

# OPERATIONAL REVIEW

The portfolio has performed well with financial performance exceeding budget, reinforcing the view that the dividend will be strongly covered by cash generated from the underlying portfolio.

## Investment performance

The NAV per share at 30 September 2022 was 125.4 pence, up from 115.3 pence at 31 March 2022.

JLEN has announced an interim dividend of 1.79 pence per share for the quarter ended 30 September 2022, payable on 30 December 2022, in line with the full-year target of 7.14 pence per share for the year ending 31 March 2023 as set out in the 2022 Annual Report.

The Fund has experienced a solid six months of financial performance, exceeding its budget by 4.9% mainly as a result of good operational performance combined with continued high power prices and inflation.

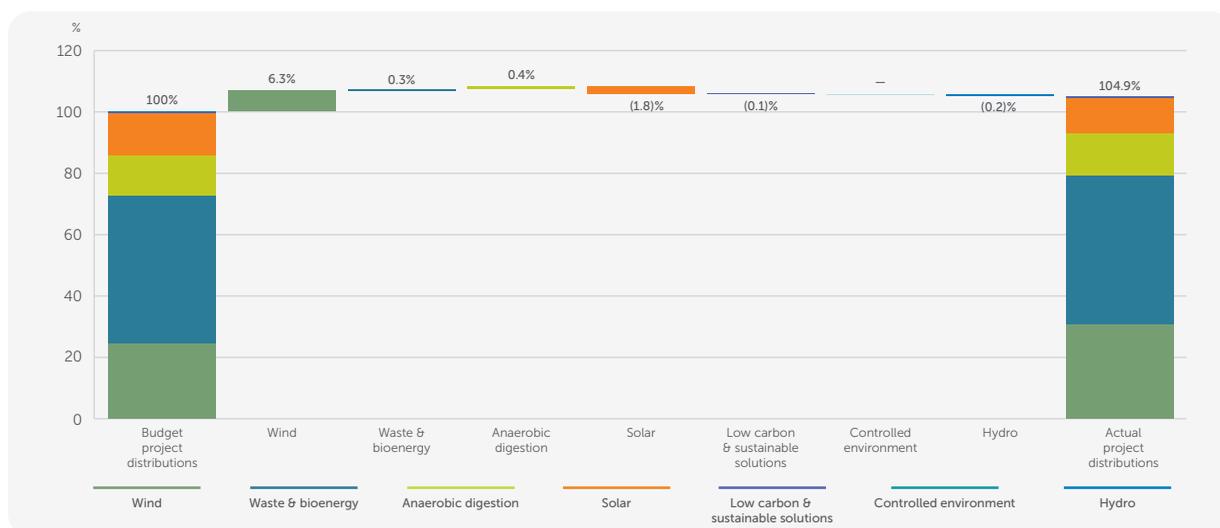
## Financial performance

As the portfolio diversifies and the proportion of non-energy generating assets increases, the Investment Manager has presented detailed information to better illustrate the financial performance of all sectors within the portfolio.

The chart below shows the budgeted proportion of cash distributions forecast to be received from underlying investments at the start of the financial year, versus the relative over or under performance during the period under review.

See overleaf for equivalent chart showing operational performance of the energy generating assets.

### Financial performance: budget project distributions vs actual project distributions



The average all-in price received by the differing technology classes in the UK for their energy volumes generated in the six months ended 30 September 2022 is shown in the table below:

Average all-in energy price	Half year ended 30 Sep 2022	Year ended 31 Mar 2022
Wind	<b>£114.25 per MWh</b>	£99.64 per MWh
AD electric	<b>£90.67 per MWh</b>	£81.19 per MWh
AD gas-to-grid	<b>£130.44 per MWh</b>	£109.69 per MWh
Biomass	<b>£262.74 per MWh</b>	£147.27 per MWh
Energy-from-waste	<b>€137.40 per MWh</b>	€173.75 per MWh
Solar	<b>£241.08 per MWh</b>	£199.22 per MWh
Hydro	<b>£347.48 per MWh</b>	£232.65 per MWh

### Power price hedging

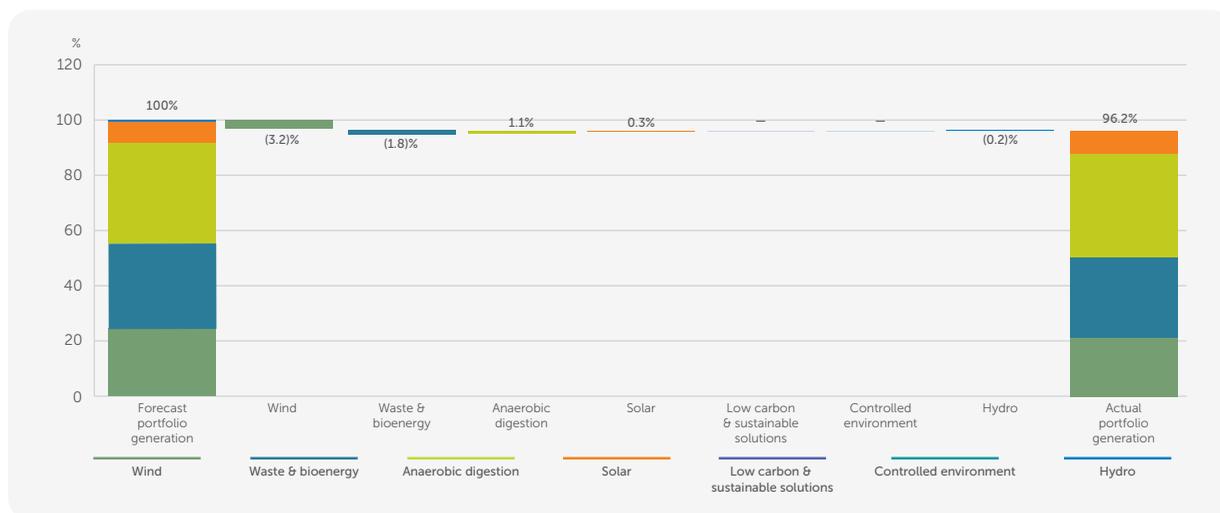
JLEN's exposure to wholesale power prices is mitigated by the practice of having a substantial proportion of generation for both electricity and gas on fixed price arrangements for durations ranging from six months out to three years. Following a continuation of this programme post the period end, the latest extent of generation subject to fixes is as follows:

	Winter 2022	Summer 2023	Winter 2023	Summer 2024
Wind	82%	98%	98%	79%
Solar	100%	100%	100%	73%
Biomass	87%	45%	—	—
Energy-from-waste	100%	—	—	—
AD – electric	100%	58%	58%	—
AD – gas	79%	71%	71%	8%
Hydro	34%	—	—	—

### Renewable energy generating assets

The chart below shows the forecast generation target expected to be achieved at the start of the financial year, versus the relative sector-level over or under performance against this target during the period under review.

#### Operational performance: forecast portfolio generation vs actual portfolio generation



## OPERATIONAL REVIEW continued

### Renewable energy generating assets continued

During the period, the renewables segment of the portfolio produced 655GWh (six months to 30 September 2021: 564GWh) of energy, 3.8% below target. This was mainly due to low wind speeds in the period; excluding the wind portfolio, the portfolio would have performed broadly on target.

### Anaerobic digestion

The AD portfolio is the largest producer of energy on a GWh basis and generated 39% of the GWh energy produced by the JLEN portfolio to 30 September 2022. Generation was 254GWh, 2.9% ahead of its sector target, continuing the trend of outperformance that has been seen since the Fund started to acquire AD assets in 2017.

Notably strong performers were Peacehill Gas and Icknield, which significantly outperformed their generation targets.

The 2022 feedstock maize harvest has faced challenges on price increases and yield due to high gas prices impacting fertiliser production and because of the summer of 2022 being one of the driest on record, which impaired crop growth. Additional feedstock is being procured from other sources to reduce the feedstock deficit for next year.

### Waste & bioenergy

The renewable energy generating segment of the waste & bioenergy portfolio is now the second largest producer of energy on a GWh basis and generated 30% of the GWh energy produced by the JLEN portfolio to 30 September 2022. The waste & bioenergy portfolio generated 200GWh over the period to 30 September 2022, 5.7% below its sector target.

Good performance was seen across parts of the waste & bioenergy portfolio, although technical issues at the Bio Collectors food waste plant and ETA energy-from-waste plant detracted from the overall performance. The Investment Manager has been working with the asset operators to remedy these issues.

The Cramlington biomass plant, which was bought out of administration with an identified list of operational matters to address, has made good progress since it was acquired by the Fund and outperformed its generation target for the period. However, a fault has been identified on a part in the turbine at a plant with a similar specification to Cramlington. The Investment Manager is ascertaining whether the design of the turbine at Cramlington could cause a similar fault in the future and will take a decision whether to pre-emptively replace the potentially faulty part of turbine. This could require an extended period of downtime for the plant and an assumption regarding this downtime has been made in the valuation. More information can be found on page 24.

### Wind

Electricity generation from the wind assets of 143GWh (which represents 22% of the JLEN portfolio energy generation for the period) was 13.0% below its sector target due to below-average wind resource during the period. However, the portfolio performed generally well, with contractual availability 2% above warranted levels. Overall availability was slightly below long-term assumptions, primarily due to an extended grid outage suffered at Llynfi to accommodate planned works on their network.

### Portfolio performance to 30 September 2022



**655GWh**

energy produced



**>351,500**

waste diverted from landfill (tonnes)



**>14.5 billion**

litres of wastewater treated

## Solar

At 56GWh, generation from the solar assets (which represents 9% of the JLEN portfolio energy generation for the period) was 2.6% above its sector generation target. The outperformance was mainly driven by the high irradiance levels experienced over the summer months. All but two of the ground-mounted sites had generation above target levels and the asset manager has implemented a programme to systematically inspect and repair any underperforming assets in order to improve availability in future periods.

## Hydro

The hydro portfolio generated 1GWh (which represents less than 1% of the JLEN portfolio energy generation for the period) and saw a 48.7% negative variance against its sector target. The poor generation performance was due to very low rainfall levels in the period. Mechanically the assets continue to perform well, when the water resource is available.

## Assets which support the transition to a lower carbon future

### Waste & wastewater concessions

Waste tonnages at the ELWA waste project have continued at levels above target. Operational performance targets are consistently exceeded with diversion from landfill at 99.98%, substantially ahead of the 67% contract target. Recycling, at 31%, is ahead of the 22% target.

Tay Wastewater plant in Scotland has performed well, with no operational or performance issues in the half-year period.

Both projects continue to perform well financially.

### Low carbon transport

The portfolio of CNG refuelling stations continues to grow and now has eight operational refuelling stations in its portfolio and a further two sites under construction, giving a total of 10 sites. Over the period, the portfolio has performed 7.1% below its fuel dispensed target, due mainly to problems in the supply chain delaying the uptake of CNG fuelled vehicles.

## Battery storage assets

### Operational assets

The operational batteries that are co-located at two of the Company's hydro assets were traded exclusively in Firm Frequency Response over the period, receipts for which were in line with expectations.

### Construction stage assets

JLEN owns four construction stage 49.9MW battery storage assets in the UK. While there have been delays to the construction of the two sites acquired in 2021/22 due to increased lead times for components and grid connection delays, the West Gourdie project is on track to commence operations in 2023 while the Sandridge project is expected to commence operations in late 2023 or early 2024. The two newly acquired battery storage assets are expected to commence operations in 2024.

## Controlled environment

### Construction stage assets

The controlled environment aquaculture project, Rjukan, is on track to meet its operational commencement date in 2024 and the controlled environment agriculture glasshouse is on track to begin production in 2023.

## Acquisitions

### Clayfords Energy Storage Limited

In August 2022, the Company acquired a 50% equity stake in Clayfords Energy Storage Limited which holds the rights to construct a 49.9MW battery energy storage system plant in Aberdeenshire in Scotland. The project is fully consented and construction ready and is expected to start commercial operations in Q4 2024.

### Rjukan controlled environment aquaculture project

In August 2022, the Company made a minority equity investment in a controlled environment aquaculture project. The project consists of a land-based aquaculture facility to be built in Rjukan, Norway, and will use established recirculating aquaculture system ("RAS") technology. It is expected that partial operations will commence in 2024 with full operations expected in 2025, following which, the facility is forecasted to produce approximately 8,000 tonnes of trout annually. This will be sold to European and international salmonid markets via an offtake agreement with an established Norwegian seafood distribution company with global reach.

## OPERATIONAL REVIEW continued

### Acquisitions continued

#### Lunanhead (Gigabox No 4) battery storage

In September 2022, the Company acquired a 50% equity stake in Gigabox No 4, which holds the rights to construct a 49.9MW battery energy storage system plant in Angus in Scotland. The project is fully consented and construction ready and is expected to start commercial operations in Q4 2024. The connection will be initially with a capacity of 45MW, increasing to the full 49.9MW capacity by early 2025.

#### Co-located glasshouse

In September 2022, the Company announced an investment into a glasshouse project via a combination of a senior secured loan for the construction of the glasshouse and a convertible loan and a minority equity stake in the glasshouse operator to provide for working capital.

The consented 2.1 hectare glasshouse will be built in the UK, in proximity to an existing AD plant owned by JLEN, which will separately be upgraded to supply low carbon heat and power to the glasshouse via a private wire.

The advanced glasshouse, which is expected to commence production in 2023, will be capable of growing a wide array of different horticultural products, from consumable produce to cut flowers. Its initial operator will focus on the lawful cultivation of the heavily regulated tetrahydrocannabinol flower, conforming to tightly monitored licence requirements for secure supply to established UK-based pharmaceutical manufacturers.

### New investments and how they fit within JLEN's investment policy

Investment	Environmental infrastructure characteristics	Has the benefit of long-term, predictable cash flows	Has inflation linkage	Supported by long-term contracts or stable and well-proven regulatory and legal frameworks	Feature well-established technologies
Clayfords Energy Storage	Facilitates the transition to more renewables on the grid	✓	Main costs and revenues unindexed	✓	✓
Rjukan	More sustainable large-scale production of seafood protein	✓	Ability to raise prices in high inflation environment	✓	✓
Lunanhead	Facilitates the transition to more renewables on the grid	✓	Main costs and revenues unindexed	✓	✓
Glasshouse	Resource efficient asset co-located with an existing AD facility	✓	Ability to raise prices in high inflation environment	✓	✓

### Acquisitions in the period

# 1

new technology sub-sector

# 4

acquisitions made in the period

## Other investments

### FEIP

In January 2020, JLEN announced a commitment of €25 million to Foresight Energy Infrastructure Partners SCSp ("FEIP"), a Luxembourg limited partnership investment vehicle. At 30 September 2022, €10 million had been drawn on this commitment.

### CNG Foresight

The CNG portfolio now has 10 natural gas refuelling stations, including two stations in construction phase. JLEN has invested a total of £13.9 million to 30 September 2022.

### FEIP assets as at 30 September 2022



(1) In addition to indirect minority ownership through FEIP, JLEN also owns 45% through a direct investment.

## OPERATIONAL REVIEW continued

### Financing

On 21 May 2021, JLEN announced that it had signed a new revolving credit facility ("RCF") with a three-year facility agreement which provides for a committed multi-currency revolving credit facility of £170 million and an uncommitted accordion facility of up to £30 million.

The RCF provides an increased source of flexible funding outside of equity raisings, with both sterling and euro drawdowns available at lower rates than the existing facility. The agreement includes an uncommitted option to extend for a further year and will be used to make future acquisitions of environmental infrastructure to add to the current portfolio, as well as covering any working capital requirements.

The interest charged in respect of the renewed RCF is linked to the Company's ESG performance, with JLEN incurring a premium or discount to its margin and commitment fee based on performance against defined targets. Those targets include:

- environmental: increase in the volume of clean energy produced;
- social: the value of contributions to community funds; and
- governance: maintaining a low number of work-related accidents, as defined under the Reporting of Injuries, Diseases and Dangerous Occurrences ("RIDDOR") by the Health and Safety Executive.

Performance against these targets will be measured annually with the cost of the RCF being amended in the following financial year. Lenders to the facility include HSBC, ING, NIBC, National Australia Bank and Royal Bank of Scotland International. The margin can vary between 195 bps and 205 bps over SONIA ("Sterling Overnight Index Average") for sterling drawings and EURIBOR for euro drawings, depending on performance against the ESG targets.

Two of the three KPI targets were successfully achieved in the first year of implementation of this facility, and the Board remains committed to delivering all three KPI targets prior to the end of the facility agreement.

In addition to the revolving credit facility, several of the projects have underlying project-level debt. There is an additional gearing limit in respect of such debt of 85% of the aggregate gross project value (being the fair market value of such portfolio companies increased by the amount of any financing held within the projects) for PFI/PPP projects and 65% for renewable energy generation projects.

As at 30 September 2022, drawings under the RCF were £71.4 million. Under its investment policy, JLEN may borrow up to 30% of its NAV.

The project-level gearing at 30 September 2022 across the portfolio was 21.5% (31 March 2022: 19.9%). Taking into account the amount drawn down under the revolving credit facility of £71.4 million, the overall fund gearing at 30 September 2022 was 25.5% (31 March 2022: 23.7%).

As at 30 September 2022, the Group, which comprises the Company and the intermediate holding companies, had cash balances of £10.5 million (31 March 2022: £18.0 million).

Financing  
at 30 September 2022

**£71.4m**

drawn on RCF

**25.5%**

fund gearing<sup>(1)</sup>

(1) Gearing is an alternative performance measure ("APM"). The APMs within the accounts are defined on page 69.