

John Laing Environmental Assets Group

Life extensions to boost NAV?

John Laing Environmental Assets Group (JLEN) says its NAV per share at the end of December 2018 was 102.8p, up 2.4p over three months. The dividend remains on-track to match the target of 6.51p for the year. Revenue generation was on budget, reflecting above-budget power generation from JLEN's anaerobic digestion and solar power assets. This offset the impact of low wind speeds on its wind farms.

In advance of its 31 March year-end, JLEN is examining the possibility of extending the economic lives of its wind and solar assets and suggests that this could positively impact on the NAV. In addition, JLEN is engaged in refinancing activity across its portfolio which could help improve returns. Also, Ofgem is engaged in a consultation, its 'Targeted Charging Review', looking at the embedded benefit revenues that make a small contribution to JLEN's returns (see page 7 of our last note for an explanation).

Progressive dividend from investment in environmental infrastructure assets

JLEN aims to provide its shareholders with a sustainable dividend, paid quarterly, that increases progressively in line with inflation. It also aims to preserve the capital value of its portfolio on a real basis over the long term. It invests in environmental infrastructure assets with predictable, wholly or partially index-linked cash flows, supported by long-term contracts or stable regulatory frameworks.

Year ended	Share price total return (%)	NAV total return (%)	Earnings per share (pence)	Dividend per share (pence)
31/03/15*	12.6	6.4	5.85	6.00
31/03/16	(2.5)	3.1	3.01	6.054
31/03/17	16.5	10.2	9.31	6.14
31/03/18	(1.8)	6.0	5.70	6.31

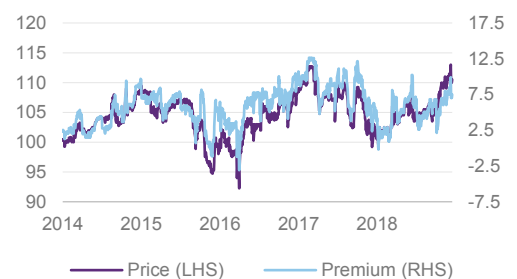
Source: Morningstar, Marten & Co. *period from launch 31 March 2014

Sector	Renewable infrastructure
Ticker	JLEN LN
Base currency	GBP
Price	109.0p
NAV	102.8p*
Premium/(discount)	6.0%
Yield	6.0%

* as at 31 December 2018

Share price and discount

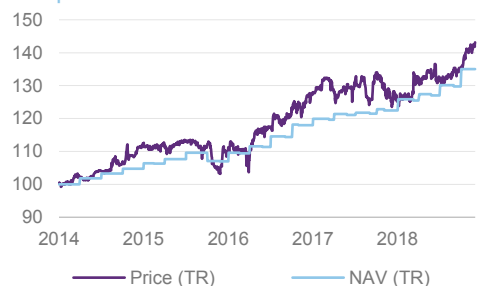
Time period 31/03/2014 to 06/03/2019



Source: Morningstar, Marten & Co

Performance since launch

Time period 31/03/2014 to 28/02/2019



Source: Morningstar, Marten & Co

Domicile	Guernsey
Inception date	31 March 2014
Manager	John Laing Capital Management
Market cap	541.7m
Shares outstanding	497.0m
Daily vol. (1-yr. avg.)	852,086 shares
Net cash	0%

[Click here for our annual overview note](#)

Positive progress

NAV rises to 102.8p, full-year 6.51p dividend target on track

The NAV uplift over the final quarter of 2018 (from 100.4p to 102.8p) reflects revenue generation in the period, less the quarterly dividend of 1.6275p; a change to the company's assumptions about long-term power prices; and a small reduction in the discount rate used to value the portfolio.

Power price assumption added 0.6p to end December NAV

As discussed in our last note, JLEN has switched to using a blend of forecast power prices supplied by two external consultants (in-line with industry norms). A revision to estimates made in Q4 2018 added 0.6p to the NAV. The assumption is that power prices will be higher in the medium term, but lower prices have been assumed for the long term. Short-term power prices have been pushed up, in part because of higher average gas prices across Europe and higher carbon prices.

Discount rate change added 2.1p to end December NAV

The discount rates for some wind and anaerobic digestion (AD) assets have been trimmed, reflecting prices paid for these assets. The net effect of a shift in the weighted average discount rate from 8.2% to 8.0% was to add 2.1p to the NAV. The range of discount rates used to value the portfolio is unchanged (ranging between 6.5% and 9.8%).

The AD portfolio

JLEN's managers say that the integration of the company's most recent AD acquisition, Welbeck, is going well and the upgrade work being undertaken at its Vulcan AD plant is progressing according to plan.

Welbeck, acquired through the £16.2m (subject to a working capital adjustment) purchase of Biogas Meden in December 2018, is situated around 25 miles southeast of Sheffield, South Yorkshire. The plant was commissioned in March 2016, has a thermal capacity of around 5MWth and predominantly produces biomethane to be injected into the national gas grid. The plant also has a 0.4 MWe CHP engine and is accredited under the Renewable Heat Incentive (RHI) and Feed-in-Tariff (FiT) schemes.

JLEN now has six AD assets and is seeking to double capacity at Vulcan plant

Following this transaction, JLEN has six AD assets. The upgrade to Vulcan was discussed in our last note and, at the half-year stage, JLEN confirmed that this could double that plant's capacity at a cost of £8.5m (which compares to an initial acquisition cost of £15.3m, including some working capital). The managers are looking at the rest of the AD portfolio for similar opportunities. They think that almost all of the AD plants in the portfolio might benefit from an upgrade, although these may not be on the same scale as Vulcan.

Four of the AD plants (Vulcan, Grange Farm, Merlin and Welbeck) are clustered in one area. This provides some synergies when it comes to feedstock acquisition and maintenance strategies. The managers say that there could be scope to further increase the density of the portfolio in this area, but would remind investors that the majority of AD plants are too small to be of interest to JLEN.

Refinancing opportunities

JLEN has a £130m revolving credit facility (RCF), provided by HSBC, NIBC, ING and Santander, that has been extended to June 2021. The margin on the facility is 200 to

225 bps (depending on JLEN's LTV). £103.6m of this was drawn down at the end of September 2018 but the £105m share issue completed in October 2018 was sufficient to repay that in full. Following this, JLEN bought Welbeck using the RCF.

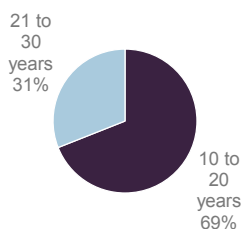
Project-level gearing at 30 September 2018 was 35.5%. Within that, gearing for the renewable energy assets was 29.4% (a relatively low level of long-term gearing relative to JLEN's listed peer group) and for the PFI assets 54.5%. The interest rates payable on this project-level debt vary and the debt is structured so that it will be fully amortised well before the end of the project's life.

Look for news of refinancing in annual results

The managers have been looking at opportunities to refinance projects within the portfolio, which they could achieve in a variety of ways. We hope to see news of this at the time of the forthcoming annual results, and would expect JLEN to achieve a reduction of its blended interest rate and improved terms.

Life extensions

Figure 1: Value split by asset life at 30 September 2018



Source: JLEN

One notable feature of the recent announcements from JLEN's peers has been discussion about extending the assumed life of the assets in their portfolios. Naturally, the managers have been exploring what is possible in that regard with respect to JLEN's portfolio.

Almost all of JLEN's projects sit on leased land. In some cases, JLEN already has rights to use the land for more than 25 years and for others the managers are investigating the scope for lease extensions with the landowners. Planning for these renewable energy assets was granted for a fixed period, but, again, it seems likely that planning permissions would be extended if requested.

Some additional repair and maintenance work might be required as the assets age. For example, solar panels degrade naturally, at a rate of about 0.4% to 0.5% per annum. This is something that the managers monitor and they will make a judgement call as to when is the appropriate point to replace older panels with new ones. That decision will reflect the falling price of panels.

Look for news of life extensions in annual results

JLEN is undertaking a formal review of the assumed lives of its projects and it says that the results of this review will be included in the Annual Report for 2018/19. Interestingly, the statement that accompanies the recent NAV announcement said that the uplift is expected to exceed the 1.2p sensitivity previously disclosed relating to potential life extensions on 25% of the wind and solar portfolios.

Other factors

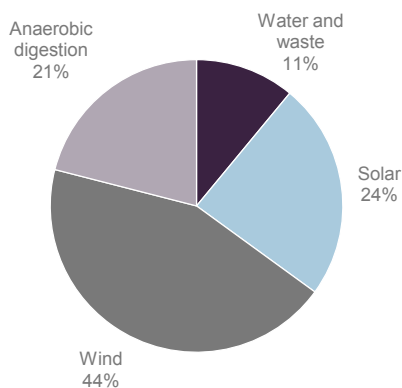
Whilst the managers are monitoring what is happening in the battery storage market, there is no current plan for JLEN to incorporate battery storage within its plants.

Ofgem is consulting on changes to embedded benefits, of which the most significant for owners of wind and solar assets are changes to the way in which costs associated with the Balancing System (the mechanism under which the network operator balances electricity supply and demand on the network) are allocated. The managers advise us that Balancing System Use of Service embedded benefits are typically worth about £1-2 per MWh for wind and solar assets depending on their position on the network.

Asset allocation

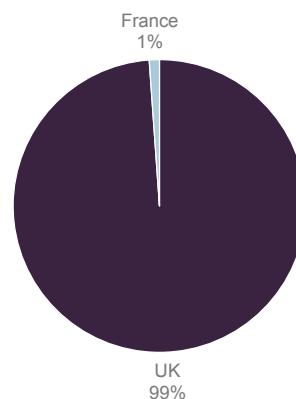
At the end of December 2018, JLEN's portfolio was diversified across 28 assets in four sectors and had a generating capacity of 279.2MW.

Figure 2: JLEN portfolio by type as at 31 December 2018



Source: JLEN, Marten & Co

Figure 3: JLEN portfolio by location as at 31 December 2018



Source: JLEN, Marten & Co

AD plants now represent a meaningful part of the portfolio. The increase in the percentage exposure to this area reflects the acquisition of the Welbeck AD plant and, to a lesser extent, the uplift in the valuation of the AD portfolio following the revision of the discount rate used to value those assets.

At the end of September 2018 (pre-Welbeck), 36% of revenue was related to sales of power, 53% to subsidies of some form and 11% to contracted PFI revenues. The addition of another AD plant will have increased the proportion from subsidy. 64% of JLEN's revenues were linked to inflation at the end of September 2018.

Performance

Generation in-line with budget

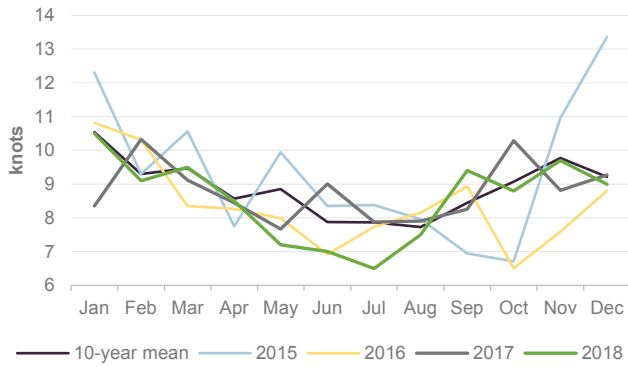
Below average wind speeds offset by higher sunshine hours and good performance from AD plants

At the half-year stage, JLEN said that generation from its solar plants was 1.5% above budget (despite a period of unavailability at Branden for a transformer and switchgear failure at the end of May), AD plants were 4.3% above budget and wind generation was 12% below budget (reflecting low wind speeds, see Figure 4, and an agreed curtailment of generation at Carscreugh, for which the company was compensated).

Up to date information on JLEN and its peers is available from the QuotedData website

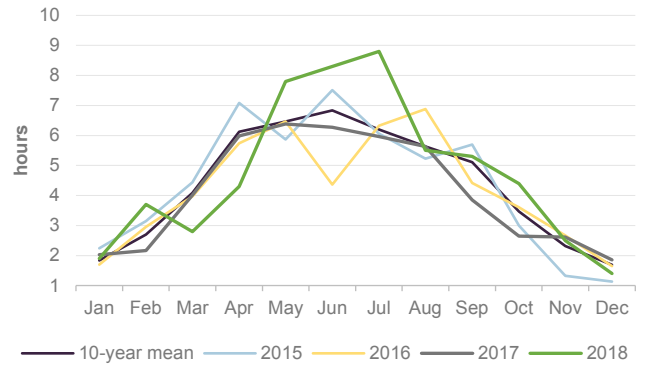
The update that accompanied the release of JLEN's end December 2018 NAV (published on 7 March 2019) said that generation for the final quarter of 2018 was in line with budget at 205.1GWh. Within that, generation from solar assets was on budget, the wind assets were slightly below budget, but this was offset by above-budget generation from the AD. Figure 6 shows how the total return from JLEN has developed since launch in NAV terms.

Figure 4: Average wind speeds in the UK



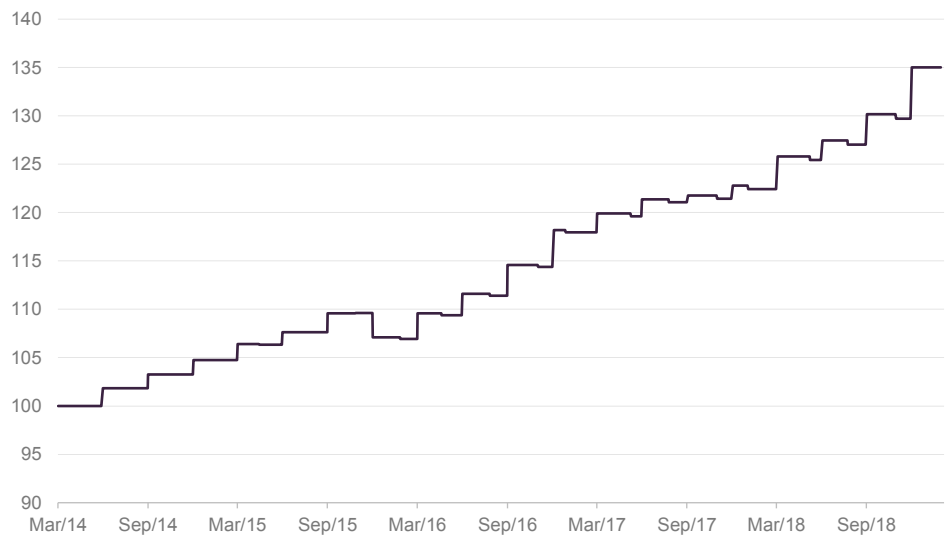
Source: The Met Office

Figure 5: Average sun hours in the UK



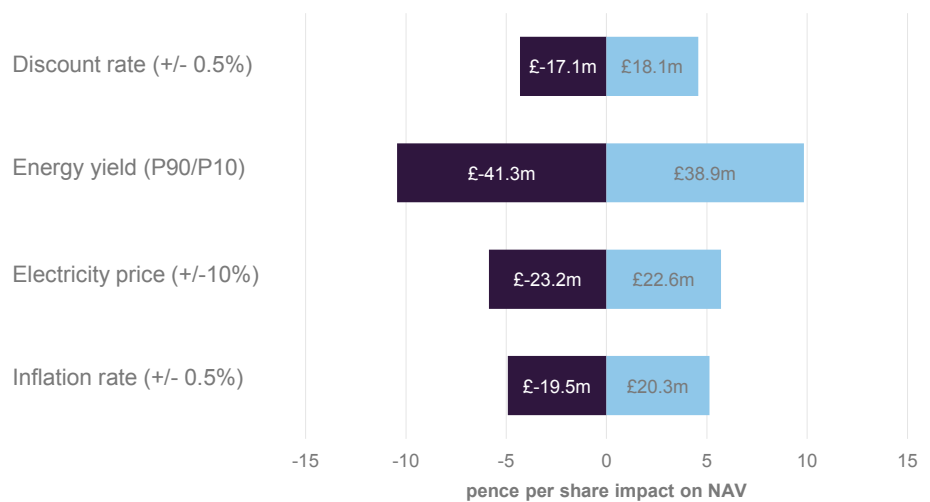
Source: The Met Office

Figure 6: JLEN NAV total return performance since launch rebased to 100



Source: Morningstar, Marten & Co

Figure 7: NAV sensitivity to various factors at 30 September 2018



Source: JLEN

Premium/(discount)

Figure 8: JLEN premium since launch



Source: Morningstar, Marten & Co

Over the past year, JLEN has traded between a discount of 0.2% and a premium of 12.6% and an average premium of 5.1%. The strength of JLEN’s premium may reflect its high and growing dividend and the relative predictability of its cash flows at a time when much else is uncertain.

Fund profile

The fund invests in renewable energy (including solar, wind, hydropower and biomass technologies), the supply and treatment of water, the treatment and processing of waste and projects that promote energy efficiency.

JLEN does not invest in new or experimental technology.

You can access the company’s website at www.jlen.com

John Laing Environmental Assets Group (JLEN) invests in infrastructure projects that use natural or waste resources or support more environmentally-friendly approaches to economic activity. This could involve the generation of renewable energy (including solar, wind, hydropower and biomass technologies), the supply and treatment of water, the treatment and processing of waste, and projects that promote energy efficiency. It aims to build a portfolio that is diversified both geographically and by type of environmental asset. This emphasis on diversification helps differentiate JLEN from its peers, which tend to specialise in solar or wind.

Reflecting its objective of delivering sustainable, inflation-linked dividends and preserving its capital, JLEN does not invest in new or experimental technology. A substantial proportion of its revenues is derived from long-term government subsidies.

Advisory team

JLEN is advised by John Laing Capital Management (JLCM or the advisers), a subsidiary of John Laing Group (JLG). The team is headed up by Chris Tanner and Chris Holmes.

Previous publications

Readers interested in further information about JLEN, such as investment process, fees, capital structure, trust life and the board, may wish to read our annual overview note [Diversification benefits shine through](#), published on 12 September 2018, as well as our previous update note and our initiation note (details are provided in Figure 9 below). You can read the notes by clicking on them in Figure 9 or by visiting our website.

Figure 9: Marten & Co. previously published notes on JLEN

Title	Note type	Date
Diverse renewables exposure	Initiation	6 September 2017
Anaerobic diversification	Update	6 March 2018
Diversification benefits shine through	Annual overview	12 September 2018

Source: Marten & Co.

Authorised and regulated by the Financial Conduct Authority

123a Kings Road, London SW3 4PL

0203 691 9430

www.martenandco.com

Registered in England & Wales number 07981621,

2nd Floor Heathmans House

19 Heathmans Road, London SW6 4TJ

Investment company sales:

Edward Marten
(em@martenandco.com)

Alistair Harkness
(ah@martenandco.com)

David McFadyen
(dm@martenandco.com)

Investment company research:

James Carthew
(jc@martenandco.com)

Matthew Read
(mr@martenandco.com)

Shonil Chande
(sc@martenandco.com)

IMPORTANT INFORMATION

This marketing communication has been prepared for John Laing Environmental Assets Group by Marten & Co (which is authorised and regulated by the Financial Conduct Authority) and is non-independent research as defined under Article 36 of the Commission Delegated Regulation (EU) 2017/565 of 25 April 2016 supplementing the Markets in Financial Instruments Directive (MIFID). It is intended for use by investment professionals as defined in article 19 (5) of the Financial Services Act 2000 (Financial Promotion) Order 2005. Marten & Co is not authorised to give advice to retail clients and, if you are not a professional investor, or in

any other way are prohibited or restricted from receiving this information, you should disregard it. The note does not have regard to the specific investment objectives, financial situation and needs of any specific person who may receive it.

The note has not been prepared in accordance with legal requirements designed to promote the independence of investment research and as such is considered to be a marketing communication. The analysts who prepared this note are not constrained from dealing ahead of it but, in practice, and in accordance

with our internal code of good conduct, will refrain from doing so for the period from which they first obtained the information necessary to prepare the note until one month after the note's publication. Nevertheless, they may have an interest in any of the securities mentioned within this note.

This note has been compiled from publicly available information. This note is not directed at any person in any jurisdiction where (by reason of that person's nationality, residence or otherwise) the publication or availability of this note is prohibited.

Accuracy of Content: Whilst Marten & Co uses reasonable efforts to obtain information from sources which we believe to be reliable and to ensure that the information in this note is up to date and accurate, we make no representation or warranty that the information contained in this note is accurate, reliable or complete. The information contained in this note is provided by Marten & Co for personal use and information purposes generally. You are solely liable for any use you may make of this information. The information is inherently subject to change without notice and may become outdated. You, therefore, should verify any information obtained from this note before you use it.

No Advice: Nothing contained in this note constitutes or should be construed to constitute investment, legal, tax or other advice.

No Representation or Warranty: No representation, warranty or guarantee of any kind, express or implied is given by Marten & Co in respect of any information contained on this note.

Exclusion of Liability: To the fullest extent allowed by law, Marten & Co shall not be liable for any direct or indirect losses, damages, costs or expenses incurred or suffered by you arising out of or in connection with the access to, use of or reliance on any information contained on this note. In no circumstance shall Marten & Co and its employees have any liability for consequential or special damages.

Governing Law and Jurisdiction: These terms and conditions and all matters connected with them, are governed by the laws of England and Wales and shall be subject to the exclusive jurisdiction of the English courts. If you access this note from outside the UK, you are responsible for ensuring compliance with any local laws relating to access.

No information contained in this note shall form the basis of, or be relied upon in connection with, any offer or commitment whatsoever in any jurisdiction.

Investment Performance Information: Please remember that past performance is not necessarily a guide to the future and that the value of shares and the income from them can go down as well as up. Exchange rates may also cause the value of underlying overseas investments to go down as well as up. Marten & Co may write on companies that use gearing in a number of forms that can increase volatility and, in some cases, to a complete loss of an investment.