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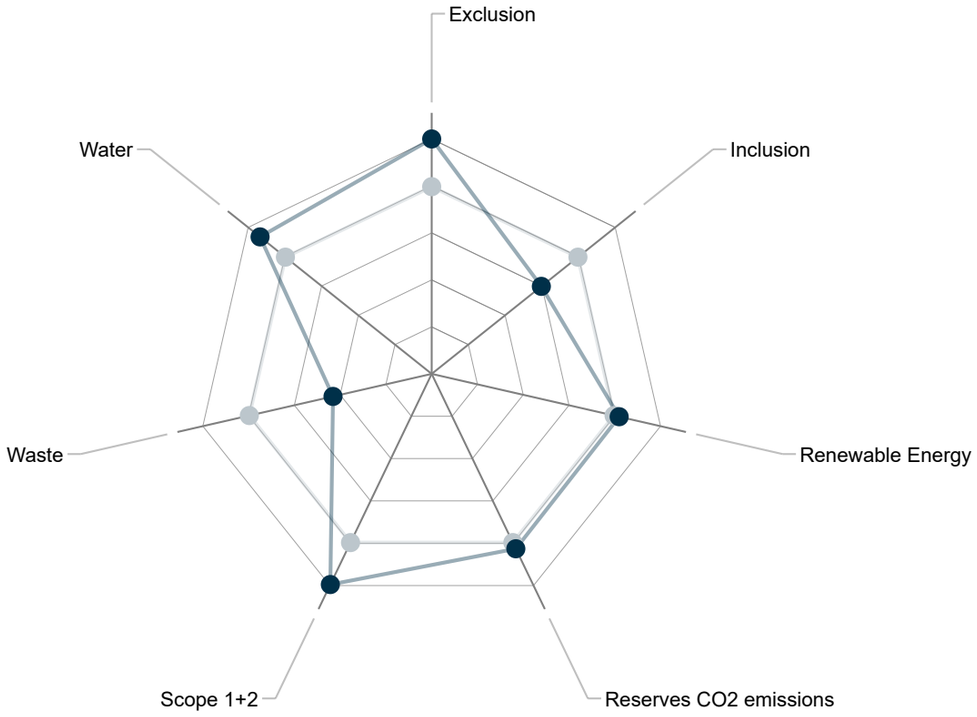
Portfolio sustainability analysis

Overall comparison between portfolio(s) and benchmark average



- The plot to the left compares each of the sustainability parameters to the average of that of the benchmark portfolios.
- The faded dotted ring in the figure represents the average benchmark figure - a ratio of the portfolio to this of 1.
- A point above this represents a relatively better performance, and a point below this a relatively worse performance.

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Who we are

Matter is a Danish fintech startup founded in 2017. We specialise in sustainable investments and have launched a sustainable pension product in Denmark in collaboration with Skandia in October 2018.
Our team consists of people with diverse experience from the United Nations, asset management, management consulting and software development.

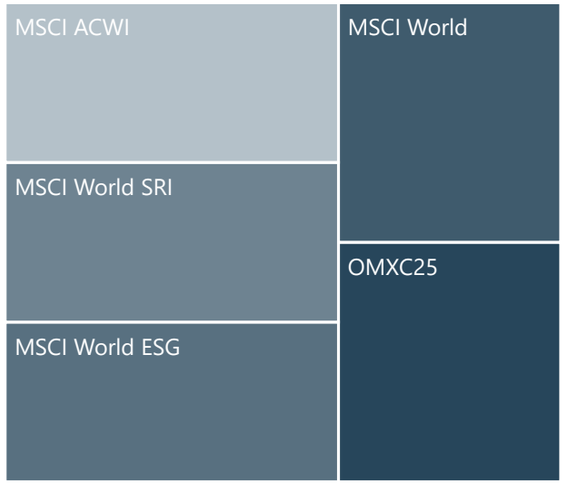
Portfolio Sustainability Analytics

Drawing upon wisdom-of-the-crowd inspired sustainability information and machine learning, we have developed automated tools to screen entire investment portfolios of listed assets on a range of sustainability criteria that can be utilized by pioneering investors wishing to create sustainable and impact-oriented portfolios.
The portfolio sustainability tools enable the qualification of ESG strategies with concrete allocation targets – with respect to exclusion of controversial companies, reduction of the portfolio's CO2 impact, inclusion of additional beneficial investments and more.
Sustainability metrics constitute a new dimension to traditional financial reporting that is here to stay.

Benchmarking

Selected portfolios

Selected Benchmarks



This analysis looks into the sustainability profile of the selected portflio(s) and compares the results to the selected benchmark(s). Both selected portfolio(s) and benchmark(s) are shown to the left.

Throughout the report, the portfolio(s) is compared to the selected benchmark(s) for all metrics. Note that the presentation contains comparisons only, and the numbers should thus not be interpreted as general sustainability ratings.

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Included metrics (1/2)

Impact metrics
Portfolio level

Measuring a portfolios impact on various metrics – from carbon emissions to renewable energy generation

Controversial corp. topics
Asset and portfolio level

Companies in the portfolio that are flagged for corruption, fossil fuels, weapons, human rights violations and much more customizable topics.

Controversial sovereign topics
Asset and portfolio level

The controversial sovereigns within the portfolio – e.g. sovereigns flagged for sanctions, corruption and more.

Beneficial corp. topics
Asset and portfolio level

The beneficial companies in the portfolio that are perceived to add cultural value, aim to benefit people and/or benefit the environment.

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Included metrics (2/2)

Impact metrics	Controversial corp. topics	Beneficial corp. topics	Controversial sov. topics
Carbon emissions (Scope 1+2)	Adult entertainment	Best in class (among peers)	High fossil fuels exports
	Alcohol		Child labor
	Business ethics violations	Business ethics pioneers	Conventional weapons export
	Correctional facilities		Financial secrecy
Total reserves CO2 emissions (Oil, coal and gas)	Corruption	Diversity & inclusion pioneers	Low share of women in national parliament
	Defense & weapons		Political rights
	Environmental damage & disasters	Environmental protection	Voice and accountability
	Ethical norms violations		Press freedom
Water use (Direct and purchased)	Extreme executive pay	Great work environment	Rule of law
	Fossil fuels		Authoritarian state
	Gambling	Green energy production	Civil liberties
	GMO		Corruption
Waste generation (Landfill and incineration)	High GHG emissions	Low GHG emissions	Government effectiveness
	Human & labor rights violations		Peace
	Israeli settlements	Health & safety pioneers	Not free state
	Meat production		Political stability - no violence
Renewable power generation (Wind, solar, hydro, geothermal and wave/tidal)	Nuclear	Human & labor rights pioneers	Regulatory quality
	Pork		Sanctions
	Stem cells		Slavery
	Tax avoidance		Tax haven
	Tobacco		

The topics are based on more than 50 well renowned sources

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Sources

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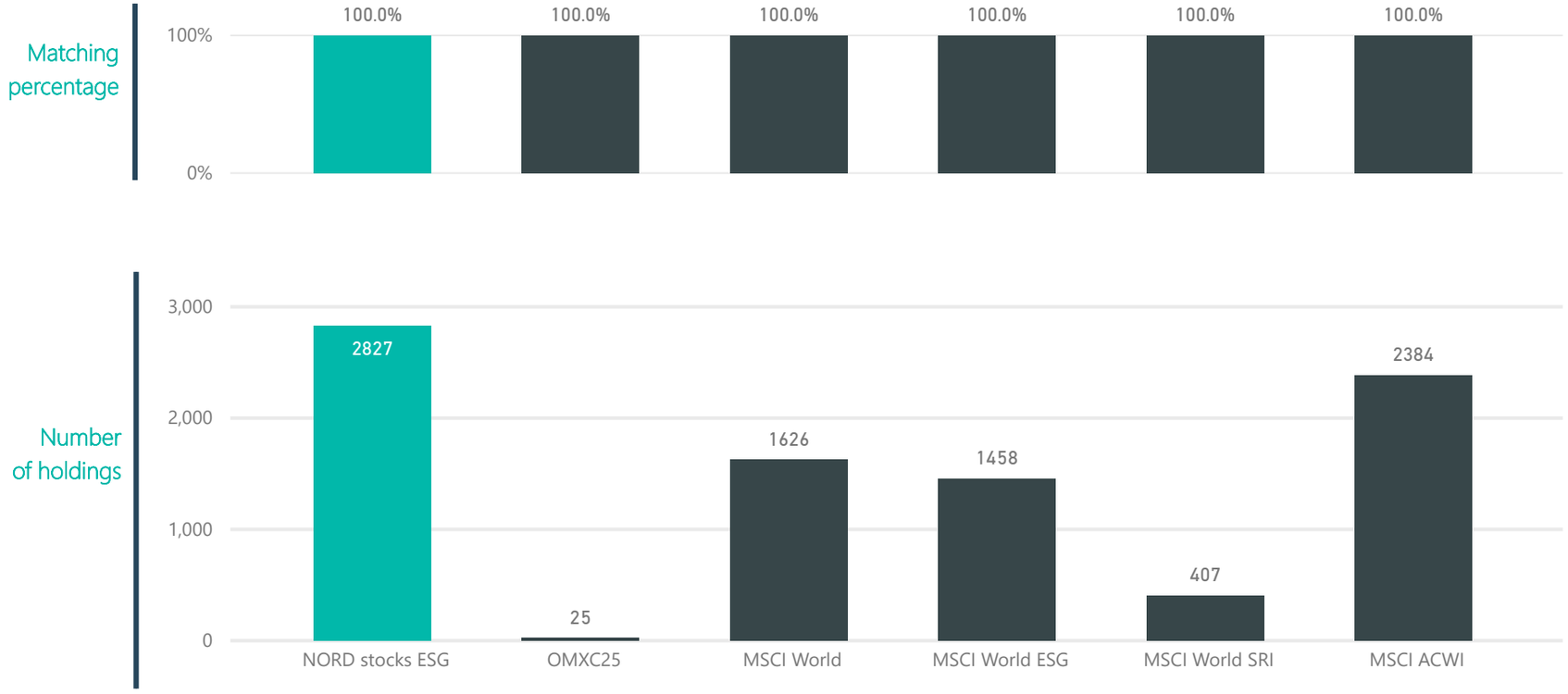
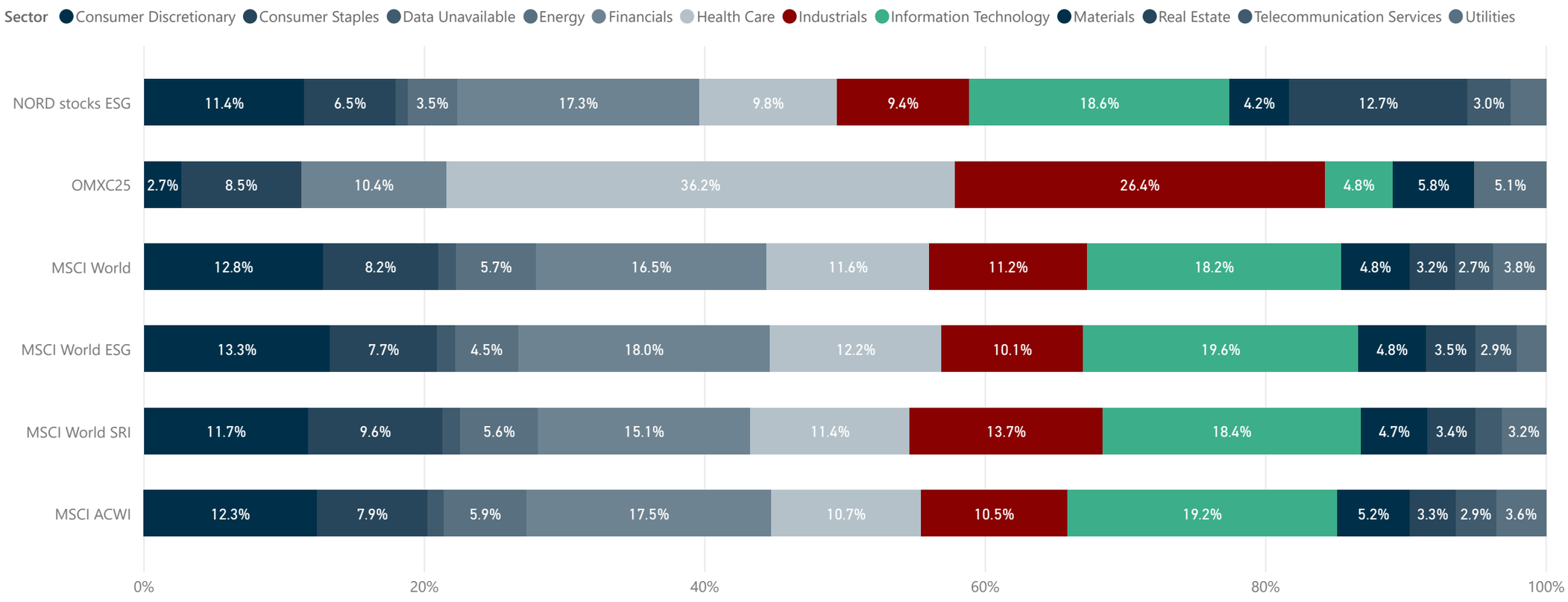
Equities

Number of holdings and matching percentage

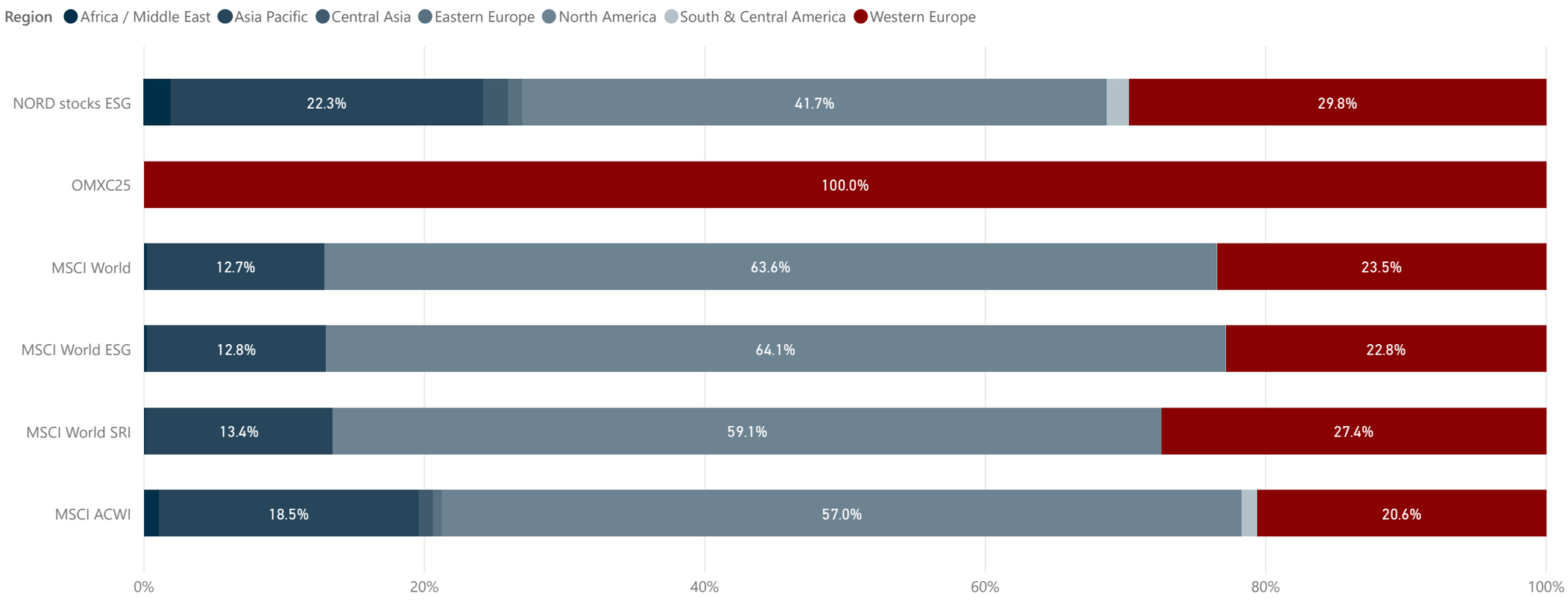


- The matching percentage is the share of the given portfolio which is matched in Matter's database with either environmental impact or controversial and beneficial companies.
- A match can be obtained through ISIN or name matching.
- The figure to the left is the number of underlying securities in the analysed equity portfolio and the selected benchmark indices.

Sector allocation



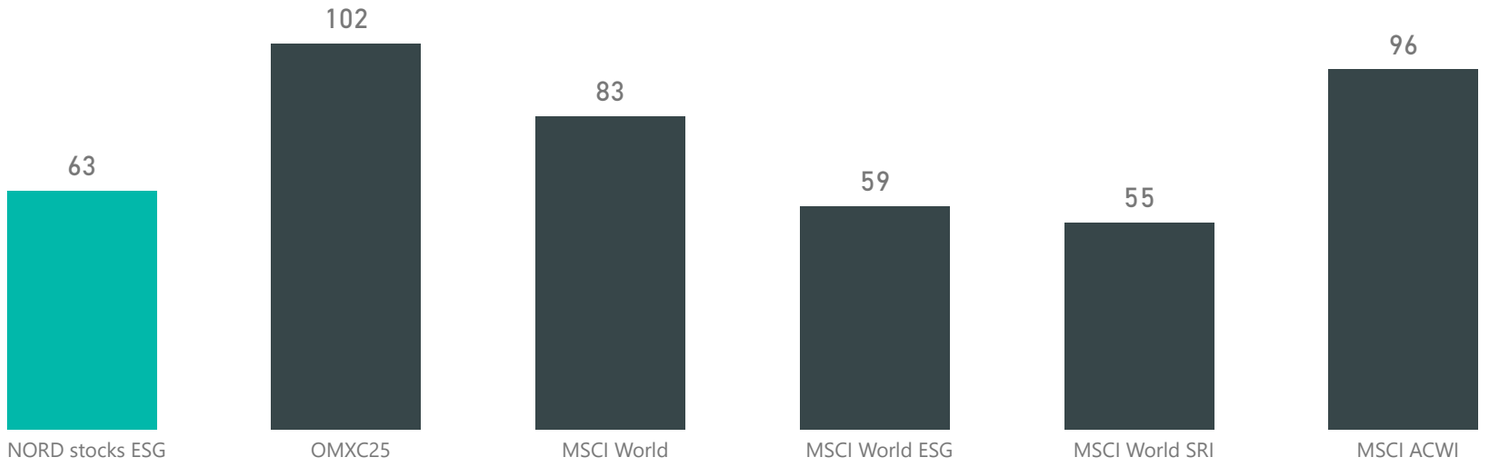
Regional allocation



Carbon scope 1 + 2 emissions

Portfolio carbon emissions

Carbon: 1+2 (tonnes CO2e) per m€



Companies with largest carbon emission impact per portfolio

NORD stocks ESG	OMXC25	MSCI World	MSCI World ESG	MSCI World SRI	MSCI ACWI
Public Joint Stock Company Gazprom	A.P. Møller - Mærsk A/S	Exxon Mobil Corporation	Exxon Mobil Corporation	HeidelbergCement AG	ArcelorMittal
RWE Aktiengesellschaft	DSV A/S	LafargeHolcim Ltd	ArcelorMittal	TOTAL S.A.	Exxon Mobil Corporation
Valero Energy Corporation	Ørsted A/S	RWE Aktiengesellschaft	DuPont de Nemours, Inc.	Air Products and Chemicals, Inc.	LafargeHolcim Ltd
LafargeHolcim Ltd	ROCKWOOL International A/S	ArcelorMittal	LafargeHolcim Ltd	WEC Energy Group, Inc.	DuPont de Nemours, Inc.
Sasol Limited	Carlsberg A/S	DuPont de Nemours, Inc.	Valero Energy Corporation	ConocoPhillips	Sasol Limited

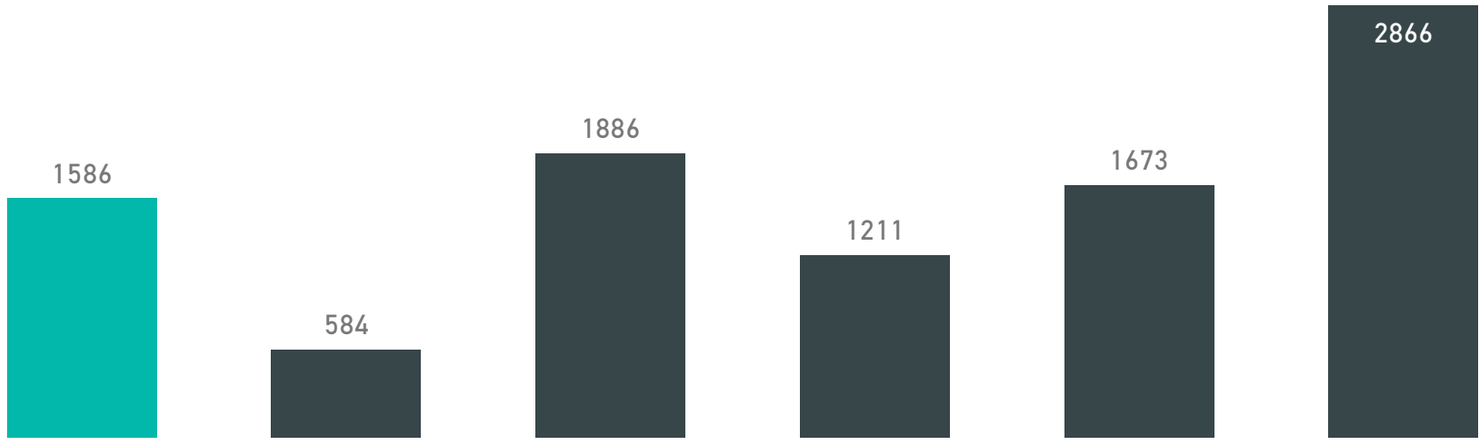
- This graph compares the portfolios' carbon scope 1+2 emissions.
- For more information as to the scope of the carbon emissions measurement, please refer to the Appendix.

- There is usually large differences between carbon emissions of portfolio companies
- To the left the top 5 companies with highest carbon emission impact on the portfolio are listed.
- A company's portfolio impact depends both on i) the total emissions of the company, ii) the size of the company and iii) the portfolio's weight of that company.
- This is useful when determining how to change a portfolios environmental profile; obtaining lower portfolio CO2 emissions can, for example, be done through less ownership of the companies with highest emission impact.

Oil, coal and gas reserves CO2 emissions

Portfolio reserves CO2 emissions

Total reserves CO2 emissions (tonnes) per m€



Companies with largest reserves CO2 emission impact per portfolio

NORD stocks ESG	OMXC25	MSCI World	MSCI World ESG	MSCI World SRI	MSCI ACWI
Public Joint Stock Company Gazprom	A.P. Møller - Mærsk A/S	Exxon Mobil Corporation	Exxon Mobil Corporation	TOTAL S.A.	Exxaro Resources Limited
PJSC LUKOIL	Ørsted A/S	Glencore plc	Glencore plc	Suncor Energy Inc.	Public Joint Stock Company Gazpror
TOTAL S.A.		BHP Group	BP p.l.c.	Teck Resources Limited	Exxon Mobil Corporation
Glencore plc		BP p.l.c.	TOTAL S.A.	Cenovus Energy Inc.	Glencore plc
Joint Stock Company Rosneft Oil Cor		Chevron Corporation	Teck Resources Limited	ConocoPhillips	BHP Group

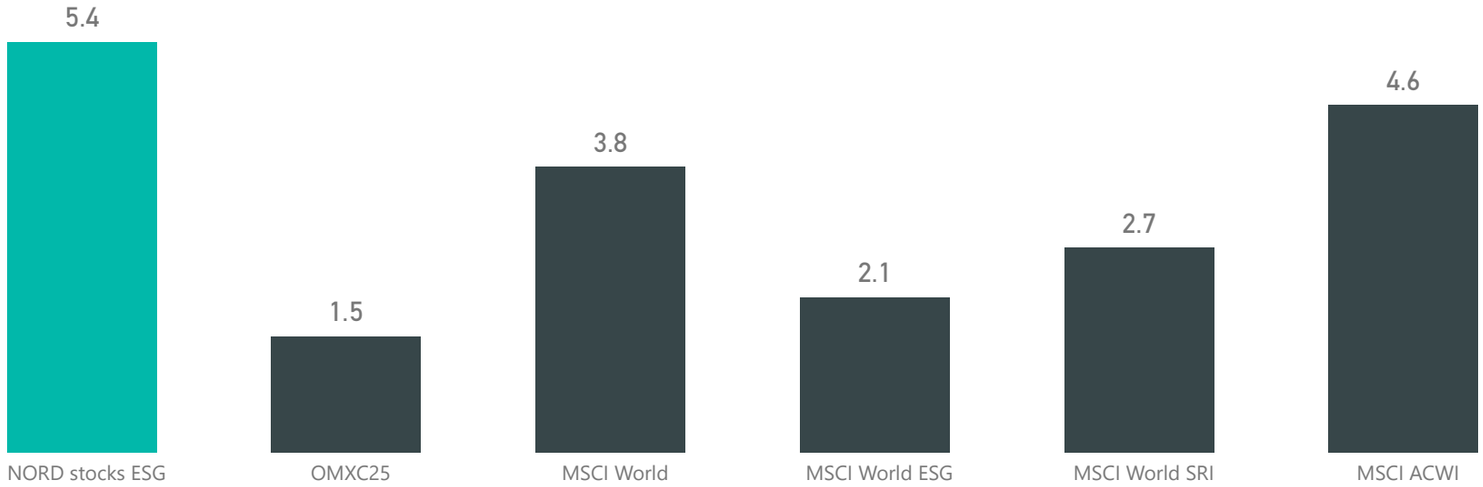
- Reserves CO2 emissions represents the amount of potential or future CO2 emissions owned through the portfolio.
- The figure to the left is an overview of the CO2 emissions reserves of the different portfolios and benchmark indices.

- There are usually large differences between reserves carbon emissions of portfolio companies.
- To the left the top 5 companies with highest reserves carbon emission impact on the portfolio are listed.
- A company's portfolio impact depends both on i) the total emissions of the company, ii) the size of the company and iii) the portfolio's weight of that company.
- This is useful when determining how to change a portfolios environmental profile; obtaining lower portfolio reserves CO2 emissions can, for example, be done through less ownership of the companies with highest emission impact

Waste generation

Portfolio Waste generation

Waste: landfill & incineration (tonnes) per m€



Companies with largest waste generation impact per portfolio

NORD stocks ESG	OMXC25	MSCI World	MSCI World ESG	MSCI World SRI	MSCI ACWI
A.P. Møller - Mærsk A/S	PJSC PhosAgro	South32 Limited	South32 Limited	Sumitomo Metal Mining Co., Ltd.	Sumitomo Metal Mining Co., Ltd.
ROCKWOOL International A/S	Polymetal International plc	BHP Group	Polymetal International plc	Kajima Corporation	Suncor Energy Inc.
Carlsberg A/S	KGHM Polska Miedz S.A.	Sumitomo Metal Mining Co., Ltd.	BHP Group	DuPont de Nemours, Inc.	Obayashi Corporation
Vestas Wind Systems A/S	Sumitomo Metal Mining Co., Ltd.	RWE Aktiengesellschaft	Sumitomo Metal Mining Co., Ltd.	Obayashi Corporation	Boliden AB (publ)
DSV A/S	RWE Aktiengesellschaft	Kajima Corporation	hina Shenhua Energy Company Limit	LyondellBasell Industries N.V.	Solvay SA

- This graph compares the portfolios' waste (landfill & incineration) generation
- Recycled waste and nuclear waste is not included

- There is usually large differences between waste generation of portfolio companies
- To the left the top 5 companies with highest waste generation impact on the portfolio are listed.
- A company's portfolio impact depends both on i) the total waste generation of the company, ii) the size of the company and iii) the portfolio's weight of that company
- This is useful when determining how to change a portfolios environmental profile; obtaining lower portfolio waste generation can, for example, be done through less ownership of the companies with highest waste generation impact

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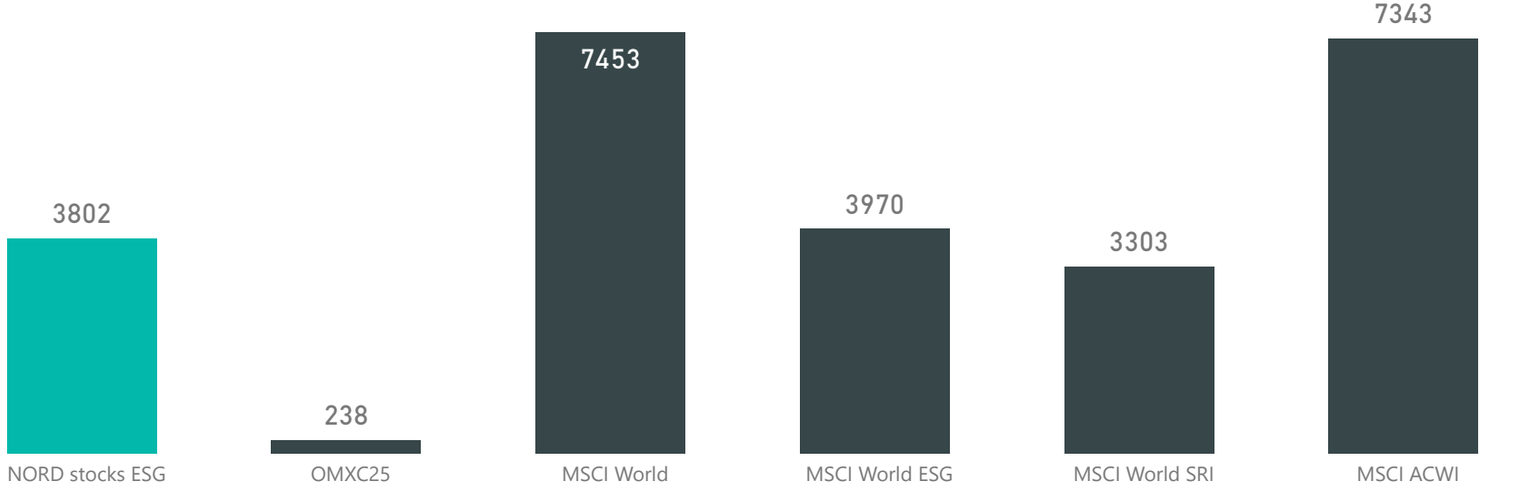
Water usage

Portfolio Water usage

Water: direct & purchased (cubic metre) per m€



Companies with largest water usage impact per portfolio

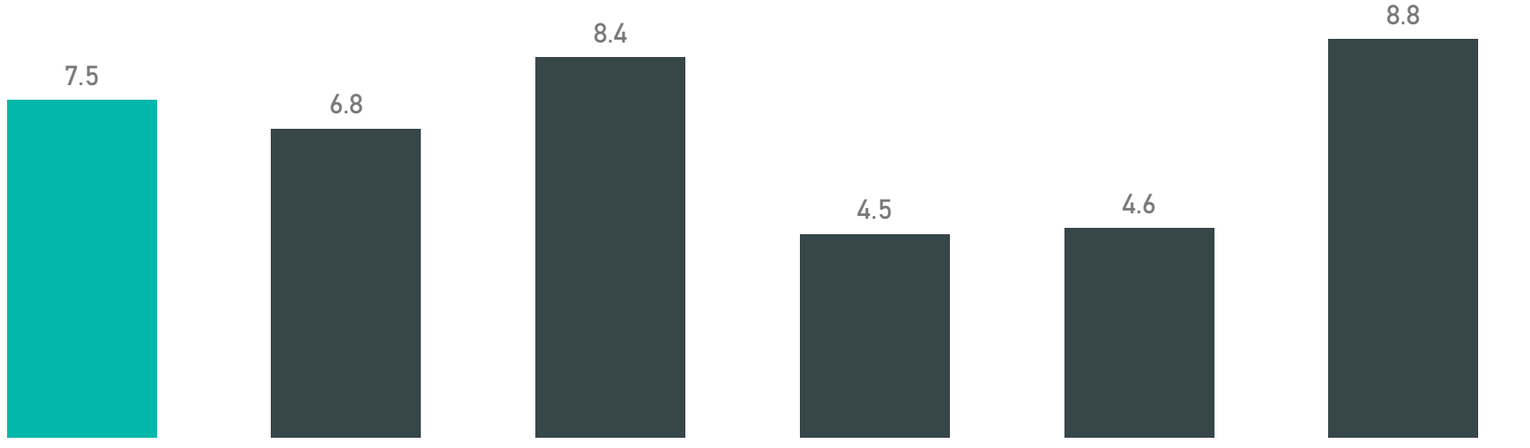
NORD stocks ESG	OMXC25	MSCI World	MSCI World ESG	MSCI World SRI	MSCI ACWI
SSE plc	Carlsberg A/S	Exelon Corporation	Exelon Corporation	SSE plc	Exelon Corporation
Exelon Corporation	Novozymes A/S	ectric Power Company Holdings, Inco	SSE plc	WEC Energy Group, Inc.	Enel SpA
lic Service Enterprise Group Incorpor	DSV A/S	Enel SpA	olic Service Enterprise Group Incorpor	Tokyo Gas Co.,Ltd.	SSE plc
Dominion Energy, Inc.	Royal Unibrew A/S	SSE plc	DuPont de Nemours, Inc.	Osaka Gas Co., Ltd.	lectric Power Company Holdings, Incc
ENGIE SA	GN Store Nord A/S	ENGIE SA	Berkshire Hathaway Inc.	CMS Energy Corporation	ENGIE SA

- This graph compares the portfolios' water usage
- There is usually large differences between water usage of portfolio companies
- To the left the top 5 companies with highest water usage impact on the portfolio are listed.
- A company's portfolio impact depends both on i) the total emissions of the company, ii) the size of the company and iii) the portfolio's weight of that company
- This is useful when determining how to change a portfolios environmental profile; obtaining lower portfolio water usage can, for example, be done through less ownership of the companies with highest water usage impact

Renewable energy generation

Portfolio Renewable energy generation

Renewable energy: wind, solar, hydroelectric, geothermal, wave & tidal (MWh) per m€



Companies with largest renewable energy generation impact per portfolio

NORD stocks ESG	OMXC25	MSCI World	MSCI World ESG	MSCI World SRI	MSCI ACWI
Iberdrola, S.A.	Ørsted A/S	Enel SpA	NextEra Energy, Inc.	EDP - Energias de Portugal, S.A.	Enel SpA
trais Elétricas Brasileiras S.A. - Eletrob		NextEra Energy, Inc.	Iberdrola, S.A.	Meridian Energy Limited	NextEra Energy, Inc.
E.ON SE		Iberdrola, S.A.	E.ON SE	Norsk Hydro ASA	Iberdrola, S.A.
China Yangtze Power Co.,Ltd.		E.ON SE	Fortum Oyj	SSE plc	E.ON SE
RWE Aktiengesellschaft		ENGIE SA	Uniper SE	UPM-Kymmene Oyj	ıtrais Elétricas Brasileiras S.A. - Eletrob

- The renewable energy category contains wind, solar, geothermal, hydroelectric and wave & tidal

- There are usually large differences between renewable energy generation of portfolio companies
- To the left the top 5 companies with highest renewable energy generation impact on the portfolio are listed.
- A company's portfolio impact depends both on i) the total renewable energy generation of the company, ii) the size of the company and iii) the portfolio's weight of that company
- This is useful when determining how to change a portfolios environmental profile; obtaining higher portfolio renewable energy generation can, for example, be done through increased ownership of the companies with highest renewable energy generation impact

Carbon scope 1+2 emissions per sector

	NORD stocks ESG	OMXC25	MSCI World	MSCI World ESG	MSCI World SRI	MSCI ACWI
Utilities	8.77	5.02	26.19	5.22	8.57	25.43
Industrials	5.14	86.19	8.02	8.60	7.42	7.30
Materials	23.05	6.83	21.29	21.62	16.43	28.45
Energy	15.28	0.00	17.90	13.81	14.24	22.74
Consumer Discretionary	3.06	0.36	3.30	3.33	2.65	4.10
Information Technology	2.63	0.33	1.53	1.70	1.25	2.25
Consumer Staples	2.02	2.68	2.60	2.55	2.41	2.58
Financials	0.46	0.02	0.33	0.35	0.24	0.39
Health Care	0.67	0.96	0.79	0.92	0.64	0.81
Real Estate	0.95	0.00	0.33	0.37	0.47	0.40
Telecommunication Services	0.79	0.00	0.48	0.53	0.29	0.72

- The heatmaps seen to the left represent a sector breakdown of the portfolios' carbon (scope 1+2) figures shown previously.

- The numbers represent the carbon emissions per portfolio, seen earlier in the report, within each sector. If the number is 0, the given portfolio doesn't hold any companies within that particular sector.

- As a portfolio consisting solely of e.g. financials or IT companies will almost always carry lower carbon emissions than a portfolio containing only e.g. energy or materials companies, this analysis is valuable to determine how the portfolios and benchmarks fare per sector. For example, if a portfolio has higher Materials carbon emissions compared to the benchmarks, the portfolio holds relatively high-emitting Materials companies compared to the benchmarks.

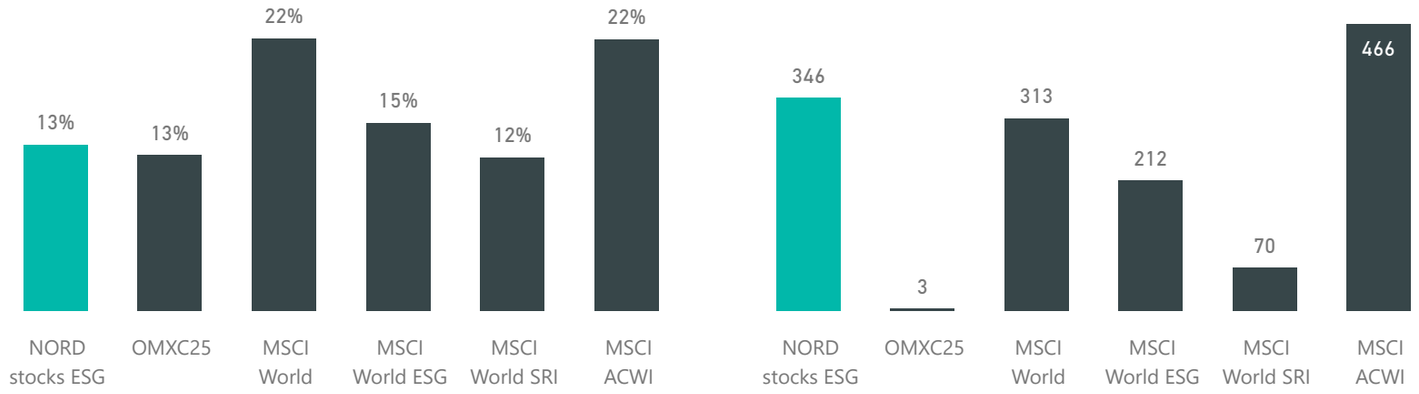
- A breakdown like the one shown here can be made for all of the environmental metrics

Aggregated statistics of controversial corporate flags

Share of portfolio

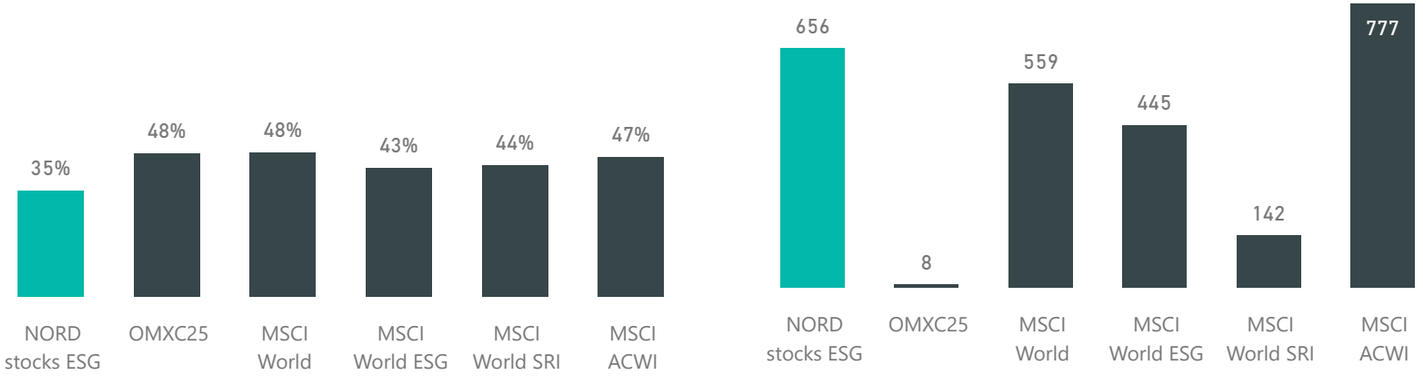
Number of companies

Significant controversial corporate flags



- The statistics to the left capture all companies in the portfolios which are flagged with any controversial corporate flag; these can all be seen on the intro pages.

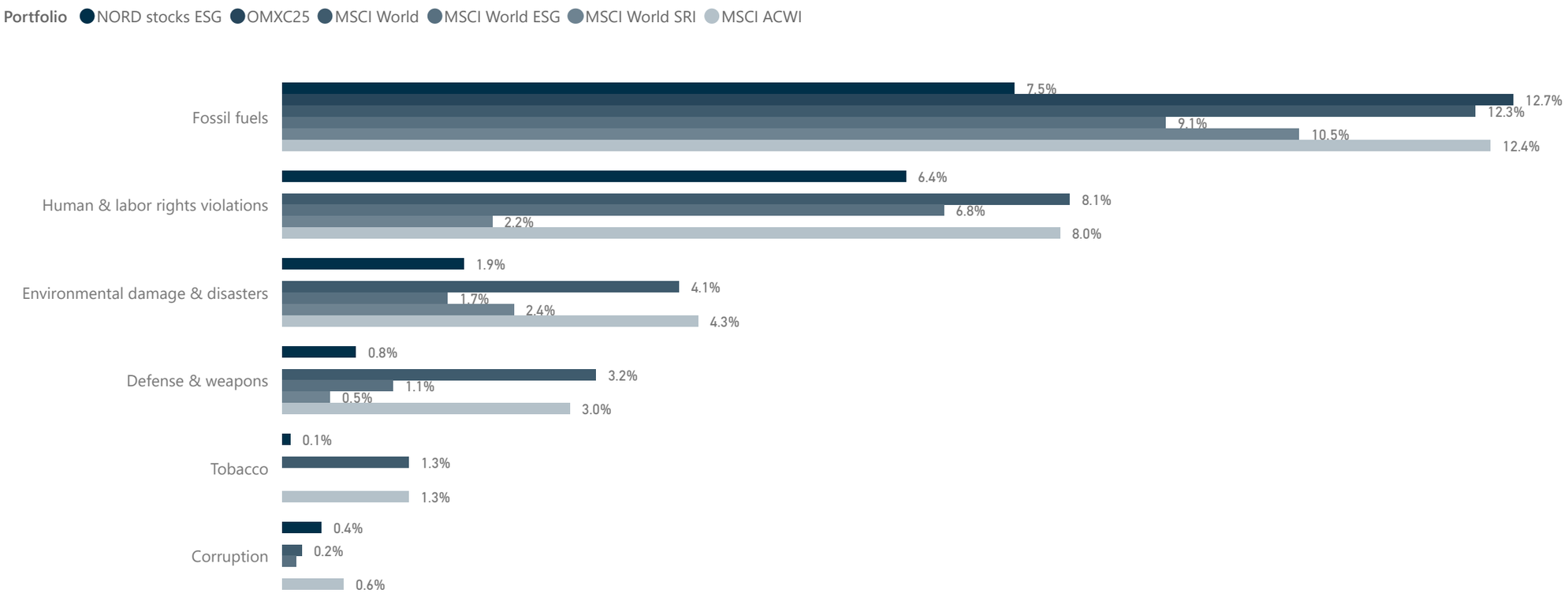
All controversial corporate flags



- The statistics to the left capture all companies in the portfolios which are flagged with one or more of the following topics: defense & weapons, fossil fuels, environmental damage, tobacco, human/labor rights violations and corruption

Portfolio shares per significant controversial corporate flag

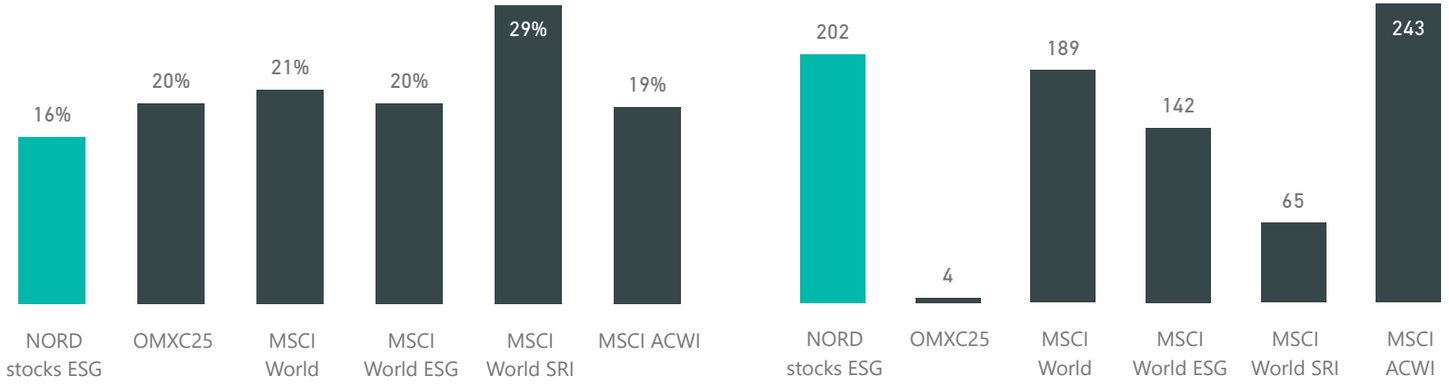
Share of portfolio



Aggregated statistics of beneficial corporate flags

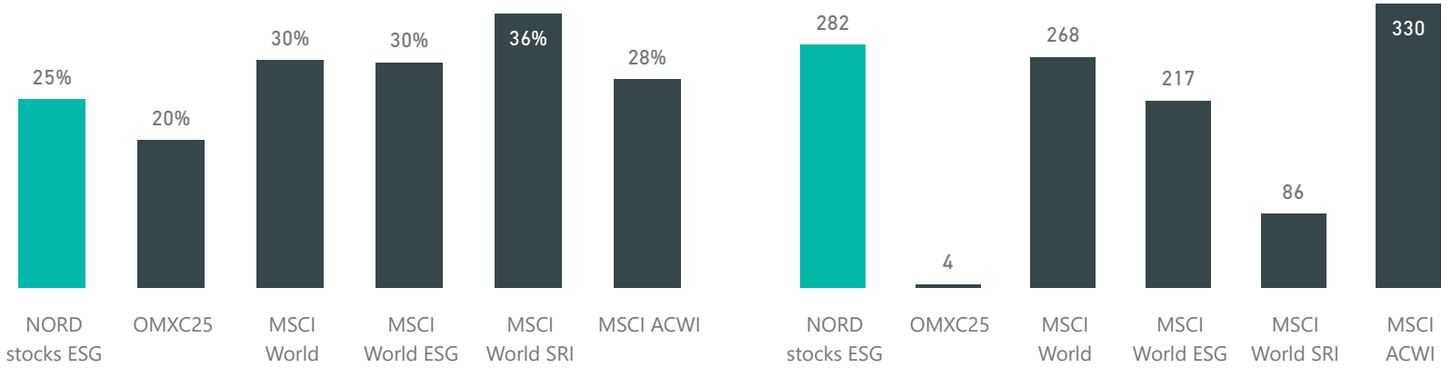
Share of portfolio | Number of companies

Significant beneficial corporate flags



- The statistics to the left capture all companies in the portfolios which are flagged with one or more of the following beneficial topics: diversity & inclusion pioneers, environmental protection, green energy production and human/labor rights pioneers.

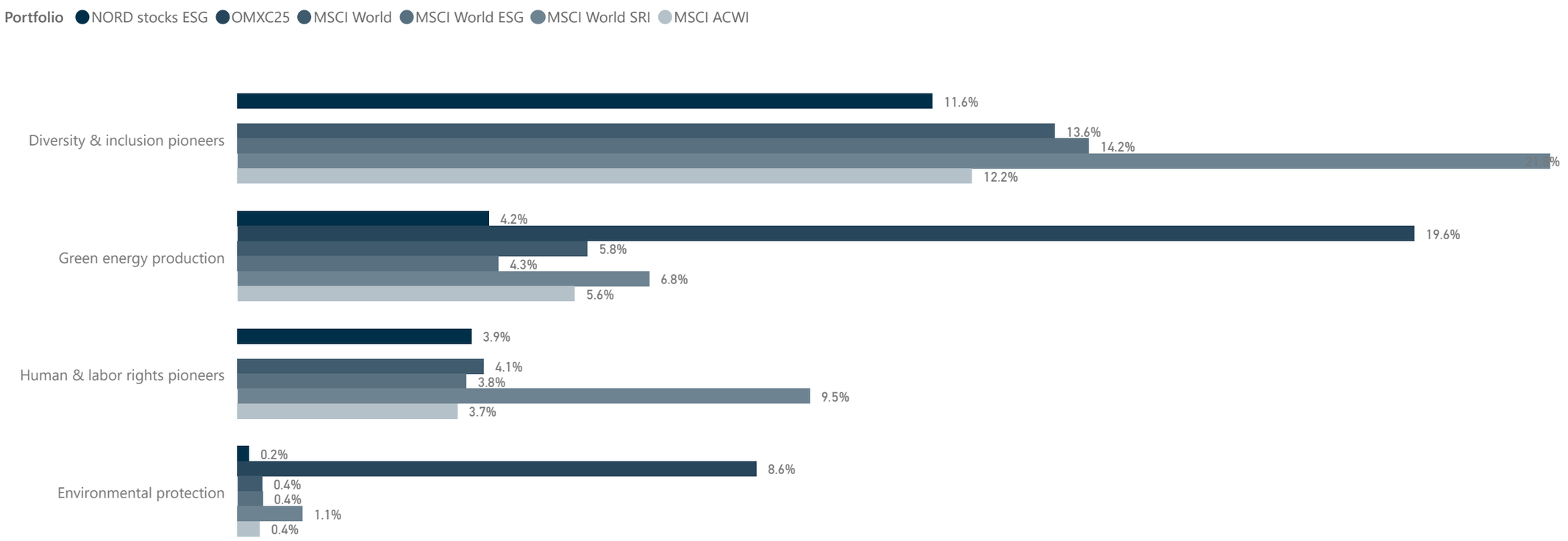
All beneficial corporate flags



- The statistics to the left capture all companies in the portfolios which are flagged with any beneficial corporate flag; these can all be seen on the intro pages.

Portfolio shares per significant beneficial corporate flag

Share of portfolio



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Appendix

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Definitions (1/2)

Trucost data and estimates
Calculations are based on Trucost Eboard data. The data samples employed are either reported by portfolio companies or estimated based on either prior emissions data or industry and peer performance. We calculate the carbon footprint for both equities and corporate bonds, but do not have data available on government bonds.

Carbon Scope 1 (tonnes CO2e)
Greenhouse gas emissions generated from burning fossil fuels and production processes which are owned or controlled by the company (reference: GHG Protocol).

Carbon Scope 2 (tonnes CO2e)
Greenhouse gas emissions from consumption of purchased electricity, heat or steam by the company (reference: GHG Protocol).

Carbon Scope 3 (tonnes CO2e)
Other indirect Greenhouse gas emissions, such as from the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc. (in line with GHG Protocol standards) (reference: GHG Protocol).

CO2 Equivalent (CO2e)
Each greenhouse gas differs in its ability to absorb heat in the atmosphere. Calculations of greenhouse gas emissions are presented in units of millions of metric tons of carbon equivalents (MMTCE), which weights each gas by its GWP value, or Global Warming Potential. The Global Warming Potentials used in this analysis are:

Greenhouse gas	CO2 equivalent
• Carbon Dioxide	1
• Methane	25
• Sulphur Hexaflouride	22,8
• Nitrus Oxide	298
• Per Fluoro Carbons	7850
• Hydro Flouro Carbons	2400

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Definitions (2/2)

Total Reserves CO2 emissions (tonnes)
The calculations of total reserves for the portfolio is based on the list of companies in the portfolio that disclose fossil fuel reserves. These reserves have been converted into CO2 emissions to express amount of potential/future CO2 emissions owned by the portfolio.

Water Direct + Purchased (m3)
The volume of water that is directly abstracted or purchased from utility companies

Waste generation (tonnes)
Quantity of waste that is generated by the company and incinerated or disposed to landfill

Renewable energy generation (MWh)
MWh energy produced through renewable energy sources (hydro, solar, wind, geothermal, wave & tidal)

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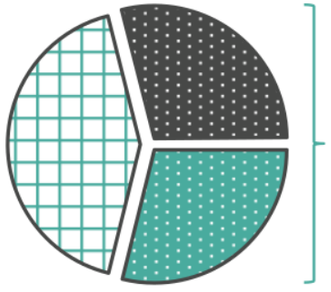
Methodology: Environmental Metrics

Example portfolio

Portfolio

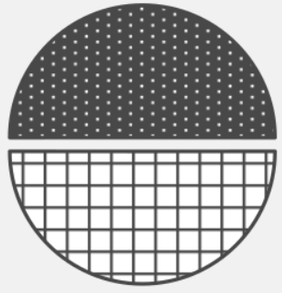


€1M

Company A Equity	30%
Company B Equity	30%
Company B Fixed income	40%

Portfolio company profiles

Company A



Total equity value (market cap)	€500M
Total debt value	€500M
Enterprise value*	€1B
CO2 emissions	1M tons

Company B

Total equity value (market cap)	€2B
Total debt value	€1B
Enterprise value*	€3B
CO2 emissions	2M tons

Portfolio CO2 emissions

Company A

Ownership	30% • €1M	€300,000
Enterprise value		€1B
Ownership %	€300,000 / €1B	0.03%
Ownership of CO2 emissions	1M tons * 0.03%	300 tons

Company B

Ownership	(30% + 40%) • €1M	€700,000
Enterprise value		€3B
Ownership %	€700,000 / €3B	0.023%
Ownership of CO2 emissions	2M tons * 0.023%	467 tons

Portfolio

Portfolio CO2 emissions	300 tons + 467 tons	767 tons

- This example portfolio carries CO2 emissions of 767 tons per €1M invested
- The metrics are typically reported per €1M invested, but it is simple to adjust to other portfolio sizes: for a €100,000 portfolio, the CO2 emissions would be 76,7 tons