

Understanding ESG & Climate Investing

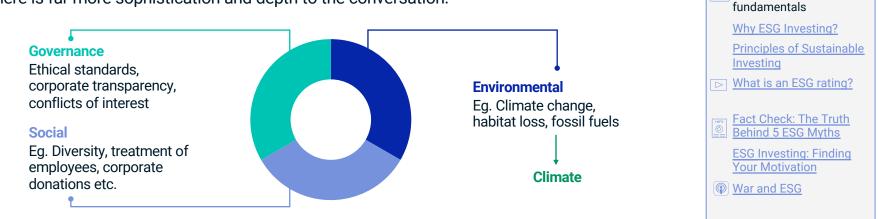


Defining Key Factors

Tools and Resources

ESG 101: Explore the

While the term ESG – Environmental-Social-Governance – was commonly used shorthand for seeking to screen out or add in companies and investments with certain characteristics, today there is far more sophistication and depth to the conversation.



In one sense a subset of the E in ESG, climate issues have emerged as a specific and important focus for investors. Climate-focused investing can be viewed as its own category and has unique measurements and criteria.



An Evolving Global Framework Fuels Progress: Key Terms

Net-Zero:	COP26:	The Paris Agreement:	UN's Principles for Responsible Investment (PRI):	Greenwashing:		3830	4900
Setting a Net-Zero target means reducing carbon emissions to the greatest extent possible, and compensating for the remaining emissions via removal.	Nations Climate Change conference was held in Glasgow in late 2021. The conference was the 26th Conference of the Parties (COP) to the	A legally binding treaty on climate change, at COP 21 and entered into on November 4th, 2016. The agreement seeks to limit global warming to below two degrees Celcius by reducing greenhouse gas emissions.	The Principles for Responsible Investment (PRI) call on investors to incorporate environmental, social and governance factors into their investment practices.	The term refers to companies falsely claiming to be doing more for the environment than they actually are - a misalignment of public statements, marketing or product labelling being with quantitative ESG data and ratings.	3028	2021	2022
					4900+ PRI S	+ PRI Signatories 21 trillion in assets*	

Tools and resources

MSCI Net-Zero Knowledge Hub: An interactive guide for professional investors

Net-Zero Tracker: quarterly gauge of

progress by the world's public companies toward curbing climate risk SEC Climate Disclosure: Target Standardization Steps to Net-Zero:

Considerations for companies and investors (infographic)

ESG Now Podcast:

Hosts Mike Disabato and Bentley Kaplan discuss pressing ESG news



*Source https://www.unpri.org/signatories/signatory-resources/quarterly-signatory-update

Information Classification: GENERAL

An Evolving Global Framework: ESG, Climate and Impact

ESG **INTEGRATION**



"Incorporating ESG may improve our investment results."

> We want to invest in companies 1) aligning their products & services with their climate impact and 2) minimizing their contribution to global warming."

MSCI



"We want investment opportunities that achieve a double bottom line - an attractive return and a positive impact.

Invest in companies better positioned to manage their most financially relevant ESG risks vs. industry peers.

Invest in alternative energy, energy efficiency, green building, pollution prevention, sustainable agriculture, & sustainable water companies.

Invest in companies better positioned to operationally withstand risks from global warming by actively working to lower emissions, that have less enterprise value at risk from alobal warming.

Spanning all major asset classes, invest to simultaneously achieve positive social/environmental outcomes and financial gain.

Separate from ESG ratings, Impact is typically measured in accordance with the UN's 17 Sustainable Development Goals (SDGs.)

Climate Change is Impacting The Environment and The World's **Economies**

The warming of Earth's atmosphere caused by human-generated emissions of carbon dioxide and other greenhouse gases is causing sea levels to rise and endangering human health, biodiversity and property.

Averting a climate catastrophe will require the largest reconstruction of the global economy since the Industrial Revolution. Capital markets participants, including asset owners, companies, and asset managers will all be part of the solution.

The financial risks

The financial opportunities

\$900 billion:

Or roughly one-third of the value of big oil and gas companies that estimates suggest would disappear if governments move to restrict diversify its economy². the rise in global temperatures to 1.5° C above pre-industrial levels for the rest of this century¹.

Two to three:

The number of notches the sovereign credit rating of an oil-exporting nation could fall by 2050 absent steps to

90%:

The share of global energy generation that is projected to come from renewable sources by 2050 according to a pathway to net-zero put forward by the International Energy Agency³.

\$1.5 trillion:

The value of new revenue opportunities from lowcarbon goods and services, according to European companies in their 2019 disclosures to CDP⁴.



the Paris Agreement





1. UNDERSTANDING ESG AND CLIMATE INVESTING

The Path to Net-Zero

To prevent the worst effects of climate change, we need to drive carbon emissions down to Net-Zero by 2050.

Net-Zero Investing

means aligning with the Paris Agreement goal of limiting global warming to well below 2°C, preferably no more than 1.5°C, above pre-industrial levels by 2100.

It means investing in companies with ambitious carbon reduction goals and compensating for remaining emissions that cannot be mitigated using carbon removal technologies.



Investor Demand for Transparency and Action is Accelerating Rapidly

ESG is being integrated into all facets of the investment industry, and the rate of change is increasing.

- \$30 trillion wealth transfer from baby boomers to 90 million millennials to take place over the next few decades¹
- 67% of millennials believe investments "are a way to express social, political, and environmental value" versus 36% of baby boomers²
- 89% of millennials want to grow their allocation to responsible investments in the next five years³



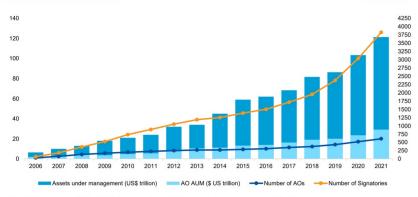


ESG and Climate Investing is Growing Dramatically

N° Signatories

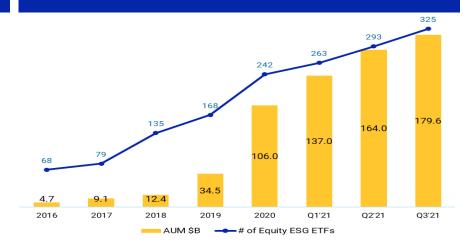
UN PRI* Has Grown to Over 4,902 signatories in managing over \$121 trillion in AUM

Assets under management (US\$ trillion)



*Total AUM include reported AUM and AUM of new signatories provided in sign-up sheet that signed up by end of March of that year.

#1 in no. of ETFs and ETF assets linked to ESG Equity Indexes**



In the next 10 years we think:

Every **company** will have a climate strategy with explicit objectives and targets for emission reduction, with **pathway to net-zero** TCFD reporting will be mandatory in most European countries, and the norm globally Company climate disclosure around emissions and targets will be required by regulation, audited and standardized Engagement with companies will focus on climate strategy with emphasis on targets for **emission reduction**



*Source https://www.unpri.org/signatories/signatory-resources/guarterly-signatory-update **As of Q3'21, 152% growth YOY in ETF AUM tracking MSCI ESG indexes

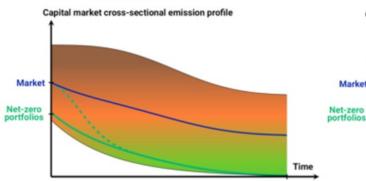
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Climate Investing Delivers Real World Change

Climate investors face two scenarios.



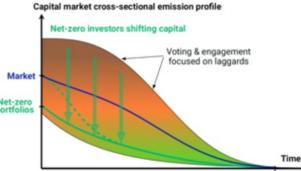
The divergence scenario - focus on net zero portfolios comprising of low greenhouse gas emitters, with periodic rebalancing. Net zero portfolios and the market portfolio diverge. The convergence scenario – tilt investments towards "emissions improvers." These companies may have high emissions now but also have ambitious and reachable targets to decarbonize. Their operations over time. This net zero portfolio converges with the market portfolio.



Divergence scenario

scenario

Convergence



Tools and Resources

Constructing Net-Zero Portfolios: <u>Three Approaches</u>



The Climate and Net-zero Revolution is an Opportunity to Seize for Companies and Investors

POTENTIAL TO LOSE VALUE	Low carbon transition (LCT) CATEGORY	EXAMPLES		
	Asset Stranding	Coal mining & coal-based power generation; Oil sands exploration/production		
	Product Transition	Oil & gas exploration & production; Petrol/diesel-based automobile manufacturers, thermal power plant turbine manufacturers etc.		
	Operational Transition	Fossil fuel-based power generation cement, steel etc.		
	Low Impact	Consumer staples, healthcare, etc.		
POTENTIAL TO BENEFIT	Solutions	Renewable electricity, electric vehicles, solar cell manufacturers etc.		



Source: MSCI, Foundations of Climate Investing, February 2021 GEMLT is the MSCI Global Total Market Equity Model for Long-term Investors. Data from Oct. 31, 2013, to Jan. 31, 2021. * e.g. controlling for possible biases due to sector, size, quality, country etc. to purely focus on the impact of LCT score

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