

Triodos Socially Responsible Investment Funds' environmental footprints

Why environmental footprinting

The Platform for Carbon Accounting Financials (PCAF) was launched in December 2015, at the Climate Conference in Paris. One of the main goals of the Platform was to create a new way to assess carbon emission footprints of financial institutions. Triodos Bank is a PCAF member. As part of the implementation of the PCAF approach by Triodos Bank, Triodos Investment Management also reports on the carbon footprint for its Socially Responsible Investment funds (SRI).

Carbon footprint

The carbon footprint of a company is its footprint in the atmosphere; its greenhouse gas emissions, counted in CO₂ equivalents. An investment fund that holds shares in several companies, is the owner of these companies, relative to the shares it owns. Consequently, the fund also bears responsibility of a part of these companies' greenhouse gas emissions. Together these parts make up the carbon footprint of an investment fund. This 'carbon footprinting' aims to show stakeholders the consequences of financial institutions' investment decisions for the climate. By publicly reporting the carbon footprints of our funds, we aim to enhance the transparency of the financial industry about its impact on climate change and stimulate the industry to contribute to accelerating the transition to a zero-carbon emissions economy. As for the corporate holdings in our SRI funds we also report on water use and waste production, to the extent the data allow.

No goal itself

Triodos' SRI funds invest in companies that have a positive contribution to the seven transition themes that we have identified. We carefully select companies that deliver a clear contribution to these themes, and not primarily because they have a very low carbon, water or waste footprint. Our minimum standards, which all companies have to meet to be eligible for investment, nevertheless include requirements on climate change policies and targets for greenhouse gas emissions reduction, especially for industries that we consider 'high-risk' due to their carbon emissions exposure. Responsible water use is also addressed in our minimum standards. Based on these minimum standards, we exclude companies in oil and gas extraction, coal mining and production of energy from fossil fuels.

The carbon footprint of our funds can therefore be regarded as one of the results of our investment strategy, but we intend to measure the 'real' impact more directly in line with the seven investment themes. The footprint figures help us to monitor the results of the strategy but are not a primary portfolio steering tool. Aiming for the lowest footprint in the short term would result in a portfolio with a strong sector bias towards typically low-emissions industries, such as services companies. Instead, we select companies for their positive impact, being well aware of the fact that even producing solar panels, wind power turbines and organic food requires energy and therefore has a carbon footprint. For a fund investing in companies that offer sustainability solutions, the key challenge is to identify companies that do such with best-practice climate policies, and to encourage relative laggards to align their operations with 'science based' emissions reduction targets, in line with goal of the Paris Climate Agreement.

Methodology

The carbon footprint of investee companies is calculated conform the Greenhouse Gas Protocol (GHG Protocol), a standard for emissions calculation. This protocol divides a company's emissions in three scopes:

- **scope 1** is a company's direct emissions,
- **scope 2** are emissions from purchased power (electricity, steam, heat or cooling for own use)
- **scope 3** includes emissions from purchased products / parts used, but also emissions caused by a company's products when used.

The data we report, represent scope 1 and scope 2 emissions. These emission data are available from carbon data providers, while approaches to scope 3 emissions are still being developed and therefore far less standardised, compared with scope 1 and 2 data. Quality scope 3 data are not sufficiently available for consistent reporting. Once they are, we will include also scope 3 emissions in the total footprint. For now, looking into scope 3 data can be useful e.g. to see which industries typically have a large emission exposure, upstream in their supply chain (mined materials), or downstream, as result of the emissions that their products produce over their life-time (fossil fuel vehicles).

Calculation

We calculate the funds' footprints, attributing investee company's greenhouse gas emissions to the fund, based on the fund's ownership share of total enterprise value (EV), as recommended by PCAF. We use EV, instead of market capitalization because the EV encompasses the sum of all outstanding shares, bonds and loans. Given that our SRI funds also invest in corporate bonds, we believe a calculation based on EV best represents the share of 'ownership' and avoids double counting.

Absolute footprint

The funds' total, absolute carbon footprint in tons of CO₂eq or CO₂ 'equivalents' (tCO₂) is the sum of the GHG-emissions (scope 1 and 2) of the companies in portfolio, based on the fund's share in each individual company: for each company in portfolio we calculate our share of the ownership, dividing the value of our shares and/or bonds by the total value of all outstanding shares and bonds (the EV). The company's total GHG-emissions multiplied by our share in total enterprise value is the footprint per company. The portfolio's total carbon footprint is the sum of the funds 'owned' shares in the carbon footprint of all investee companies.

Relative footprint

The data in the tables are based on the absolute carbon footprint of the fund's portfolio. The relative footprint is calculated by dividing the absolute footprint by the total value of the fund, thus arriving at a number of tons emitted per million euros invested. If, for example, the absolute footprint is 100 million tons CO₂eq and the fund's total value is 100 million euro, the relative footprint would be 1 million ton CO₂ per million euro invested, or 1 mln. tCO₂/mln. euro.

Difference to benchmark

The key metrics that we report show the difference between the fund's footprint and the benchmark index. For many, this says more than an absolute figure. Ideally, the fund's footprint should be smaller than the benchmark's. As said before, however, a small environmental footprint is not the primary goal of our SRI funds. If the difference to the benchmark is less pronounced, we should have a clear and convincing story to explain such result. The figures for Triodos Sustainable Pioneer Fund (TSPF) in the table below, for example, show that for this fund the difference of water and waste footprint to the benchmark is limited. Analysis of data shows that this fund, compared with the MSCI World Index, has a clear overweight in companies that have physical production activities, and therefore substantial water use and waste production. These companies have been carefully selected, however, for their contribution to one of our transition themes with their products and services.

Water and waste

The 'footprints' for water and waste are calculated conform the same method as the carbon footprint. The water footprint is calculated in cubic meters (m³) of water use, the waste footprint in tons of waste produced. We include direct and indirect water use, to provide a most complete picture of a company's 'water footprint', also including the water used upstream in its supply chain. It shows, for example, that financials have low direct process water and low indirect process water, whereas utilities have very high direct process water, and food products companies typically have high indirect water use. Regarding waste production we also take a broad approach, including waste-to-landfill and waste-to-incineration, both directly and indirectly, through the products and services that companies purchase.

Listed equity only

So far, we have concentrated on the footprinting of listed equity holdings, given the availability of data. Next, we will establish the footprint of corporate, sovereign, and green bonds, to approach the total footprint of the SRI funds as far as available data allow. This is work in progress.

Targets, scenario's and carbon neutrality

There are numerous initiatives that aim to accelerate the transition to a low-carbon economy. Triodos Bank and Triodos Investment Management follow these with interest and participate selectively, where we can make a difference. We have monitored the work of the Taskforce on Climate-Related Financial Disclosures (TCFD), for example, and are active members of PCAF. As part of this group, Triodos Bank is a co-sponsor of the Science-Based Targets initiative to create greenhouse gas emission reduction targets in line with climate science.

This is important, because these targets specify how far, and how quickly, a company can reduce its greenhouse gas emissions to stay within safe environmental boundaries. At the same time, carbon neutrality is not a short-term goal in itself for us. We want to avoid any unintended consequences that rigidly sticking to this agenda could create. However, by encouraging our investee companies to use renewable energy, and optimise energy efficiency, we aim to make the journey towards a low-carbon society together. Indeed, we engage with companies to lower their carbon footprint in a number of ways, for example via the Investor Decarbonisation Initiative, coordinated by ShareAction.

Carbon, water and waste footprints of Triodos Sustainable Equity Fund

		MSCI	TSEF	Difference to benchmark
CO ₂	Absolute footprint: tCO ₂	59,981	20,978	-65%
	Relative footprint: tCO ₂ / mln. euro invested	88	31	-65%
Water	Absolute water footprint: m ³	12,486,100	6,954,999	-44%
	Relative footprint: m ³ / mln. euro invested	18,222	10,150	-44%
Waste	Absolute footprint: tons	4,520	3,129	-31%
	Relative footprint: tons / mln. euro invested	7	5	-31%

Carbon, water and waste footprints of Triodos Sustainable Pioneer Fund

		MSCI	TSPF	Difference to benchmark
CO ₂	Absolute footprint: tCO ₂	24,441	14,748	-40%
	Relative footprint: tCO ₂ / mln. euro invested	88	53	-40%
Water	Absolute water footprint: m ³	5,087,885	4,709,034	-7%
	Relative footprint: m ³ / mln. euro invested	18,222	16,865	-7%
Waste	Absolute footprint: tons	1,842	1,832	-0.5%
	Relative footprint: tons / mln. euro invested	6.6	6.5	-0.5%

For comparison reasons, the absolute CO₂, water and waste footprints of the benchmark and both funds are calculated based on the funds' total Assets under Management.

Data / sources

The footprints are calculated using carbon emissions data from Oekom research AG, and water and waste data from S&P Trucost (copyright c 2018 S&P Trucost Limited). For the MSCI world benchmark, coverage by weight is 92% for carbon, 90% for water data and 85% for waste. For the TSEF portfolio coverage of assets invested – by weight - is 100% for carbon, 100% for water, and 90% for waste. For TSPF, the fund portfolio, of assets invested – by weight, 98% is covered by carbon data; 98% for water and 90% for waste.

NB: Water and Waste footprints may seem large in absolute terms, compared to other funds, as both direct and indirect water use and waste are included. Exact scope of reporting is therefore important when comparing the data.

As the data about a company's environmental performance are not reported per quarter, as are the financial data, and need to be compiled, checked and to some extent modelled by our data providers, there is a time-lag in the environmental footprinting. We use most recently available data from our providers, which means data from at least one year ago. In the table above, we use GHG, water and waste data over FY 2016-17, and company enterprise value and revenues per end of that same reporting year. The footprint is based on the current composition of the fund, i.e. the portfolio composition per end Q3 2018.

Triodos Investment Management, October 2018