

# PEAR TREE ESSEX ENVIRONMENTAL OPPORTUNITIES FUND

**FOR THE QUARTER ENDED DECEMBER 31, 2024,** the Pear Tree Essex Environmental Opportunities Fund's Ordinary Shares (the "Fund") underperformed its benchmark, MSCI World Index (the "Index"). The Fund achieved a return of (7.56%) at net asset value compared to (0.07%) for the Index.<sup>1</sup>

#### Market Conditions and Investment Strategies

The Essex Global Environmental Opportunities Strategy was founded on our strong belief that the listed equity markets offer solutions to global environmental problems and companies with commercially viable solutions offer investors long-term investment opportunities. The last few years have been challenging for the clean technology sector as the zero interest-rate policy earlier this decade led to an overcapitalization of companies with questionable business models. We believe that 2024 was a critical year when the capital markets have started to differentiate the quality cleantech companies from the failures; we believe our thesis is not only exemplified but reinforced currently and we see opportunity in the clean tech market segment.

We are at historically unprecedented levels of market concentration, which has been broadly reported, and, for this case, using recent Goldman Sachs research going back to 1970, aggregate versus equal weight relative performance for the S&P 500 is the most extreme ever measured in the data set. Valuations for the equal weight index are 70% cheaper, as measured by price to earnings, the largest dispersion observed since 2001 according to Goldman research. We are reminded of Charlie Munger's musing that "mimicking the herd invites regression to the mean." We believe our GEOS portfolio companies offer long-term opportunity at attractive valuations backed by significant tailwinds. Importantly, when you hear the words, "nuclear", please think about the GEOS power technology theme. "Data center?" Yes, covered in our power tech, water, and clean tech and efficiency themes. "Wildfires?" Climate adaptation is covered across GEOS, from public infrastructure to advanced weather forecasting, emergency deployment services and electrical line forest management. What we see in the headlines today we believe are increasing signs of opportunity for our approach and holdings.

GEOS outperformance versus the Wilderhill Clean Energy Index<sup>2</sup> (ticker: ECO) over the past one, two and three years is due to our consistent investment process and execution in a highly inefficient portion of the stock market.<sup>3</sup> GEOS invests primarily in commercially viable, profitable companies offering solutions to environmental problems, which we believe made a difference in outperformance in 2024, as the worst performers in the Wilderhill Index are not profitable, as measured by margins and free cash flow. We believe the breadth of the nine GEOS themes provides greater opportunity as well as diversification, with performance led by our power technology and water themes.

<sup>1</sup>The Fund is the successor to the investment performance of the Essex Environmental Opportunities Fund ("Predecessor Fund") as a result of the reorganization of the Predecessor Fund into the Environmental Opportunities Fund on September 1, 2021. Performance information shown prior to the close of business on August 31, 2021 is that of the Predecessor Fund.

<sup>2</sup>The Wilderhill Clean Energy Index (ticker: ECO) is a modified equal dollar weighted index comprised of publicly traded companies whose businesses stand to benefit from societal transition toward the use of cleaner energy and conservation.

<sup>3</sup>For three years, ended 12/31/24, the Pear Tree Essex Environmental Opportunities Fund returned (10.39%) versus (34.16%) for the Wilderhill Clean Energy Index. For the two-year period, the Fund posted (0.11%) while the Wilderhill returned (27.23%). For the one-year period, the Fund returned 1.32%, versus (31.72%) for the Wilderhill.



# PEAR TREE ESSEX ENVIRONMENTAL OPPORTUNITIES FUND (CONTINUED)

#### **Attribution (Fourth Quarter 2024)**

#### Top contributors:

Performance for the fourth quarter was led by GEOS power technology holding Primoris Services (ticker PRIM), which provides construction and engineering services to utilities, municipalities and energy companies. Primoris is expected to benefit from the data center power grab, and the current backlog is for more traditional utility projects, with a favorable tailwind we believe given the generational increase in domestic power demand. GE Vernova (ticker GEV) outperformed for the second quarter in a row. The diversified power technology company is focused on ten markets, from steam heat to wind, grid solutions and nuclear. The electrification business, which includes Grid Solutions is the fastest growing segment currently as measured by bookings and billings. Mueller Water Products (ticker MWA), the long-standing GEOS water holding was a strong performer after beating earnings estimates in their third quarter earnings report. We sold the Mueller position during the quarter as it was well above our fair valuation estimate. The new efficient transport holding Rivian Automotive (ticker RIVN) rounded out the top performers, on the heels of good production and shipments, as well as a joint venture announcement with VW to provide Rivian zonal architecture for VW EVs - a must have for EVs which are software defined vehicles. We believe Rivian will be the next EV standout and is scaling for new model production this year with the R2, a more mass market offering, albeit attractive and refined, smaller electric SUV. Despite some negative political rhetoric, the EV transition is intact, and we think Rivian has the platform differentiation and execution to take share from the traditional automotive segment.

#### **Underperformers:**

Underperformance for the quarter was led by efficient transport, battery safety holding Aspen Aerogels (ticker ASPN). Aspen has secured a Department of Energy loan for a new manufacturing facility in Georgia yet share price weakened following an equity offering in October to strengthen its balance sheet. We added to our position in late December, after what we believe was excessive share price weakness given the company's differentiation of its technology to control lithium-ion battery fires. Residential solar rooftop firm Sunrun (ticker RUN) was added to GEOS in late October, given what we believe will be improving fundamentals for rooftop solar in the next year based on nationally escalating electricity prices, and improving pricing and cash flow as volumes improve. The stock weakened after the November election, yet we remain constructive and believe the historically cheap valuation and improved outlook could be the contrarian pick for 2025. Electric meter systems firm Landis+Gyr (ticker LAND SW) is based in Switzerland with 60% revenue exposure to the US, which will be their focus in the next few years given lower smart meter penetration rates versus Europe. We believe much of the stock pressure was due to non-fundamental reasons as European share prices generally underperformed on fears of continued EU economic weakness. Landis announced an improved backlog and confirmed earnings guidance for 2025, assembling a strong trading update in the quarter. Rounding out the underperformance was Advanced Drainage Systems (WMS), which is in the GEOS water theme, newly purchased in August based on strong valuation and what we forecast to be improving fundamentals for their water harvesting and drainage systems for residential neighborhoods and industrial facilities. The company foresees improvements in both end markets, and we added marginally to the position in early November.



# **PEAR TREE ESSEX ENVIRONMENTAL OPPORTUNITIES FUND (CONTINUED)**

#### **Portfolio Changes**

We sold solar tracker manufacturer Array Technologies (ticker ARRY) early in the quarter given extended pricing pressure from competitors, as well as continued high input costs. We also exited solar inverter company Enphase Energy given weakened expectations for a near-term improvement in earnings. Global wind turbine manufacturer Vestas Wind Systems was also sold based on uncertainty as to when equipment pricing discipline will improve, as well as continued backlog pushouts which should hinder margins. Water holding Xylem (ticker XYL) was trimmed to make room for a new GEOS position, IDEX (ticker IEX), which resides in 10 verticals, operating with great discipline to acquire differentiated businesses, from agricultural to energy, life sciences, water and semiconductors, with 50% revenue exposure to the US, and 25% in the EU. IDEX operates primarily in fluid and metering technologies, health & science and fire & safety. IDEX has consistent sales growth and strong free cash flow generation, with an asset light manufacturing model. Management recently commented that near-term growth will be based on water, which is 11% of revenues, advanced materials, aerospace and semiconductors. We see attractive valuations in Japan and purchased the diversified industrial company Toray Industries (3402 JT) which operates in advanced materials for industrial applications, as well as industrial and municipal water filtration. Another new position added later in the quarter was Chart Industries (ticker GTLS), which provides equipment for industrial gas applications and storage. Chart focuses on cryogenic components and heat exchangers to improve the energy efficiency of industrial gas production and has strong legacy in advanced hydrogen applications. Another new position in the efficient transport theme is the lidar company Ouster (ticker OUST), which we classify as a fast grower and was purchased at a 1% weight. Ouster is focused on deploying their technology to smart city, industrial applications such as robotics and automation, as well as on and off-road transportation. Ouster sees the most near-term uptake in the materials handling market, providing full lidar systems to global forklift manufacturers.

#### Outlook

The nine GEOS themes are all tied to industries which solve global environmental problems – each theme is directly related to enabling economic growth with less resources and improved quality of life. We can think of no timelier example than that of power technology, which consists of technologies and services that enable more efficient and safe distribution and storage of power. Our current power technology exposure consists of companies building and maintaining the electrical grid, as well as technologies that enable more efficient distribution of electricity by optimizing delivery amidst more distributed resources and increasingly severe weather. Note that while domestic demand for electricity has historically been less than GDP growth, projections are mounting from many energy consultants to administrations such as the Energy Information Administration, for much higher annualized demand growth for the next decade+. We have seen projections as high as 10% or more, but are conservatively modeling 4% given the prospects for overestimates or industry overbuild risk. This, as our centralized grid has suffered from benign neglect and is considered generally obsolete for the coming demand drivers from data centers, onshoring and increased electrification. Utilities are finally sounding the alarm, and peak power demand prices in regions such as Texas ERCOT have spiked recently to unprecedented levels, in the early days of the onshoring and domestic re-industrialization cycle. There can be no economy without power, and electricity generation and distribution require many inputs that are represented by GEOS, from water to software, wires, substations and storage solutions. For example, GEOS water holding Xylem (XYL) delivers water management solutions for intake, cooling and condensation use by nuclear power plants. Reliability and redundancy are increasingly important for continuous operations amidst more volatile water supply. GEOS power technology holding Primoris Services (PRIM) has over 70 years of operating experience installing and maintaining power distribution systems. Primoris also has an energy segment which provides more decentralized power solutions for industry, enabling behind the meter renewables and power storage to limit business risk, from power prices to operational downtime. Primoris sees the greatest opportunity in their power delivery segment, given increased load demand and the need for weather hardening and preparedness, with a \$105B market opportunity in the next three years.



# **PEAR TREE ESSEX ENVIRONMENTAL OPPORTUNITIES FUND (CONTINUED)**

#### **Outlook Continued**

Amidst the power challenges, we believe utility and rooftop solar are well positioned, given the less complex permitting, engineering and construction issues when compared to combined cycle gas plants and the decade+ logistics for new nuclear. Texas has now surpassed California in solar capacity, which increased 800% since 2019 according to the US EIA. Last year, Texas installed 80% more combined solar, wind and battery capacity than California, with over 30% of power capacity coming from renewables. Florida is now in third place nationally for solar and battery capacity. While there are some recent examples of nuclear power deals from data centers, the primary power purchase agreements are solar and battery storage based. Just last month, Amazon announced they will spend over \$150B over the next 15 years on data centers, with renewables the primary power source. Solar and storage provide distributed power, meaning the source allows generation at the point of demand, limiting the vagaries of long permitting lead times and grid connection. Last October, the FERC rejected Amazon's proposal with Talen Energy to purchase an extra 180 megawatts for the Susquehanna data center complex, citing concerns about customer power bills and reliability. We expect this trend to continue, where regulators side in favor of consumer power over large offtakes for data centers. It is for this reason that Meta, Microsoft and Google are the largest renewables power purchasers, and last year Microsoft signed the largest ever corporate renewables power purchase agreement (PPA) equating to over 11 gigawatts of solar and storage by 2030. Late last year, Meta signed a long-term PPA with Longroad Energy for a 300-megawatt solar project based in Texas. GEOS holding First Solar is the panel supplier to Longroad. We are in early innings in the global power grid transformation and believe GEOS to be well positioned to capitalize across several themes and many holdings in both the near and longer term. 💠



## **DECEMBER 31, 2024**

## TOTAL EXPENSE RATIOS\*

	Gross Expense Ratio*	Net Expense Ratio*
Ordinary Shares	1.51%	1.24%
Institutional Shares	1.25%	0.99%
R6 Shares	1.12%	0.95%

\* Per Prospectus dated August 1, 2024, as amended. Fee waivers and expense reimbursements may not be amended, rescinded or terminated before July 31, 2025 without the consent of the Fund's Trustees.

### A WORD ABOUT RISK

Investing in foreign markets, particularly emerging markets, can be more volatile than the U.S. market due to increased risks of adverse issuer, political, regulatory, market or economic developments and can perform differently than the U.S. market. The fund's exclusion of investments in companies other than clean tech may adversely affect the fund's relative performance at times when those other types of investments are performing well.

Investment Products
Not FDIC insured = May lose value = No bank guarantee



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## **PEAR TREE ESSEX ENVIRONMENTAL OPPORTUNITIES FUND PORTFOLIO HIGHLIGHTS**

as of December 31, 2024 (The portfolio is actively managed. Holdings and weightings are subject to change daily.)

Top Ten Holdings	
Percentage of total net assets	46.40%
Primoris Services Corporation	6.4%
NextEra Energy, Inc.	6.2%
GE Vernova Inc.	6.1%
Badger Meter, Inc.	5.6%
Valmont Industries, Inc.	4.6%
Infineon Technologies AG	4.1%
Keyence Corporation	3.4%
Trimble Navigation Limited	3.4%
MP Materials Corp.	3.3%
IDEX Corporation	3.3%

# The companies mentioned in the commentary on page one have the following percentage of total net assets as of 12/31/2024:

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Toray Industries	3.1%
Chart Industries	3.1%
Advanced Drainage Systems	2.4%
Aspen Aerogels	2.2%
Landis+Gyr	2.0%
Xylem	1.8%
Ouster	1.1%
Rivian Automotive	1.0%
Sunrun	0.7%

## PERFORMANCE

#### as of December 31, 2024

#### Average Annual Total Returns at Net Asset Value

	Unann	ualized	Annualized					
	Q4	Calendar YTD	1-Year	3-Year	5-Year	10-Year	Since Inception	Inception Date
Ordinary Shares	(7.56%)	1.32%	1.32%	(10.39%)	5.36%	_	4.85%	09/01/2017
Institutional Shares	(7.49%)	1.60%	1.60%	(10.15%)	5.63%	—	5.11%	09/01/2017
R6 Shares	(7.44%)	1.67%	1.67%	(10.11%)	_	_	(10.34%)	09/01/2021
MSCI World <sup>1</sup>	(0.07%)	19.19%	19.19%	6.85%	11.70%	_	11.40%	-

<sup>1</sup>The MSCI World Index captures large and mid-cap representation across 23 Developed Markets (DM) countries. With 1,395 constituents as of 12/31/2024, the index covers approximately 85% of the free float-adjusted market capitalization in each country. You cannot invest directly in an index. For comparative performance purposes, the beginning date of the Index is 09/01/2017. The MSCI World Index is maintained by MSCI Inc.

**Performance data quoted represents past performance and is no guarantee of future results.** Current performance may be lower or higher than performance data quoted. Investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. For the most recent month-end performance, visit the Fund's website at www.peartreefunds.com.

For information about the Pear Tree Essex Environmental Opportunities Fund, obtain the Fund's prospectus by calling (800) 326-2151 or visiting www.peartreefunds.com. Before investing carefully consider the Fund's investment objectives, risks, charges and expenses. Please read the prospectus carefully before you invest or send money.