



# Long-term investment themes 2024

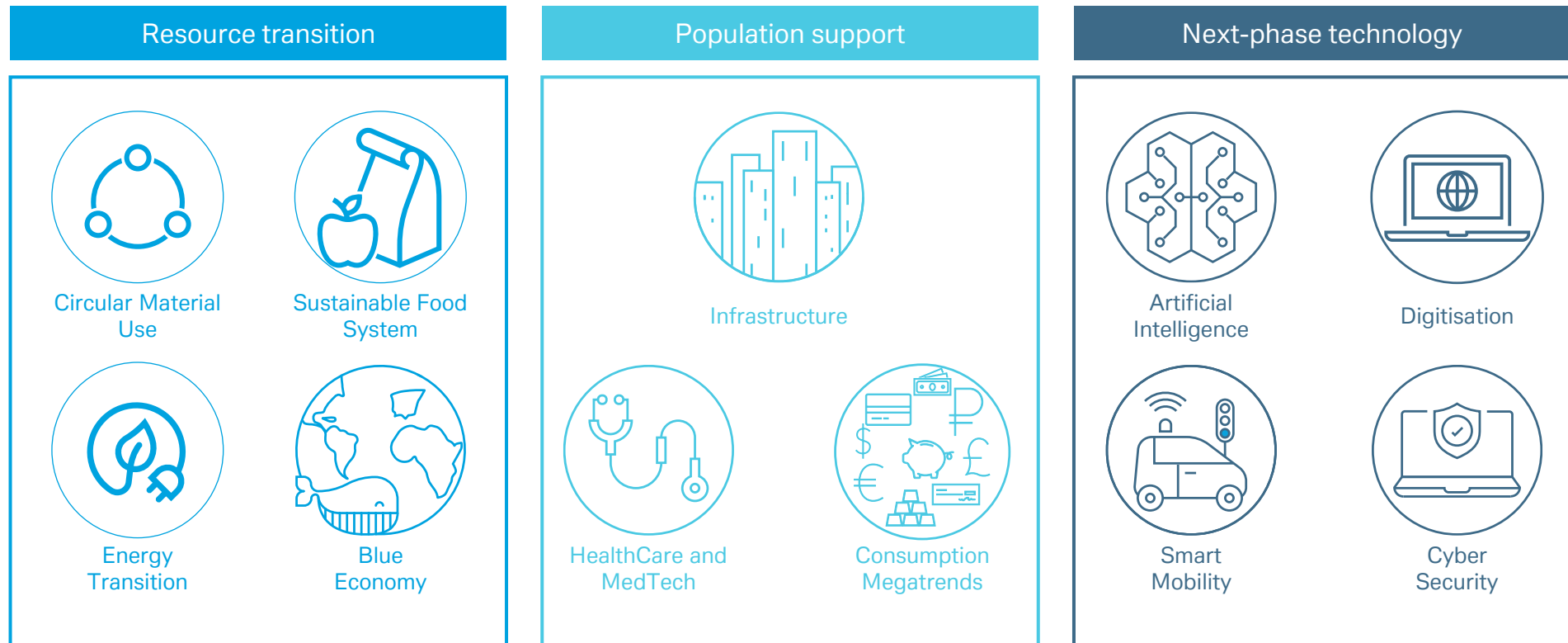
## *Market outlook: Resource transition*

*Sebastian Janker, Head Chief Investment Office EMEA*

*March 2024*



# LTIT Structure



*We organise our eleven Long Term Investment Themes (LTITs) into three broad areas: Resource transition, Population support and Next-phase technology. We see these areas as the most important global challenges in terms of how we properly use and conserve our resources, support the world's population and develop key technologies that can help us in these endeavours.*

Source: Deutsche Bank AG. Data as of January 2024.



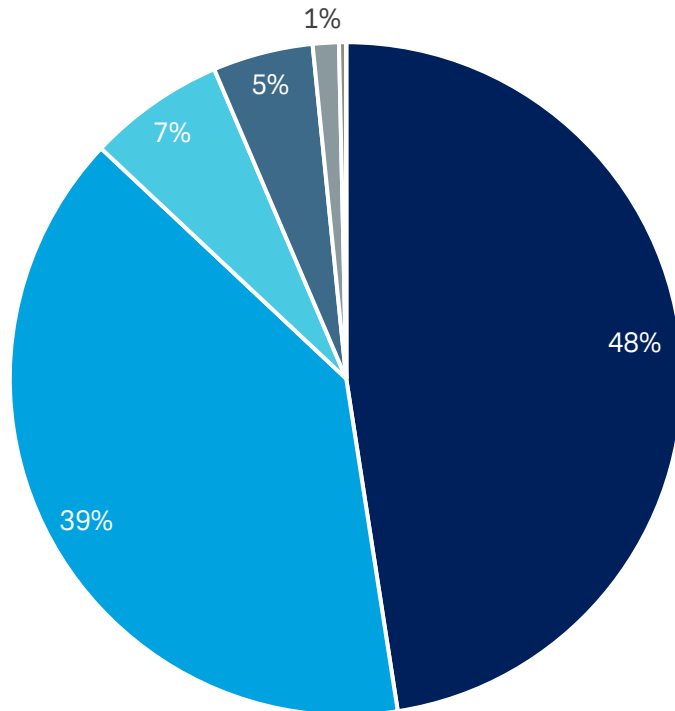
# Resource transition





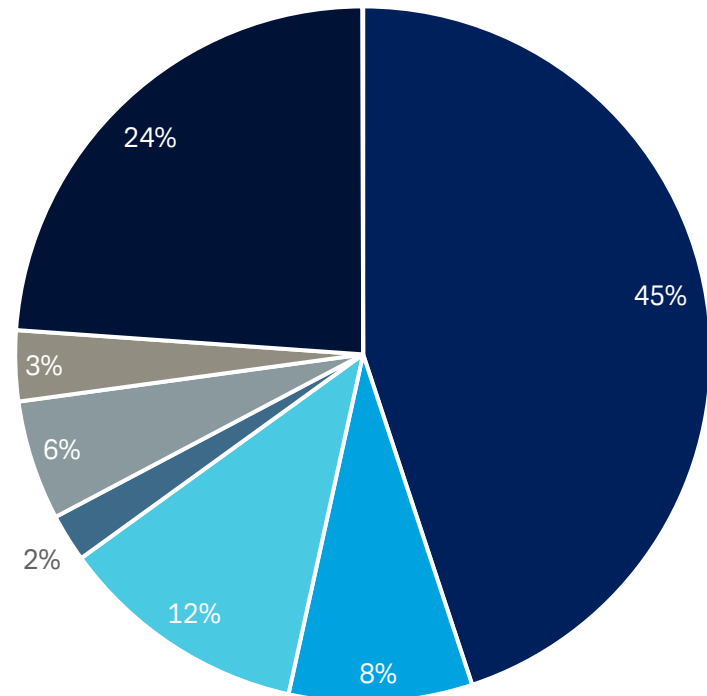
# CMU creates exposure to Industrials and Materials

Relevant sectors (by market capitalization)



- Industrials
- Materials
- Consumer Discretionary
- Utilities
- Consumer Staples
- Energy
- Technology

Relevant business areas (by market capitalisation)



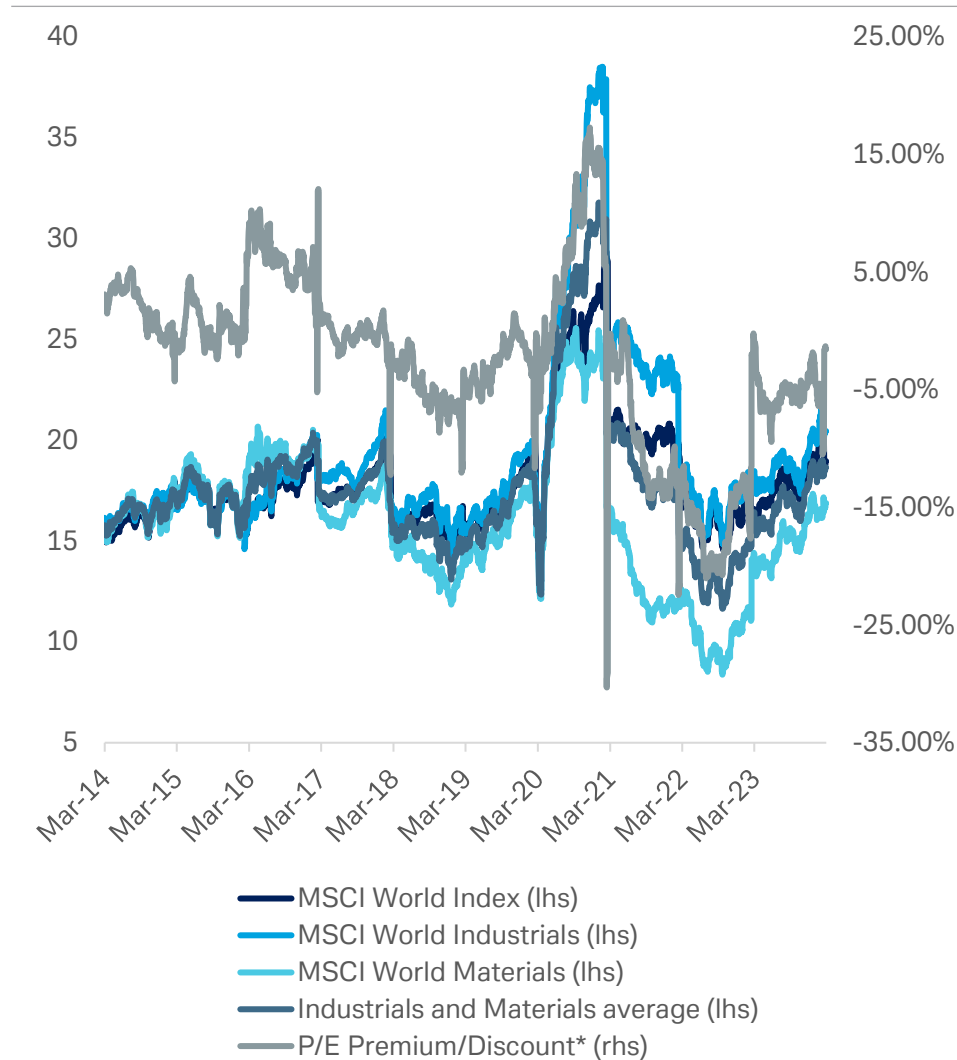
- Recycling & Recovery
- Building Products
- Chemicals
- Equipment & Technology
- Waste-to-Energy
- Plastic & Packaging
- Metals
- Fibers

Source: LSEG, Bloomberg L.P., Deutsche Bank AG. Data as of February 29, 2024.

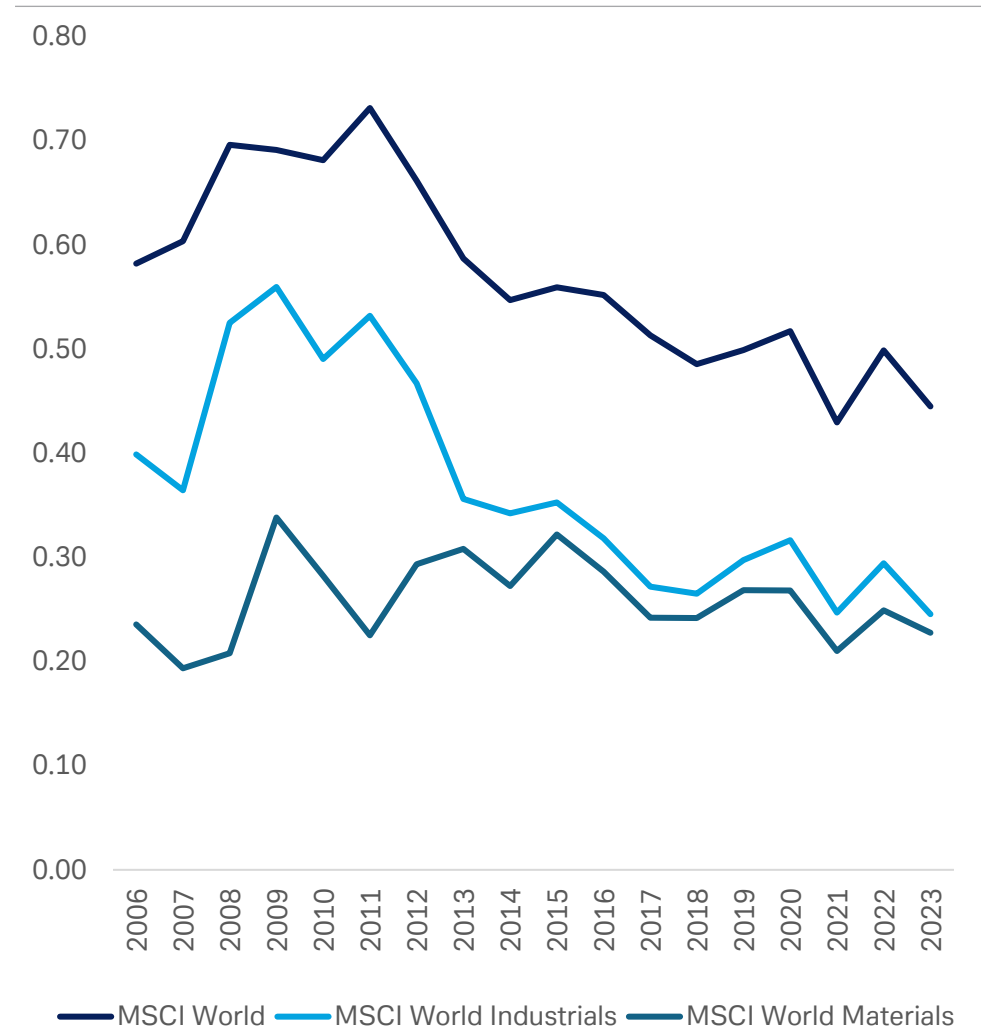


# Sector exposure brings similar valuation and lower debt

Forward looking P/E ratio of selected indices



Total debt to enterprise value of selected indices



\*P/E Premium/Discount of Industrials and Materials average P/E towards MSCI World. Source: Bloomberg L.P., Deutsche Bank AG. Data as of March 3, 2024.

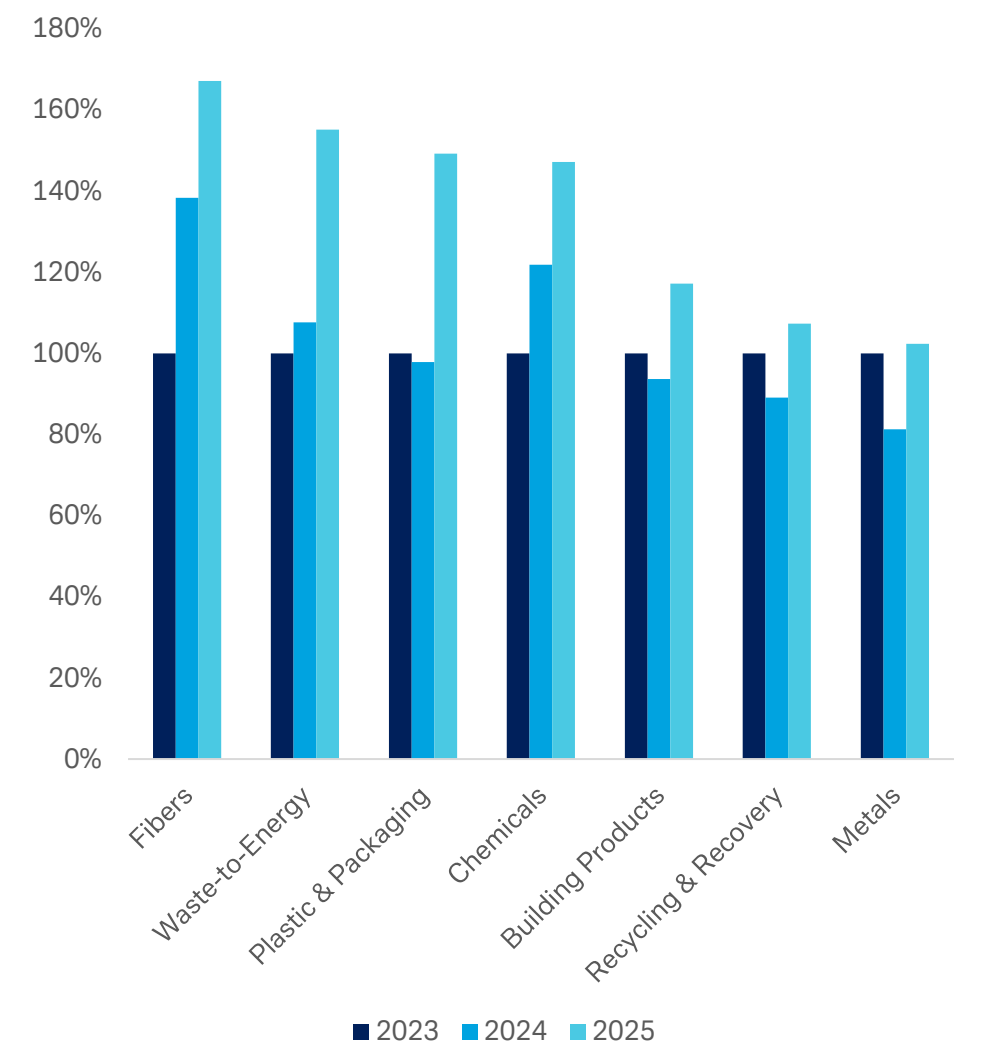


# Strong correlation with the market and high EPS growth

Total return CMU and market and 10-year US yields



Average expected EPS growth (2023 = 100)



Source: LSEG, Deutsche Bank AG. Data as of February 29, 2024.



# Relative performance strongly dependent on rates

## Relative performance of SFS to benchmarks and ongoing US yields

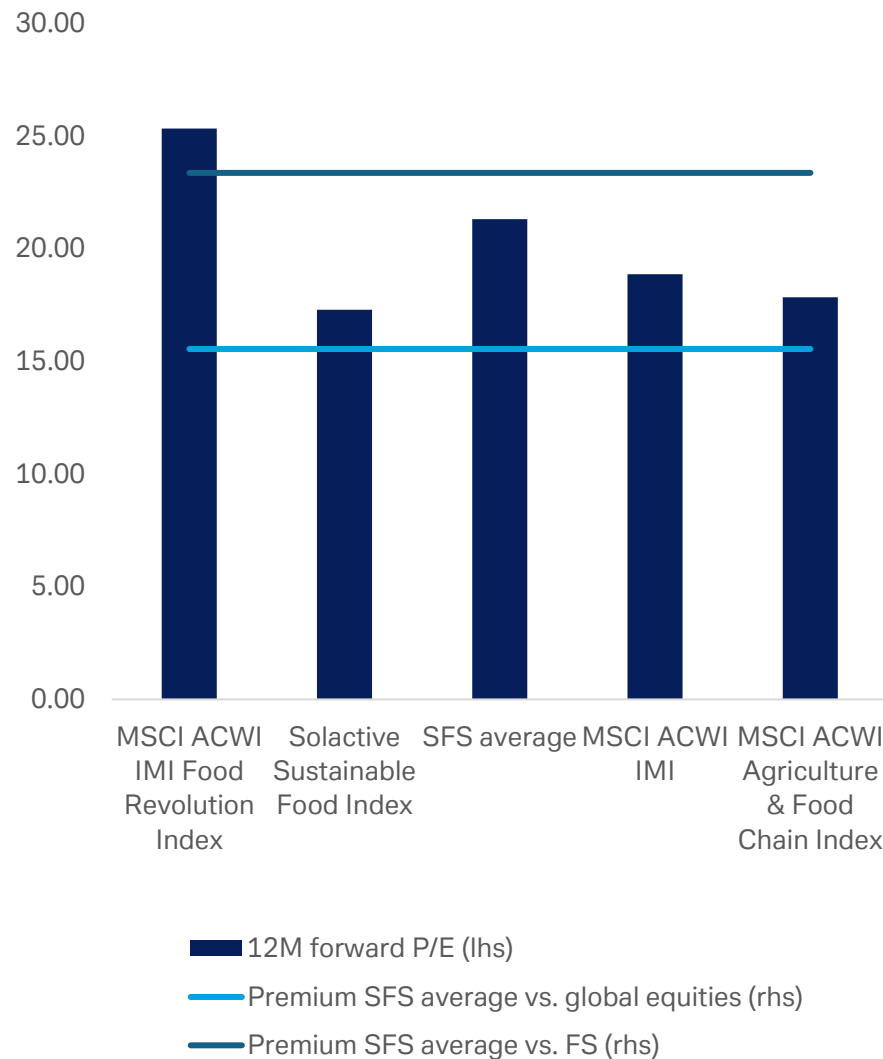


Shown is the correlation between the relative performance of SFS to the global equity market/FS and the ongoing yields of 10-year and 2-year US Treasuries. The negative correlation indicates that SFS tends to be outperformed by both benchmarks when ongoing yields rise and vice versa. SFS is represented here by the equally weighted average of the MSCI ACWI IMI Food Revolution Index and the Solactive Sustainable Food Index, the global equity market by the MSCI ACWI IMI and FS by the MSCI ACWI Agriculture & Food Chain Index. Source: Bloomberg L.P., Deutsche Bank AG. Data as of February 2024.

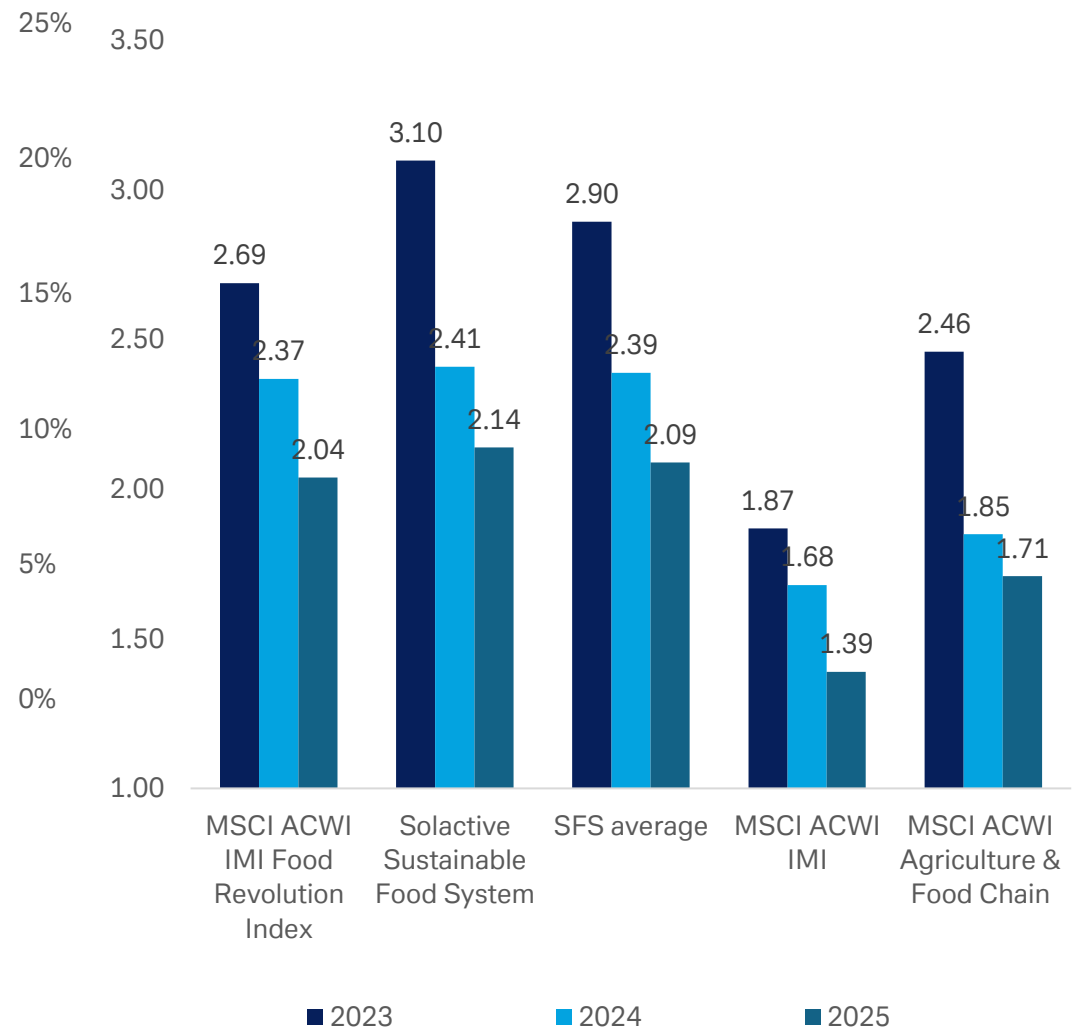


# Interest rate dependency due to valuations and debt

12M forward P/E of selected indices



Net Debt to EBITDA of selected indices



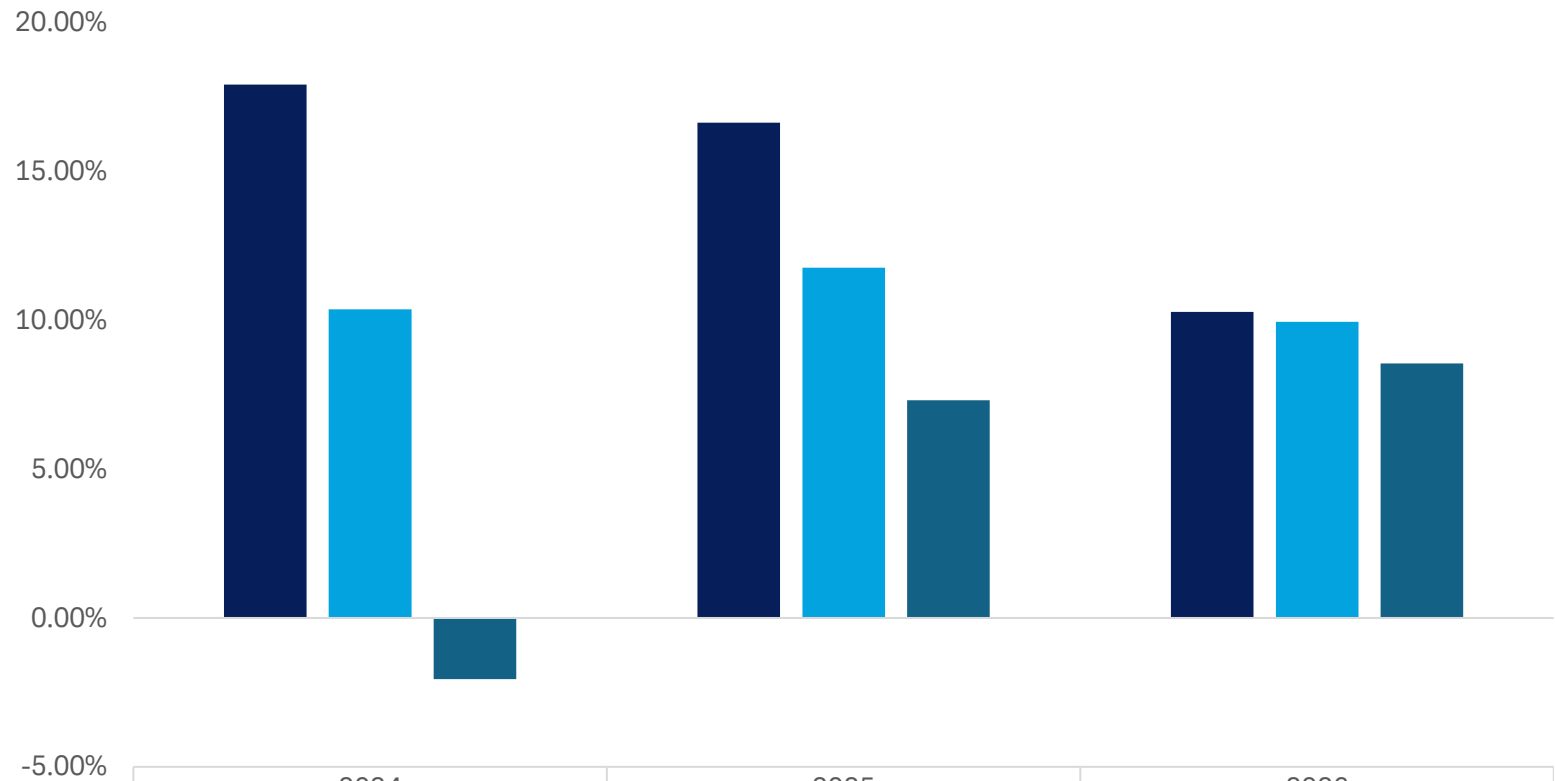
Source: Bloomberg L.P., Deutsche Bank AG. Data as of February 2024.





# Strong outlook for the upcoming years

## Earnings growth expectations\*



	2024	2025	2026
■ SFS average	17.93%	16.64%	10.29%
■ MSCI ACWI IMI	10.38%	11.78%	9.95%
■ MSCI ACWI Agriculture & Food Chain	-2.05%	7.31%	8.55%

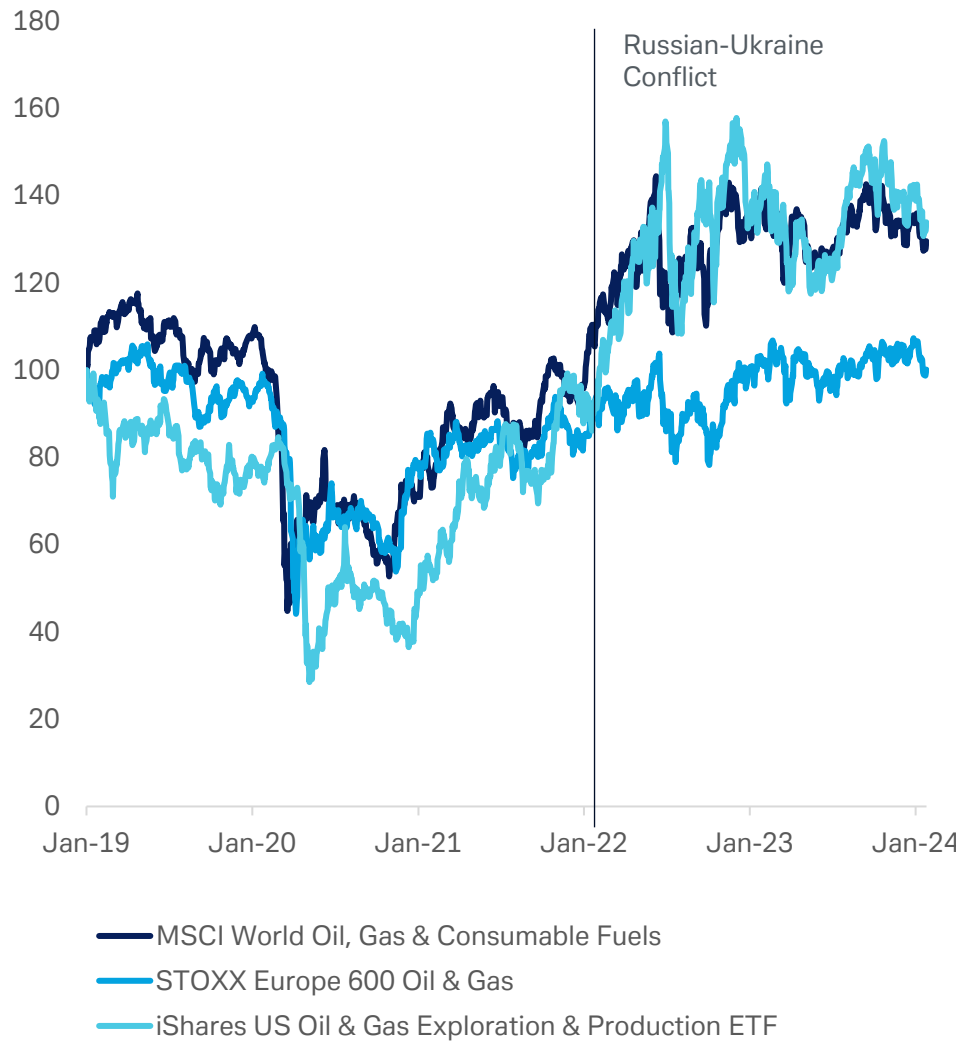
■ SFS average   ■ MSCI ACWI IMI   ■ MSCI ACWI Agriculture & Food Chain

\*Based on Bloomberg estimated EPS. Source: Bloomberg L.P., Deutsche Bank AG. Data as of February 2024.

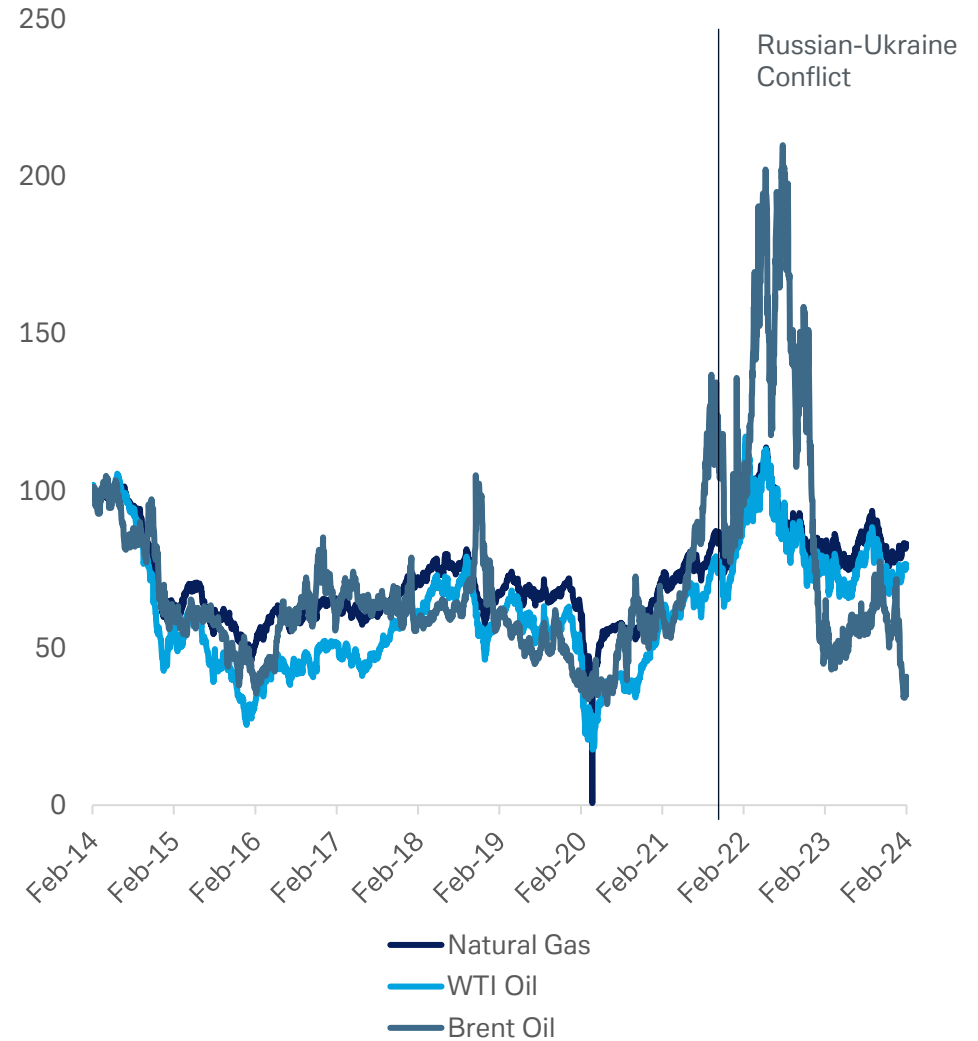


# Energy sector has recently come under the spotlight

Total return of selected indices in USD



Indexed price development of selected commodities

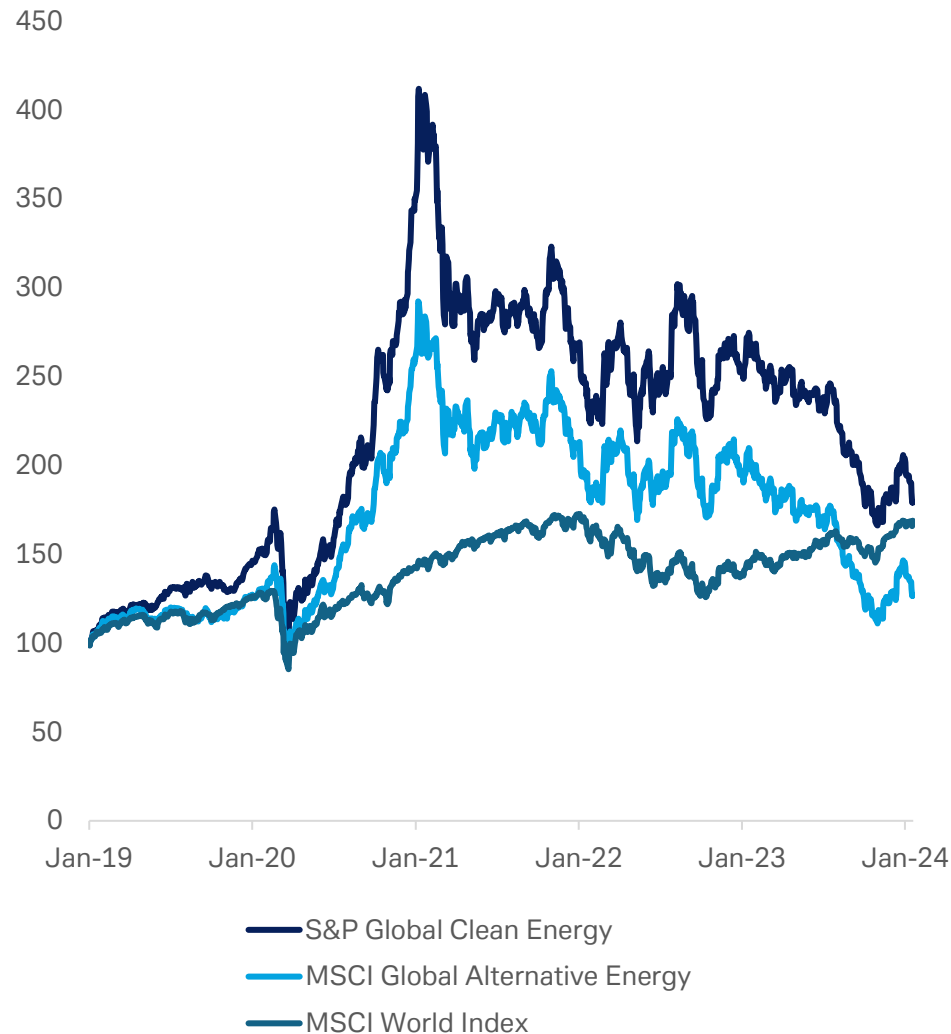


Source: LSEG, Deutsche Bank AG. Data as of February 2024.

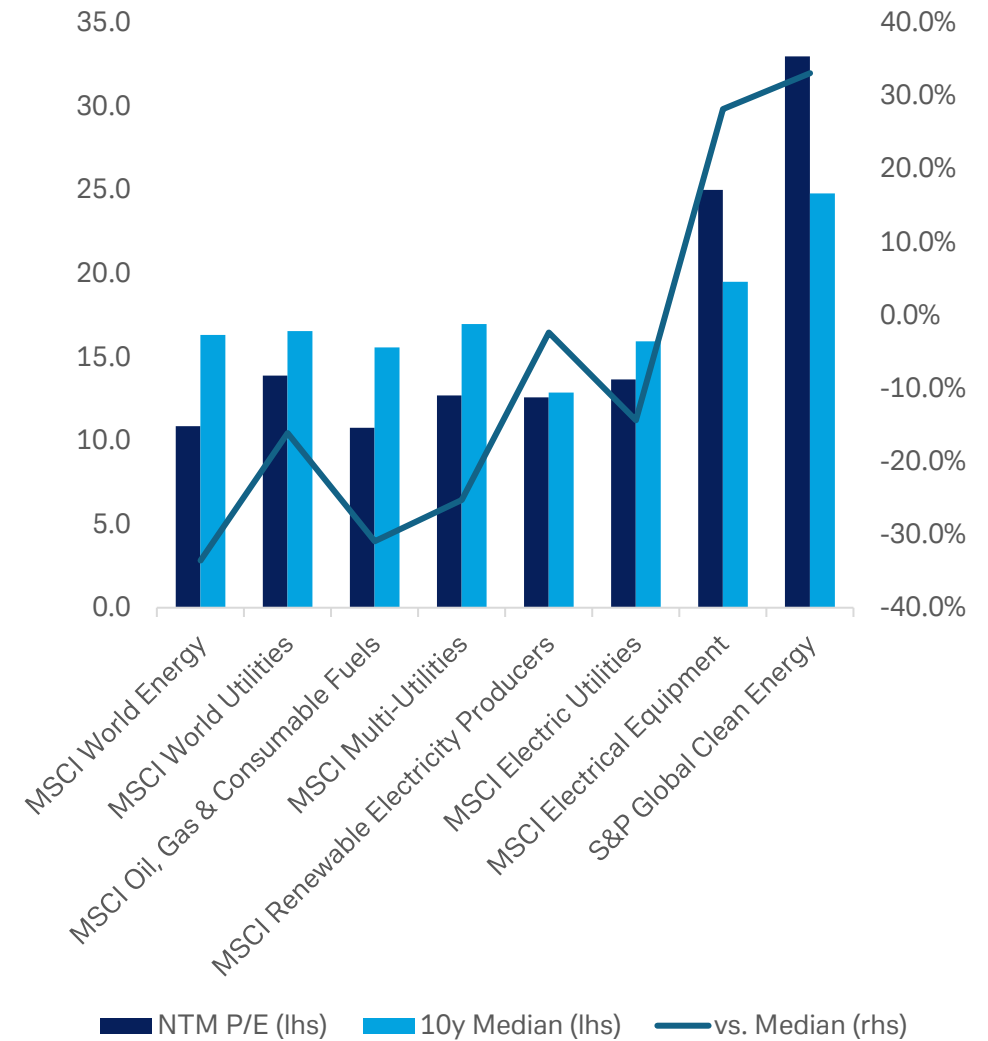


# Clean Energy companies have struggled instead

Total return of selected indices in USD



Price/earnings ratio of selected indices

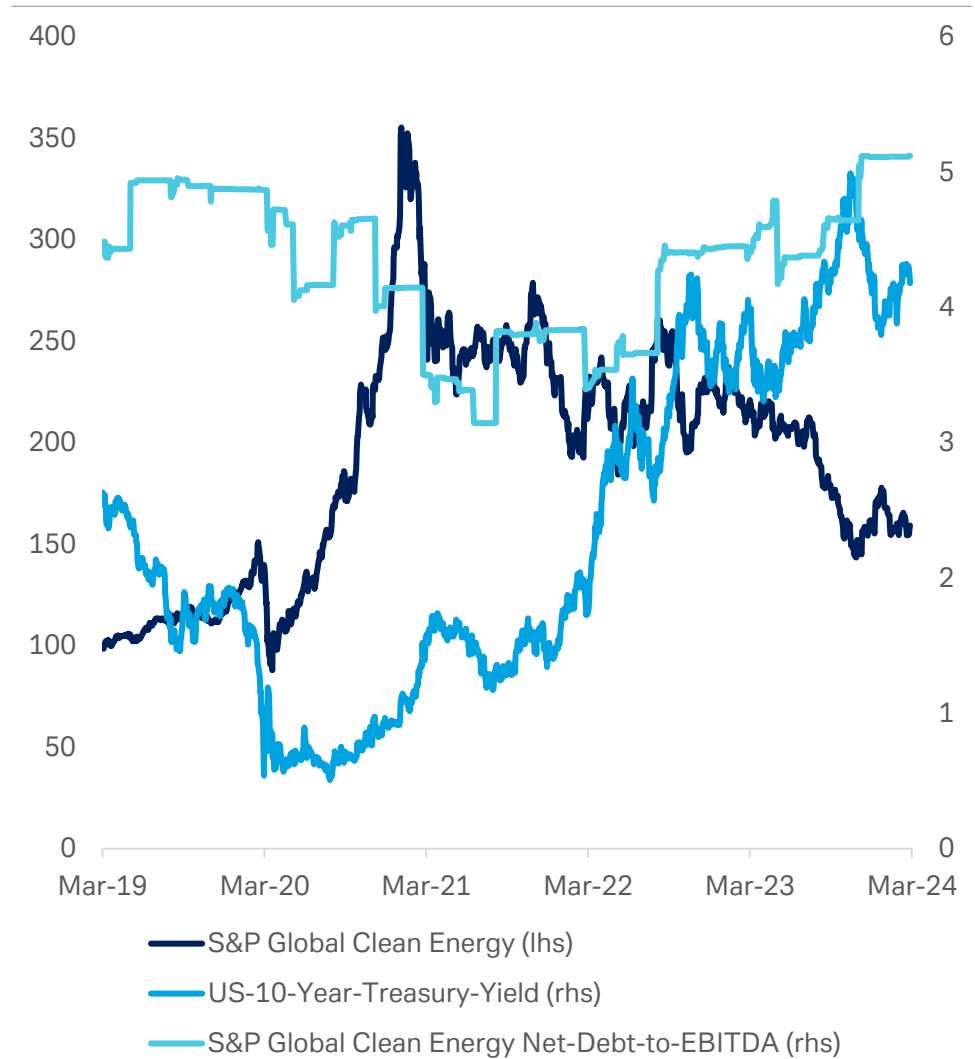


Source: Bloomberg L.P, LSEG, Deutsche Bank AG. Data as of February 2024.

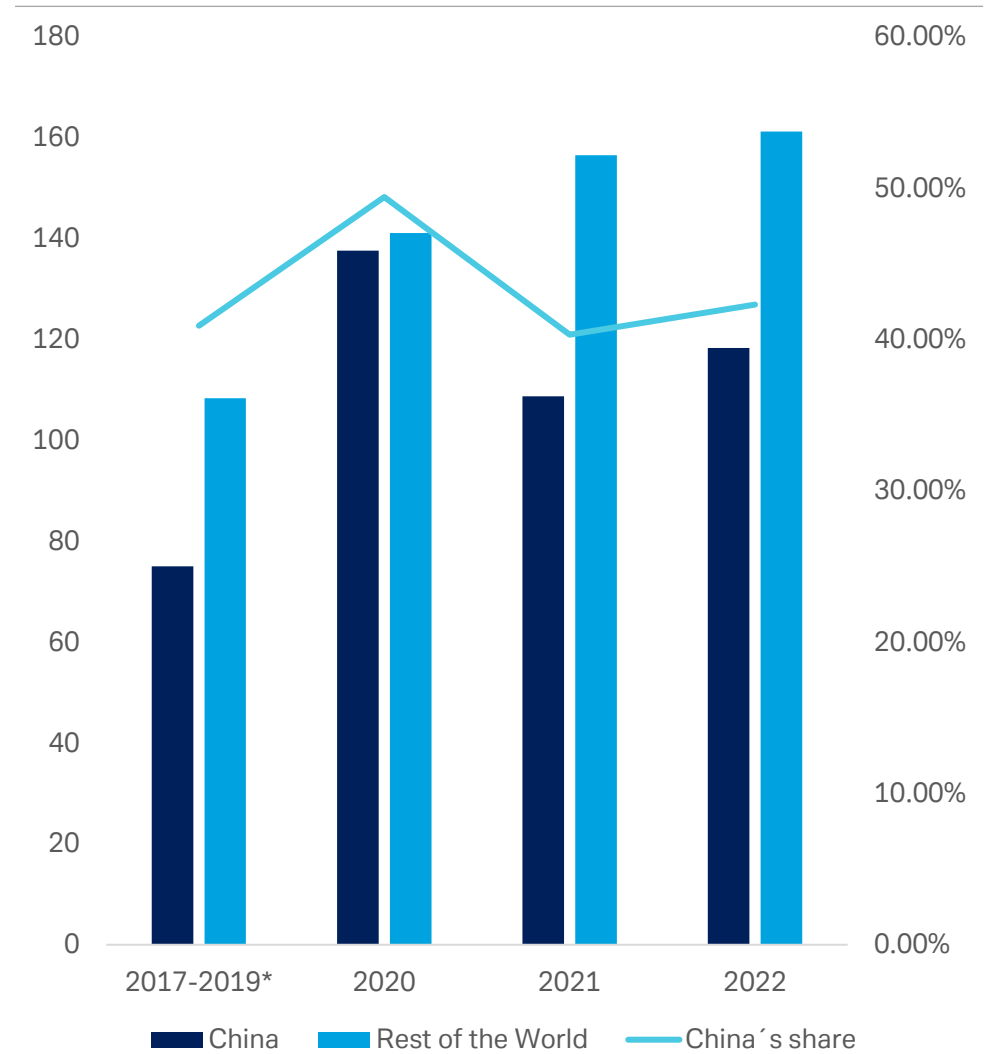


# Headwinds due to higher rates and competition

Total return and current yield on U.S. government bonds



Capacity growth for renewable energies (GW)

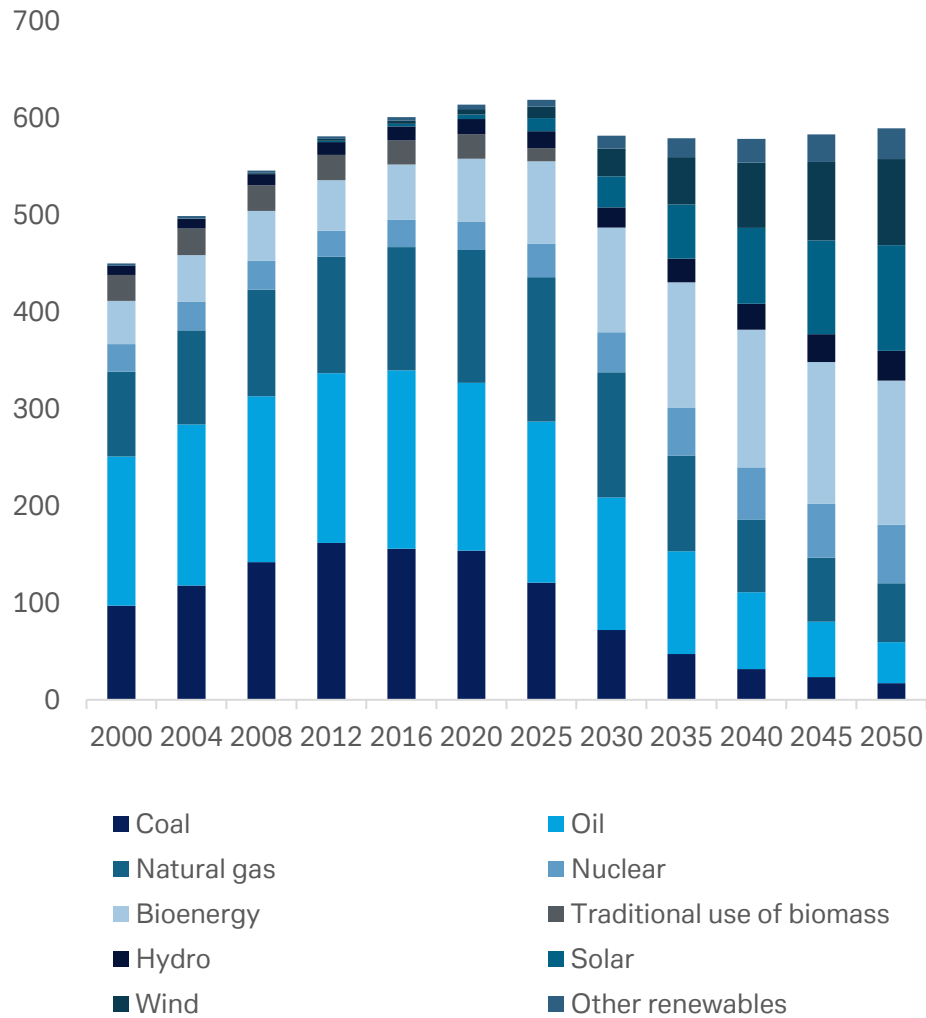


\*Note: The "2017-2019" bar represents the average annual capacity growth for this three-year period. IEA. Bloomberg L.P., Deutsche Bank AG. Data as of February 2024.

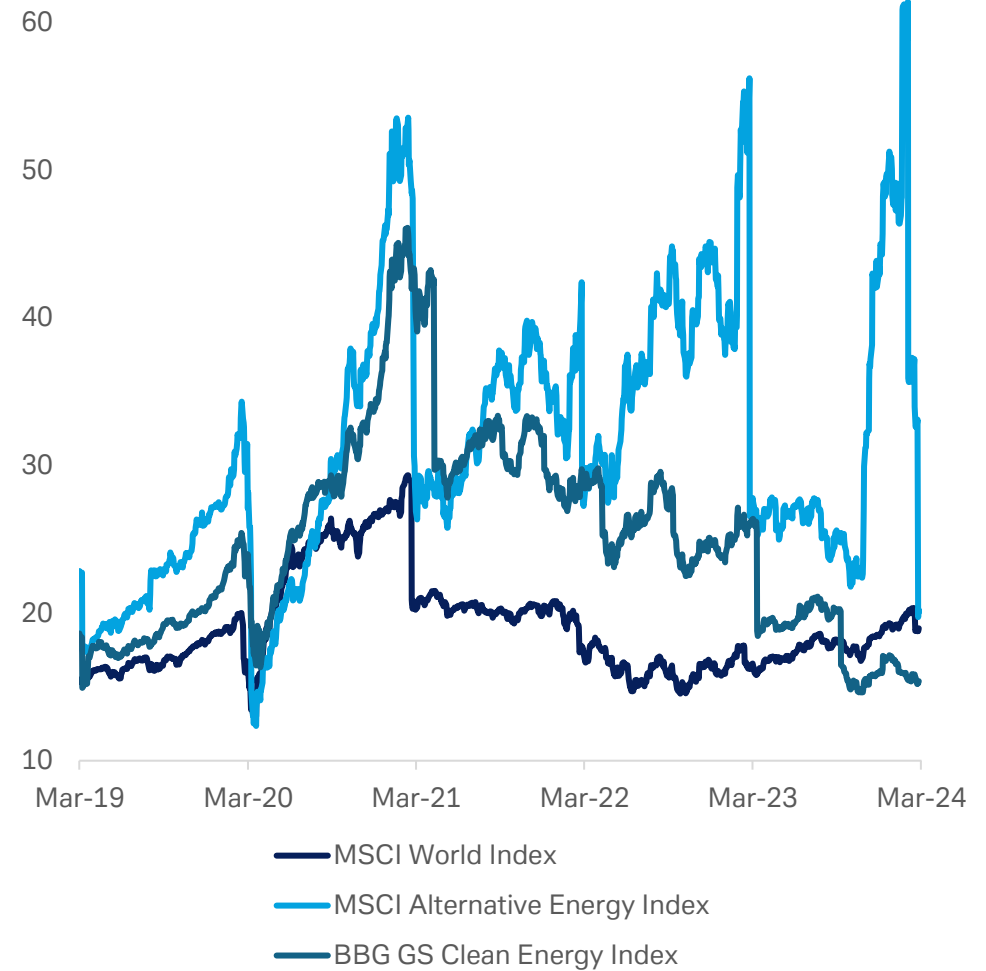


# Recent underperformance creates opportunities

Capacity of various energy sources in net-zero scenario



Price/earnings ratios of selected indices



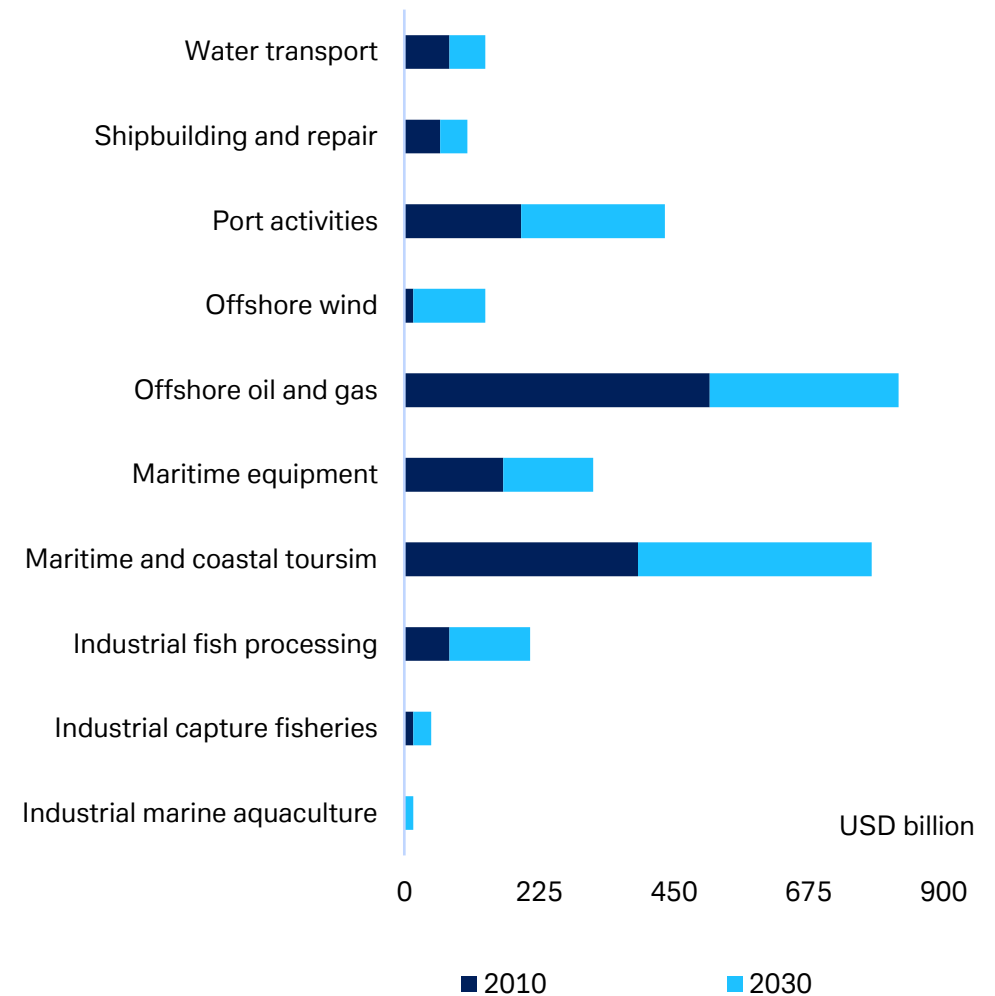
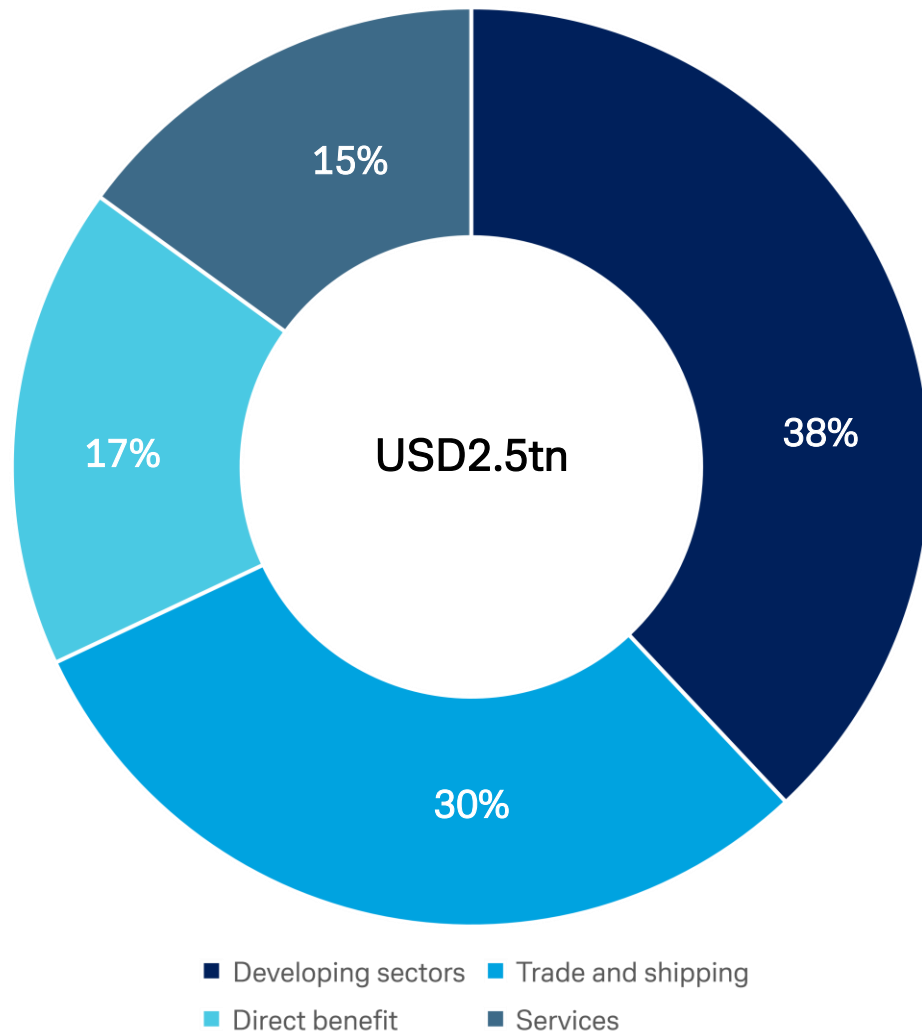
Source: IRENA, IEA, LSEG, Bloomberg L.P., Deutsche Bank AG. Data as of February 2024.



# The Blue Economy's value is still underappreciated

Value creation of the blue economy (direct and indirect)

Financing gaps in various Blue Economy areas



Sources: WWF, NOAA, World Bank, BlueInvest, UNCTAD, Deutsche Bank AG. Data as of February 2024.

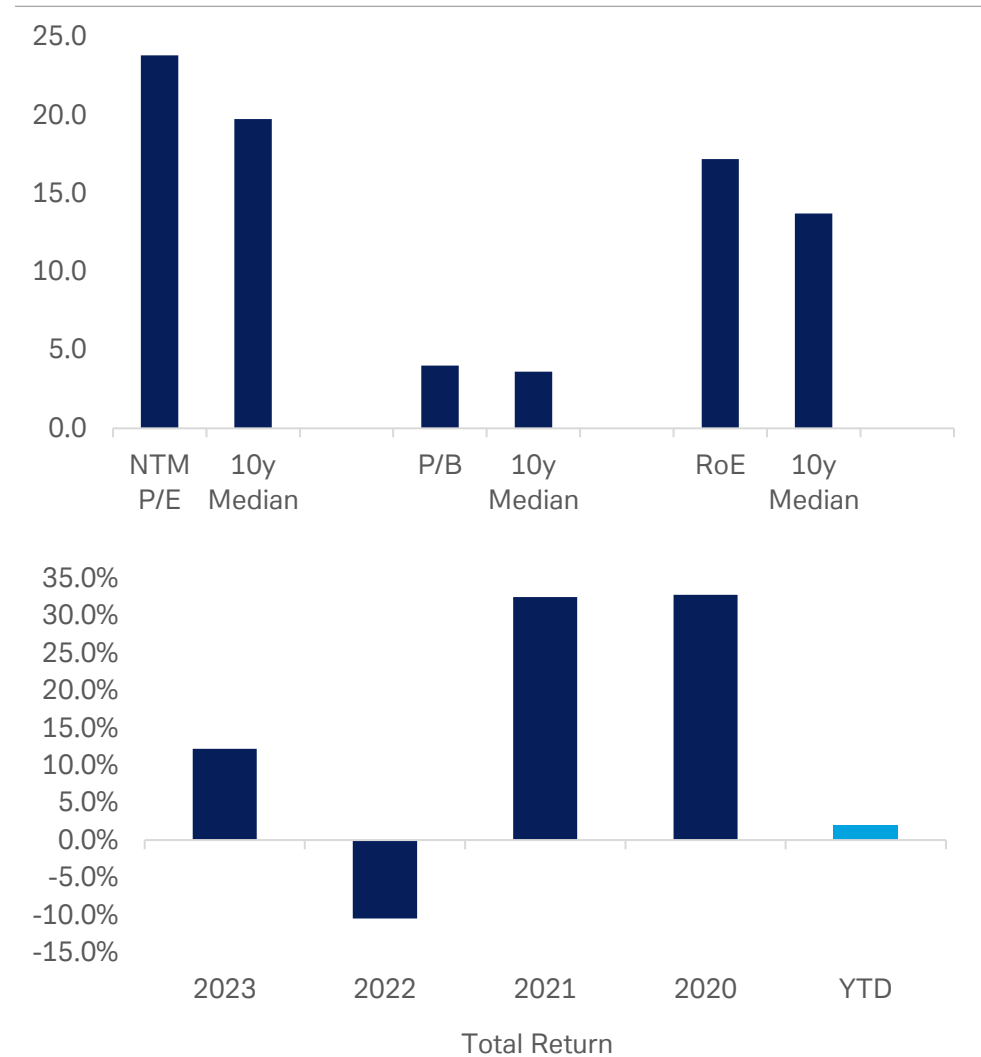


# This is reflected in underperformance vs. market

Total return of selected indices



Current valuation premium and profitability\*

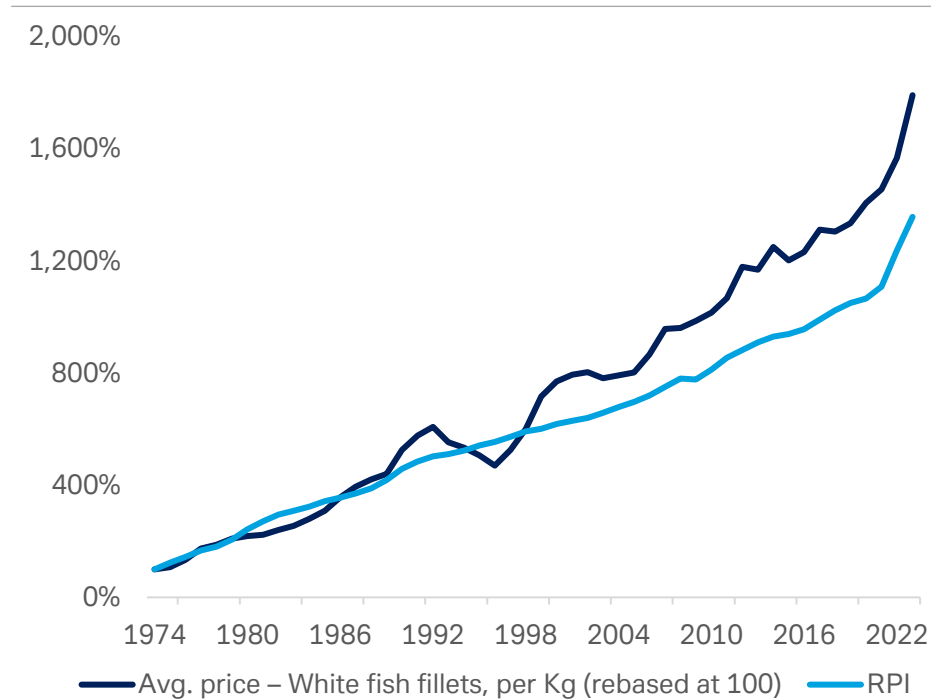


\*Valuation and performance indicators refer to a basket of Blue Economy companies as determined by Deutsche Bank's Chief Investment Office. \*\*Return on equity. Source: Bloomberg L.P, Refinitiv. Deutsche Bank AG. Data as of February 2024.

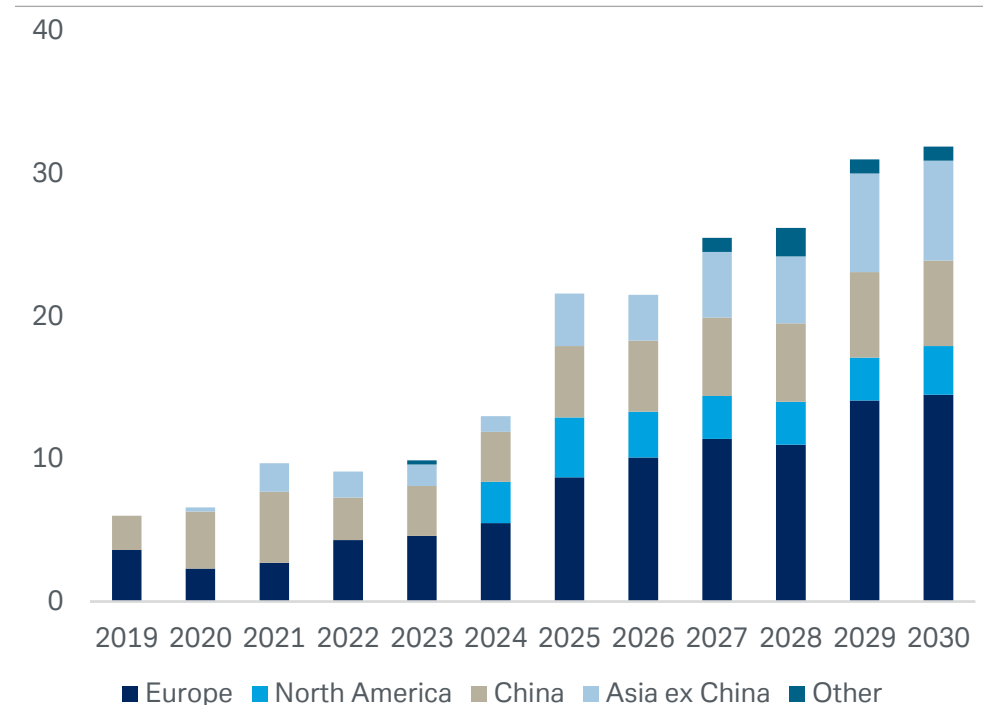


# But growth prospects remain very strong

Fish prices compared to the retail price index (EHPI)



Offshore wind (global, net installations in GW)



- 80% of goods exchanged globally by shipping.
- For maritime shipping, no known system-wide solution expected to halve emissions by 2050.

- 20% growth of global fish demand by 2030 (30 million additional tons of fish per year).
- 7-20% growth per year of aquaculture economy.

- Global Ocean-based electricity generation is still only 0.3%.
- 15 times increase of global Offshore wind capacity to 2040, with floating overtaking fixed.

Source: McKinsey Sustainability, FERl , FAO, Niehörster and Murnane (2018), Economist Intelligence Unit, Deutsche Bank AG. Data as of February 2024.





# Glossary

**12-month forward P/E ratio:** The 12-month forward P/E ratio is a measure that compares a company's current share price to its estimated earnings per share over the next 12 months.

**BBG GS Clean Energy Index:** The Bloomberg Goldman Sachs Global Clean Energy Index aims to track the performance of a number of companies that are expected to generate significant revenues from products and services that contribute to the generation of energy from renewable sources such as wind and solar.

**Blue Economy:** The Blue Economy is a concept that focuses on the sustainable use of marine and coastal resources.

**EBITDA:** Earnings Before Interest, Taxes, Depreciation and Amortisation, is a measure of a company's profitability before interest, taxes, depreciation and amortisation.

**Retail Price Index:** The Retail Price Index is a sales price index that only includes goods sold by retail companies to private households, but not services.

**EPS:** Earnings per share.

**Gigawatt (GW):** A gigawatt (GW) is a unit of power equivalent to 1 billion watts.

**iShares US Oil & Gas Exploration & Production ETF:** The iShares U.S. Oil & Gas Exploration & Production ETF seeks to track the investment

results of an index composed of U.S. oil and gas exploration and production stocks.

**P/B ratio:** The price-to-book ratio (P/B ratio) is a ratio of a company's share price to its book value per share.

**P/E ratio:** The price/earnings ratio (P/E ratio) is a ratio of a company's share price to its earnings per share.

**Market capitalisation:** The market capitalisation of a company is the total value of all issued shares. It is calculated by multiplying the number of shares by the current share price.

**MSCI ACWI Agriculture & Food Chain:** The MSCI ACWI Agriculture & Food Chain Index tracks the global opportunities of listed companies active in the production of agricultural products. The constituents are selected from the equity universe of the MSCI ACWI, the parent index, which covers medium and large companies from 23 industrialised countries (DM) and 24 emerging markets (EM)\*. All index constituents are classified into one of four sub-industries according to the Global Industry Classification Standard: agricultural products, fertilisers and agrochemicals, packaged food and meat, and food retailers.

**MSCI ACWI IMI Food Revolution Index:** The MSCI ACWI IMI Food Revolution Index is based on the MSCI ACWI IMI Index, its parent

index, and comprises large-, mid- and small-cap stocks from 23 Developed Markets (DM) and 24 Emerging Markets (EM) countries. The index aims to track the performance of a range of companies involved in the development of new products and services designed to improve the way food is produced and consumed.

**MSCI ACWI IMI:** The MSCI ACWI Investable Market Index (IMI) tracks large, medium-sized and small companies from 23 Developed Markets (DM) and 24 Emerging Markets (EM)\*. With 9,064 constituents, the index is comprehensive and covers approximately 99% of global equity investment opportunities.

**MSCI Global Alternative Energy:** The MSCI Global Alternative Energy Index includes large, medium and small companies from developed and emerging markets that generate at least 50% of their revenues from alternative energy products and services.

**MSCI World Index:** The MSCI World Index is a free-float weighted equity index. It was developed with a base value of 100 as at 31 December 1969. The MXWO comprises the developed markets of the world, but not the emerging markets. MXWD includes both emerging and developed markets.



# Glossary

**MSCI World Industrials:** The MSCI World Industrials Index is designed to capture the large and mid-cap companies in 23 developed market (DM) countries around the world. All securities included in the index are categorised by industry sector according to the Global Industry Classification Standard.

**MSCI World Oil, Gas & Consumable Fuels:** The MSCI World Oil, Gas, and Consumable Fuels Index is a free-float weighted equity index. It is a GICS level 3 index. **MSCI World Commodities:** The MSCI World Materials Index is designed to track large and mid-cap companies in 23 Developed Markets (DM) countries\*. All securities included in the index are allocated to the commodities sector in accordance with the Global Industry Classification Standard.

**Net debt to EBITDA:** Net debt to EBITDA is a measure of a company's debt in relation to its profitability. **ROE:** The return on equity (ROE) is a key figure that measures the profitability of a company's equity. It is calculated by dividing net profit after tax by equity.

**S&P Global Clean Energy:** The S&P Global Clean Energy Index is designed to track the performance of clean energy companies from industrialised and emerging countries, with the number of companies included totalling 100.

**Solactive Sustainable Food System:** The Solactive Sustainable Food Index NTR is designed to measure the performance of companies in the food industry that utilise technology, efficient production and delivery practices and/or innovation to create a sustainable food ecosystem.

**STOXX Europe 600 Oil & Gas:** The STOXX 600 Oil & Gas Index is a capitalisation-weighted index that includes European companies active in the energy sector. **WTI oil:** West Texas Intermediate



# Historical performance

Start	End	Bloomberg Goldman Sachs Global Clean Energy Index Net Return	iShares U.S. Oil & Gas Exploration & Production ETF	MSCI ACWI Agriculture & Food Chain Price Return USD	MSCI ACWI IMI Food Revolution Index	MSCI ACWI IMI
March 8, 2019	March 8, 2020	25.28%	-33.81%	9.43%	7.02%	5.71%
March 8, 2020	March 8, 2021	70.43%	108.61%	17.66%	53.24%	41.42%
March 8, 2021	March 8, 2022	8.47%	56.77%	10.64%	-16.20%	1.18%
March 8, 2022	March 8, 2023	-4.59%	15.69%	-0.30%	-4.86%	-1.19%
March 8, 2023	March 8, 2024	-11.58%	13.32%	-5.49%	-7.25%	23.62%

Total return in USD. Source: Bloomberg L.P., Deutsche Bank AG. Data as of March 8, 2024.



# Historical performance

Start	End	MSCI GLOBAL ALTERNATIVE ENERGY INDEX	MSCI World Index	MSCI World Industrials Index	MSCI World Oil Gas & Consumable Fuels Index
March 8, 2019	March 8, 2020	21.94%	7.40%	1.87%	-23.26%
March 8, 2020	March 8, 2021	72.98%	39.32%	41.84%	46.60%
March 8, 2021	March 8, 2022	3.94%	4.66%	-1.81%	42.33%
March 8, 2022	March 8, 2023	-9.94%	-0.43%	6.61%	13.38%
March 8, 2023	March 8, 2024	-29.33%	27.16%	24.85%	7.99%

Total return in USD. Source: Bloomberg L.P., Deutsche Bank AG. Data as of March 8, 2024.



# Historical performance

Start	End	MSCI GLOBAL ALTERNATIVE ENERGY INDEX	MSCI World Index	MSCI World Industrials Index	MSCI World Oil Gas & Consumable Fuels Index
March 8, 2019	March 8, 2020	21.94%	7.40%	1.87%	-23.26%
March 8, 2020	March 8, 2021	72.98%	39.32%	41.84%	46.60%
March 8, 2021	March 8, 2022	3.94%	4.66%	-1.81%	42.33%
March 8, 2022	March 8, 2023	-9.94%	-0.43%	6.61%	13.38%
March 8, 2023	March 8, 2024	-29.33%	27.16%	24.85%	7.99%

Total return in USD. Source: Bloomberg L.P., Deutsche Bank AG. Data as of March 8, 2024.



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