



7 Essentials of ESG

As of July 31, 2022





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1. ESG considerations are affecting consumer preferences and public attitudes
2. Policymakers are setting environmental goals and creating the policies as well as regulations needed to meet them
3. For some companies this may be a headwind...
4. ...but it also creates significant opportunities for those at the forefront of change
5. It's not just climate, G matters and focus on S is growing
6. ESG is affecting the investment landscape...
7. ...and is changing the nature of investment flows

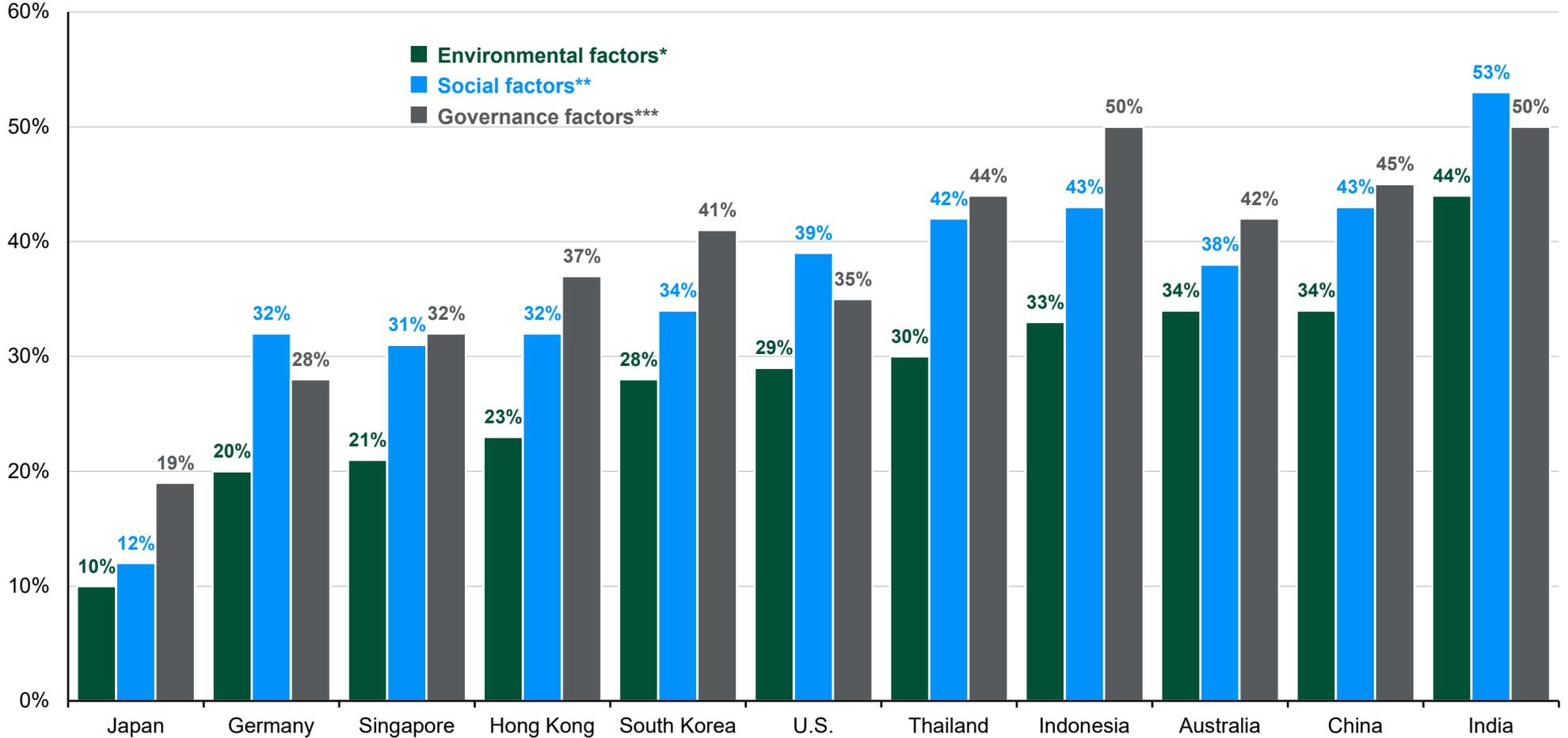
ESG is Environmental, Social, and Governance



1. ESG considerations are affecting consumer preferences

“A company’s ESG actions influence often or always influence my decision to purchase a product or service from the company.”

% of respondents



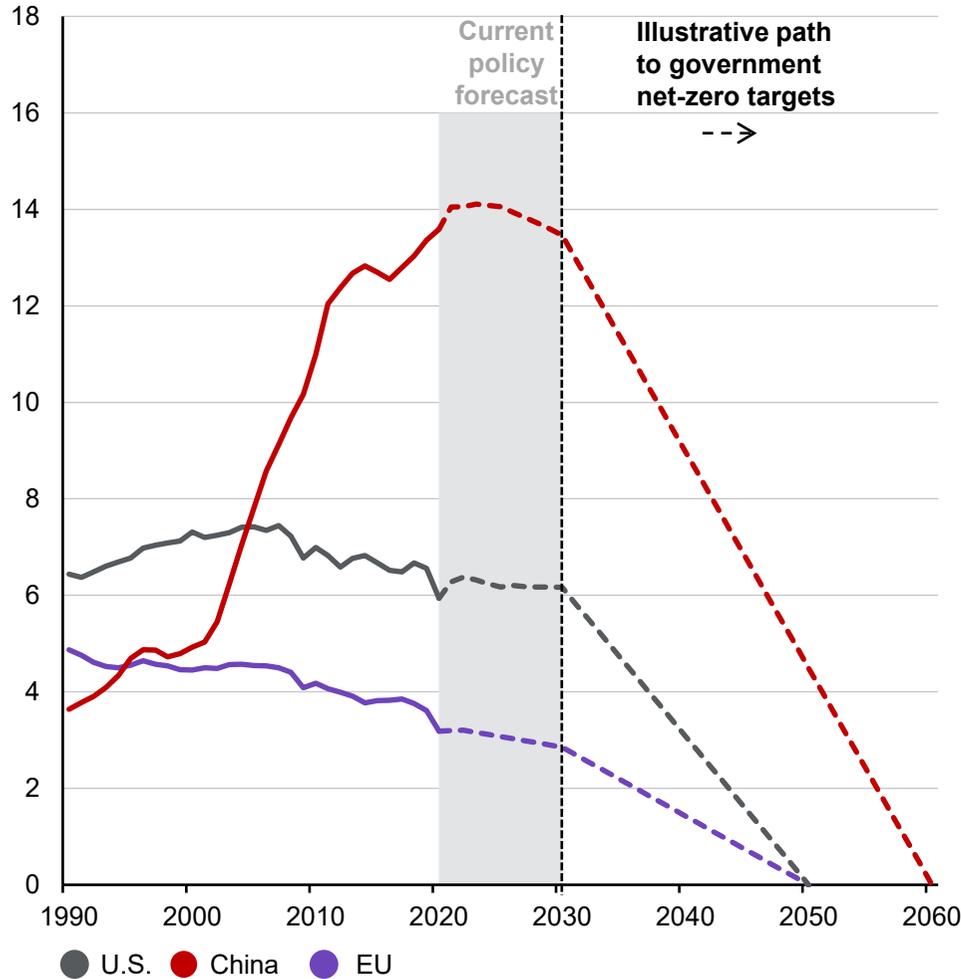
Source: PwC, J.P.Morgan Asset Management. PwC’s June 2022 Global consumer insights pulse survey was conducted in March 2022. It polled 9,069 consumers across 25 territories. The respondents were at least 18 years old and were required to have shopped online at least once in the previous year. *Environmental factors refer to commitments towards reducing carbon emissions, using recycled materials, or reducing plastic waste in products. **Social factors refer to commitments towards supporting human rights, supporting diversity and inclusion in the work place, or supporting local communities. ***Governance factors refer to commitments towards transparency and ethical practice, complying with regulations, or managing customer data and privacy appropriately. Data reflect most recently available as of 31/07/22.



2. Policymakers are setting environmental goals and creating the policies & regulations needed to meet them

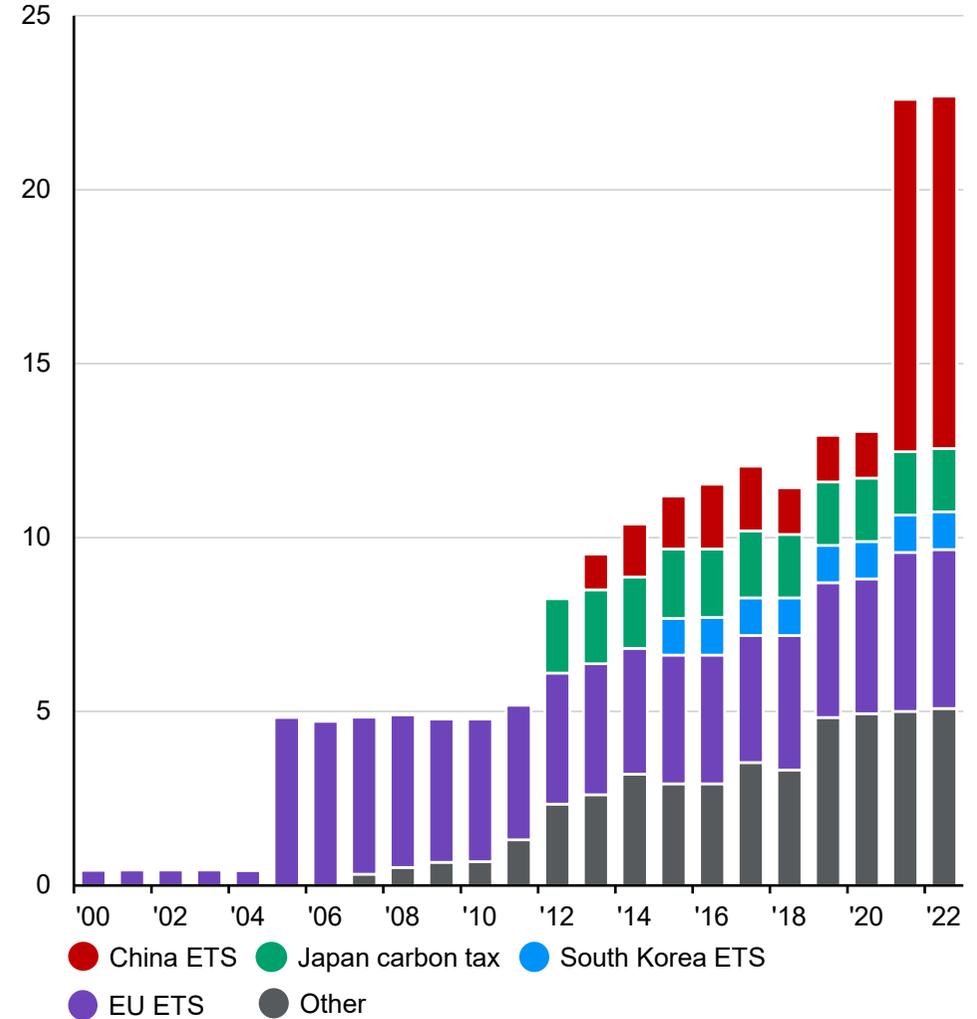
Greenhouse gas emission targets

Billion tonnes/year, CO2 equivalent



Global emissions covered by carbon pricing initiatives

% of global greenhouse gas emissions

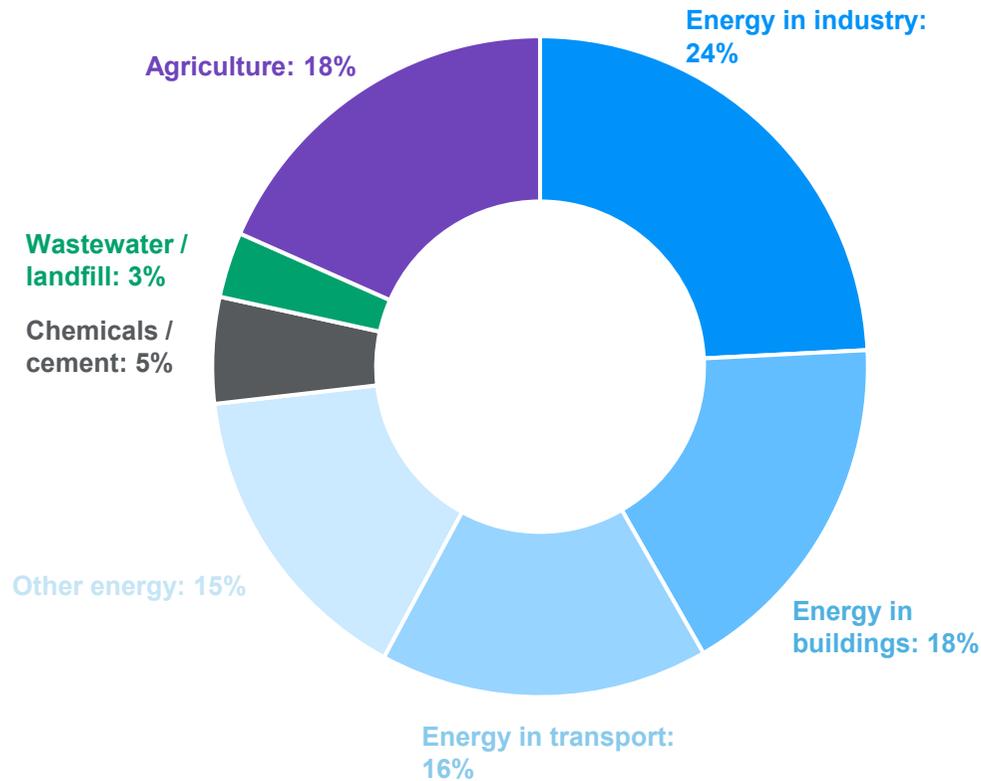


Source: J.P. Morgan Asset Management; (Left) Climate Action Tracker. Current policy forecast is the post-Covid forecast provided by Climate Action Tracker. (Right) World Bank. ETS is emissions trading system. performance is not a reliable indicator of current and future results. Data reflect most recently available as of 31/07/22.

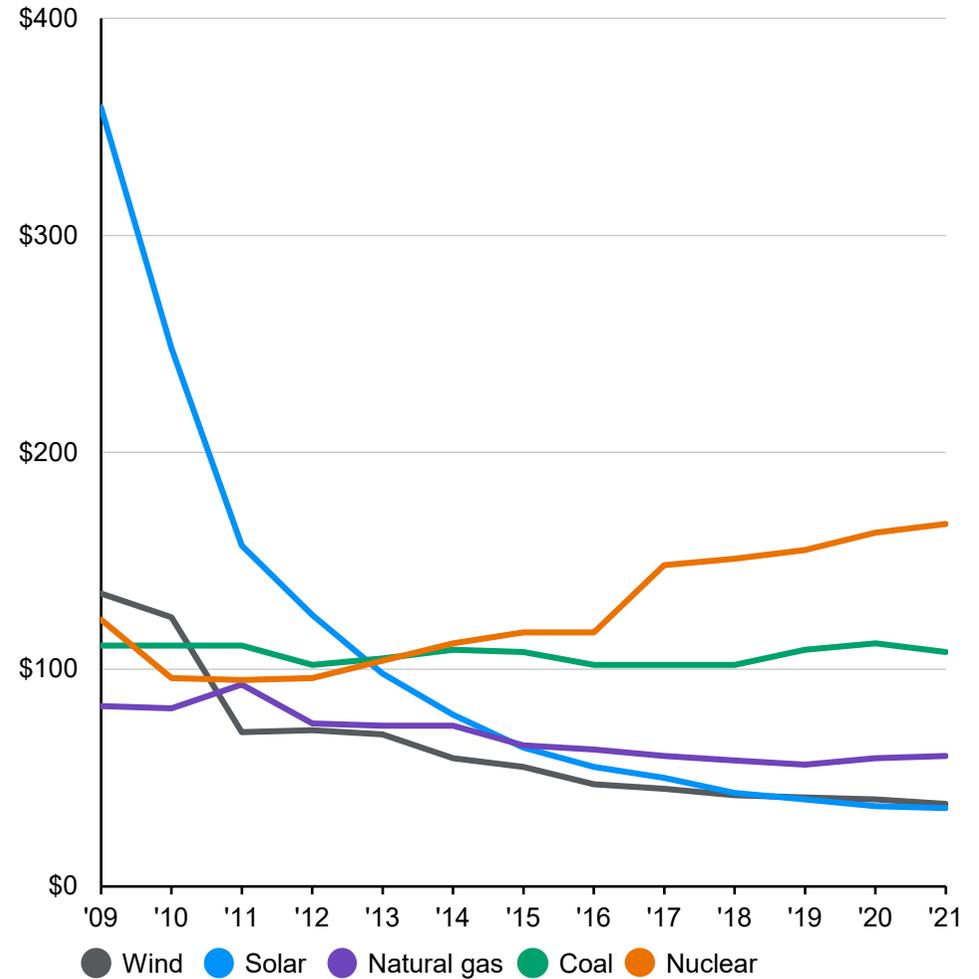


3. For some companies it may serve as a headwind

Share of global greenhouse gas emissions by sector
% of global greenhouse gas emissions (2016), CO₂ equivalent tonnes



Cost of wind, solar, natural gas and coal
Mean LCOE*, 2020, dollar per megawatt hour

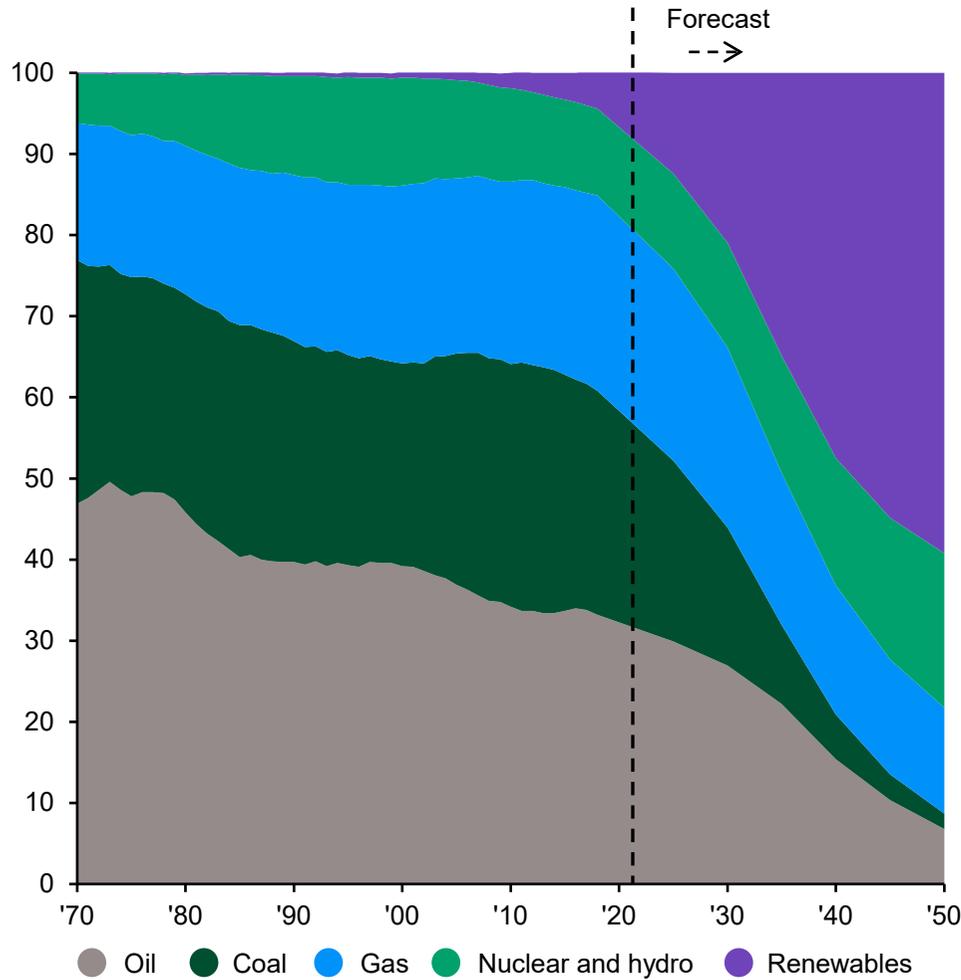


Source: J.P. Morgan Asset Management. (Left) Climate Watch, Our World in Data, World Resource Institute. Greenhouse gas emissions include CO₂, methane, nitrous oxide and fluorinated greenhouse gases. CO₂ equivalent tonnes standardise emissions to allow for comparison between gases. One equivalent tonne has the same warming effect as one tonne of CO₂ over 100 years. (Right) *LCOE is levelized cost of energy, the net present value of the unit-cost of electricity over the lifetime of a generating asset. It is often taken as a proxy for the average price that the generating asset must receive in a market to break even over its lifetime. This primarily relates to U.S. alternative energy landscape, but reflects broader/ global cost declines. Data reflect most recently available as of 31/07/22.

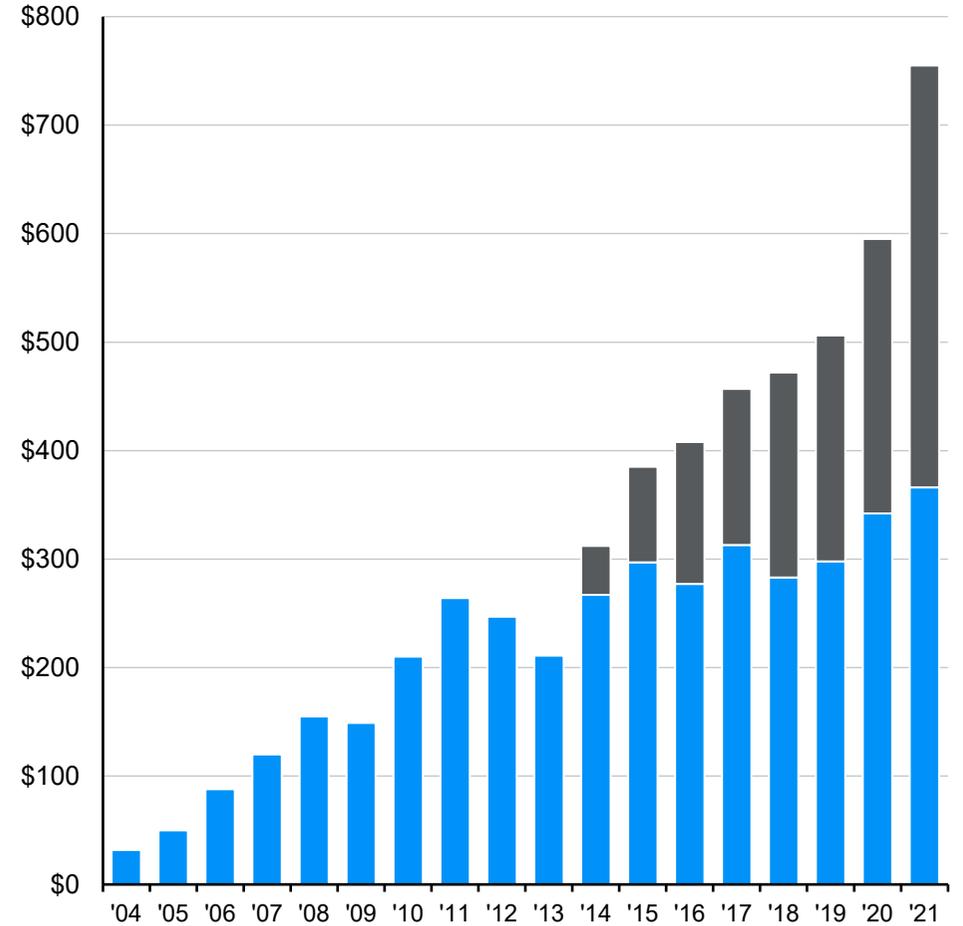


4...but it also creates significant opportunities for those at the forefront of change

Global energy mix
% primary energy consumption



Global investment in energy transition
Billions USD, nominal

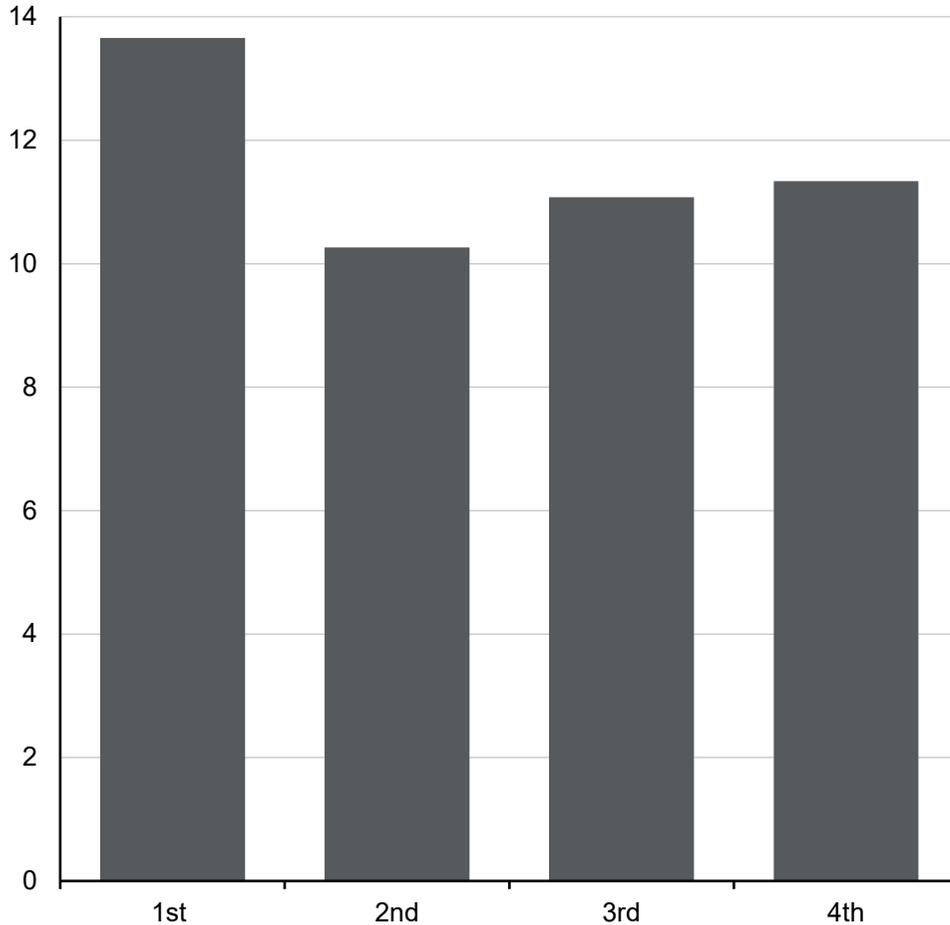


Source: J.P. Morgan Asset Management; (Left) BP Energy Outlook 2021; Forecast is based on BP's scenario for global net-zero emissions by 2050. (Right) Bloomberg NEF, IEA. Storage, electrification and other includes hydrogen, carbon capture and storage, energy storage, electrified transport and electrified heat. Data reflect most recently available as of 31/07/22.

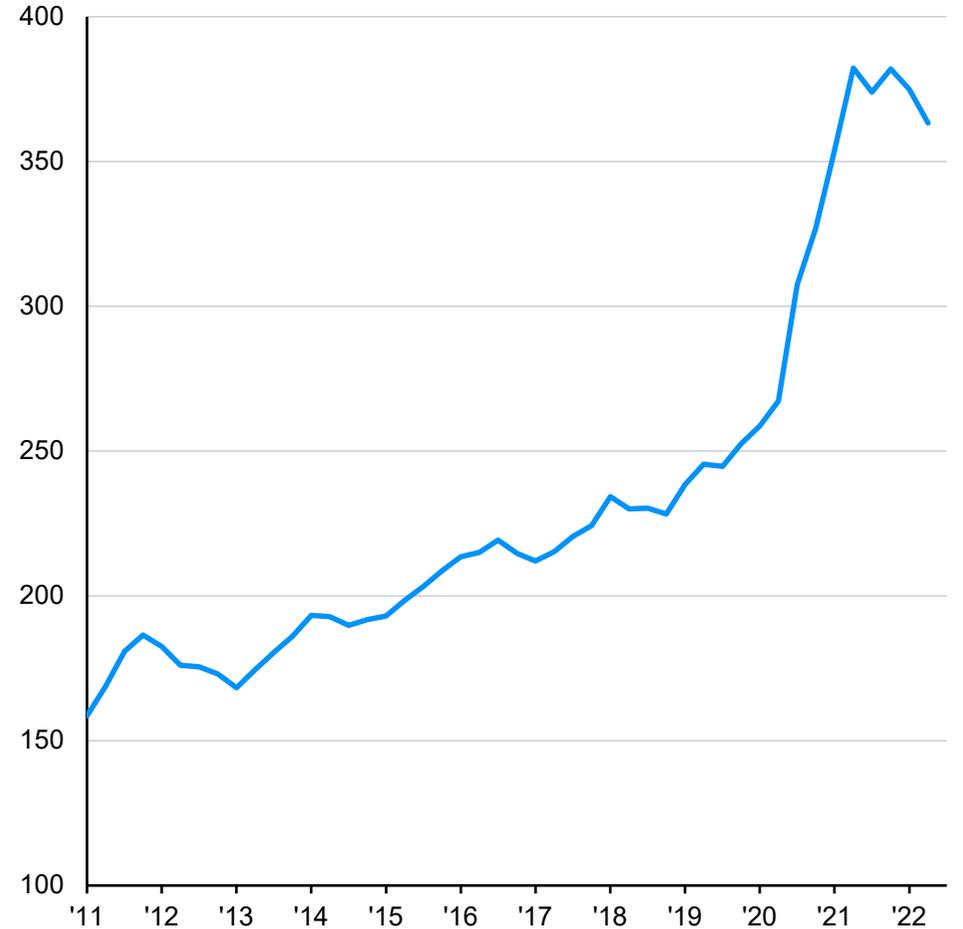


5. Its not just climate, G matters and focus on S is growing

Average return on equity of global stocks by governance score
%, return on equity



Corporate mentions of “diversity” or “inclusion”
Earnings calls for MSCI AC World companies, 4 quarter moving average

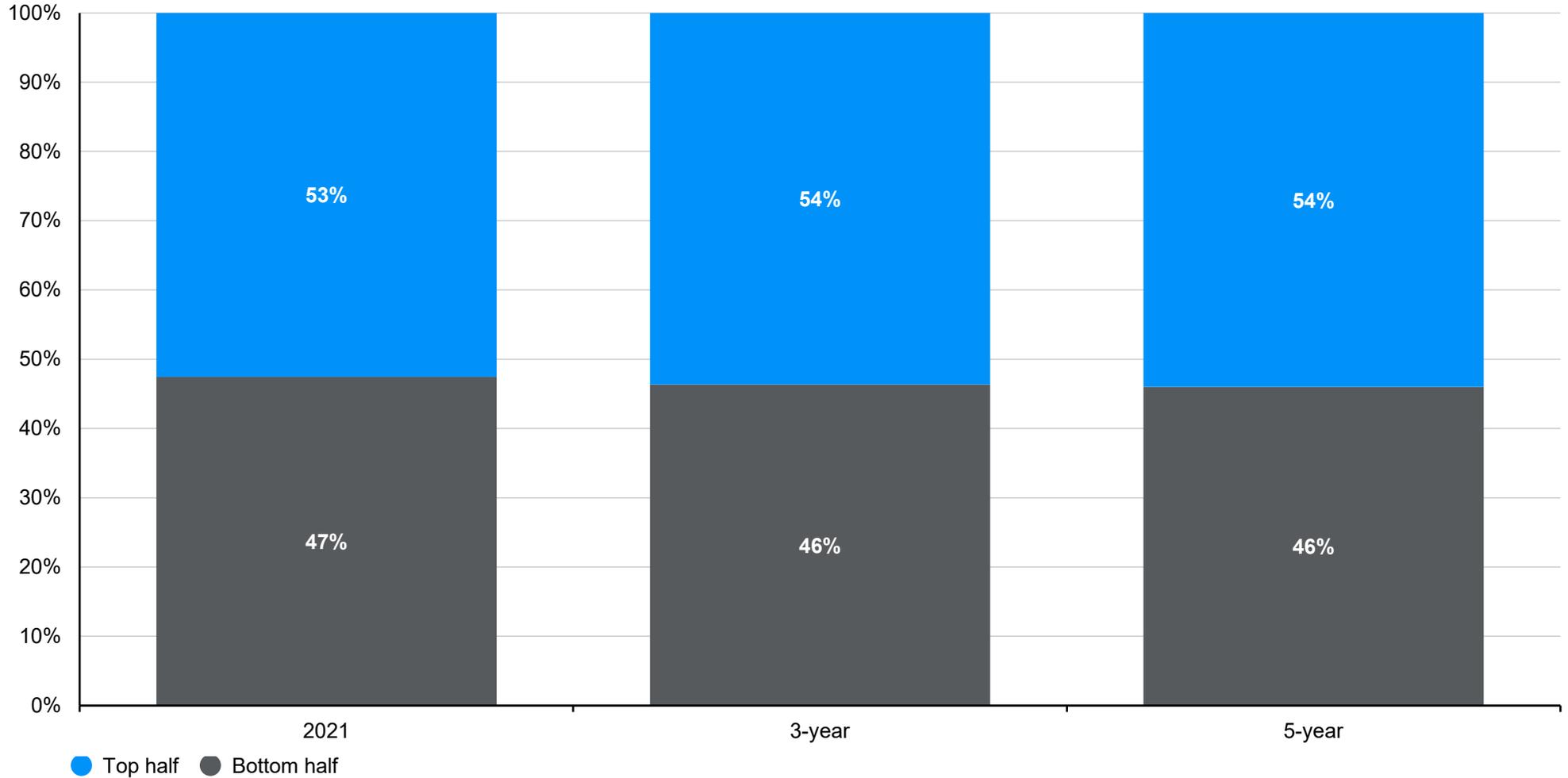


Source: J.P. Morgan Asset Management. (Left) Bloomberg, MSCI. Global stocks are represented by MSCI All-Country World Index constituents based on data availability. We group constituents into quartiles based on proprietary analysis of governance arrangements by J.P. Morgan Asset Management, and then calculate an equally-weighted average return on equity for each group. Past performance is not a reliable indicator of current and future results. Data reflect most recently available as of 31/07/22.



6. ESG is affecting the investment landscape

Global sustainable funds performance by Morningstar category quartile



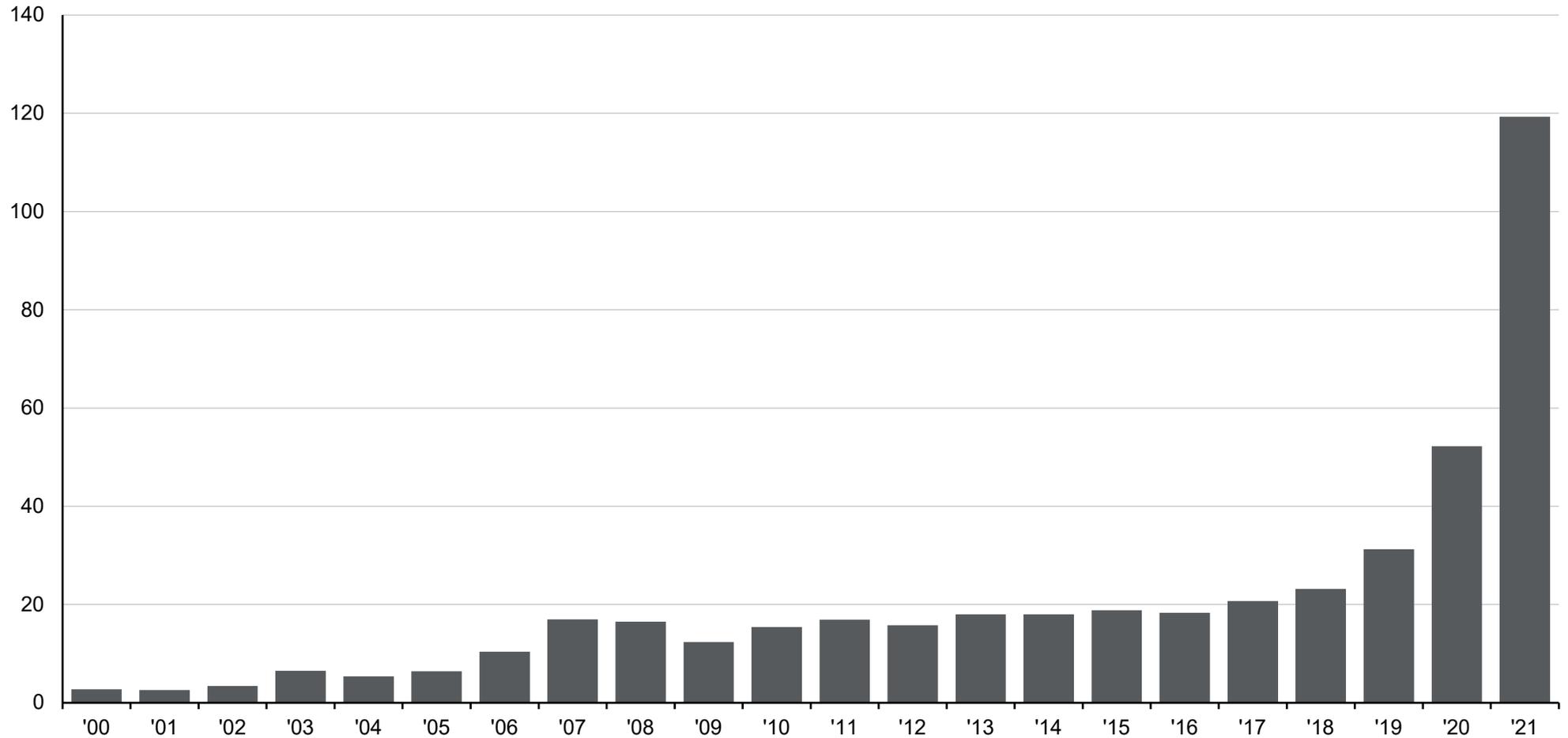
Source: Morningstar Direct, J.P. Morgan Asset Management. To identify sustainable funds, we searched Morningstar Direct, as follows: 1. Open-End Funds and ETFs universe 2. Domicile = Global. 3. Sustainable Investment Overall = Yes. 4. Oldest share class = Yes. 3-year and 5-year trailing performances reflect the periods 31/07/19 – 31/07/22 and 31/07/17- 31/07/22 respectively. Money market funds, fund of funds and feeder funds are excluded. 2021 includes funds with full-year records only, and 4,675 funds in total (2,523 equity, 2,152 fixed income/asset allocation/other). 3-year includes 3,800 funds (2,021 equity, 1,779 fixed income/asset allocation/other). 5-year includes 2,976 funds (1,579 equity, 1,397 fixed income/asset allocation/other). Figures may not match with prior reports due to ongoing revisions by data providers after the prior reports have been published. Data reflect most recently available as of 31/07/22.



7. ...and is changing the nature of investment flows

APAC-domiciled sustainable mutual fund and ETF AUM*

USD billions



Source: Morningstar Direct, J.P.Morgan Asset Management. *APAC domiciled funds include Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. Money market funds, fund of funds and feeder funds are excluded. Figures may not match with prior reports due to ongoing revisions by data providers after the prior reports have been published. Data reflect most recently available as of 31/07/22.



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