









# Pharus Electric Mobility Value Niche

## Portfolio Update 29<sup>th</sup> December 2023 – 31<sup>st</sup> March 2024



Launch date: 10.06.2019

Total Net Asset as of 31.03.24: € 20,617,850.10

Currency: EUR

Net Asset Value per share as of 31.03.24:

Class A – ISIN: LU1867072149 € 154.45

Class B – ISIN: LU1867072222 € 168.42

Class Q – ISIN: LU1867072495 € 168.20

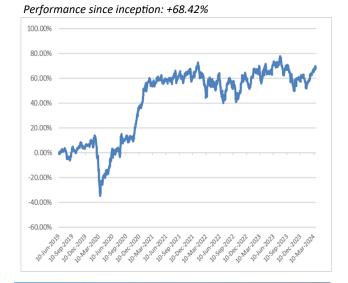
Class A GBP – ISIN: LU2526377374 £ 97.95

	Q1	Year to Date	1 Year	3 Years	Since inception
Performance (Class B)	+3,37%	+3,37%	+1.77%	+8.04%	+68.42%
Volatility					18.58%

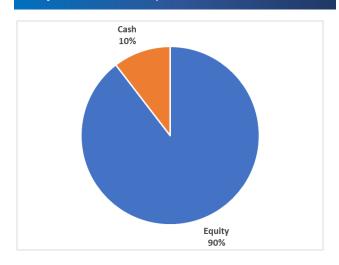
#### Net Asset Value per share

#### Performance Q1 2024: +3.37%

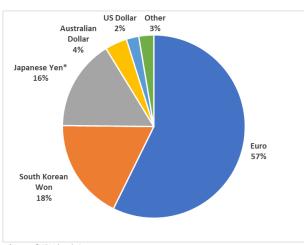




#### Portfolio breakdown by asset class



#### Portfolio breakdown by currency



\*net of JPY hedging

#### Quarterly comment

During the first quarter of 2024, the Fund achieved a positive return of 3.37%.

The performance was better than that shown by the main ETFs exposed to electric mobility, benefiting from its deep value approach (P/TBV close to 1x), which allows investment in a high-growth theme but at reduced risk of permanent capital loss.

The dispersion of performance within the different niches was significant. Three of the eight Niches showed double-digit positive performance (**Cathodes** +12%, **Satellite Areas** +10%, **Electrolytes** +31%), benefiting from a number of positive results, especially with regard to Japanese companies (cathode precursor materials manufacturer Toda Kogyo was the best performer). Two niches were virtually unchanged, while the remaining three niches showed low-to-mid single digit declines.

The sub-niche that hurt the portfolio the most was **Lithium Cells** (-4%), due to weakness in Japanese and Korean electric vehicle battery manufacturers, as a result of the slowing phase in the penetration of electric cars on a global scale, aided by the waiting phase before the launch of mass market models.

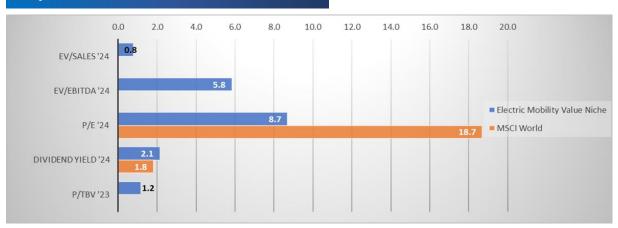
The first quarter of 2024 is expected to see a marked slowdown in the growth rate of electric cars. February data showed global electric vehicle market growth of 3 percent for a 13 percent penetration (China -9 percent sales for a 33 percent penetration share; Europe +10 percent for a 20 percent share; U.S. +11 percent for an 8.8 percent share). This slowdown was substantially anticipated by the market and should be followed by stabilization in the second half of the year. The improving trend will be supported by the launch of several new models, although a decisive acceleration will not occur until 2025-2026, when several electric vehicles will be available for the mass market segment.

There are, however, a number of potential catalysts that point to a recovery for Lithium Cells in the coming months including: the end of the downward revision of near-term earnings growth estimates; the launch starting in the second half of the year of the new 4680 cylindrical batteries, which will significantly improve battery performance; and the supportive regulatory environment in the U.S. market, where Korean and Japanese players are heavily exposed with aggressive Gigafactory development plans.

## Performance by niche – Q1 2024

NICHE	Performance
Lithium Cells	-4.19%
Cathodes	+11.85%
Anodes	-1.01%
Electrolytes & Elecfoils	+31.37%
Separators	-5.19%
Commodities	-0.18%
Powertrains & Ultracapacitors	-0.08%
Satellite Areas	+9.56%

## Portfolio valuation



Source: Niche AM, Refinitiv, MSCI

## Top holdings

ISIN	SECURITY	%	NICHE	SUB-NICHE
JP3866800000	Panasonic Holdings	5.68%	Lithium Cells (LC)	NCA
JP3402600005	Sumitomo Metal Mining	4.39%	Cathodes (CM)	NCA
KR7051911006	Lg Chem	4.20%	Lithium Cells (LC)	NMC
JP3544000007	Teijin Ltd	3.62%	Separators (SM)	WET
JP3627400009	Toda Kogyo	2.85%	Cathodes (CM)	NCA
KR7096771001	Sk Innovation Pref	2.53%	Lithium Cells (LC)	NMC
DE0007664039	Volkswagen Pref Shs	2.50%	Satellite Areas (SA)	CARS
FR0000131906	Renault	2.50%	Satellite Areas (SA)	CARS
FR0013176526	Valeo	2.36%	Power Trains & Ultracapacitors (PTU)	POWER TRAINS
FR0000131757	Eramet	2.36%	Commodities (C)	NICKEL SULPHATE

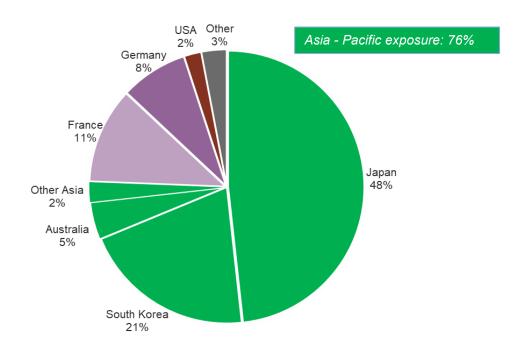
#### Main increases in the quarter

Holdings	Weight at 31/12/23	Weight at 31/03/24
ALD	1.4%	2.1%
Aurubis	0.0%	0.7%
Albemarle	0.0%	0.4%
Gaya Abadi Sempurna	0.1%	0.2%

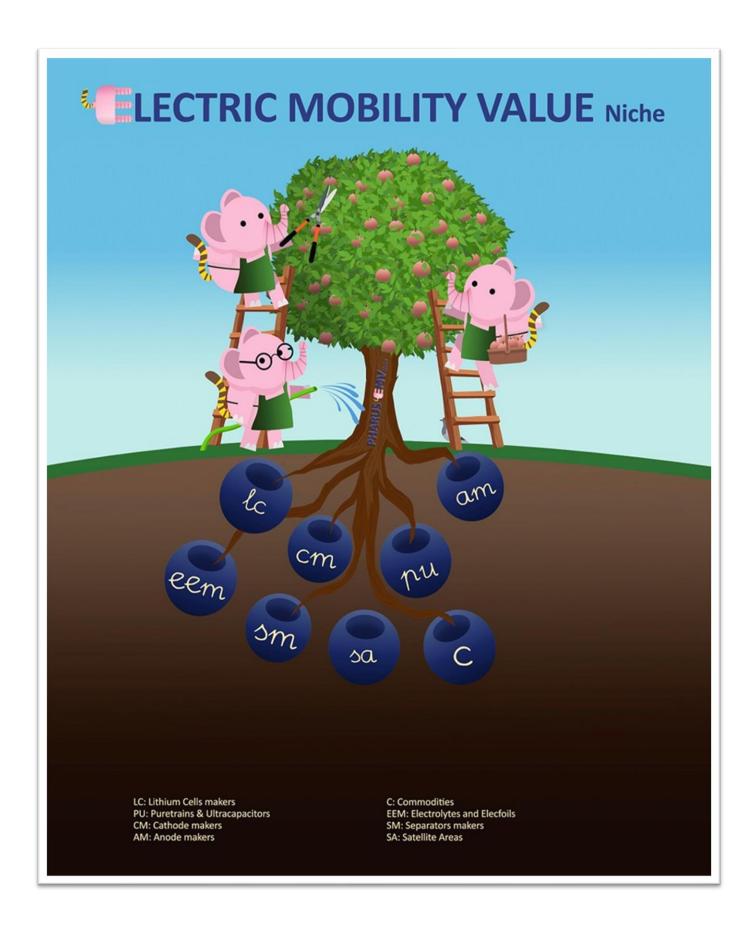
#### Main decreases in the quarter

Holdings	Weight at 31/12/23	Weight at 31/03/24	Total Return
Soulbrain Holdings	2.4%	0.4%	+70.86%
TDK	2.4%	1.0%	+47.53%
Taiheiyo Cement	2.1%	0.7%	-3.35%

## **Geographical Composition**



Source: Niche AM



# Lithium cells



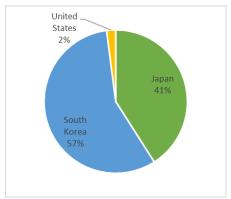
# stocks: 7 Average Market Cap (mln €) 9.252 Median Market Cap (mln €): 2.227

#### Lithium cells – segment breakdown

Lithium Cells	LC	EM Fund	Lithium Niche 100.0%
Elemani Cens	20	13.370	100.070
Nickel Manganese & Cobalt	NMC	9.3%	60.8%
Nickel Cobalt & Aluminium	NCA	6.0%	39.2%

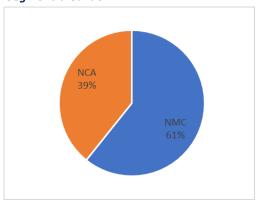
Source: Niche AM

#### Geographical breakdown

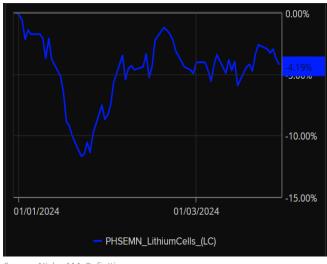


Source: Niche AM

#### Segment breakdown



#### Performance Q1 2024 (31/12/23-31/03/24)



Source: Niche AM, Refinitiv

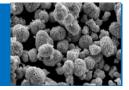
#### **Performance since inception (10/06/19 – 31/03/24)**



#### Niche Description

Electric mobility will grow dramatically in the coming years, with a speed still awaited by most, changing the world forever. Electric mobility will be pervasive, encompassing transport on land, water and air. At the heart of the electrification of mobility are lithium batteries, which consist of several lithium cells joined together through a battery management system. Each cell is a small battery with a cathode, an anode, a separator and filled with an electrolyte solution. There are different types of lithium cells, each with its own chemistry, although NCA and NMC are by far the most widely used in the electrification of transport.

# **Cathodes**



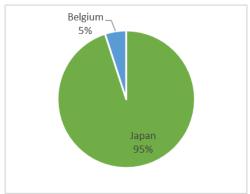
Median Market Cap (mln €): # stocks: Average Market Cap (mln €): 3.136

#### Cathodes – segment breakdown

		EM Fund	Cathodes Niche
Cathodes		13.0%	100.0%
Nickel Manganese & Cobalt	NMC	2.1%	16.1%
Nickel Cobalt & Aluminium	NCA	7.7%	58.9%
Cathodes Material	CM	3.3%	25.0%

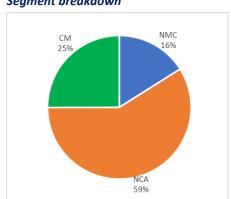
Source: Niche AM

#### Geographical breakdown

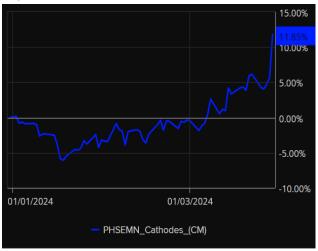


Source: Niche AM

#### Segment breakdown

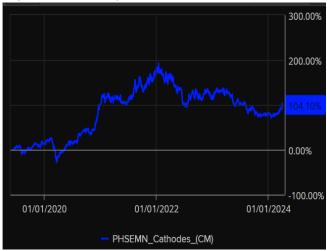


### Performance Q1 2024 (31/12/23-31/03/24)



Source: Niche AM, Refinitiv

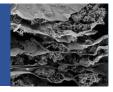
#### Performance since inception (10/06/19 - 31/03/24)



#### **Niche Description**

Cathodes are the most expensive component in lithium-ion batteries for electric vehicles (about 25 per cent of the total cost) and their chemistry is decisive for energy density and thus battery capacity. The composition of these cathodes will, at least for the next 5 to 7 years, be limited to two types of chemistry, NCA (nickel, cobalt and aluminium) and NMC (nickel, manganese and cobalt), as these provide the energy density required to make electric mobility competitive in terms of range with internal combustion vehicles.

## **Anodes**



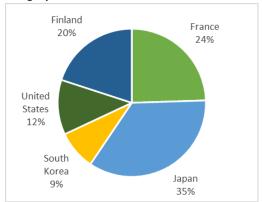
7 # stocks: 5.266 Median Market Cap (mln €): Average Market Cap (mln €) 2.682

#### Anodes – segment breakdown

	EM Fund	Anodes Niche
Anodes	6.9%	100.0%
Coating	1.7%	24.5%
Anodes	1.7%	25.3%
Artificial Graphite	1.3%	18.2%
Needle Coke	2.2%	32.0%

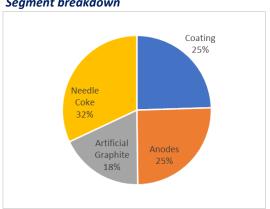
Source: Niche AM

Geographical breakdown



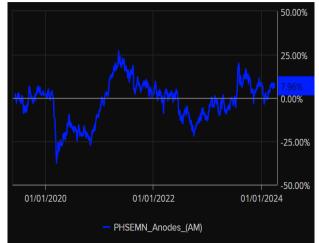
Source: Niche AM

Segment breakdown



Performance Q1 2024 (31/12/23-31/03/24)

**Performance since inception (10/06/19 – 31/03/24)** 



Source: Niche AM, Refinitiv

#### **Niche Description**

01/01/2024

Anodes also contribute to determining the energy density of the battery, as they are responsible for storing and releasing lithium ions to and from the cathode. Anodes are arranged on copper or aluminium membranes that serve as a current collector for the anode. Selecting high quality materials for the anode enables lithium cells to offer good retention capacity and significant energy efficiency.

0.00%

-5.00%

-10.00%

-15.00%

01/03/2024

PHSEMN\_Anodes\_(AM)

# **Separators**



# stocks: 5

Average Market Cap (mln €):

2.344 Median Market Cap (mln €):

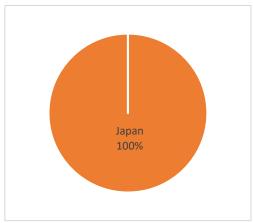
1.707

#### Separators – segment breakdown

	EM Fund	Separators
Separator Maker	5.4%	100.0%
Wet Separetors	4.5%	82.9%
Dry Separators	0.9%	17.1%

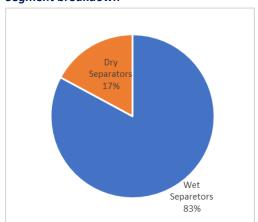
Source: Niche AM

#### Geographical breakdown

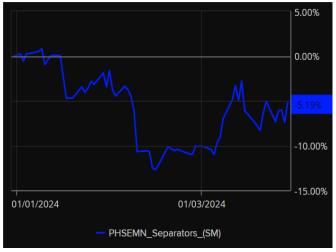


Source: Niche AM

#### Segment breakdown

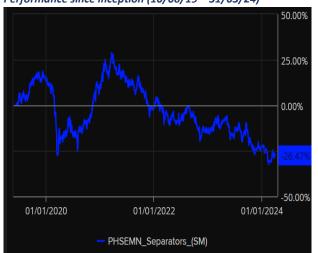


Performance Q1 2024 (31/12/23-31/03/24)



Source: Niche AM, Refinitiv

**Performance since inception (10/06/19 – 31/03/24)** 



#### **Niche Description**

Separators ensure the safety of lithium cells as they act as a barrier between cathode and anode. Although separators occupy only 5% of the space of a cell, they represent the second most significant cost item after the cathode (around 10% of the total cost). The market for separators for electric vehicles was worth around USD600m in 2015, with a capacity of 0.5bn. This number could grow to over 20bn square metres by 2025, in line with the growth of electric mobility. However, there is a risk that after 2030 this component will no longer be needed if the solid-state battery is developed and adopted...

# **Electrolytes**



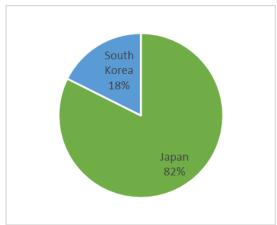
# stocks: 3 Average Market Cap (mln €): 399 Median Market Cap (mln €):

#### Electrolytes & Elecfoils – segment breakdown

	EM Fund	Electrolytes Niche
Electrolytes & Elecfoils	4.4%	100.0%
Electrofoils	0.0%	0.0%
Electrolytes	2.5%	100.0%

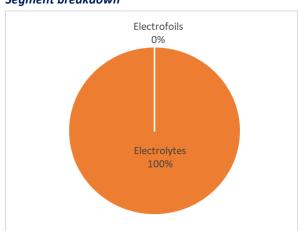
Source: Niche AM

#### Geographical breakdown

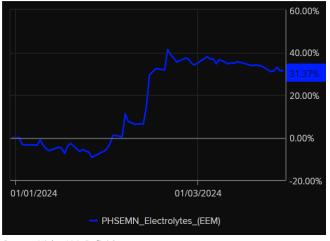


Source: Niche AM

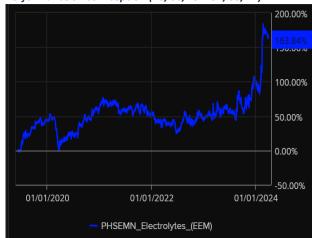
#### Segment breakdown



Performance Q1 2024 (31/12/23-31/03/24)



Performance since inception (10/06/19 - 31/03/24)



Source: Niche AM, Refinitiv

#### **Niche Description**

The electrolyte plays a key role as it enables and promotes the movement of lithium ions between cathode and anode. The electrolyte consists of solvents, salts and additives. The solvents allow the salts to dissolve. The salts allow the ions to pass through. Additives are products that are added to modify and refine the characteristics of the electrolyte. Materials that ensure a high ion-conducting capacity are essential to ensure good performance of the cell.

# **Commodities for electric mobility**



# stocks:

Average Market Cap (mln €):

Median Market Cap (mln €):

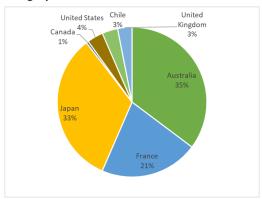
1.263

#### Commodities - segment breakdown

	EM Fund	Commodities Niche
Commodities	11.1%	100.0%
Natural Graphite	1.4%	12.4%
Cobalt	1.1%	10.1%
Nickel Sulphate	3.5%	31.8%
Lithium	2.8%	25.7%
Copper	2.2%	19.8%
Vanadium	0.0%	0.3%

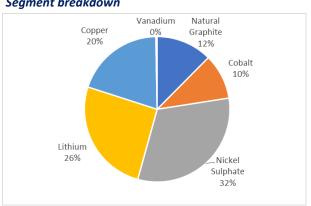
Source: Niche AM

#### Geographical breakdown



Source: Niche AM

#### Segment breakdown



Performance Q1 2024 (31/12/23-31/03/24)



#### Performance since inception (11/06/19 - 31/03/24)



#### **Niche Description**

Base Materials are vital for electric mobility. The need for cobalt, lithium and graphite will multiply many times over by 2025, while the need for nickel will almost double. Today, the world seems unprepared for this change, so a gradual increase in the price of these materials is likely once the adoption of e-mobility begins to accelerate dramatically.

# Powertrains & Ultra Capacitors



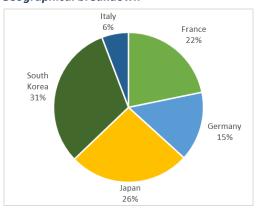
# stocks: 9 Average Market Cap (mln €): 7.141 Median Market Cap (mln €): 5.856

#### PTs & UTs - segment breakdown

	EM Fund	Powertrains & UT
Powertrains & UTs	10.8%	100.0%
Power Trains	8.0%	73.9%
Ultra Capacitors	2.8%	26.1%

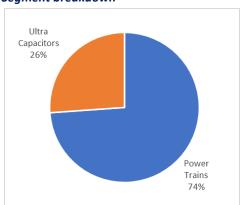
Source: Niche AM

#### Geographical breakdown

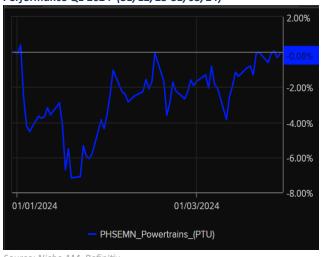


Source: Niche AM

#### Segment breakdown

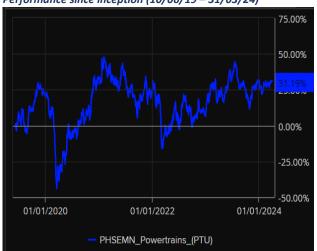


Performance Q1 2024 (31/12/23-31/03/24)



Source: Niche AM, Refinitiv

Performance since inception (10/06/19 – 31/03/24)



#### **Niche Description**

Electric vehicle powertrains are completely different from conventional ones and will be refined over time to produce solutions that can improve vehicle efficiency. Those companies that are best equipped to handle the change will be able to gain market share and significantly improve margins. At the same time, ultracapacitors can become an important complement to the electric powertrain, providing high energy intensity when needed and, in doing so, increasing vehicle performance and extending battery life.

# **Satellite Areas**



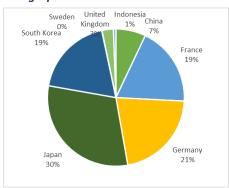
# stocks: 23 Average Market Cap (mln €): 5.258 Median Market Cap (mln €): 927

#### Satellite Areas – segment breakdown

	EM Fund	Satellite Areas Niche
Satellite Areas	24.7%	100.0%
Sensors	1.4%	5.8%
Cars	8.9%	36.0%
Assembly Lines	4.3%	17.5%
Electric Airplanes	0.5%	2.0%
Electrodes Cutting Equipment	3.2%	13.0%
Charging Stations	1.2%	4.7%
New Materials For Mobility	3.0%	12.3%
Lithium Batteries Assembly Machinery	0.4%	1.7%
Thermal Management Systems	0.9%	3.7%
Electric Bus	0.7%	2.7%
Electric Scooters	0.1%	0.6%

Source: Niche AM

#### Geographical breakdown



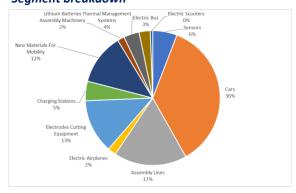
Source: Niche AM

#### Performance Q1 2024 (31/12/23-31/03/24)

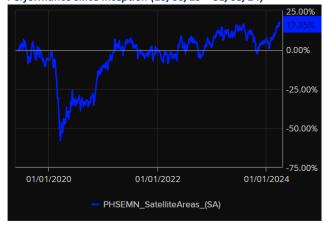


Source: Niche AM, Refinitiv

### Segment breakdown



#### Performance since inception (10/06/19 - 31/03/24)



### Niche Description

The transition from internal combustion vehicles to electric vehicles will be epochal, the value of the battery market will multiply by 30 in less than 10 years, reaching that of semiconductors. A billion cars and hundreds of millions of other vehicles will be affected. There is no doubt that this change will have the power to reshape many other adjacent sectors. This Niche seeks to identify the companies that will indirectly benefit from this trend.

This document, any presentation made in conjunction herewith and any accompanying materials are preliminary and for information only. They are not an offering memorandum, do not contain any representations and do not constitute or form part of an offer or invitation to subscribe for any of Niche's funds (each, the" Fund"). Further they do not constitute or form part of any solicitation of any such offer or invitation, nor do they (or any part of them) or the fact of their distribution, form the basis of, or can they be relied on, in connection with any contract therefor. The information contained in this report has been compiled exclusively by Niche Asset Management Ltd which is authorised and regulated by the Financial Conduct Authority (RN783048) and is registered in England & Wales 10805355. The information and views contained in this document are not intended to be complete and may be subject to change at any time. No representation, warranty or undertaking, stated or implied, is given as to the accuracy of the information or views in this document and no liability for the accuracy and completeness of information is accepted by Niche Asset Management Ltd and/or its partners. The investment strategy of the Fund is speculative and involves a substantial degree of risk of losing some or all the capital invested. Market, political, counterparty, liquidity and other risk factors may have a significant impact on the investment objectives of the Fund, while past performance is not a guide or otherwise indicative of future results. The distribution of this document and the offering of the Fund's shares in certain jurisdictions may be restricted by law and therefore persons into whose possession this document comes should inform themselves about and observe any such restrictions. The Funds are not yet available for distribution in all countries, it will be only subject to registration with the local supervisory Authority. Potential investors are invited to contact Niche Asset Management Ltd. to check registration countries. Any failure to comply with these restrictions could result in a violation of the laws of such jurisdiction. Any reproduction of this information, in whole or in part, without the prior consent of Niche Asset Management Ltd is also prohibited. This document may only be communicated or passed to persons to whom Niche Asset Management Ltd is permitted to communicate financial promotions pursuant to an exemption available in Chapter 4.12 of the Financial Conduct Authority's Conduct of Business Sourcebook ("COBS") ("Permitted Recipients"). In addition, no person who is not an authorised person may communicate this document or otherwise promote the Funds or shares therein to any person it the United Kingdom unless such person is both (a) a Permitted Recipient and (b) a person to whom an authorised person is permitted to communicate financial promotions relating to the Fund or otherwise promote the Fund under the rules in COBS 4.12 applicable to such authorised person. The securities referenced in this document have not been registered under the Securities Act of 1933 (the "1933 Act") or any other securities laws of any other US jurisdiction. Such securities may not be sold or transferred to US persons unless such sale or transfer is registered under the 1933 Act or exemption from such registration.

This document is a marketing communication intended for professional investors only. Potential investors are recommended to carefully read Prospectuses and Key Investor Information Documents (KIIDs) before making any final investment decision. Prospectuses, supplements and KIIDs are available free of charge at <a href="https://nicheam.com/legal">https://nicheam.com/legal</a>.