

GLOBAL X INSIGHTS

The Next Big Theme: March 2024

Ido Caspi

icaspi@globalxetfs.com

Date: March 19, 2024 **Topic: Thematic**



Robotics & Artificial Intelligence

New Investments Set to Put Humanoids on the Fast Track

Robotics startup Figure AI has raised \$675 million at a \$2.6 billion valuation from notable entities including Nvidia, Microsoft, OpenAI, Bezos Expeditions and Amazon's Industrial Innovation Fund. As part of the deal, Figure Al will partner with OpenAl to develop next generation AI models for humanoid robots, and it will use Microsoft's Azure cloud services for AI infrastructure, training, and storage.2 Founded in 2022, Figure Al's robot, Figure 01, uses two legs and five-fingered hands to move and manipulate objects with precision.³ Tesla showcased improvements to its Optimus humanoid robot, which now walks at a record speed of 1.34 mph, a 30% increase from previous demonstrations. Eventually, Optimus is expected to reach speeds up to 5 mph. 4 Thanks to recent technological advancements and decreasing production costs, the Global X team estimates that by 2035, over 100 million humanoid robots will be operational across a variety of environments, including factories, distribution centers, offices, elderly homes, households, and more.⁵

Electric Vehicles

Global EV Sales and Production Remain Resilient

Despite some headwinds across the EV value chain in 2023, global EV sales (including battery electric vehicles (BEVs) and plug-in hybrid) totaled 1.1 million units in January 2024, a 69% year-over-year (YoY) increase and a new monthly global record.⁶ Sales in China nearly doubled, with 668,000 new EV's registered, or roughly 32% of all new car registrations. Sales increased 41% in North America and 29% in Europe.8 In the second half of 2023, the United States added nearly 1,100 public fast-charging EV stations.9 With the 16% YoY increase, the country now has one fast-charging EV station for every 16 gas stations. 10 Toyota announced plans for another \$1.3 billion investment in its Kentucky factory for EV production, starting with an electric SUV. General Motors will add four models to its South Korea lineup in 2024, including two EVs, the Chevrolet Equinox EV and Cadillac LYRIQ.¹¹ Chinese automaker BYD also recently unveiled U9, a new electric supercar that can hit speeds of 192 mph, comparable to high-end models produced by industry heavyweights like Ferrari. 12

Artificial Intelligence & Technology

Generative AI Achieves Breakthroughs in Audio and Video Modalities

OpenAl launched a new video-generation model dubbed Sora that can create realistic and imaginative scenes from text instructions. The text-to-video model allows users to generate up to one-minute-long photorealistic videos from written prompts. 13 The model can also generate a video based on a still image and fill in missing frames on an existing video or extend it.14 Adobe unveiled Project Music GenAl Control, a versatile platform capable of creating audio from textual descriptions or a melody reference. 15 Users can fine-tune key elements like tempo, intensity, patterns, and overall structure, all within their workflow. Users can also extend tracks to any length, enabling remixes or endless, seamless loops. 16 Updates about OpenAI's existing models include financial services firm Klarna's AI chatbot assistant, handling 2.3 million conversations in its first month, the equivalent of 700 full-time agents. 17



OUR ETFs



Hydrogen

Global Hydrogen Industry Is Ready to Scale Up

The overwhelming response to the European Commission's inaugural European Hydrogen Bank underscores the interest in renewable hydrogen production. The subsidy auction garnered 132 bids from 17 European Union countries, totaling 8.5-gigawatt (GW) of potential electrolyzer capacity.¹8 Selected projects, which are expected to receive notification by April or May, will be held to a five-year deadline to commence production. The number of bids far exceeded the auctions €800 million budget, meaning only a fraction of the projects can procure subsidies this round.¹9 If fully realized, the bids could generate up to 8.8 million tons of renewable hydrogen, achieving nearly achieving 10% of the EU's 2030 goal.²0 Major conglomerates Caterpillar, Microsoft, and Ballard Power Systems are collaborating to explore the use of hydrogen fuel cells for data center backup power. Their project, a 1.5-megawatt (MW) hydrogen fuel cell at Microsoft's data center in Wyoming, proved its efficacy in a 48-hour backup power trial, marking a significant step towards sustainable energy solutions.²1

Telemedicine & Digital Health

Al-Driven Innovation Fuels Growth for Digital Health Providers

Medical networking service Doximity and telehealth company Him & Hers are leveraging Al investments in an effort to significantly boost their growth in the healthcare sector. Doximity has introduced several Al-powered products aimed at the medical community which has helped boost user engagement to record highs.²² Unique active users on a quarterly, monthly, weekly, and daily basis are all up double-digit percentages over the past year.²³ The company's Al writing assistant, DoximityGPT, is widely used for drafting essential medical documents.²⁴ Similarly, Him & Hers, which provides an extensive personal health solution platform has continued to witness digital tailwinds keep growth elevated, which has allowed management to invest more aggressively in technology-first offerings in mental health, weight loss, and dermatology. The company's specialty vertical is expected to add nearly \$100 million in revenues by 2025.²⁵ Mental health is one area where adoption of Al is sticking, as its role to predict patient responses to medication is streamlining treatment approaches by minimizing the guesswork in medication selection.

Cybersecurity

Ransomware Attacks Intensify, Global Defenses Fortify

Hackers stole a record \$1 billion through ransomware attacks in 2023 alone and the threats continue into 2024.²⁶ Good news is that in one of the largest cybercrime operations to date, a global alliance of law enforcement agencies, including the U.S. Justice Department and the U.K. National Crime Agency's Cyber Division, struck a significant blow against the notorious Lockbit ransomware, a tool frequently used by cybercriminals to target critical institutions, such as hospitals and schools. By dismantling Lockbit's infrastructure, law enforcement effectively shut down its operations and replaced its dark web platform with a repository of informative resources and victim support.²⁷ That's welcome news for healthcare, in particular. Change Healthcare, a unit of UnitedHealthcare responsible for processing 15 billion health-related transactions annually, recently revealed that ransomware hackers disrupted its operations.²⁸ Doctors and hospitals have been unable to bill for services, and patients have faced difficulties in accessing prescriptions. Given the increasing sophistication of cyberattacks like these, worldwide spending on cybersecurity and risk management is projected to increase 14.35% YoY to \$215 billion in 2024.²⁹



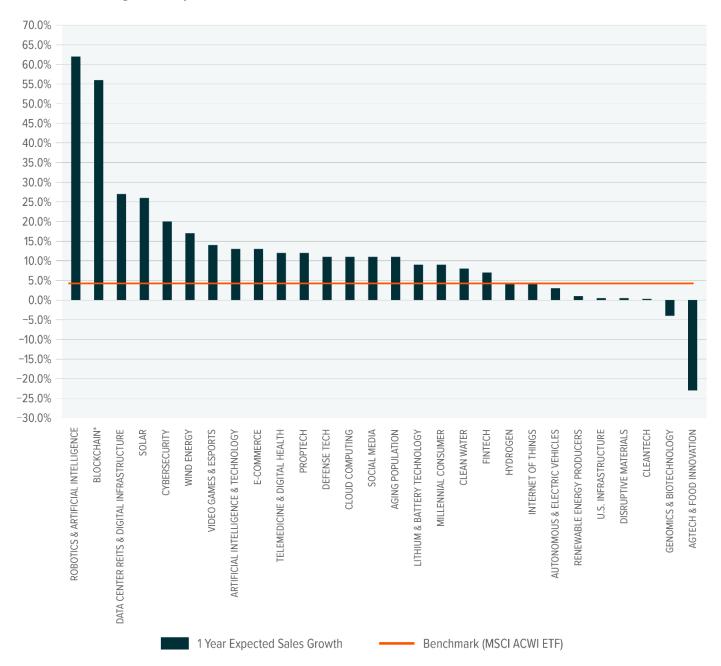


THE NUMBERS

The following charts examine returns and sales growth expectations by theme, based on their corresponding ETFs or indices.

THEMATIC EXPECTED SALES GROWTH

Source: Bloomberg, February 29, 2024, Global X ETFs.



Note: Forward looking based on index data and analysis from 2/29/2024.

1 year annualized forward sales growth is the consensus analyst expectations for total sales growth in the next 12 months. *Refer to Appendix above Footnotes for details on Indices used.*

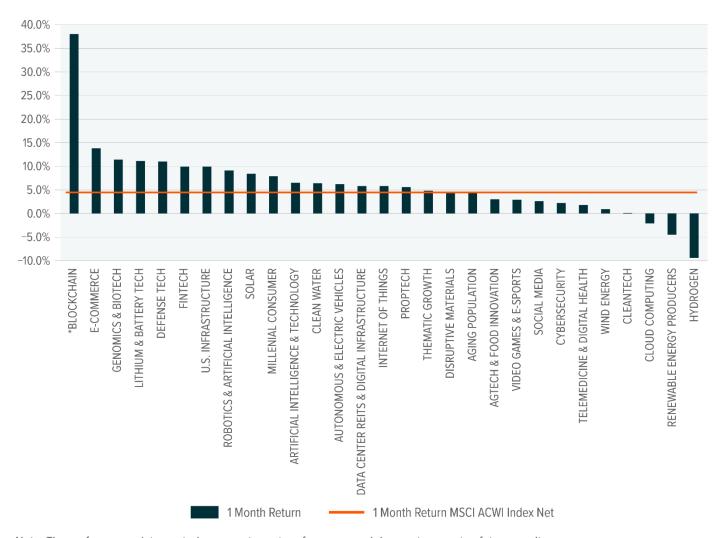


OUR ETFs



FEBRUARY 2024 THEMATIC ETF RETURNS

Source: Bloomberg, February 29, 2024, Global X ETFs.



Note: The performance data quoted represents past performance and does not quarantee future results. *Blockchain reflects figures according to BKCH ETF

Performance data quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investors' shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than the performance quoted. High short-term performance of the fund is unusual and investors should not expect such performance to be repeated. For performance data current to the most recent month end, please call 1-888-493-8631 or visit www.globalxetfs.com.



OUR ETFs

INSIGHTS



Standard Performance			Cumulative % Data as of month end (02/29/24)			Avg. Annualized % Data as of quarter end (12/31/23)					
	Expense Ratio		1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception	
ROBOTICS & ARTIFICIAL		NAV	8.05%	17.66%	116.72%	38.62%	-4.62%	11.47%	_	9.85%	
INTELLIGENCE	0.69%	Market Price	9.10%	17.99%	117.01%	38.97%	-4.71%	11.60%	_	9.83%	
Inception Date 9/12/2016	0.0070	Index	8.10%	17.81%	122.68%	39.05%	-4.12%	11.99%	_	10.25%	
·		NAV	9.67%	18.70%	86.94%		-16.60%	4.10%	_	8.40%	
FINTECH	0.68%	Market Price	9.91%	18.74%	86.58%		-16.63%	4.10%	_	8.38%	
Inception Date 9/12/2016	0.0070	Index	9.72%	18.91%	94.36%	34.29%		4.57%	_	8.95%	
		NAV	5.05%	9.45%	149.97%	22.81%	4.32%	17.74%	_	13.38%	
INTERNET OF THINGS	0.68%	Market Price	5.77%	9.51%	150.04%	23.05%	4.26%	17.71%	_	13.34%	
Inception Date 9/12/2016	0.0076	Index	5.13%	9.59%	156.48%	23.38%	4.69%	18.13%	_	13.76%	
		NAV	-2.00%	5.87%	48.77%	41.15%	-6.18%	-	_	9.43%	
CLOUD COMPUTING	0.68%	Market Price	-2.05%	5.73%	49.02%	41.15%	-6.16%	_	_	9.43%	
Inception Date 4/12/2019	0.68%	Index	-1.93%					-	-		
				6.07%	53.42%	42.08%	-5.57%	8.02%	C 0E9/	10.11%	
SOCIAL MEDIA Inception Date 11/14/2011	0.65%	NAV	2.93%	1.00%	175.84%		-12.97%		6.95%	8.86%	
		Market Price	2.63%	0.77%	173.90%		-12.93%	8.14%	6.90%	8.86%	
* DTIFICIAL INITELLIGENIAE A		Index	2.95%	1.12%	194.25%	31.75%	-12.57%	8.60%	7.47%	9.44%	
ARTIFICIAL INTELLIGENCE &	0.68%	NAV	6.55%	12.18%	127.86%	54.78%	4.95%	19.58%	-	14.33%	
TECHNOLOGY		Market Price	6.49%	12.08%	127.66%	55.39%	4.96%	19.68%	-	14.35%	
Inception Date 5/11/2018		Index	6.62%	12.39%	133.82%	55.83%	5.50%	20.13%	-	14.83%	
AUTONOMOUS & ELECTRIC	0.68%	NAV	5.72%	5.38%	74.20%	25.60%	2.18%	17.25%	-	10.60%	
VEHICLES		Market Price	6.20%	5.39%	73.71%	26.13%	2.01%	17.24%	-	10.55%	
Inception Date 4/13/2018		Index	5.75%	5.57%	75.97%	25.75%	2.43%	17.49%	-	10.78%	
LITHIUM AND BATTERY TECH	0.75%	NAV	10.37%	-3.42%	77.69%	-11.85%	-5.22%	14.67%	8.47%	5.21%	
Inception Date 7/22/2010		Market Price	11.12%	-2.71%	77.59%	-12.20%	-5.60%	14.63%	8.45%	5.15%	
inception Date 7/22/2010		Index	10.40%	-3.33%	89.27%	-11.56%	-4.68%	14.91%	8.85%	5.70%	
GENOMICS AND		NAV	11.62%	15.37%	-21.27%	-8.61%	-21.13%	-	-	-5.66%	
BIOTECHNOLOGY	0.50%	Market Price	11.44%	14.97%	-20.00%	-8.62%	-21.19%	-	-	-5.31%	
Inception Date 4/5/2019		Index	11.57%	15.44%	-19.41%	-8.17%	-20.80%	-	-	-5.21%	
AULI ENDUAL CONCURSED		NAV	8.09%	16.68%	163.48%	36.19%	-1.51%	12.76%	-	12.38%	
MILLENNIAL CONSUMER Inception Date 5/4/2016	0.50%	Market Price	7.90%	16.42%	161.78%	36.27%	-1.54%	12.75%	-	12.32%	
		Index	8.15%	16.84%	173.32%	36.82%	-1.04%	13.32%	-	12.90%	
		NAV	2.96%	8.85%	103.39%	9.71%	1.32%	9.17%	-	9.39%	
AGING POPULATION	0.50%	Market Price	4.32%	10.38%	109.82%	9.66%	1.35%	9.08%	-	9.65%	
Inception Date 5/09/2016		Index	2.85%	8.83%	107.43%	10.08%	1.54%	9.41%	_	9.68%	
		NAV	13.52%	15.29%	55.37%	30.50%		9.19%	_	7.40%	
E-COMMERCE	0.50%	Market Price	13.83%	15.09%	55.10%		-12.49%	9.19%	_	7.37%	
Inception Date 11/27/2018	0.5070	Index	13.58%	15.43%	59.00%	31.13%	-12.03%		_	7.86%	
US INFRASTUCTURE		NAV	9.94%	20.29%	163.11%	30.88%	18.34%	21.40%	_	13.70%	
DEVELOPMENT	0.47%	Market Price	9.91%	20.32%	163.11%	31.01%	18.38%	21.41%	_	13.71%	
Inception Date 3/6/2017		Index	10.02%	20.66%	173.38%	31.90%	19.10%	22.10%	_	14.33%	
inception Date 3/0/2017		NAV	2.43%	2.26%	38.75%	8.78%	-12.68%	ZZ.1U/0		8.14%	
VIDEO GAMES & ESPORTS	0 E00/	Market Price		2.26%	36.75% 37.91%		-12.89%	-			
Inception Date 10/25/2019	0.50%	IMAIKEL PIICE	2.86%	2.30%	37.91%	8.36%	-12.09%	-	-	8.01%	





Standard Performance			Cumulative % Data as of month end (02/29/24)			Avg. Annualized % Data as of quarter end (12/31/23)				
	Expense Ratio		1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception
CVDEDCECUDITY		NAV	2.10%	14.35%	107.27%	40.95%	2.04%	-	-	17.67%
CYBERSECURITY	0.51%	Market Price	2.16%	14.73%	111.12%	41.40%	2.03%	-	-	18.24%
Inception Date 10/25/2019		Index	2.46%	14.54%	111.40%	41.66%	2.47%	-	-	18.20%
THEMATIC CROWTH		NAV	5.61%	4.44%	-0.54%	10.34%	-16.02%	-	-	0.86%
THEMATIC GROWTH	0.50%	Market Price	4.84%	4.22%	0.04%	10.24%	-16.11%	-	-	0.97%
Inception Date 10/25/2019		Index	5.54%	4.31%	-1.58%	10.23%	-16.25%	-	-	0.64%
TELEMEDICINE & DIGITAL		NAV	1.92%	6.70%	-37.27%	-13.01%	-19.23%	-	-	-11.14%
HEALTH	0.68%	Market Price	1.82%	6.61%	-37.54%	-12.61%	-19.33%	-	-	-11.24%
Inception Date 7/29/2020		Index	1.91%	6.82%	-36.26%	-12.87%	-18.88%	-	-	-10.75%
CLEANITECH		NAV	0.22%	-7.23%	-38.78%	-25.82%	-21.47%	-	-	-9.49%
CLEANTECH Inception Date 10/27/2020	0.50%	Market Price	0.11%	-7.65%	-39.18%	-25.57%	-21.61%	-	-	-9.57%
inception Date 10/27/2020		Index	0.24%	-7.16%	-39.70%	-25.63%	-21.89%	-	-	-9.93%
DATA CENTER REITS & DIGITAL		NAV	6.43%	8.40%	8.42%	18.21%	-0.23%	-	-	0.91%
INFRASTRUCTURE	0.50%	Market Price	5.79%	7.75%	8.02%	18.92%	-0.37%	-	-	1.00%
Inception Date 10/27/2020		Index	6.52%	8.57%	8.51%	18.26%	-0.24%	-	-	0.90%
RENEWABLE ENERGY	0.65%	NAV	-5.61%	-6.02%	-14.69%	-12.33%	-13.23%	2.25%	-	-0.07%
PRODUCERS Inception Date 05/27/2015		Market Price	-4.51%	-5.39%	-14.85%		-13.65%		-	-0.17%
		Index	-5.57%	-5.89%	-11.81%		-12.85%	2.61%	-	0.31%
CLEAN WATER	0.50%	NAV	6.64%	10.44%	17.10%	19.85%	-	-	-	4.72%
		Market Price	6.40%	9.69%	16.67%	20.16%	-	_	-	4.79%
Inception Date 04/08/2021		Index	6.69%	10.59%	18.22%	20.25%	-	-	-	5.06%
AGTECH AND FOOD	0.50%	NAV	2.92%	4.76%	-57.17%	-23.92%	-	_	-	-28.67%
INNOVATION		Market Price	3.02%	4.75%	-57.13%	-23.87%	-	-	-	-28.59%
Inception Date 07/12/2021		Index	2.99%	4.91%	-56.74%	-23.70%	-	-	-	-28.41%
	0.50%	NAV	-10.41%	-16.87%	-78.34%	-37.26%	-	-	_	-40.73%
HYDROGEN		Market Price	-9.44%	-16.23%	-78.14%	-36.49%	_	-	_	-40.59%
Inception Date 07/12/2021		Index	-10.34%	-16.54%	-77.99%	-36.63%	_	_	_	-40.40%
		NAV	38.92%	56.65%	-49.12%	270.95%	_	-	_	-24.51%
BLOCKCHAIN	0.50%	Market Price	38.02%	54.55%	-49.48%	267.36%		-	-	-24.65%
Inception Date 07/12/2021	0.5070	Index	38.93%	56.62%	-50.90%	265.69%		_	_	-25.58%
		NAV	7.73%	-1.20%	-52.16%	-35.37%	_		_	-23.06%
SOLAR	0.51%	Market Price	8.40%	-1.20%	-51.99%	-35.37%	-	-	-	-23.00%
Inception Date 09/08/2021	0.51%	Index	7.75%	-1.11%	-51.56%	-35.02%	_	_		-22.99%
		NAV	7.7570	-4.03%	-49.51%	-22.40%		_		-21.78%
WIND ENERGY	0.50%	Market Price	0.90%	-3.42%	-49.34%	-22.22%				-21.76%
Inception date 09/08/2021	0.50%	Index	0.90%	-4.00%	-49.00%	-22.22%		-	-	-21.46%
		NAV					-	-		
DISRUPTIVE MATERIALS	0.59%	Market Price	2.74% 4.50%	-1.75% -0.48%	-39.52%	-19.67% 19.75%	-	-	-	-18.27% 19.60%
Inception date 01/24/22					-39.21%	-19.75%	-	-	-	-18.60%
		Index	2.81%	-1.60%	-38.94%	-19.35%	-	-	-	-17.92%
PROPTECH	0.50%	NAV	5.66%	17.60%	27.84%	-	-	-	-	-
Inception date 04/11/23		Market Price	5.57%	17.63%	27.60%	-	-	-	-	-
		Index	5.72%	17.75%	28.28%	-	-	-	-	-
DEFENSE TECH		NAV	10.64%	15.35%	25.62%	-	-	-	-	-
Inception date 09/11/23	0.50%	Market Price	11.05%	15.82%	26.27%	-	-	-	-	-
inception date 09/11/23		Index	10.68%	15.48%	25.92%	-	-	-	-	-





P/S AND EV/S

Source: Bloomberg, data is as of 2/29/24 and 1/31/24, Global X ETFs.

Ticker	Name	F	P/S	EV/S		
		2/29/24	1/31/24	2/29/24	1/31/24	
GNOM	Global X Genomics & Biotechnology ETF	7.70	7.04	6.74	6.10	
BUG	Global X Cybersecurity ETF	6.02	5.94	5.75	5.68	
ВКСН	Global X Blockchain ETF	4.85	3.60	6.08	4.76	
BOTZ	Global X Robotics & Artificial Intelligence ETF	4.81	4.46	5.20	4.83	
CLOU	Global X Cloud Computing ETF	4.09	4.26	4.32	4.52	
AGNG	Global X Aging Population ETF	3.87	3.48	4.37	4.12	
FINX	Global X FinTech ETF	3.76	3.39	4.47	4.10	
VPN	Global X Data Center REITS & Digital Infrastructure ETF	3.71	3.88	6.23	6.29	
AIQ	Global X Artificial Intelligence & Technology ETF	3.65	3.50	3.73	3.61	
SOCL	Global X Social Media ETF	3.13	3.06	3.01	2.97	
HERO	Global X Video Games & Esports ETF	2.87	2.96	2.81	2.86	
SNSR	Global X Internet of Things ETF	2.84	2.65	3.08	2.98	
SPY	SPDR S&P 500 ETF TRUST	2.74	2.62	3.11	2.99	
AQWA	Global X Clean Water ETF	2.62	2.46	3.59	3.44	
MILN	Global X Millennial Consumer ETF	2.26	2.10	2.60	2.44	
HYDR	Global X Hydrogen ETF	2.25	2.49	2.35	2.43	
PTEC	Global X PropTech ETF	2.17	1.95	3.66	3.30	
RNRG	Global X Renewable Energy Producers ETF	2.08	2.16	5.27	5.11	
EDOC	Global X Telemedicine & Digital Health ETF	2.08	2.08	2.06	2.07	
ACWI	MSCI ACWI ETF	2.02	1.93	2.74	2.59	
PAVE	Global X US Infrastructure Development ETF	1.75	1.65	2.03	1.97	
SHLD	Global X Defense Tech ETF	1.65	1.52	1.89	1.79	
WNDY	Global X Wind Energy ETF	1.60	1.53	2.75	2.81	
LIT	Global X Lithium & Battery Tech ETF	1.57	1.37	1.77	1.54	
RAYS	Global X Solar ETF	1.34	1.22	1.95	1.85	
EBIZ	Global X E-Commerce ETF	1.23	1.08	1.35	1.21	
DMAT	Global X Disruptive Materials ETF	1.22	1.13	1.57	1.45	
DRIV	Global X Autonomous & Electric Vehicles ETF	0.86	0.78	0.98	0.91	
CTEC	Global X CleanTech ETF	0.78	0.77	1.11	1.10	
KROP	Global X Agtech & Food Innovation ETF	0.17	0.94	0.22	1.23	

Note: P/S and EV/S refer to price-to-sales and enterprise value-to-sales, respectively.





F12M SALES GROWTH, PSG, AND EVSG

Source: Bloomberg, data is as of 2/29/24 and 1/31/24, Global X ETFs.

Ticker	Name	F12M Sales (%)		PSG		EVSG	
		2/29/24	1/31/24	2/29/24	1/31/24	2/29/24	1/31/24
BOTZ	Global X Robotics & Artificial Intelligence ETF	61.9%	69.4%	0.08	0.06	0.08	0.07
ВКСН	Global X Blockchain ETF	56.3%	69.5%	0.09	0.05	0.11	0.07
VPN	Global X Data Center REITs & Digital Infrastructure ETF	26.6%	25.8%	0.14	0.15	0.23	0.24
RAYS	Global X Solar ETF	25.6%	25.3%	0.05	0.05	0.08	0.07
BUG	Global X Cybersecurity ETF	19.5%	22.6%	0.31	0.26	0.29	0.25
WNDY	Global X Wind Energy ETF	16.6%	17.7%	0.10	0.09	0.17	0.16
HERO	Global X Video Games & Esports ETF	13.6%	12.7%	0.21	0.23	0.21	0.22
AIQ	Global X Artificial Intelligence & Technology ETF	13.0%	12.8%	0.28	0.27	0.29	0.28
EBIZ	Global X E-Commerce ETF	12.6%	14.5%	0.10	0.07	0.11	0.08
EDOC	Global X Telemedicine & Digital Health ETF	12.2%	7.3%	0.17	0.29	0.17	0.28
PTEC	Global X PropTech ETF	11.9%	10.0%	0.18	0.20	0.31	0.33
SHLD	Global X Defense Tech ETF	11.4%	11.5%	0.15	0.13	0.17	0.16
CLOU	Global X Cloud Computing ETF	11.4%	11.8%	0.36	0.36	0.38	0.38
SOCL	Global X Social Media ETF	10.7%	9.8%	0.29	0.31	0.28	0.30
AGNG	Global X Aging Population ETF	10.5%	10.2%	0.37	0.34	0.41	0.40
LIT	Global X Lithium & Battery Technology ETF	8.7%	8.9%	0.18	0.15	0.20	0.17
MILN	Global X Millennial Consumer ETF	8.6%	9.0%	0.26	0.23	0.30	0.27
AQWA	Global X Clean Water ETF	7.7%	7.5%	0.34	0.33	0.47	0.46
FINX	Global X FinTech ETF	7.4%	5.3%	0.51	0.64	0.61	0.78
SPY	S&P 500 ETF	5.8%	6.0%	0.47	0.43	0.54	0.50
ACWI	MSCI ACWI ETF	5.2%	5.4%	0.39	0.36	0.53	0.48
HYDR	Global X Hydrogen ETF	4.5%	14.6%	0.50	0.17	0.52	0.17
SNSR	Global X Internet of Things ETF	3.7%	4.0%	0.76	0.67	0.82	0.75
DRIV	Global X Autonomous & Electric Vehicles ETF	2.8%	6.9%	0.31	0.11	0.35	0.13
RNRG	Global X Renewable Energy Producers ETF	0.5%	2.8%	4.06	0.78	10.26	1.85
PAVE	Global X U.S. Infrastructure Development ETF	0.5%	0.8%	3.59	2.15	4.18	2.57
DMAT	Global X Disruptive Materials ETF	0.5%	-1.6%	2.61	-0.70	3.37	-0.89
CTEC	Global X CleanTech ETF	0.3%	-0.2%	2.44	-4.07	3.48	-5.81
GNOM	Global X Genomics & Biotechnology ETF	-4.0%	-7.3%	-1.95	-0.97	-1.71	-0.84
KROP	Global X AgTech & Food Innovation ETF	-23.2%	-5.9%	-0.01	-0.16	-0.01	-0.21

Note: F12M Growth is calculated using consensus analyst expectations for total sales in the next 12 months and weighted average trailing 12 month revenue.

Please note that substantial month-over-month variations in F12M Sales may be the result of Bloomberg coverage and estimates of underlying securities.

PSG and EVSG refer to Price-to-Sales over F12 Sales Growth and Enterprise Value over F12 Sales Growth, respectively.





KEEP UP WITH THE LATEST RESEARCH FROM GLOBAL X

To learn more about the disruptive themes changing our world, read the latest research from Global X, including:

- Inflection Points: Al Doesn't Rhyme with Dotcom
- Four Companies Leading the Rise of Lithium & Battery Technology: A 2024 Update
- The Rise of Humanoids, Explained
- The Enduring Case for U.S. Energy Infrastructure
- How AI Is Shaping the Future of Data Platforms & Infrastructure in 2024

ETF HOLDINGS AND PERFORMANCE

To see individual ETF holdings and current performance across the Global X Thematic Growth Suite, including information on the indexes shown, click these links:

- Disruptive Technology: Artificial Intelligence & Technology ETF (AIQ), Robotics & Artificial Intelligence ETF (BOTZ), Cybersecurity ETF (BUG), Cloud Computing ETF (CLOU), Autonomous & Electric Vehicles ETF (DRIV), FinTech ETF (FINX), Video Games & Esports ETF (HERO), Lithium and Battery Tech ETF (LIT), Internet of Things ETF (SNSR), Social Media ETF (SOCL), Data Center REITs & Digital Infrastructure ETF (VPN), AgTech & Food Innovation ETF (KROP), Blockchain ETF (BKCH), Blockchain & Bitcoin Strategy ETF (BITS), PropTech ETF (PTEC), Defense Tech ETF (SHLD)
- People and Demographics: Millennial Consumer ETF (MILN), E-Commerce ETF (EBIZ), Genomics & Biotechnology ETF (GNOM), Aging Population ETF (AGNG), Telemedicine & Digital Health ETF (EDOC)
- Physical Environment: U.S. Infrastructure Development ETF (PAVE), CleanTech ETF (CTEC), Renewable Energy Producers (RNRG), Clean Water ETF (AQWA), Hydrogen ETF (HYDR), Solar ETF (RAYS), Wind Energy ETF (WNDY), Disruptive Materials ETF (DMAT)
- Multi-Theme: Thematic Growth ETF (GXTG)

Appendix: Thematic Expected Sales Growth Graph Indices

AgTech & Food Innovation: Solactive AgTech & Food Innovation Index

Aging Population: Indxx Aging Population Thematic Index

Artificial Intelligence & Technology: Indxx Artificial Intelligence & Big Data Index Autonomous & Electric Vehicles: Solactive Autonomous & Electric Vehicles Index

Blockchain: Solactive Blockchain Index

Clean Water: Solactive Global Clean Water Industry Index

CleanTech: Indxx Global CleanTech Index

Cloud Computing: Indxx Global Cloud Computing Index

Cybersecurity: Indxx Cybersecurity Index

Data Center REITs & Digital Infrastructure: Solactive Data Center REITs & Digital Infrastructure Index

Defense Tech: Global X Defense Tech Index

Disruptive Materials: Solactive Disruptive Materials Index

E-Commerce: Solactive E-commerce Index FinTech: Indxx Global FinTech Thematic Index

Genomics: Solactive Genomics Index Hydrogen: Solactive Global Hydrogen Index

Internet Of Things: Indxx Global Internet of Things Thematic Index Lithium & Battery Technology: Solactive Global Lithium Index

Millennial Consumer: Indxx Millennials Thematic Index

PropTech: Global X PropTech Index

Renewable Energy Producers: Indxx Renewable Energy Producers Index

Robotics & Artificial Intelligence: Indxx Global Robotics & Artificial Intelligence Thematic Index

Social Media: Solactive Social Media Total Return Index

Solar: Solactive Solar Index

Telemedicine & Digital Health: Solactive Telemedicine & Digital Health Index

U.S. Infrastructure: Indxx U.S. Infrastructure Development Index Video Games & Esports: Solactive Video Games & Esports Index

Wind Energy: Solactive Wind Energy Index





Footnotes

- 1. CNBC. (2024, February 19). Humanoid robot startup Figure Al valued at \$2.6 billion as Bezos, OpenAl, Nvidia join funding.
- 2 Ibid
- 3. TechCrunch. (2024, February 29). Figure rides the humanoid robot hype wave to \$2.6B valuation.
- 4. Teslarati. (2024, February 24). Tesla shares more footage of Optimus walking improvements
- 5. Global X. (2024, March 1). The Rise of Humanoids, Explained.
- 6. Carbon Credits. (2024, February 21). New Monthly EV Sales Record to Kickstart 2024.
- 7. InsideEVs. (2024, February 27). China Plug-In Car Sales Almost Doubled in January 2024.
- 8. Reuters. (2024, February 14). Global EV sales up 69% y/y in Jan, down 26% vs Dec Rho Motion.
- 9. Bloomberg. (2024, January 31). More Than 1,000 New EV Stations Have come Online in the US Since Summer.
- 10. Ibid.
- 11. Bloomberg (2024, February 3). GM Korea to Launch 4 New Models Including 2 Electric Cars in 2024.
- 12. CNBC. (2024, February 26). Tesla rival BYD launches electric supercar that could take on Ferrari for \$233,000.
- 13. The Verge. (2024, February 15). OpenAl introduces Sora, its text-to-video Al model.
- 14 Ibid
- 15. TechCrunch. (2024, February 28). Adobe reveals a GenAi tool for music.
- 16. Ibid
- 17. Klarna. (2024, February 27). Klarna Al assistant handles two-thirds of customer service chats in its first month.
- 18. European Union. (2024, February 19). European Hydrogen Bank pilot auction: 132 bids received from 17 European countries.
- 19. Ibid.
- 20. Ibid.
- 21. Caterpillar. (2024, January 19). Caterpillar Demonstrates Viability Of Using Hydrogen Fuel Cell Technology For Backup Power At Microsoft Data Center.
- 22. Fierce Healthcare. (2024, February 9). Doximity doubles down on Al-fueled growth, boosts 2024 revenue guidance.
- 23. Ibid.
- 24. Ibid.
- 25. CNBC. (2024, February 27). Him & Hers soars 31% on rapid growth in mental health, weight loss and dermatology treatments.
- 26. NBCNews. (2024, February 7). Ransomware hackers raked in a record \$1 billion from victims last year.
- 27. U.S. Department of Justice. (2024, February 20). U.S. and U.K. Disrupt LockBit Ransomware Variant.
- 28. KFFHHealthNews. (2024, March 1). Hacking at UnitedHealth Unit Cripples a Swath of the US Health System: What to Know.
- 29. USA Today. (2024, February 26). Cybersecurity statistics in 2024.

Investing involves risk, including the possible loss of principal. International investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. Narrowly focused investments may be subject to higher volatility. The funds are non-diversified.

The companies in which the Disruptive Technology Funds invest may be subject to rapid changes in technology, intense competition, rapid obsolescence of products and services, loss of intellectual property protections, evolving industry standards and frequent new product productions, and changes in business cycles and government regulation.

Hydrogen companies typically face intense competition, short product lifecycles and potentially rapid product obsolescence. They may be significantly affected by fluctuations in energy prices and in the supply and demand of renewable energy, tax, incentives, subsidies and other governmental regulations and policies. Investments in smaller companies typically exhibit higher volatility.

Carefully consider the Funds' investment objectives, risk factors, charges, and expenses before investing. This and additional information can be found in the Funds' summary or full prospectus, which may be obtained by calling 1.888.493.8631, or by visiting globalxetfs.com. Please read the prospectus carefully before investing.

Global X Management Company LLC serves as an advisor to Funds. The Funds are distributed by SEI Investments Distribution Co. (SIDCO), which is not affiliated with Global X Management Company LLC or Mirae Asset Global Investments.

Shares of ETFs are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Brokerage commissions will reduce returns. Beginning October 15, 2020, market price returns are based on the official closing price of an ETF share or, if the official closing price isn't available, the midpoint between the national best bid and national best offer ("NBBO") as of the time the ETF calculates current NAV per share. Prior to October 15, 2020, market price returns were based on the midpoint between the Bid and Ask price. NAVs are calculated using prices as of 4:00 PM Eastern Time. The returns shown do not represent the returns you would receive if you traded shares at other times.

Indices are unmanaged and do not include the effect of fees, expenses or sales charges. One cannot invest directly in an index.

This material represents an assessment of the market environment at a specific point in time and is not intended to be a forecast of future events, or a guarantee of future results. This information is not intended to be individual or personalized investment or tax advice and should not be used for trading purposes. Please consult a financial advisor or tax professional for more information regarding your investment and/or tax situation.

