividend payout record from the IICs and REIFs has been reassuring, especially when set alongside the intense financial pressures that other UK energy stocks, such as Centrica, have faced. With the relative lack in the market of good-quality stocks on decent yields, and the many dividend cuts and/or suspensions by well-known quoted companies over the past few years, it is hardly surprising that IICs and REIFs attracted the interest of many discerning yield-driven investors. Of course, this confidence has been seriously eroded of late by increases in interest rates and their negative impact on both valuations and on sector share prices, which has given rise to large trading discounts to NAVs.

The Severn Trent RAV contrast with IICs/REIF NAVs

Except for the very difficult period in the spring and summer of March 2020, when the COVID-19 pandemic panic was at its height, many IICs and REIFs continued – until mid-2022 – to trade at a good premium to their NAV, in common with utilities such as regulated water stocks. Severn Trent, for example, is currently trading at a ca.15% premium to its regulatory asset value (RAV, a similar concept to NAV, is used by utility regulators) despite the ongoing PR24 periodic review – the water companies must decide very shortly whether to accept Ofwat's Final Determination or seek to overturn it.

Valuations have gone sharply south

Over a short – but eventful – period for financial markets, the trading premium-based scenario has changed very markedly, with all 29 IICs/REIFs now being quoted at a discount to their NAVs – many discounts exceed 50%. Assuming interest rates fall this year, which is far from certain, these discounts should erode, unless the fund concerned is financially very challenged. Whether IICs, such as BBGI – now trading at a 15% discount – recover to trade at a 25% premium to its NAV, as was the case as recently as 2022, remains to be seen.

Environmental Investment Trusts (EITs)

Impax Environmental leads the trio

Although their business models are somewhat different from those of the 29 IICs and REIFs analysed in this document, we also briefly assess the three Environmental Investment Trusts (EITs), which are classified as "Environmental" by the AIC. The three stocks assessed are Impax Environmental Markets along with the much smaller Jupiter Green and Menhaden Energy Resources. The combined capitalisation of this trio is £1,080m.

Impax Environmental Markets (£915m)

Investment sectors: Impax Environmental Markets focuses on four key areas in the expanding environmental sector: clean energy and energy efficiency; water treatment and pollution control; water technology and natural resource management; and sustainable food. Importantly for investors, no investment in its portfolio is normally permitted to represent more than 3% of the fund's overall value.

Portfolio: Impax Environmental Markets' top 10 investments account for ca.27% of the portfolio's value. Just over 57% of the portfolio is invested in the US, with a further 29% in Europe. The leading stock, with a 3.4% share of the portfolio, is PTC, a US software solutions business. The US-based Clean Harbors Inc., which provides environmental services, accounts for 3.0%; and a similar figure applies to another US business, Trimble Inc., which operates in the IT sector.

Financial/share price data: During 2024, Impax Environmental Markets' NAV barely changed over the year. The NAV at the December 2024 year-end was 427p per share and its shares are currently trading at a discount of almost 10%. In terms of dividends, Impax Environmental Markets has recently linked its payments more closely to earnings. For 2024/25, a payment of ca.4.80p per share is likely, with a distinctly modest yield of just over 1%.

Impax Environmental Markets – half-year income statement 2024

(£000)	to 30/09/24	to 30/09/23
Gains/losses on investments	(20,900)	41,667
Net forex gains/losses	1,871	(2,192)
Income	12,667	12,569
Investment management fees	(4,932)	(4,789)
Other expenses	(762)	(754)
Activities before finance costs and tax	(12,056)	46,511
Finance costs	(2,262)	(1,540)
Return on ordinary activities before tax	(14,318)	44,971
Tax	(1,477)	(1,437)
Return on ordinary activities after tax	(15,795)	43,534
Return per ordinary share (p)	(5.85)	14.36

Source: Impax Environmental Markets, Hardman & Co Research

Jupiter Green (market cap. £46m)

Investment sectors: Jupiter Green is an investment trust, which "invests globally in companies that have a significant focus on environment solutions". More specifically, it has sought to invest across several key sectors, including green mobility, clean energy, green buildings and industry, and sustainable agriculture and land ecosystems. However, this strategy has been overshadowed of late by an announcement on 19 December 2024 that Jupiter Green intended to "propose a scheme of reconstruction and voluntary liquidation of the company". Existing shareholders will be offered the opportunity to switch their shares into the Jupiter

Ecology Fund, a similar investment, or to choose an "uncapped cash exit at a modest discount to NAV".

Portfolio: In terms of markets, over 41% of Jupiter Green's assets are invested in US stocks, while the remaining 59% is well diversified, with Denmark – accounting for 7% – being the next-largest exposure. Importantly, no stock within Jupiter Green's portfolio accounts for more than 4% of value. In fact, during the past year, there has been considerable turnover of the portfolio as Jupiter Green's policy shifted towards providing enhanced investment in small innovative companies. The largest shareholding currently, at 3.8%, is in the Atlanta, Georgia-based Acuity Brands, while 3.5% of the portfolio is invested in both Clean Harbours Inc. the US environmental services business, and in the Italian-based cable manufacturer Prysmian. Overall, on a sector basis, industrials account for more than 51% of the Jupiter Green portfolio, with the IT component at 19%.

Financial/share price data: During a turbulent year for many of the IICs/REIFs, Jupiter Green's share price rose by almost 14%; its shares are currently trading at a comparatively modest 7% discount to the December 2024 year-end NAV of 251.5p per share. Given the planned reconstruction and subsequent voluntary liquidation, set for 1Q'25, any near-term share price movements are likely to be dependent upon the "uncapped cash exit at a modest discount to NAV" figure, as set out in a statement to shareholders in December 2024.

Menhaden Resource Efficiency (market cap. £119m)

Menhaden

Investment sectors: Menhaden Resource Efficiency operates a "multi-asset investment strategy, which seeks to provide the best balance between risk and reward across equity, credit and private universes." Generally, it runs positions in between 15 and 25 assets, mainly in the US or in Europe. Infrastructure and transportation, along with digitalisation, are the favoured areas of investment. And, in 2024, it had an outstanding year.

Portfolio: Menhaden Resource Efficiency has undertaken – very successfully – some major portfolio reshuffling during the past two years. Currently, its portfolio has a 46% exposure to North America and a 29% exposure to Europe. Its holding in the French-based Airbus, the infrastructure and transportation company, has been reduced – it is now 10.3%. Currently, the 12.1% share allocated to its Alphabet stake – the owner of Google – is the largest in the portfolio: its shares rose by 35% in 2024. The three next most important holdings are: in the French-based Safran, an aircraft equipment manufacturer with an industrial emission reductions division; in Avantus; a clean energy business with a 10.2% allocation; and in Microsoft, which accounts for a 9.4% share.

Financial/share price data: During 2024, Menhaden Resource Efficiency's shares rose by 52% – a very different scenario from that of all the other 29 IICs/REIFs under review. Nevertheless, Menhaden Resource Efficiency continues to trade at a discount – currently 12.3% – to its December 2024 year-end NAV of 173.3p per share. However, the trading discount to NAV has narrowed appreciably over the past year, due in part to the strong performance of US-based IT stocks, such as Alphabet and Microsoft. To preserve its investment trust status, Menhaden Resource Efficiency is expected to pay a modest dividend, perhaps of 0.5p per share, for 2024.

Databoxes

Reproduced below are databoxes for the 29 IICs/REIFs and the three environmental stocks – they contain key financial information and other relevant data or investors. In terms of Total Shareholder Returns (TSRs) – listed as "return record" in the databoxes – the relevant information is not, in some cases, readily available: the time-periods also vary. Moreover, given the poor performance of virtually all the sector's stocks over the past two years, it is perhaps unsurprising that less prominence is now given to highlighting TSRs since the relevant IPO date. For the more long-standing funds, the relevant TSRs are included.

3i Infrastructure5

Issue	Comments
Status	IIC
Ticker/website	3IN/www.3i-infrastructure.com
Fund aim	"To maintain a balanced portfolio of infrastructure investments delivering an attractive mix of income yield and capital appreciation for shareholders"
Key sectors	Utilities, transportation and digitalisation
Key markets	EU, UK, Norway and US
Year-end	Mar
Core portfolio	ca.20 infrastructure assets
NAV per share	374.7p (09/24)
Discount rate	11.3%
Market cap./share price	£2,924m/317p
Premium/discount to NAV	-15.4%
Prospective DPS/yield	12.65p/4.0%
Return record	Since its IPO in 2007, TSR has increased by an average 11.5% per year

Source: 3i Infrastructure, Bloomberg

Aquila Energy Efficiency

Issue	Comments
Status	REIF in MWD
Ticker/website	AEET/www.aquila-energy-efficiency-trust.com
Fund aim	The fund "focuses on investments in small to medium-sized energy efficiency projects in the private and public sectors"
Key sectors	Energy efficiency
Key markets	UK, EU
Core portfolio capacity	n/a
Year-end	Dec
NAV per share	95.1p (6/24)
Discount rate	8.4%
Market cap./share price	£42m/52p
Premium/discount to NAV	-45.3%
Prospective DPS/yield	6.14p/11.8%
Return record	n/a

Source: Aquila Energy Efficiency, Bloomberg

Aquila European Renewables

Issue	Comments
Status	REIF in MWD
Ticker/website	AERS/www.aquila-european-renewables-income-fund.com
Fund aim	"Will seek to generate stable returns, principally in the form of income distribution, by investing in a diversified portfolio of renewable energy infrastructure investments"
Key sectors	Wind, solar and hydro generation
Key markets	Nordics, Iberia
Core portfolio capacity	464MW
Year-end	Dec
NAV per share	(c90.3)/74.9p (09/24)
Discount rate	7.5%
Market cap./share price	£207m/55p
Premium/discount to NAV	-26.9%
Prospective DPS/yield	(c5.79)/4.80p/8.8%
Return record	n/a

Source: Aquila European Renewables, Bloomberg

BBGI

Issue	Comments
Status	IIC
Ticker/website	BBGI/www.bb-gi.com
Fund aim	We are "an Infrastructure Investment Company that invests in and actively manages, for the long term, a globally diversified, low-risk portfolio of essential social infrastructure investments. We are committed to delivering stable and predictable cash flows with progressive long-term dividend growth and attractive, sustainable. returns to shareholders."
Key sectors	Roads, bridges, schools, hospitals, blue light (fire and police stations)
Key markets	Canada, UK, US
Core portfolio	56 investments
Year-end	Dec
NAV per share	147.4p (06/24)
Discount rate	7.3% (06/24)
Market cap./share price	£894m/125p
Premium/discount to NAV	-15.2%
Prospective DPS/yield	8.40p/6.7%
Return record	Since its IPO in 2011, TSR has increased by an average 7.0% per year

Source: BBGI, Bloomberg

Bluefield Solar

Issue	Comments
Status	REIF
Ticker/website	BSIF/www.bluefieldsif.com
Fund aim	"Acquisitioned management of a diversified portfolio of large-scale solar energy in the UK, with the objective of delivering long-term stable yield'
Key sectors	Solar generation
Key markets	UK
Core portfolio capacity	834MW
Year-end	Jun
NAV per share	126.1p (09/24)
Discount rate	8.0%
Market cap./share price	£556m/94p
Premium/discount to NAV	-25.5%
Prospective DPS/yield	9.00p/9.6%
Return record	Since its IPO in 2013, TSR has increased by ca.104%

Source: Bluefield Solar, Bloomberg

Cordiant Digital Infrastructure

Issue	Comments
Status	IIC
Ticker/website	CORD/www.cordiantdigitaltrust.com
Fund aim	"The Company invests principally in operating digital infrastructure assets (that) exhibit a number of attractive investment features which drive value growth, including recurring long-term contracts ....with predictable cashflows"
Key sectors	Digital infrastructure
Key markets	Czech Republic, Poland and US
Core portfolio	Digital networks in Eastern Europe
Year-end	Mar
NAV per share	124.4p (09/24)
Discount rate	9.5%
Market cap./share price	£686m/90p
Premium/discount to NAV	-27.7%
Prospective DPS/yield	4.20p/4.7%
Return record	n/a

Source: Cordiant Digital Infrastructure, Bloomberg

Digital 9 Infrastructure

Issue	Comments
Status	IIC in MWD
Ticker/website	DGI9/www.d9infrastructure.com
Fund aim	As an investment trust, it "actively invests in critical digital infrastructure assets with a target annual return of 10% per annum"
Key sectors	Digital infrastructure
Key markets	UK, EU and Middle East
Core portfolio	Digital networks
Year-end	Dec
NAV per share	46.6p (06/24)
Discount rate	13.8%
Market cap./share price	£164m/19p
Premium/discount to NAV	-59.2%
Prospective DPS/yield	0.0p/n/a
Return record	n/a

Source: Digital 9 Infrastructure, Bloomberg

Downing Renewables and Infrastructure

Issue	Comments
Status	REIF
Ticker/website	DORE/www.doretrust.com
Fund aim	It "aims to achieve stable and sustainable returns by investing in a diversified portfolio of renewable energy and other infrastructure assets"
Key sectors	Hydro, wind and solar generation
Key markets	Sweden, GB
Core portfolio capacity	203MW, pre Gabrielsberget Syd Wind sale
Year-end	Dec
NAV per share	117.3p (09/24)
Discount rate	7.7%
Market cap./share price	£132m/77p
Premium/discount to NAV	-34.4%
Prospective DPS/yield	5.80p/7.5%
Return record	n/a

Source: Downing Renewables and Infrastructure, Bloomberg

Ecofin US Renewables Infrastructure

Issue	Comments
Status	REIF in MWD
Ticker/website	RNEP/www.uk.ecofinvest.com
Fund aim	"To provide shareholders with an attractive level of current distributions by investing in a diversified portfolio of mixed renewable energy and sustainable assets, predominantly located in the US"
Key sectors	Solar and wind generation
Key markets	US (California, Texas, Massachusetts)
Core portfolio capacity	177MW
Year-end	Dec
NAV per share	(c65.0) 52.0p (06/24)
Discount rate	8.5%
Market cap./share price	£33m/24p
Premium/discount to NAV	-53.8%
Prospective DPS/yield	(c70.0)/0.56p/2.3%
Return record	n/a

Source: Ecofin US Renewables, Bloomberg

Foresight Environmental Infrastructure (ex JLEN)

Issues	Comments
Status	REIF
Ticker/website	FGEN/www.jlen.com
Fund aim	"To provide shareholders with a sustainable dividend paid quarterly, that increases progressively in line with inflation and to preserve the capital value of its portfolio on a real basis over the long term"
Key sectors	Renewable generation
Key markets	UK
Core portfolio capacity	359MW capacity, 161MW of which is wind and 80MW solar – almost entirely in UK
Year-end	Mar
NAV per share	109.8p (09/24)
Discount rate	9.5%
Market cap./share price	£472m/73p
Premium/discount to NAV	-33.5%
Prospective DPS/yield	7.80p/10.7%
Return record	Since its IPO in March 2014, TSR has increased by 69%

Source: Foresight Environmental Infrastructure, Bloomberg

Foresight Solar

Issues	Comments
Status	REIF
Ticker/website	FSFL/www.fsfl.foresight.group.eu
Fund aim	"To provide investors with a sustainable and inflation-linked quarterly dividend ...and it aims to preserve and, where possible, enhance capital value through the re-investment of excess cashflow"
Key sectors	Solar generation
Key markets	UK, Australia, Spain
Core portfolio capacity	1,044MW solar (inc.723MW in UK, 170MW in Australia and 76MW in Spain)
Year-end	Dec
NAV per share	112.6p (09/24)
Discount rate	7.9%
Market cap./share price	£435m/77p
Premium/discount to NAV	-31.6%
Prospective DPS/yield	8.00p/10.4%
Return record	Since its IPO in 2013, TSR has increased by an average of 5.0% per year

Source: Foresight Solar, Bloomberg

GCP Infrastructure

Issues	Comments
Status	IIC
Ticker/website	GCP/www.graviscapital.com
Fund aims	"Our investment objective is to provide shareholders with regular, sustained, long-term dividends and to preserve the capital of (our) investment assets"
Key sectors	Renewable energy, PPP/PFI, social housing
Key markets	UK
Core portfolio	50 investments, mainly energy and PPP/PFI stakes
Year-end	Sep
NAV per share	105.2p (09/24)
Discount rate	7.95%
Market cap./share price	£606m/70p
Premium/discount to NAV	-33.5%
Prospective DPS/yield	7.0p/10.0%
Return record	Since its IPO in 2010, its TSR has increased by ca.60%

Source: GCP Infrastructure, Bloomberg

Gore Street Energy Storage

Issues	Comments
Status	REIF
Ticker/website	GSF/www.gsenergystoragefund.com
Fund aims	"To focus on projects that are well-positioned for growth in strategic locations with high barriers to entry and with a sustainable low operating cost structure" and "to generate value for our companies and investors beyond capital"
Key sectors	Battery storage systems
Key markets	UK, RoI, Germany, US
Core portfolio capacity	421MW of energy storage systems
Year-end	Mar
NAV per share	100.5p (09/24)
Discount rate	ca.8.25% (energised assets)
Market cap./share price	£242m/48p
Premium/discount to NAV	-52.2%
Prospective DPS/yield	7.00p/14.6%
Return record	n/a

Source: Gore Street Energy Storage, Bloomberg

Greencoat Renewables

Issues	Comments
Status	REIF
Ticker/website	GRP/www.greencoat-renewables.com
Fund aim	"Initially to focus on investing in operating wind assets in Ireland…. over time, it will also target certain other Eurozone countries"
Key sectors	Wind generation
Key markets	RoI, Germany, France, Nordics, Spain
Core portfolio capacity	Almost 1,500MW (inc. Erstrask in Sweden), mainly wind capacity in RoI and in other leading EU countries
Year-end	Dec
NAV per share	(c110.4) 91.6p (09/24)
Discount rate	7.1% (unlevered) to 9.2% (levered)
Market cap./share price	£746m/67p
Premium/discount to NAV	-26.6%
Prospective DPS/yield	(c6.74)/5.59p/8.3%
Return record	n/a

Source: Greencoat Renewables, Bloomberg

Greencoat UK Wind

Issues	Comments
Status	REIF
Ticker/website	UKW/www.greencoat-ukwind.com
Fund aim	It "invests in UK wind farms" and "seeks to provide investors with an annual dividend that increases in line with RPI inflation whilst preserving the capital value of its investment portfolio in the long term"
Key sectors	Wind
Key markets	UK
Core portfolio capacity	2,017MW
Year-end	Dec
NAV per share	158.6p (09/24)
Discount rate	9.0%-11%
Market cap./share price	£2,880m/128p
Premium/discount to NAV	-19.3%
Prospective DPS/yield	10.0p/7.8%
Return record	Since its IPO in March 2013, TSR has increased by more than 140%

Source: Greencoat UK Wind, Bloomberg

Gresham House Energy Storage

Issues	Comments
Status	REIF
Ticker/website	GRID/www.greshamhouse.com
Fund aim	"To provide investors with an attractive and sustainable dividend over the long term by investing in a diversified portfolio of utility-scale operational energy storage systems"
Key sectors	Battery storage systems
Key markets	UK
Core portfolio capacity	845MW of battery storage systems
Year-end	Dec
NAV per share	109.1p (09/24)
Discount rate	10.6%-10.8%
Market cap./share price	£256m/45p
Premium/discount to NAV	-58.8%
Prospective DPS/yield	0.0p/n/a
Return record	n/a

Source: Gresham House Energy Storage, Bloomberg

Harmony Energy Income

Issues	Comments
Status	REIF
Ticker/website	HEIT/www.harmonyenergy.co.uk
Fund aim	"Its investment objective is to provide investors with an attractive and sustainable level of income returns, with the potential for capital growth by investing in commercial scale energy storage and renewable energy generation projects..."
Key sectors	Battery storage systems
Key markets	UK
Core portfolio capacity	395MW (operational)
Year-end	Oct
NAV per share	88.5p (10/24)
Discount rate	10.3%
Market cap./share price	£148m/65p
Premium/discount to NAV	-26.6%
Prospective DPS/yield	0.0p/n/a.
Return record	n/a

Source: Harmony Energy Income, Bloomberg

HICL

Issues	Comments
Status	IIC
Ticker/website	HICL/www.hicl.com
Fund aim	"HICL's investment proposition is to deliver sustainable income from a diversified portfolio of investment core infrastructure"
Key sectors	Health, transport
Key markets	UK
Core portfolio	Over 100 investments
Year-end	Mar
NAV per share	156.5p (09/24)
Discount rate	8.1%
Market cap./share price	£2,380m/119p
Premium/discount to NAV	-24.0%
Prospective DPS/yield	8.25p/6.9%
Return record	Since its IPO in 2006, TSR has increased by an average of 8.1% per year

Source: HICL Infrastructure, Bloomberg

HydrogenOne Capital Growth

Issues	Comments
Status	REIF
Ticker/website	HGEN/www.hydrogenonecapitalgrowthplc.com
Fund aim	"HydrogenOne Capital Growth was established to provide investors with opportunities in clean hydrogen and energy storage for energy transition"
Key sectors	Hydrogen
Key markets	UK, Germany, Estonia and Netherlands
Core portfolio capacity	n/a
Year-end	Dec
NAV per share	100.8p (09/24)
Discount rate	13.3%
Market cap./share price	£26m/20p
Premium/discount to NAV	-80.2%
Prospective DPS/yield	0.0p/n/a
Return record	n/a

Source: HydrogenOne Capital Growth, Bloomberg

Impax Environmental Markets

Issues	Comments
Status	EIT
Ticker/website	IEM/www.impaxenvironmentalmarkets.co.uk
Fund aim	"It seeks to achieve sustainable, above-market returns over the longer term by investing globally in companies active in the growing Resource Efficiency and Environmental Markets"
Key sectors	Energy, waste, water
Key markets	US, Europe
Core portfolio	All investments, with minor exceptions, account for less than 3% of the portfolio
Year-end	Mar
NAV per share	427p (12/24)
Discount rate	n/a (virtually all investments are quoted)
Market cap./share price	£915m/387p
Premium/discount to NAV	-9.6%
Prospective DPS/yield	4.80p/1.2%
Return record	Since 02/2002, its share price has more than trebled

Source: Impax Environmental Markets, Bloomberg

INPP

Issues	Comments
Status	IIC
Ticker/website	INPP/www.internationalpublicpartnerships.com
Fund aim	"We aim to provide investors with long-term, inflation-linked returns, by growing our dividend and creating the potential for capital appreciation"
Key sectors	Over 140 investments in energy, transport
Key markets	Predominantly UK, but Belgium and Australia
Year-end	Dec
Core portfolio	Electricity, gas and water price-regulated assets
NAV per share	149.5p (06/24)
Discount rate	8.7%
Market cap./share price	£2,275m/121p
Premium/discount to NAV	-19.1%
Prospective DPS/yield	8.36p/6.9%
Return record	Since its IPO in 2006, TSR has increased by an average by 6.4% per year

Source: INPP, Bloomberg

Jupiter Green

Issues	Comments
Status	EIT - Probable Reconstruction/Liquidation
Ticker/website	JGC/www.jupiteram.com
Fund aim	"It invests globally in companies which have a significant focus on environment solutions"
Key sectors	Energy, waste, technology
Key markets	US
Core portfolio	US (ca.40%), Denmark
Year-end	Mar
NAV per share	251.5p (12/24)
Discount rate	n/a
Market cap./share price	£46m/234p
Premium/discount to NAV	-7.0%
Prospective DPS/yield	nil/n/a
Return record	Since its launch in 2006, its share price has increased by almost 150%

Source: Jupiter Green, Bloomberg

Menhaden Resource Efficiency

Issues	Comments
Status	EIT
Ticker/website	MHN/www.menhaden.com
Fund aim	"Seeks to generate long-term shareholder returns...by investing in business opportunities that are demonstrably delivering or benefiting from the efficient use of energy and resources"
Key sectors	Resource and energy efficiency
Key markets	US, Europe
Core portfolio	Alphabet and other long-term growth stocks
Year-end	Dec
NAV per share	173.3p (12/24)
Discount rate	n/a (ca.75% of assets are quoted)
Market cap./share price	£119m/152p
Premium/discount to NAV	-12.3%
Prospective DPS/yield	0.5p/n/m
Return record	Since July 2015, its share price has risen by over 50%

Source: Menhaden Resources, Bloomberg

NextEnergy Solar

Issues	Comments
Status	REIF
Ticker/website	NESF/www.nextenergysolarfund.com
Fund aim	"Seeks to provide investors with a sustainable and attractive dividend that increases in line with RPI over the long term; in addition, the Company seeks to provide investors with an element of capital growth"
Key sectors	Solar generation
Key markets	UK, Italy
Core portfolio capacity	983MW of solar capacity of which 830MW is in the UK and 35MW capacity in Italy
Year-end	Mar
NAV per share	97.8p (09/24)
Discount rate	8.0%
Market cap./share price	£383m/66p
Premium/discount to NAV	-32.5%
Prospective DPS/yield	8.43p/12 8%
Return record	Since its IPO in 2014, TSR has increased by between 4% and 5%

Source: NextEnergy Solar, Bloomberg

Octopus Renewables Infrastructure

Issues	Comments
Status	REIF
Ticker/website	CORIT/www.octopusrenewablesinfrastructure.com
Fund aim	"Seeks to provide investors with an attractive and sustainable level of income returns, with an element of capital growth by investing in a geographically and technology-diversified spread of renewable energy assets"
Key sectors	Solar and wind generation
Key markets	UK, RoI, France
Core portfolio capacity	802MW
Year-end	Dec
NAV per share	103.8p (09/24)
Discount rate	8.2%
Market cap./share price	£373m/67p
Premium/discount to NAV	-35.5%
Prospective DPS/yield	6.02p/9.0%
Return record	Since its IPO in 2019, TSR has decreased by 11.3%

Source: Octopus Renewables Infrastructure, Bloomberg

Pantheon Infrastructure

Issues	Comments
Status	IIC
Ticker/website	PINT/www.pantheoninfrastructure.com
Fund aim	We "will enable investors to gain exposure to a high-quality mix of yielding and growth infrastructure assets with strong downside and inflation protection in developed markets"
Key sectors	Digital infrastructure, renewable energy generation, transport infrastructure
Key markets	US, EU and UK
Core portfolio	Digital infrastructure and energy
Year-end	Dec
NAV per share	116.2p (09/24)
Discount rate	13.6%
Market cap./share price	£417m/89p
Premium/discount to NAV	-23.4%
Prospective DPS/yield	4.20p/4.7%
Return record	n/a

Source: Pantheon Infrastructure, Bloomberg

SEEIT

Issues	Comments
Status	REIF
Ticker/website	SEIT/www.seeitplc.com
Fund aim	"To provide an attractive total return for shareholders of 7%-8% per annum – with a stable dividend income, capital preservation and the opportunity for capital growth"
Key sectors	CHP, gas generation/networks and biomass
Key markets	US, Spain, Sweden, UK
Core portfolio	Various energy asset holdings
Year-end	Mar
NAV per share	90.6p (09/24)
Discount rate	9.4% (levered)
Market cap./share price	£589m/54p
Premium/discount to NAV	-40.4%
Prospective DPS/yield	6.32p/11.7%
Return record	n/a

Source: SEEIT, Bloomberg

Sequoia Economic Infrastructure

Issues	Comments
Status	IIC
Ticker/website	SEQI/www.seqifund.com
Fund aim	Sequoia Economic Infrastructure "invests in income-generating economic infrastructure debt, creating attractive risk-adjusted returns for shareholders from its diverse portfolio of private debt and bond investments, across 12 mature jurisdictions and a range of sectors and subsectors"
Key sectors	Economic infrastructure debt
Key markets	US, EU, UK
Core portfolio	TMT, transport, power
Year-end	Mar
NAV per share	94.9p (11/24)
Discount rate	Varied
Market cap./share price	£1,225m/78p
Premium/discount to NAV	-17.9%
Prospective DPS/yield	6.88p/8.8%
Return record	Since its IPO in 2015, TSR has increased by ca.43%

Source: Sequoia Economic Infrastructure, Bloomberg

TRIG

Issues	Comments
Status	REIF
Ticker/website	TRIG/www.trig-ltd.com
Fund aim	"To invest principally in a diverse range of operational renewable energy infrastructure assets, with a focus on the UK and other parts of Northern Europe....and to seek to provide an attractive long-term income-based return with a positive correlation to inflation"
Key sectors	Wind and solar generation
Key markets	UK, France, Sweden, Germany, Spain and RoI
Core portfolio capacity	ca2,700MW – 59% of capacity is in the UK
Year-end	Dec
NAV per share	121.6p (09/24)
Discount rate	8.3%
Market cap./share price	£2,116m/86p
Premium/discount to NAV	-29.3%
Prospective DPS/yield	7.47p/8.7%
Return record	Since its IPO in 2013, TSR has increased by an average 6.2% per year

Source: TRIG, Bloomberg

Triple Point Energy Transition

Issues	Comments
Status	REIF in MWD
Ticker/website	TENT/www.tpenergytransition.com
Fund aim	"We target UK-based, institutional-grade energy efficiency infrastructure assets whilst helping to ensure our shareholders receive an attractive long-term income source with a positive impact"
Key sectors	CHP systems, distributed generation, energy efficiency
Key markets	UK
Core portfolio	CHP and small hydro-power investments
Year-end	Mar
NAV per share	77.2p (09/24)
Discount rate	n/a
Market cap./share price	£45m/45p
Premium/discount to NAV	-41.7%
Prospective DPS/yield	5.50p/12.2%
Return record	n/a

Source: Triple Point Energy Transition, Bloomberg

US Solar

Issues	Comments
Status	REIF
Ticker/website	USFP/www.ussolarfund.co.uk
Fund aim	"To provide its shareholders with attractive and sustainable dividends, with an element of capital growth, through investing in a diversified portfolio of solar power assets located in North America and other OECD countries in the Americas"
Key sectors	Solar generation
Key markets	US (North Carolina, Oregon, California and Utah)
Core portfolio capacity	443MW of solar plant
Year-end	Dec
NAV per share	(c75.0) 60.0p (09/24)
Discount rate	9.2%
Market cap./share price	£98m/32p
Premium/discount to NAV	-46.7%
Prospective DPS/yield	(c2.25)/1.80p/5.6%
Return record	n/a

Source: US Solar, Bloomberg

VH Global Energy Efficiency

Issues	Comments
Status	REIF
Ticker/website	*ENRG/www.globalenergyinfrastructure.co.uk*
Fund aim	"Seeks income yield and NAV growth by investing in stable, yielding, sustainable energy infrastructure investments that are in operation, in construction or "ready-to-build"…"
Key sectors	Hydro-power, CHP and solar generation
Key markets	Brazil, UK, US, Iberia and Australia
Core portfolio capacity	ca.285MW, including the 198MW Mascarenhas hydro plant in Brazil
Year-end	Dec
NAV per share	111.2p (09/24)
Discount rate	n/a
Market cap./share price	£257m/65p
Premium/discount to NAV	-41.5%
Prospective DPS/yield	5.68p/8.7%
Return record	n/a

Source: VH Global Energy Efficiency, Bloomberg

Conclusion

Two depressing years – will 2025 be any different?

Despite the pronounced fall in IIC and REIF share prices in both 2023 and 2024 – mainly on the back of markedly higher interest rates – both sectors still offer some attractions to investors. Aside from their decent yields, the more well-established funds, as defensive investments, look to be reasonably well placed. Their earnings are generally high-quality – often backed by public sector contracts or by PPAs – while their dividend payment profiles, with a few notable exceptions, are fairly secure.

Rising interest rates and weak power prices are key risks

Of course, both IICs and REIFs are exposed to various risks, with high interest rates being one obvious concern – the fall in sector share prices over the last two years has highlighted this risk element. More specifically, some IICs are vulnerable to the revenue risk of holding demand-based assets while leading REIFs, especially wind and solar generators, are exposed to potentially lower power prices.

On the assumption that interest rates are expected to fall – although this is far from certain - quoted IICs and the larger REIFs continue to offer appeal on several fronts. Their dividends should rise, at least in nominal terms, on the back of reasonably attractive yields given the current financial environment.

The more mature funds to attract interest?

As such, despite their low profile and generally poor share price performance throughout 2023 and 2024, IICs and REIFs, especially the more mature funds, are expected to remain of interest to the discerning investor.

Appendix 1

Glossary

Glossary	
AD	Anaerobic Digestion
AIC	Association of Investment Companies
BESS	Battery Energy Storage System
CCGT	Combined Cycle Gas Turbine Plant
CfD	Contract for Difference
CHP	Combined Heat and Power
CMA	Competition and Markets Authority
CPI	Consumer Price Index
CRC	Capital Recycling Programme
Discount to NAV	Amount at which a Fund's Shares Trade below NAV
EGL	Electricity Generation Levy
EIT	Environmental Investment Trust
EPL	Energy Profits Levy
EU	European Union
EV	Enterprise Value
EIT	Environmental Investment Trust
FCA	Financial Conduct Authority
FiT	Feed-in Tariff
FM	Facilities Management
FV	Fair Value
GAV	Gross Asset Value
GB	Great Britain
GWh	Gigawatt Hour – Electricity Generation per Hour
IFRS	International Financial Reporting Standards
IIC	Infrastructure Investment Company
IMF	International Monetary Fund
IPO	Initial Public Offering
ITC	Investment Tax Credit
MWD	Managed Wind-Down
MWh	Megawatt Hour – Electricity Generation per Hour
NAV	Net Asset Value
NESO	National System Energy Operator
NI	Northern Ireland
NPL	Non-Performing Loan
NTMA	National Treasury Management Agency
OBM	Open Balancing Mechanism
OBP	Open Balancing Platform
OFTO	Offshore Transmission Owners
PFI	Private Finance Initiative
PPA	Power Purchase Agreement
PPP	Public/Private Partnership
Premium to NAV	Amount at which a Fund's Shares Trade above NAV
RAV	Regulatory Asset Value
RCF	Revolving Credit Facility
REC	Regional Electricity Company
REIF	Renewable Energy Infrastructure Fund
RoI	Republic of Ireland
RO	Renewable Obligation
ROC	Renewable Obligation Certificate
RPI	Retail Price Index
SPV	Special Purpose Vehicle
TMT	Technology, Media and Telecom
TSR	Total Shareholder Return
TTT	Thames Tideway Tunnel

Source: Hardman & Co Research

Appendix 2

Possible questions

We list, below, various questions – some of which may not relate to all 29 stocks under review – that might reasonably be asked of the Directors of IICs or of REIFs.

- What has been the impact on your business model of higher interest rates?
- How is your NAV calculated?
- What is the blended discount rate that you use for your NAV calculations?
- What projections are you using for long-term power prices?
- What percentage of your revenues is subsidy-driven?
- How difficult is it for you to find new investments at the present time that meet your financial return requirements?
- What is your policy regarding investment in demand-based assets?
- Which overseas markets do you see as the most attractive for IIC/REIF investment – and why?
- What has been your TSR since your IPO?
- What percentage of your revenues is covered by PPAs?
- In percentage terms, what is your inflation linkage?
- What is your latest dividend cover?
- What is your long-term dividend policy?
- How damaging is the 2017 closure of the RO for new solar investment?
- When do you expect gas prices to return to 2020 levels?
- Have you had any issues with "Continuation Votes"?
- How beneficial are share buybacks to your financial model?
- Is raising new equity in your sector viable in today's challenging markets?
- Has the recent change of government in the UK had any impact on your business operations?

About the author

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Nigel Hawkins is the Renewables sector analyst at Hardman & Co.

Nigel is responsible for analysing the UK Utilities, including those privatised in the 1980s and 1990s, as well as newer arrivals in the sector. He has been involved in the Utilities sector since the late 1980s, as a feature writer at Utility Week magazine and as an analyst at Libertas Capital, which specialised in the renewable energy sector. Prior to that, he was the Telecoms analyst at Williams de Broë. Between 1989 and 1995, he worked at Hoare Govett as the Water and Electricity sector analyst.

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