WisdomTree European thematic monthly update

January 2024

Thematic universe overview

+ AUM in thematic Exchange Traded Funds ("ETFs") and open-ended funds decreased slightly in January to $320 billion driven mostly by outflows in open-ended funds. ETFs' market share is increasing to 13.5%, on the back of better flow performance, with a total AUM of $43.2 billion. AUM in ETFs is stable compared to last year and only 3 billion off the all-time high in December 2021. This highlights the bifurcation we continue to observe between Thematic ETFs and open-ended funds. ETF performance and flows have been more resilient since mid-2023.

+ Performance in January was more challenging after the strong end-of-year bull markets. Only nine themes beat the MSCI All-Country World in January. Most of them are in Tech, and none of them are in "Environmental Pressures".

+ Flows in January have been negative, with -$3.2 billion in Europe. However, the bulk of the outflows are in open-ended funds, and ETFs gathered $1 billion of assets. This is a continuation of the trend observed in 2023, with ETF flows being more resilient. ETF flows are concentrated in the "Technological Shifts" Cluster.

Recent yearly flows in Europe
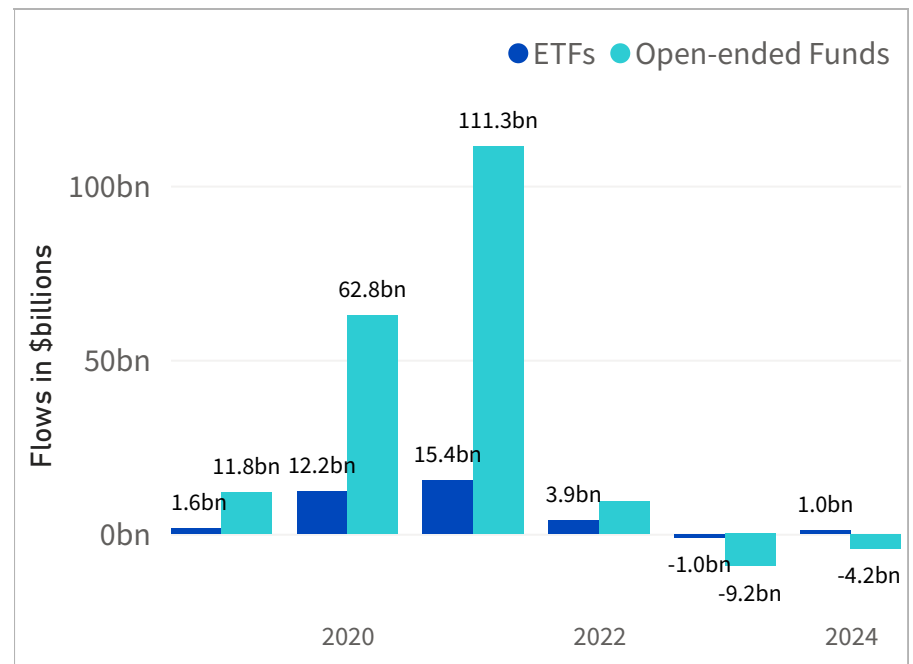
Europe-domiciled thematic AUM evolution and ETFs' market share
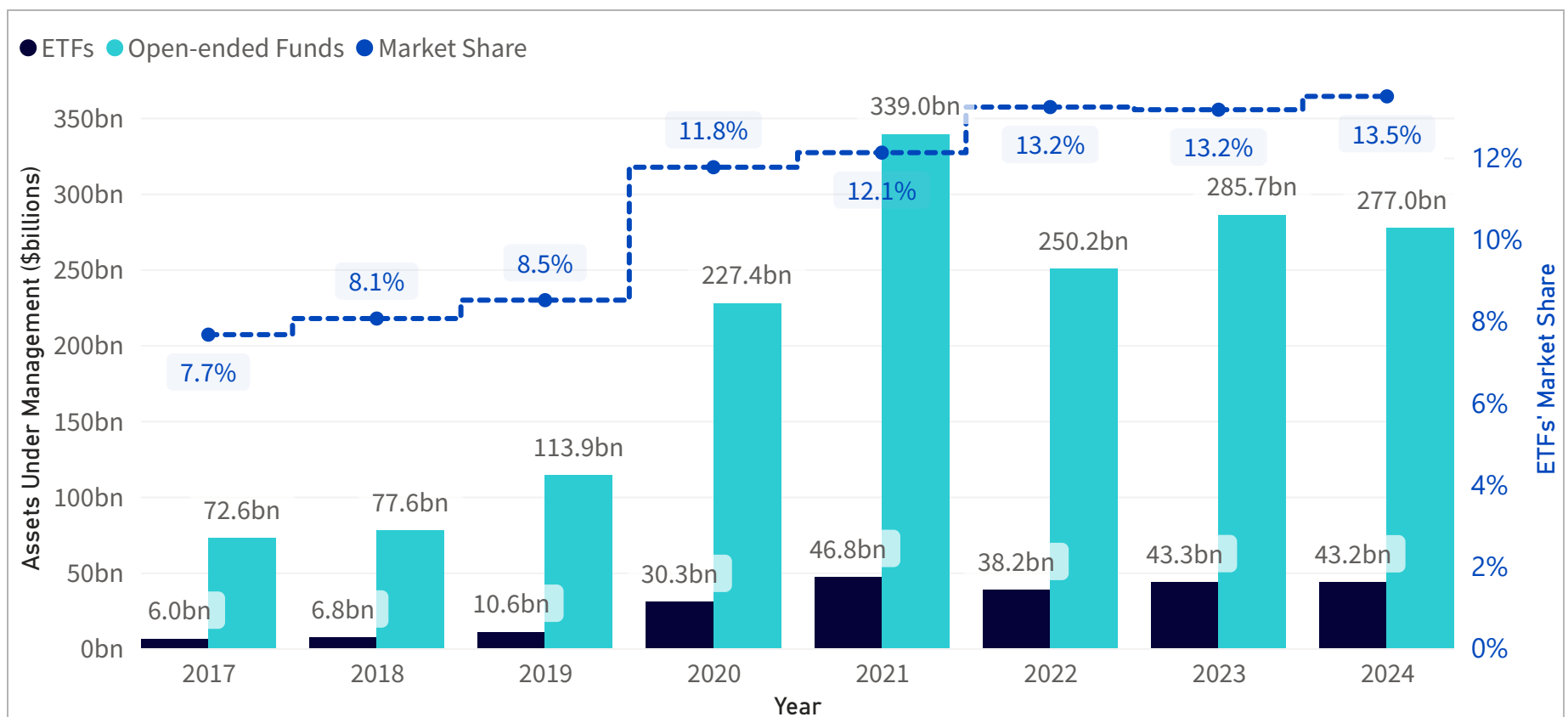
Source: WisdomTree, Morningstar, Bloomberg. All data as of 31/01/2024 and based on WisdomTree's internal classification of thematic funds. Performance is based on monthly returns from Bloomberg and Morningstar More information on the WisdomTree Thematic classification can be found in the Appendix. **Historical performance is not an indication of future performance, and any investments may go down in value.**

Thematic universe overview (continued)

+ Joint AUM in global thematic ETFs and open-ended funds in Europe are down $14 billion from December 2023. This decrease is driven mostly by the performance of thematic equities, since flows globally were positive at $4.5 billion during January 2024.

+ Year-to-date, European open-ended funds have suffered outflows across all clusters and type of funds (ie single themes or multi themes. ETFs have gathered the most flows in "Technological Shifts" followed by the "Environmental Pressures" cluster. Overall, outflows have been strong out of the "Environmental Pressures" cluster.

+ The "Environmental Pressures" cluster remains the biggest cluster in Europe with $132 billion of assets, but Technological Shifts is narrowing the gap with $108 billion as of the end of January 2024. It is worth noting that in the US, "Technological Shifts" is almost three times bigger than "Environmental Pressures".
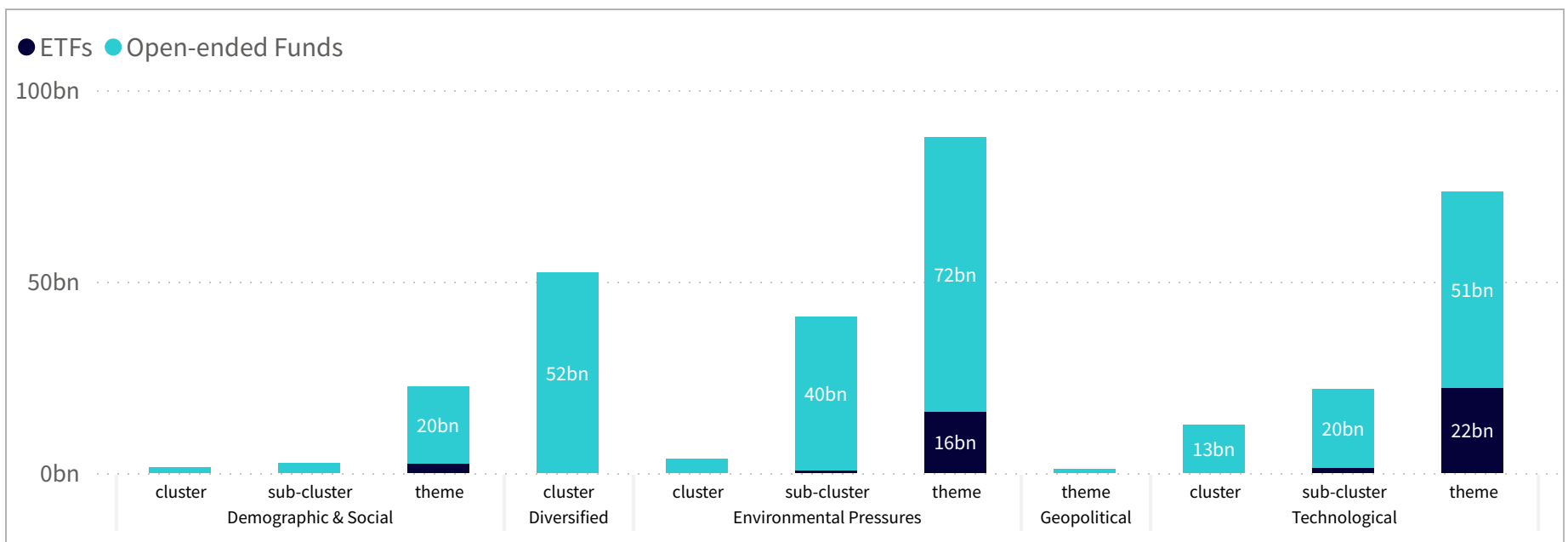
AuM in Thematics by region (Last 10Y)
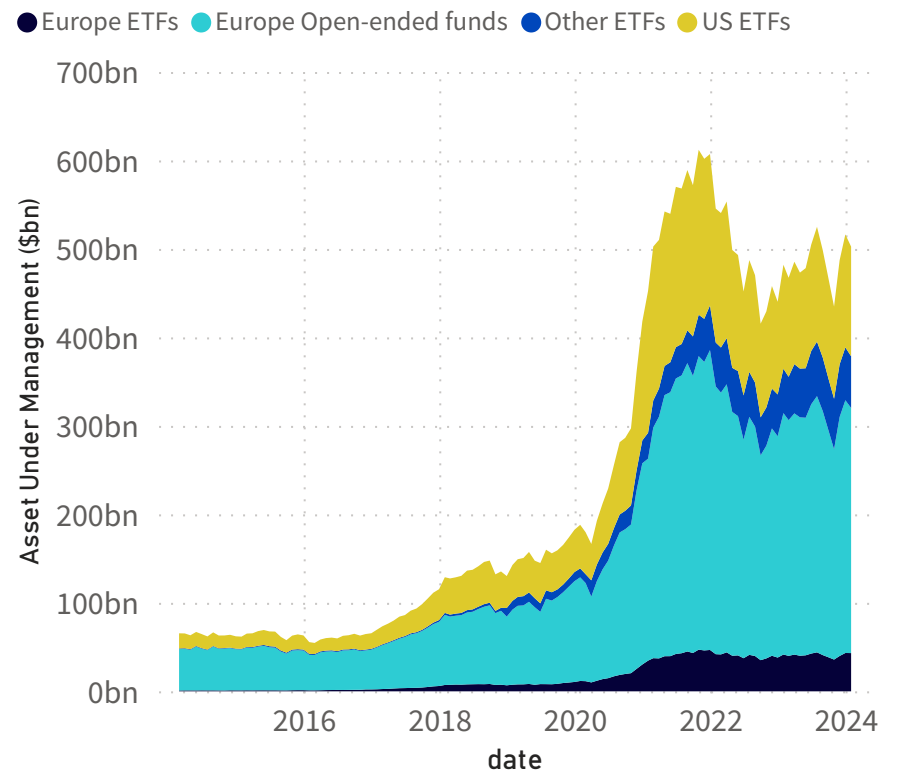
YTD flows in Europe by wrapper in cluster, sub-cluster and focused themes
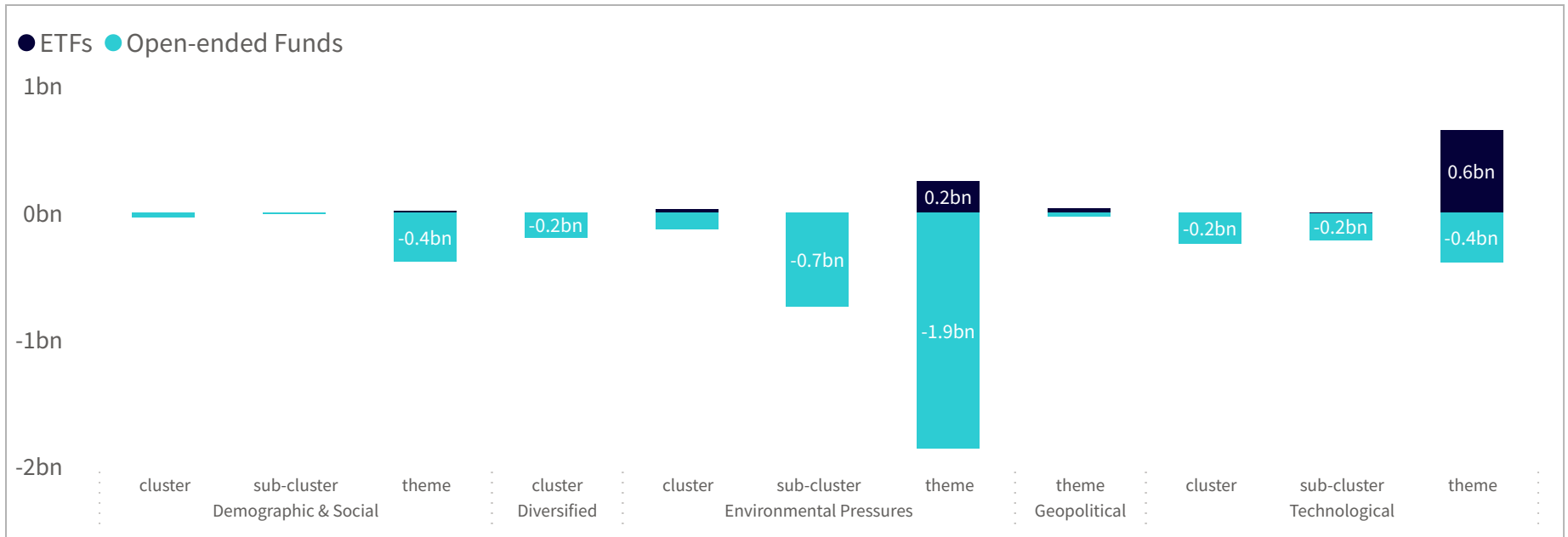
AuM in Europe by wrapper in cluster, sub-cluster and focused themes

Source: WisdomTree, Morningstar, Bloomberg. All data as of 31/01/2024 and based on WisdomTree's internal classification of thematic funds. Performance is based on monthly returns from Bloomberg and Morningstar More information on the WisdomTree Thematic classification can be found in the Appendix. **Historical performance is not an indication of future performance, and any investments may go down in value.**
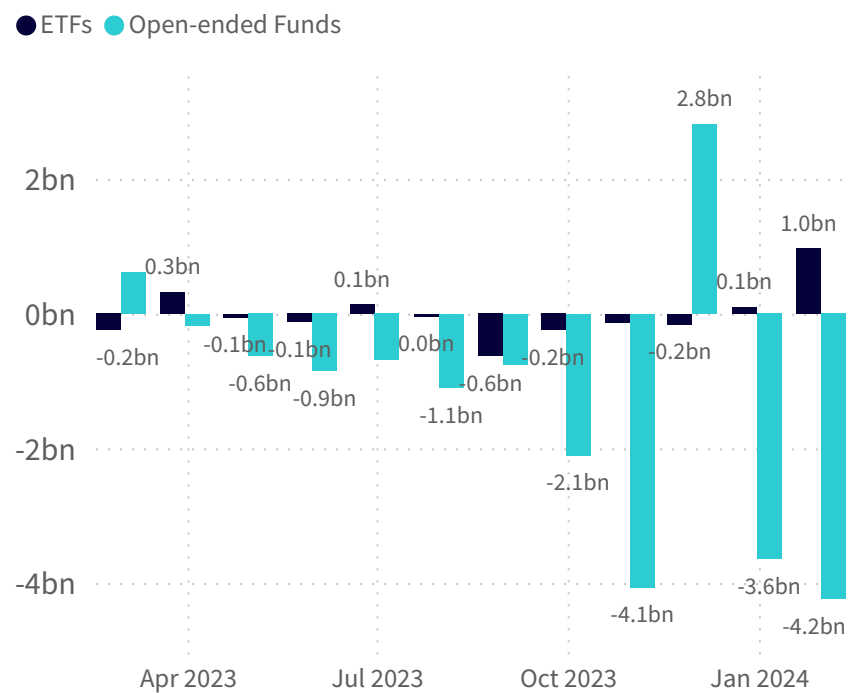
Thematic flows in Europe

+ Flows in January were positive for ETFs (+$966 million) but quite negative for Open-ended Funds with $4.24 billion outflows. This is a continuation of the trend observed in 2023 and a by-product of the strength of "Tech" versus "Green Themes".
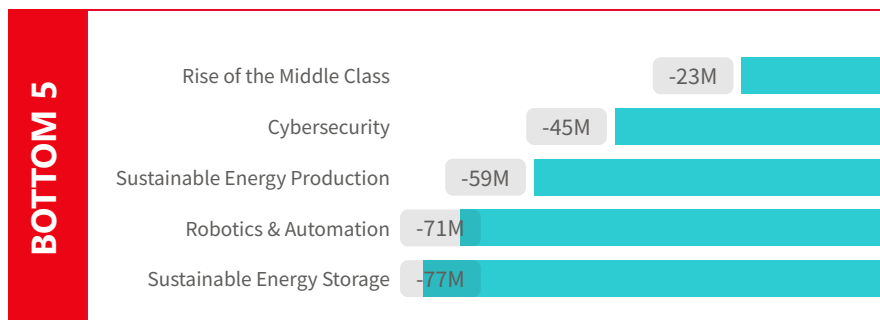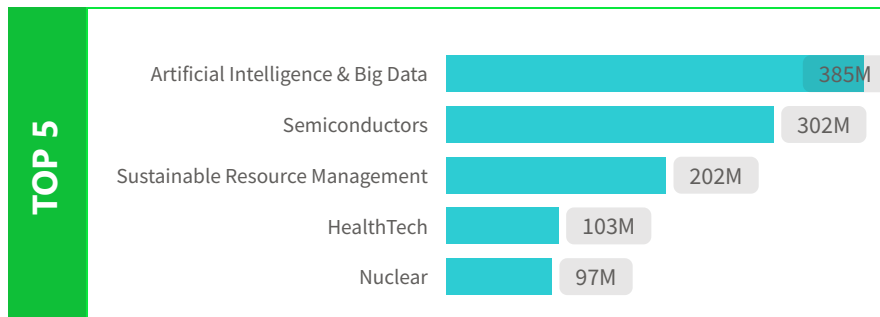
+ In January, "AI & Big Data" gathered the most assets with 442 million across both wrappers showing that the theme is continuing to attract interest. "Semiconductors" is second with +$302 million. Also a continuation of 2023's trends. "Nuclear" finishes third surfing on the momentum it accumulated in 2023. "Energy Transition Materials" is a surprise in 4th place as "green themes" have been suffering from some "ESG fatigue" for a year now. Looking at flows by wrappers, we observe that "HealthTech" did quite well in ETFs with $103 million in inflows.

+ The worst performer for the month is "Sustainable Energy Production", with $929 million in outflows. This is also in line with 2023's trends. "Sustainable Mobility" and "Water" follow with around $200 million of outflows each.
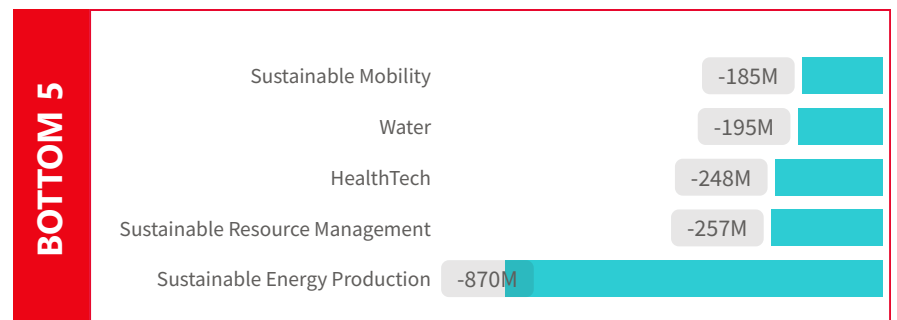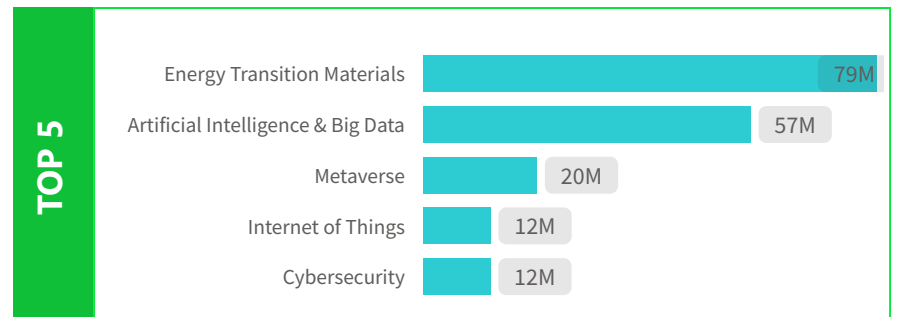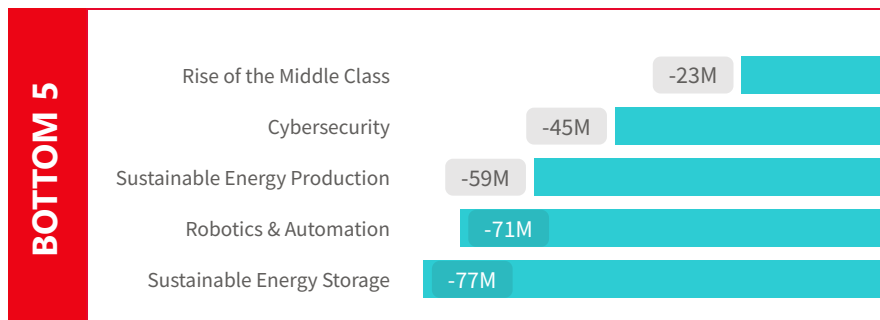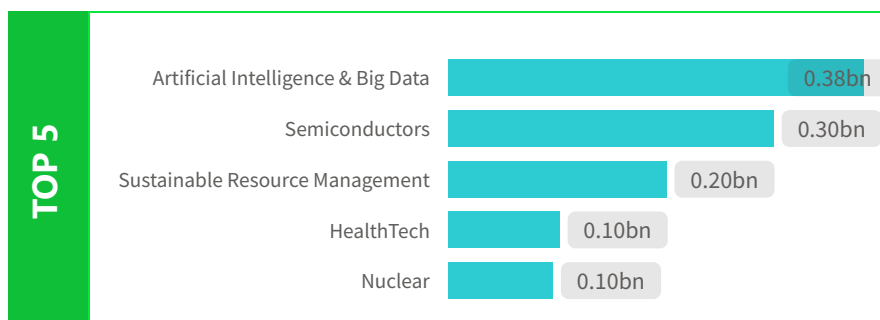
Month-on-month thematic flows

● ETFs ● Open-ended Funds

January Top/Bottom flows in Europe ETFs

TOP 5
|	
Artificial Intelligence & Big Data	385M
Semiconductors	302M
Sustainable Resource Management	202M
HealthTech	103M
Nuclear	97M

BOTTOM 5
Rise of the Middle Class	-23M
Cybersecurity	-45M
Sustainable Energy Production	-59M
Robotics & Automation	-71M
Sustainable Energy Storage	-77M

January Top/Bottom flows in Mutual Funds

TOP 5
Energy Transition Materials	79M
Artificial Intelligence & Big Data	57M
Metaverse	20M
Internet of Things	12M
Cybersecurity	12M

BOTTOM 5
Sustainable Mobility	-185M
Water	-195M
HealthTech	-248M
Sustainable Resource Management	-257M
Sustainable Energy Production	-870M

YTD Top/Bottom flows in Europe ETFs

TOP 5
Artificial Intelligence & Big Data	0.38bn
Semiconductors	0.30bn
Sustainable Resource Management	0.20bn
HealthTech	0.10bn
Nuclear	0.10bn

BOTTOM 5
Rise of the Middle Class	-23M
Cybersecurity	-45M
Sustainable Energy Production	-59M
Robotics & Automation	-71M
Sustainable Energy Storage	-77M

YTD Top/Bottom flows in Mutual Funds

TOP 5
Energy Transition Materials	79M
Artificial Intelligence & Big Data	57M
Metaverse	20M
Internet of Things	12M
Cybersecurity	12M

BOTTOM 5
Sustainable Mobility	-0.19bn
Water	-0.20bn
HealthTech	-0.25bn
Sustainable Resource Management	-0.26bn
Sustainable Energy Production	-0.87bn

Thematic performance and launches in Europe

+ In January, "Nuclear" was the best theme with +8.8% of returns. Artificial Intelligence-related themes also continued to perform strongly, with "Cybersecurity" gaining 2.9%, "Semiconductors" gaining 2.9% and "Artificial Intelligence & Big Data" gaining 1.9%. Rise of Tensions is also in the top 5 showing the increased momentum for themes linked to geopolitical risks. Overall, AI continued to drive narrative in thematics but its impact is extending to "adjacent themes" like Cybersecurity, Cloud or HealthTech.

+ The worst-performing theme for the month was Blockchain. After an incredible ride in December, blockchain and cryptocurrency marked a stop after the launch of 11 spot Bitcoin US ETFs. Once again the adage "buy the rumour, sell the news" rang true. The rest of the bottom 5 are climate change and China-related. "Sustainable Energy Storage" lost on average -12.1%, "China Tech" lost -11.1% and "Energy Transition Metals" lost -9.7%. Which did not stop $73 million of inflows to enter the theme as discussed earlier.
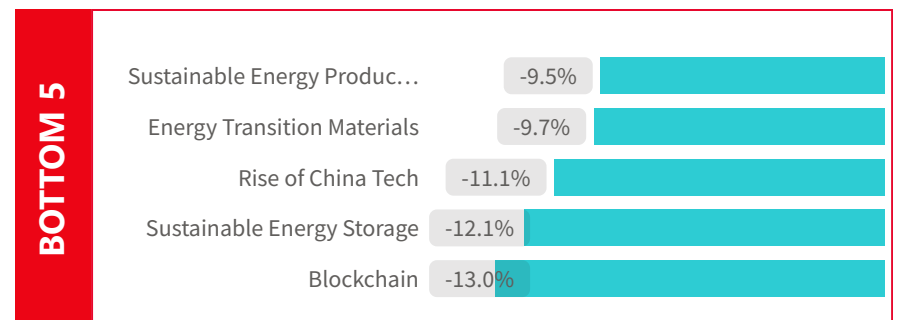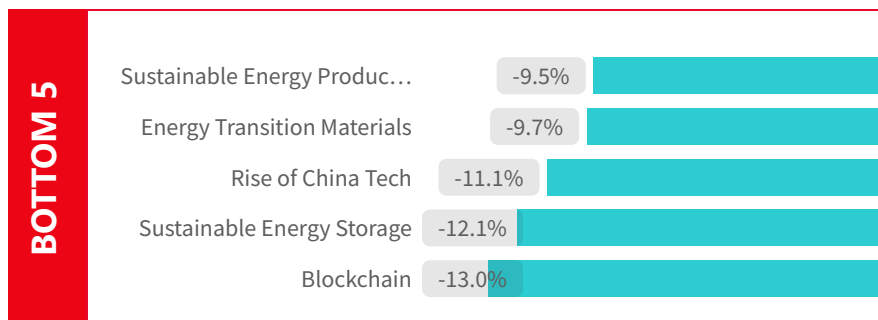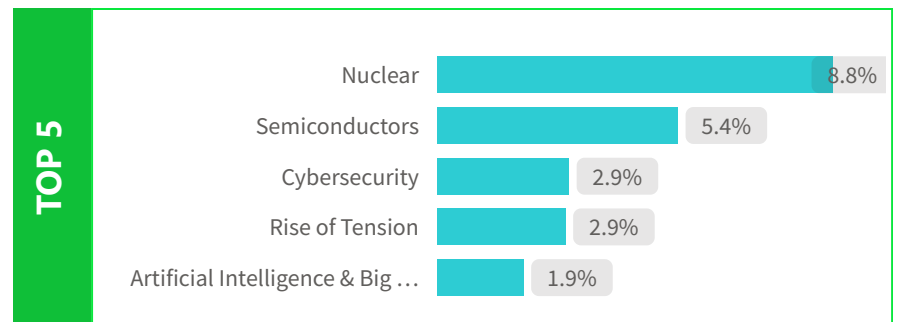
Yearly thematic launches in Europe*

● ETFs ● Open-ended Funds
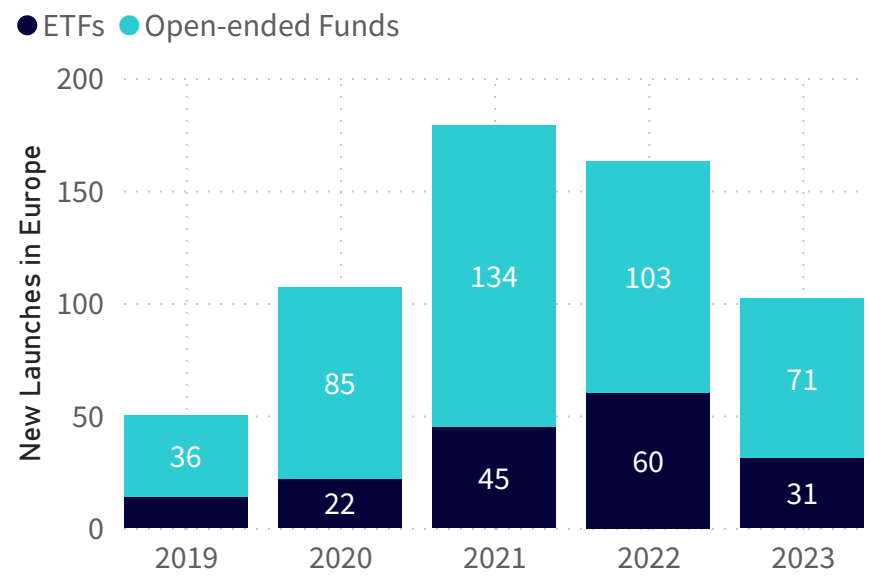
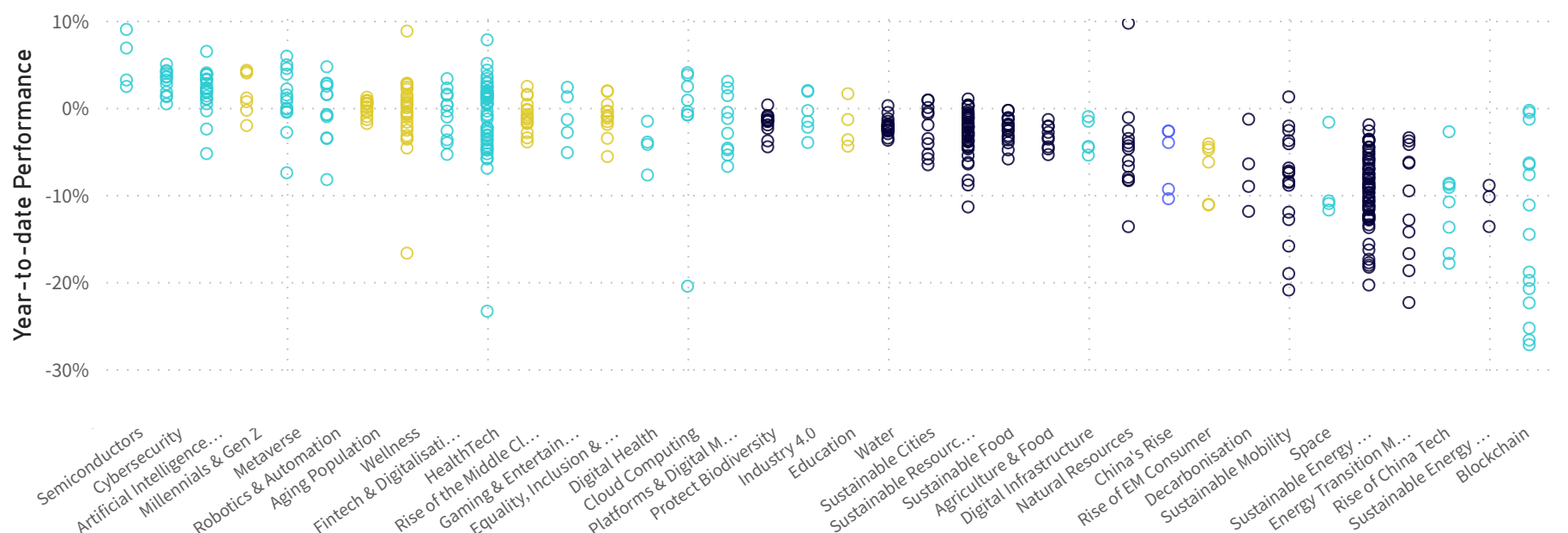* New launches are updated quarterly

Top 5/Bottom 5 by performance in January
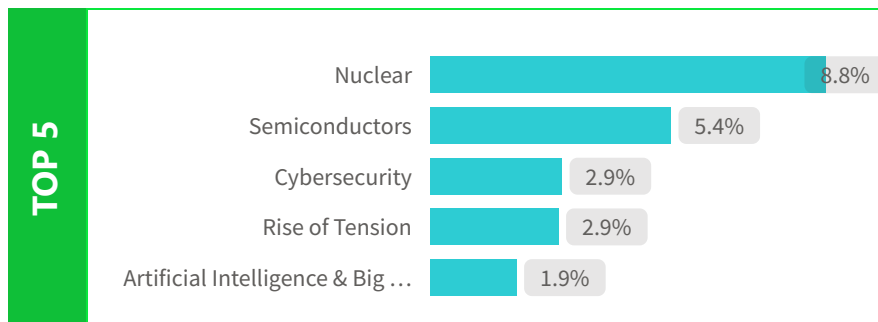
Top 5/Bottom 5 by YTD performance

Dispersion of YTD performance of all ETFs and mutual funds by themes in Europe

Source: WisdomTree, Morningstar, Bloomberg. All data as of 31/01/2024 and based on WisdomTree's internal classification of thematic funds. Performance is based on monthly returns from Bloomberg and Morningstar More information on the WisdomTree Thematic classification can be found in the Appendix. **Historical performance is not an indication of future performance, and any investments may go down in value.**

AUM per theme in ETFs and open-ended funds domiciled in Europe ($billions)
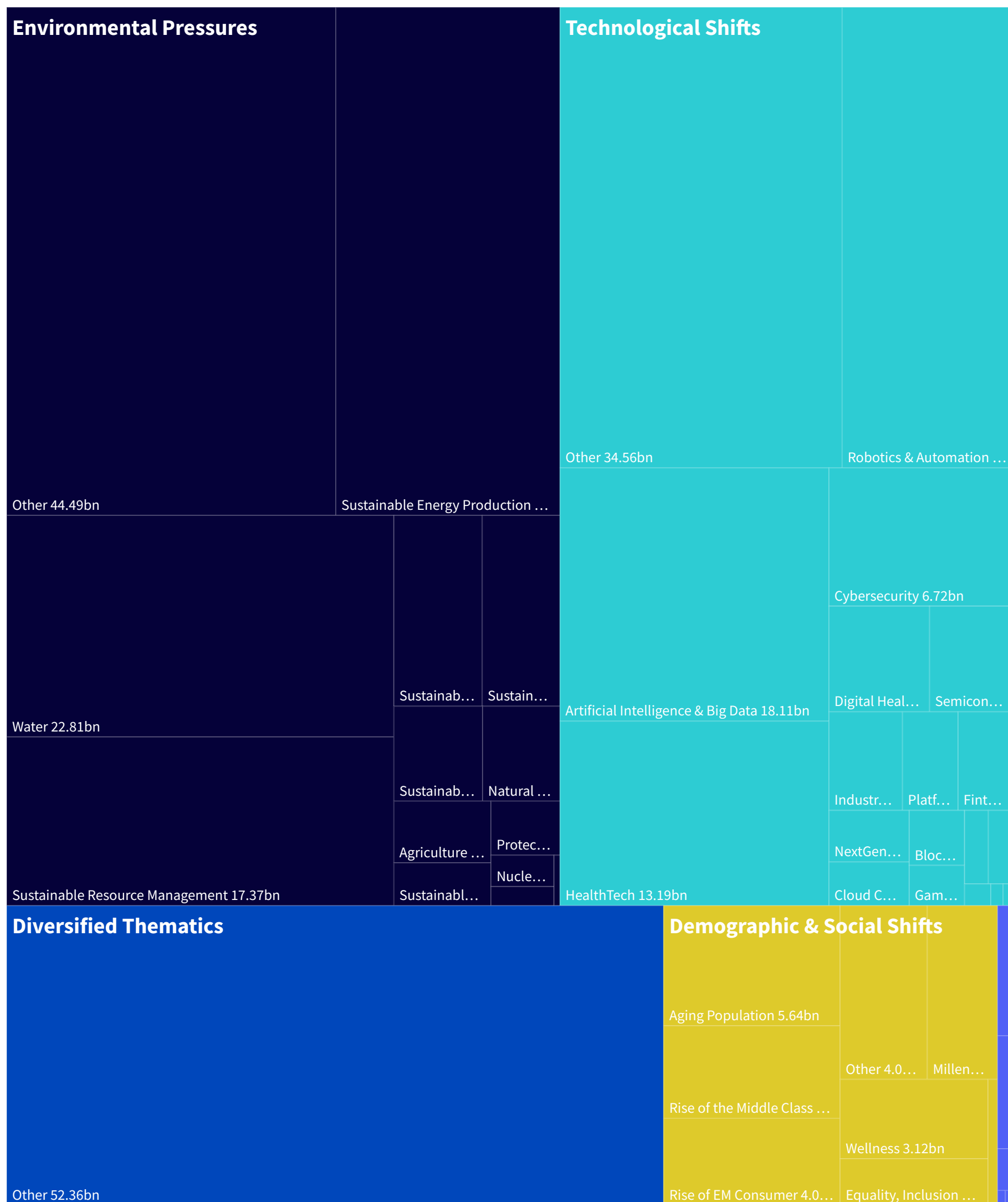
Environmental Pressures

Other 44.49bn

Sustainable Energy Production …

Water 22.81bn

Sustainab… Sustain…

Sustainab… Natural …

Agriculture … Protec…

Nucle…

Sustainable Resource Management 17.37bn Sustainabl…

Technological Shifts

Other 34.56bn

Robotics & Automation …

Cybersecurity 6.72bn

Artificial Intelligence & Big Data 18.11bn

Digital Heal… Semicon…

Industr… Platf… Fint…

NextGen… Bloc…

HealthTech 13.19bn Cloud C… Gam…

Diversified Thematics

Other 52.36bn

Demographic & Social Shifts

Aging Population 5.64bn

Other 4.0… Millen…

Rise of the Middle Class …

Wellness 3.12bn

Rise of EM Consumer 4.0… Equality, Inclusion …

Appendix - Multi themes & diversified thematic ETFs and Open-ended funds

Cluster	Sub-Cluster	AuM ($)	Flows Last Month ($)	Flows YTD ($)
Technological Shifts		12,604.77M	-239.53M	-239.53M
Technological Shifts	Disruptive Technologies	15,043.41M	-203.33M	-203.33M
Technological Shifts	HyperConnectivity & Digitalisation	6,911.09M	-11.17M	-11.17M
Environmental Pressures		3,734.96M	-100.27M	-100.27M
Environmental Pressures	Climate Change & Sustainability	40,741.13M	-742.99M	-742.99M
Environmental Pressures	Limited Resources	10.17M	-0.18M	-0.18M
Diversified Thematics		52,355.09M	-196.61M	-196.61M
Demographic & Social Shifts		1,532.73M	-38.95M	-38.95M
Demographic & Social Shifts	Demographic Shifts	2,480.91M	-7.20M	-7.20M
Demographic & Social Shifts	Social Shifts	14.02M	-0.56M	-0.56M

Appendix - Theme focused ETFs and Open-ended funds

Theme Name	AuM ($)	Flows Last Month ($)	Flows YTD ($)	Performance Last Month	Performance YTD
Aging Population	5,635.66M	-118.21M	-118.21M	0.1%	0.1%
Agriculture & Food	1,592.99M	-118.87M	-118.87M	-3.3%	-3.3%
Artificial Intelligence & Big Data	18,111.81M	441.89M	441.89M	1.9%	1.9%
Blockchain	808.38M	29.15M	29.15M	-13.0%	-13.0%
China's Rise	496.04M	-22.13M	-22.13M	-5.8%	-5.8%
Cloud Computing	931.97M	-18.67M	-18.67M	-1.4%	-1.4%
Cybersecurity	6,722.51M	-33.24M	-33.24M	2.9%	2.9%
Decarbonisation	81.52M	-1.99M	-1.99M	-7.4%	-7.4%
Digital Health	2,827.99M	-47.74M	-47.74M	-1.3%	-1.3%
Digital Infrastructure	71.20M	-0.94M	-0.94M	-3.4%	-3.4%
Education	321.56M	-11.35M	-11.35M	-2.0%	-2.0%
Energy Transition Materials	319.52M	73.35M	73.35M	-9.7%	-9.7%
Equality, Inclusion & Diversity	1,830.30M	-33.42M	-33.42M	-1.0%	-1.0%
Fintech & Digitalisation of Finance	1,410.97M	-60.22M	-60.22M	-0.7%	-0.7%
Gaming & Entertainment	592.80M	-15.82M	-15.82M	-1.0%	-1.0%
Global Logistics	26.11M	-0.52M	-0.52M	-3.4%	-3.4%
HealthTech	13,191.70M	-144.37M	-144.37M	-0.7%	-0.7%
Industry 4.0	1,926.21M	0.25M	0.25M	-1.8%	-1.8%
Internet of Things	151.80M	11.45M	11.45M	-1.1%	-1.1%
Metaverse	460.58M	21.44M	21.44M	0.9%	0.9%
Millennials & Gen Z	3,246.91M	-44.61M	-44.61M	1.7%	1.7%
Natural Resources	1,954.19M	-90.88M	-90.88M	-4.3%	-4.3%
Near/Reshoring	430.56M	-6.51M	-6.51M	1.0%	1.0%
NextGen Communications	1,100.71M	-34.69M	-34.69M	1.0%	1.0%
Nuclear	525.60M	97.11M	97.11M	8.8%	8.8%
Platforms & Digital Markets	1,457.45M	-61.31M	-61.31M	-1.5%	-1.5%
Political Polarisation	30.98M	0.00M	0.00M	-5.0%	-5.0%
Protect Biodiversity	993.14M	-7.17M	-7.17M	-1.8%	-1.8%
Rise of China Tech	465.45M	-17.99M	-17.99M	-11.1%	-11.1%
Rise of EM Consumer	4,081.50M	-84.70M	-84.70M	-7.0%	-7.0%
Rise of Tension	158.31M	31.26M	31.26M	2.9%	2.9%
Rise of the Middle Class	4,338.96M	-143.16M	-143.16M	-1.2%	-1.2%
Robotics & Automation	20,796.50M	-117.01M	-117.01M	0.3%	0.3%
Semiconductors	2,314.79M	301.54M	301.54M	5.4%	5.4%
Space	50.73M	1.25M	1.25M	-8.8%	-8.8%
Sustainable Cities	2,238.66M	67.42M	67.42M	-2.4%	-2.4%
Sustainable Energy Production	30,294.00M	-928.81M	-928.81M	-9.5%	-9.5%
Sustainable Energy Storage	1,106.11M	-87.10M	-87.10M	-12.1%	-12.1%
Sustainable Food	4,485.49M	-156.75M	-156.75M	-2.7%	-2.7%
Sustainable Mobility	3,947.17M	-208.54M	-208.54M	-8.7%	-8.7%
Sustainable Resource Management	17,372.11M	-54.40M	-54.40M	-2.7%	-2.7%
Water	22,811.97M	-196.58M	-196.58M	-2.1%	-2.1%
Wellness	3,123.50M	60.98M	60.98M	-0.5%	-0.5%

Source: WisdomTree, Morningstar, Bloomberg. All data as of 31/01/2024 and based on WisdomTree's internal classification of thematic funds. Performance is based on monthly returns from Bloomberg and Morningstar More information on the WisdomTree Thematic classification can be found in the Appendix. **Historical performance is not an indication of future performance, and any investments may go down in value.**

Appendix - Definitions

The WisdomTree Thematic classification is built around 4 main thematic clusters

Technological Shifts
This cluster focuses on the different themes that originate from the introduction of new technologies and innovation It incorporates disruptive and emerging technologies as well as their impact on societies and economies, such as the increasing digitalisation and connectivity of the world

Demographic and Social Shifts
This cluster focuses on the themes that originate from changes in population and societies alike For example, it incorporates changes in the world's pyramid of age, the impact of the growing, younger, wealthier populations in emerging markets, as well as changes to societal values and lifestyles

Environmental Pressures
Focusing on the environment and, more importantly, on the impact of human activities on the planet, this cluster incorporates changes driven by sustainability issues, the increasing scarcity of resources and the need to address global warming and climate change

Geopolitical Shifts
This cluster focuses on the themes driven by the globalisation and the changes in the global geopolitical order with the rise of new geopolitical powers like China. It also taps into the increasing polarisation of modern societies as a counterforce to globalisation

All thematic ETFs and open ended funds in the WisdomTree Thematic classification are classified into

- **Diversified thematics**, if they try to harness a large number of megatrends in one go. Those funds tend to have a very diluted focus, which could mean that it might be harder to find sources of potential differentiation against a broad market benchmark.

- **A specific cluster**, if they try to harness multiple themes across sub-clusters but within one particular cluster. For example, a fund investing in Artificial Intelligence, Robotics, Cloud, and Cybersecurity would be classified as a 'Technological Shifts' fund.

- **A particular sub cluster**, if a strategy aims to invest in most of the themes within that sub cluster For example, a fund investing in Cloud Computing, Platforms, Cybersecurity, and Fintech would be classified as a 'Hyperconnectivity & Digitalisation' fund.

- **A theme**, if the investment strategy is focused on a specific, clear theme.

YTD stands for Year to Date

MTD stands for Month to Date

For all of our calculations, we use the WisdomTree Thematic Classification that we have previously introduced here and can be found in the next page.

Performance of a theme. For any given theme, we consider each month all the ETFs and open-ended funds classified in that specific theme that have published a monthly return for that month in Morningstar. We then calculate the average of all those monthly returns to compute the average monthly return for that theme. So, the monthly return for January 2020 for the theme may include 19 funds, while the February 2020 return may comprise 21 funds (if two funds classified in that theme have been launched in the meantime). By collating monthly returns for the theme, we get the theme's average historical performance Therefore, the theme's average historical performance incorporates every ETF, and open-ended fund focused on this theme The theme's average historical performance is not biased towards surviving funds or successful funds Every fund alive in a given month is included irrespective of its future survival or success Investments that try to focus on multiple themes and, therefore, classified either at Cluster or Sub-Cluster Level are not included.

The WisdomTree Thematic Classification

DIVERSIFIED THEMATICS	TECHNOLOGICAL SHIFTS		DEMOGRAPHIC AND SOCIAL SHIFTS		GEOPOLITICAL SHIFTS		ENVIRONMENTAL PRESSURES	
	DISRUPTIVE TECHNOLOGIES	HYPER CONNECTIVITY & DIGITALISATION	DEMOGRAPHIC SHIFTS	SOCIAL SHIFTS	GLOBALISATION	MULTI-POLARITY	CLIMATE CHANGE & SUSTAINABILITY	LIMITED RESOURCES
	Artificial Intelligence & Big Data	Cloud Computing	Aging Population	Education	Global Logistics	China's Rise	Decarbonisation	Agriculture & Food
	Rise of China Tech	Cybersecurity	Millennials & Gen Z	Equality, Inclusion & Diversity		Political Polarisation	Protect Biodiversity	Natural Resources
	Blockchain	Digital Health		Rise of the Middle Class		Rise of Tension	Sustainable Mobility	Water
	HealthTech	Digital Infrastructure		Rise of EM Consumer		Near/Reshoring	Sustainable Energy Production	Nuclear
	Industry 4.0	Fintech & Digitalisation of Finance		Wellness			Sustainable Energy Storage	
	Next Gen Communications	Gaming & Entertainment					Sustainable Food	
	Robotics & Automation	Internet of Things					Sustainable Cities	
	Semiconductors	Metaverse					Sustainable Resource Management	
	Smart Materials & Nano Tech	Platforms & Digital Markets					Extreme Events	
	Space	Social Media & Media					Energy Transition Materials	

Source: WisdomTree, as of 31/12/2023