

Responsible investment 2022

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In brief: what we achieved in 2022

Exercise of shareholder rights							
Engagement	Exercise of voting rights						
 Completed three-year dialogue with seven chocolate manufacturers; for more details see our <u>website</u> Conducted dialogue on ESG themes with 400 companies 	 Exercised voting rights at all Swiss companies. Voted on all agenda items at 121 companies abroad Took decision to double the number of foreign-based companies in which we exercise our voting rights from 2023 onwards 						

Integration into the securities portfolio

- Completed search for a partner to develop a bespoke ESG benchmark for investments in emerging market government bonds
- Integrated Scope 3 data when calculating greenhouse gas emissions in the climate-efficient equity index
- Progressively implemented responsible investment in the private market investments, working with our external asset managers
- Completed search for a partner to measure the contribution made by companies in the equity and corporate bond portfolio to the UN Sustainable Development Goals. More information on this will be provided in next year's report (2024).
- Took part in the third voluntary climate goal alignment test run by the Federal Office for the Environment (FOEN) and the State Secretariat for International Finance (SIF)

Negative criteria	Strategic risk analysis	Positive criteria
 Extended coal exclusions to companies that produce electricity from coal Excluded 115 companies Excluded Russia 	 Analysed dependency on electricity supply Decided to build knowledge base on biodiversity during 2023 	 Made a CHF 454 million investment in green bonds Provided funding for renewable energy (CHF 212 million) and social housing (CHF 74 million) in the private market investments

Integration into the direct real estate portfolio

- CECBs: PUBLICA obtains Cantonal Energy Certificates for Buildings (CECBs) for the properties. Currently, 30 CECBs are on file.
- Launched the operational optimisation of existing property portfolio project to implement straightforward
 optimisations swiftly. Recommendations for medium- to long-term actions flow into maintenance planning.
- Took part in the third voluntary climate goal alignment test run by the Federal Office for the Environment (FOEN) and the State Secretariat for International Finance (SIF)

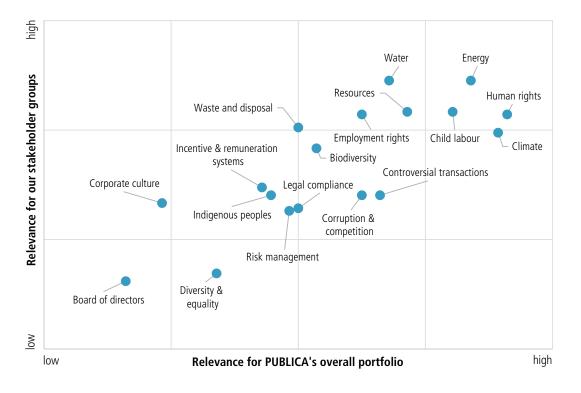
New build projects (examples)	Refurbishment projects
 «Am Industrieplatz 5» in Neuhausen a. R.: a perfect fit for the portfolio owing to immediate proximity of public transport Minergie-P certification, carsharing, cargobike «Chêne Park» in Renens: one of three buildings became operational in October 2022 ideally located between two major railway stations with connections to Lausanne powered by its own solar panels, district heating, e-charging stations 	 Put the «Free Cooling» project at the «La Maladière» property in Neuchâtel into operation Reducing CO₂ emissions: five years before the technical lifecycle of a major heating installation comes to an end, PUBLICA is investigating alternative energy sources and how they could be used technically. Installing solar panels and e-mobility are also considered when carrying out these project studies.

1 Our approaches and objectives

1.1 Our first report on responsible investment

This is PUBLICA's first comprehensive report on responsible investment. Our aim in publishing it is to create greater transparency and explain what we mean by responsible investment and where we have made progress. We owe it to our approximately 110 000 active members and pension recipients to inform them about the principles we apply when investing their pension assets. We have also observed growing public awareness of this issue. Responsible investment is a wide-ranging and complex topic, and we use the experience and findings we have gained to continually develop our approach to it. We intend to carry on that journey. Our aim is to produce further reports in subsequent years to highlight the impact of the measures we take. The report is based on the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), the Swiss Climate Scores developed by the Federal Council, and the ESG reporting recommendations laid down by the Swiss Pension Funds Association ASIP.

We conducted a survey among the delegates and parity commissions at PUBLICA covering environmental, social and governance issues, to find out which topics they are most interested in. We also evaluated these internally. The following materiality matrix is the result.



When investing responsibly, we address many of the issues that are mentioned in the materiality matrix. Energy, water, human rights and child labour are considered especially relevant. We have worked on these issues separately and published reports about them on <u>our website</u>. Our strategic risk analysis examined the issue of energy. Energy and water are issues that are also often addressed in dialogue with companies. Read more about the <u>«Andritz case» on our website</u>. It combines the issues of water and energy. Above and beyond that, we have not yet systematically analysed the issue of water, because we believe it has less influence on the portfolio than other issues. We tackled the issue of <u>child labour</u> in a three-year dialogue with seven companies that manufacture cocoa and chocolate. When companies violate human rights, we also address this through dialogue. If the dialogue does not lead to a successful outcome, we exclude the company concerned from the portfolio – as with <u>Ofilm</u>, a smartphone supplier.

1.2 Responsible investment at PUBLICA

Governance

The Board of Directors is PUBLICA's supreme management body. It lays down the principles and objectives of the responsible investment policy. In so doing, it is advised by the Investment Committee, which is also responsible for ensuring that the various responsible investment approaches are implemented in the individual asset classes. During 2022, the Board of Directors discussed responsible investment in government bonds and private market investments, and approved the third report on the management of climate-related opportunities and risks. The Investment Committee explicitly dealt with the responsible investment approaches in five of its six ordinary meetings, underscoring that our governing bodies engage with the issue on a regular basis.

Strategy

We invest responsibly by taking account of environmental, social and governance (ESG) criteria when investing our active members' pension assets. This allows us to improve the risk/return ratio over the long term.

Responsible investment is part of our fiduciary duty of due diligence and is embedded in our investment guidelines. The attention we pay to ESG criteria influences the security and profitability of our investments. The law does not permit us to deliberately forgo a market return.

PUBLICA adopts different approaches to responsible investment for each asset class, in order to take ESG issues into account when investing pension assets. These approaches are described in more detail in our responsible investment policy.

«Responsible investment is part of our fiduciary duty of due diligence and is embedded in our investment quidelines.»

«When companies commit systematic and serious violations of human rights, we address this through dialogue.»

Overview: the approaches we apply for each asset class

Asset class	Proportion of overall	Exercisii holder r	0	Integratin portfolio	g into the secu	Integrating into direct real estate investments		
	portfolio ¹	Engage- ment	- Exercising voting rights	Negative criteria	Strategic risk analysis	Positive criteria	New build projects	Refurbish- ment projects
CHF bonds, govern- ment bonds	30%				•			
Corporate bonds and equities	37%				•			
Real estate Switzer- land	9%						•	٠
Private market investments	21%				•	٠		
Precious metals	3%							

¹ As per 2022 strategic asset allocation for the open pension plans

Risk management

Our annual strategic risk analysis in 2022 prioritised the potential impact of electricity shortages on the portfolio, along with the risk of failure to adapt to climate change, and the geopolitical conflict between the US and China. The following table shows what we have done in relation to the individual issues. In 2023, we aim to build a knowledge base on biodiversity.

Issue	Actions
Dependency with regard to electricity supply	Dependency on electricity supply and the impact of an electricity shortage are high, and have increased sharply as a consequence of the Russia-Ukraine war. We analysed the dependencies and the vulnerability of the portfolio as a whole. This analysis showed that diversification by companies, sectors and regions is one of the best ways of meeting the challenge of an electricity shortage.
Failure to adapt to climate change	The actions implemented include introducing the climate-efficient equity index and reducing CO ₂ intensity in the corporate bonds. CO ₂ intensity is a measure of CO ₂ emissions compared with revenues. It also takes into account a security's weighting in the portfolio. We are currently analysing the implementation of an ESG benchmark for emerging market government bonds.
US-China conflict	We examined the US-China conflict in detail in the first half of 2021. One unresolved issue was that of human rights violations by companies and states. With regard to companies, SVVK-ASIR conducts regular screening to establish whether we are invested in companies that violate human rights in their value chains. In controversial cases, we seek dialogue with the companies concerned. PUBLICA plans to introduce a democracy filter for country selection for CHF bonds and government bonds.

Focal points and objectives

PUBLICA aims to continually improve its responsible investment strategy, paying particular attention to:



Environment: climate risks and achieving net-zero emissions by 2050 at the latest

Society: respect for human and workers' rights on the part of companies

Governance: clearly formulated expectations on the composition of the board of directors and on compensation.

The quantitative climate goals are:

Objectives by asset class								
	Objective	Proportion of overall portfolio ¹	Status					
Overall portfolio	Net-zero emissions by 2050 at the latest	100%	Being implemented					
Equities Switzerland Equities Japan	 Reduce transition risks by 30% compared with the benchmark Increase transition opportunities by 30% compared with the benchmark Reduce physical risks by 30% compared with the benchmark 	8%	Achieved					
Equities North America Equities Europe Equities Pacific ex. Japan Equities emerging markets	 Reduce transition risks by 50% compared with the benchmark Increase transition opportunities by 50% compared with the benchmark Reduce physical risks by 50% compared with the benchmark 	24%	Achieved					
Corporate bonds US and Europe	Reduce CO ₂ intensity by at least 40% compared with the benchmark	5%	Achieved					
Real estate Switzerland	Reduce CO ₂ emissions by 50% to 4.2 kg/m ² ERA	9%	Implementa- tion by 2035					

¹ As per 2022 strategic asset allocation for the open pension plans

We have not yet set any quantitative targets for equities CHF, government bonds, private market investments and precious metals.

The **benchmark** is a reference index that replicates a specific investment market and is used to assess performance. We use bespoke indices from MSCI for equities and Barclays indices for corporate bonds.

Physical risks are attributable to changes in climate. They include damage to real estate and infrastructure due to flooding, forest fires or hurricanes.

Transition risks and opportunities are created by regulations, incentives such as taxes, or subsidies.

Net-zero emissions describes a situation in which CO₂ emissions and CO₂ reduction are in balance, in other words, the quantity of CO₂ extracted from the atmosphere matches the quantity emitted.

Memberships

Memberships of recognised organisations and initiatives make it easier for us to access expert knowledge about responsible investment, help us conduct our dialogue with companies, and promote exchange with other institutional investors.

On 5 September 2022, PUBLICA joined the Federal Office of Energy's Exemplary Energy and Climate initiative. We did this to support the measures adopted by the Federal Council to achieve the climate goals, by acting in an exemplary manner in our investments and reporting regularly on the progress made in decarbonising the portfolio.

We are members of:

- ASIP Swiss Pension Funds Association
- <u>Climate Action 100+</u> (PUBLICA is a supporter)
- IIGCC Institutional Investors Group on Climate Change
- Inrate Responsible Shareholder Group
- SVVK-ASIR Swiss Association for Responsible Investments
- <u>UN PRI Principles for Responsible Investment</u>
- Exemplary Energy and Climate

We have also signed the Montréal Carbon Pledge.

1.3 Overview of key figures as at 31.12.2022

Exercise	of	voting	rights	by	PUBLICA

	Switzerland	in %	International	in %	Standard	Source
Companies in which votes were cast and proportion of invested capital in %	127	100%	121	5%	ASIP	Inrate / Minerva
Agenda items voted on as a proportion of total agenda items		100%		100%	ASIP	Inrate / Minerva
No. of agenda items	2 752		1 882		ASIP	Inrate / Minerva
of which votes in favour	2 232	81%	1 466	78%	ASIP	Inrate / Minerva
of which votes against	520	19%	353	19%	ASIP	Inrate / Minerva
of which abstentions	0	0%	63	3%	ASIP	Inrate / Minerva
No. of agenda items on climate issues	5		12		ASIP/SCS ¹	Inrate / Minerva
of which votes in favour	5	100%	11	92%	ASIP/SCS	Inrate / Minerva
of which votes against	0	0%	1	8%	ASIP/SCS	Inrate / Minerva
of which abstentions	0	0%	0	0%	ASIP/SCS	Inrate / Minerva
1 SCS - Swiss Climate Scores						

¹ SCS = Swiss Climate Scores

Dialogue conducted by PUBLICA

Dialogue conducted by Foblick			
	Memberships	Standard	Source
Memberships of engagement initiatives	Inrate Responsible Shareholder Group, SVVK-ASIR and Climate Action 100+	ASIP/SCS	PUBLICA
Is a credible stewardship strategy to mitigate climate change applied?	Yes	ASIP/SCS	PUBLICA
Climate stewardship strategy and report	SVVK-ASIR website	ASIP/SCS	SVVK-ASIR

	Number ²	in %	Standard	Source
Companies with which the dialogue is conducted and proportion of invested capital in $\%$	400	9%	ASIP	Inrate / SVVK-ASIR / Climate Action 100+
Companies that are subject to an active climate engagement strategy and proportion of invested capital in %	204	5%	ASIP / SCS	Inrate / SVVK-ASIR / Climate Action 100+

² Excluding double counting of companies with which Inrate, SVVK-ASIR and Climate Action 100+ are conducting the dialogue

Key figures on climate							
Equities	Units	2020	2021	2022	Coverage Standard		Source
CO ₂ footprint of the portfolio	Tonnes of CO ₂ emissions	163	62	80	27%	ASIP / SCS	MSCI
CO ₂ footprint of the benchmark	per USD million invested	137	119	153	_	ASIP / SCS	MSCI
Average weighted CO ₂ intensity of the portfolio	Tonnes of CO ₂ emissions	173	99	116	27%	ASIP / SCS	MSCI
Average weighted CO ₂ intensity of the benchmark	per USD million revenues	178	188	191	-	ASIP / SCS	MSCI
Exposure to coal in the portfolio	in %	0.9%	0.4%	0.6%	27%	ASIP / SCS	ΡΑCΤΑ
Exposure to coal in the benchmark	in %	0.7%	0.9%	0.9%	_	ASIP / SCS	ΡΑCΤΑ
Exposure to other fossil fuels in the portfolio	in %	4.6%	1.5%	2.0%	27%	ASIP / SCS	ΡΑCΤΑ
Exposure to other fossil fuels in the benchmark	in %	4.6%	3.7%	3.7%	_	ASIP / SCS	ΡΑCΤΑ
Market value of equity portfolio	CHF millions	11 509	11 287	10 591	27%	_	J.P. Morgar

Corporate bonds	Units	2020	2021	2022	Coverag	e Standard	Source
Average weighted CO ₂ intensity of the portfolio	Tonnes of CO ₂ emissions	177	121	119	8%	ASIP / SCS	Asset managers
Average weighted CO ₂ intensity of the benchmark	per USD million revenues	220	233	219	-	ASIP / SCS	Asset managers
Exposure to coal in the portfolio	in %	1.0%	0.3%	0.5%	8%	ASIP / SCS	PACTA
Exposure to coal in the benchmark	in %	1.6%	0.4%	0.9%	_	ASIP / SCS	ΡΑCΤΑ
Exposure to other fossil fuels in the portfolio	in %	4.9%	4.0%	4.7%	8%	ASIP / SCS	PACTA
Exposure to other fossil fuels in the benchmark	in %	5.6%	3.8%	4.8%	_	ASIP / SCS	ΡΑCΤΑ
Market value of the corporate bond portfolio	CHF millions	4 205	3 755	3 226	8%	-	J.P. Morgan

Real estate	Units	2019	2020	2021 ³	Coverag	e Standard	Source
CO ₂ intensity – Scope 1 as per CO ₂ Act	kg CO ₂ /m ² /year	8.4	8.3	9.3	9%	ASIP / SCS	Amstein + Walthert
CO2 intensity – Scope 1 as per CO2 Act – climate-adjusted	kg CO ₂ /m ² /year	8.4	9.1	8.7	9%	_	Amstein + Walthert
Energy reference area (rounded)	Thousand m ²	705 000 7	705 000	705 000	9%	_	Amstein + Walthert
No. of properties in data survey	Buildings	75	75	75	9%	-	Amstein + Walthert
Market value of the real estate portfolio	CHF millions	2 874	3 143	3 450	9%	_	J.P. Morgan

³ The CO₂ figures are always reported with a one-year delay. This is because not all ancillary cost statements for the reporting year were available at the time of going to press.

1.4 Responsible action in PUBLICA's operations

As an investor, we can use our approaches to encourage change and drive responsible investment. We also take our responsibilities seriously when it comes to our operations. The following topics are especially important to us:

Responsible employer

- PUBLICA is proactively committed to a diverse and equal employee structure and systematically implements equal pay. 2022 saw the creation of «publica f», a network for women at PUBLICA.
- PUBLICA promotes training and professional development for its staff. In total, 75% of employees attended further training in 2022.
- PUBLICA wants to enable its employees to balance their work and private lives. We are therefore committed to offering a choice of working time models, flexible working hours and locations, and a company crèche.
- PUBLICA makes seasonal fruit available to its staff, along with drinking water.
 We attach importance to the ergonomic use of workstations. Desks, for example, are height-adjustable. We support sporting and artistic activities for staff.
- PUBLICA trains apprentices for three career paths. Since 2022 we have offered an apprenticeship as a media and technology specialist alongside the commercial apprenticeship. In 2023, an additional apprentice will begin training as an ICT specialist.



Renewable energies

- PUBLICA's offices are supplied with heat from the Marzili heating network. The heat is obtained from groundwater and district heating from the Forsthaus energy centre consisting of 80% domestic, renewable energy.
- To promote electricity production from renewable energy sources, PUBLICA has subscribed to the «BLAU» product from Energie Wasser Bern (ewb) since 2020. This is entirely generated using hydroelectric power.
- Modern, energy-efficient LED lighting was installed when the offices were refurbished. We also took
 the opportunity to switch cooling for the computer centre to the air conditioning, allowing us to
 dispense with redundant cooling units.

Reducing CO₂ emissions

- If a business flight is unavoidable owing to the distance involved, the CO₂ emissions are offset by a contribution to the organisation myClimate.
- PUBLICA supports the bike2work campaign and encourages its staff to use bicycles instead of cars.
 A dedicated charging station is available for staff using an electric car.

2 What we have achieved in the asset classes

2.1 CHF bonds, government bonds

In the strategic asset allocation for the open pension plans, CHF bonds and government bonds together account for 30% of PUBLICA's overall portfolio. Four portfolio managers manage the investments in CHF bonds and in government bonds from developed markets. The Investment Committee defines the countries on the basis of financial and non-financial criteria, with the latter taking account of indicators on political stability and corruption. In 2022 we were invested in the following developed markets: Switzerland, Germany, the Netherlands, the UK, the US, Canada, Australia and Sweden.

The emerging market government bonds are managed by external asset managers. A project to develop a bespoke ESG benchmark for those bonds has been launched to take better account of ESG criteria in these investments. It involves working with an external provider to define the country universe and ESG criteria for weighting those markets in the index, in order to improve the risk/return profile of the government bond portfolios.

At present, the sanctions list issued by the State Secretariat for Economic Affairs SECO forms the basis for excluding individual countries. In February 2022, PUBLICA's Investment Committee decided to exclude Russia on the basis of Swiss sanctions. The guidelines on handling sanctions against states (in German) and the current country exclusion list can be found on the SVVK-ASIR website.

Regarding the issue of climate, we once again signed the <u>Global Investor Statement to Governments on</u> <u>the Climate Crisis</u> this year. It is the most ambitious to date, calling on governments to establish a clear political framework for directing capital flows towards urgent climate protection measures.

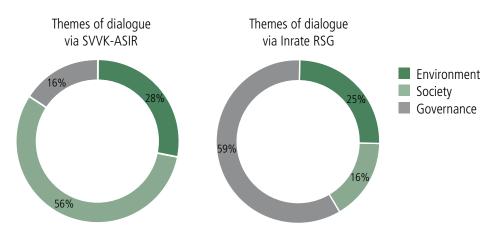
2.2 Corporate bonds and equities

In the strategic asset allocation for the open pension plans, corporate bonds and equities together account for 37% of PUBLICA's overall portfolio and are managed by external asset managers.

Dialogue

Empirical studies have shown that companies which maintain higher sustainability standards are less likely to face regulatory and statutory measures or law suits. In extreme cases, such risks can result in a company going bankrupt, as was the case in 2019 with the US supplier Pacific Gas and Electric (PG&E). It was accused of negligence in maintaining power lines and thereby causing devastating forest fires in California. PUBLICA is an investor with a long-term orientation and a broadly diversified portfolio. We discuss this type of risk with particularly exposed companies in a multi-year dialogue along with other investors.

One example of a successful dialogue comes from the cocoa sector. Cocoa production is often associated with child labour. Engagement on this issue with seven chocolate manufacturers led to a positive outcome in 2022. You can read more about this on our <u>website</u>. Ten dialogue cases were also brought to a conclusion abroad. Dialogue with 163 companies via SVVK-ASIR is still ongoing. It covers issues including environmental hazards (28%), social misconduct in relation to human and workers' rights (56%), and corporate governance risks (15%). In 2022, SVVK-ASIR, together its partner Sustainalytics, embarked on a new engagement with regard to human and workers' rights. This explains why the issue accounts for such a large proportion of the dialogue. SVVK-ASIR's engagement in this area covers companies from the mining, food and electronics industries. The emphasis on environmental hazards is also high, as engagement on the climate issue is being conducted with 20 energy producers and suppliers as well as seven Swiss companies. PUBLICA is also a supporter of the collaborative engagement initiative Climate Action 100+, which is engaging in dialogue with 167 CO₂-intensive companies.



In Switzerland, dialogue has been conducted with 115 companies via the Inrate Responsible Shareholder Group on the following themes:

- Environment: measurement of CO₂ emissions (Scope 3), sustainable products and biodiversity
- Society: human rights and treatment of psychosocial risks
- Governance: powers of the board of directors and ESG criteria in the remuneration system

Our partners' engagement guidelines can be found on their websites:

- <u>SVVK-ASIR</u>
- Climate Action 100+
- Inrate Responsible Shareholder Group

Exercise of voting rights

PUBLICA rejected motions at annual general meetings in 19% of cases. Most often, this was because PUBLICA considered the remuneration paid to members of the executive board and board of directors to be too high, or the remuneration systems to be intransparent.

«PUBLICA rejected half the remuneration reports of Swiss companies.» In Switzerland, for example, half of remuneration reports were rejected. In the case of two agenda items in Switzerland, the Investment Committee exercised its veto and voted against the proxy voting agency's recommendation regarding the appointment of an individual to the boards of directors of Credit Suisse and Richemont.

We approved all the agenda items relating to climate issues. One exception is Danske Bank, where we rejected the motion to align the corporate strategy with the Paris Agreement on climate change because the bank had already taken action in this area, publishing an updated strategy after the shareholder motion had been submitted but before the meeting took place. This strategy supports the achievement of the Paris Agreement goals, so that in our view the matter raised by the shareholder motion had already been dealt with.

PUBLICA intends to assert its rights as a shareholder of foreign-based companies even more strongly in future, and has therefore decided to exercise its voting rights in more companies. From 2023, we will exercise our voting rights

- at the 100 biggest companies in the international equity portfolio and

at the companies with which the Climate Action 100+ initiative is conducting dialogue.
 We have already exercised our voting rights at companies with which we engage in dialogue via SVVK-ASIR for some time, and will continue to do so.

Detailed information on our exercise of voting rights at individual annual general meetings is published on <u>our website</u>. The guidelines on the exercise of voting rights in Switzerland and abroad can be viewed on Inrate's website.

Negative criteria

Pure coal producers, manufacturers of controversial weapons and companies that are demonstrably in breach of Swiss laws and international conventions are excluded from the equity and corporate bond portfolios. Investments in these companies are associated with higher risks which are not adequately compensated over the long term. A total of 115 companies were excluded in 2022. Set against a total universe of around 8,000 companies, the negative impact of the exclusions on diversification is minimal. SVVK-ASIR's exclusion list can be viewed on its website.

The Investment Committee decided in 2022 to expand the coal exclusion to ensure more holistic coverage of risks arising out of the coal sector. This is being implemented in the first half of 2023, at which point companies on the <u>Global Coal Exit List</u> published by Urgewald will be excluded. An exception is made for companies with which PUBLICA is engaging in dialogue or that have a credible coal exit plan in place. Other fossil fuel companies, such as oil and gas suppliers and electricity generators, are not excluded. We are helping them, through dialogue, to open up more responsible areas of business. Additionally, companies with higher risks in relation to climate change are significantly underweighted in the climate-efficient equity index.

«We are helping companies, through dialogue, to open up more responsible areas of business.»

Strategic risk analysis on the issue of climate

The climate-efficient equity index launched in 2020 has been optimised by factoring in Scope 3 data for greenhouse gas emissions and expanding the coal exclusions. Both adjustments are being made in the first half of 2023. The <u>bespoke climate-efficient equity index</u> enables us to take systematic account of climate-related opportunities and risks. Twice a year, we ensure that the index's three metrics – transition risks, transition opportunities, and physical risks and opportunities – are 30%–50% better than the benchmark. As regards corporate bonds, we have achieved and actually exceeded the minimum 40% reduction in CO₂ intensity compared with the existing benchmark that was agreed with the external asset managers.

Scope 1 emissions: CO₂ emissions caused directly by a company, for example through the production of consumer goods.

Scope 2 emissions: CO₂ emissions caused indirectly by a company, by using energy such as electricity, heat and refrigeration needed to manufacture a product.

Scope 3 emissions: All other indirect CO₂ emissions resulting from upstream or downstream activities in a company's value chain.

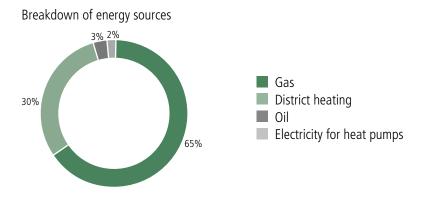
2.3 Real estate Switzerland

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Under the strategic asset allocation for the open pension plans, directly held Swiss real estate accounts for 9% of PUBLICA's overall portfolio. It is managed strategically by PUBLICA's real estate team.

PUBLICA has defined an ambitious path to reduce CO₂ emissions which involves achieving a CO₂ value (Scope 1) across the entire property portfolio of 4.2 kg/m² by 2035. This value (Scope 1) stood at 9.3 kg/m² at the end of 2021 and 8.3 kg/m² back at the end of 2020. The rise was due to the colder winter and a 17% increase in the number of heating degree days. The climate-adjusted CO₂ value (Scope 1) is 8.7 kg/m² compared with 9.1 kg/m² the year before. The term «climate-adjusted» is explained as follows: the amount of heating energy used from year to year depends crucially on differences in climate. To assess the building and its use, the energy consumption – and therefore the CO₂ emissions – is converted to the weather in 2019 using the heating degree days method.

PUBLICA obtains Cantonal Energy Certificates for Buildings (CECBs) for the properties. This standard allows buildings to be compared. The certificates also contain information on a building's energy efficiency and highlight potential improvements achievable through refurbishment. Because PUBLICA's property portfolio is relatively young, it does not yet make sense to obtain a certificate for all the properties. Currently, 30 CECBs are on file. Over the medium term, a number of fossil fuel heating systems will be replaced. All current new build projects are heated using geothermal or district heating.



The «Free Cooling» project went into operation at the «La Maladière» property in Neuchâtel in mid-August 2022. The building is now cooled and heated using water from Lake Neuchâtel and heat recovery from the refrigeration units. District heating is now only needed at peak times. This for-ward-looking investment will save an estimated 230 tonnes of CO₂ per year. That is the equivalent of travelling 759,000 kilometres using a petrol-driven car. However, this will not lead to an improvement in the CO₂ values mentioned above, because Scope 1 already factors in district heating with a value of zero. PUBLICA holds an approximately 50% share of the «La Maladière» property. It is a mixed-purpose development which also includes a shopping centre, offices and sports facilities.



Free cooling system for the shell of the Stade de la Maladière

2.4 Private market investments

Under the strategic asset allocation for the open pension plans, private market investments account for 21% of PUBLICA's overall portfolio and comprise the following asset classes: corporate loans, infrastructure financing and infrastructure participations, real estate mortgages and international real estate funds.

This year, PUBLICA issued its external asset managers with a range of instructions to increase transparency with regard to ESG criteria. These cover the reports that the asset managers are required to submit to PUBLICA concerning memberships and sector standards applied, dialogues, integration of ESG criteria into the investment process, and data on greenhouse gas emissions. They will be progressively implemented over the next two to three years. The asset managers are already applying the same rules concerning exclusions in the mandates as they are in the equities and corporate bonds.

Around one fifth of PUBLICA's infrastructure investments are in renewable energies. These can help to diversify the investment risk and contribute directly to financing the energy transition. The portfolio includes wind farms and solar panel installations as well as geothermal and hydroelectric power plant projects. No new investments in renewables were made during 2022. We have currently provided CHF 212 million in funding for renewables. In the «social» category, we are providing CHF 74 million in funding for social housing.

PUBLICA's investments in private infrastructure debt PUBLICA's share of total output in megawatts (MW)

	Units	2020	2021	2022
Photovoltaic installations	MW	20	23	30
Wind farms	MW	52	52	57
Hydroelectric plants	MW	14	14	18
Geothermal	MW	_	6	7
District heating	MW	_	_	132
Total renewables	MW	86	95	244
Market value of investments in renewables	CHF millions	199	206	212
Market value of the infrastructure debt portfolio	CHF millions	1,238	1,368	1,086

2.5 Precious metals

Some 3% of PUBLICA's precious metals investments consist of gold. We do not apply any ESG criteria here.

3 Summary

Responsible investment is important to PUBLICA. We continued to pursue a range of measures during 2022, including dialogue with companies, exercising our voting rights, integrating ESG criteria into our portfolio, excluding companies and analysing risks. Addressing the various themes thoroughly takes time and extends over a number of years. Responsible investment is very much an ongoing process rather than a static condition. Areas we are continuing to work on in 2023 include:

- exercising voting rights in a broader universe of foreign companies,
- developing an ESG benchmark for investments in emerging market government bonds,
- implementing the expanded coal exclusion,
- integrating Scope 3 data when calculating greenhouse gas emissions in the climate-efficient equity index,
- progressively implementing ESG rules for asset managers of private market investments,
- continuing the operational optimisation projects, energy efficiency upgrades and implementation of solar panel installations and e-mobility in the properties, and
- improving reporting on responsible investment.

We look forward to the next steps in the new year, and of course to hearing your comments on the report. Write to us at info@publica.ch.

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