



Swisscanto
Invest

by Zürcher Kantonalbank

Sustainable – Seeking returns with impact

Systematic focus on returns with societal value



100% Swiss
Made Asset
Management

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Further information:

[swisscanto.ch/sustainability](https://www.swisscanto.ch/sustainability)

Sustainability Impact – The standard of excellence for sustainable investments

Sustainability reports will not save the planet

Every year, a growing number of companies are taking up the cause of sustainability. In the meantime, more than 90% of the world's 250 largest companies (the Fortune 250) publish a sustainability report that informs the general public about their sustainability management. Although this development should be rather pleasing, it contradicts the condition of our planet. So far, it has not been possible to decouple economic growth from environmental consumption; for instance, in the last century, global population has quadrupled while energy consumption has increased sixteen-fold. We consume more resources and produce more waste and pollution than our planet can sustainably endure. In view of this fact, the question is raised as to whether the sustainability initiatives taken by large companies actually accomplish their stated aims, or whether they are merely "greenwashing" campaigns to assuage the guilty conscience of companies and their customers.

Achieving an optimum sustainable effect with investments

We firmly believe that companies and countries that act sustainably have considerable competitive advantages in the long term because they are more successful at incorporating relevant current and future challenges into their strategies. In its sustainable funds, Swisscanto Invest focuses precisely on these investments: companies that use their products, services or production methods to contribute to sustainable development in line with the Sustainable Development Goals (*Figure 1*) have a sustainability impact.

The 17 Sustainable Development Goals

In order to achieve sustainable development, the UN has defined 17 Sustainable Development Goals. These goals were published in 2015 by the United Nations General Assembly and entered into force on 1 January 2016.

Profit-driven companies can also contribute directly to achieving some of these goals. The focus here lies on the issues of environmental protection, education, healthcare and equal opportunities.

Sustainable enterprise is not only about optimising production processes or fulfilling statutory requirements and social standards. Rather it's a matter of which developments are initiated by business activities and what ability companies have to implement necessary changes. One example is the energy revolution which seeks to replace fossil fuels with renewable energies and energy efficiency. Non-sustainable production processes or products must be dropped and replaced by new ones.

Sustainable companies use their innovative power to create environmentally compatible and socially responsible products and services.

Figure 1: Sustainable Development Goals



Source: UN (2016)

Generating returns with sustainability impact

Swisscanto Invest is convinced that companies that provide a social benefit are more successful, as they have products and services that will generate above-average demand in the medium term. If the companies are protected from competition by barriers to entry, they can grow to become more profitable. A favourable valuation in terms of their capital profitability and growth makes the companies an attractive investment.

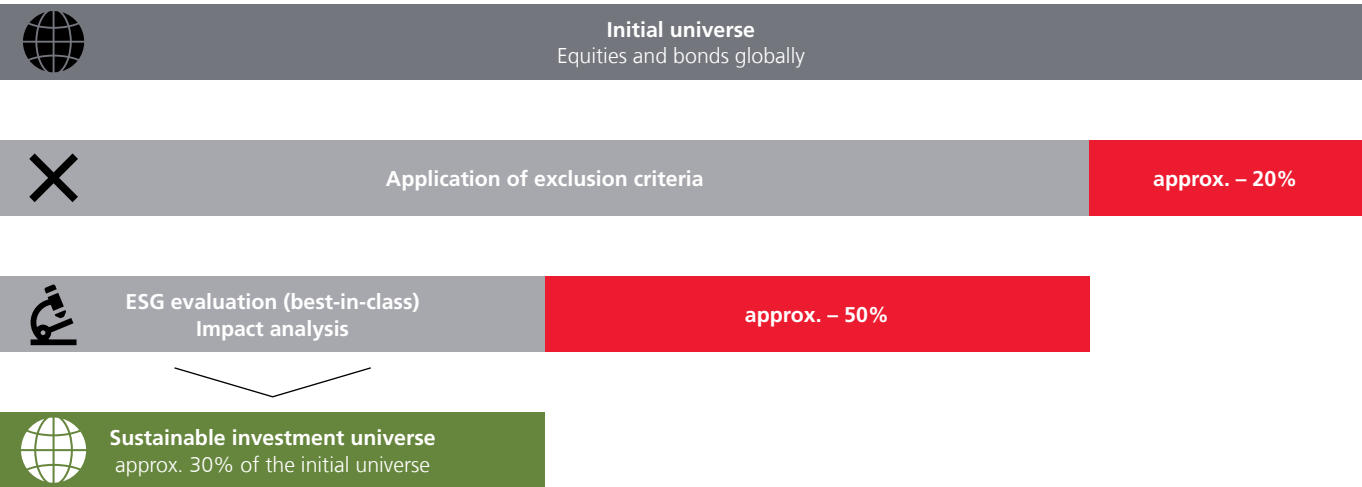
In the bonds asset class, a specific impact segment has developed over the course of recent years: impact bonds exclusively aim to finance ecological (green bonds) or social projects (social bonds) and thereby contribute to sustainable development. These bonds are in line with our Sustainable approach.

The investment process

All securities with sustainability impact undergo a complex sustainability analysis process (*Table 1*), which ensures that our Sustainable funds contain the equities and countries with the greatest societal impact. As a result, around 70% of the initial universe is omitted.

- **Exclusion criteria**
Broad exclusion criteria exclude around 20% of the initial universe.
- **Best-in-class and media research**
Through analysis of 45 ESG criteria, the most sustainable companies are identified.
- **Sustainability impact analysis**
The companies and countries with the highest social benefits and strong growth prospects are identified.

Table 1: Sustainable investment process



Investment sectors with the best prospects

Swisscanto Invest has defined six investment sectors thanks to which equity and bond investors can contribute to sustainable development. Each investment sector is briefly introduced below and illustrated using a

business example. The sustainability impact profiles each show the social benefit, business model, growth and barriers to entry.



Six investment sectors



Energy

- Renewable energy
- Energy efficiency



Mobility

- Public transport
- Personal transport



Resources

- Water
- Resource efficiency



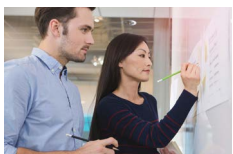
Health

- Access to basic care
- Promotion of health



Finance

- Access to financial services
- Financial infrastructure



Knowledge

- Education
- Networking

Sustainable investment goals (main focus)



- Ensure access to affordable, reliable, sustainable and modern energy for all
- Build resilient infrastructure, promote sustainable industrialisation and foster innovation
- Take urgent action to combat climate change and its impacts



- Ensure healthy lives and promote well-being for all at all ages
- Make cities inclusive, safe, resilient and sustainable
- Take urgent action to combat climate change and its impacts



- Ensure access to water and sanitation for all
- Ensure sustainable consumption and production patterns
- Take urgent action to combat climate change and its impacts



- End poverty in all its forms everywhere
- Ensure healthy lives and promote well-being for all at all ages
- Reduce inequality within and among countries



- End poverty in all its forms everywhere
- Achieve gender equality and empower all women and girls
- Reduce inequality within and among countries



- Ensure inclusive and quality education for all and promote lifelong learning
- Achieve gender equality and empower all women and girls
- Promote inclusive and sustainable economic growth, employment and decent work for all

Energy

Renewable energy – protecting the climate

Around 30% of global greenhouse gas emissions come from the power plant sector. The current composition of electricity generation consists predominantly of coal, oil, natural gas, nuclear and hydro power. To achieve the 2-degree target of climate policy, the portion of energy sources with low green-house gas emissions would have to increase from 30% to at least 80% by the middle of the 21st century. Electricity generation from renewable energy sources is normally characterised by no or low operating costs for the use of the energy sources, a substantially reduced burden on the environment compared to conventional power plants and a decentralised nature. Electricity generated from solar energy (photovoltaics) has made huge progress in terms of production technologies and cost reductions in the last decade. As a result, photovoltaics have already become competitive in sunny regions. Today, power generated from wind energy is also able to compete with electricity from fossil fuel power stations in many cases. Electricity generated by wind energy or photovoltaics has thus far had the disadvantage that it is dependent on weather, unlike electricity generated from fossil fuels. This disadvantage can be offset by power stores in the form of batteries. The costs of batteries will drop substantially as electric vehicles become increasingly prevalent. It will therefore be possible to store power from renewable energy sources in batteries in a cost-effective manner and provide it to electricity customers when needed.

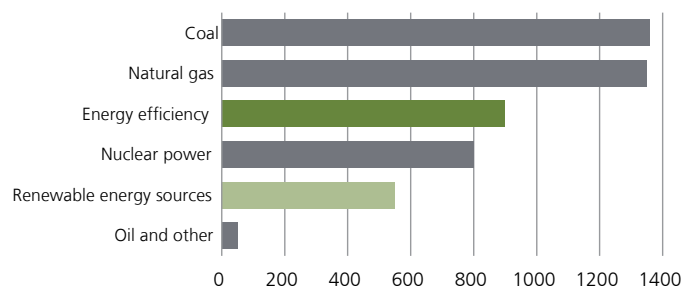
Energy efficiency – why less is more

In the USA, electricity consumption in 2015 was practically just as high as it was in 2010, although the economy – measured by gross domestic product – grew by 11% in this period. This decoupling is largely attributed to energy efficiency measures, such as standards for product efficiency, construction regulations and efficiency programmes by energy suppliers. Besides renewable energy sources, energy efficiency also plays a pivotal role in reducing greenhouse gas emissions: among all the scenarios for achieving the climate goals, those that are aimed at improving energy efficiency in accordance with the International Energy Agency clearly exhibit the lowest overall costs. In order to achieve the goals of the Paris Climate Change Conference, the relevant investments must increase significantly, however.

More than non-consumed energy

Statutory regulations are the most important drivers for investment in energy efficiency measures. For example, the EU Energy Efficiency Directive provides a framework for defining national energy efficiency targets, such as in the renovation of buildings or the construction of power plants. The potential for efficiency in the construction sector, transport and industry is particularly great – and these investments offer business opportunities for providers of the right solutions. In Switzerland, around one quarter of energy consumption is accounted for by the residential sector, and a significant proportion of buildings are in need of energy modernisation. Important measures include the prevention of heat loss (insulation in roofs, walls and windows, and comfort ventilation systems) as well as efficient appliances for heating, hot water and lighting. In the latter area, light-emitting diodes (LEDs) have changed the market substantially thanks to their energy efficiency and long lifespan. Digital control systems will provide further efficiency gains in the future. Information and communication technologies will increasingly be used to relieve power grids through the smart management of supply and demand (smart grids).

Figure 2: US electricity production in 2015 and savings through energy efficiency measures since 1990 in billion kWh



Source: American Council for an Energy-Efficient Economy (ACEEE)

Energy efficiency is more than just “non-consumed energy”: if energy savings in the USA were compared with the electricity generated, energy efficiency would be the third largest energy source according to ACEEE (Figure 2). Energy efficiency can be considered an actual energy source that is still not fully exploited by any means.

Case study: Vestas

Sustainability impact profile



Energy

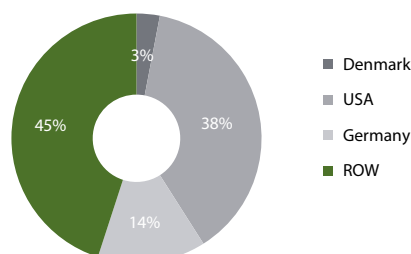
Renewable energies

Company description

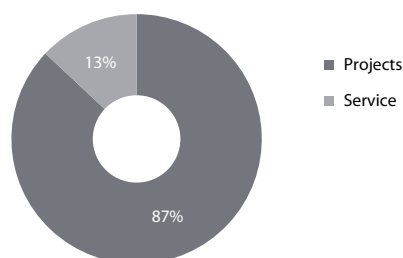
Sector	Electrical appliances
Country	Denmark
Employees	23,303
Turnover	DKK 113.4 billion
Market capitalisation	DKK 75.5 billion

Vestas Wind Systems develops and produces onshore and offshore wind turbines. The production sites are located in Europe, China, USA and Brazil, and the turbines are sold in 75 countries. At the same time, services are a growing business area.

Geographic positioning (turnover)



Business areas (turnover)



Data as at March 2019

Sustainability Impact and business model

The portion of electricity production in worldwide greenhouse gas emissions equals around 30%. Wind energy is an endless source of energy, unlike fossil fuels, and does not produce any running fuel costs; Overall CO₂ emissions and water consumption are low. Financially, power generated from wind energy can also now compete with electricity from fossil fuel power stations in many cases. The share of wind energy in global electricity generation by 2050 may lie between 15 and 30%, depending on the scenario; it currently lies at 7%. The time it takes for a turbine to recover its own production energy (energy payback period) only amounts to just over half a year. Vestas has two product platforms (2 MW and 3 MW). 2020 will see the launch of new 5-MW onshore turbines that will reduce the cost per unit of energy by a further 30%. The offshore wind turbines are manufactured in cooperation with Mitsubishi Heavy. At over 80 GW, the company generates the greatest wind power output worldwide.

Growth and barriers to entry

The conversion of electricity generation to renewable energy sources for environmental protection reasons as well as economic considerations is stimulating strong growth. Wind energy is increasingly becoming the more cost-effective source of energy. Vestas expects annual growth of around 5%. With a market share of 16%, Vestas is the global leader in wind turbines (onshore) and is able to invest more heavily in research and development than its competitors, such as for new developments including weak wind turbines. Scaling effects can be exploited to reduce production costs and the costs per generated kilowatt-hour for the customer. The company offers a wide range of products and is also geographically highly diversified. The higher-margin and less cyclical business with services is becoming more and more important due to the growing base of installed wind turbines. More than half of the order book and approximately 40% of its profit relate to service provision.

Risks

The political risks include a possible cessation of state support instruments. The feed-in remuneration in the USA, for example, will be dropped from 2021. The increasing competition for contract awards, partly also due to the emergence of Chinese manufacturers, may also have an impact on growth and margins. Other risk factors include fossil fuel energy costs being too low and the sharp cost reduction in solar power.

Mobility

Mobility change, not climate change

Sharply rising traffic volumes are leading to an exacerbation of climate issues, resource scarcity and poor air quality in cities. Mobility is a basic need for any society and a requirement for its development. The transport sector is responsible for around 23% of global greenhouse gas emissions (energy), and the trend is increasing (Table 2). 75% of greenhouse gases in the transport sector come from road transport.

	Transport share in CO ₂ emissions (energy)	Rate of urbanisation	Cars per 1,000 inhabitants
World	23%	52%	164
USA	28%	83%	912
EU	29%	74%	426
China	8%	51%	73
India	9%	31%	27

Sources: IEA, EEA, EPA

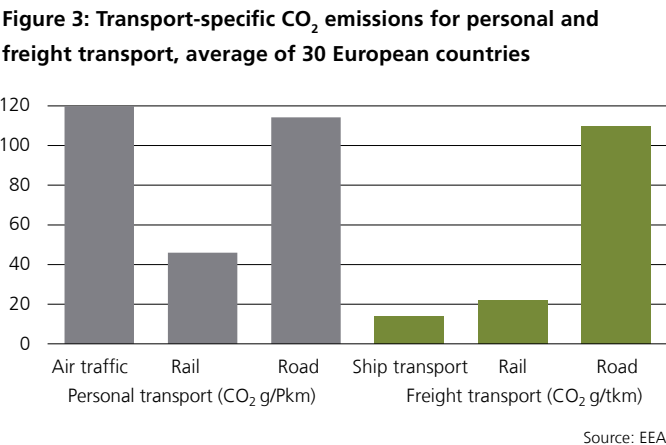
There are also further significant negative effects on the environment and society, such as deaths and injuries due to traffic accidents or noise pollution. In order to prevent these effects and optimally satisfy the growing need for mobility, a number of different strategies are applied. When considering the sustainability performance of various modes of transport, rail transport is clearly in the lead for land transport (Figure 3). In terms of CO₂ emissions, trains are more than twice as good as motorised personal transport and even five times as good in freight transport.

Dreaming of freedom – as a service?

For motorised personal transport, more environmentally compatible drive systems are a priority. These include more efficient and low-emission engine technologies, lightweight design and the electrification of drive systems (hybrid or electric vehicles) in conjunction with the expansion of renewable energy sources. Support provided by driver assistance systems through to autonomous driving contributes to road traffic safety. Non-motorised transport, such as high-performance e-bikes or a developed infrastructure, is becoming increasingly attractive, even for moderate distances, and also promotes healthy exercise in everyday life. Furthermore, new mobility concepts are gaining substantial momentum, especially due to the openness to the sharing economy as well as car and bike sharing projects. Will we soon stop buying cars and instead consider mobility as a service?

Impending gridlock in developing countries

Here, there is a need to intelligently integrate various modes of transport, particularly with public transport: this will enable commuters and travellers to reach their urban destinations quickly by metro and rental bike. Especially in developing countries, the high rate of population growth and increasing urbanisation are ushering in major challenges. Megacities with several million inhabitants are being choked by cars and are suffering severely from poor air quality, since there is still a lack of efficient public transportation systems. Public transport offers huge efficiency advantages in particular: it is designed according to ecological concerns and is the best solution for transporting large populations. Even electric vehicles are subject to congestion! The global promotion of public transportation systems benefits manufacturers of underground railways, for example, or companies in the traffic management and telematics sectors.



Video conferences can already make business trips obsolete. As further progress is also made in digitalisation, such as with virtual reality, traffic will be either reduced or avoided to increasing degrees in the future. The challenges associated with increasing urbanisation and the importance of transport for climate change are buoying the current investment theme of mobility.

Case study:

Régie Autonome des Transports Parisiens (RATP)

Sustainability impact profile



Mobility

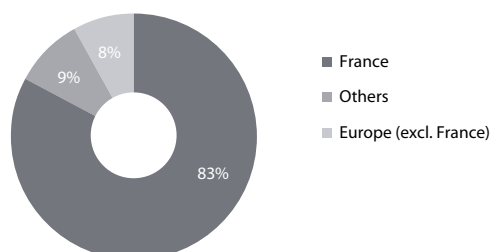
Public transport

Company description

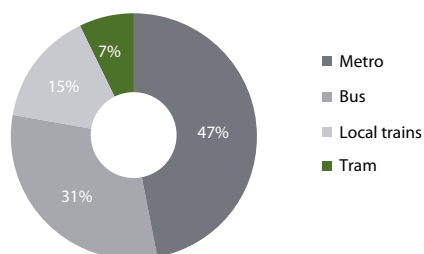
Sector	Transport
Country	France
Employees	61,000
Turnover	EUR 5.5 billion
Credit rating (Moody's)	Aaa

Régie Autonome des Transports Parisiens (RATP), a public company, operates transport services in Paris and the surrounding area, other regions of France and 13 other countries. Every day, around 16 million passengers are transported in the metro and on local trains, buses and trams. RATP is one of the world's largest transport companies.

Geographical positioning (employees)



Passenger transport Ile-de-France



Data as at December 2017

Sustainability impact and business model

By 2030, 60% of the world's population will live in cities. The share is still low in emerging countries; the high rate of population growth and increasing urbanisation are ushering in major challenges. Megacities with several million inhabitants are suffering from congested roads and practically choking from poor air quality, since there is still a lack of efficient public transportation systems. Régie Autonome des Transports Parisiens (RATP) operates transport services in Paris and the surrounding area. It is also responsible for the infrastructure, such as stops and stations. By providing efficient and safe public transport services, the company makes a significant contribution to the quality of life, environmental protection and development of the Greater Paris region. RATP's transport services enjoy a high level of customer satisfaction. Examples of RATP's international operations include bus services in London and Copenhagen, metro lines in India, Algeria and South Korea or tram lines in China, Qatar and the USA. RATP has good sustainability management. Greenhouse gas emissions are to be reduced by 50% and energy consumption by 20% by 2025 (2015 basis). For example, the bus fleet in the Ile-de-France region – currently more than 4,500 buses – is to be completely converted to environmentally friendly transport (such as electric buses) by 2025. Further improvements are planned in terms of station accessibility.

Green bond issue

RATP issued a green bond in 2017. The funds will be used to update the RER A regional train line, the line with the highest passenger volume in Europe, and to automate metro line 4. These investments contribute to an increase in energy efficiency and transport capacity and provide greater comfort and safety. The independent research agency Vigeo Eiris has reviewed this issue for compliance with the Green Bond Principles.

Risks

Accidents or other operational disruptions can cause considerable damage. Therefore, investments in security and maintenance of the infrastructure as well as committed and motivated personnel are of central importance. The performance of corporate governance is average. Some important committees are missing (such as nomination) and transparency is limited (for example on pay).

Resources

Circular economy, not landfill

The growth in population and prosperity is leading to a continual increase in demand for natural resources, instances of resource scarcity and heightened levels of environmental pollution. A large proportion of manufactured goods still goes to landfill or incineration plants after use. In order for non-renewable resources not to be wasted in future, it is important to ensure closed cycles of resource flows; this could be achieved, for example, by manufacturing products such that the materials used can be fully recycled. Economical dismantling and recycling processes produce essential preconditions for a more efficient and sustainable approach to handling valuable and scarce resources. Decoupling resource consumption and water usage from economic growth will become important investment themes of the 21st century.

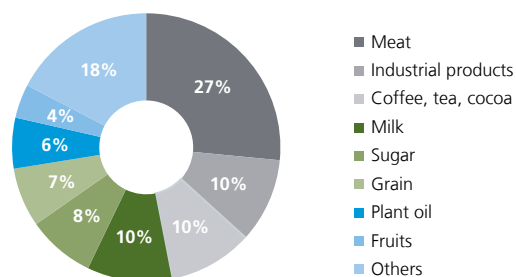
Water – a vital resource for life

Water has a unique characteristic that sets itself apart from other resources: there is no substitute for water. Around one third of humanity suffers from “water stress”, which means that their water supply can be at risk during several months of the year. It is likely that by 2050 the number of people suffering from water stress will at least double. The main reason for this is higher consumption due to population growth and increasing wealth. In addition, global warming has a negative effect on the availability of water in many regions due to changing rainfall patterns, increased evaporation resulting from higher temperatures and the melting of mountain glaciers. At the regional level, these changes will cause severe problems and threaten millions of people with water shortages. Existing water infrastructures are significantly outdated to a large extent and require modernisation. There is a massive need for investment. It is often the case in developing countries that appropriate infrastructures must first be built. Consequently, huge volumes of water are still going to waste in distribution. For instance, Mexico City experiences water losses of more than 40%, while this proportion is estimated at around 20% for France. These tremendous losses are costly as the lost water is for the most part treated beforehand at significant expense. Accordingly, smart water management systems have been developed for water distribution, for example, in order to find evidence of leaks. Another significant problem is often the very low water tariffs. Demand for water purification and waste water treatment technologies is increasing around the world. Seawater desalination plants are also becoming increasingly important. Clean water is crucial in tackling diseases and epidemics.

How much water does a beef steak need?

The “water footprint” represents the amount of water used by a country’s inhabitants in total. *Figure 4* shows the water footprint of a German consumer. Direct water consumption in households for drinking, cooking and washing is infinitesimal compared to indirect consumption, such as due to beef consumption. One 100-gram beef fillet requires over 1,500 litres of water in production.

Figure 4: Water footprint of a German consumer (3,900 litres/day)



Source: Mekonnen & Hoekstra 2011, UNESCO

The agricultural sector consumes around 70% of freshwater resources used around the world. From a sustainability standpoint, there are many arguments in favour of organic farming. It dispenses with the use of chemical-synthetic pesticides and fertilisers, as they are problematic for health and the environment (particularly bodies of water) and impair the fertility of the soil. Organic farms provide a much higher degree of biodiversity than conventional farms and they require far less energy per kilogram of food produced since they forego the use of chemical-synthetic agents. Incidentally, there is huge potential to save water and protect the climate in how we treat food: around 50% of food products end up as waste!

Case study: Xylem Inc.

Sustainability impact profile



Resources

Resource efficiency

Company description

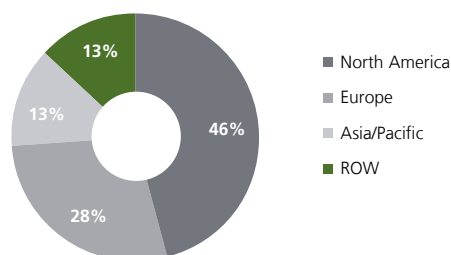
Sector	Machinery
Country	USA
Employees	16,200
Turnover	USD 4.7 billion
Market capitalisation	USD 13.7 billion

Xylem Inc. develops and produces equipment for water supply and water disposal mostly for public suppliers and industrial companies, and provides services in the corresponding sector. The company works with a variety of brand names in a range of areas and is present in over 150 countries.

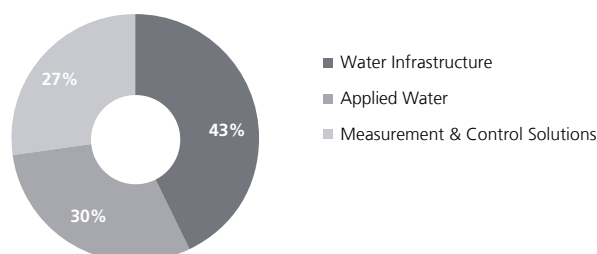
Sustainability Impact and business model

A modern water infrastructure minimises expensive seepage losses and improves water protection. The measurement of water consumption and relevant pricing are essential for raising awareness of water consumption and water saving. Xylem offers an interesting product portfolio for the water sector: intelligent pumps, water analysis tools, water controllers (valves, distributors and tanks) and provides a range of products for water and sewage treatment. The pump business is focused on community supply, industry and buildings. Xylem is a leader in the water and sewage treatment sector, as well as in UV and ozone disinfection. For industrial companies, Xylem offers products, for example, to recycle water in closed water circuits. The development of the products is focused on energy efficiency and keeping maintenance costs down to a minimum. With acquisitions including Sensus, Pure Technologies or EmNet, Xylem is securing its technological leadership and systematically building up growth areas; these include smart meters (networked meters), network technology and data analysis for water suppliers as well as gas and electricity suppliers.

Geographic positioning (turnover)



Business areas (turnover)



Data as at March 2019

Growth and barriers to entry

New regulations (energy and quality), urbanisation, population growth, the renewal of outdated infrastructures (water losses) and the impact of climate change on water supply are positively affecting the demand for products from the water industry. Xylem is one of the world's leading providers of technology and is growing quicker than the market, with an annual sales growth between 4% and 6% up until 2020. The strongest growth drivers are business concerning water meters and development in emerging markets. By focusing on water technology and the spare parts business, Xylem aims to increase its margins. Around 40% of turnover and 60% of profit is generated in the spare parts segment and in services. Customers are tied in due to the large number of products installed, which presents a certain barrier to entry.

Risks

The financing of infrastructure projects is dependent on the economic and political situation. Sensitivity to exchange rate fluctuations is high. Successful integration of acquisitions is important. The company was criticised for its excessive remuneration of senior management.

Health

Living healthily

A health sector designed to enable a life in good health forms a core part of sustainable development. Thanks in part to medical progress, global life expectancy has risen sharply (from 52.5 years in 1960 to 71.7 in 2015) and the infant mortality rate has fallen (from 121.9 per 1,000 births to 31.7).

Although many life-threatening diseases are now treatable, the challenges facing the global healthcare sector are tremendous.

Examples include increasing cases of chronic diseases, new epidemics and greater antibiotic resistance. Our healthcare system also has to adapt to demographic changes, particularly to diseases associated with an ageing population such as dementia or increased blood sugar levels. In the healthcare sector, we expect innovative companies to launch new therapies and treatments on the market and improve affordable access to healthcare.

Innovative therapies

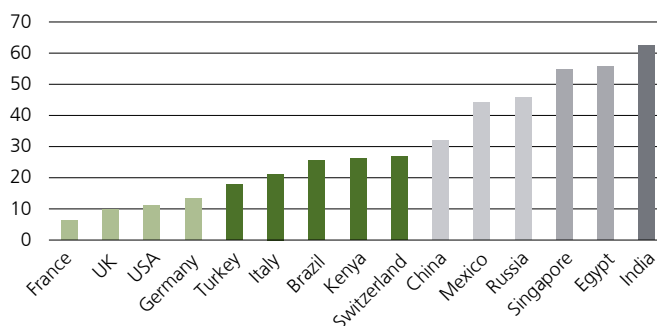
After infectious diseases, cancer is the second most common cause of death around the world. A range of new innovations in gene therapy, cell therapy and genome sequencing are creating new treatment options, such as in oncology and cardiology, as well as for rare conditions, autoimmune and infectious diseases. In cancer therapy, immuno-oncology is ushering in a new era in which the patient's own defence system is used to attack cancer cells. This enables individualised therapy with fewer side effects. These kinds of ground-breaking therapy and treatment methods are incredibly important; at the same time, it is imperative that affordable access is guaranteed for the wider population.

Affordable medical care

Affordability is a key challenge facing the healthcare sector. Even though medication prices only account for 15% to 20% of total healthcare costs, they have risen sharply in recent years partly as a result of the new options available. The medicines developed by Gilead for the successful treatment of hepatitis C have been sold in the USA for around USD 100,000, for example. In India or Egypt, the same medicines have been sold for approximately USD 1,000 in order to provide the less affluent population access to this important medication. In many countries, there is only limited insurance coverage available, if any. In certain developing countries, the patients bear more than 90% of the costs themselves (*Figure 5*). The pent-up demand for greater access to health provision and care is particularly high in these regions. The "Access to Medicine Index" indicates the degree to which companies are committed

to affordable access in developing countries. The index assesses the pricing for medicine provision as well as the development effort taken to combat neglected diseases.

Figure 5: Share of healthcare costs borne by private households (in %)



Source: World Health Organization (2014 data)

Extremely high prices are also not sustainable in the long term for insurers and uninsured patients in developed countries. This explains, for example, why people with hepatitis C travel to India to purchase medication. Generic medicines, biosimilars (imitators of biopharmaceuticals) and vaccines make an important contribution to affordable healthcare. The use of new technologies can also help increase cost efficiency, in addition to improving quality. Insurance companies and entities such as hospitals are increasingly using IT solutions to achieve better treatment processes with a more precise interpretation of diagnostic data and optimise cost management. Another relevant area for healthcare is preventive medicine, but sufficient exercise and a healthy diet are also indispensable. Companies in the health promotion sector also play a role in increasing quality of life and reducing healthcare costs overall.

Case study: Canton Hospital Baden

Sustainability impact profile



Health

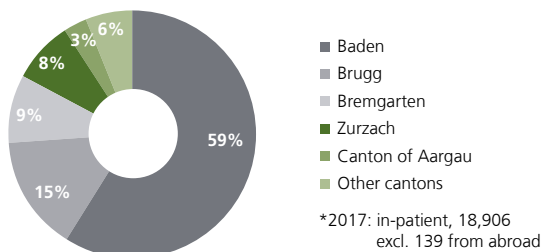
Access to
basic care

Company description

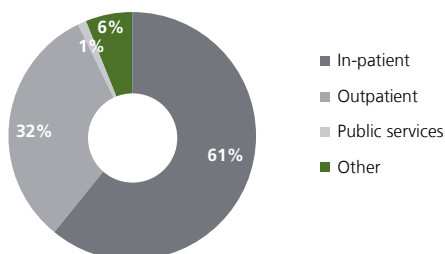
Sector	Healthcare
Country	Switzerland
Employees	2,259
Turnover	CHF 355 million
Credit rating	
Zürcher Kantonalbank	AA –

The Canton Hospital Baden has a charitable purpose in accordance with Aargau hospital legislation. Together with its main site, the external sites (Brugg Medical Centre, Limmatfeld Medical Centre and Muri District Hospital) offer around 300,000 residents in the eastern part of Aargau safe healthcare using the latest technology.

Geographic positioning (number of patients*)



Business areas (turnover)



Data as at March 2019

Sustainability Impact and business model

Canton Hospital Baden (KSB) ensures the provision of modern, local basic medical care in the Greater Baden Area. The hospital is one of the leading institutions in oncology thanks to its use of the latest therapies, for example through its collaboration with the Paul Scherrer Institute in the area of proton therapy for tissue-conserving radiation. In Switzerland, cancer is one of the most common causes of death and this is set to increase yet further due to its ageing population. In 2016, the KSB was certified by the German Cancer Society. The quality of care is also high; so, for example, there are processes for older patients, who have a higher risk of delirium after operations, to obtain an early diagnosis and the appropriate treatment. The opening of a new hospital building "Agnes" is planned for 2022. An internationally renowned architect's firm specialising in healthcare building construction incorporates the concept of "healing architecture" as well as efficiency, which includes spatial qualities such as colours and noise. Evidence shows that this promotes well-being and thus helps in a patient's recovery.

Growth and barriers to entry

Due to the demographic trend and the expected population growth in the Greater Baden Area, patient numbers are expected to increase. By constructing this new building, bed numbers are expected to increase from 380 to 400. In management, the KSB is meeting the political target of "out-patient before in-patient" with an increase in out-patient cases of 30% and an increase in in-patient cases of 6% between 2012 and 2017. In the east of the canton of Aargau, there is no direct local competition for KSB from the other 12 clinics on the hospital list in Aargau and seven clinics outside of the canton. The new construction and the digitisation of the hospital infrastructure, due to be completed in 2022, will improve efficiency and quality. Aside from that, patient safety will be continually improved through the hospital's own and national networked control systems, such as the critical incident reporting system.

Risks

With a profit margin before interest rates, tax, depreciation and amortisation of 11%, the KSB is meeting the target set by the canton of 10%. Delays in the new construction or failings in the digitisation could make it more difficult to reach this target. Other risks include greater savings pressure with hospital tariffs, overcapacities due to new construction at other hospitals and changes to financial targets for healthcare services.

Finance

Vital for society

Whatever one may think of banks, the financial industry plays an indirect, yet important role when it comes to the direction in which our society is to develop. No economic system could function without access to financial resources, growth-inducing loans, property and life insurance, and the relevant infrastructure; innovations and new technologies would not be able to take root.

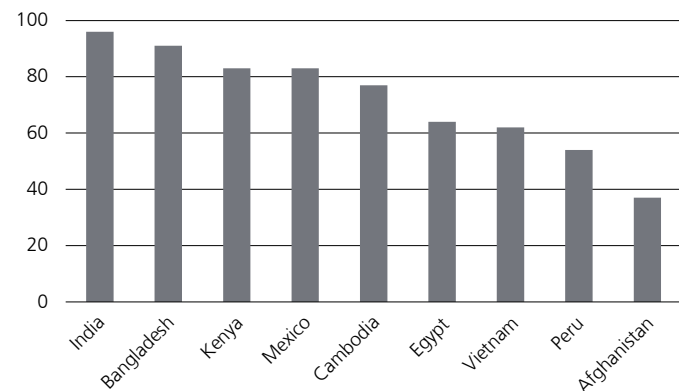
The digitalisation of financial infrastructure can help execute processes and business transactions in a quicker and more cost-effective manner. The increasing level of networking has enabled novel forms of financial services, such as crowd investing which has made it easier for start-ups and small businesses to access capital and investors. It is more frequently becoming the case that these types of services no longer even require a conventional bank.

Micro-finance – help for self-help

Even for the smallest economic units such as communities or families, it is difficult to evade poverty without investing in the future. But purchasing a school uniform, medication or a bicycle is almost impossible for people with no or very low incomes. According to estimates by the World Bank, more than 700 million people worldwide still lived in extreme poverty in 2015. At the same time, two billion adults had no bank account, and hence practically no access to the financial system. Conventional loans are also not granted, as there is either a lack of collateral required by commercial banks or such small amounts are not even offered in the first place. This is where micro-financial institutions (MFIs) come in: even relatively small loans – typically between 50 and a few thousand US dollars – enable people to establish a livelihood for themselves. Due to the fact that there is a lack of asset securities in these cases, other approaches are developed for financial protection, such as getting to know the exact life circumstances of the borrower or forming cooperatives. For many MFIs, women represent a large proportion of the customer base: the improved financial situation brought about by micro-financing improves the position women occupy in society – and in many instances, women have turned out to be the most reliable borrowers (*Figure 6*). For micro-loans to really help customers overcome the poverty line and not find themselves in a debt spiral, it is important that MFIs take on corresponding functions of responsibility and control. The loans are supposed to be invested in viable, long-term

projects and not simply satisfy consumer needs. The recipients have to be informed of the terms and conditions in a language they understand.

Figure 6: Share of female micro-loan borrowers (in %)



Source: mix, Benchmark Report 2014

“Mobile wallets” make it easier to save or reinvest acquired funds. They are offered by telecommunication providers and are particularly relevant in regions in which financial services are still not readily available, and where the market penetration of mobile telephones is relatively high. They are helpful for carrying out the fundamental functions of money transfers and cash-less payment transactions via mobile telephone, even for very small amounts, without the need for a normal bank account.

Financial resilience

Losses due to illness and death, theft, poor harvests and natural catastrophes have a particularly severe effect on the poorest share of the population. Ideally, besides loans, micro-insurance schemes should also be available that allow insured people to protect themselves against losses by paying in very small premiums over a period of time. Even in developed countries, such acts of fate can affect livelihoods in the worst cases. Insurance protection increases the acceptability of health, age-related, economic and ecological risks by collectivising them and spreading them out over time.

Case study: PT Bank Rakyat Indonesia

Sustainability impact profile



Finance

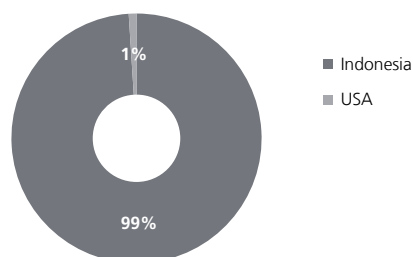
Access to financial services

Company description

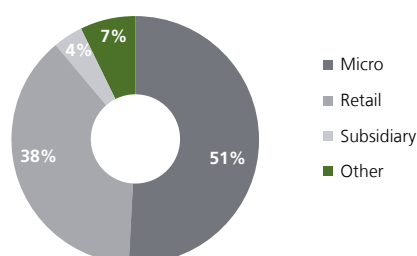
Sector	Banks
Country	Indonesia
Employees	60,553
Turnover	IDR 95.8 billion (CHF 6.6 billion)
Market capitalisation	IDR 476.1 billion (CHF 33.9 billion)

Bank Rakyat Indonesia Persero (BRI) was founded in 1895 during the period under Dutch colonial rule. It is Indonesia's oldest bank and became known by its current name after the country's independence. The bank provides a wide range of banking services, focusing particularly on micro, small and medium-sized enterprises (MSMEs).

Geographic positioning (turnover)



Business areas (turnover)



Data as at March 2019

Sustainability impact and business model

For retail customers and companies from all economic sectors, safe investment opportunities, access to payment transactions, loans and insurance services form a precondition for absorbing income risks and fluctuations, and for saving up for important, larger investments. These may include education for children or establishing an independent business. BRI is the oldest lender in Indonesia, and also the largest measured by assets, with more than 1,000 branches and over 25,000 cash dispensers.

Growth and barriers to entry

Indonesia is home to 261 million inhabitants and is one of the most populous countries in the world. In 2018, however, only 48% of adults had a bank account and this proportion was even less than 36% for the poorest 40% of the population. BRI therefore has huge potential for growth due to its business activity almost exclusively in Indonesia. With 56% of the outstanding loans for MSMEs (micro, small and medium-sized enterprises), the bank is by far the largest provider in the region for this segment. In terms of their number, MSMEs account for almost 100% of companies in Indonesia and they employ 89% of workers (as of 2018). BRI has already demonstrated over many years that it has the leading edge over competitors when it comes to also providing cost-effective financial products to customers in rural regions. It does this through small and sometimes mobile branch offices, and also increasingly via digital solutions. The company is able to profit from the higher interest margin and low default rate in the micro segment (due in part to shorter durations). Since 2011, both the volume of micro-loans and the corresponding customer base have practically doubled.

Risks

The micro-loan programme of the government (KUR) stipulates volumes and interest rates to the major Indonesian state banks. KUR affects the profitability and credit quality of BRI products and creates uncertainty with regard to future development, as the requirements have been adjusted on multiple occasions in the past. The Indonesian government holds 57% of the voting rights in BRI and therefore has a veto right for specific resolutions. There are no female members on the board of commissioners. No information is published on how to handle credit risks associated with negative environmental influences for corporate customers (50% of the credit portfolio).

Knowledge

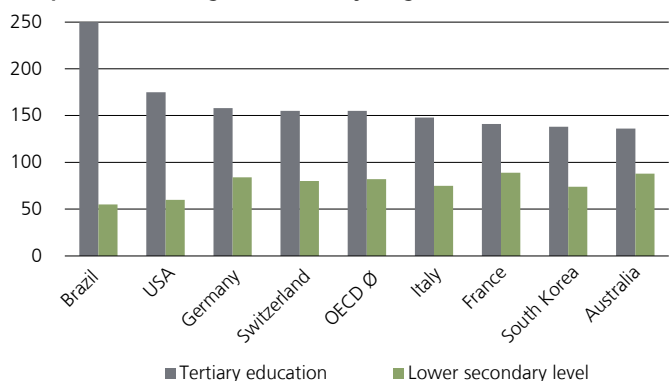
Knowledge as the key to tackling poverty

Access to knowledge and information is essential for society and individuals to be able to shape their lives independently. It is only in this way that we are able to fully utilise the options open to us, whether in exercising our political rights, accessing better-paid work to cover our healthcare costs or tackling climate change. The lack of access to information technology or inadequate education restricts the potential for society and the economy.

Education for all – still not a matter of course

Education means access to knowledge and allows learning the skills to use this knowledge. Good basic education for all – regardless of social background – is a necessity. Nevertheless, children from poorer families in developed and developing countries still receive a lower standard of education, because there is a lack of quality among public primary schools. School pupils from poorer social strata with low levels of competency have an 80% higher probability of unemployment and a 40% higher risk of health problems. This causes social tension in many countries. According to OECD studies, higher incomes are only achievable with improved education and qualifications (*Figure 7*).

Figure 7: Income differences for selected countries in comparison with higher secondary stage education (=100)



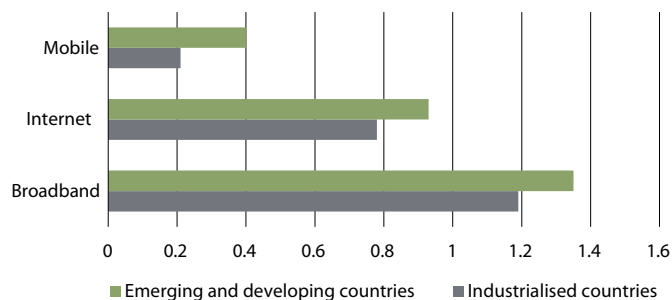
Source: OECD, Swisscanto Invest

Many people from lower and middle social backgrounds in countries with inadequate public education institutions depend on second-chance education programmes. This is particularly critical as the requirements on daily work are becoming more technology and knowledge-intensive, even in developing countries. It is for this reason, for example, that profit-driven private companies are offering high-quality education services in Brazil. The loans are affordable for graduates, thanks to the subsequently higher-qualified and better-paid work.

Networking for better solutions

Digital communication technologies (ICT) create economic and social networks which make access to knowledge, information, services or goods cheaper and more efficient. Studies show that improving access to mobile communications and the Internet has a positive effect on a country's economy, as additional incomes can be generated and costs saved (*Figure 8*). Digital solutions also contribute to decoupling resource consumption from economic growth by means of efficiency gains or innovations. For this reason, connectivity to mobile networks is a sustainability goal in itself.

Figure 8: Additional GDP growth (in %) per 10% higher ICT coverage, 1980–2011



Source: World Bank 2016, Relationship Broadband & Economic Growth

Despite rapid development in this area, there is still a significant "digital divide" between various global regions. Differences also exist within countries, for example, between urban and rural areas, different income groups and between men and women. A lack of infrastructure is not always the cause. Impediments also include lack of knowledge in dealing with communication technologies (digital literacy) or the fact that, in certain cultures, women are obstructed from access to education, money and technology, and hence independence and self-determination. Private education services and the communication and technology sector make a vital contribution to tackling poverty.

Case study: Millicom International Cellular

Sustainability impact profile



Knowledge
Networking

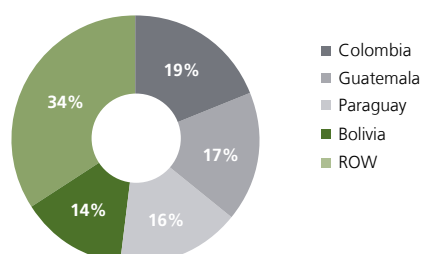
Company description

Sector	Telecommunications
Country	Sweden
Employees	21,403
Turnover	USD 4.07 billion
Market capitalisation	USD 6.03 billion

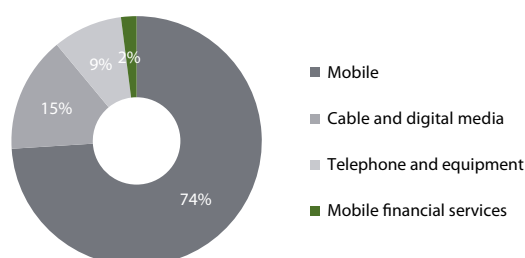
Millicom International Cellular is an international mobile communications company. The company primarily focuses on Asia, Latin America and Africa, where landline coverage is inadequate or even non-existent. In various countries, Millicom offers inexpensive prepaid and contract services under the brand name Tigo.

Geographic positioning (turnover)

Adjusted by minorities



Business areas (turnover)



Data as at March 2019

Sustainability impact and business model

Digitalisation helps both the economic and social development of a region: cheap smartphones enable broad swathes of the population to have Internet access, and hence also access to knowledge and education. Access to information and a diverse media landscape is generally considered an important part of a functioning democracy. Millicom is a provider of mobile communications, cable, pay-TV, prepaid and corporate client services in frontier markets such as in Latin America. The company purports to follow a “4A” strategy in mobile communications: affordability, accessibility, availability and affinity. Customers not only have to be able to afford the mobile services, they must also have access to them. Moreover, relevant areas have to be developed for mobile communications and useful products provided for customers. The services offered by Millicom include very low mobile credit amounts and cheap data packages valid for short periods.

Growth and barriers to entry

In the markets in which the company is active, Millicom is working on expanding the mobile communication network; it also intends to make a name for itself as a provider of digital services. Population growth in the frontier markets managed by Millicom is higher than in the USA or Europe, as is the expected growth in prosperity. Millicom can continue to profit from the driving force that is digitalisation with its range of mobile financial services (money transfers, bill payments, etc.). In Latin American markets, with a market share of over 50% in some countries, Millicom has a leading market position in mobile communications; in Colombia and Bolivia, the company is in third and second place respectively, which gives it high margins due to economies of scale.

Risks

High inflation (particularly in Latin America) is slowing the real growth of the company. Besides food prices, inflation has been driven in particular by the depreciation of currencies. Furthermore, Millicom proactively reported a case of corruption in a joint venture in Guatemala to the US authorities; the case is not yet closed and the amount of the fine is still to be set. The Board of Directors’ payment and accounting committee is not independent; the holding company Kinnevik, which is also involved to some degree in operations, possesses more than 40% of outstanding shares.

Investing sustainably with Swisssanto Invest – Overview

Swisssanto Invest offers two lines of investment in the ESG area for a range of customer needs: **Responsible** for the systematic reduction of ESG risks and **Sustainable** to achieve returns with societal benefits. *Table 3* shows the two approaches compared to each other in the most important dimensions.

Responsible – Systematic reduction of ESG risks

With the Responsible approach, the most controversial companies from a perspective of sustainability are systematically excluded – while maintaining a return profile that is comparable with that of traditional investments. As a result, those companies are excluded, which exhibit insufficient management of ESG risks, have committed gross violations of or breaches against international

standards or whose activities are rated critically based on ecological or social considerations. The objective is to systematically reduce ESG risks.

Sustainable – Systematic focus on returns with societal value

The products under the stricter sustainability approach of the Sustainable portfolio extend beyond the risk perspective and use investment opportunities to achieve a societal benefit. Swisssanto Invest is convinced that companies that provide a social benefit are more successful, as they have products and services that will generate above-average demand in the medium term.

Table 3: ESG approaches of Swisssanto Invest compared

	Responsible	Sustainable
Objective	Systematic reduction of ESG risks	Systematic focus on returns with societal value
1st Step Application of exclusion criteria	Limited exclusion criteria exclude around 5 – 10% of companies.	Broad exclusion criteria exclude around 20% of companies.
2nd Step Application of ESG filters	“Laggard out” Through analysis of 45 ESG criteria, the least sustainable companies are excluded .	“Best in class” Through analysis of 45 ESG criteria, the most sustainable companies are identified .
3rd Step Sustainability impact analysis	–	By means of impact analysis, the companies with the highest societal benefits and strong growth prospects are identified.
Result	Responsible investment universe: initial universe reduced by 20%	Sustainable investment universe: initial universe reduced by 70%
Implementation	The selection of shares and bonds from the Responsible investment universe for our Responsible funds, which have a risk/return profile that is comparable with that of traditional funds.	The selection of shares and bonds from the Sustainable investment universe for our sustainability-focused Sustainable funds, which have a risk/return profile that deviates from that of a traditional investment.

A pioneer in sustainable investments

Swisscanto Invest is a pioneer in the area of sustainable investments and launched the first investment solutions back in 1998. In 2009, Zürcher Kantonalbank, the proprietor of the Swisscanto Invest brand, became one of the first full-service banks in Europe to sign the six Principles for Responsible Investment (PRI) of the United Nations. It thereby reiterated its conviction that the integration of ESG themes in investment decisions and active shareholder relations is a prerequisite for fiduciary responsibility in wealth management. The UN PRI (Principles for Responsible Investing) international investor initiative regularly coordinates social or ecological engagements for more than 1,700 signatories with a volume of investment of around USD 75 billion. Swisscanto Invest regularly takes part in these joint engagements under the UN PRI platform. Regular dialogue is also carried out with the management of companies on ESG topics.

Swisscanto Invest uses its voting rights actively: the voting guidelines of Swisscanto Invest are based on Swiss and international corporate governance standards, as well as the principles of the UN PRI, which incorporate a comprehensive set of environmental, social and corporate governance principles into the decision-making process. In the analysis and decision-making process for the voting procedures at general meetings, Swisscanto uses the assessments of the independent voting right adviser ISS (Institutional Shareholder Services) and our investment specialists in Asset Management. The voting procedures are set out in detail at [swisscanto.com](https://www.swisscanto.com).

Sustainability Advisory Committee

Swisscanto Invest rounds out its know-how with an independent sustainability committee through an external specialist department. Several renowned specialists – including from the Climate and Environmental Physics Department of the University of Berne – monitor the current investment universe and the conceptual development of the sustainability approach.

Detailed information about the various sustainable investment solutions from Swisscanto Invest can be found on our website: [swisscanto.ch/sustainability](https://www.swisscanto.ch/sustainability).



