Quoted UK Infrastructure and Renewables

Reviewing the sectors over 1H'22

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Please note:

Closing stock market prices as at 14/07/2022 have been used, unless otherwise specified.

Exchange rates used are:

£ to € – €1.18

£ to US$ – US$1.19

£ to CN$ – CN$1.54

Executive summary

- In this publication, Hardman & Co's focus is on the nine quoted Infrastructure Investment Companies (IICs) and on the 22 Renewable Energy Infrastructure Funds (REIFs), as we update our publication of January 2022 and address two key issues of recent months – rising inflation and surging power prices.
- The stocks analysed are all members of the Association of Investment Companies (AIC). As a group, their combined market capitalisation is currently £31.6bn. The most valuable IICs are HICL Infrastructure and INPP – both are currently capitalised at over £3bn each. The largest REIFs are Greencoat UK Wind and TRIG, which are capitalised at £3.6bn and £3.3bn, respectively.
- Sharply rising inflation, and not just in the UK, remains a real concern for many investors. In fact, IICs and REIFs, to varying extents, derive material benefits from higher inflation, providing – in an admittedly unlikely scenario – that it is not accompanied, in time, by higher interest rates.
- The impact for the leading REIFs of soaring gas prices – the spot price rose from 50p per therm in April 2021 to over 450p per therm just eight months later – is wide-ranging, and the pronounced upward impact on their long-term valuations is very relevant for investors. This process has already become apparent, since long-term power price assumptions are a key factor, along with the discount rate, in determining the NAVs of most REIFs. Foresight Solar's 27.4% increase and JLEN's 25.1% increase in their NAVs between March 2021 and March 2022 are clear examples of this trend.
- All the REIFs and, for the most part, the IICs have weathered COVID-19 with relatively minor dislocation. However, some IICs, including HICL Infrastructure and INPP, have suffered, due to their exposure to demand-based transport investments. Others, such as 3i Infrastructure, have prospered, with their shares rising by ca.40% since March 2020.
- Around 50% of the REIF sector's £16.4bn valuation is accounted for by wind power generation. On the back of generous subsidies, the UK wind power sector has expanded, and now exceeds 24GW of capacity, while UK solar capacity is currently almost 15GW. The removal of subsidies for new solar plants from 2017 remains challenging, although unit costs have plummeted.
- Offshore wind power is the new "go-to" investment sector. Given the sea change in costs, the government is seeking a quintupling of offshore wind capacity by 2030. The pivotal 2019 auction for the development of some North Sea sites saw several Contracts for Difference (CfDs) being awarded. The lowest, on the Dogger Bank, was struck at just £39.65p (2012 prices) per MWh, and this July's auction saw a record low price of £37.35p per MWh.
- The underlying sector premia over the NAVs vary markedly among the IICs – the highest premium, at 14.4%, is for BBGI, whose Total Shareholder Return (TSR) since its IPO in 2011 has been 10.4% per year, and it has consistently traded at a sizeable premium to its NAV.
- For the REIFs, the standout performer has been Gresham House Energy Storage; its shares are currently trading (driven, in part, by its very conservative 10.7% discount rate) at a 20.5% premium to its latest published NAV. However, on the back of winning T1 and T4 contracts in the recent capacity auction, it has flagged an expected rise in its NAV to ca.145p per share, as calculated at June 2022. By contrast, shares in HydrogenOne Capital, which floated in July 2021, have fallen by 29% in the year to date, and Aquila Energy Efficiency's shares are down by 21% since its IPO in June 2021.
- While virtually all established IICs and REIFs have avoided nominal dividend cuts, any increases, with a few exceptions, have been modest. 3i Infrastructure,

whose dividend rose by 6.7% in 2021/22, is planning a similar rise in 2022/23, while Greencoat UK Wind, which links its dividend payments to the RPI, has raised its payment by 7.5% for 2022.

- Lower dividend cover has become a notable trend. GCP Infrastructure, HICL Infrastructure and Sequoia Economic Infrastructure are among those that have sought to restore their cover by holding their dividend on a nominal basis. In HICL Infrastructure's case, five years – until 2023/24 – of a flat nominal dividend have been flagged.
- Underlying prospective dividend yields for most established IICs and REIFs now lie within ranges of 4.0%-5.5% and 4.5%-6.0%, respectively.
- Despite the absence of IPOs in 1H'22 – in 2021 alone, three IICs and six REIFs undertook IPOs – fundraising for the IICs and REIFs has continued unabated, with the two newly quoted digital infrastructure companies, Cordiant Digital Infrastructure and Digital 9 Infrastructure, being very much to the fore. Since January 2020, the 31 IICs and REIFs have raised ca.£10bn of new funds at modest discounts to their prevailing share prices.
- Recent IPOs in the REIF sector have expanded well beyond the standard UK-based onshore wind and solar models of the past: Battery Energy Storage Systems (BESS) now feature more prominently. It should be noted, too, that the targeted dividend yield, as exemplified by the projected long-term (after year two) 7%+ figure proposed in its Prospectus by ThomasLloyd Energy Impact, has risen, as funds seek to attract income-driven investors. Similar criteria apply to Harmony Energy Income Trust.
- Three Environmental Trusts – Impax Environmental Markets, Jupiter Green and Menhaden Resource Efficiency – are also discussed briefly in this document. Along with the 31 IICs and REIFs, they are within the AIC universe.
- BBGI, one of the 31 IICs and REIFs analysed in this report, is 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	328	891	2,924	Mar	303.3	8.1%	11.15	3.4%
BBGI	161	713	1,148	Dec	140.7	14.4%	7.48	4.6%
Cordiant Digital Infrastructure	104	774	805	Mar	106.3	-2.4%	4.00	3.8%
Digital 9 Infrastructure	111	865	960	Dec	104.6	6.7%	6.00	5.4%
GCP Infrastructure	108	884	955	Sep	114.3	-5.5%	7.00	6.5%
HICL Infrastructure	169	2,035	3,439	Mar	163.1	3.6%	8.25	4.9%
INPP	161	1,910	3,075	Dec	148.2	8.6%	7.74	4.8%
Pantheon Infrastructure	102	437	446	Dec	98.0	3.9%	2.00	2.0%
Sequoia Economic Infrastructure	83	1,770	1,469	Mar	100.5	-17.4%	6.25	7.5%
Total			**15,221**					

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	78	100	78	Dec	97.4	-19.9%	0.00	0.0%
Aquila European Renewables	86	408	350	Dec	87.9	-2.3%	4.50	5.2%
Atrato Onsite Energy	105	150	158	Sep	97.4	7.8%	5.00	4.8%
Bluefield Solar	131	611	800	Jun	127.0	3.1%	8.16	6.2%
Downing Renewables and Infrastructure	112	185	207	Dec	110.1	1.7%	5.00	4.5%
Ecofin US Renewables	87	138	121	Dec	81.7	6.9%	4.55	5.2%
Foresight Solar	118	610	720	Dec	117.1	0.8%	7.12	6.0%
Gore Street Energy Storage	119	481	572	Mar	107.1	11.1%	8.00	6.7%
Greencoat Renewables	101	1,141	1,154	Dec	92.3	9.6%	5.25	5.2%
Greencoat UK Wind	154	2,320	3,573	Dec	153.6	0.3%	7.72	5.0%
Gresham House Energy Storage	159	541	860	Dec	131.9	20.5%	7.00	4.4%
Harmony Energy Income	111	210	233	Oct	108.9	1.9%	2.00	1.8%
HydrogenOne Capital Growth	86	129	111	Dec	96.8	-11.2%	0.00	0.0%
JLEN	119	662	787	Mar	115.3	3.2%	7.14	6.0%
NextEnergy Solar	111	589	654	Mar	113.5	-2.2%	7.52	6.8%
Octopus Renewables	110	565	622	Dec	104.0	5.8%	5.24	4.8%
SEEIT	119	990	1,178	Mar	108.4	9.8%	6.00	5.0%
ThomasLloyd Energy Impact	88	115	102	Dec	84.7	4.1%	2.10	2.1%
TRIG	135	2,480	3,348	Dec	134.2	0.6%	6.84	5.1%
Triple Point Energy Efficiency	89	100	89	Mar	96.1	-7.4%	5.70	6.4%
US Solar	74	332	245	Dec	80.2	-7.8%	4.60	6.2%
Victory Hill GSEO	110	423	465	Dec	107.6	2.2%	5.00	4.5%
Total			**16,428**					

Source: Hardman & Co Research

Infrastructure investment companies (IICs)

Nine IICs currently

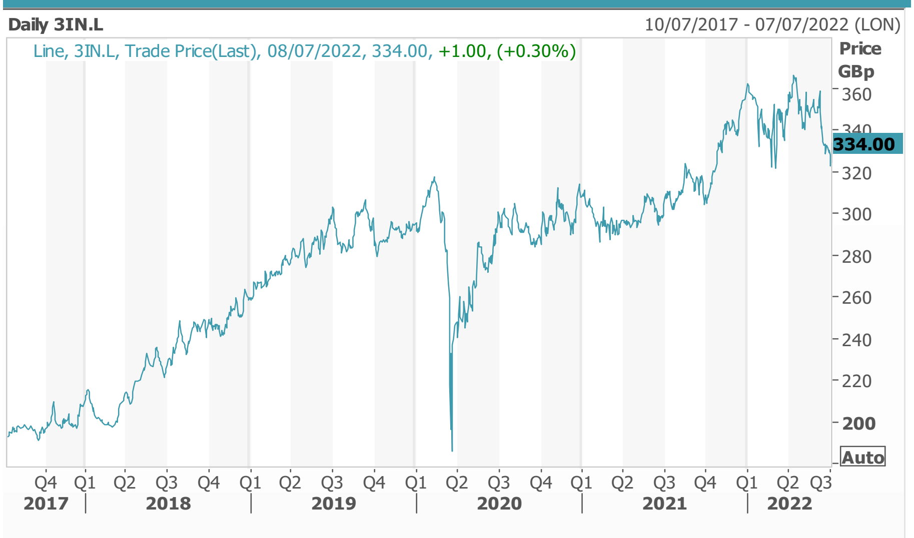
Currently, there are nine quoted UK IICs; they are capitalised at a total of £15.2bn, with HICL Infrastructure, at £3.4bn, and INPP, at £3.1bn, being the most valuable in the sector. The newcomers to the sector, Digital 9 Infrastructure and Cordiant Digital Infrastructure, are currently capitalised at £960m and £805m, respectively.

Shown below are those IICs with market capitalisations of over £750m.

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

3I Infrastructure was demerged from the 3i Group in 2007. Subsequently, its shares have performed impressively – up by ca.40% since March 2020 – as the graph below shows.

3i Infrastructure – five-year share price performance



Source: Refinitiv

Investment sectors: 3i Infrastructure's investments are wide-ranging, but its focus lies on mid-market economic infrastructure investments – within a typical equity range of £100m to £300m. 3i Infrastructure periodically recycles its portfolio assets. In 2020, it sold its very profitable 93% stake in WIG and its UK Projects investments for a combined total of £581m – an illustration of its successful investment rollover strategy.

Fund aims: "To provide shareholders with a total return of 8% to 10% per annum to be achieved over the medium term, with a progressive annual dividend per share".

Portfolio: 3i Infrastructure owns a portfolio comprising ca.20 investments. Based on asset value, 26% of the total is accounted for by utilities, while transport and communications (effectively the Norwegian Tampnet fibre infrastructure business) represent 24% and 22%, respectively. With the recently acquired full ownership of ESVAGT, the latter became the largest single holding, at 17% (at least, prior to the recent syndication deal). The UK-based waste business, Infinis, is the next most valuable holding, accounting for a 10% share. In terms of jurisdictions, 3i Infrastructure's assets are split quite widely throughout the EU and the UK, with the Netherlands, France and the UK being, along with Belgium and Luxembourg, the key markets.

Latest results: 3i Infrastructure recently published its full-year results for 2021/22. The figures were generally good, with the NAV figure rising to 303.3p per share. The once formidable cash balance has been eroded, on the back of substantial new investment in recent months; these are listed below. 3i Infrastructure's 11.15p dividend per share target for 2022/23 represents an impressive 6.7% increase on the 2021/22 dividend per share. The latest income statement is shown in the table below.

3i Infrastructure – full-year income statement, 2021/22

£m	to 30/03/2022	to 30/03/2021
Net gains on investment	384	118
Investment income	127	92
Fees payable on investment activities	(3)	(1)
Interest receivable	6	11
Investment return	514	220
Movement in FV of derivative instruments	(2)	22
Management, advisory and performance fees	(97)	(31)
Operating expenses	(3)	(3)
Finance costs	(5)	(2)
Exchange movements	(3)	0
Profit before tax	404	206
Income taxes	0	0
Profit after tax and profit for the year	404	206
Total comprehensive income for the year	404	206
EPS (basic and diluted, p)	45.3	23.1

Source: 3i Infrastructure, Hardman & Co Research

Since the end of its 2021/22 half-year, 3i Infrastructure has announced several major investments; they include:

- An agreement to invest ca.£300m (previously $512m) to acquire full ownership of GCX, a leading global data communications service provider, with sub-sea fibre-optic networks. Completion is due shortly.
- The increase of its 48% stake in TCR to 96%, at a cost of £334m; this deal was completed in 4Q'22.
- A decision to move to full ownership of ESVAGT, a service provider for offshore wind vessels, at an additional cost of £268m; this transaction has now been completed. Subsequently, it has been superseded, as 3i Infrastructure has syndicated a 16.9% stake to 3i Aura, a 3i Group subsidiary.
- Completion in December 2021of a ca.£192m investment to secure a 92% stake in SRL Traffic Systems, a traffic management rental company; £83m of further debt financing is also being provided.

Given the considerable funds involved – over 10% of 3i Infrastructure's current market capitalisation – the proposed GCX transaction, in particular, will be closely scrutinised by investors.

BBGI (market cap. £1,148m)

BBGI INVESTING IN GLOBAL INFRASTRUCTURE

Since its IPO in 2011, BBGI has delivered very good value for its shareholders. Its TSR has risen by 10.4% per year. In recent months, its shares have continued to trade at a substantial premium to its NAV.

Investment sectors: BBGI is a diversified social infrastructure company. It seeks to invest in long-term, low-risk essential infrastructure investments that deliver stable, predictable cashflows. Most of its investments are via PPPs or derivatives thereof – all are availability-based – and are supported by government-backed revenues. There are no investments in higher-risk, demand-based or regulatory-based sectors. As recent events, notably the COVID-19 pandemic, have demonstrated, it has the lowest risk profile of all the IICs.

Fund aims: BBGI follows "…a low-risk, globally diversified and internally managed investment strategy to deliver long-term predictable returns to our shareholders. We target an internal rate of return (IRR) in the region of 7%-8% on the IPO price of 100p per ordinary share".

BBGI's in-house management team is focused on delivering shareholder value, incentivised by shareholder returns and growth in NAV per share. Consequently, neither NAV-based management fees nor acquisition fees are charged, while the internal management team's interests are fully aligned with those of BBGI's shareholders. Moreover, BBGI consistently maintains the lowest ongoing charges among the IICs to its shareholders.

Importantly, BBGI provides access to a diversified portfolio of infrastructure assets that serve an inherent social purpose in supporting local communities; furthermore, it adopts a robust approach to addressing ESG issues.

Portfolio: Within its global 56-strong asset portfolio, investment in bridges and roads features prominently. Crucially, the portfolio concentrates on low-risk, public sector-financed, availability-based infrastructure investments. Its two leading markets are the UK and Canada, but the US is also important for BBGI.

More specifically, BBGI is single-minded in its policy of investing in availability-based infrastructure assets; consequently, it has avoided any materially negative impact from COVID-19. Indeed, during the pandemic, its assets were over 99% available to its public sector clients. None of its existing 56 investments has reported either defaults or distribution lock-ups – unlike other members of its peer group.

Latest results: In March 2022, BBGI announced its results for its full-year ending December 2021; the key details are shown below. While, as expected, there have been some FV accounting adjustments, BBGI's NAV remains solid. Its December 2021 NAV figure was 140.7p per share, an increase of 2.1% on the June 2021 figures. With its impressive TSR – averaging 10.4% per year over the decade – BBGI's shares continue to trade at a premium of 14.4% to its NAV. A full-year dividend of 7.48p per share is expected for 2022. For 2023 and 2024, BBGI has announced a planned increase in its target dividends, to 7.63p per share and 7.78p per share, respectively.

BBGI – full-year income statement, 2021/22

£000	to 30/12/2021	to 30/12/2020
Operating income	76,177	65,523
Operating expenses	(12,726)	(16,875)
Operating profit	63,451	46,648
Profit before tax	60,695	44,359
Profit from continued operations	57,997	41,710
EPS (basic, p)	8.47	6.58
EPS (diluted, p)	8.46	6.57

Source: BBGI, Hardman & Co Research

BBGI's availability-based business model is centred upon assuming very low risks and generating good returns.

Currently, BBGI has 56 investments, and it expects to complete its 57th shortly, having confirmed its intention to secure a 25% stake in the Centre hospitalier de l'Université de Montréal (CHUM) PPP.

The CHUM PPP has very close similarities to another successful BBGI investment in Montreal – the McGill University Health Centre (MUHC) project – which is currently the fourth-largest of BBGI's 56-strong portfolio. In this case, BBGI has secured a 40% shareholding, while the concession period, which began in 2010, is for 34 years, and therefore will not expire until 2044.

An image of the MUHC facility is reproduced below, along with the key investment data for the project.

BBGI's MUHC facility

- **Type:** Availability-based
- **Status:** Operational
- **Equity Holding (%) BBGI:** 40%
- **Total Investment Volume (Debt & Equity):** C$2 billion
- **Financial Close/Operational:** July 2010/October 2014
- **Concession Period:** 34 years ending in 2044

Source: BBGI Annual Report 2020

In terms of BBGI's own investment outlay in MUHC, we calculate that the cost of BBGI's 40% equity share of the C$2bn (£1.3bn) total cost of the project will be broadly replicated in the proposed CHUM investment, namely within the £50m to £60m range. The 25% CHUM stake will be funded by drawing upon BBGI's £230m Revolving Credit Facility (RCF) and by other existing cash resources.

For more detailed information about BBGI, please see our research report published in April 2022, *Boring is beautiful – and dividend growth continues*.

Cordiant

Cordiant Digital Infrastructure (market cap. £805m)

Investment sectors: Cordiant Digital Infrastructure's business model is – not surprisingly – based on investment in digital infrastructure, and enhanced connectivity lies at the heart of its offering.

Portfolio: To date, Cordiant Digital Infrastructure has completed its £306m acquisition of Ceske Radiocomunikace (CRA) in the Czech Republic, which has given it a business comprising 660 digital broadcast towers, an optical backbone network and a portfolio of strategically located data centres. In addition, Cordiant Digital Infrastructure has signed an agreement to buy Emitel, a multi-asset digital information business with more than 500 communication towers, which is sited in Warsaw, Poland, at a cost of over £350m. This deal has now received approval from the Polish regulatory authorities. Outside Eastern Europe, Cordiant Digital Infrastructure has recently completed the acquisition of the New York City-based Hudson Interchange (formerly DataGryd) for $74m (£62m).

Latest results: Cordiant Digital Infrastructure has published its maiden results covering the 15 month-period between January 2021 and March 2022 inclusive. Including the £370m of gross proceeds that Cordiant Digital Infrastructure raised at its IPO in February 2021, it has raised almost £800m, most of which has now been invested. Its published NAV is 106.3p per share, while, on the dividend front, Cordiant Digital Infrastructure plans to pay a 4.0p dividend per share for its 2022/23 financial year.

Cordiant Digital Infrastructure – 15-month income statement 2021/22	
£000	to 31/03/2022
Income	
Movement in FV of investments	40,346
Unrealised foreign exchange gains on investments	13,852
Interest income	2,932
Total income	**57,130**
Operating expenses	
Investment acquisition costs	(4,564)
Other expenses	(7,448)
Operating profit	**45,118**
Foreign exchange movement of working capital revaluation	1,876
Unrealised gain on foreign exchange forwards	**8,072**
Finance income	180
Profit before tax for the period	**51,370**
Tax charge	0
Profit after tax for the period	51,370
Profit and total comprehensive income for the period	**51,370**
Basic EPS from continuing operations (p per share)	**12.49**
Diluted EPS from continuing operations (p per share)	**12.48**

Source: Cordiant Digital Infrastructure, Hardman & Co Research

Digital 9 Infrastructure (market cap. £960m)

D/9 DIGITAL INFRASTRUCTURE

Investment sectors: Digital 9 Infrastructure undertook its IPO in March 2021. It emerged from the same stable as Triple Point Energy Efficiency, although the pace of its acquisitions policy has undoubtedly exceeded that of the latter. At the operating level, it seeks to improve – and to expand – digital infrastructure and to reduce the digital divide: the experiences of the internet during the pandemic have demonstrated the range of commercial opportunities. Investment in data centres, wireless and subsea cable services lie at the heart of its operations.

Fund aims: Digital 9 Infrastructure's primary aim is "to deliver value for shareholders". Aggressively growing its business will be key in achieving this; an attractive dividend stream is also expected.

Portfolio: In terms of building its portfolio, it is still relatively early days: Digital 9 Infrastructure has already made striking progress, with a series of investments. Initially, Digital 9 Infrastructure – at a cost of £170m – acquired Aqua Comms., an Irish-based business that operates capacity services across fibre- optic telecoms networks; it manages a transatlantic subsea fibre system of ca.20,000km in length. Subsequently, Verne Holdings, which manages data centres in Iceland and is 100% renewable-powered, was acquired for £231m. A further £50m has been invested in a new intercontinental fibre system, EMIC-1, that will improve connectivity between Europe, the Middle East and India. And, in Finland, the €135m (£115m) Ficolo acquisition has now been completed. Digital 9 has also announced plans to buy a 48% stake in Arqiva, a UK data, networks and communications service provider, at a cost of a formidable ca.£460m.

Latest results: Digital 9 Infrastructure has announced its maiden (near) full-year results as a quoted company; they are heavily impacted by FV adjustments to reflect asset revaluations. To date, including its IPO fundraise of £300m in March 2021, Digital 9 Infrastructure has secured new equity of ca.£900m in just 18 months. Net assets, at December 2021, were valued at £756m, while the NAV per share was 104.6p. A minimum 6.0p dividend per share has been flagged for the 2022 financial year.

Digital 9 Infrastructure – full-year income statement, 2021	
£000	From 08/01/2021 to 31/12/2021
Income	
Income from investments held at FV	2,923
Gains on investments held at FV	45,502
Interest income	14
Total income	**48,439**
Expenses	
Acquisition expenses	(5,516)
Investment management fees	(2,952)
Other operating expenses	(1,660)
Total expenses	**10,128**
Operating profit	**38,311**
Finance expenses	(2)
Profit on ordinary activities before taxation	**38,309**
Profit and total comprehensive income attributable to shareholders	**38,309**
EPS (basic and diluted, p per share)	**9.77**

Source: Digital 9 Infrastructure, Hardman & Co Research

GCP Infrastructure (market cap. £955m)

Investment sectors: GCP Infrastructure, along with GCP Asset Backed, is one of two quoted Gravis Capital closed-ended investment funds. Their market capitalisations are £955m and £396m, respectively. GCP Infrastructure aims "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.

Fund aims: GCP Infrastructure aims to "provide shareholders with regular, sustained, long-term dividends and to preserve the capital value of its investment assets over the long term".

Portfolio: GCP Infrastructure holds 48 Investments, with an average life of 11 years – all are UK-based. Most notably, it has heavy exposure to the renewable energy sector, with the wind generation component accounting for 20% of its investment value and biomass accounting for a further 12%. Outside the energy sector, GCP Infrastructure has 23% of its value tied up within PPP/PFIs, a financing model that the UK government is effectively phasing out. Social housing, a sector in which further investment by GCP Infrastructure now seems unlikely, represents a further 14.%.

Latest results: In its half-year results for the period ending in March 2022, GCP Infrastructure reported a notable increase – on the back of higher energy price assumptions – in its NAV, which rose to 112.7p per share; by June 2022, its NAV had risen to 114.3p per share. Previously, GCP infrastructure's NAV had been adversely affected by lower long-term power price assumptions – a scenario that the recent surge in gas prices has significantly reversed. Having paid an annual dividend of 7.6p per share for seven consecutive years, GCP Infrastructure's dividend was cut to 7p per share in 2019/20, a figure that was held in 2020/21. With thin dividend cover, the 7p per share annual dividend payment seems set to continue for 2021/22 – and possibly beyond this period.

GCP Infrastructure – half-year income statement, 2021/22		
£000	to 31/03/2022	To 31/03/2021
Income		
Net income/gains on FV financial assets	112,364	10,742
Net gains on FV derivative financial instruments at FV	4,247	0
Other income	942	451
Total income	117,553	11,193
Expenses		
Investment advisory fees	(4,123)	(3,963)
Operating expenses	(2,428)	(1,526)
Total expenses	(6,551)	(5,489)
Total operating profit before finance costs	111,002	5,704
Finance costs	(2,101)	(1,867)
Total profit and income for the period	108,901	3,837
EPS (basic and diluted, p)	12.34	0.44

Source: GCP Infrastructure, Hardman & Co Research

HICL Infrastructure (market cap. £3,439m)

Investment sectors: HICL Infrastructure has over 100 investments across many sectors. Its portfolio is heavily slanted to the UK, which accounts for 73% of its investments, with most of the remainder arising from mainland EU. Its North American exposure is modest. Transport and health investments, which account for ca.60% of its value, are key sectors in HICL Infrastructure's portfolio.

Fund aims: "To deliver long-term, stable income from a well-diversified portfolio of infrastructure investments positioned at the lower end of the risk spectrum".

Portfolio: HICL Infrastructure has the largest and widest range of the nine IICs under review. Its extensive portfolio has been built up over a sustained period at a cost of over £3bn, of which ca.85% has been equity-financed. Importantly, in terms of risk, PPP/PFI schemes now account for 66% of these assets, while the demand-based component, which includes some revenue risk, is now 22%.

HICL Infrastructure's favoured sectors are transport and health, which account for 32% and 27%, respectively, of its total portfolio value. Importantly, within its transport holdings, HICL Infrastructure has significant demand-based investments, including HS1 (which has seen demand plummet since early 2020), the Northwest Parkway in Colorado, US, and the A63 motorway in SW France. In the health sector, some acute care hospitals within HICL Infrastructure's portfolio – predominantly those in the north of England – have been facing various issues, which its clients are contesting. HICL Infrastructure has also completed the sale of its shareholding in the Queen Alexandra Hospital in Portsmouth for £108m.

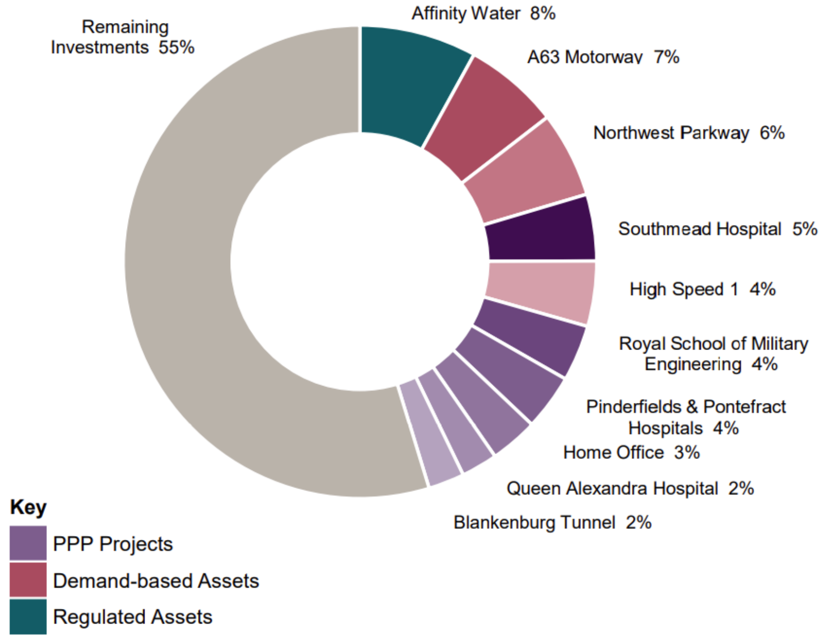
Latest results: HICL Infrastructure has recently published its full-year results for 2021/22; they showed an improvement overall, especially as the three largest demand-based investments, which had been severely affected by COVID-19 travel restrictions, recovered. Although NAV rose to 163.1p per share, compared with 152.3p per share at March 2021, cash/dividend cover remains very tight, at 1.05x (it was 0.90x in 2020/21), but it is set to increase over the next two years, due partly to held dividend payments. HICL Infrastructure is planning to maintain its full-year dividend for 2022/23 at 8.25p per share – and to do so again in 2023/24 – meaning five years of a flat dividend. In mid-July 2022, HICL undertook a £160m placing, whose proceeds are included in the market capitalisation figure shown above.

HICL Infrastructure – full-year income statement, 2021/22		
£m	to 30/03/2022	to 30/03/2021
Dividends received	79.3	37.3
Interest received	80.5	121.0
Net gain/loss on revaluation of investment	212.0	(3.5)
Total income (IFRS basis)	371.8	154.8
Fund expenses	(3.1)	(2.9)
Profit before tax	368.7	151.9
Profit for the year	368.7	151.9
Earnings per share (basic and diluted, p)	19.0	17.9

Source: HICL Infrastructure, Hardman and Co Research

As part of its 2021/22 interim results, HICL Infrastructure published a chart setting out its portfolio metrics, highlighting its key shareholdings; Affinity Water – now at 9% – remains its leading shareholding. The Queen Alexandra Hospital shareholding has now been sold. The chart is reproduced below.

HICL's Infrastructure's 10 largest investments*



**By value, using directors' valuation of £3,121.7m as at 30 September 2021*
Source: HICL Infrastructure's interim results presentation

INPP (market cap. £3,075m)

Investment sectors: INPP's origins lie with Babcock & Brown, an Australian Investment Bank. INPP is very long-term-orientated, with an investment life span of well over 30 years. Its focus has been very much on the energy sector, and especially on gas transportation and electricity transmission.

Fund aims: "We aim to provide our investors with long-term, inflation-linked returns by growing our dividend and creating the potential for capital appreciation".

Portfolio: INPP's key investments are in the utilities sector, notably in its offshore electricity transmission operations, and in its Cadent distribution business, which delivers gas to ca.50% of UK gas customers. These two components account for almost 40% of INPP's portfolio. After its Cadent stake, its second-largest investment is the 25km Thames Tideway Tunnel (TTT) super sewer. Much of the remainder of the portfolio is made up of transport and education investments, including over 250 schools. These two sectors each account for ca.19% of the portfolio.

In terms of location, the UK is INPP's key market, with almost 75% of its portfolio being sited here. Of the remainder, Australia and Belgium (the latter with its Diabolo rail link contract to service Brussels airport) account for 8% and 7%, respectively.

Latest results: Despite some concerns, INPP confirmed, in its 2021 full-year income statement, that it was performing soundly. Although the construction element of the TTT super sewer project, at December 2021, was 73% complete, INPP has suffered various delays and cost increases from COVID-19, and asset impairments have resulted. Importantly, financial regulation of the Cadent gas business is now clearer following the final determination of the Competition and Markets Authority (CMA); in INPP's words – "the appeal process is complete".

Overseas, INPP has suffered from the heavy COVID-19-related fall-off in demand on its Diabolo rail link to Brussels airport: the latter's revenue is very dependent on rail passenger numbers. INPP has agreed to invest €24m (£20.2m) in the business, around half of which relates to a contingency commitment. In April 2022, INPP raised £325m (gross), at 159.5p per share, from a very well-supported issue. With its NAV rising to 148.2p per share, compared with 147.1p per share at March 2021, INPP is planning to increase its full-year 2022 dividend to 7.74p per share; the 2022 dividend payment was 7.55p per share.

INPP – full-year income statement, 2020/21

£000	to 31/12/2021	to 31/12/2020
Interest income	81,930	81,204
Dividend income	45,247	42,822
Net change in investment at FV via P&L	34,626	(27,731)
Total investment income	161,803	96,295
Other operating income/expenses	3,560	(3,326)
Total income	165,363	92,969
Management costs	(26,173)	(25,888)
Administration costs	(2,281)	(1,825)
Transaction costs	(3,896)	(286)
Directors' fees	(393)	(416)
Total expenses	(32,743)	(28,415)
Profit before finance costs and tax	132,620	64,554
Finance costs	(3,453)	(3,797)
Profit before tax	129,167	60,757
Tax credit	44	(44)
Profit for the period	129,211	60,713
EPS (basic and diluted, p)	7.78	3.76

Source: INPP, Hardman & Co Research

Sequoia Economic Infrastructure (market cap. £1,469m)

SEQUOIA ECONOMIC INFRASTRUCTURE INCOME FUND LIMITED

Investment sectors: Sequoia Economic Infrastructure is a specialist investor in economic infrastructure debt. It runs a portfolio of debt – 95% of which is private – and bond investments, with generally shorter timeframes than those of other quoted IICs.

Fund aims: "To provide investors with regular, sustained, long-term distributions and capital appreciation from a diversified portfolio of senior and subordinated economic infrastructure debt investment".

Portfolio: Currently, Sequoia Economic Infrastructure has over 70 investments across eight sectors, with an average life of ca.4.5 years. In terms of asset allocation, power, including renewables, is the largest component, with a 29% share. Technology, media and telecoms (TMT) account for 25%, and transport covers a further 21% of the portfolio.

Sequoia Economic Infrastructure has diversified across many mature jurisdictions. Slightly over half of its assets are in North America, with a further 28% being in

Europe and 16% in the UK. However, it has some significant exposure to the collapsed Bulb Energy – a victim of the UK's shambolic energy supply market – via ca.£55m of senior debt, which is secured against Simple, Bulb Energy's parent company; to date, £10m of this debt has been recovered. Bad debts have also arisen with both the delayed – and above-budget – Salt Lake Potash project in Australia and with a school in Washington, DC, whose enrolment levels, and therefore revenues, have fallen well short of expectations.

Latest results: On the back of a seriously weak share price – down by over 20% since the start of 2022 – Sequoia Economic Infrastructure's full-year results for 2021/22 addressed some of the challenging issues that it is facing. The income statement was heavily impacted by the application of FV accounting methodology to both its non-derivative and derivative financial assets – this accounts for the very sharp fall in EPS. However, although NAV fell back, the decline was more modest – to 100.5p per share in March 2022, compared with 103.2p per share at March 2021; higher professional costs during 2021/22 were a significant factor. With various challenges on the broad economic front, such as rising inflation, along with specific issues in the energy sector – the impact of surging gas prices being especially concerning – Sequoia Economic Infrastructure's outlook, perhaps inevitably, remains distinctly cautious. Its dividend for 2021/22 was 6.25p per share, a pay-out that seems likely to be held "for the foreseeable future".

Sequoia Economic Infrastructure – full-year income statement, 2021/22

£	to 31/03/2022	to 31/03/2021
Revenue		
Net gains on non-derivative financial assets at FV	(27,520,112)	6,958,954
Net gains (losses) on derivative financial assets at FV	(39,932,471)	106,075,653
Investment income	151,920,575	114,979,084
Net foreign exchange loss	(1,023,582)	419,582
Total revenue	83,444,410	228,433,273
Expenses		
Investment adviser fees	11,836,201	11,253,254
Investment manager fees	349,634	344,938
Directors' fees and expenses	305,202	246,127
Other professional fees	3,214,544	2,316,619
Other expenses	497,617	219,945
Total operating expenses	16,203,198	14,380,883
Loan finance costs	4,522,522	4,094,586
Total expenses	20,725,720	18,475,469
Loss/profit and comprehensive loss/income for the year	62,718,690	209,957,804
EPS (basic and diluted, p)	3.55	12.62

Source: Sequoia Economic Infrastructure, Hardman & Co Research

Foresight Group now quoted

Another major UK infrastructure player, although outside the AIC criteria, is Foresight Group, which undertook an IPO in February 2021. It is now valued at £425m – and holds a ca.5% stake in Foresight Solar.

UK energy background

Ukraine and soaring gas prices

In recent months, the Ukraine crisis, and more specifically, soaring gas prices, have dominated debates in the UK energy sector. Various decisions of late, and especially the efforts to reduce the role of gas in energy generation, have been driven by the abiding concerns about future gas supplies and the price per therm at which they will be available. There is real uncertainty about how longer-term gas prices will settle in a market that is, at present, highly volatile.

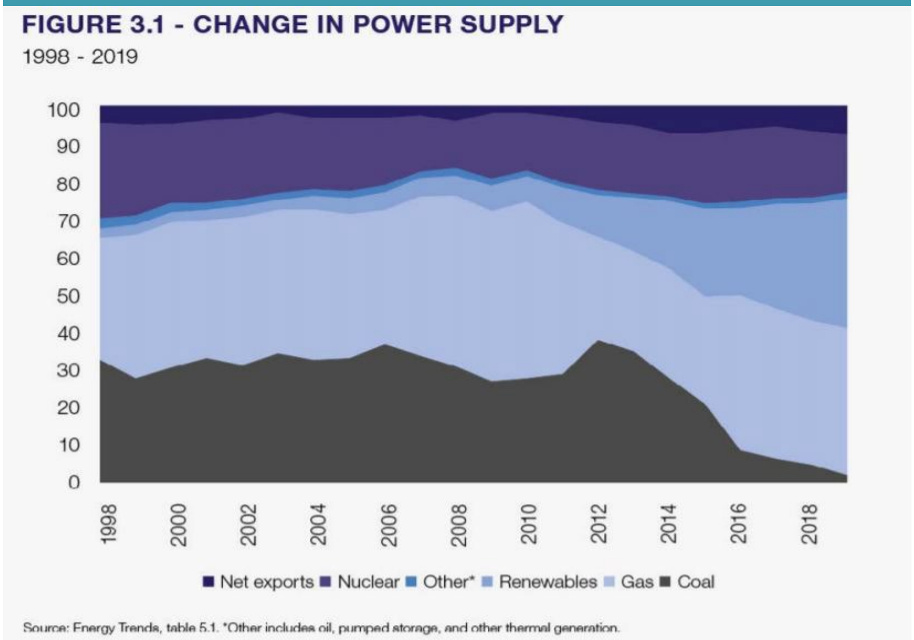
The response from the supply side

It should be added that, because spot prices for a therm of gas may have soared, it does not mean that this supply scenario will endure for the next five or ten years. Already, various initiatives to boost UK gas supplies are under way, such as the planned re-opening – at very considerable cost – of the Rough gas storage facility in the North Sea, which was closed in 2017; other examples include the approval of new North Sea gas projects.

The coal/renewables changeover

Importantly, in recent years, there has been a sea-change in generation sources, as output from renewables plants replaces coal-fired output, which produces substantial CO2 emissions. The pronounced shift is clearly illustrated in the graph below, which was published in the Energy White Paper 2020.

Change in power supply



Source: Energy White Paper 2020

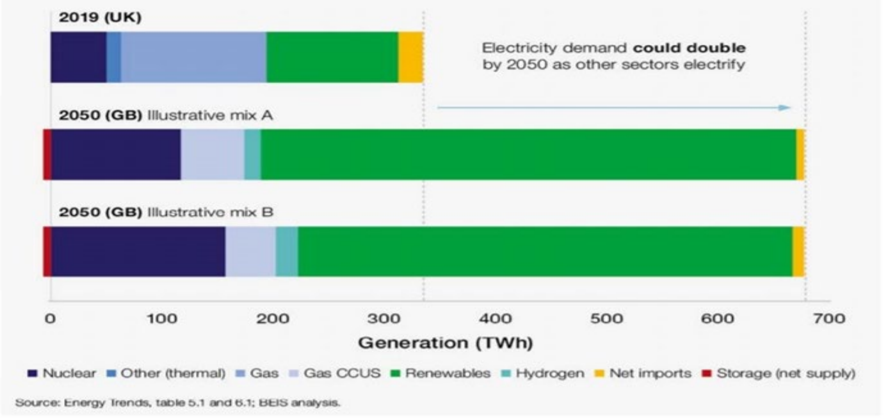
Renewables share up from 7% in 2010 to a third now

To underline this transition in generation source, the Energy White Paper 2020 also confirmed that the contribution from UK renewable generation was now ca.33%, compared with just 7% in 2010 – a very sharp rise in just over a decade.

Projections from the Energy White Paper 2020

Looking forward, the Energy White Paper 2020 also set out its GB generation projections until 2050 – the tranche allocated to renewables sources is very marked, partly at the expense of gas. Details of these projections are set out below.

Future generation mix projections



Source: Energy White Paper 2020

The Energiewende will be key in Germany…

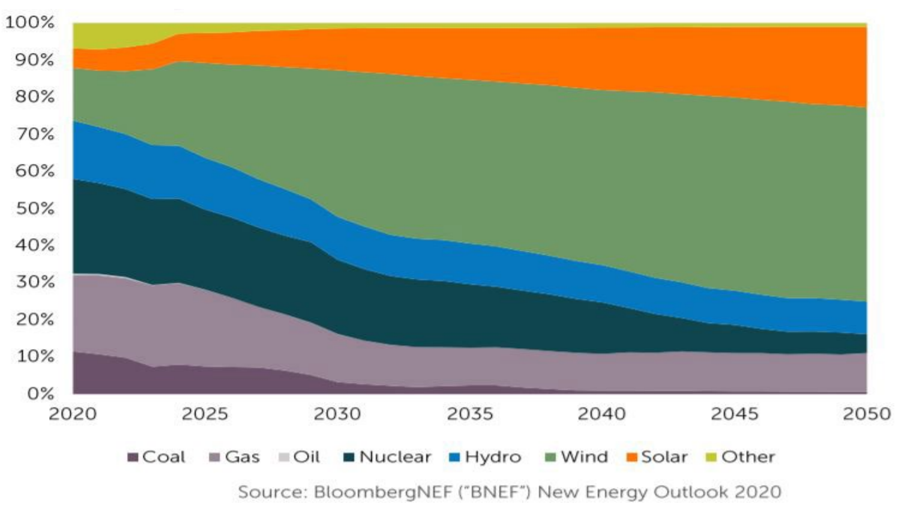
A similar scenario applies in the EU. In the expectation of a rapidly expanding EU renewable generation market, many REIFs, most notably TRIG, Octopus Renewables and Infrastructure and Aquila European Renewables, have already invested in mainland EU countries – and will continue to do so.

…as will the Russian gas imports scenario

The *Energiewende* in Germany, which envisages a very pronounced upsurge in renewable generation investment, will be a key driver. And, of course, Germany is at the forefront of the profound uncertainties relating to Russian gas supplies, which may well see a very sharp fall in imported gas volumes from Russia, notwithstanding far higher prices than previously.

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 over the next decades.

European power generation mix to 2050



Source: Bloomberg New Energy/JLEN September 2020 interim results presentation

France and others lagging

Investment in wind generation continues to expand in Europe, although some countries are lagging, including France, whose wind power capacity is below one third of the ca.63GW in Germany.

Developing trend – Northern Europe for wind and southern Europe for solar

A discernible pattern is emerging from investment overseas by REIFs. Scandinavia is favoured for onshore wind investment, while the two Iberian countries – Portugal and Spain – are attracting significant solar investment: the latter's Andalucía province is especially favoured.

UK power prices

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

During the lead up in the latter part of 2021 to the invasion of Ukraine by Russia, spot gas prices soared. Apart from the OPEC-driven surge in oil prices in the mid-1970s – up fourfold between October 1973 and January 1974 – there has been no similar precedent in global energy markets of such massive increases over so short a time span.

Spot gas prices have soared

The graph below, published by Ofgem, shows how alarmingly spot prices for gas have risen since the spring of 2021.

Gas prices per therm – forward delivery contracts (GB)

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

Markets should respond on the gas supply front

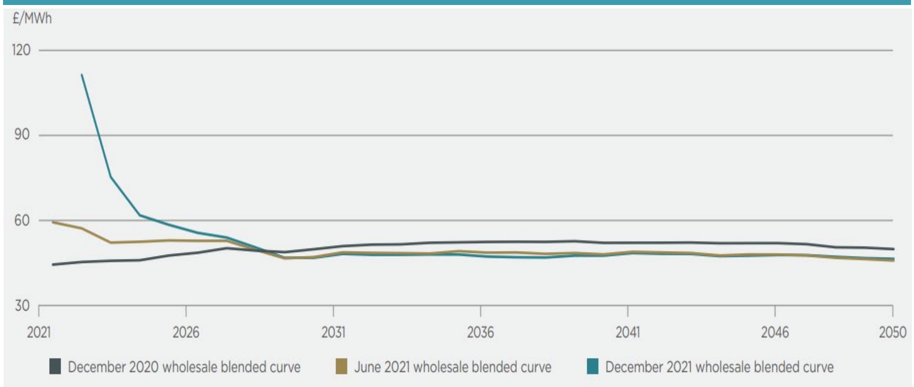
In the longer term, the response of market forces should enable more supply to come on stream and demand for gas to be reduced, but it seems unlikely that wholesale gas prices will return close to the levels prior to mid-2021.

For electricity generators, much higher gas input costs mean that CCGTs become far less competitive than hitherto. Importantly, virtually every generator sells part of its output on a forward basis, at locked-in prices, but some output is sold on a merchant price basis, which provides exposure to the benefits of higher prices but is also exposed to the risks of lower prices.

Foresight Solar's long-term projections

Looking forward, Foresight Solar has published a graph on future UK wholesale electricity projections, which is reproduced below. It shows electricity prices returning, in real terms, to their pre-2021 levels by the 2030s.

UK wholesale power prices (£/MWh)

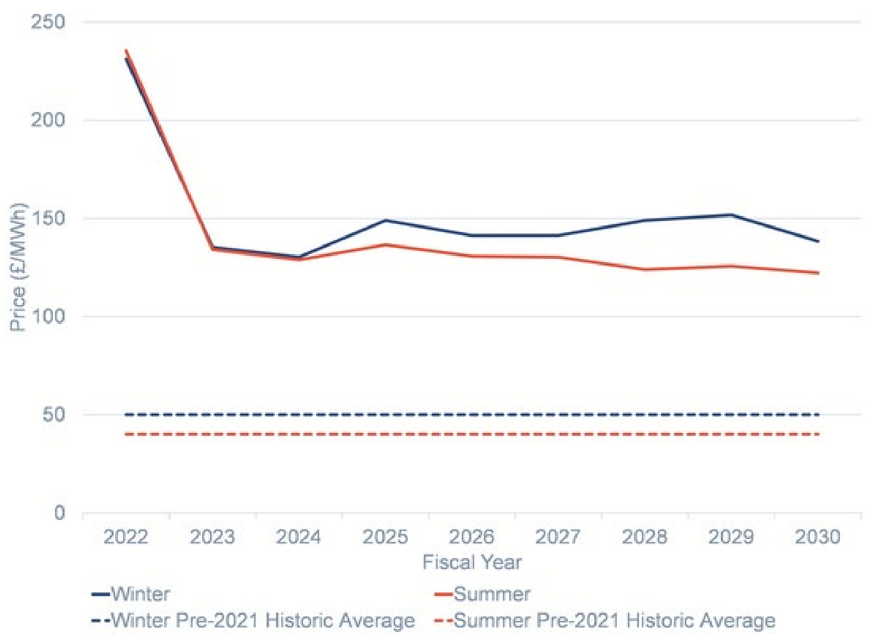


Source: Foresight Solar

The curve goes down and plateaus in ca.2025 – but way above the pre-2021 figure

By contrast, the longer-term projections from Cornwall Insights, a well-known energy consultancy, are somewhat different. Their figures show, as expected, a surge in gas prices, which begin to wind down until 2025. Thereafter, there is a predicted return to near normality. However, the figures from 2025 onwards show that the new long-term energy equilibrium prices are well above those prior to mid-2021 – a very sharp ongoing premium is projected by Cornwall Insights, although other gas experts – and Foresight Solar – consider this projected premium excessive.

Power price forecasts – average per fiscal year



Source: Cornwall Insight Benchmark Power Curve

JLEN's 25.1% NAV uprating – on the back of higher power price assumptions

In general, higher energy prices are good news for the 22 REIFs, in that they boost their revenue line, not necessarily immediately, but over time. The recent sharp increases in NAVs underpin this characteristic: Foresight Solar's 27.4% NAV increase and JLEN's 25.1% NAV increase during 2021/22, due mainly to higher energy price assumptions, are obvious illustrations.

Interest rates climbing

Yet, in the real world, higher inflation, which is fuelled – to a large extent – by higher energy prices, almost inevitably brings about rises in interest rates – the latter is a distinct negative for REIF valuations. Indeed, in recent weeks, interest rates have risen significantly, in both the US and the UK.

UK power costs

The gas price impact

In recent years, energy generation costs have been volatile. The recent gas price surge has made many CCGTs highly uncompetitive, while operating costs of plants in the UK's dated nuclear power portfolio have been far more predictable, even if the media headlines have been captured by further cost over-runs and delays at Hinkley Point C.

In addition, on the UK renewable generation front, onshore wind and solar investment persists – although way below the levels prior to 2017, when the subsidy payments for new wind and solar plant were abolished.

Greencoat UK's planned heavy investment in subsidy-free South Kyle

Nevertheless, Greencoat UK Wind is planning to invest heavily in the unsubsidised 235 MW South Kyle wind farm in Scotland, which it has contracted to buy from its developer, Sweden's state-owned Vattenfall. NextEnergy Solar is investing in subsidy-free solar plants at Staughton, with a capacity of 50MW, and elsewhere.

Sea change in the North Sea

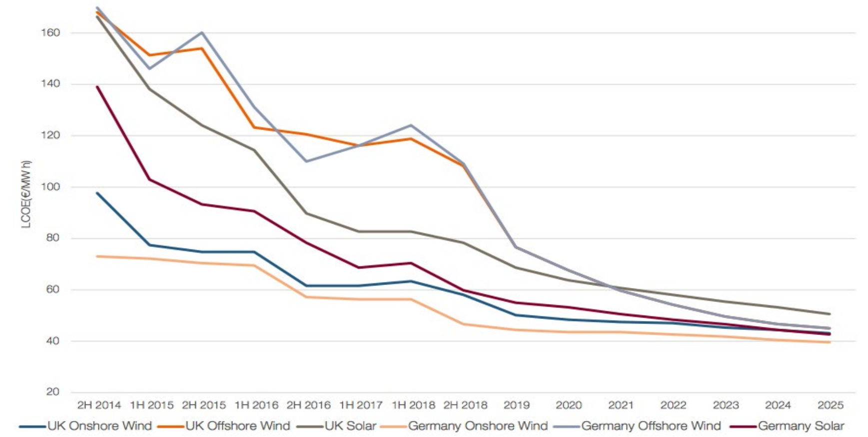
Offshore wind development is set to be a major growth area, with a sea change in costs, far larger turbines and minimal environmental concerns – the Energy White Paper 2020 was unequivocal in its support for this.

Costs plummet

On the cost front, offshore wind generation has performed extremely well – and in direct contrast to CCGT plants, where the gas input cost is a very high proportion of overall generation costs.

The graph below – compiled by IRENA – shows the very sharp 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

Unquestionably, the massive fall in costs of offshore wind power has provided the kick-starter for more aggressive offshore wind developments.

Offshore at <£40 per MWh vs. >£90 per MWh for nuclear from Hinkley Point C

Unquestionably, 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 controversial – and desperately expensive – new Hinkley Point C nuclear plant. More recently, in this summer's offshore wind auction, the lowest successful CfD bid was for just £37.35p per MWh.

BP and Shell gear up for offshore wind investment

Given the pronounced cost factor differentials, a key driver behind the Energy White Paper 2020 target of 40GW of offshore wind power by 2030, it seems inevitable that the government, whether Conservative or Labour, 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 its capex boat way out into the North Sea

Major oil sector players, including BP and Shell, are expected to participate, especially by taking stakes in North Sea offshore wind projects. Furthermore, National Grid, whose activities are pivotal to exploiting North Sea energy resources, has just announced a massive £54bn investment budget for expanding its network, which is targeted at building more wind generation infrastructure, especially offshore. Much of this £54bn budget is set to be deployed before 2030.

Renewable energy infrastructure funds (REIFs)

Leading REIFs

In our analysis of the REIFs, we focus specifically on the four most valuable REIFs, with market capitalisations of over £1bn. Included in this grouping are Greencoat UK Wind, TRIG, SEEIT and the Irish-based Greencoat Renewables.

The JLEN renewables template

Also assessed, despite its market value being below our £1bn threshold, is the renewable generation portfolio operated by JLEN, which arguably provides a portfolio template for a typical REIF. JLEN is UK-based, but it has some minor interests – for the moment at least – in mainland Europe and a focus on onshore wind and solar generation, along with some smaller investments in other renewables technology, most notably in Anaerobic Digestion (AD) plants.

There are two quoted REIFs, namely Greencoat UK Wind and TRIG, where UK wind output is pivotal in determining their cash generation and share rating. In total, this duo accounts for between 40% and 45% of the 22 REIFs' total market capitalisation.

Greencoat UK Wind (market cap. £3,573m)

GREENCOAT UK WIND

Greencoat UK Wind, as its name implies, focuses exclusively on the UK wind sector, in which it is heavily invested. Its capacity was recently confirmed, in June 2022, as being 1,460MW. Over 40% of its capacity is sited in Scotland, with much of the remainder in England. Its investment policy is narrowly defined as follows:

- To "invest exclusively in operating UK wind farms, predominantly onshore, although offshore returns are now becoming more relevant".
- To "increase its dividend in line with the RPI".
- To "preserve capital on a real basis by re-investing excess cashflow in additional operating UK wind farms, and through prudent use of portfolio leverage".

In terms of its financial performance since 2013, the figures are impressive – until quite recently – as demonstrated by the table below.

Greencoat UK Wind's financial performance – 2013/20

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%

Source: Greencoat UK Wind

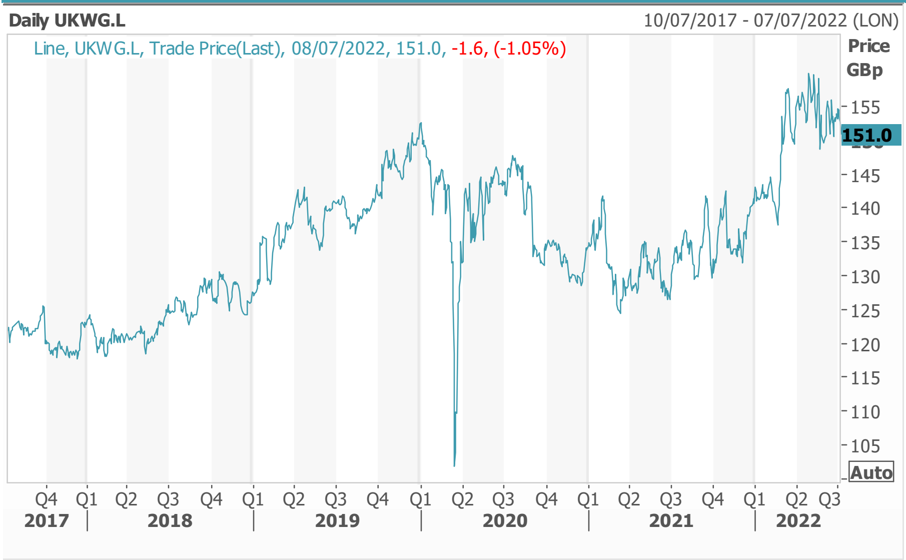
South Kyle is large – and unsubsidised

Furthermore, once the 235MW South Kyle wind farm in southwest Scotland has been built, Greencoat UK Wind has committed to buy it from the developer, Vattenfall, at a cost of ca.£320m. The project has been subject to some delays but is expected to be commissioned in 2023. Given its considerable size and that it will be a subsidy-free project, investors will be carefully analysing its financial returns. Greencoat UK Wind is also set to acquire a 12.5% stake in the Hornsea 1 offshore wind project.

Greencoat UK Wind is sector bellwether

Excepting the March 2021 COVID-19-related share price plunge, from which its recovery was quick, Greencoat UK Wind's five-year performance chart shows a consistent rise in its share price; most recently, it has advanced further, on the back of higher power price assumptions – and its well above the average RPI-linked dividend increase. Its NAV per share at June 2022 was 153.6p, compared with 122.2p per share at March 2021.

Greencoat UK Wind – five-year share price performance



Source: Refinitiv

Very comfortable £450m post COVID-19 fundraise

In November 2021, Greencoat UK Wind raised £450m of new equity at a relatively modest discount of ca.6% to its then share price. This fundraise illustrates the strong, latent demand for new REIF equity – the investor appetite is undoubtedly there.

Furthermore, shareholder returns have been boosted by an annual RPI-adjusted dividend increase. While the 2021 payment was 7.18p per share – the RPI figure was comparatively low between January 2021 and December 2021 – Greencoat UK Wind's full-year 2022 dividend is set to rise by 7.5% to 7.72p per share. This increase was in line with Greencoat UK Wind's declared policy to link its dividend payments to movements in the RPI. Few larger REIFs can match these achievements.

TRIG (market cap. £3,348m)

TRIG's international reach

Greencoat UK Wind and TRIG have alternated in the role of being the most valuable REIF in recent years. Undoubtedly, though, TRIG has a greater international reach; its operational capacity figure at December 2021 was 1,729MW, and further capacity is under construction. Significantly, almost 90% of TRIG's capacity covers wind generation assets.

TRIG's recent international expansion has seen it acquire full ownership of the 213MW Jadraas onshore wind plant. Importantly, too, TRIG acquired a 25% stake in the 330MW Gode 1 offshore wind project, which is located off the German coast in the North Sea. TRIG is widely expected – in good time – to make further investments in offshore wind, in both the Baltic Sea and the North Sea, and major build-outs are expected there over the next decade.

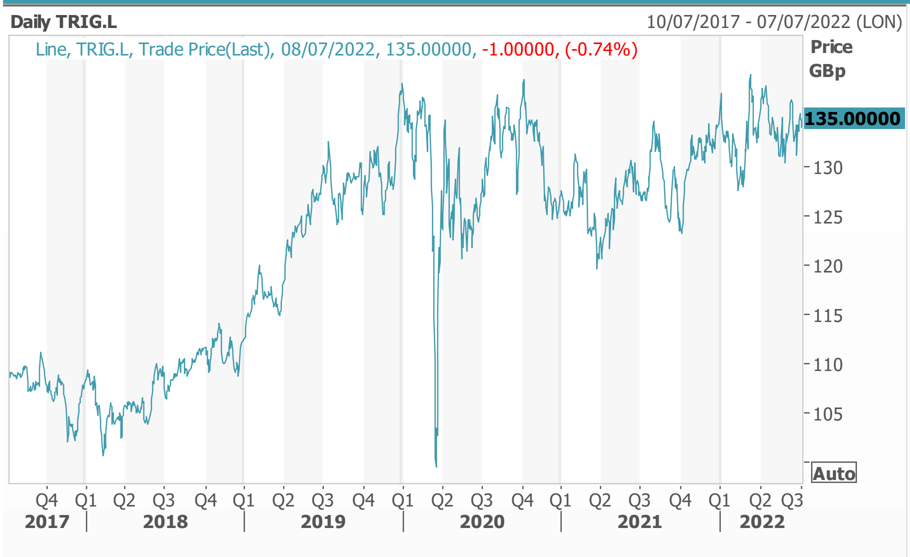
TRIG's twin aims

Overall, TRIG's two key aims are:

- To provide investors with long-term stable dividends, while preserving the capital value of its investment portfolio.
- To invest in a diversified portfolio of renewable energy infrastructure assets in the UK and in northern Europe, with a focus on operating assets. Realising TRIG's European aspirations has been facilitated by the approval to raise the threshold to 65% for permissible investment outside the UK.

The chart below underlines the success of TRIG's investment policy, with a solid rise in its share price – despite the COVID-19-induced chasm in March 2020 – over the past five years.

TRIG – five-year share price performance



Source: Refinitiv

TRIG's recent acquisitions, notably in northern Europe, have certainly raised its international profile. Arguably, too, its overall risk profile has risen through its exposure to the Swedish market, where wholesale prices are generally below-average. Recent figures show that, while England and Scotland contribute over 50% of generated output, Germany and Scandinavia are contributing 15% and 13%, respectively.

Modest dividend increase

TRIG's 2021 full-year results were adversely affected by wind volumes that were well below budget. Three key onshore wind markets, the UK, Ireland and Germany, all saw pronounced shortfalls. However, by June 2022, NAV per share had risen sharply to 134.2p per share. Dividend cover, though, has come under sustained pressure – being just 1.12x in 2021. Hence, TRIG's dividend is set to increase by a distinctly modest 1.2%, to 6.84p.

SEEIT (market cap. £1,178m)

SEEIT

SEEIT's focus is primarily on the US and, to a lesser extent, on EU energy markets, and it has been very active in seeking out – and investing in – deals that meet its investment criteria and that are slanted towards promoting energy efficiency through CHP schemes. The US is SEEIT's key market, accounting for 55% of its project exposure. The European component, excluding the UK, now accounts for 22%.

Industrial US is key market – with Red Rochester to the fore

Having developed its seed capital portfolio, which consisted mainly of Combined Heat and Power (CHP) investments, SEEIT has announced many subsequent acquisitions. Importantly, in the US, SEEIT has acquired the district energy system, Red Rochester, based around the very large Eastman Industrial Park in Rochester, New York; it is SEEIT's most valuable single investment. Also in the US, it has full ownership of Primary Energy, which comprises five co-generation projects within the US steel industry. Elsewhere in the US, it operates – via ONYX – a solar generation and energy storage business, with off-takers on over 200 sites.

Sweden is SEEIT's lead European market

In Europe, SEEIT has invested £107m in Vartan Gas, whose main subsidiaries are Gasnatet, a Swedish gas distribution business, and Stockholm Gas; these businesses account for ca.10% of SEEIT's overall portfolio value. Previously, SEEIT had bought a 125MW co-generation portfolio in Spain, comprising five CHP plants, two olive-processing plants and two biomass plants. Recently, SEEIT announced an agreement to buy a 69MW portfolio of renewable assets from United Utilities for ca.£100m.

Equity raise, then acquisition, then another equity raise

Having raised £100m (gross) at its IPO in December 2018, SEEIT has undertaken several equity raises subsequently. In total, including its IPO fundraise, it has secured over £1bn of new equity. Compared with other REIFs, such as Aquila Energy Efficiency and Triple Point Energy Efficiency, SEEIT's investment policy has been positively frenetic – despite total debt at March 2022 of £369m. Given a very extensive pipeline of potential new investments, this stance seems set to persist, provided that SEEIT continues to receive strong support, as it has done to date, from its shareholders.

In its recently published full-year results for 2021/22, SEEIT reported a 5.8% increase in its NAV – up to 108.4p per share, compared with 102.5p at March 2021 – and confirmed its full-year 2022/23 dividend target of 6.00p per share.

Greencoat Renewables (market cap. £1,154m)

The RoI-based Greencoat Renewables undertook its IPO in 2017. Its shares are €-denominated and, since its IPO, they have performed creditably, on the back of secure wind-generated earnings.

Big player in RoI wind market

In total, Greencoat Renewables has generation capacity of 1,079MW (this includes its recent French acquisition). Its core business is in the Republic of Ireland (RoI), which accounts for most of its revenues; it does not operate in Northern Ireland (NI). Greencoat Renewables has now completed its acquisition of the County Kerry-based 90MW Cordal wind farm. Its RoI capacity is now 721MW.

Greencoat Renewables' ambitions lie beyond RoI

Greencoat Renewables has also sought to invest overseas, with the Nordic Region being a favoured market, along with Germany and France. In the case of the latter, it now owns 117MW of wind capacity there. However, its most ambitious long-term target is in offshore wind generation; recently, it acquired a 50% stake in the Borkum Riffgrund project; the publicly quoted Oersted holds the other 50%.

Destination – The Nordics

In coming years, it seems probable that further mainland Europe wind generation investments will be undertaken by Greencoat Renewables – and, most likely, in northern European countries, where wind conditions are more favourable. The acquisition of the 43MW wind plant at Kokkoneva in Finland, due to be commissioned very shortly, may be the first of many such deals in the Nordic region.

On the financial front, Greencoat Renewables raised gross proceeds of €282m (£237m) in April 2022 – this sizeable sum will help finance future deals. As at March 2022, Greencoat Renewables' NAV was confirmed as 92.3p (c108.6) per share, up by 8.4% on the March 2021 figure. In terms of its 2022 full-year dividend, Greencoat Renewables is expected to pay a dividend of 5.25p (c6.18) per share, a distinctly modest increase over the 2021 payment.

JLEN

JLEN (market cap. £787m)

Apart from TRIG and Greencoat UK Wind, JLEN (formerly John Laing Environment Fund), which was floated in March 2014 out of the eponymous housebuilder, has 37 investments. It also owns the largest UK wind capacity of the remaining REIFs. Indeed, its portfolio, details of which are set out below, provides the template for a renewable energy start-up business, at least in securing diversification across the renewables sector.

The table below shows JLEN's current generation portfolio.

JLEN – generation portfolio

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

Source: JLEN

At present, JLEN has capacity of 359MW, 161MW of which is onshore wind, with almost all its plants – part of its small French wind portfolio was recently sold – being in the UK. JLEN also owns six solar plants, with a capacity of 80MW, all of which are sited in the UK.

Heavily subsidised AD focus

Exceptionally, among the other REIFs, JLEN is well-invested in Anaerobic Digestion (AD) facilities, with a UK capacity of 50MW. To date, these AD plants have earned good returns, since plant revenues are underpinned by substantial payments from the Heat Incentive Scheme.

Recent power price increases boosted NAV by a formidable 25%

In terms of its NAV of 115.3p per share, JLEN reported a very pronounced increase – of more than 25% – over the depressed level of 92.2p per share at its March 2021 year-end. JLEN's latest NAV was boosted mainly by higher power price assumptions, along with the impact of the Cramlington CHP waste acquisition. Although JLEN's cash dividend cover in 2021/22 was very thin, at just 1.1x, it should rise markedly this year, to nearer 1.5x. The 2022/23 dividend forecast is 7.14p per share.

JLEN taps the market

In January 2022, JLEN raised ca.£61m (gross) of new equity at a small discount to its then share price; previously, in May 2021, a similar sum, £57m (gross), had been raised. The two issues noticeably improved JLEN's cash position.

Looking forward, JLEN, in common with other REIFs, is struggling to find renewable energy projects that can achieve its desired financial returns commensurate with assuming the appropriate risks – the recent Cramlington CHP acquisition apparently met those criteria. Central to this search is Foresight Group, which is now the Investment Adviser to JLEN.

The UK's three major solar players

The UK quoted solar generation sector is dominated by three REIFs – Bluefield Solar, Foresight Solar and NextEnergy Solar. Their average market capitalisation is ca.£700m. Given their similarities, this trio is ideal as a sector benchmark for valuing unquoted solar generation portfolios.

Bluefield Solar (market cap. £800m)

Bluefield Solar is a somewhat older member of the quoted REIF sector, having undertaken its IPO in July 2013. Its focus is entirely on the UK, and it derives considerable benefit from – and reliance on – the various generous subsidies applicable to solar plants built prior to 2017.

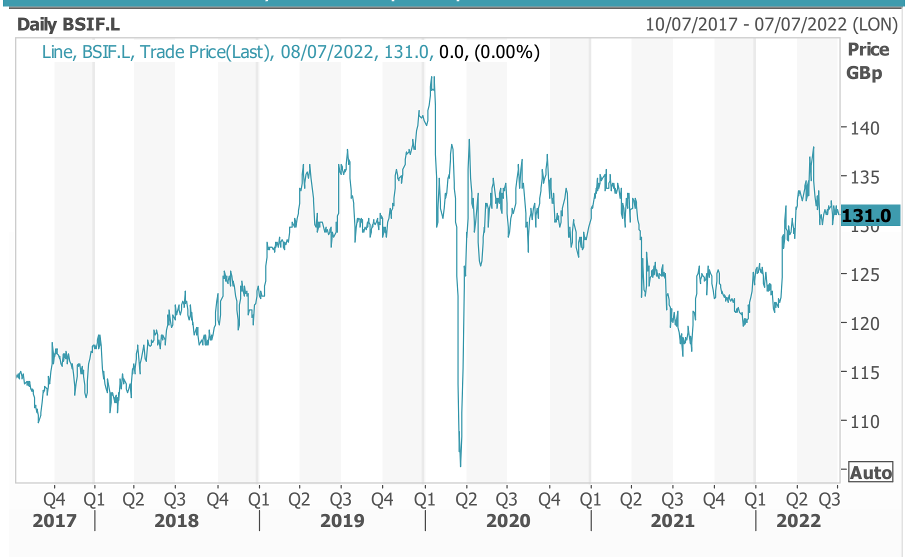
Following the purchase of a portfolio of small wind plants – its first move outside the solar sector – Bluefield Solar's latest capacity figure is 673MW. There have been several tuck-in acquisitions of late. Furthermore, the planned £112m acquisition of a sizeable portfolio of UK solar and wind plants is set to raise Bluefield Solar's capacity to 766MW, assuming that this is completed. Importantly, Bluefield Solar's entire portfolio is based in – and is dependent upon – the UK and its regulatory regime.

Major UK acquisition pending

In June 2022, Bluefield Solar raised £150m of new equity capital, which will partly fund its acquisitions, most notably of the proposed 93MW UK portfolio: completion is expected shortly. At its June 2021 full year, Bluefield Solar's NAV was 115.8p per share. Its latest NAV, as at March 2022, of 127.0p per share, was boosted by higher power price assumptions. Bluefield Solar's dividend outlook – 8.16p per share for 2021/22 – is relatively robust, and it helps underpin its share price rating.

Bluefield Solar's shares have rallied since the COVID-19-instigated market plunge in March 2020, as its five-year share price graph highlights.

Bluefield Solar – five-year share price performance



Source: Refinitiv

Foresight Solar (market cap. £720m)

Australian and Spanish investments

The second quoted solar generation REIF, Foresight Solar, is somewhat different, in that ca.170MW of its 1,043MW capacity (a small element of which is currently under construction) is sited in Australia, where there have been prolonged and divisive debates about the merits of financing renewable generation projects. In addition to its existing 125MW solar plant portfolio in southern Spain, Foresight Solar is investing in project Lorca, also in southern Spain, near Granada, for which 99MW of solar capacity is being constructed. Further Iberian acquisitions seem likely.

Even so, Foresight Solar's core business remains in the UK, where it operates solar plants with a capacity of ca.751MW. Like other REIFs, Foresight Solar has weathered the COVID-19 pandemic without undue alarm, but its shares had performed sluggishly until quite recently, due partly to lower power price projections, which have now been reversed, on the back of the surge in gas prices.

Foresight Solar 27.4% NAV rise in just 12 months

At March 2022, Foresight Solar's NAV had risen to 117.1p per share, compared with just 91.9p per share at March 2021, representing a 27.4% increase in NAV in a single year. This recovery has spurred Foresight Solar to reassess its dividend policy. There have been abiding concerns about Foresight Solar's thin dividend cover, but it is expected to rise in 2022. Indeed, for 2022, a dividend of 7.12p per share – a 2.0% rise over the 2021 payment – is anticipated.

Changes afoot?

Looking ahead, changes may be afoot, as Foresight Solar's former parent company, Foresight Group, whose interests extend well beyond the former's core renewable energy sector, undertook an IPO in February 2020.

NextEnergy Solar (market cap. £654m)

NextEnergy Solar undertook its IPO in April 2014. At the time, longer-term energy price projections were considerably higher than had been the case in recent years – at least until very recently, when gas prices surged. Nevertheless, NextEnergy Solar has progressed, although – with the end of subsidies for new solar capacity as from 2017 – the past four years have been more challenging. Expectations for growth in both its share price and its dividend have been curbed.

The challenge of unsubsidised solar

Currently, NextEnergy Solar owns installed renewable generation capacity (as at March 2022) of 865MW. Around 96% of its capacity is sited in the UK, with the remainder located in Italy. Despite the end of the Renewable Obligation (RO) for new solar plants in 2017, NextEnergy Solar is continuing to invest in additional solar capacity – it seeks to build up to 150MW of new solar capacity in the UK, 50MW of which relates to the now commissioned Staughton plant. Further opportunities are sure to materialise via its JV with NPIII. In addition, NextEnergy Solar has made its first tentative steps into the BESS market.

NextEnergy Solar's last reported NAV at March 2022 was 113.5p per share. Its low dividend cover – just 1.2x in 2021/22 – has been holding back NextEnergy Solar's plans to deliver decent dividend growth. However, for 2022/23, NextEnergy Solar's dividend is expected to rise by ca.5%, to 7.52p per share, based partly on the higher dividend cover expectations set out in its 2021/22 full-year results.

Still to achieve pre-COVID-19 rating

The chart below shows how NextEnergy Solar's share price has performed over the past five years. Unlike some other REIFs, its share price remains below its pre-COVID-19 rating in early 2020.

NextEnergy Solar – five-year share price performance

Source: Refinitiv

Undoubtedly, the three largest UK-quoted wind generators – including the Irish-based Greencoat Renewables – and the three solar generators form the backbone of the quoted REIF sector, which now comprises a membership of 22 funds. In market capitalisation terms, these six REIFs account for almost 65% of the sector's overall value.

In comparing their portfolios, the three quoted pure solar companies – Bluefield Solar, Foresight Solar and NextEnergy Solar – are included in the table below, along with Greencoat UK Wind, TRIG and JLEN. Latest plant capacity data of these six REIFs are also shown in the table.

UK solar and wind data

REIF	Installed capacity (MW)	UK	Solar	Wind
Bluefield Solar	673 (pre planned 93MW UK deal)	100%	96%	4%
Foresight Solar	1,043	72%	100%	0%
Greencoat UK Wind	1,460	100%	0%	100%
JLEN	360	96%	22%	45%
NextEnergy Solar	865	96%	100%	0%
TRIG	1,729	57%	10	89%

Source: Hardman & Co Research

Fundraising

Strong primary and secondary markets for infrastructure funds - £10bn raised since 1/20

Judging by the table below, which shows that the IICs and REIFs have raised ca.£10bn of new money since January 2020, investor appetite remains robust. Of this figure, £3.3bn was raised in respect of the IICs, while the remaining £6.7bn arose from REIFs' fundraising.

Clearly, many investors seem readily to accept the risk profile. Whilst no sector IPOs have taken place so far in 2022, nine sector IPOs took place in 2021 – three IICs and six REIFs – although there has also been the occasional failure, such as the planned IPO of the Blackfinch Renewables European Income Trust. Importantly, too, many secondary fundraisings – in some cases for quite serious amounts – have been achieved at a very modest discount to the prevailing share price. Recent examples include fundraisings from INPP and TRIG, which raised £325m (gross) and £277m (gross), respectively, at a low discount to their then prevailing share prices.

Major IIC and REIF fundraises since January 2020

IICs and REIFs	Date	New shares (m)	Price (p)	Gross proceeds (£m)
3i Infrastructure	n/a	0	n/a	0
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
Atrato Onsite Energy	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	July'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	May'22	10.7	101	11
	Dec'20	125.0	100	125
Foresight Solar	n/a	0	n/a	0
GCP Infrastructure	n/a	0	n/a	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'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	Nov'21	210.0	100	187
HICL Infrastructure	Jul'22	94.7	169	160
	Jul'20	73.2	164	120
HydrogenOne Capital Growth	Apr'21	21.5	100	21
INPP	Apr'22	203.8	160	325
	Jul'20	81.8	165	135
JLEN	Jan'22	60.1	101	61
	May'21	54.7	104	57
	Feb'20	49.7	115	57
NextEnergy Solar	n/a	0	n/a	0
Octopus Renewables	Nov'21	70.0	105	74
	Jun'21	144.9	104	150
Pantheon Infrastructure	Nov'21	400.0	100	400
SEEIT	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

Note: Overseas currencies have been converted at 31/12/2021 exchange rates

Source: Hardman & Co

Major IIC and REIF fundraises since January 2020 (continued)				
IICs and REIFs	Date	New shares (m)	Price (p)	Gross proceeds (£m)
ThomasLloyd Energy Impact	Dec'21	115.4	100	85
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 Efficiency	Oct'20	100.0	100	100
US Solar	May'21	132.0	72	98
Victory Hill GESO	Jun'22	111.0	110	122
	Dec'21	69.0	101	70
	Feb'21	242.6	100	243
Total				**10,006**

Note: Overseas currencies have been converted at 31/12/2021 exchange rates
Source: Hardman & Co

Much of the activity in the infrastructure sector, which now comprises 31 members, has centred around the entry of new investment funds, with, as mentioned, three IIC IPOs and six REIF IPOs taking place in 2021 alone.

Current market ratings

Set out below are the latest market ratings for the 31 IICs and REIFs under review. Most NAV figures are those published for either December 2021 or for March 2022.

Dividends, yields and NAVs

The tables below covering dividend yields and NAVs show:

- A market capitalisation for the 31 IICs and REIFs of £31.6bn, split as follows: IICs at £16.4bn and REIFs at £15.2bn.
- A prospective underlying dividend yield for the 31 IICs/REIFs of between 4.0% and 6.0%, with a few notable outliers, such as 3i Infrastructure, whose prospective dividend yield is noticeably lower.

  On average, there is a modest premium over NAV, with Gresham House Energy Storage, at 20.5%, being comfortably the highest. Some funds are currently trading at discounts to their NAVs – Aquila Energy Efficiency and Sequoia Economic Infrastructure being the most notable, with discounts of 19.9% and 17.4%, respectively.

NAV premia range widely

The table below shows the NAV data reported by each of the 31 IICs and REIFs – in most cases, December 2021 or March 2022 figures have been used. In respect of the two most valuable REIFs, Greencoat UK Wind and TRIG, June 2022 NAV returns have been entered. Importantly, consistency on such issues as discount rates, power prices, asset valuations and asset lives remains elusive; this precludes precise read-across comparisons between NAV premia and other valuation tools. Current market yields for the IICs and REIFs, based on our prospective dividends for the coming period, are also set out. Some sector newcomers are expected, initially, to pay comparatively low dividends, as they build up their portfolios.

UK-quoted IICs and REIFs

IIC and REIF	Share price (p)	Market cap. (£m)	NAV per share (p)	Prem./Disc. to NAV	Prospective yield
3i Infrastructure	328	2,924	303.3	8.1%	3.4%
Aquila Energy Efficiency	78	78	97.4	-19.9%	n/a
Aquila European Renewables	86	350	87.9	-2.3%	5.2%
Atrato Onsite Energy	105	158	97.4	7.8%	4.8%
BBGI	161	1,148	140.7	14.4%	4.6%
Bluefield Solar	131	800	127.0	3.1%	6.2%
Cordiant Digital Infrastructure	104	805	106.3	-2.4%	3.8%
Digital 9 Infrastructure	111	960	104.6	6.7%	5.4%
Downing Renewables and Infrastructure	112	207	110.1	1.7%	4.5%
Ecofin US Renewables Infrastructure (ex $ to £)	87	121	81.7	6.9%	5.2%
Foresight Solar	118	720	117.1	0.8%	6.0%
GCP Infrastructure	108	955	114.3	-5.5%	6.5%
Gore Street Energy Storage	119	572	107.1	11.1%	6.7%
Greencoat Renewables (ex € to £)	101	1,154	92.3	9.6%	5.2%
Greencoat UK Wind	154	3,573	153.6	0.3%	5.0%
Gresham House Energy Storage	159	860	131.9	20.5%	4.4%
Harmony Energy Income	111	233	108.9	1.9%	1.8%
HICL Infrastructure	169	3,439	163.1	3.6%	4.9%
HydrogenOne Capital Growth	86	111	96.8	-11.2%	n/a
INPP	161	3,075	148.2	8.6%	4.8%
JLEN	119	787	115.3	3.2%	6.0%
NextEnergy Solar	111	654	113.5	-2.2%	6.8%
Octopus Renewables	110	622	104.0	5.8%	4.8%
Pantheon Infrastructure	102	446	98.0	3.9%	2.0%
SEEIT	119	1,178	108.4	9.8%	5.0%
Sequoia Economic Infrastructure	83	1,469	100.5	-17.4%	7.5%
ThomasLloyd Energy Impact (ex $ to £)	88	102	84.7	4.1%	2.1%
TRIG	135	3,348	134.2	0.6%	5.1%
Triple Point Energy Efficiency	89	89	96.1	-7.4%	6.4%
US Solar (ex $ to £)	74	245	80.2	-7.8%	6.2%
Victory Hill GSEO	110	465	107.6	2.2%	4.5%
Total	n/a	31,648	n/a	n/a	n/a

Note: Based on prices as at 14/07/2022; Source: Bloomberg, Hardman & Co Research

Valuation issues

NAV movements pivotal for valuing IICs and REIFs

In valuing IICs and REIFs, movements in their NAVs are pivotal. Currently, there are significant premia over NAV for some quoted IICs and REIFs, although this has not always been the case. However, their defensive characteristics, especially at a time of economic uncertainty and rising inflation, appeal to many discerning, income-seeking investors.

Back-tracking NAVs

The table below tracks the latest published NAVs for the leading IICs and REIFs; it also compares them with those reported around three years previously. The 2021/22 NAV figures quoted below are mostly based upon the latest published data, from either December 2021 or from March 2022. Until recently, with the notable exception of 3i Infrastructure, which has thrived, sector NAVs have generally edged upwards. Recently, though, the surge in gas prices has driven up NAVs to the benefit of both Greencoat UK Wind and TRIG: in both cases, June 2022 NAVs have been used. The notable outlier on the downside has been the troubled Sequoia Economic Infrastructure, which has recorded a fall in its NAV in recent years.

Historical NAV data of leading IICs and REIFs

IIC and REIF	NAV at either 12/2021 or 03/2022 or 06/2022 (p)	NAV at either 12/2019 or 03/2020 (p)	NAV at either 12/2018 or 03/2019 (p)	Current prem./disc. to 12/2018 or 03/2019 NAV
3i Infrastructure	303.3	254.5	234.7	+29.2%
BBGI	140.7	136.2	133.5	+5.4%
Bluefield Solar	127.0	120.8	114.4	+11.0%
Foresight Solar	117.1	103.8	111.2	+5.3%
GCP Infrastructure	114.3	109.8	112.5	+1.7%
Greencoat Renewables	c108.6	c103.2	c103.4	+5.0%
Greencoat UK Wind	153.6	121.4	123.1	+24.8%
HICL Infrastructure	163.1	152.3	157.5	+3.6%
INPP	148.2	150.6	148.1	0%
JLEN	115.3	97.5	104.7	+10.1%
NextEnergy Solar	113.5	99.0	110.9	+2.3%
Sequoia Economic Infrastructure	100.5	96.7	103.4	-2.8%
TRIG	134.2	115.0	108.9	+23.2%

Source: Hardman & Co Research

Lack of consistency in determining NAVs

More specifically, in analysing the IICs and REIFs, it is very apparent that 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.

Dividends

The search for decent nominal – or preferably real – dividend growth

Given mounting concerns about UK inflation – now close to 10%, and way above the Bank of England's declared range – it will become increasingly difficult for the stocks under review to pay real, as opposed to nominal, dividend increases. 3i Infrastructure, with its aggressive dividend projections, should be an exception in this respect.

For many years, the established IICs and REIFs have managed to generate nominal dividend increases. With inflation at 2%, real dividend increases were very common. However, with ongoing inflation far in excess of this figure, real dividend increases will be quite rare, although the rate of inflation may begin to ease back during the latter part of 2022 and thereafter.

Eroding dividend cover for many REIFs

Dividend cover levels have eroded for many of the established stocks within the IIC and REIF grouping – although not for 3i Infrastructure, a major outlier in this respect. Several are paying dividends that are barely covered, which clearly has implications for future dividend growth. In some cases, notably Foresight Solar, HICL Infrastructure, JLEN and NextEnergy Solar, their latest published cash dividend cover is 1.2x or below. In framing their future dividend targets, IICs and REIFs carefully consider their level of projected dividend cover and how it might change going forward.

Most yields lie in 4.0% to 6.0% range – 3i Infrastructure's growth profile makes it an outlier

The table below shows projected dividend payments and the relevant prospective yields for the quoted IICs and REIFs. Most underlying prospective yields lie within the 4.0%-6.0% range. Despite several IICs and REIFs having low dividend cover, most are targeting modest annual dividend increases – but in nominal, not in real, terms. Such a scenario is in clear contrast with the UK's leading gas supply company, Centrica, which cut its dividend per share in 2019 by a formidable 58%.

Prospective dividends			
IICs and REIFs	Financial year-end	Prospective dividend (p)	Prospective yield
3i Infrastructure	Mar	11.15	3.4%
Aquila Energy Efficiency	Dec	n/a	n/a
Aquila European Renewables	Dec	4.50	5.2%
Atrato Onsite Energy	Sep	5.00	4.8%
BBGI	Dec	7.48	4.6%
Bluefield Solar	Jun	8.16	6.2%
Cordiant Digital Infrastructure	Mar	4.00	3.8%
Digital 9 Infrastructure	Dec	6.00	5.4%
Downing Renewables and Infrastructure	Dec	5.00	4.5%
Ecofin US Renewables Infrastructure	Dec	4.55	5.2%
Foresight Solar	Dec	7.12	6.0%
GCP Infrastructure	Sep	7.00	6.5%
Gore Street Energy Storage	Mar	8.00	6.7%
Greencoat Renewables	Dec	5.25	5.2%
Greencoat UK Wind	Dec	7.72	5.0%
Gresham House Energy Storage	Dec	7.00	4.4%
Harmony Energy Income	Oct	2.00	1.8%
HydrogenOne Capital Growth	Dec	n/a	n/a
HICL Infrastructure	Mar	8.25	4.9%
INPP	Dec	7.74	4.8%
JLEN	Mar	7.14	6.0%
NextEnergy Solar	Mar	7.52	6.8%
Octopus Renewables	Dec	5.24	4.8%
Pantheon Infrastructure	Dec	2.00	2.0%
SEEIT	Mar	6.00	5.0%
Sequoia Economic Infrastructure	Mar	6.25	7.5%
ThomasLloyd Energy Impact	Dec	2.10	2.1%
TRIG	Dec	6.84	5.1%
Triple Point Energy Efficiency	Mar	5.70	6.4%
US Solar	Dec	4.60	6.2%
Victory Hill GSEO	Dec	5.00	4.5%

Source: Company accounts, Hardman & Co Research

Greencoat UK Wind's pronounced – and RPI-linked - 2022 dividend hike

Overall, though, the dividend pay-out record in recent years 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 three years, it is hardly surprising that IICs and REIFs have attracted the interest of many discerning yield-driven investors.

Consistent NAV premia – The Severn Trent RAV comparison

Furthermore, except for the period when the COVID-19 pandemic panic was at its height, in March 2020, many IICs and REIFs have continued, with a few exceptions, to trade at a decent premium to their NAV, in common with utilities such as regulated water stocks. Severn Trent, for example, is currently trading at a ca.30% premium to its regulatory asset value (RAV) (a similar concept to NAV adopted by price-regulated utilities) despite the decidedly tougher five-year pricing regime imposed following the PR19 periodic review.

Key macro numbers

Whether this scenario continues depends on various factors, most notably major changes to the pathway of surging power prices and any further upward movements in both inflation and interest rates.

Lower-capitalised IICs and REIFs

The smaller infrastructure players

Out of the 31 IICs and REIFs, nine have a current market capitalisation of over £1bn. Prospects for the two largest digital infrastructure players, Cordiant Digital Infrastructure and Digital 9 Infrastructure, along with GCP infrastructure, were addressed earlier. In addition, the business activities and financial prospects of the three solar funds – Bluefield Solar, Foresight Solar and NextEnergy Solar – as well as of JLEN, have also been discussed earlier in this document.

The remaining IICs and REIFs all have current market capitalisations below £1bn. At the lower end of the market capitalisation table are some REIFs, which are valued at ca.£100m; they include Aquila Energy Efficiency, Ecofin US Renewables, HydrogenOne, ThomasLloyd Energy Impact and Triple Point Energy Efficiency.

Gresham House Energy Storage's 74% rise since March 2020

Given the increasing interest in BESS technology, it is worth highlighting the business models of both Gore Street Energy Storage and, especially of, Gresham House Energy Storage; the latter has been the standout performer in the sector over the past year. Its shares have risen by more than 30% during the past 12 months, and they are up by 74% from the depth of the COVID-19 sell down in March 2020.

Both offer some characteristics of a typical REIF; indeed, they are listed as such under the AIC criteria. However, their business models and, more specifically, their cashflows are very different from those of a relatively mature wind and solar generation business.

Many announcements outstanding – and eagerly awaited

For the most recent sector entrants, Aquila Energy Efficiency, Atrato Onsite Energy, Harmony Energy Income, HydrogenOne Capital Growth, ThomasLloyd Energy Impact and the IIC-classified Pantheon Infrastructure, it is still early days. Nonetheless, some of these REIFs, notably Aquila Energy Efficiency and HydrogenOne Capital Growth, have seen their share price ratings fall quite sharply in recent months. Announcements are awaited from many in this grouping regarding their investment strategy – and to what extent this replicates the intentions set out in their pre-IPO Prospectus, especially with respect to the realisation of their individual pipelines.

Brief profiles of Pantheon Infrastructure and the smaller REIFs are set out below.

Aquila Energy Efficiency (market cap. £78m)

AQUILA CAPITAL

Aquila Energy Efficiency is out of the same stable as Aquila European Renewables. Its focus is somewhat different in that its *mantra* is delivering energy efficiency from a wide range of investments with both public and private bodies. Targeted markets include the UK and the EU, notably Italy and Spain.

Aquila Energy Efficiency undertook an IPO in May 2021 – its share price has fallen by 22% subsequently. At its IPO, it raised gross proceeds of £100m – below its £150m target as set out in its Prospectus. Most of these proceeds are still to be deployed – an issue that has culminated in the resignations of two Non-Executive Directors. Its latest NAV figure is 97.4p per share as at December 2021. Aquila Energy Efficiency was planning to pay a 3.5p dividend in its 2022 financial year and 5.0p per share in 2023. Given the serious delays in deploying the funds that it raised, its dividend policy is under review.

Aquila European Renewables (market cap. £350m)

Aquila European Renewables, which was floated in 2019, is based in Hamburg, Germany, a country that will see a very sharp increase in wind power investment – especially offshore – in the coming years, as its nuclear power plants are decommissioned. Wind power, solar power and hydro power assets are Aquila European Renewables' preferred technologies.

Over the past three years, Aquila European Renewables has expanded aggressively, and it now has a generation capacity of 332MW (the Rocks and Albeniz plants are included in the figure). Scandinavia, especially Norway, has emerged as its prime wind generation market, where its 23.8% stake in the 150MW Tesla plant in Sweden and its 13.8% stake in the controversial 400MW Rocks onshore wind project in Norway are cornerstone investments. Aquila European Renewables also owns valuable assets at Olhava in Finland and at Svindbaek in Denmark. In southern Europe, it has acquired a portfolio of hydro assets in Portugal, along with Albeniz, a 50MW solar business, in southern Spain.

At the time of its IPO in May 2019, Aquila European Renewables raised €154m, which has been progressively invested in a diversified portfolio of renewable generation assets across mainland Europe, although not in the UK. More recently, in November 2020, it raised a further €127m and, in September 2021, another €90m of equity capital was secured. Aquila European Renewables' latest NAV figure is 87.9p (c103.42) per share. Despite a low dividend cover, the 2022 dividend is expected to rise by ca.5% to 4.50p (c5.25) per share.

Atrato Onsite Energy (market cap. £158m)

ROOF
ATRATO ONSITE ENERGY

The core business of Atrato Onsite Energy is the onshore renewable assets market. More specifically, though, it focuses on the installation of energy equipment on the rooftops of commercial properties, such as supermarkets, which it argues is a somewhat neglected area in terms of energy efficiency potential.

It is likely that various agreements with participating organisations will be announced shortly – discussions with several companies are underway. Indeed, a deal with Marks & Spencer was recently announced, which will entail investment of almost £7m. In addition, a £10.6m solar power arrangement has just been agreed with the carmaker, Nissan, in Sunderland.

In its IPO, which took place in November 2021, Atrato Onsite Energy raised £150m from an issue that was significantly oversubscribed. Its NAV at December 2021 was 97.4p. A dividend payment of 5p per share has been flagged for 2021/22.

Downing Renewables and Infrastructure (market cap. £207m)

Downing

Downing Renewables and Infrastructure is assembling a portfolio of generation investments in key European markets, notably in Sweden where it has been focussing on the hydro-electric plants, as well as in the UK.

Initially, Downing Renewables and Infrastructure bought eight hydro – mainly run-of-river – plants in Sweden, with a capacity of 26MW, from Fortum AB, for £60m. Subsequently, it has acquired other hydro plants there. On the solar front, it has invested £42m to acquire capacity of 96MW, 78MW of which is in Great Britain, with the remaining 18MW in NI. Downing Renewables and Infrastructure now has total generating capacity of 175MW. In terms of technology, the split is 54% for hydro power and 28% for solar power.

As part of its IPO in December 2020, Downing Renewables and Infrastructure raised over £122m of proceeds (gross), part of which it has used to finance the purchase of its hydro plant portfolio in Sweden and its solar portfolio in the UK: it raised a further £53m in June 2022. Downing Renewables and Infrastructure's latest NAV is 110.1p per share; a 5.0p dividend per share for 2022 is expected.

Ecofin US Renewables Infrastructure (market cap. £121m)

Excepting the Whirlwind acquisition, solar generation in certain selected states in the US lies at the heart of the model for Ecofin US Renewables. To finance its expansion, Ecofin US Renewables undertook an IPO on the LSE in 2020.

Ecofin US Renewables Infrastructure's initial priority had been to complete the acquisition of its four seed portfolios; this has now been achieved. The 49.5% stake in two Californian solar plants, Beacon Solar 2 and Beacon Solar 5, with a total capacity of 108MW, is integral to its underlying valuation. Seeds 2, 3 and 4, with a total capacity of 23MW, were completed earlier, so that Ecofin US Renewables Infrastructure is now the owner of several energy assets in Massachusetts and has operating generation plant in four other states. In addition to completing its 60MW Whirlwind Energy acquisition in Texas – as the name implies, a wind asset rather than a solar asset – Ecofin US Renewables Infrastructure is expected to pursue further similar initiatives. With 71 assets in four states, its total capacity is now 203MW.

At its IPO in December 2020, Ecofin US Renewables Infrastructure raised $125m (£105m) (gross). If further substantial acquisitions are undertaken, additional fundraising – whether through debt or equity – will be needed. Its NAV at June 2022 was 81.7p (c97.3) per share. A 4.55p (c5.50) dividend per share payment is expected for this calendar year.

Gore Street Energy Storage (market cap. £572m)

This fund continues to invest in a diversified portfolio of utility-scale BESS projects – it operates in the same space as Gresham House Energy Storage. More specifically, Gore Street Energy Storage uses battery cell technology to provide frequency balancing services to grid operators; this is undoubtedly an expanding market. Moreover, it is optimistic about revenue growth arising from its "dynamic containment" technical initiative.

Country-wise, Gore Street Energy Storage has been focused on the UK and the RoI. In both countries, it has been assembling a portfolio of BESS investments. Gore Street Energy Storage now owns a total of 262MW of operating assets – a figure that is set to rise markedly over the next two years. Most of its operational capacity is UK-based, although it holds 30% stakes in the 30MW Kilmannock and in the 30MW Porterstown BESS plants in the RoI. Both sites are set to increase their capacity following consent for major grid upgrades locally. Gore Street Energy Storage is also looking internationally and has recently completed BESS deals with ERCOT in Texas – three of the BESS plants are operational – and has also secured a 90% stake in a project at Cremzow in Germany.

In terms of its finances, Gore Street Energy Storage has been busy raising funds of late. In total, since January 2020, Gore Street Energy Storage has raised proceeds of almost £450m (gross): £150m was secured in April 2022. Gore Street Energy Storage's latest NAV, published in its final results for 2021/22, was 107.1p per share. For 2021/22, Gore Street Energy Storage is paying a dividend of 7p per share and, for 2022/23, of up to 8p per share, although this latter payment is conditional on the level of NAV growth.

Gresham House Energy Storage (market cap. £860m)

Gresham House Energy Storage is the larger of the two quoted REIFs in the BESS sub-sector. Investing in BESS plants is its core business, which enables it to provide frequency balancing services to grid operators. Its shares have performed very impressively over the past year – up by 30%.

On the trading front, Gresham House Energy Storage is benefiting from the many arbitrage opportunities that have recently arisen as UK renewable generation output rises; the recent gas-driven spikes in power prices provide an obvious example. More specifically, Gresham House Energy Storage was awarded valuable contracts in the recent T1 and T4 capacity auctions. Furthermore, it now has utility-scale BESS assets at many different sites in England and Scotland, after a pronounced build-up over the past three years. Its plant capacity has now risen to 425MW, with a similar capacity currently under construction. However, this figure is set to be dwarfed by the planned delivery of the existing pipeline of 707MW, which – if delivered – would expand capacity up to almost 1,600MW by 2024: it includes a 180MW plant in County Louth, RoI.

Including its IPO in November 2018, Gresham House Energy Storage has raised ca.£500m of equity finance. With BESS technology being a popular sector for discerning investors, demand for Gresham House Energy Storage's shares has been heavy. Its latest reported NAV was 131.9 per share at March 2022, but its NAV is expected to have climbed to 145p per share by now. Furthermore, its very conservative 10.7% blended discount rate – way above the ca.7% average adopted by other REIFs – suggests some material hidden value. Gresham House Energy Storage plans to pay a 7p per share dividend for 2022.

Harmony Energy Income (market cap. £233m)

The focus of the Yorkshire-based Harmony Energy Income is clear-cut – developing and operating commercial-scale BESS projects in Britain: it is closely involved with the US-based Tesla in seeking to do so. Harmony Energy Income's current operating BESS capacity is 42MW.

Once completed, Harmony Energy Income's initial seed capacity should exceed 200MW, based on its holding of 50% stakes in five shovel-ready projects, with a total capacity of more than 400MW. The Pillswood project at East Cottingham in East Yorkshire is the largest, and its construction is progressing well. Its total capacity is 196MW, 98MW, of which is attributable to Harmony Energy Income. Engineering, procurement and construction (EPC) contracts have now been awarded for its four other smaller BESS projects. Harmony Energy Income is also involved in the operation of wind plants; it has, however, relinquished ownership of most of them. Solar installations also come within Harmony Energy Income's investment ambit, not just in the UK but also in New Zealand.

At its IPO in November 2021, Harmony Energy Income raised gross proceeds of £210m, much of which is being deployed into its seed assets, notably the Pillswood project. It benefits from a substantial investment by Ineos, a well-known, privately owned participant in the international oil and gas sector. Harmony Energy Income's NAV at April 2022 was 108.9p per share; it plans to pay a 2p dividend in its 2022/23 financial year and a decidedly ambitious 8p per share in 2023/24.

HydrogenOne Capital Growth (market cap. £111m)

Given the undoubted investor interest in the developing hydrogen market, HydrogenOne Capital Growth is well-positioned to deliver significant benefits for its shareholders, once it has assembled a decent portfolio of hydrogen-based assets. To date, HydrogenOne Capital Growth has not identified a single specific element of the emerging hydrogen market on which to focus, although the hydrogen/gas relationship is likely to be pivotal. Government policy on many hydrogen-related issues, including the scope to redeploy the existing UK gas network, remains unclear: the recent surge in gas prices may well delay this process.

Recently, HydrogenOne Capital Growth confirmed that a majority of the net proceeds from its July 2021 IPO had been invested, mostly in three private companies. Several relatively modest investments have been made, including the £10m investment in Bramble Energy, which is involved in the fuel cells market. Overseas, a £20m stake in Elcogen, an Estonian-based undertaking, has been acquired.

At its IPO, HydrogenOne Capital Growth raised gross proceeds of £107m on the back of considerable investor interest – from the growth potential angle. A further £21m (gross) was raised in April 2022. Its latest NAV, at March 2022, was 96.8p per share. HydrogenOne Capital Growth, as its name implies, has no interest in paying large dividends; but it does seek to make sufficient payments to enable it to retain its investment trust status. Its shares have been weak of late, down by 29% since the start of the 2022.

Octopus Renewables Infrastructure (market cap. £622m)

Octopus Renewables Infrastructure undertook its IPO in December 2019. In assembling its pan-European portfolio, it is focusing on the wind and solar generation market. While the UK is expected to account for much of the investment, there are other countries of investment interest, including mainland Europe – with wind projects in the north and solar projects in the south – as well as Australia. Interestingly, Octopus Renewables Infrastructure has prescribed a maximum 60% exposure – by gross asset valuation – for both wind and solar investments.

Aside from the UK, where it owns 123MW of solar plant, Octopus Renewables Infrastructure is now active in most major EU markets. Its total generation capacity is 442MW (this includes its 71MW capacity in Finland, its 59MW capacity in Poland and its 21MW share of the Lincolnshire project). Octopus Renewables Infrastructure has also acquired wind capacity in Sweden. Overall, in capacity terms, the 120MW solar portfolio in France is the most significant international deal to date. Looking forward, Octopus Renewables Infrastructure plans a major investment in a 175MW solar farm in Andalucía, Spain.

Having raised proceeds of £350m (gross) at its IPO in 2019, there is no immediate need for additional funding, although Octopus Renewables and Infrastructure has a formidable investment pipeline, some of which may necessitate, in time, further fundraising. However, the combination of a £150m RCF, agreed in November 2020, and two recent fundraises – totalling £224m (gross) – suggests that further quite rapid expansion is likely. Octopus Renewables and Infrastructures' NAV at March 2022 was confirmed as 104.0p per share and is expected to exceed 109.0 per share shortly, on the back of higher power price assumptions. A 5.24p per share dividend is being targeted for 2022.

Pantheon Infrastructure (market cap. £446m)

Undoubtedly, Pantheon Infrastructure's investment plans are both ambitious and wide-ranging. In its Prospectus, it identified the following as possible targets: digital infrastructure, renewables and energy efficiency, power and utilities, transport and logistics, and social investment. Under the transport and logistics head, ports, rail, road and airports were cited. In terms of timing, Pantheon Infrastructure is seeking to acquire between eight and 12 assets by the autumn of 2022 – discernible progress in this regard has already been made over the past six months.

To date, ca.£240m has been invested in nine different projects – thereby averaging £27m per project. They have been spread across several sectors – digital infrastructure and gas transmission being the most prominent. The US market seems particularly appealing to Pantheon Infrastructure – its three most recent completed acquisitions have all been there. In time, Pantheon Infrastructure's portfolio may begin to resemble that of 3i Infrastructure – but with less risk, lower returns and higher US exposure.

Pantheon Infrastructure's IPO in November 2021 was very strongly supported in that its £300m fundraising target was easily reached; eventually, a figure of £400m was prescribed – and, even then, some scaling back was necessary. Our estimated NAV for Pantheon Infrastructure, at the end of March 2022, was 98.0p per share; it has also confirmed a 2.0p per share dividend target for 2022.

ThomasLloyd Energy Impact (market cap. £102m)

ThomasLloyd Energy Impact undoubtedly breaks new ground for the REIFs. Its planned investments are in Asia – a geographical spread that is unique to the existing sector. India, the Philippines, Indonesia, Vietnam, Bangladesh and Sri Lanka - prior to its recourse for emergency loans to the International Monetary Fund (IMF) - have all been confirmed as target markets. Undoubtedly, the economies of these countries have real long-term growth potential, and additional power capacity will be much-needed. ThomasLloyd Energy Impact describes itself as "the first and only impact-focused company on the LSE dedicated to sustainable energy infrastructure projects aimed at helping reduce Asia's significant greenhouse emissions". Clearly, in so vast a potential market – some 4.6bn people currently live in Asia – project selection will be key, which will presumably be underpinned by long-term PPAs.

Currently, ThomasLloyd Energy Impact has nine solar power projects operating in the Philippines. It is also planning to buy shortly – for ca.$34.5m (£29m) – a 43% stake in SolarArise, a Delhi-located solar generation company with a formidable 434MW of capacity, 234MW of which is currently operational. Furthermore, by 4Q'22, ThomasLloyd Energy Impact hopes to have acquired the remaining 57% in SolarArise for ca.$38.5m (£32.3m).

At its IPO in December 2021, ThomasLloyd Energy Impact confirmed the issue of 100m new shares, raising gross proceeds of £100m – falling well below its Prospectus target. Importantly, if 100% ownership of SolarArise were to be achieved, Thomas Lloyd Energy Impact would have invested over 60% of its IPO proceeds. Its latest NAV, at March 2022, was 84.7p (c100.9) per share. The 2022 dividend target of 2.1p (c2.5) is not unduly aggressive, but the longer-term dividend policy – stated in the Prospectus as yielding 7%+ by year three – may well be.

Triple Point Energy Efficiency (market cap. £89m)

Triple Point Energy Efficiency, whose IPO took place in October 2020, is focused on three specific sectors: low carbon heat (local and distributed), social housing retrofit and industrial energy efficiency, and distributed generation (hydro and solar). Given that all three of these sub-sectors are complex and that any deal will necessarily involve several parties, it is perhaps not surprising that investment initiatives, to date, have been both very slow and distinctly cautious.

In seeking acquisitions within the £5m to £30m band, Triple Point Energy Efficiency has invested, via the Teesside-based Spark Stream, in CHP-related assets. Nine operational small hydro plants in Scotland have also been acquired at a cost of £46m – all are covered by Feed-in-Tariffs. Recently, Triple Point Energy Efficiency began investing in the BESS market, with the provision of a £46m fixed rate debt facility for Virmati Energy to pursue BESS construction opportunities. In terms of the overall pipeline, the figure now exceeds £500m, although few of these projects will come to fruition.

At its IPO, Triple Point Energy Efficiency raised £100m (gross) of proceeds; part of these proceeds seems likely to fund UK acquisitions in the specified fields in coming months. Triple Point Efficiency's NAV at March 2022 was 96.1p per share. Although there is apparently no published target, a dividend of ca.5.70p per share is expected for the 2022/23 financial year.

US Solar (market cap. £245m)

US Solar's declared aim is to invest in solar power assets, predominantly in the US, where many states offer attractive financial incentives for solar power development – the investment pipeline disclosed more than 60 projects, located across 13 US states. While, in time, investments in Canada and Mexico are also possible, the current focus is very much on states on the US east and west coasts, as well as on its Milford plant in Utah.

So far, US Solar has assembled a portfolio of 543MW of solar generation capacity with 42 fully operational assets across four states. Within US Solar's portfolio, its largest investments – 28 in all – are now in North Carolina, with a capacity of 168MW. Aside from the 128MW Milford facility in Utah, the 140MW of capacity in Oregon is also pivotal to US Solar's underlying valuation.

In April 2019, US Solar raised proceeds of $200m (£168m) (gross) at its IPO. Subsequently, in May 2021, a further $132m (£111m) (gross) was raised. Given its overtly expansionist aims, further equity issues are likely, despite the share price weakness in recent months. The latest NAV figure is 80.2p (c96.7) per share. A 4.60p (c5.58) dividend per share is planned for the 2022 financial year.

Victory Hill GSEO (market cap. £465m)

Victory Hill GSEO plans to "invest in a diversified portfolio of global sustainable energy infrastructure assets". It has identified a seed portfolio – "the enhanced pipeline" – of potential investments, with a total cost of ca.£305m.

To date, Victory Hill GSEO has signed commitments for investments in three projects. Its lead UK project – at a total of £78m – is to fund two flexible CHP plants, with a combined capacity of 45MW, one of which is in Nottingham and the other in County Durham (it has already completed the acquisition of a 10MW plant in Nottingham). Its three other well-advanced projects are in the US, Brazil and Australia. In the US, ca.£50m has been spent on acquiring two terminal storage sites on the Texas coast. In both Brazil and Australia, similar amounts are to be invested in 18 remote solar distribution plants in 10 Brazilian states and in distributed solar generation in the case of the latter.

At its IPO in January 2021, Victory Hill GSEO raised over £242m of gross proceeds, much of which seem destined to finance the seed portfolio. In November 2021, £70m (gross) of new equity was raised: a further £150m (gross) of new equity capital was secured in June 2022. Victory Hill GSEO's latest NAV at March 2022 was 107.6p per share. It is planning to pay a 5p per share dividend in its 2022 financial year.

Environmental Investment Trusts (EITs)

Although their business models are somewhat different from those of the 31 IICs and REIFs analysed in this document, we also assess briefly the three Environmental Investment Trusts (EITs), which are classified as "Environmental" by the AIC. The three stocks concerned are Impax Environmental Markets, which is capitalised at £1,219m and the much smaller Jupiter Green and Menhaden Energy Resources.

Impax Environmental Markets (£1,219m)

Set out below are the key elements of the investment policy of Impax Environmental Markets – and its marked success in growing its NAV from 250p per share at the end of December 2018 to 415p per share at 14 July 2022; the latter figure has fallen back from 496p per share at 1 January 2022.

Investment sector: As an EIT that invests in the expanding environmental sector, Impax Environmental Markets focuses on four key areas: clean energy and energy efficiency; water treatment and pollution control; water technology and natural resource management; and sustainable food.

Fund aims: Impax Environmental Markets has stated that 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". Importantly, no investment is permitted to represent over 3% of the fund's value.

Portfolio: Impax Environmental Markets runs a diverse, environmentally orientated portfolio and has focused on the four key areas highlighted above. Its top 10 investments account for less than 24% of the portfolio's value. Just over one half of the portfolio is invested in the US, with a further 34% in Europe. The leading stock, with a 2.8% share, is the US-based Clean Harbors, which operates in the hazardous waste sector. The next two stocks, in terms of value, are PTC, a US software solutions business, and American Water Works, the largest publicly quoted US water utility.

Latest results: The 2021 full-year results were published in April 2022. The announcement confirmed an NAV, as at 31 December 2021, of 496p, a figure that has fallen back noticeably of late. The 2021 EPS return was down by ca.15% on the 2020 figure, although FV accounting policies seriously distorted the published figures. As for dividends, Impax Environmental Markets has declared modest dividends previously – just 2.8p per share in 2021. A major increase in Impax Environmental Markets' dividend per share in 2022 – currently yielding well below 1% – is most unlikely.

Impax Environmental Markets – full-year income statement 2021

£000	Year to 31/12/2021	Year to 31/12/2020
Gains/losses on investments	239,534	241,488
Net forex gains/losses	(314)	371
Income	15,195	9,322
Investment management fees	(9,883)	(6,395)
Other expenses	(1,360)	(1,097)
Activities before finance costs and tax	243,172	243,689
Finance costs	(1,471)	(1,348)
Return on ordinary activities before tax	241,701	242,341
Tax	(1,263)	(1,504)
Return on ordinary activities after tax	240,438	240,837
Return per ordinary share (p)	84.35	100.46

Source: Impax Environmental Markets, Hardman & Co Research

Jupiter Green (market cap. £41m)

Jupiter Green is an investment trust, which "invests globally in companies that have a significant focus on environment solutions". More specifically, it looks to invest across three key sectors – infrastructure, resources efficiency and demographics.

In terms of markets, 37% of Jupiter Green's assets are invested in US stocks, while the remaining 63% is well diversified. Importantly, no stock within its portfolio accounts for more than 4%. At March 2022, as shown by the recently published full-year results for 2021/22, the US-based Evoque Water Technologies was the largest shareholding at 4%. Koninklijke DSM, a health/nutrition business based in the Netherlands, and the well-known French water company, Veolia Enivironnement, each accounted for 3.4% of the portfolio.

Jupiter Green is currently trading at a 17% discount to its latest NAV of 231p. Owing to Jupiter Green's revised policy to switch its investment strategy more towards small, innovative companies, future dividend payments are expected to be either very modest or to be passed entirely.

Menhaden Resource Efficiency (market cap. £79m)

Menhaden Resource Efficiency's portfolio has a 63% exposure to North America and a 27% exposure to Europe: the UK element is just 6%. Its core holding is Alphabet – the owner of Google – representing 28% of the portfolio. Almost 18% of NAV is attributable to Charter Communications, a US-based connectivity business. The Microsoft holding accounts for a further ca.12%. Holdings in these major companies have been justified on the basis of their data storage activities – surely a wide interpretation of their investment criteria. The unquestionably energy-orientated X-ELIO, an expanding Spanish solar generation company, is the fourth-largest component of Menhaden Resource Efficiency's portfolio.

To preserve its investment trust status, Menhaden Resource Efficiency is expected to continue paying dividends, although no dividend was declared for 2021. More importantly, Menhaden Resource Efficiency continues to trade at a very pronounced discount – currently 27% – to its latest NAV of 135.6p per share. The weakness in the share valuations of both Alphabet and Microsoft – down by more than 20% since the start of 2022 – has been the key factor. Management continues to review the various options in its very challenging quest to narrow the large – and persistent – trading discount to NAV.

Databoxes

3i Infrastructure

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
Key markets	EU, UK and Norway
Year-end	Mar
Core portfolio	ca.20 infrastructure assets
NAV per share	303.3p (05/22)
Discount rate	10.9%
Market cap./share price	£2,924m/328p
Premium/discount to NAV	8.1%
Prospective DPS/yield	11.15p/3.4%
Return record	Since its IPO in 2007, TSR has averaged 13.1% per year

Source: 3i Infrastructure, Bloomberg

Aquila Energy Efficiency

Issue	
Status	REIF
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	97.4p (12/21)
Discount rate	n/a
Market cap./share price	£78m/78p
Premium/discount to NAV	-19.9%
Prospective DPS/yield	nil/n/a
Return record	n/a

Source: Aquila Energy Efficiency, Bloomberg

Aquila European Renewables

Issue	Comments
Status	REIF
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	332MW
Year-end	Dec
NAV per share	(c103.4)/87.9p (03/22)
Discount rate	6.6%
Market cap./share price	£350m/86p
Premium/discount to NAV	-2.3%
Prospective DPS/yield	(c5.25)/4.50p/5.2%
Return record	Since its IPO in June 2019, TSR has been 6.6%

Source: Aquila European Renewables, Bloomberg

Atrato Onsite Energy	
Issues	**Comments**
Status	REIF
Ticker/website	ROOF/www.atrato.roof.com
Fund aim	"The company's investment objective is to support the net zero agenda whilst delivering capital growth and progressive dividend income to its shareholders"
Key sectors	Solar – roof installations
Key markets	UK (commercial, especially supermarkets)
Core portfolio capacity	n/a
Year-end	Sep
NAV per share	97.4p (03/21)
Discount rate	n/a
Market cap./share price	£158m/105p
Premium/discount to NAV	7.8%
Prospective DPS/yield	5.0p/4.8%
Return record	n/a

Source: Atrato Onsite Energy, 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	140.7p (12/21)
Discount rate	6.55% (12/21)
Market cap./share price	£1,148m/161p
Premium/discount to NAV	+14.4%
Prospective DPS/yield	7.48p/4.6%
Return record	Since its IPO in 2011, TSR has averaged 10.4% 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	673MW (pre major UK acquisition)
Year-end	Jun
NAV per share	127.0p (03/22)
Discount rate	6.0%
Market cap./share price	£800m/131p
Premium/discount to NAV	3.1%
Prospective DPS/yield	8.16p/6.2%
Return record	Since its IPO in 2013, TSR has averaged 8.4% per year

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 cash flows"
Key sectors	Digital infrastructure
Key markets	Czech Republic, US, Poland
Core portfolio	Digital networks in Eastern Europe
Year-end	Mar
NAV per share	110.1p (03/22)
Discount rate	n/a
Market cap./share price	£805m/104p
Premium/discount to NAV	-2.4%
Prospective DPS/yield	4.0p/3.8%
Return record	n/a

Source: Cordiant Digital Infrastructure, Bloomberg

Digital 9 Infrastructure

Issue	Comments
Status	IIC
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	RoI, UK, mainland EU, Middle East
Core portfolio	Digital networks
Year-end	Dec
NAV per share	104.1p (12/21)
Discount rate	n/a
Market cap./share price	£960m/111p
Premium/discount to NAV	6.7%
Prospective DPS/yield	6.00p/5.4%
Return record	Since its IPO in March 2021, TSR has averaged 16.9% per year

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 and solar generation
Key markets	Sweden, GB
Core portfolio capacity	175MW
Year-end	Dec
NAV per share	110.1p (03/21)
Discount rate	7.3%
Market cap./share price	£207m/112.0p
Premium/discount to NAV	1.7%
Prospective DPS/yield	5.0p/4.5%
Return record	Since its IPO in January 2021, TSR has averaged 16.1% per year

Source: Downing Renewables and Infrastructure, Bloomberg

Ecofin US Renewables Infrastructure

Issue	Comments
Status	REIF
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 generation
Key markets	US (California, Texas, Massachusetts)
Core portfolio capacity	155MW
Year-end	Dec
NAV per share	(c97.3) 81.7p (06/22)
Discount rate	7.2%
Market cap./share price	£121m/87p
Premium/discount to NAV	6.9%
Prospective DPS/yield	(c5.50)/4.55p/5.2%
Return record	n/a

Source: Ecofin US Renewables, 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	1,043MW solar (inc.751MW in UK, 167MW in Australia and 125MW in Spain)
Year-end	Dec
NAV per share	117.1p (03/22)
Discount rate	6.26%
Market cap./share price	£720m/118p
Premium/discount to NAV	0.8%
Prospective DPS/yield	7.12p/6.0%
Return record	Since its IPO in 2013, TSR has averaged 7.3% 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	48 investments, mainly energy and PPP/PFI stakes
Year-end	Sep
NAV per share	114.3p (06/22)
Discount rate	4.6%-10.4% for Level 3 assets
Market cap./share price	£955m/108p
Premium/discount to NAV	-5.5%
Prospective DPS/yield	7.0p/6.5%
Return record	Since its IPO in 2010, TSR has exceeded 130%

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	Energy storage systems
Key markets	UK, RoI, US
Core portfolio capacity	292MW (operational as at 06/22) of energy storage systems
Year-end	Mar
NAV per share	107.1p (06/22)
Discount rate	8.31%
Market cap./share price	£572m/119p
Premium/discount to NAV	11.1%
Prospective DPS/yield	8.00p/6.7%
Return record	Since its IPO in 2018, TSR has been 37%

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, France, Nordics
Core portfolio capacity	1,079MW of wind, mainly in RoI, and including 65MW of new capacity in France
Year-end	Dec
NAV per share	(c108.6) 92.3p (03/22)
Discount rate	6%-7%
Market cap./share price	£1,154m/101p
Premium/discount to NAV	9.6%
Prospective DPS/yield	(c6.18)/5.25p/5.2%
Return record	Since its IPO in 2017, TSR has been ca.40%

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	1,460MW
Year-end	Dec
NAV per share	153.6p (06/22)
Discount rate	7.7%
Market cap./share price	£3,573m/154p
Premium/discount to NAV	0.3%
Prospective DPS/yield	7.72p/5.0%
Return record	Since its IPO in March 2013, TSR has been 125.6%

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	Energy storage
Key markets	UK, RoI
Core portfolio capacity	425MW of battery storage systems in the UK
Year-end	Dec
NAV per share	131.9p (03/22)
Discount rate	10.7%
Market cap./share price	£860m/159p
Premium/discount to NAV	+0.5%
Prospective DPS/yield	7.00p/4.4%
Return record	Since its IPO in November 2018, TSR has been 51.5%

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	Energy storage, wind generation
Key markets	UK
Core portfolio capacity	n/a
Year-end	Oct
NAV per share	108.9p (03/22)
Discount rate	n/a
Market cap./share price	£233m/111p
Premium/discount to NAV	1.9%
Prospective DPS/yield	2.0p/1.8%.
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	163.1p (03/22)
Discount rate	6.60%
Market cap./share price	£3,439m/169p
Premium/discount to NAV	3.6%
Prospective DPS/yield	8.25p/4.9%
Return record	Since its IPO in 2006, TSR has averaged 9.0% 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
Core portfolio capacity	n/a
Year-end	Dec
NAV per share	96.8p (03/22)
Discount rate	n/a
Market cap./share price	£111m/86p
Premium/discount to NAV	-11.2%
Prospective DPS/yield	nil/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 are below 3% of its portfolio
Year-end	Mar
NAV per share	415p (07/22)
Discount rate	n/a (virtually all investments are quoted)
Market cap./share price	£1,219m/401p
Premium/discount to NAV	-0.3%
Prospective DPS/yield	2.8p/n/m
Return record	Since 2/2002, its share price has risen by ca.4.5x – modest dividends have been paid in some years

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	UK
Year-end	Dec
Core portfolio	Electricity, gas and water price-regulated assets
NAV per share	148.2p (12/21)
Discount rate	6.97%
Market cap./share price	£3,075m/161p
Premium/discount to NAV	8.6%
Prospective DPS/yield	7.74p/4.8%
Return record	Since its IPO in 2006, TSR has been 8.5% per year

Source: INPP, Bloomberg

JLEN

Issues	Comments
Status	REIF
Ticker/website	JLEN/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	37 investments with 372MW capacity, 169MW of which is wind and 80MW solar – almost entirely UK
Year-end	Mar
NAV per share	115.3p (03/22)
Discount rate	7.3%
Market cap./share price	£787m /119p
Premium/discount to NAV	3.2%
Prospective DPS/yield	7.14p/6.0%
Return record	Since its IPO in March 2014, TSR has been 77.4%

Source: JLEN, Bloomberg

Jupiter Green

Issues	Comments
Status	EIT
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	UK
Core portfolio	EU, UK,US
Year-end	Mar
NAV per share	231p (07/22)
Discount rate	n/a
Market cap./share price	£41m/193p
Premium/discount to NAV	-16.5%
Prospective DPS/yield	0.64p/n/m
Return record	Since its launch in 2006, its shares have risen by ca.90%

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 Charter Communications stakes
Year-end	Dec
NAV per share	135.6p (07/22)
Discount rate	n/a (ca.88% of assets are quoted)
Market cap./share price	£79m/99p
Premium/discount to NAV	-27%
Prospective DPS/yield	nil/n/a
Return record	Since July 2015, its shares are broadly unchanged

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	865MW solar of which 830MW in UK, 35MW in Italy
Year-end	Mar
NAV per share	113.5p (03/22)
Discount rate	6.3%
Market cap./share price	£654m/111p
Premium/discount to NAV	-2.2%
Prospective DPS/yield	7.52p/6.8%
Return record	Since its IPO in 2014, TSR has been 6.7% per year

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	France, UK, Nordics, Spain
Core portfolio capacity	442MW of pan-European assets (the 21MW share of the Lincolnshire portfolio is included)
Year-end	Dec
NAV per share	104.0p (03/22)
Discount rate	6.8%
Market cap./share price	£622m/110p
Premium/discount to NAV	+5.8%
Prospective DPS/yield	5.24p/4.8%
Return record	Since its IPO in 2019, TSR has been 17.7%

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 and other developed countries
Core portfolio	Digital infrastructure and gas transmission
Year-end	Dec
NAV per share	98.0p (est.) (07/22)
Discount rate	n/a
Market cap./share price	£446m/102p
Premium/discount to NAV	+3.9%
Prospective DPS/yield	2.00p/2.0%
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	108.4p (03/22)
Discount rate	7.0% (unlevered)
Market cap./share price	£1,178m/119p
Premium/discount to NAV	9.8%
Prospective DPS/yield	6.00p/5.0%
Return record	Since its IPO in 2018, TSR has been 39.4%

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 sub-sectors"
Key sectors	Economic infrastructure debt
Key markets	US, EU, UK
Core portfolio	TMT, transport, power
Year-end	Mar
NAV per share	100.5p (03/22)
Discount rate	Varied
Market cap./share price	£1,469m/83p
Premium/discount to NAV	-17.4%
Prospective DPS/yield	6.25p/7.5%
Return record	Since its IPO in 2015, TSR has been ca.35%

Source: Sequoia Economic Infrastructure, Bloomberg

ThomasLloyd Energy Impact	
Issues	**Comments**
Status	REIF
Ticker/website	TLEP/www.tlenergyimpact.com
Fund aim	"The infrastructure investment platform offers unique access to the growth market for infrastructure in Asia – based on a broad range of dependable investment solutions that reflect two key investor demands – real assets with stable valuations and attractive potential returns, and responsible and sustainable investments"
Key sectors	Renewable generation
Key markets	Philippines, India, East Asia
Core portfolio capacity	32MW
Year-end	Dec
NAV per share	84.7p (03/22)
Discount rate	n/a
Market cap./share price	£102m/88p
Premium/discount to NAV	+3.9%
Prospective DPS/yield	2.10p/2.1%
Return record	n/a

Source: ThomasLloyd Energy Impact, 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, Nordics, Germany, France
Core portfolio capacity	1,729MW – ca. 57% of which are in the UK
Year-end	Dec
NAV per share	134.2p (6/22)
Discount rate	6.60%
Market cap./share price	£3,348m/135p
Premium/discount to NAV	0.6%
Prospective DPS/yield	6.84p/5.81%
Return record	Since its IPO in 2013, TSR has been 8.3% per year

Source: TRIG, Bloomberg

Triple Point Energy Efficiency	
Issues	**Comments**
Status	REIF
Ticker/website	TEEC/www.tpenergyefficiency.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	96.1p (03/22)
Discount rate	n/a
Market cap./share price	£89m/89p
Premium/discount to NAV	-7.4%
Prospective DPS/yield	5.70p/6.4%
Return record	n/a

Source: Triple Point Energy Efficiency, 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 (East Coast, Oregon and Utah)
Core portfolio capacity	543MW of solar plant in five US states
Year-end	Dec
NAV per share	(c96.7) 80.2p (03/22)
Discount rate	n/a
Market cap./share price	£245m/74p
Premium/discount to NAV	-7.8%
Prospective DPS/yield	(c5.58)/4.60p/6.2%
Return record	n/a

Source: US Solar, Bloomberg

Victory Hill GSEO	
Issues	**Comments**
Status	REIF
Ticker/website	*VICT/www.vh-gseo.com*
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	CHP generation
Key markets	UK
Core portfolio capacity	nil (10MW under construction)
Year-end	Dec
NAV per share	107.6p (03/22)
Discount rate	n/a
Market cap./share price	£465m/110p
Premium/discount to NAV	+2.2%
Prospective DPS/yield	5.00p/4.5%
Return record	n/a

Source: Fund website, Bloomberg

Conclusion

Is the going getting tougher?

Both the IIC and the REIF sectors, as defensive investments, still look to be well placed. After all, their earnings are high-quality – often backed by public sector contracts or PPAs – while their dividend payment profiles are sound and, in most cases, secure, although any increases may be modest.

The inflation boost

While rising inflation is a major issue, especially in the UK where a figure of ca.10% is expected, both IICs and REIFs generally gain from higher inflation due to locked-in price increases – providing that higher interest rates do not follow; the latter is an unlikely scenario. Most mature IICs and leading REIFs have inflation protection of between 40% and 75%.

REIFs benefit from higher power prices

Those REIFs involved in electricity generation particularly welcome higher power prices since they boost their revenue lines and their NAVs. Few sectors derive such obvious benefits from higher generation prices, which are being driven upwards by increased gas prices.

Higher interest rates and lower power prices are key risks

IICs are exposed to risks, with higher interest rates being one obvious concern, along with the revenue risk of holding demand-based assets. Both the leading REIF sub-sectors, wind and solar generation, are exposed to potentially lower power prices – not an issue currently – and higher interest rates, which would adversely affect all funds, although some to a greater extent than others.

Inflation protection

Nonetheless, quoted IICs and REIFs continue to offer appeal on several fronts, with dividends expected to rise at least in nominal terms, on the back of a combined sector yield of between 4% and 6.0%. In addition, there is significant protection against higher inflation, although rising interest rates would clearly be a negative factor.

As such, despite their low profile, IICs and REIFs are expected to be of increasing interest to the discerning investor.

Appendix 1

Glossary

Glossary	
AD	Anaerobic Digestion
AIC	Association of Investment Companies
BESS	Battery Energy Storage System
CfD	Contract for Difference
CHP	Combined Heat and Power
CMA	Competition and Markets Authority
CPI	Consumer Price Index
Discount to NAV	Amount at which a fund's shares trade below NAV
EV	Enterprise Value
EIT	Environmental Investment Trust
FM	Facilities Management
FV	Fair Value
GWh	Gigawatt hour – electricity generation per hour
IFRS	International Financial Reporting Standards
IIC	Infrastructure Investment Company
IMF	International Monetary Fund
IPO	Initial Public Offering
MWh	Megawatt hour – electricity generation per hour
NAV	Net Asset Value
NI	Northern Ireland
NTMA	National Treasury Management Agency
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
REC	Regional Electricity Company
REIF	Renewable Energy Infrastructure Fund
RoI	Republic of Ireland
ROC	Renewable Obligation Certificate
RPI	Retail Price Index
SPV	Special Purpose Vehicle
TMT	Technology, Media and Telecom
TSR	Total Shareholder Return
TWh	Terawatt hour – electricity generation per hour

Source: Hardman & Co Research

Appendix 2

Possible questions

We list below various questions that might reasonably be asked of the Directors of IICs or of REIFs.

- What is the impact on your business model of higher inflation and higher interest rates?
- How is your NAV calculated?
- What projections are you using for long-term power prices?
- What is the blended discount rate that you use for your NAV calculations?
- What percentage of your revenues is subsidy-driven?
- To what extent have you been adversely impacted by COVID-19?
- How difficult is it for you to find new investments at an attractive price that meet your financial return requirements?
- What is your policy regarding investment in demand-based assets?
- How do you account – in valuation terms – for "tuck-in" acquisitions?
- Which overseas markets do you see as the most attractive for IIC/REIF investment – and why?
- What is your target annual growth rate?
- What has been your TSR since your IPO?
- What percentage of your revenues is covered by PPAs?
- 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?

About the author

Nigel Hawkins

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.

Between 1984 and 1987, Nigel was the Political Correspondence Secretary to Lady Thatcher at 10 Downing Street.

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