



**Investment & Actuarial Consulting,
Controlling and Research.**



www.ppcmetrics.ch



IPE Seminars

Approaches and Challenges of Measuring ESG in Investment Portfolios

PPCmetrics AG

Dr. Oliver Dichter, Managing Consultant

Zurich, 26 October 2021

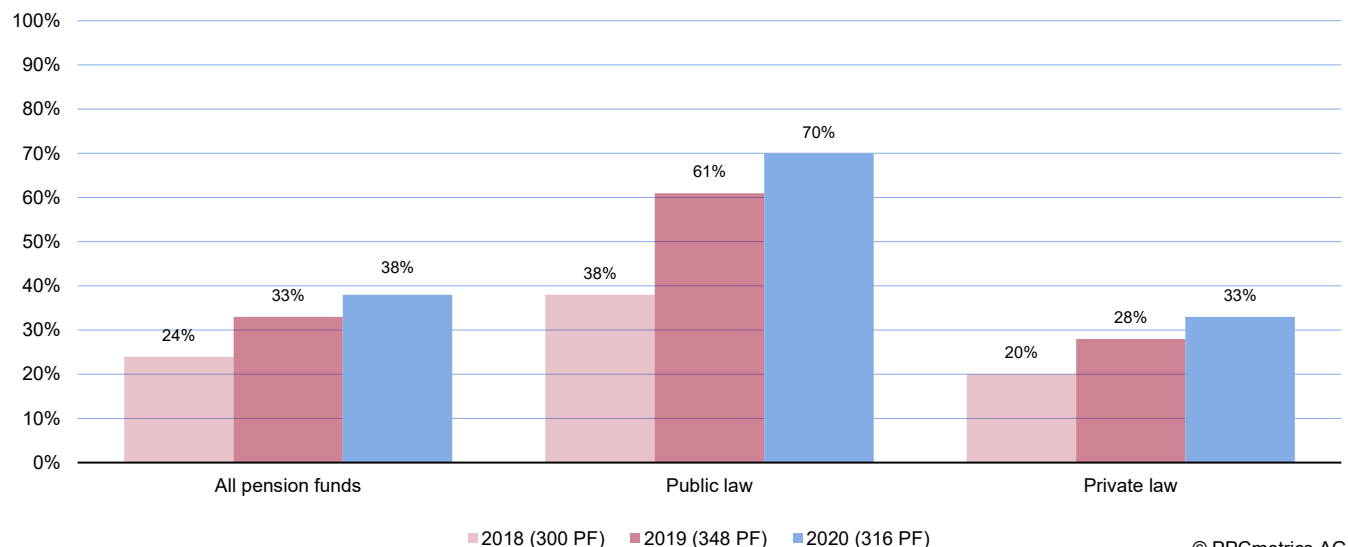
Introduction

- **ESG investing** has widely come to the attention of institutional investors in recent years.
- This presentation shows the **extent** to which Swiss pension funds **disclose information on ESG**.
- Furthermore, the possibilities for institutional investors to **measure ESG** are analysed.
- Measuring the ESG characteristics of a portfolio is not trivial. For this reason, various **difficulties** in this area are discussed.

ESG Reporting by Swiss Pension Funds (PF)

Reporting on sustainability efforts 01.01.2018 - 31.12.2020

All pension funds (2020: 316 PF)



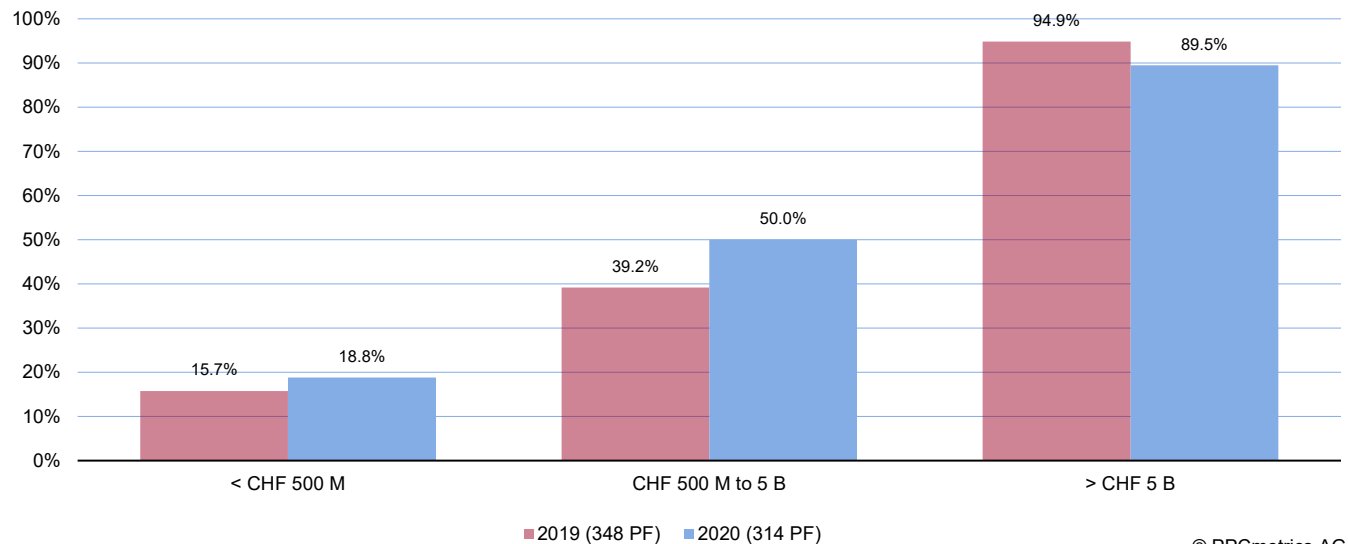
© PPCmetrics AG

- As at the end of 2020, **38%** of the evaluated PFs report on sustainability – either on their website or in the annual report.
- Institutions under **public law** report more frequently on ESG.

Larger PFs Report More Frequently on ESG

Reporting on sustainability efforts by volume 01.01.2019 - 31.12.2020

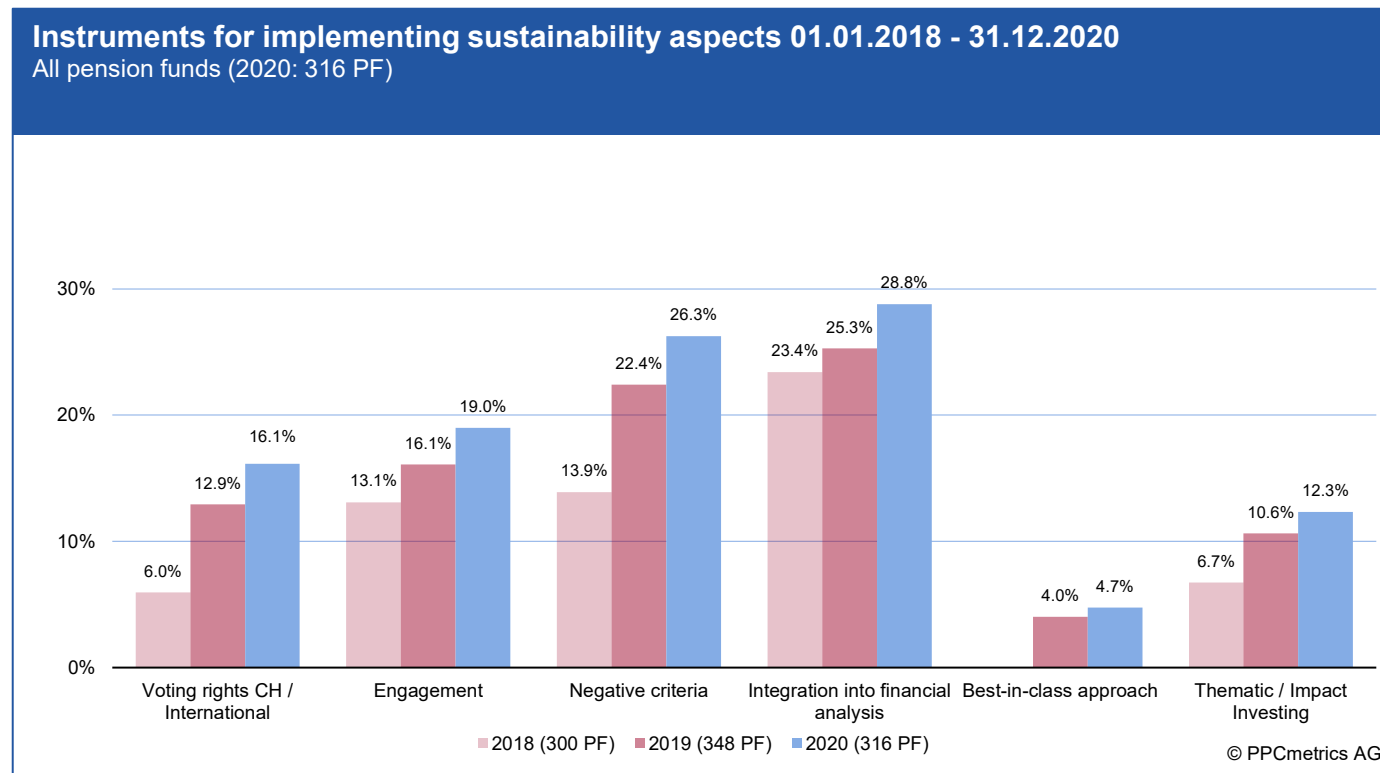
All pension funds (2020: 314 PF)



© PPCmetrics AG

- **Large PFs** report more frequently on ESG than smaller PFs.

Which Instruments Do PFs Report On?



- The most common instruments are **negative criteria** and the **integration** of sustainability criteria into the **financial analysis**.

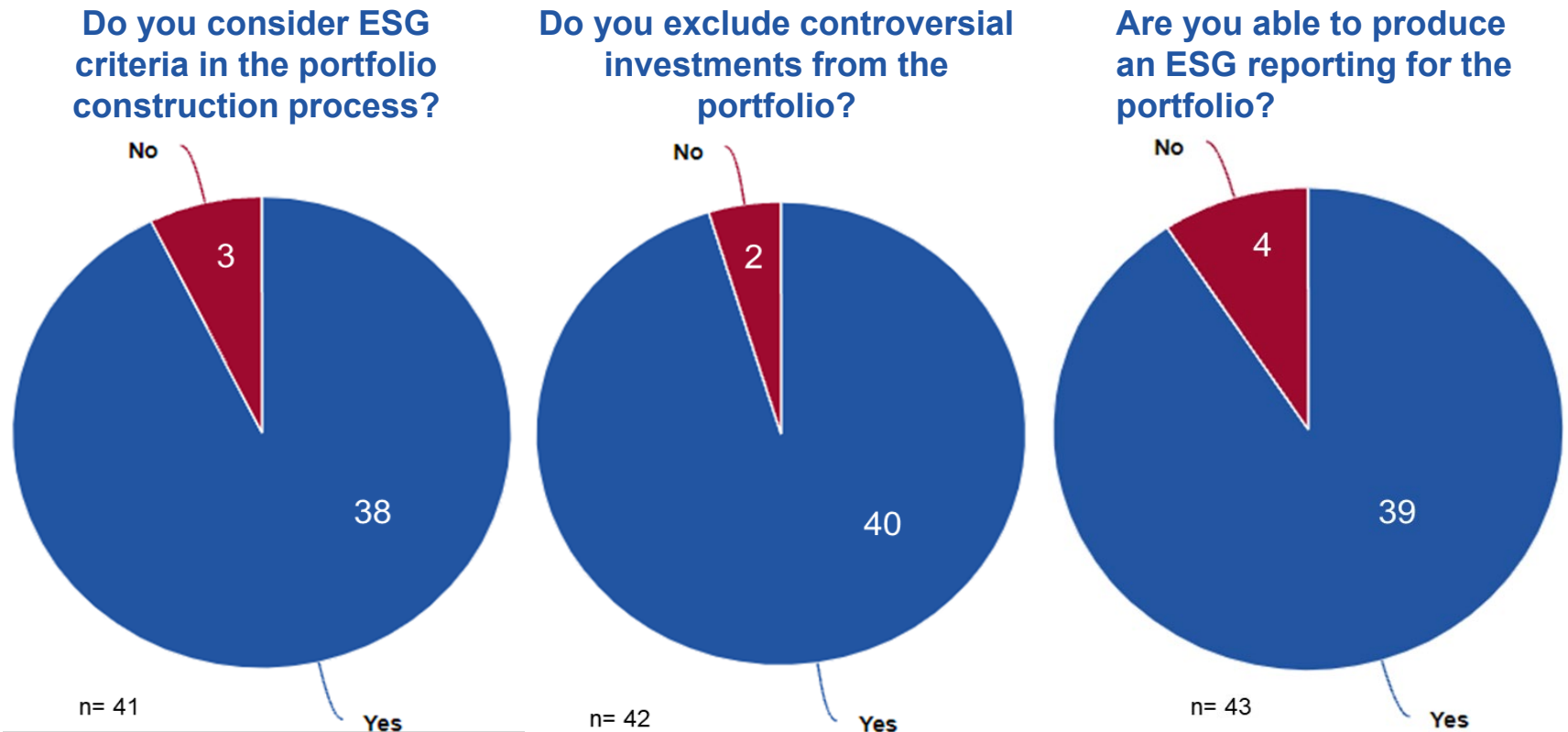
PFs Do More than They Report

- Even in a standard **balanced index mandate**...
 - ... **voting rights** are usually exercised by the manager considering ESG.
 - ... the asset manager usually participates in an **active engagement program**.
 - ... the asset manager usually implements an **exclusion list** that relies on international agreements ratified by Switzerland (e.g. recommendations for exclusions by SVVK-ASIR).

Market Screen 2020

Active Traditional Swiss Equity Mandates

- In standard active mandates there is a high probability that the asset manager considers ESG as well:



Source: PPCmetrics Market Screen 2020

How Can ESG Be Measured by Investors?

- There is **more ESG consideration in pension portfolios than disclosed**.
- Before investors report on ESG....



...they have to measure ESG

- Ways to measure ESG characteristics of a portfolio:

1

ESG screening carried out by external service providers

2

Collection of information directly from the asset managers (ESG questionnaire)

1

ESG Screening

Who Provides the Service?

- **Many different providers:**

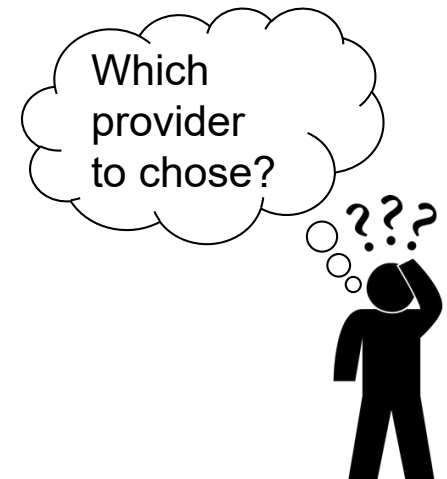
- Rating providers



- Specialised companies that use external data or combine external data with own research



- Banks and asset managers



Source for picture on the bottom right: <https://pixabay.com/de/>

1

ESG Screening

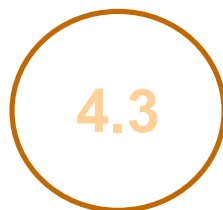
What Information Is Typically Shown?

ESG rating

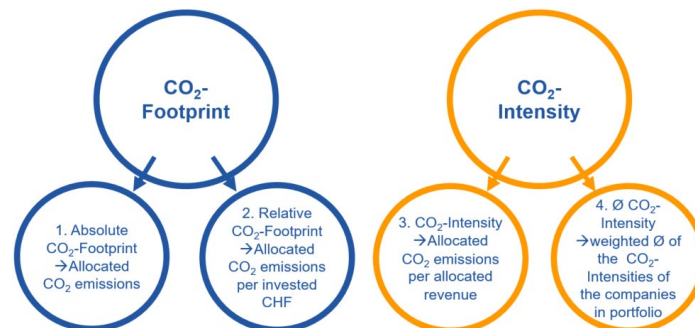
Portfolio



Benchmark



Carbon figures



Controversies

Controversies	Portfolio	Benchmark
Controversial weapons	0.00%	2.10%
UN Global Compact violations	0.00%	0.01%
Pornography	0.00%	0.07%
Coal	0.00%	1.10%
Total	0.00%	3.28%

SDG mapping



Source: Own illustrations; picture with SDGs on the bottom right: un.org

1

ESG Screening

ESG Ratings: Understanding the Approach Is Key

Correlation between ESG ratings of different providers, Common sample = 924 companies

	SA VI	SA RS	SA A4	SA MS	VI RS	VI A4	VI MS	RS A4	RS MS	A4 MS	Average
ESG	0.77	0.65	0.53	0.53	0.62	0.6	0.49	0.42	0.4	0.37	
E	0.7	0.66	0.59	0.33	0.69	0.59	0.35	0.61	0.26	0.19	
S	0.67	0.57	0.52	0.29	0.62	0.58	0.27	0.55	0.27	0.28	
G	0.55	0.48	0.36	0.34	0.7	0.7	0.43	0.68	0.38	0.34	

SA = Sustainalytics, RS = RobecoSAM, VI = Vigeo, A4 = Asset 4, MS = MSCI

- Also relevant for ESG indices – which index is best for the investor?
- As a comparison: Correlation of credit ratings is typically around 0.99**



Source: Berg, Florian and Kölbel, Julian and Rigobon, Roberto, Aggregate Confusion: The Divergence of ESG Ratings (May 17, 2020). Available at SSRN: <https://ssrn.com/abstract=3438533>; Picture on the bottom right: <https://pixabay.com/de/>

1

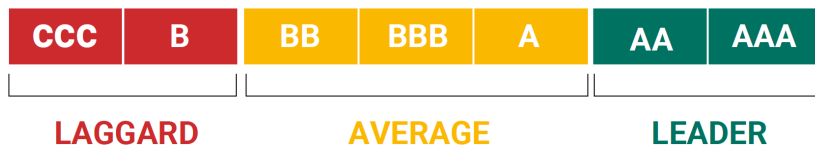
ESG Screening

MSCI ESG Rating as an Example

MSCI ratings of 8 of the largest companies in Switzerland	2019	2020	2021
Nestlé SA	AA	AA	AA
Novartis AG	BBB	A	A
Roche Holding AG	A	A	A
Zurich Insurance Group AG	AA	AA	AA
UBS Group AG	AA	AA	AA
ABB Ltd	AA	AA	AA
LafargeHolcim Ltd	BBB	BBB	A
Swatch Group AG	BB	BB	BB

- MSCI ESG rating measures ESG performance relative to peers.
- ▶ «Best-in-class» rating
- ▶ It is not possible to compare ratings across sectors (e.g. to compare LafargeHolcim to Roche).
- ▶ Other agencies compute ratings that are comparable across sectors.

Rating scale



Source: <https://www.msci.com/esg-ratings>; Picture on the bottom right: <https://pixabay.com/de/>

1

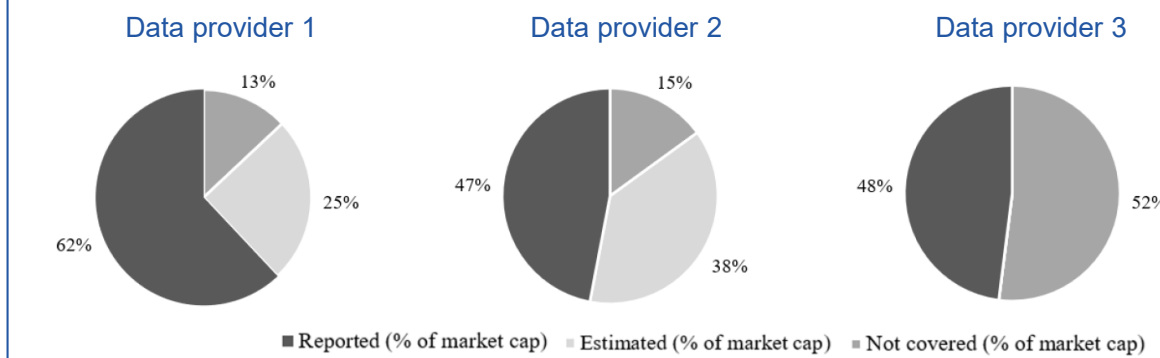
ESG Screening

Carbon Figures: Data Quality

- Carbon data providers obtain data from companies or public data sources.
- Companies sometimes disclose data only selectively and not completely.
- Part of the data still has to be estimated.

Greenhouse gas emissions of three data providers:

Figure 1. Comparison of Market-Capitalization Coverage with GHG Emissions, 2010–2016



- But company reporting is improving. Further improvement is expected through regulation (reporting based on recommendations of the TCFD).

Source: Kalesnik, V. and Wilkens, M. and Zink, J., Green Data or Greenwashing? Do Corporate Carbon Emissions Data Enable Investors to Mitigate Climate Change? (November 24, 2020)

1

ESG Screening

Carbon Figures: Difference between Scope 1, 2 and 3

Scope 1

Direct emissions from company-owned and controlled resources.

Example:

A car manufacturer produces a car in its factory. The emissions generated in this process are scope 1.

Scope 3

All other indirect emissions that occur in the value chain of the company.

Example:

The sold car emits gases during its lifetime, which are credited to the car producer as scope 3 emissions.

Scope 2

Indirect emissions from electricity, steam, heat and cooling, purchased externally and used by the company.

Example:

The car manufacturer's factory uses electricity from a local power producer. The emissions generated in the production of this electricity are scope 2 for the car producer.

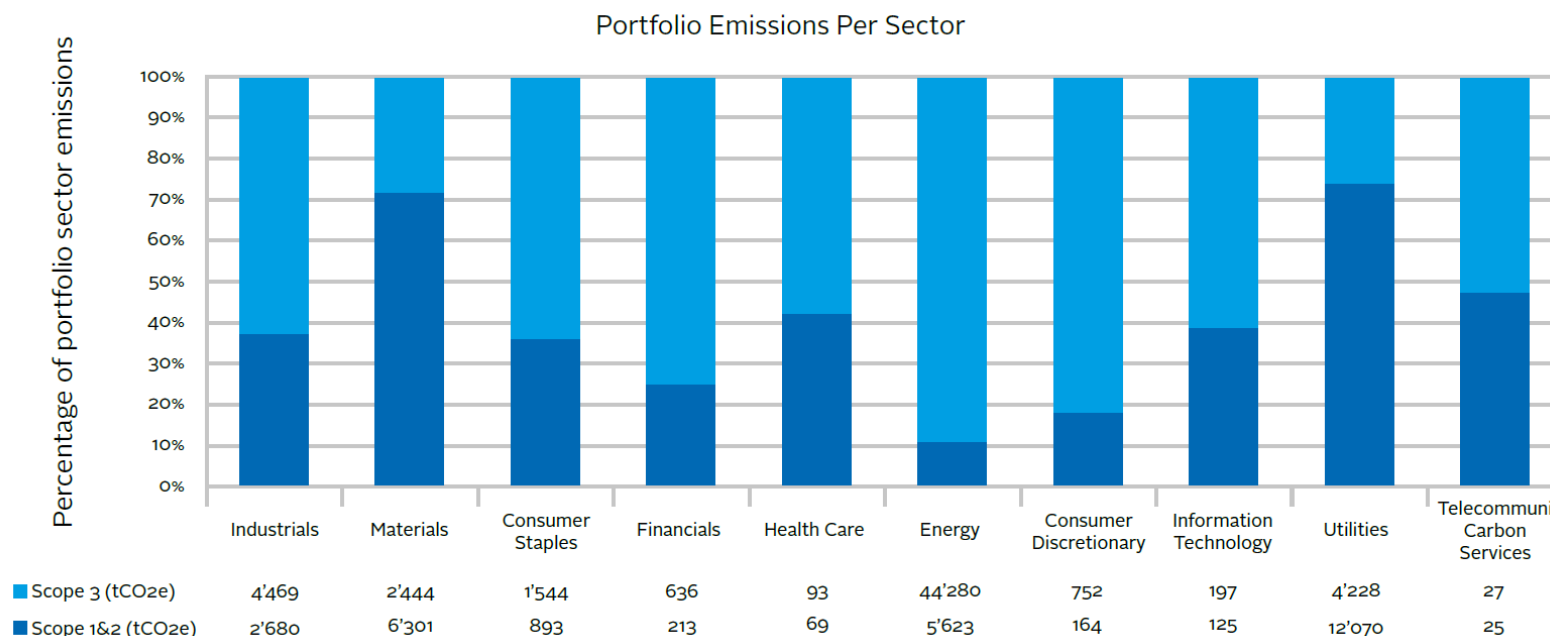


Source for picture on the bottom right: <https://pixabay.com/de/>

1

ESG Screening

Carbon Figures: Relevance of Scope 3 Emissions



- For most products, scope 3 emissions account for a large portion of total emissions.
- Since individual companies in many cases do not report scope 3 emissions, this data is often based on estimates.

Source: PRI Climate Change Strategy Project with data from South Pole Carbon (2015), <https://www.unpri.org/download?ac=1876>

1

ESG Screening

Carbon Figures: Examples of Company Reporting

LafargeHolcim

2018 2019 2020

Absolute gross Scope 1 emissions (Scope 1)	Mt	122	121	110
Absolute Scope 2 emissions (Scope 2)	Mt	7	8	7
Absolute Scope 3 emissions (old methodology) (note 6a)	Mt	20	19	n/a
Absolute Scope 3 emissions (revised methodology) (note 6a)	Mt	n/a	n/a	29

- Scope 1, 2 and 3 are reported

Nestlé

Indicator	Units	2010	2019	2020
Direct GHG emissions (scope 1)	10 ⁶ tonnes CO ₂ eq.	3.8	3.3	3.3
Indirect GHG emissions (scope 2) ^(a)	10 ⁶ tonnes CO ₂ eq.	3	2	2
Total GHG emissions (scope 1 & 2) ^(a)	10 ⁶ tonnes CO ₂ eq.	7.1	5.5	5.2

- Scope 3 is not reported on a yearly basis

Source: https://www.holcim.com/sustainability-reports?field_year_tid_i18n_exposed=1458
<https://www.nestle.com/csv/performance>

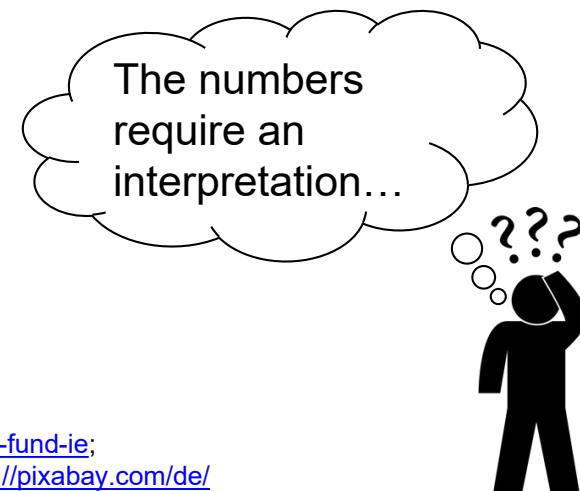
1

ESG Screening

Carbon Figures: Is Lower Always Better?

	iShares Green Bond Index Fund (IE)	iShares Core Global Aggregate Bond UCITS ETF
Benchmark	Bloomberg Global Green Bond Index	Bloomberg Global Aggregate Bond Index
MSCI Weighted Average Carbon Intensity	395.25 (per 07/09/2021)	191.92 (per 06/08/2021)

- Issuers of green bonds often operate in carbon intensive industries.
- Carbon measures capture the whole emissions of the companies and not the financing purpose of the bond.



Source: <https://www.ishares.com/ch/institutional/en/products/316313/ishares-green-bond-index-fund-ie>;
<https://www.ishares.com/ch/institutional/en/products/291773/>; Picture on the bottom right: <https://pixabay.com/de/>

ESG Reporting

All answers must make reference to the mandate / product as of 30.06.2021

ESG Process applied to the mandate	Please confirm (YES / NO)
Do you have a separate in-house ESG team?	
Significant organisational events with respect to the ESG team	
Do you integrate ESG criteria into your portfolio construction process?	
Do you integrate a dedicated ESG approach into your portfolio construction process?	
Changes to the ESG approach of this mandate / product	
Do you consider the carbon intensity of the portfolio over time?	
Does an external company provide an ESG rating (e.g. Sustainalytics, MSCI, Morningstar Globes)?	
Do you consider the ESG rating of the portfolio over time?	
Controversial Stocks / Exclusions	Please confirm (YES / NO)
Is any company from the SVWK (Swiss association for responsible investments, www.svwk-asir.ch) list in the portfolio?	
Are companies from the SVWK exclusion list systematically excluded?	
... If yes, how quickly do you implement changes in the exclusion list?	
Do you apply other exclusion lists (UN Global Compact...)?	
Do you apply an internal exclusion list?	
Carbon Profile	Do you measure WACI (YES / NO)?
Weighted Average Carbon Intensity of the Portfolio (Scope 1+2)	
Weighted Average Carbon Intensity of the Benchmark (Scope 1+2)	
Is the portfolio aligned with the Paris Climate Agreement (max 2 degree global warming, for further information please see https://www.transitionmonitor.com/)?	
ESG Profile	Do you measure ESG Scores (YES / NO)?
MSCI ESG Score of the Portfolio	
MSCI ESG Score of the Benchmark	
ESG Score of the Portfolio	
ESG Score of the Benchmark	

- **ESG questionnaire** to be completed by all asset managers (“self-declaration”).
- **All asset classes** can be considered (not only listed bonds and equities).
- The rating and carbon figures will rely on **different methodologies** (chosen by the asset managers).

Source: Own illustration

Asset Class (Asset Manager)	Exclusions			ESG Profile			Carbon Profile			Stewardship				EU SFDR
	SVVK	Further Exclusions by Asset Manager	Client-specific Exclusions	ESG Score Portfolio (1)	ESG Score Benchmark (2)	Relative ESG Score [(1) / (2)]	Carbon Intensity Portfolio (1)	Carbon Intensity Benchmark (2)	Relative Carbon Intensity [(1) / (2)]	UN PRI Signatory / member of SSF	Manager Specific Engagement	Voting rights	Engagement	
Bonds CHF (AM 1)				7.1	6.8	104%	109	95	115%					
Bonds FW Gov. hedged (AM 2)				5.0	6.6	76%	110	112	98%					
Bonds FW Corp. hedged (AM 2)				5.7	5.8	98%	302	368	82%					
Bonds LC EMMA (AM 3)				4.8	4.4	109%	623	809	77%					
Equities CH (AM 1)				7.3	6.4	114%	70	68	103%					
Equities World ex CH (AM 4)				21.5	22.3	104%	112	136	82%					8
Equities World ex CH hedged (AM 2)				6.9	6.7	103%	124	138	90%					6
Equities World Small Cap (AM 5)				29.7	29.3	99%	221	215	103%					6
Equities EMMA (AM 3)				5.3	5.2	102%	203	148	137%					
Real Estate CH (AM 6)				75.0	70.0	107%	401	450	89%					
Senior Secured Loans (AM 7)				4.9	4.8	102%	178	152	117%					
Average						102%			99%					

Source: Own illustration

Takeaways

- **The share of Swiss pension funds reporting on ESG is growing.**
- **Communicating ESG requires an adequate measurement method.**
- **Sustainability assessments may differ significantly between different providers.**
- **Data uncertainty is a challenge for investors and needs to be accepted to some degree.**
- **Results from an ESG assessment can be taken as a starting point to develop an ESG strategy or to identify assets with a need for action.**



Investment & Actuarial Consulting,
Controlling and Research

PPCmetrics AG
Badenerstrasse 6
Postfach
CH-8021 Zurich

Phone +41 44 204 31 11
E-Mail zurich@ppcmetrics.ch

PPCmetrics SA
23, route de St-Cergue
CH-1260 Nyon

Phone +41 22 704 03 11
E-Mail nyon@ppcmetrics.ch

Website www.ppcmmetrics.ch
Social Media 

PPCmetrics (www.ppcmmetrics.ch) is a leading Swiss investment consultant, investment controller, strategic investment advisor, and pension actuary. Our clients are institutional investors (e.g., pension fund, benefits plan, insurance, health insurance, foundation, NPO and treasury department) as well as private investors (e.g., private clients, family offices, family foundations or Ultra High Net Worth Individuals UHNWI). Our services include investment consulting and investment advice as well as the definition of an investment strategy (Asset Liability Management ALM), portfolio analysis, asset allocation, the development of investment guidelines, legal consulting, asset manager selection, the implementation of public tenders, investment controlling, actuarial consulting, and activities as pension actuary.

We publish more than 40 articles on various topics per year.



Publications



Our experts share their knowledge and opinions with the public.

Videos



Experience our conferences, which we organize several times per year.



Conferences

PPCmetrics AG
Investment & Actuarial Consulting,
Controlling, and Research.
[Read more](#)



Website

