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## Introduction

ESG funds have experienced rapid growth as of late. As with much in financial markets, with great growth comes great influence, and even greater scrutiny. Investors are increasingly inquisitive about the holdings of funds that claim to incorporate ESG into its analytical procedures, and rightfully so. Aside from the financial materiality aspect of ESG considerations, for many investors it's important for a fund's holdings to align with their own values and principles. ESG funds currently offer investors a spectrum of sustainability, creating challenges for those looking to align their capital with their values. Simply put, not all ESG funds are the same as their ESG policies and the resulting sustainability attributes can vary significantly. In this report we looked at the largest equity ESG funds globally, their holdings and ESG attributes, alongside things to consider when conducting ESG fund due diligence and selection.

#### **Key Findings:**

- The 20 largest ESG funds in our coverage collectively accounted for approximately 13% of total assets under management globally in ESG equity funds. There was an almost even split between active and index-based fund investment approaches, with active funds accounting for over 57% of AUM.
- Information technology was the largest sector allocation for most funds, with almost no allocation in energy.
   Google was the most commonly held stock across most funds; Alphabet Inc. was included in 12 funds, with an average weight of 1.9%.
- Despite the overall low allocation to energy, there were
   11 funds that both held energy stocks and exhibited
   a lower carbon intensity than those with no energy
   exposure, highlighting the fact that single stock
   allocations were not always the main driver of a fund's
   overall ESG attributes.

<sup>1</sup> Within MSCI's fund universe of coverage as of Dec 31, 2020.

# Twenty Largest ESG Funds

The 20 largest ESG funds in our coverage held more than USD 150 billion in assets combined, as of December 31, 2020. Collectively, these 20 funds represent approximately 13% of the total assets under management (AUM) globally in ESG equity funds.

Despite their nominal similarities these ESG funds vary widely in their manager's investment approach and holding composition. There is a nearly even split between indexbased and active funds, including both mutual funds and ETFs. Active funds accounted for a slight majority of held assets, holding over 50% of total AUM; while the remaining AUM held by index-based funds were divided evenly between mutual funds and ETFs (Exhibit 2). A number of thematic funds were also featured in this list of active and index-based strategies, namely water and clean energy products, collectively accounting for approximately USD 20 billion.<sup>2</sup>

The funds varied widely in tenure and domicile, the oldest fund has been managed for more than 30 years old, and the youngest for just over five. But two-thirds of total AUM (over USD 100 billion) was held in funds less than twenty years old (Exhibit 3), and half of them were domiciled in Europe where ESG adoption has been long established. However, the geographic focus of most funds was U.S. equities.

<sup>2</sup> All fund characterizations based on data from Broadridge and MSCI ESG Research, as of Dec. 31, 2020

**Exhibit 1: Top 20 Largest ESG Equity Funds by AUM** 

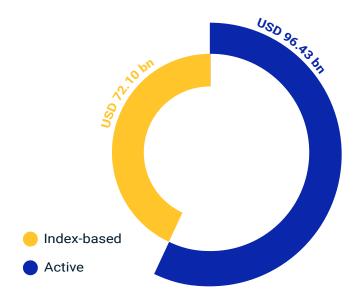
#	Name	Assets USD Billion	Inception	Domicile	Geographic Focus	Fund Type	MSCI ESG Rating	Peer Percentile Rank <sup>3</sup>
1	Parnassus Core Equity Fund	22.94	1992	U.S.	U.S.	Active Fund	А	83rd
2	iShares ESG Aware MSCI USA ETF	13.03	2016	U.S.	U.S.	Index-based ETF	А	82nd
3	Vanguard FTSE Social Index Fund	10.87	2000	U.S.	U.S.	Index-based Fund	BBB	41st
4	Stewart Investors Asia Pacific Leaders Sustainability Fund	9.87	2003	UK	Pacific ex Japan	Active Fund	А	61st
5	Vontobel Fund - mtx Sustainable Emerging Markets Leaders	9.58	2011	Luxembourg	Emerging Markets	Active Fund	А	81st
6	Northern Trust World Custom ESG Equity Index	8.69	2013	Ireland	Global	Index-based Fund	А	35th
7	Pictet - Global Environmental Opportunities	8.31	2010	Luxembourg	Global	Active Fund	AA	89th
8	Pictet - Water	8.02	2000	Luxembourg	Global	Active Fund	AA	-
9	KLP AksjeGlobal Indeks I	7.69	2004	Norway	Global	Index-based Fund	А	31st
10	Nordea 1 - Global Climate and Environment	7.37	2008	Luxembourg	Global	Active Fund	AA	89th
11	Parnassus Mid-Cap Fund	6.90	2005	U.S.	U.S.	Active Fund	А	98th
12	iShares ESG Aware MSCI EM ETF	6.83	2016	U.S.	Emerging Markets	Index-based ETF	А	98th
13	iShares Global Clean Energy UCITS ETF	6.52	2007	Ireland	Global	Index-based ETF	А	45th
14	iShares Global Clean Energy ETF	6.51	2008	U.S.	Global	Index-based ETF	А	45th
15	Nordea 1 - Emerging Stars Equity Fund	6.41	2011	Luxembourg	Emerging Markets	Active Fund	А	87th
16	TIAA-CREF Social Choice Equity Fund	6.32	1999	U.S.	U.S.	Index-based Fund	А	86th
17	Handelsbanken Hallbar Energi	5.85	2014	Sweden	Global	Active Fund	А	77th
18	Putnam Sustainable Leaders Fund	5.81	1990	U.S.	U.S.	Active Fund	А	92nd
19	iShares MSCI USA SRI UCITS ETF	5.63	2016	Ireland	U.S.	Index-based ETF	AA	99th
20	Calvert Equity Fund	5.37	1987	U.S.	U.S.	Active Fund	А	95th

Source: MSCI ESG Research LLC and Broadridge as of Dec. 31, 2020  $\,$ 

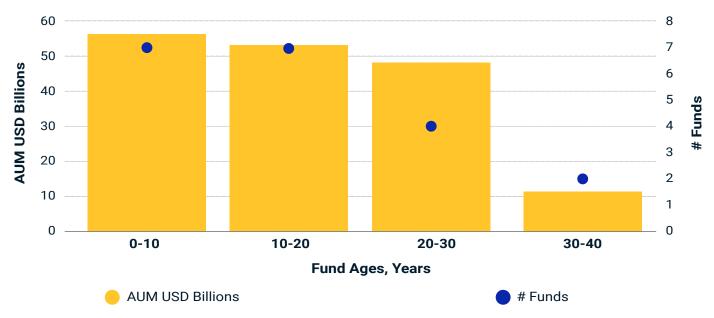
<sup>3</sup> Percentile rank of the fund within its peer group and within the global universe of funds in the MSCI coverage universe.

**Exhibit 2: Fund Strategy Breakdown** 

Strategy	# Funds	AUM USD Billion
Active Fund	11	96.43
Index-based Fund	4	33.58
Index-based ETF	5	38.52



**Exhibit 3: ESG Fund Age and Assets Under Management** 



Source: Broadridge and MSCI ESG Research as of Dec. 31, 2020

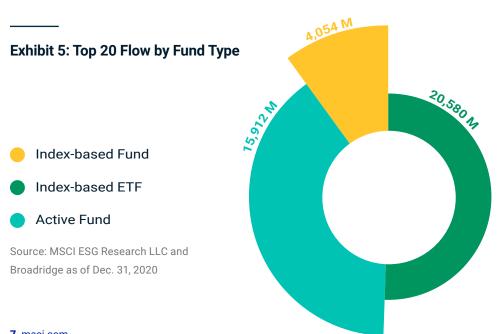
The order of size and order of flows in the top 20 are different. Index-based strategies saw the lion's share of inflows, exceeding over USD 20 bn (Exhibit 5). The iShares ESG Aware MSCI USA ETF alone witnessed in excess of USD 7 billion in flows. Thematic funds – clean energy,

water - were particularly popular in 2020 collectively witnessing over USD 15 bn in flows, two listings of the iShares Global Clean Energy ETF saw collective flows in excess of USD 7 billion.

Exhibit 4: Top 20 Ranked by Flow in 2020

Fund	Flows USD Millions (12 mo.)	Fund ESG Rating	Fund Type
iShares ESG Aware MSCI USA ETF	7,126.0 M	Α	Index-based ETF
Pictet Environmental Opp	4,227.1 M	AA	Active Fund
iShares Global Clean Energy (US Listing)	3,986.5 M	А	Index-based ETF
iShares Global Clean Energy UCITS ETF	3,522.2 M	А	Index-based ETF
Handelsbanken Hallbar Energi	3,454.9 M	А	Active Fund
iShares ESG Aware MSCI EM ETF	3,345.5 M	А	Index-based ETF
Nordea 1 Glob Climate	2,957.3 M	AA	Active Fund
iShares MSCI USA SRI UCITS ETF	2,599.7 M	AA	Index-based ETF
Vontobel Fund mtx Sust EM Leaders	2,345.6 M	А	Active Fund
Northern Trust World Cst ESG	1,927.7 M	А	Index-based Fund
Nordea 1 - Emerging Stars Equit	1,599.3 M	А	Active Fund
Vanguard FTSE Social Index Fund	1,347.2 M	BBB	Index-based Fund
Parnassus Mid Cap Fund	963.0 M	А	Active Fund
Parnassus Core Equity Fund	686.3 M	А	Active Fund
Calvert Equity Fund	574.4 M	А	Active Fund
KLP AksjeUSA	471.9 M	А	Index-based Fund
Pictet-Water	444.1 M	AA	Active Fund
TIAA-CREF Social Choice Equity	307.3 M	А	Index-based Fund
Putnam Sustainable Leaders Fund	-385.6 M	А	Active Fund
Stewart Investors Asia Pacific	-953.9 M	А	Active Fund

Source: MSCI ESG Research LLC and Broadridge as of Dec. 31, 2020  $\,$ 



# Exposures and Positioning —

Exhibit 6: Sector Exposures - Tech vs. Energy

	Fund Sector Holdings (%)										
Name	Communication Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Real Estate	Utilities
Parnassus Core Equity	11.32	7.88	8.52	0.00	6.17	10.61	18.17	32.48	3.38	1.47	0.00
iShares ESG Aware MSCI USA ETF	10.10	11.99	6.05	2.15	10.06	13.43	9.13	28.79	2.36	2.79	2.54
Vanguard FTSE Social Index	12.56	13.82	5.66	0.05	10.56	14.45	5.31	32.90	2.48	2.79	0.77
Stewart Investors APAC Leaders Sust	2.64	4.59	20.69	0.00	13.23	18.93	6.66	29.15	4.11	0.00	0.00
Vontobel - mtx Sustainable EM Leaders	13.18	17.05	4.19	4.59	21.57	1.88	2.37	19.84	5.97	4.23	5.13
Northern Trust World Custom ESG Equity	8.77	10.52	5.49	0.99	10.93	12.79	5.07	22.28	2.52	2.66	1.24
Pictet - Global Environmental Opportunities	0.00	0.00	0.00	0.00	0.00	8.97	25.17	37.53	12.86	4.05	9.27
Pictet - Water	0.00	4.38	0.00	0.00	0.00	12.87	43.75	3.47	4.41	0.00	30.25
KLP AksjeGlobal Indeks I	10.74	12.25	6.23	2.02	9.99	13.52	8.21	28.88	2.53	2.52	2.78
Nordea 1 - Global Climate and Environment	0.00	0.00	4.00	0.00	0.00	4.42	36.94	32.31	15.16	1.52	5.64
Parnassus Mid-Cap	3.29	9.35	4.03	0.00	5.66	14.77	21.53	27.22	2.55	7.03	4.56
iShares ESG Aware MSCI EM ETF	10.76	17.83	6.05	5.18	21.97	4.06	3.99	21.00	5.72	1.32	1.59
iShares Global Clean Energy UCITS ETF	0.00	0.00	0.00	2.01	0.00	0.00	25.94	22.86	0.00	0.00	49.17
iShares Global Clean Energy ETF	0.00	0.00	0.00	2.01	0.00	0.00	25.94	22.86	0.00	0.00	49.17
Nordea 1 - Emerging Stars Equity	11.59	20.46	8.99	0.00	25.15	2.48	0.89	27.46	1.45	0.45	1.06
TIAA-CREF Social Choice Equity	9.19	10.37	5.89	2.20	12.17	14.52	9.44	25.40	2.95	3.14	2.67
Handelsbanken Hallbar Energi	0.00	2.19	11.55	0.44	2.40	0.00	28.07	19.30	9.52	0.29	24.49
Putnam Sustainable Leaders	1.12	16.34	5.94	0.00	9.97	13.06	8.98	30.55	6.90	2.19	4.94
iShares MSCI USA SRI UCITS ETF	5.95	19.08	10.56	0.72	12.62	16.63	11.57	14.23	3.41	4.27	0.82
Calvert Equity		12.84	4.92	0.00	8.74	13.79	9.92	29.34	7.02	4.40	0.00

Source: MSCI ESG Research LLC and Broadridge as of Dec. 31, 2020

Sector exposures across the funds revealed that information technology was the largest allocation in most funds, and an almost zero allocation in energy (Exhibit 6). This was one of the key drivers behind the shorter-term recent outperformance of ESG funds relative to their non-ESG counterparts, as tech stocks rallied in 2020 whilst energy declined.

Google was the most commonly held stock across most funds; Alphabet Inc. was in 12 funds, with an average weight of 1.9% (Exhibit 7), followed by Ecolab, Thermo

Fisher Scientific and Microsoft. The companies with the highest average weight across the funds were Apple (5.6%) and Microsoft (5.0%); the market return of these firms was 30% and 41% respectively in 2020. It should be noted however, that turnover takes place within funds and the ranks and weighting held by these companies may not have been constant for the entirety of the year, and that this analysis represents an end of year snapshot.

<b>Exhibit</b>	7: T	ัดท	10	Commo	on Holdii	nas hv	GICS	Sector <sup>4</sup>
	<i>,</i>	VD.			zii i iviaii	143 54	$\mathbf{o}_{\mathbf{i}}\mathbf{o}_{\mathbf{o}}$	OCCLOI

Name	ESG Rating	# Funds	Av Wgt %	Max Wgt %	Min Wgt %	Name	ESG Rating # Funds	Av Wgt %	Max Wgt %	Min Wgt %
MICROSOFT CORPORATION APPLIED MATERIALS, INC. CADENCE DESIGN INC. ADOBE INC. TEXAS INSTRUMENTS AUTODESK, INC. TRIMBLE INC. SYNOPSYS, INC. APPLE INC. NVIDIA CORPORATION	AAA AA AAA AAA AA BB BBB	9 8 8 8 8 8 7 7	5.09 1.33 1.28 1.25 0.94 1.14 0.90 1.73 5.68 1.67	7.30 4.06 3.71 2.41 2.10 3.23 2.99 3.62 7.56 4.15	3.47 0.17 0.08 0.52 0.33 0.15 0.04 0.09 1.49 0.70	ONEOK, INC. HESS CORPORATION CHENIERE ENERGY, INC. CHEVRON CORPORATION CONOCOPHILLIPS Schlumberger N.V. VALERO ENERGY CORP BAKER HUGHES COMPANY EXXON MOBIL CORPORATION PHILLIPS 66	A 5 AA 4 BBB 4 A 4 BBB 4 AA 4 BBB 3 BBB 3	0.10 0.07 0.08 0.49 0.19 0.12 0.10 0.07 0.47	0.26 0.12 0.12 0.63 0.31 0.17 0.18 0.13 0.54	0.01 0.03 0.03 0.35 0.09 0.07 0.05 0.03 0.38 0.07
ALPHABET INC. DISCOVERY, INC. ELECTRONIC ARTS INC. CABLE ONE, INC. VERIZON COMMS INC. LIBERTY GLOBAL PLC LIBERTY BROADBAND CORP. ZILLOW GROUP, INC. FOX CORPORATION COMCAST CORP	BB BBB A BBB BB BB BB BB	12 7 7 6 6 6 6 5	1.93 0.07 0.31 0.29 1.30 0.05 0.10 0.04 0.02	0.15 0.77 1.62 3.79 0.14 0.44 0.07 0.03	0.09 0.02 0.53 0.02	CHARLES SCHWAB CORP CME GROUP INC. MARSH & MCLENNAN INC. MOODY'S CORPORATION BLACKROCK, INC. S&P GLOBAL INC. FACTSET INC. T. ROWE PRICE GROUP INC. PNC FINANCIAL INC. TRAVELERS COMPANIES INC	BBB 7 BBB 7 AA 7 AA 7 AA 6 AA 6 AA 6 A 6	0.73 0.79 0.57 0.31 0.93 0.38 0.08 0.17 0.40	2.77 3.40 1.84 0.74 2.73 0.73 0.19 0.52 0.96 0.54	0.18 0.14 0.13 0.11 0.24 0.17 0.03 0.06 0.14 0.08
V.F. CORPORATION NIKE, INC. THE HOME DEPOT, INC. BORGWARNER INC. Hasbro, Inc. LOWE'S COMPANIES, INC. VAIL RESORTS, INC. AMAZON.COM, INC. CHIPOTLE MEXICAN GRILL TRACTOR SUPPLY COMPANY	AA AA AA AA AA BBB BBB	8 7 7 7 7 7 6 6	0.75 1.02 1.52 0.05 0.30 0.77 0.17 4.43 0.38 0.09	2.67 4.20 0.14 1.69 1.83 0.77 5.35 1.60	0.06 0.38 0.62 0.01 0.00 0.26 0.02 3.01 0.08 0.03	THERMO FISHER SCIENTIFIC INC. DANAHER CORPORATION AGILENT TECHNOLOGIES INC. CERNER CORPORATION BECTON, DICKINSON AND CO GILEAD SCIENCES, INC. WATERS CORPORATION AMGEN INC. HOLOGIC, INC. VERTEX PHARMA INC	BBB 10 BB 9 AA 9 AA 8 A 7 AA 7 AA 7 AA 7 AA 7	1.91 2.33 0.89 0.85 0.75 0.46 0.38 0.83 0.53 0.47	4.42 5.70 2.47 3.23 3.11 1.10 2.13 2.04 3.06 1.00	0.40 0.28 0.08 0.05 0.16 0.16 0.03 0.29 0.04 0.13
ECOLAB INC. LINDE PUBLIC LIMITED COMPANY INTERNATIONAL FLAVORS&FRAGRANCES BALL CORPORATION NEWMONT CORPORATION PPG INDUSTRIES, INC. AIR PRODUCTS AND CHEMICALS, INC. THE SHERWIN-WILLIAMS COMPANY THE MOSAIC COMPANY DUPONT DE NEMOURS, INC.	AAA A AA AA BBB BBB A	10 9 8 6 5 5 5 5	1.31 1.45 0.22 0.40 0.29 0.59 0.33 0.32 0.07	3.38 1.39 1.35 0.73 2.55 1.01 0.91 0.12	0.12 0.30 0.02 0.07 0.10 0.05 0.11 0.13 0.03	AMERICAN TOWER CORPORATIO EQUINIX, INC. DIGITAL REALTY TRUST, INC. BOSTON PROPERTIES, INC. PROLOGIS, INC. CBRE GROUP, INC. HEALTHPEAK PROPERTIES, INC. SBA COMMUNICATION CORP ALEXANDRIA REAL ESTATE UDR, INC.	AA 8 AA 7 BB 6 A 6 AA 6 AAA 6 BBB 6 BBB 5 BB 5	0.93 0.89 0.64 0.27 0.43 0.12 0.11 0.28 0.09 0.05		0.03 0.16 0.05 0.04 0.07 0.05
AMERICAN WATER WORKS COMPANY EVERSOURCE ENERGY CONSOLIDATED EDISON, INC. CENTERPOINT ENERGY, INC. SEMPRA ENERGY ORSTED A/S PUBLIC SERVICE ENTERPRISE GROUP	AA AA BBB A	8 6 6 5 5	1.31 0.40 0.19 0.05 0.20 2.20	1.23 0.37 0.09 0.34	0.06 0.06 0.05 0.03 0.08 0.08	Source: Refinitiv/Lipper and MSCI of Dec. 31, 2020	ESG Rese	earch LLC	as	

PUBLIC SERVICE ENTERPRISE GROUP

EDISON INTERNATIONAL

ESSENTIAL UITILITIES INC

NEXTERA ENERGY, INC.

AA

BBB 4

BBB 4

0.17

0.10

0.91

AAA 4 **0.83** 1.20 0.33

0.22 0.06

0.16 0.05

3.43 0.02

<sup>4</sup> GICS, the Global Industry Classification Standard jointly developed by MSCI and Standard & Poor's.

#### **Exhibit 8: Information Technology- Industry Groups**



The most commonly held information technology stocks were Microsoft (9 funds), followed by Applied Materials and Cadence Design Systems (8 funds each). Within information technology, the industry groups with the largest exposure across most funds were software and services, and semiconductors (Exhibit 8). The largest fund investors into these industry groups were active funds; Pictet Environmental Opportunities (21.3%) and Parnassus Core Equity (19.1%), whereas index-based approaches allocated approximately half that of their active peers. averaging a 9% exposure. The concentration of fund investment into these industry groups has had significant impact on the recent outperformance of ESG. To put the performance of these industries into context, in 2020, the MSCI World Software & Services Index returned 38.7%, while the MSCI World Semiconductors and Semiconductor Equipment Index returned 46.7%, by far among the best performing subsectors within the information technology sector.

Despite the general absence of energy exposure in the above funds, some did have minor allocations to energy stocks. Out of those that did, for example, the iShares ESG Aware MSCI USA ETF had a 2.15% allocation to energy, which included 11 oil and gas names such as Exxon and Chevron. The iShares MSCI USA SRI ETF, comparatively, held considerably less: at 0.72% of only two names, Phillips 66 and Oneok. Why? Because index methodology matters, and different indexes provide investors with diverse investment choices. The iShares ESG Aware MSCI USA ETF tracks an index5 that employs an optimization process to maximize exposure to ESG factors while maintaining a target tracking error to the parent MSCI USA index within a specified range, along with being sector-diversified and targeting companies with high ESG ratings in each sector. The fund's only exclusions are on tobacco and controversial weapons related companies. Compare this to the iShares MSCI USA SRI ETF that tracks an index that is considerably more stringent in its investment criteria, and aims to provide exposure to companies with the highest ESG ratings while excluding companies with certain negative social or environmental impacts. In this case the exclusions are more far reaching, removing companies involved in nuclear power, tobacco, alcohol, gambling, weapons and civilian firearms, thermal coal

5 MSCLUSA ESG Focus Index

and more<sup>6</sup>.

<sup>6</sup> MSCI SRI Indexes Methodology

# Carbon Intensity

The majority of funds in our analysis that did not hold any energy stocks were active funds and most that did were index-funds. But how does that reconcile with real world carbon emissions? The energy sector tends to be first in line when it comes to ESG scrutiny, making it easy to presume that funds with energy exposure would lead

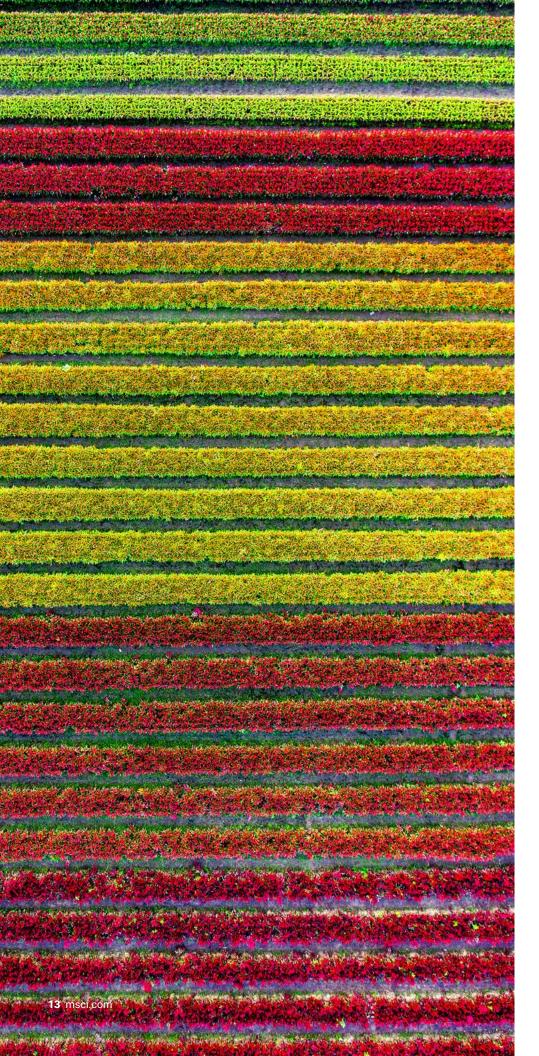
to more exposure to pollutive companies, or higher fund emissions and carbon intensity<sup>7,8</sup>. However, holdings alone do not provide the full picture, in fact there are funds within this group that do not have any energy stocks but exhibit a substantially higher carbon intensity than those that do (Exhibit 9).

**Exhibit 9: Fund Weighted Average Carbon Intensity vs. Holdings** 

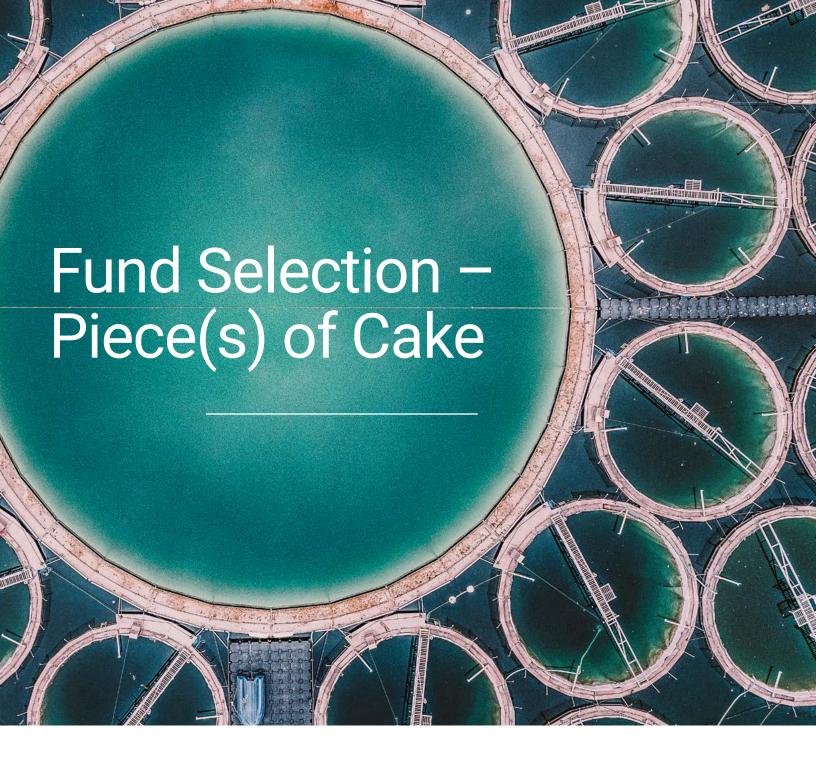


Source: Refinitiv/Lipper and MSCI ESG Research as of Dec. 31, 2020

Third of low-carbon funds invest in oil and gas stocks | Financial Times (ft.com)

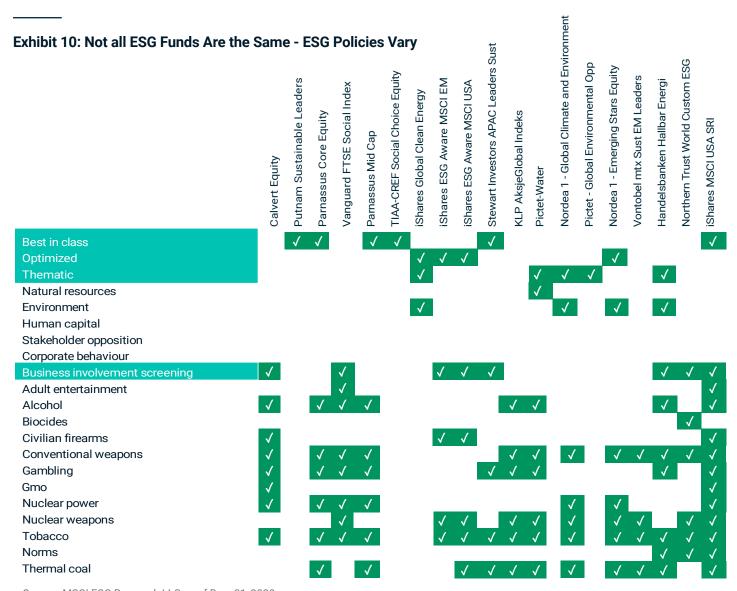


Pictet Water for example, is a thematic fund with no energy exposure, yet it exhibits a considerably higher carbon intensity than the rest in the list, predominantly driven through its industrials and utilities holdings. Investors often laude funds that exclude energy, but this is not the only pollutive industry, and different funds have different goals. Pictet Water may have a high carbon intensity, but it aims to capture investment opportunities across all areas of the global water industry, with a particular focus on water supply, clean water technology and environmental services. This niche theme could therefore be considered to be more environmentally beneficial in the long-run, providing more exposure to the development of sustainable solutions, as opposed to investing in sectors with inherently low carbon intensity, such as financials or communication services, which lack immediate business involvement in the engineering of solutions. This all goes to show that understanding the nuances of fund mandates matter.



The ESG fund universe is anything but uniform. The largest funds are very much a reflection of the spectrum of investors' choice and preferences, active and index-based, integration, values & screens based, and thematics. They highlight the fact that there is no one way to invest sustainably, demonstrate clearly that different investors may be at different stages in their ESG journey, and that their preferences can be guite diverse.

These funds differ from one another, often quite substantially. Investors moving into ESG may wish to consider these differences very carefully to ensure that their investments are actually aligned with their own investment principles. Alongside fundamental analysis, risk/reward considerations, sector, and geographic exposures, attaining a good understanding of fund ESG policies can help investors make more informed fund decisions in this regard.



Source: MSCI ESG Research LLC as of Dec. 31, 2020

Introspection can be a good place to start when it comes to fund selection. What are my values and principles, in order of preference? What matters the most? What do I care about most, and what would be acceptable as collateral benefits? Optimizing multiple parameters can be challenging. Also, it may be important to look beyond just holdings, as single names alone have historically not dictated overall ESG attributes.

Effectively, ESG funds are like a cake. We can't have our cake and eat it, but we can eat some parts of the cake. It's a matter of systematically prioritizing which parts matter the most.

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