

# Octopus Renewable Energy Opportunities Fund (OREO)

Manager Report for the period ending 30 June 2023

octopusinvestments

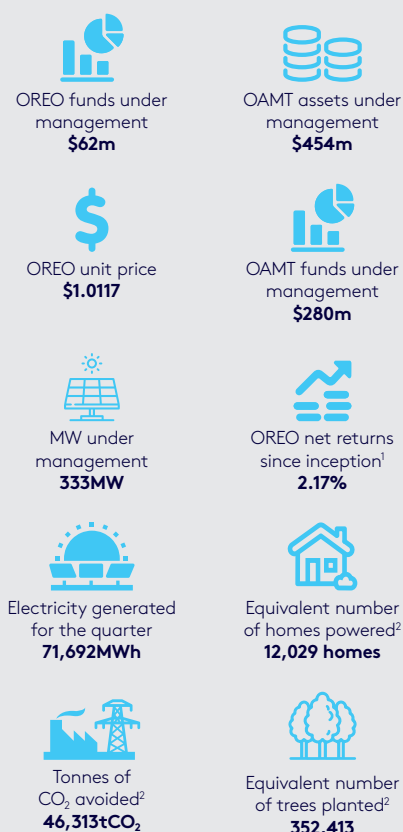
A brighter way

Octopus Renewable Energy Opportunities Fund ("OREO", or the "Fund") is an open ended unregistered wholesale Australian unit trust. The Fund focuses on providing investors with exposure to a diversified portfolio of Australian clean energy infrastructure assets through its investment in the Octopus Australia Master Trust ("OAMT") alongside the Octopus Australia Sustainable Investments Fund ("OASIS").

## Highlights

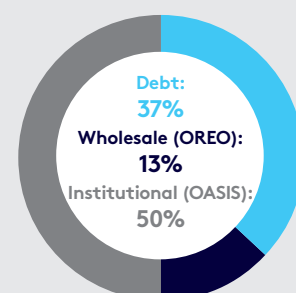
- The valuation of OREO as at 30 June 2023 was \$61.5m, reflecting the share in OAMT and its ownership of Darlington Point Solar Farm ("DPSF"). The OREO unit price has risen from \$1.00 at fund launch to \$1.0117 at quarter end. A distribution of \$0.02 per share was paid to investors post quarter end.
- Performance of DPSF for the quarter was below expectations, the result of lower than forecast irradiance and network grid outages and constraints. The fires from earlier in the year, continued to impact 4% of the site. However, in June the fire remediation works were completed and the site was fully energised. All costs in relation to the fire remediation works have been paid by the EPC contractor, with the project only pursuing business interruption insurance with its insurers.
- The second close of the Fund and the acquisition of 180MW Dulacca Wind Farm is eminent. The existing OASIS investors have committed an additional \$200m of capital to the Fund. Furthermore, Octopus expect to make an announcement of a commitment from a new institutional investor as part of the fundraising.
- Dulacca's progress continues as the site, now connected to the grid, is ramping up production from 55MW to 118MW as a result of passing performance standards set by AEMO. Dulacca is expected to be released to its full capacity by the end of the year as further performance testing continues. Dulacca is showing delivery of the strategic investment thesis for the site: the wind resource profile at Dulacca is proving to be incredibly valuable as the site generates from the evening peak through the night into the morning when energy prices are high.
- The Manager's pipeline of renewable assets across Australia includes 348MW of exclusive or shortlisted generation assets and 1,325MW/2,760MWh storage.
- The annual external valuation of the underlying assets of the portfolio was carried out during the quarter. This valuation confirmed the Manager's holding value of these assets.
- During the quarter the OASIS Development Trust made its first acquisitions, finalising an agreement to acquire three development sites: Hay Plains a 400MW NSW Wind Farm, Ardandra a 97MW QLD Solar + 55MW/220MWh Battery Energy Storage System ("BESS") and Theodore a 70MW QLD Solar + 40MW/160MWh BESS. These sites when construction ready will be acquired by OAMT. Additional details on these projects can be found in the Case Study on page 7.
- Octopus Australia's team saw growth across key functions of the business: Mark Thompson joined as a Senior Electrical Engineer from AEMO and will provide support on grid connections and site design. Lee Mrnjavac joined as an Investment Director. Lee was previously the Managing Director of RWE Renewables' Australian business. The Development team expanded by three with Claude Lam, Jaryd Revere and Ned Halliday all joining as Senior Development Managers. Ned will assist Octopus Australia as our indigenous liaison as he will be specifically working on the Desert Springs Octopus projects. Additionally Edward Irving joins the Energy Markets and Technology team, headed by Brent Collyer (former Head of Energy and Analytics at the AEMC), as well as Edwina Lane who joins the Development Legal Team (with a focus on PPAs).

## Fund Statistics



<sup>1</sup>Not annualised <sup>2</sup>Based on current quarter generation.

## Assets under management

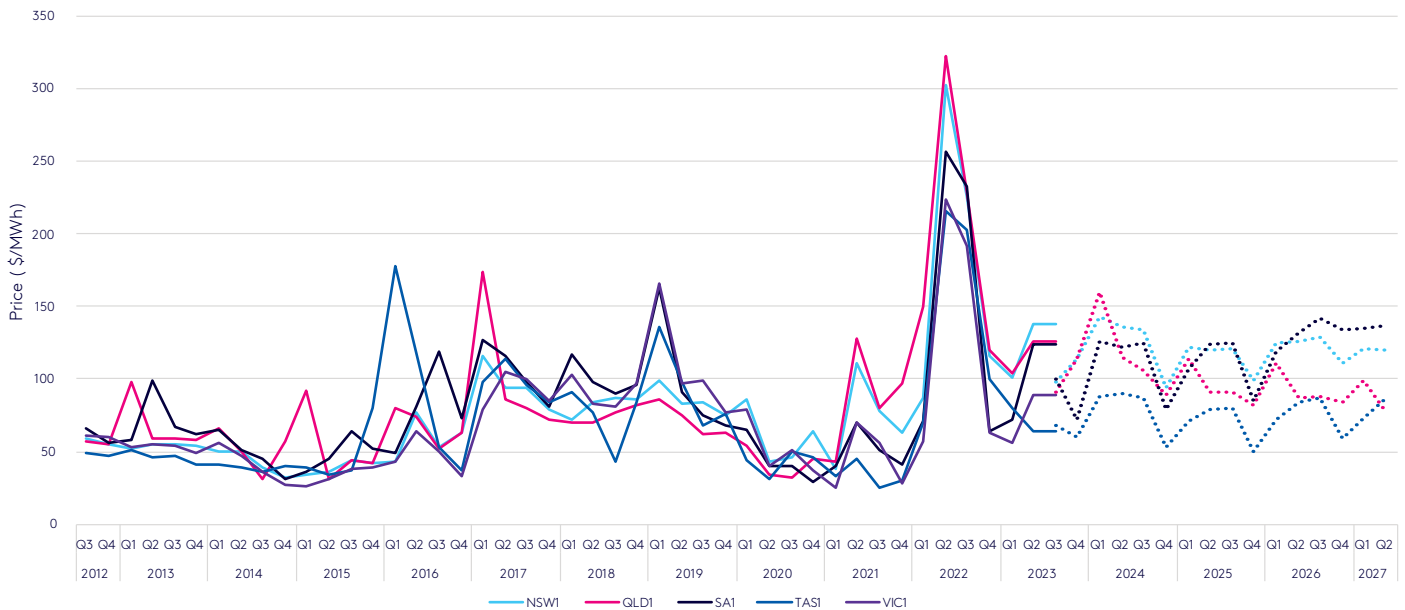


## Energy market update

The biggest energy news event for the quarter was the closure of the Liddell Coal Power Station in NSW, which saw ~9% of the state's generation capacity removed from service. The closure of this station was announced by AGL in 2015 and the final Liddell units went offline during April, with little initial impact as seasonally favourable conditions meant renewable generation was strong, demand was reduced, and the performance of the NEM thermal fleet was good. However, in May several cold snaps, accompanied by constraints on interconnectors, low wind generation and outages at some of the NSW and QLD coal power stations resulted in very high spot outcomes across the NEM. Whilst spot outcomes moderated somewhat in June prices remained historically high supporting some of the highest quarterly prices on record across the NEM.

The high spot prices for the quarter did flow through to renewable energy capture prices, in particular capture prices for QLD wind where strong averaging ~\$105; however, in NSW daily weighted average pricing for solar assets was ~\$68 for the NSW solar fleet.

In forward contract markets, prices remain elevated through summer 23/24 with concern remaining on the markets ability to backfill Liddell, the high likelihood of El Niño and corresponding high temperatures as well as the continued delayed to many renewable energy projects.



### LGC Pricing

The first half of 2023 has seen a continuation of high spot and forward LGC prices, see figure above. Q2 saw this trend continue, with spot prices trading as high as \$58. Our average sale price for the quarter was \$53/certificate against a budgeted \$46/certificate.

Recent market announcements suggest the current strong pricing outcomes will continue, as the market is concerned about supply of LGCs in the face of:

- delays to new supply/renewable energy projects,
- increased voluntary demand from Australian corporates,
- significant shortfall demand from retailers seeking to cover previous year shortfall positions.

The Octopus energy markets team will continue to monitor the LGC prices and forecast outlook with the opportunity to hedge these across the portfolio to lock in the high pricing.

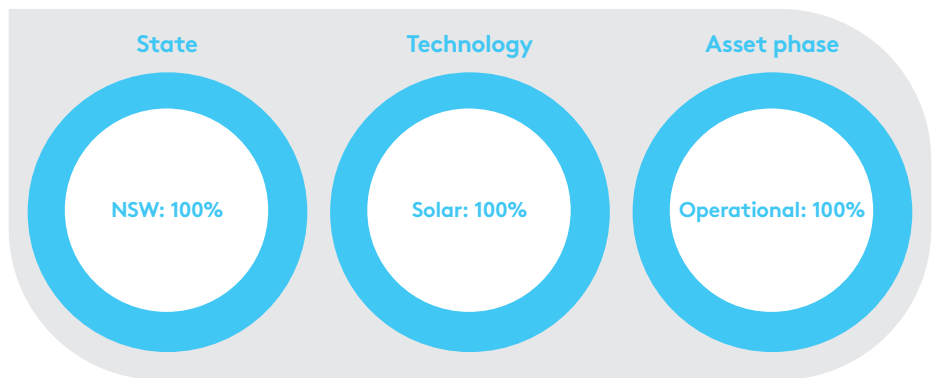
# Portfolio summary

Project	Technology	Location	Sites	Generator Capacity (MW)	BESS Capacity (MW/MWh)	Average asset life remaining (years)	Status	Total Asset NAV (\$m)
Darlington Point	Solar PV	NSW, Australia	1	333	-	33	Operational	241.4



## Portfolio composition

Portfolio composition broken down by total assets under management.



## Portfolio performance

<b>Return for quarter</b>	<b>Return since fund launch</b>
0.56%	2.17%
<b>Cash yield for quarter</b>	<b>Cash yield since fund launch</b>
0.00%	1.00%

In July 23, post quarter end, a distribution of \$0.02 per unit was paid to OREO investors.

## Asset performance

DPSF generation for the quarter was 28% below forecast, largely the result of lower irradiance and wider network grid upgrades. However, over the quarter, plant availability remains in line with budget.

Irradiance was down 12%, the result of heavy rain, high winds and colder than forecast temperatures across the April, May and June. The month of May being the coldest on record in NSW for a number of years. It is expected El Niño will likely develop later this year bringing increased temperatures and heatwaves.

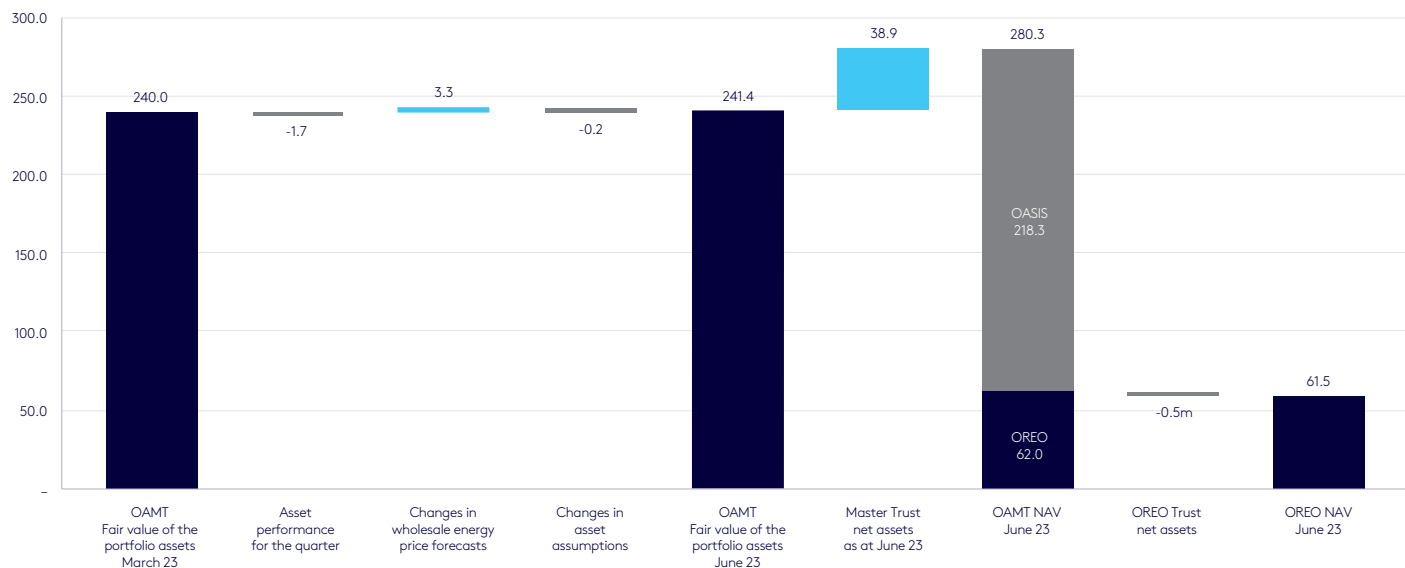
Wider network grid curtailment upgrades and constraints were 13% below forecast the result of a number of AEMO network upgrades throughout the quarter.

Performance of 4% of the site continued to be impacted due by the fires earlier in the year arising from faulty equipment. This issue affected the performance ratio due to the combiner boxes being isolated by the fires. The remediation works were completed in June and the site was fully reenergised. All costs in relation to the fire remediation works have been paid by the EPC contractor, with the project only pursuing business interruption (BI) insurance with our insurers. The BI insurance is expected to be recovered later this year when the full loss is known and claim is filed.

Solar energy capture prices were 19% below forecast for the quarter. Refer to the energy market update above for more detail on wholesale energy prices.

# Valuation bridge

## Fund Equity Value Bridge \$m



The graph above illustrates the OREO portfolio net asset value as at 30 June 2023 of \$61.5m, an increase of \$19.6m from \$41.9m at 31 March, largely reflecting the additional funds invested. The fair value of the OAMT portfolio assets, the significant investment of OREO, have increased value over the quarter by \$1.4m to \$241.4m. Including OAMT net assets the total OAMT NAV is \$280.3m.

### Asset performance for the quarter (-\$1.7m)

As discussed in the 'Asset Performance' section above, asset performance was down during the quarter, the result of challenging weather conditions and network outages which resulted in a net downward movement in the valuation of \$1.7m across the quarter.

### Changes in wholesale energy price forecasts (+\$3.3m)

Unless fixed under PPAs or otherwise hedged, the power prices used in valuations are based on both market forward prices in the near term, and an equal blend of two independent and widely used market consultants' technology-specific capture price forecasts for each asset.

These are updated on a quarterly basis to reflect prevailing market conditions and recent announcements. Updating the latest curves resulted in a valuation uplift of \$3.3m.

### Change in asset performance assumption (-\$0.2m)

Forecast generation losses the result of additional planned site maintenance resulted in a valuation decrease of \$0.2m.

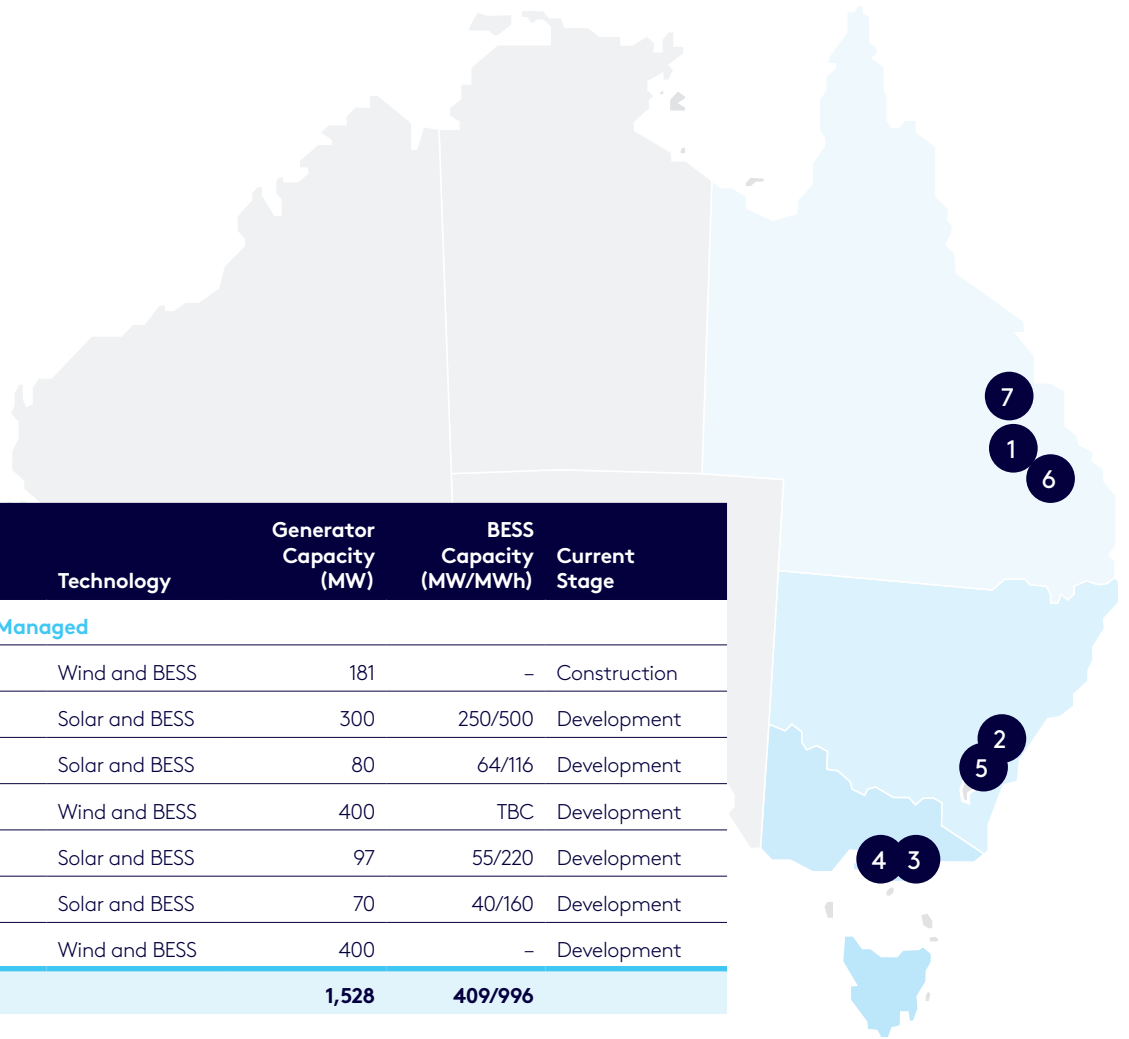
### Master Trust net assets (\$38.9m)

The Master Trust net assets of \$38.9m consists primarily of cash and receivables (\$38.5m). The funds will be deployed as part of the Dulacca acquisition. OREO's share of the OAMT net asset value is \$62.0m.

### Fund valuation

Adjusting for OREO Fund net liabilities \$0.5m, the total OREO net asset value as at 30 June 2023 is \$61.5m or \$1.0117 per ordinary unit.

# Pipeline



Location	Technology	Generator Capacity (MW)	BESS Capacity (MW/MWh)	Current Stage
<b>Current Octopus Australia Managed</b>				
1 Dulacca	Wind and BESS	181	-	Construction
2 Blind Creek	Solar and BESS	300	250/500	Development
3 Fulham Solar Farm	Solar and BESS	80	64/116	Development
4 Giffard Wind Farm	Wind and BESS	400	TBC	Development
5 Ardandra Solar Farm	Solar and BESS	97	55/220	Development
6 Theodore Solar Farm	Solar and BESS	70	40/160	Development
7 Hay Plains Wind Farm	Wind and BESS	400	-	Development
<b>Total</b>		<b>1,528</b>	<b>409/996</b>	

Location	Technology	Generator Capacity (MW)	BESS Capacity (MW/MWh)	Equity Deployment Value (\$)
<b>Medium Term Equity Deployment Pipeline (Under Exclusivity/Shortlisted)</b>				
Queensland	Solar and BESS	98	555/1,220	28
New South Wales	-	-	-	-
Victoria	-	-	-	-
South Australia	-	-	-	-
Tasmania	-	-	-	-
<b>Total</b>		<b>98</b>	<b>555/1,220</b>	<b>28</b>

<b>Medium Term Equity Deployment Pipeline (Early Stage Pipeline)</b>				
Queensland	BESS	-	170/340	8
New South Wales	BESS	-	150/300	10
Victoria	Solar and BESS	250	250/500	32
South Australia	BESS	-	200/400	22
Tasmania	-	-	-	-
<b>Total</b>		<b>250</b>	<b>770/1,540</b>	<b>72</b>

<b>Grand Total Pipeline</b>		<b>348</b>	<b>1,325/2,760</b>	<b>100</b>
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# Case-study: OASIS Development Trust acquisition of first development projects

In April 2023 the OASIS Development Trust acquired its first projects, three-early-stage renewable development sites. The sites Hay Plains Wind Farm, Ardandra Solar Farm and Theodore Solar Farm were acquired from a single developer following a limited bidding process. OASIS acquired 85% of the sites, with the remaining 15% acquired by Octopus Capital Aust Pty Ltd. These sites when construction ready will be acquired by OAMT, giving OREO a secure pipeline for future deployment.

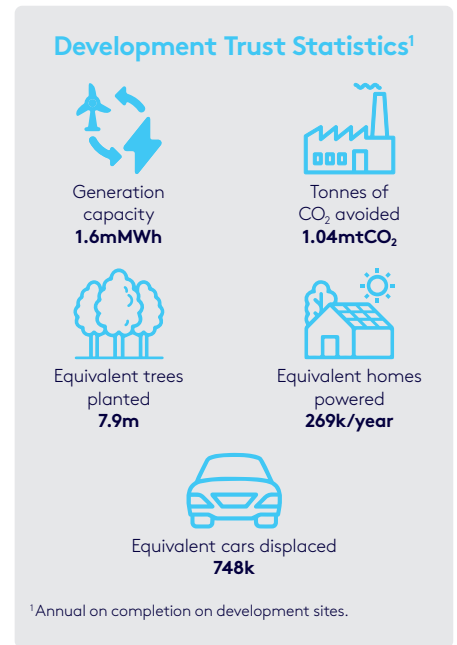
All sites allow for the inclusion of Battery Energy Storage Systems (BESS). The acquisition process took place over 4-months, led by the Octopus investment team with support from the Octopus development team, engineering team and energy market team, to complete internal diligence and lead various engagements with external advisors to assess the suitability for the addition of these assets to OASIS's development portfolio.

Hay Plains is a 400MW wind farm project located in the South West Renewable Energy Zone (REZ) in NSW. The land has been secured and the land agreements allow for the development of not just wind but also solar and BESS, enabling the establishment of a renewable hub in the region. The site has strong wind resource and good location, in close proximity to the new transmission interconnector under construction between NSW and SA (Project Energy Connect). The project is a rare opportunity to get exposure to a highly prized wind farm in NSW. Combined with Dulacca in QLD, and Giffard in VIC, these three wind assets provide a strong foundation and a highly attractive platform for OASIS investors. The asset is expected to be developed in parallel with new transmission lines in the region, due to be commissioned in 2027. The project will initially deploy \$12.5m with a total of \$20.1m to be deployed over the course of the development.

Ardandra is a 97MW hybrid solar and 55MW/220MWh BESS project located immediately adjacent to the Octopus managed Dulacca Wind Farm, in the Western Downs Region in QLD. The land is secured, and development approval is in place. The location of the project is a distinctive chance for OASIS to simultaneously introduce a solar farm and BESS and a wind farm to the market using the same transmission line. We anticipate offering reliable firm off-take products to the market once constructed. The project provides downside protection to OAMT against other investors owning the asset and operating it to the detriment of Dulacca Wind Farm and can also be optimally sized to maximise value for the portfolio. Once built and operating, it's expected to create operational synergies across both it and Dulacca to minimise line curtailment and impact on MLF through the BESS. The cost of the development is expected to be \$5.8m with OAMT acquisition and construction commencement in 2025 to achieve full operations in 2027.

Theodore is a 70MW hybrid solar and 40MW/160MWh BESS project located in central Queensland. The smallest of the three, it is in early stages with land secured and development approval in place. This acquisition allows OASIS to continue to build on its portfolio offering within Queensland with the aim of providing firm off-take products to the market as it continues to strategically acquire other assets in the state. It is expected that this site will reach full operations in 2028.

Since acquisition, the Octopus team has had a number of very positive in-person meetings with the landowners of all the recently acquired projects. In-person meetings with key regional stakeholders and project neighbours are planned over the next quarter. Octopus is looking forward to building on these positive relationships as we progress the projects towards completion.



Theodore Solar Farm site, Queensland

## Investment guidelines

- Target Returns **7.0%** net IRR (post annual management and performance fees, before tax).
- Target Yield **4-5%** per annum net yield.
- The Fund, via its investment in the OAMT, intends to invest in a geographically and technologically diversified spread of assets and, over the long term, expects that the following investment guidelines will be met:
  - Investment targets will include utility scale Australian solar PV farms, wind farms, storage and hydrogen opportunities;
  - Leverage will not, in aggregate across the Portfolio, exceed 65% of the gross asset value;
  - At any one time, more than 50% of generation from sites within the Portfolio will be covered by a fixed price contract, with a target of more than 60% under normal market conditions (as determined by the Manager, acting reasonably)
- Quarterly liquidity on best endeavours basis.
- Investment manager **Octopus Aust OREO Manager Pty Ltd.**

### **Octopus Aust OREO Manager Pty Ltd (Manager)**

Level 8, 627 Chapel Street  
South Yarra VIC 3141

### **Apex Fund Services (Australia) Pty Ltd (Administrator)**

Level 13, 459 Little Collins Street  
Melbourne VIC 3000

### **OneVue Fund Services Pty Ltd (Share Registry)**

Level 16, 385 Bourke Street  
Melbourne VIC 3000

### **Equity Trustees Limited (Responsible Entity)**

Level 1, 575 Bourke Street  
Melbourne VIC 3000

## Octopus Australia – who we are

Octopus Aust OREO Manager Pty Ltd (“the Manager”) is a subsidiary of Octopus Capital Aust Pty Ltd (ACN 627 019 096) (“OCA”), which employs greater than 35 energy professionals and renewables experts across wind/solar/storage development as well as construction, asset and fund management. The team has a deep knowledge of the Australian energy market and has extensive experience within the domestic renewable energy market.

OCA provide its team’s experience to the Fund via service contracts directly with the underlying assets (development, construction and asset management) or with the Fund (fund management). Asset-level services relating to a project are carried out by OSCAR Management Aust Pty Ltd (“OSCAR”), a 100% subsidiary of OCA, unless otherwise determined by the Manager in respect of one or more projects. Such services represent the necessary costs associated with developing institutional grade assets designed to perform for 30+ years. Fund management services will be carried out by the Manager.

### Glossary

<b>AEMO</b>	Australian Energy Market Operator	<b>MW</b>	Megawatt	<b>OREO</b>	Octopus Renewable Energy Opportunities Fund
<b>BESS</b>	Battery Energy Storage Systems	<b>MWh</b>	Megawatt hour	<b>OSCAR</b>	OSCAR Management Aust Pty Ltd
<b>CPI</b>	Consumer Price Index	<b>OA</b>	Octopus Australia	<b>PPA</b>	Power Purchase Agreement
<b>DPSF</b>	Darlington Point Solar Farm	<b>OAMT</b>	Octopus Australia Master Trust	<b>PV</b>	Photo Voltaic
<b>IC</b>	Investment Committee	<b>OASIS</b>	Octopus Australia Sustainable Investments Fund		
<b>LGC</b>	Large-scale Generation Certificate	<b>OCA</b>	Octopus Capital Aust Pty Ltd		

## Key risks

An investment in OREO will place capital at risk. The value of investments, and any income, can go down as well as up, so investors could get back less than the amount invested.

Neither past performance nor any forecasts should be considered a reliable indicator of future results. Actual performance will, inter alia, depend on factors such as wholesale power prices, power purchase agreements, regulatory environment, government incentives, exchange rates, inflation, grid connections, asset concentrations and site performance.

OREO is investing in OAMT which is investing in construction and operational renewable energy assets and, therefore, may be exposed to certain risks, such as cost overruns, construction delay and construction defects, which may be outside OREO’s control.

Investment valuation is based on financial projections for the Fund’s relevant Renewable Energy Assets. Projections will primarily be based on the Investment Manager’s assessment and are only estimates based on assumptions made at the time of the projection.

For the full list of investment risks please refer to the OREO Information Memorandum.