

GLOBAL X INSIGHTS

The Next Big Theme: April 2024

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Topic: **Thematic**

The Next Big Theme

A Regular Pulse on
Disruptive Trends by Global X ETFs



Lithium & Battery Technology

Lithium Prices Back on an Upswing

Global lithium prices showed signs of stabilizing as they entered positive territory for the first time year-to-date (YTD) in early April.¹ Notably, in China, lithium carbonate traded around 15,550 USD per tonne as of April 10th, up 15% YTD.² Also positive for prices is that global electric vehicle (EV) sales are projected to increase 27% year-over-year (YoY) to 17.5 million units in 2024.³ A surge of this magnitude could further drive lithium prices, which depend on robust EV demand. On the supply front, the U.S. Department of Energy conditionally agreed to loan \$2.26 billion to Lithium Americas to help develop the company's Thacker Pass mine in Nevada.⁴ The loan will largely finance the initial phase of the project, which is now estimated to cost \$2.93 billion.⁵ Slated to start production in 2027, the company aims for the mine to produce 40,000 tons of battery grade lithium carbonate per year, enough to supply 800,000 electric vehicles (EVs).⁶ Thacker Pass contains the largest proven lithium reserve in North America and is expected to play a significant role in bolstering the domestic lithium & battery supply chain.

Artificial Intelligence

Tech Heavyweights Intensify AI Investments

Amazon will invest an additional \$2.75 billion in Anthropic, a prominent AI startup and rival to OpenAI, at a valuation of \$18.4 billion.⁷ Amazon's total stake in Anthropic is now \$4 billion, representing Amazon's largest external venture investment.⁸ The investment comes shortly after Anthropic launched Claude 3, an AI model suite excelling in multimodal capabilities. Claude 3 reportedly surpasses OpenAI's GPT-4 and Google's Gemini Ultra in various benchmark tests, including knowledge and reasoning at various educational levels and basic mathematics.⁹ As part of the agreement, Anthropic will prioritize Amazon Web Service (AWS) for cloud services and utilize Amazon's chips for developing and deploying its foundational models.¹⁰ The deal continues the trend of escalating AI investments by tech giants, which soared to \$24.6 billion in 2023 from \$4.4 billion in 2022.¹¹ Nvidia's recent unveiling of its most powerful AI processor yet, the Blackwell GPU Architecture, is another example of the intensifying AI technology race.¹²

U.S. Infrastructure

CHIPS Act Funding to Help Build New Semiconductor Facilities

The U.S. Department of Commerce has a non-binding preliminary agreement to allocate \$8.5 billion from the CHIPS Act to Intel for the construction of semiconductor facilities in Arizona, New Mexico, Ohio, and Oregon.¹³ The four projects, which are expected to support 20,000 construction jobs, are part of Intel's plan to invest more than \$100 billion to expand its chip production capacity and capabilities in the U.S. over the next five years.¹⁴ Additionally, Intel may receive up to \$11 billion in CHIPS Act loans and is eligible for a tax credit covering 25% of specific capital expenditures. All told, the funding for Intel represents the CHIPS Act's largest allocation to date.¹⁵ National Grid announced a \$4 billion investment to upgrade upstate New York's power grid.¹⁶ Seventy projects over six years will enhance the grid's resilience against extreme weather and support renewable energy. Over 1,000 miles of transmission lines will be



overhauled.¹⁷ Investments like these will help modernize the country's aging and disconnected power infrastructure and advance the energy shift.

Social Media

Reddit IPO Reignites Social Media Sector

Reddit's shares surged 48% in their initial public offering (IPO) on March 21st, marking the first major social media IPO since Pinterest in 2019.¹⁸ This milestone potentially signals a new era for community-based platforms, as Reddit's innovative monetization of AI points to emerging revenue opportunities beyond traditional advertising for social networks rich in user data. For example, Reddit anticipates incremental revenue from data licensing after agreeing to several deals with aggregate contract values above \$200 million over 2-3 years.¹⁹ In 2024, Reddit expects to recognize roughly \$66 million in revenue from data licensing deals.²⁰ Among them, Alphabet's expanded partnership with Reddit allows Google more access to Reddit data to train AI models and improve its products.²¹ This strategic partnership validates the viability of such monetization efforts and sets the stage for continued growth within social media.

Genomics and Biotechnology

Genomic Medicine and Biotech Approvals and Deal Activity Surge in Early 2024

The U.S. Food and Drug Administration (FDA) has now approved 26 genomic medicines and notably continues to expand approvals for already marketed drugs.²² Most recently, the FDA expanded Vertex Pharmaceutical and CRISPR Therapeutics' approval of their gene editing treatment to include beta-thalassemia.²³ The expanded approval came over two months ahead of schedule and six weeks after the original approval of Casgevy for sickle cell disease (SCD). Sales of Casgevy are expected to be robust, totaling \$2.7 billion in 2028.²⁴ The FDA also recently approved the first CAR-T cell therapy for solid tumors. Historically, CAR-T treatment approvals have been limited to blood-based cancers, so this approval opens the door to a wider pool of cancer types. Ongoing genomic and biotech innovation has also accelerated mergers and acquisition (M&A) activity, which includes Gilead Science's recent acquisition of CymaBay Therapeutics for \$4.3 billion to bolster its liver disease portfolio.²⁵

CleanTech

Industry Leaders Collaborate to Accelerate Clean Power

Microsoft, Google, and Nucor announced the Advanced Clean Electricity initiative, aiming to propel emerging 24/7 clean energy technologies such as advanced nuclear, next-gen geothermal, and long-duration energy storage.²⁶ This initiative seeks to mitigate project risks and enhance efficiencies for these types of projects, and it highlights how long-duration energy storage is essential for transitioning to greener power grids, given the intermittency of wind and solar energy. Requests for information about early pilot projects were sent out, and applicants have until mid-April to make submissions. Power purchase agreements for selected projects will be finalized by early 2025.²⁷ Additionally, the U.S. Department of Energy announced \$6 billion in funding for 33 projects focused on decarbonizing energy-intensive industries like aluminum, cement, and steel.²⁸ These projects, ranging from metal recycling to hydrogen-fueled steel production, aim to cut annual CO2 emissions by 14 million metric tonnes—equivalent to emissions from 3 million gas-powered cars.²⁹

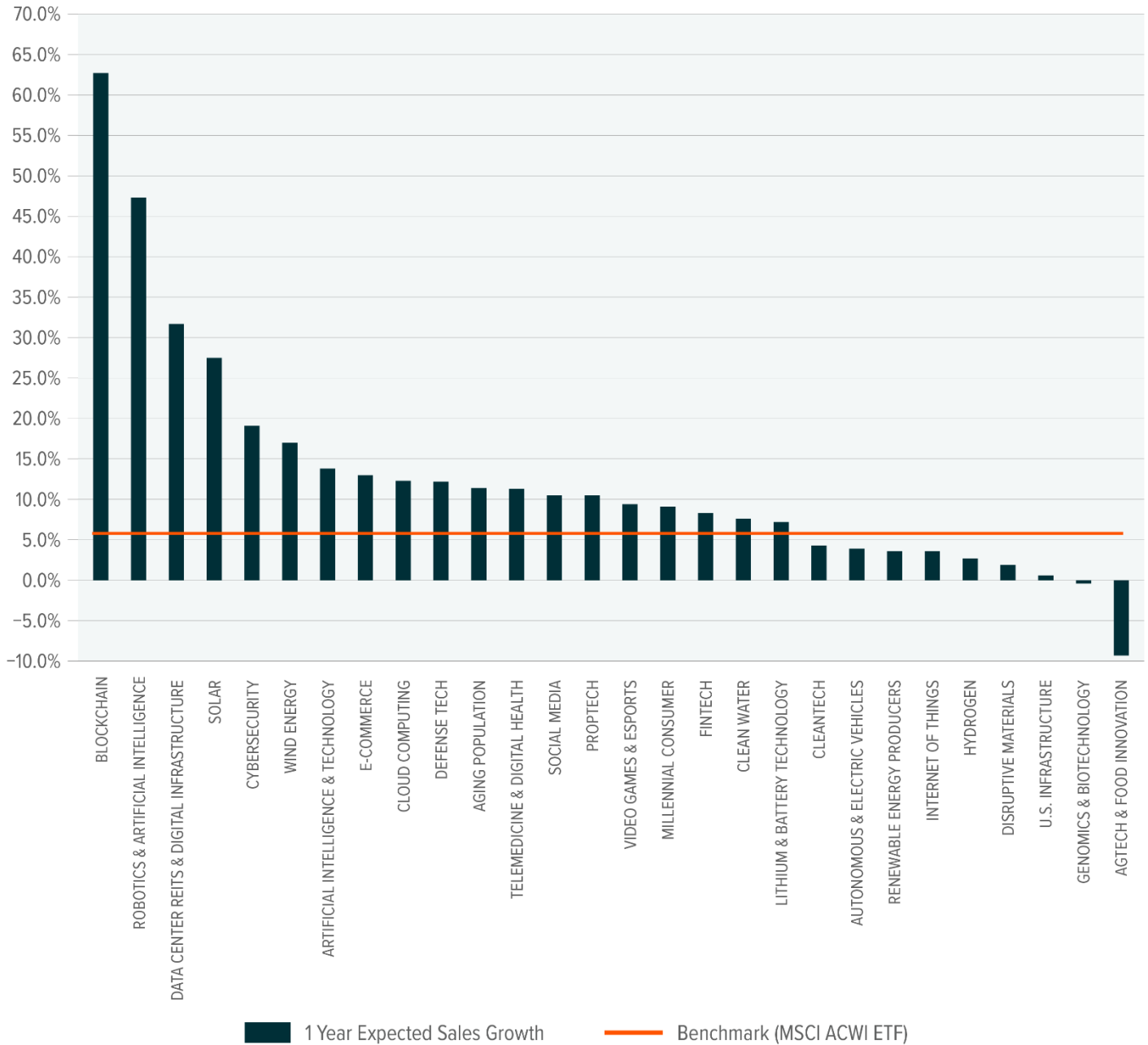


THE NUMBERS

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

THEMATIC EXPECTED SALES GROWTH

Source: Bloomberg, March 31, 2024, Global X ETFs.



Note: Forward looking based on index data and analysis from 3/31/2024.

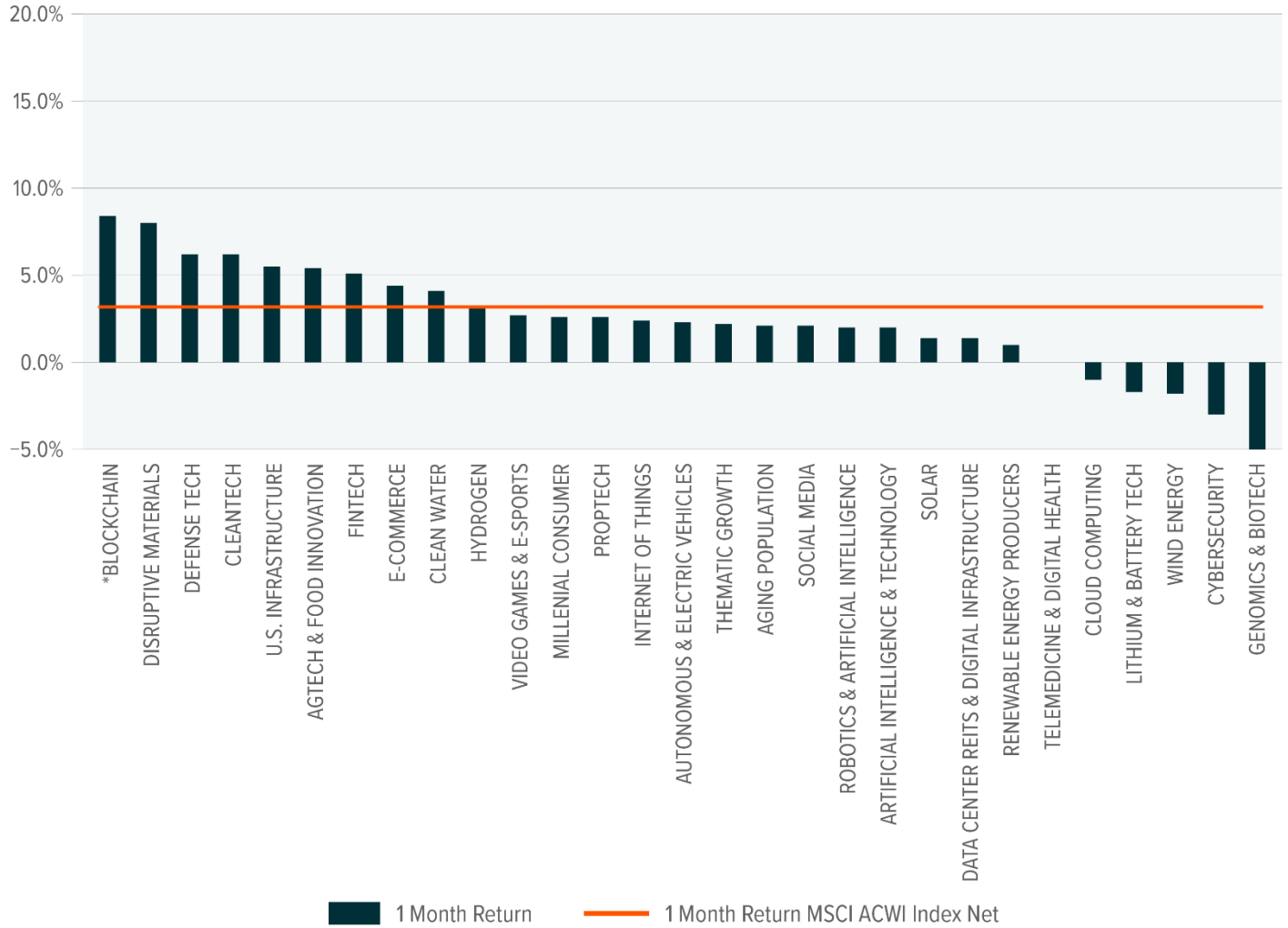
1 year annualized forward sales growth is the consensus analyst expectations for total sales growth in the next 12 months.

Refer to Appendix below Footnotes for details on Indices used.



MARCH 2024 THEMATIC ETF RETURNS

Source: Bloomberg, March 31, 2024, Global X ETFs.



Note: The performance data quoted represents past performance and does not guarantee 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.



Standard Performance			Cumulative % Data as of month end (03/31/24)			Avg. Annualized % Data as of quarter end (03/31/24)				
	Expense Ratio		1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception
ROBOTICS & ARTIFICIAL INTELLIGENCE Inception Date 9/12/2016	0.69%	NAV	2.15%	11.46%	121.39%	25.79%	-1.01%	10.08%	-	11.10%
		Market Price	2.02%	11.61%	121.40%	25.00%	-1.16%	10.02%	-	11.10%
		Index	2.14%	11.54%	127.44%	26.10%	-0.48%	10.60%	-	11.49%
FINTECH Inception Date 9/12/2016	0.68%	NAV	4.97%	8.91%	96.24%	34.19%	-12.48%	1.29%	-	9.34%
		Market Price	5.13%	8.96%	96.15%	34.14%	-12.57%	1.27%	-	9.33%
		Index	5.02%	9.10%	104.11%	34.86%	-12.19%	1.75%	-	9.91%
INTERNET OF THINGS Inception Date 9/12/2016	0.68%	NAV	2.77%	2.68%	156.89%	10.04%	3.73%	15.49%	-	13.30%
		Market Price	2.40%	2.61%	156.05%	9.68%	3.52%	15.39%	-	13.26%
		Index	2.91%	2.96%	163.96%	10.75%	4.17%	15.93%	-	13.71%
CLOUD COMPUTING Inception Date 4/12/2019	0.68%	NAV	-0.95%	-3.71%	47.35%	18.87%	-4.84%	-	-	8.11%
		Market Price	-0.96%	-4.02%	47.60%	18.53%	-4.91%	-	-	8.14%
		Index	-0.90%	-3.55%	52.04%	19.67%	-4.21%	-	-	8.79%
SOCIAL MEDIA Inception Date 11/14/2011	0.65%	NAV	1.59%	-0.05%	180.21%	9.91%	-14.99%	4.98%	7.81%	8.67%
		Market Price	2.08%	-0.22%	179.59%	9.58%	-15.19%	4.97%	7.82%	8.65%
		Index	1.61%	0.05%	198.98%	10.53%	-14.60%	5.53%	8.32%	9.24%
ARTIFICIAL INTELLIGENCE & TECHNOLOGY Inception Date 5/11/2018	0.68%	NAV	1.83%	8.96%	132.03%	38.60%	6.53%	17.10%	-	15.35%
		Market Price	1.98%	8.92%	132.17%	38.34%	6.37%	17.11%	-	15.36%
		Index	2.04%	9.31%	138.59%	39.81%	7.17%	17.72%	-	15.90%
AUTONOMOUS & ELECTRIC VEHICLES Inception Date 4/13/2018	0.68%	NAV	2.23%	0.08%	78.09%	5.60%	-1.17%	14.49%	-	10.15%
		Market Price	2.28%	0.12%	77.67%	5.26%	-1.35%	14.37%	-	10.11%
		Index	2.27%	0.17%	79.96%	5.77%	-0.94%	14.75%	-	10.34%
LITHIUM AND BATTERY TECH Inception Date 7/22/2010	0.75%	NAV	-1.54%	-11.68%	74.96%	-27.66%	-7.01%	10.87%	6.76%	4.17%
		Market Price	-1.67%	-11.09%	74.62%	-28.01%	-7.48%	10.89%	6.67%	4.15%
		Index	-1.34%	-11.46%	86.74%	-27.26%	-6.42%	11.19%	7.05%	4.66%
GENOMICS AND BIOTECHNOLOGY Inception Date 4/5/2019	0.50%	NAV	-5.41%	-1.82%	-25.53%	-7.57%	-20.26%	-	-	-5.73%
		Market Price	-5.01%	-1.56%	-24.01%	-7.63%	-20.29%	-	-	-5.35%
		Index	-5.23%	-1.55%	-23.62%	-6.37%	-19.88%	-	-	-5.25%
MILLENNIAL CONSUMER Inception Date 5/4/2016	0.50%	NAV	2.33%	10.26%	169.62%	31.46%	-0.59%	10.83%	-	13.35%
		Market Price	2.62%	10.30%	168.65%	31.86%	-0.62%	10.83%	-	13.30%
		Index	2.35%	10.39%	179.73%	32.10%	-0.13%	11.39%	-	13.88%
AGING POPULATION Inception Date 5/09/2016	0.50%	NAV	2.64%	5.09%	108.76%	12.59%	3.44%	7.66%	-	9.77%
		Market Price	2.10%	5.87%	114.23%	13.50%	3.51%	7.65%	-	10.13%
		Index	2.74%	5.14%	113.11%	12.98%	3.67%	7.90%	-	10.05%
E-COMMERCE Inception Date 11/27/2018	0.50%	NAV	4.41%	12.77%	62.22%	32.43%	-10.97%	6.70%	-	9.47%
		Market Price	4.37%	12.69%	61.88%	32.45%	-11.11%	6.61%	-	9.43%
		Index	4.44%	12.91%	66.06%	33.00%	-10.60%	7.17%	-	9.95%
US INFRASTRUCTURE DEVELOPMENT Inception Date 3/6/2017	0.47%	NAV	5.54%	15.59%	177.69%	41.47%	17.58%	21.32%	-	15.53%
		Market Price	5.54%	15.53%	177.69%	41.42%	17.50%	21.30%	-	15.53%
		Index	5.56%	15.73%	188.59%	42.56%	18.29%	22.02%	-	16.16%
VIDEO GAMES & ESPORTS Inception Date 10/25/2019	0.50%	NAV	2.37%	2.37%	42.04%	2.86%	-12.28%	-	-	8.23%
		Market Price	2.73%	2.63%	41.67%	2.51%	-12.48%	-	-	8.17%
		Index	2.40%	2.50%	44.91%	3.22%	-11.91%	-	-	8.72%



CYBERSECURITY Inception Date 10/25/2019	0.51%	NAV	-2.87%	1.88%	101.32%	27.23%	6.89%	-	-	17.09%
		Market Price	-3.03%	1.50%	104.72%	27.00%	6.71%	-	-	17.53%
		Index	-2.65%	2.21%	105.81%	28.14%	7.42%	-	-	17.67%
THEMATIC GROWTH Inception Date 10/25/2019	0.50%	NAV	1.60%	-2.51%	1.05%	-3.58%	-19.14%	-	-	0.24%
		Market Price	2.16%	-1.87%	2.20%	-3.34%	-19.13%	-	-	0.49%
		Index	1.58%	-2.65%	-0.03%	-3.78%	-19.36%	-	-	-0.01%
TELEMEDICINE & DIGITAL HEALTH Inception Date 7/29/2020	0.68%	NAV	-	-6.00%	-37.27%	-19.00%	-20.63%	-	-	-11.92%
		Market Price	-	-6.03%	-37.54%	-18.86%	-20.77%	-	-	-12.02%
		Index	0.05%	-5.87%	-36.23%	-18.54%	-20.28%	-	-	-11.52%
CLEANTECH Inception Date 10/27/2020	0.50%	NAV	5.70%	-11.15%	-35.29%	-39.49%	-23.61%	-	-	-11.93%
		Market Price	6.18%	-11.09%	-35.42%	-39.27%	-23.94%	-	-	-11.98%
		Index	5.55%	-11.24%	-36.35%	-39.50%	-24.06%	-	-	-12.35%
DATA CENTER REITS & DIGITAL INFRASTRUCTURE Inception Date 10/27/2020	0.50%	NAV	0.84%	6.22%	9.34%	19.46%	1.55%	-	-	2.64%
		Market Price	1.37%	6.07%	9.49%	19.80%	1.50%	-	-	2.68%
		Index	0.86%	6.37%	9.44%	19.86%	1.60%	-	-	2.67%
RENEWABLE ENERGY PRODUCERS Inception Date 05/27/2015	0.66%	NAV	1.02%	-13.28%	-13.81%	-19.70%	-13.64%	-3.31%	-	-1.67%
		Market Price	1.03%	-12.68%	-13.97%	-19.38%	-13.72%	-3.43%	-	-1.69%
		Index	1.13%	-13.16%	-10.81%	-19.34%	-13.27%	-2.96%	-	-1.28%
CLEAN WATER Inception Date 04/08/2021	0.50%	NAV	3.80%	7.16%	21.54%	21.59%	-	-	-	6.76%
		Market Price	4.11%	6.91%	21.47%	21.77%	-	-	-	6.74%
		Index	3.85%	7.30%	22.77%	22.09%	-	-	-	7.13%
AGTECH AND FOOD INNOVATION Inception Date 07/12/2021	0.50%	NAV	5.20%	3.83%	-54.94%	-22.74%	-	-	-	-25.40%
		Market Price	5.39%	3.82%	-54.82%	-22.06%	-	-	-	-25.33%
		Index	5.24%	3.98%	-54.47%	-22.46%	-	-	-	-25.12%
HYDROGEN Inception Date 07/12/2021	0.50%	NAV	2.77%	-18.92%	-77.74%	-49.04%	-	-	-	-42.44%
		Market Price	3.11%	-18.38%	-77.46%	-48.45%	-	-	-	-42.17%
		Index	2.65%	-18.82%	-77.41%	-48.54%	-	-	-	-42.12%
BLOCKCHAIN Inception Date 07/12/2021	0.50%	NAV	7.90%	9.97%	-45.10%	136.45%	-	-	-	-19.78%
		Market Price	8.45%	10.25%	-45.21%	134.45%	-	-	-	-19.84%
		Index	7.88%	9.93%	-47.04%	134.60%	-	-	-	-20.83%
SOLAR Inception Date 09/08/2021	0.51%	NAV	1.47%	-10.99%	-51.46%	-43.58%	-	-	-	-24.58%
		Market Price	1.38%	-10.97%	-51.33%	-43.52%	-	-	-	-24.51%
		Index	1.53%	-10.95%	-50.82%	-43.36%	-	-	-	-24.19%
WIND ENERGY Inception date 09/08/2021	0.50%	NAV	-1.63%	-12.34%	-50.33%	-29.95%	-	-	-	-23.90%
		Market Price	-1.79%	-12.00%	-50.25%	-29.43%	-	-	-	-23.85%
		Index	-1.55%	-12.23%	-49.79%	-29.71%	-	-	-	-23.58%
DISRUPTIVE MATERIALS Inception date 01/24/22	0.59%	NAV	8.09%	-3.42%	-34.63%	-21.45%	-	-	-	-17.69%
		Market Price	7.97%	-2.28%	-34.36%	-21.37%	-	-	-	-17.54%
		Index	8.07%	-3.32%	-34.02%	-21.17%	-	-	-	-17.34%
PROPTECH Inception date 04/11/23	0.50%	NAV	2.27%	6.76%	30.74%	-	-	-	-	-
		Market Price	2.59%	6.61%	30.90%	-	-	-	-	-
		Index	2.33%	6.89%	31.27%	-	-	-	-	-
DEFENSE TECH Inception date 09/11/23	0.50%	NAV	6.33%	19.17%	33.58%	-	-	-	-	-
		Market Price	6.21%	19.17%	34.10%	-	-	-	-	-
		Index	6.40%	19.30%	33.98%	-	-	-	-	-



P/S AND EV/S

Source: Bloomberg, data is as of 3/31/24 and 2/29/24, Global X ETFs.

Ticker	Name	P/S		EV/S	
		3/31/24	2/29/24	3/31/24	2/29/24
GNOM	Global X Genomics & Biotechnology ETF	7.51	7.70	6.61	6.74
BUG	Global X Cybersecurity ETF	5.80	6.02	5.54	5.75
BKCH	Global X Blockchain ETF	4.64	4.85	5.62	6.08
BOTZ	Global X Robotics & Artificial Intelligence ETF	4.17	4.81	4.82	5.20
CLOU	Global X Cloud Computing ETF	4.05	4.09	4.29	4.32
AGNG	Global X Aging Population ETF	3.89	3.87	4.43	4.37
AIQ	Global X Artificial Intelligence & Technology ETF	3.69	3.65	3.73	3.73
FINX	Global X FinTech ETF	3.68	3.76	4.27	4.47
VPN	Global X Data Center REITS & Digital Infrastructure ETF	3.66	3.71	6.50	6.23
SOCL	Global X Social Media ETF	3.16	3.13	3.04	3.01
SNSR	Global X Internet of Things ETF	3.14	2.84	3.34	3.08
HERO	Global X Video Games & Esports ETF	2.99	2.87	2.93	2.81
SPY	SPDR S&P 500 ETF TRUST	2.83	2.74	3.20	3.11
AQWA	Global X Clean Water ETF	2.66	2.62	3.68	3.59
HYDR	Global X Hydrogen ETF	2.31	2.25	2.32	2.35
MILN	Global X Millennial Consumer ETF	2.30	2.26	2.66	2.60
PTEC	Global X PropTech ETF	2.19	2.17	3.74	3.66
RNRG	Global X Renewable Energy Producers ETF	2.16	2.08	5.44	5.27
EDOC	Global X Telemedicine & Digital Health ETF	2.15	2.08	2.14	2.06
ACWI	MSCI ACWI ETF	2.08	2.02	2.85	2.74
PAVE	Global X US Infrastructure Development ETF	1.84	1.75	2.14	2.03
SHLD	Global X Defense Tech ETF	1.75	1.65	1.98	1.89
WNDY	Global X Wind Energy ETF	1.58	1.60	2.77	2.75
LIT	Global X Lithium & Battery Tech ETF	1.57	1.57	1.76	1.77
RAYS	Global X Solar ETF	1.36	1.34	1.99	1.95
DMAT	Global X Disruptive Materials ETF	1.35	1.22	1.72	1.57
EBIZ	Global X E-Commerce ETF	1.28	1.23	1.21	1.35
KROP	Global X Agtech & Food Innovation ETF	1.02	0.17	1.32	0.22
DRIV	Global X Autonomous & Electric Vehicles ETF	0.89	0.86	0.99	0.98
CTEC	Global X Cleantech ETF	0.85	0.78	1.26	1.11

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 3/31/24 and 2/29/24, Global X ETFs.

Ticker	Name	F12M Sales (%)		PSG		EVSG	
		3/31/24	2/29/24	3/31/24	2/29/24	3/31/24	2/29/24
BKCH	Global X Blockchain ETF	62.7%	56.3%	0.07	0.09	0.09	0.11
BOTZ	Global X Robotics & Artificial Intelligence ETF	47.3%	61.9%	0.09	0.08	0.10	0.08
VPN	Global X Data Center REITs & Digital Infrastructure ETF	31.7%	26.6%	0.12	0.14	0.21	0.23
RAYS	Global X Solar ETF	27.5%	25.6%	0.05	0.05	0.07	0.08
BUG	Global X Cybersecurity ETF	19.1%	19.5%	0.30	0.31	0.29	0.29
WNDY	Global X Wind Energy ETF	17.0%	16.6%	0.09	0.10	0.16	0.17
AIQ	Global X Artificial Intelligence & Technology ETF	13.8%	13.0%	0.27	0.28	0.27	0.29
EBIZ	Global X E-Commerce ETF	13.0%	12.6%	0.10	0.10	0.09	0.11
CLOU	Global X Cloud Computing ETF	12.3%	11.4%	0.33	0.36	0.35	0.38
SHLD	Global X Defense Tech ETF	12.2%	11.4%	0.14	0.15	0.16	0.17
AGNG	Global X Aging Population ETF	11.4%	10.5%	0.34	0.37	0.39	0.41
EDOC	Global X Telemedicine & Digital Health ETF	11.3%	12.2%	0.19	0.17	0.19	0.17
SOCL	Global X Social Media ETF	10.5%	10.7%	0.30	0.29	0.29	0.28
PTEC	Global X PropTech ETF	10.5%	11.9%	0.21	0.18	0.36	0.31
HERO	Global X Video Games & Esports ETF	9.4%	13.6%	0.32	0.21	0.31	0.21
MILN	Global X Millennial Consumer ETF	9.1%	8.6%	0.25	0.26	0.29	0.30
FINX	Global X FinTech ETF	8.3%	7.4%	0.44	0.51	0.52	0.61
AQWA	Global X Clean Water ETF	7.6%	7.7%	0.35	0.34	0.49	0.47
LIT	Global X Lithium & Battery Technology ETF	7.2%	8.7%	0.22	0.18	0.25	0.20
SPY	S&P 500 ETF	6.6%	5.8%	0.43	0.47	0.49	0.54
ACWI	MSCI ACWI ETF	5.6%	5.2%	0.37	0.39	0.51	0.53
CTEC	Global X CleanTech ETF	4.3%	0.3%	0.20	2.44	0.29	3.48
DRIV	Global X Autonomous & Electric Vehicles ETF	3.9%	2.8%	0.23	0.31	0.25	0.35
RNRG	Global X Renewable Energy Producers ETF	3.6%	0.5%	0.60	4.06	1.51	10.26
SNSR	Global X Internet of Things ETF	3.6%	3.7%	0.88	0.76	0.93	0.82
HYDR	Global X Hydrogen ETF	2.7%	4.5%	0.85	0.50	0.86	0.52
DMAT	Global X Disruptive Materials ETF	1.9%	0.5%	0.72	2.61	0.92	3.37
PAVE	Global X U.S. Infrastructure ETF	0.6%	0.5%	2.86	3.59	3.33	4.18
GNOM	Global X Genomics & Biotechnology ETF	-0.4%	-4.0%	-20.10	-1.95	-17.69	-1.71
KROP	Global X AgTech & Food Innovation ETF	-9.3%	-23.2%	-0.11	-0.01	-0.14	-0.01

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.



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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:

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- **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

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