Swiss Banking

# GSS+ bonds

## The Swiss market for sustainable bonds in an international comparison

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Swiss Bankers Association (SBA) discussion paper

## Key points in brief

- Green, social, sustainability and sustainability-linked (GSS+) bonds, together with other financial instruments, are a vital catalyst for the sustainable development of the State, the economy and society. Their importance has grown considerably since 2015, with GSS+ bonds worth some CHF 3.36 trillion outstanding worldwide at the end of 2023, but they still make up only a low single-digit percentage of the global bond market.
- Europe is the leading region in terms of GSS+ bond issuance: the category accounts for 10% or more of the annual total in some countries.
- In Switzerland, the growth of GSS+ bonds only began in 2019, around four years after the rest of the world. Despite this, they now make up about 10% of the market here too. Switzerland has thus mostly caught up with the leading sustainable bond centres in just a few years.
- By international standards, Switzerland has a highly diversified GSS+ bond market. Whereas sovereign issuers or other political entities have driven growth in many European states, most of Switzerland's issuance emanates from companies in the real economy and the financial sector.
- The GSS+ bonds issued on the Swiss markets are used in particular to finance sustainable newbuilds, energy-efficient building renovations and the transformation of traffic and transport infrastructure.
- GSS+ bonds are just one type of instrument among many for financing sustainable development, so their market share does not give a direct indication of the Swiss capital market's sustainability. Nevertheless, it could make sense to keep promoting them – all the more so as demand for sustainable financial investments remains especially high in Switzerland. Various approaches are conceivable:
  - **Taking advantage of synergies:** As of 1 January 2024, Swiss companies with capital market viability are obliged to report publicly on climate issues. If this reporting is based on a holistic strategy with concrete, measurable sustainability targets, it reduces the effort required to set up and report on GSS+ bonds too.
  - **Raising awareness among cantons and cities:** The Swiss GSS+ bond market has a low proportion of domestic public-sector issuers compared with other jurisdictions. This stands in contrast to the large number of cantons and cities that regularly issue traditional bonds. In addition, it is these issuers that have suitable and above all large-scale projects that could be financed via GSS+ bonds.
  - **Sustainability-linked bonds as an alternative:** Most companies with capital market viability will still have difficulty generating sufficient project volumes to finance with dedicated bonds. Sustainability-linked bonds could be an alternative for them. These are more flexible than green, social and sustainability bonds in that issuers may use their proceeds for general corporate purposes, in exchange for which they undertake contractually to achieve predefined sustainability targets. However, investors appear to favour classic "use of proceeds" bonds for now.

# 1. Introduction

The term "GSS+" stands for green, social, sustainability and sustainability-related bonds. These have gained a great deal of importance since 2015, with their overall volume growing much faster than that of conventional bonds. GSS+ bonds are classic fixed-interest debt securities, but the proceeds from their issuance are used to finance sustainable projects, especially those addressing environmental, climate and social issues. They are therefore a vital catalyst for the sustainable development of the economy, the State and society in general and the climate transition in particular.

The Swiss Confederation issued its first green bond in October 2022 with a value of CHF 1.07 billion. This has since been increased to around CHF 1.95 billion. The Federal Council explicitly hopes that this green Confederation bond will encourage other actors to issue GSS+ bonds of their own. It is thus an important piece of the puzzle with regard to the Federal Council's aim of turning the Swiss financial centre into a leading global hub for sustainable finance (Federal Council 2021, Federal Finance Administration 2022).

However, little is still known at present about how the Swiss GSS+ bond market measures up in an international comparison. A study published in autumn 2023 by the Enterprise for Society Center (E4S) claims that Switzerland is lagging behind the European Union, at least when it comes to green bonds (Chiarotti et al. 2023). Up to now, there has been no broader analysis covering the entire spectrum of GSS+ bonds. This discussion paper is intended to close that gap.

Following a brief overview of the different types of GSS+ bonds and their characteristics, it explains how sustainable bonds have developed globally and in which countries they are most widely used. Special attention is paid to the issuers and industries behind these bonds as well as the projects they finance. Having established the global background, developments in Switzerland are analysed with a focus on what sets Switzerland apart. Finally, potential approaches to the continued promotion of this bond segment are outlined.

# 2. Notes on methodology

All information and charts in this paper are based on market data as at 31 December 2023 for the international comparison and 30 June 2024 for the Swiss market. The analysis assumes a broad definition of bonds including all debt securities with fixed interest as well as those secured against claims (bonds and covered bonds) that are listed on a trading venue, regardless of their risk classification, coupon type or term to maturity. However, it does not take securitisations, structured products or other debt instruments (e.g. promissory notes) into consideration.

Bonds that are not specifically labelled as GSS+ from issuers that are already considered to be sustainable are treated as conventional bonds for the purposes of this paper and thus do not flow into the calculations of GSS+ bonds' market share in the various jurisdictions. Finally, this paper only deals with new bond issuance (the primary market), not subsequent trading of the same bonds (the secondary market).

# 3. What are GSS+ bonds?

GSS+ bonds are classic interest-bearing debt securities issued by companies in the real economy or financial sector, public-sector entities or multilateral or supranational organisations to finance specific sustainable projects or support their sustainability targets. There are four main types of GSS+ bonds:

**Green bonds'** proceeds are invested by the issuer in projects that protect the environment or the climate. **Social bonds**, meanwhile, focus on social aspects. **Sustainability bonds** finance projects with a mix of green and social aims. Since their proceeds are tied to specific sustainability projects, these three types are referred to as "use of proceeds" bonds (ICMA 2020).

**Sustainability-linked bonds** differ from the other three types in that their proceeds are not used to finance specific projects but are instead made available for general corporate purposes, with the issuer contractually undertaking to achieve predefined, measurable sustainability targets. As a rule, failure to achieve these targets results in penalty payments to investors – mostly in the form of an increased coupon. The opposite is sometimes true, i.e. the coupon or payment to investors is reduced if the targets are met. In both cases, sustainability-linked bonds are intended to provide the issuer with a financial incentive to achieve the sustainability targets it has set within the agreed time frame (ICMA 2023).

GSS+ bonds do not constitute a static, closed universe. For example, blue bonds, which finance maritime conservation projects, have been attracting more and more attention lately. Transition bonds are also a hot topic. These are explicitly intended to support decarbonisation pathways for companies that are responsible for especially high emissions. That said, both of these are merely specialised forms of green, social, sustainability and sustainability-linked bonds. The intention behind them is always the same, namely to finance the sustainable development of the State, the economy and society.

**Info box 1: examples of GSS+ bonds in Switzerland**

In September 2022, Transports publics genevois (TPG) issued a **green bond** worth CHF 100 million. The capital raised is being used to enlarge Geneva's fleet of trams and buses and further improve their energy efficiency as well as to upgrade and expand the city's public transport infrastructures (TPG 2022).

In June 2022, the Canton of Basel-Stadt was the first public-sector entity in Switzerland to issue a **social bond**. The proceeds of CHF 110 million will be invested to preserve existing affordable housing and build more. Under the terms of the bond, homes must be offered for rents at least 10% below the average market rate (BS 2022).

In September 2021, the housing cooperative Allgemeine Baugenossenschaft Zürich (ABZ) was the first organisation of its kind to issue a **sustainability bond**. The CHF 120 million raised will refinance social and environmental construction projects in the Zurich region, including the new Glattpark, Entlisberg 2 and Toblerstrasse developments with a total of 660 social apartments (ABZ 2021).

In January 2022, Holcim became the very first issuer of a **sustainability-linked bond** denominated in CHF. With two tranches maturing in four and ten years respectively for a total of CHF 375 million plus an additional CHF 50 million, the bond has raised CHF 425 million in total. Its terms are contingent on the achievement of specific $CO_2$ emissions reduction targets. Scope 1 emissions must be reduced by 9.7% by December 2025 and 17.5% by December 2030. If these targets are not met, the tranches' coupon payments to investors increase by 37.5 and 75 basis points respectively (Holcim 2022).

# 4. How are GSS+ bonds regulated?

GSS+ bonds, like conventional bonds, are governed by the Financial Services Act (FinSA). This means that a prospectus must be issued that provides details of the issuer, the guarantor and security provider as well as the associated rights, obligations and risks for investors (Chiarotti et al. 2023).

Beyond this requirement, there are no specific legal provisions governing GSS+ bonds. Internationally, however, various principles and guidelines have been developed – many of them by the industry itself – for the benefit of both issuers and investors. The International Capital Market Association (ICMA) is regarded as the most influential standard-setting body in this regard (OECD 2023). It has published Voluntary Process Guidelines for all four types of GSS+ bonds with a view to promoting transparency and disclosure and enhancing market integrity. The Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines contain best practice recommendations on implementation, managing the proceeds of bond issues, and the process for selecting and evaluating projects (ICMA 2020). The Sustainability-Linked Bond Principles (ICMA 2023), meanwhile, explain how issuers should select, calibrate and verify sustainability targets (key performance indicators and sustainability performance targets). All four sets of guidelines recommend reporting on the progress of projects (impact and capital allocation) or the progress towards achieving sustainability targets at least once a year with the aid of an independent third party. Taken together, the ICMA guidelines can be seen as a de facto global market standard, and the Swiss government also followed them when creating its green Confederation bond (Federal Finance Administration 2022).

The Climate Bonds Standard and Certification Scheme published by the Climate Bonds Initiative (CBI) is another important set of rules for sustainable bonds. The CBI goes a step further than the ICMA by linking Climate Bond certification to compliance with specific requirements. In particular, bonds may only receive the certification if they finance projects that meet the criteria of the CBI's own sustainability taxonomy (alignment with the Paris Agreement climate goals) (OECD 2023).

The European Union (EU) has recently joined the fray to compete with the various industry initiatives with its own regulations. The European Green Bond Standard, finalised in October 2023, is intended as nothing less than a gold standard for sustainable bonds. For a bond to bear the European Green Bond mark of quality, its issuer must apply the EU taxonomy in choosing the project to be financed in order to ensure that the latter is genuinely sustainable. The Standard also includes a number of duties regarding reporting and having compliance checked by a licensed external reviewer so as to enhance the transparency and comparability of European Green Bonds even further. European Green Bonds are also subject to a supervisory framework. The European Securities and Markets Authority (ESMA) is responsible for registering and supervising the external reviewers, while the national supervisory authorities monitor issuers' compliance with the disclosure and reporting requirements. Last but not least, the European Green Bond Standard Regulation also contains voluntary disclosure templates for green bonds that are not (yet) based on the EU taxonomy (e.g. those under the ICMA guidelines) as well as for other bonds labelled as sustainable such as sustainability-linked bonds (Vyvyan 2023).

## 5. What are the factors to consider with regard to GSS+ bonds?

Issuing a GSS+ bond brings various pros and cons for the issuer, which may be a company in the real economy or the financial sector, a public-sector entity or a multilateral or supranational organisation. For example, it is important to remember that only bonds with a volume of at least CHF 100 million are admitted for listing as part of SIX Swiss Exchange's Swiss Bond Index (SBI) family, which is often seen as an essential prerequisite for attractive bond conditions. "Use of proceeds" bonds – i.e. green, social and sustainability bonds – can therefore fall at the first hurdle if they are unable to find green and/or social projects that are suitable and above all sufficiently large. In addition, issuers of these types of bonds are restricted in how they can use the proceeds because they are only allowed to invest them in the named sustainability projects. Sustainability-linked bonds are more flexible because their proceeds can be used for general corporate purposes. This makes it easier for them to reach the de facto minimum threshold of CHF 100 million.

On top of this, the cost of issuing GSS+ bonds is higher than for conventional bonds due to the additional reporting requirements, for which a verified framework needs to be in place. In fact, the cost normally runs into the middle tens of thousands (Chiarotti et al. 2023). The importance of this higher cost is questionable, however, when set against the proceeds of CHF 100 million or more. What is more cost-intensive is developing a sustainability strategy and embedding it in the corporate culture and organisation, although societal and regulatory developments mean that this is now expected of companies on the capital market and public-sector entities anyway.

Persistently high demand for sustainable financial investments is also creating opportunities. For example, issuing a GSS+ bond can have a positive effect on the issuer's share price (Daubanes et al. 2022). The existence of a "greenium" (green premium) is also a subject of discussion in both research and practice. It would mean that green bonds could have a lower coupon than otherwise identical conventional bonds, allowing issuers to refinance at a lower cost. This is surprising as green bonds, being of the "use of proceeds" type, have similar structures and risk profiles to conventional bonds, so their default risk depends directly on the issuer rather than on the project being financed. There is not yet any clear evidence in support of a greenium. Some recent studies have shown a demand-driven yield discount of 1-18 basis points (Kölbel and Lambillon 2022), but others have found no sign of a greenium at all (Flammer 2021). In principle, it can be assumed that any greenium has dwindled as the market for green bonds has matured. Going forward, first issuers and issuers with especially ambitious targets are most likely to generate high demand and thus benefit from a greenium (GDV 2022). There has been no specific study of the Swiss market, but green bond coupons are in fact 12 basis points higher than those for conventional bonds on average (Chiarotti et al. 2023). From the issuer's perspective, therefore, the added value of green and other "use of proceeds" bonds does not lie primarily in cheaper refinancing but rather in the signal they send out to investors, namely that the issuer takes a holistic view of sustainability and is harnessing the power of the capital market to achieve sustainability targets. Green, social and sustainable bonds are thus a means of consolidating and expanding the investor base (Flammer 2021 and Kidney 2018).

By contrast, financial aspects still appear to play a greater role in relation to sustainability-linked bonds, the latest addition to the GSS+ bond family. A study by Kölbel and Lambillon (2022) states that two thirds of global sustainability-linked bond issues feature a sustainability premium in the form of a lower coupon. On top of this, the increase in the coupon as a result of failure to achieve the associated sustainability targets is often smaller than this premium. It thus follows that most issuers of sustainability-linked bonds can currently refinance more cheaply than they would have been able to with a conventional bond, even if they do not meet their sustainability targets (Kölbel and Lambillon 2022).

It is also important to understand that GSS+ bonds do not necessarily lead to an additional climate or environmental impact, since the sustainability projects they support would in many cases go ahead anyway (Kaiser and Oehri 2020). Even the Federal Council made reference to this when placing its green Confederation bond (Federal Council 2021). That said, the impact of GSS+ bonds can be seen not only in the projects they finance, but also in a broader systemic context. Green bonds, for instance, are "a mechanism to stimulate internal debate and receive external recognition (...) to transition to a low-carbon and climate resilient economy" (Kidney 2018). Indeed, various studies show that issuers of green bonds reduce $CO_2$ emissions faster and to a greater extent on average than issuers of conventional bonds (Flammer 2021, Schmittmann and Teng 2021, Mazzacurati et al. 2021 and Fatica 2020). However, the relationship – particularly over the long term – is not always significant (Ehlers et al. 2020), so it is important to consider each issuer individually.

This means that it is crucial to disclose the aims and impact of a GSS+ bond in a transparent and readily understandable way so that investors can assess how investable and credible it is, which depends on how the issuer addresses sustainability and climate issues in its business strategy. This is especially true given that a GSS+ bond issuer can still have the majority of its operations in a sector of the economy that is not regarded as sustainable (Ehlers et al. 2020), in which case transition plans play a key role.

**Info box 2: the banks' role**

Banks are central players on the bond market and can assume a number of different roles:

- lead manager of a bond placement on behalf of the issuer (e.g. a company in the real economy or the financial sector, a public-sector entity or a multilateral or supranational organisation);
- advisor to issuers in creating a GSS+ bond framework;
- buyer of GSS+ bonds in the context of balance sheet or liquidity management or market-making;
- advisor to institutional or private investors or active portfolio manager in asset, wealth or investment management; and
- issuer of GSS+ bonds (raising debt capital).

Banks also act as an interface between issuers and investors, helping to align supply and demand more effectively.

# 6. International developments

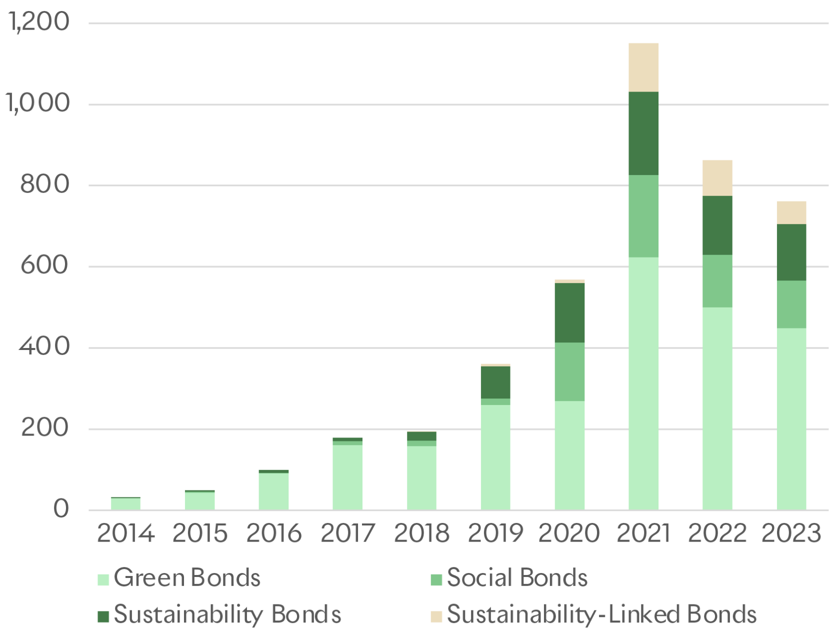
The first green bond – labelled Climate Awareness Bond – was issued as long ago as 2007 by the European Investment Bank (EIB), but it did not attract a wave of imitators. In the early years, almost all sustainable bonds were issued by multilateral and supranational organisations. It was not until the mid-2010s that a wide range of issuers, in particular companies in the real economy and the financial sector, began to raise capital via GSS+ bonds.

The rapid growth in the years that followed was closely linked to the ICMA's Green Bond Principles, first published in 2014, and especially the Paris Agreement on climate change of 2015, which gave the financial sector a key role to play in fighting climate change. Between 2010 and 2023, annual issuance rose by an impressive 56% a year on average. The year 2021 saw increased issuance of social bonds by governments and other public-sector entities – France, for example, issued one worth the equivalent of CHF 21.4 billion. The proceeds of these bonds were earmarked in particular for recovery programmes following the COVID-19 pandemic. The turmoil on the global energy markets due to Russia's war of aggression against Ukraine, together with inflation and the end of low interest rates, caused a major slump on the bond market in 2022, as a result of which the market for GSS+ bonds underwent its first significant contraction. This was followed by a further fall in issuance in 2023. The outstanding volume of GSS+ bonds worldwide at the end of 2023 was around CHF 3.36 trillion.

Various analysts predict slowing growth and stagnating issuance (i.e. flat compared with 2023) this year, with multilateral and supranational actors as well as governments issuing more GSS+ bonds than corporates. Reasons for this include higher capital market interest rates, the increased cost of materials and capital, lower capital spending and a temporary lack of suitable projects following high issuance in 2021 and 2022 (ING 2023 and UBS 2024).

Fig. 1

**Global issuance of GSS+ bonds (CHF billion equivalent)**

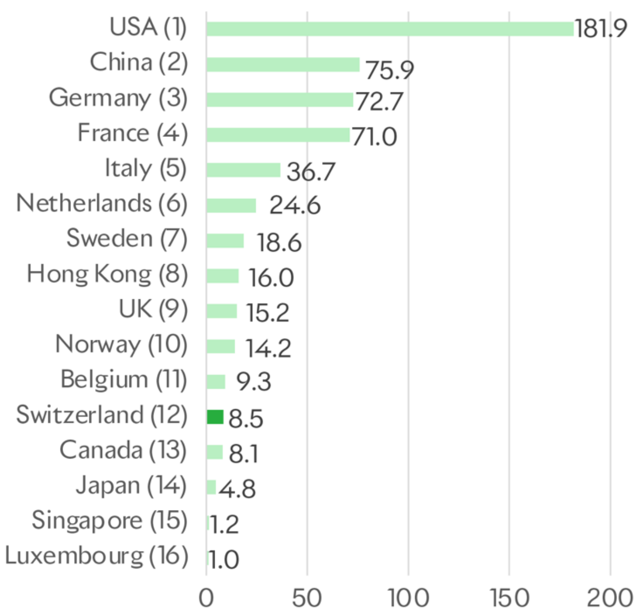


The past decade has been characterised not only by marked growth in volumes, but also by increasing differentiation among sustainable bonds. All bonds issued in the early years, for instance, qualified as green bonds. Since the United Nations published its 17 Sustainable Development Goals in 2015, however, social and sustainability bonds have gained importance. More recent growth has come from sustainability-linked bonds, which have only been issued by corporates since 2019. Nevertheless, green bonds are still the dominant force among GSS+ bonds with a 59% market share.

Figure 2 shows the volume of GSS+ bonds issued in 16 jurisdictions in 2023, including the Benelux countries, China, the G7 states, Switzerland, selected Scandinavian countries and comparable Asian financial centres. Together, these make up about three quarters of the global volume of sustainable bonds. The EU, the US and China are the biggest markets, which is hardly surprising in view of their sheer size and economic power. Within continental Europe, Germany and France are the clear leaders ahead of Italy, the Netherlands and Sweden. Switzerland is in 12th place with issuance of approximately CHF 8.5 billion and thus well ahead of its traditional rivals Singapore (CHF 1.2 billion) and Luxembourg (CHF 1.0 billion), ranked 15th and 16th respectively.

Fig. 2

**GSS+ bond issuance in 2023 (CHF billion equivalent)**[1]




[1] The global bond markets cannot be precisely divided into distinct jurisdictions. To simplify matters, it is assumed here that a bond's International Securities Identification Number (ISIN) and currency determine its nationality. This means, for example, that all GSS+ bonds that are denominated in CHF and have an ISIN beginning with CH are Swiss, whereas those issued by Swiss companies such as Holcim, Novartis and UBS but denominated in EUR or other currencies are not Swiss. GSS+ bonds that have an ISIN beginning with XS (settlement via Clearstream or Euroclear, with no specific country code) are allocated to a jurisdiction based on the issuer's domicile.

However, volumes alone are only part of the picture. It is important to look at the relative size of national economies and the importance of the bond market, which varies from country to country. The Swiss bond market, for example, traditionally features relatively little depth due to a combination of the buy side being dominated by institutional investors, regulatory hurdles for foreign investors (such as withholding tax and stamp duty), and competition with an efficient corporate loan market. A weighted view is therefore needed to compare the success and appeal of GSS+ bonds on individual markets.

Fig. 3

GSS+ bond market shares in 2023[2]

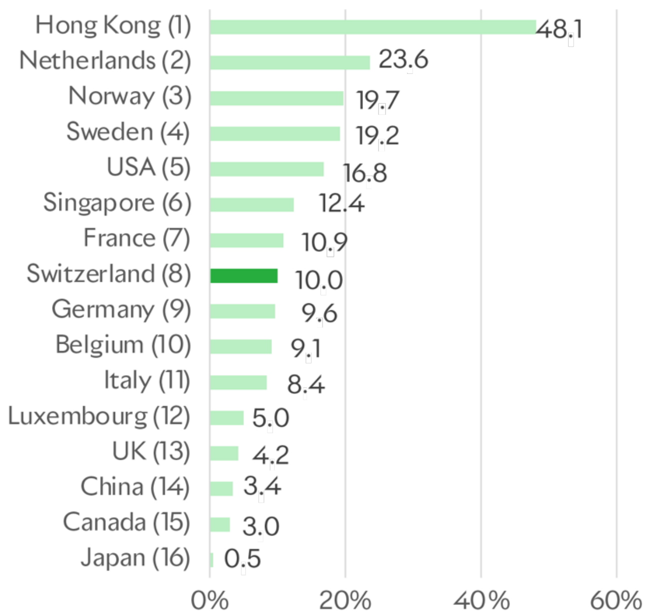



Figure 3 shows the market shares of GSS+ bonds in 16 jurisdictions in 2023. In this view, the US slips to fifth place with a market share of 16.8% and China to 14th place with 3.4%. France, meanwhile, is only in seventh place with 10.9%, and Germany is in ninth place with 9.6%. Switzerland, on the other hand, climbs four places to eighth in this view with a market share of 10%. Hong Kong heads the list with 48.1%, having benefited from extensive state green bond programmes in 2023 as well as financial incentives for issuing green bonds (see Hong Kong Monetary Authority Tax Concessions and Incentive Schemes). The Netherlands are placed second. Their market share of 23.6% is attributable in particular to strong GSS+ bond issuance by financial holding companies, which are far more prevalent there than elsewhere in Europe (De Nederlandsche Bank 2023). The Scandinavian countries Norway and Sweden follow in third and fourth places, helped by their traditions of sustainable corporate culture, large and diversified corporate sectors and intensive cooperation between issuers and investors (Torvanger et al. 2021).

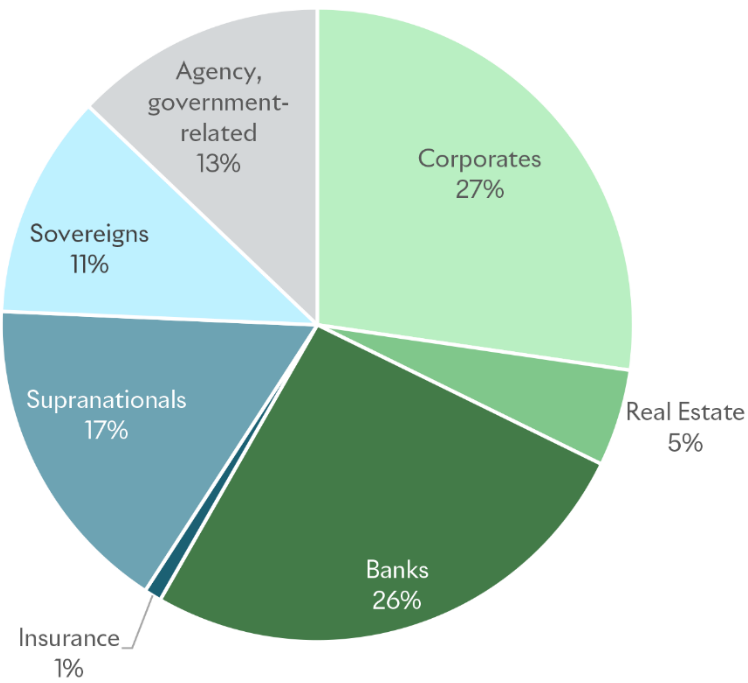
It is also interesting to look at the volume-weighted market shares of GSS+ bonds in each currency bloc. Here too, Hong Kong is the clear leader, with the GSS+ label accounting for 44% of the total bond volume denominated in Hong Kong dollars. Second place goes to the Swedish krona (25%), third to the Norwegian krone (12%). With a GSS+ market share of 11%, the Swiss franc is placed fourth. The euro is also

[2] Share of issued bond volume made up by GSS+ bonds in 2023.

in double digits with a 10% share. The UK pound comes next with 6%, then the Canadian dollar with 5% and the US dollar with 3%. The Chinese renminbi bond market is in last place with just 1%. Globally, GSS+ bonds still make up only a low single-digit percentage of the global bond market and thus remain a niche product in spite of their rapid growth.

Fig. 4

**Issuers by outstanding GSS+ bond volume**




The global development of GSS+ bonds can be roughly divided into three phases. In the early years, issuance mostly came from supranational and multilateral organisations. Starting in the mid-2010s, sovereign issuers increasingly came on board. By 2019, companies in the real economy and financial sector had become the driving force behind volume growth. Looking at the currently outstanding volume of GSS+ bonds worldwide, 32% is attributable to financial institutions, 27% to corporates, 17% to multilateral and supranational organisations, and 11% to governments. The remaining 13% is made up by public-sector entities (e.g. local and regional government bodies). In the financial institutions category, banks are responsible for 81.7% of the bond volume, real estate companies 15.5% and insurers 2.8%.

Fig. 5

### Project purposes by outstanding GSS+ bond volume[3]

| Use of proceeds | Share |
|---|---|
| Renewable energy | 14.1 |
| Clean transportation | 11.1 |
| Energy smart technologies and energy efficiency | 10.5 |
| Pollution prevention and control | 7.5 |
| Green buildings and infrastructure | 7.0 |
| Sustainable water management | 6.8 |
| Access to essential services | 6.3 |
| Terrestrial and aquatic biodiversity conservation | 5.0 |
| Climate change adaption | 4.9 |
| Agriculture and forestry | 4.7 |
| Socioeconomic advancement and empowerement | 4.5 |
| Affordable housing | 4.1 |
| Employment generation | 4.0 |
| Eco-efficient products, production technologies and processes | 3.1 |
| General purposes | 2.9 |
| Food security | 1.8 |
| Affordable basic infrastructure | 1.7 |
| **Total** | **100** |

Given the dominance of green bonds as outlined above, the picture regarding how the proceeds of GSS+ bonds are used comes as no surprise. The vast majority flow into projects pursuing green aims. The main categories among these are renewable energy (14.1%), clean transportation (11.1%), energy efficiency (10.5%), pollution prevention and control (7.5%) and green buildings (7.0%). Other categories with climate and/or environmental relevance, including sustainable water management, biodiversity and climate change adaption, only play a secondary role. In total, 22.4% of proceeds flow into projects pursuing social aims, including access to essential services and affordable housing. Finally, just 2.9% of the outstanding bond volume consists of sustainability-linked bonds, which may be used for general corporate purposes.

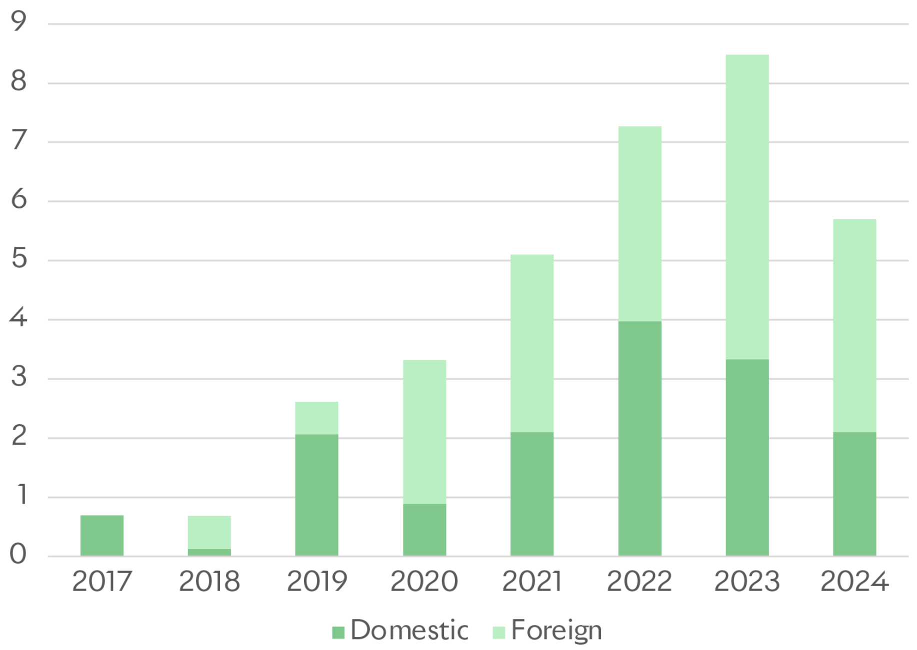
[3] GSS+ bonds can be used to finance multiple projects. Since the precise allocation of proceeds to each project cannot be systematically tracked, the amounts raised by some bonds may have been counted more than once in this analysis.

# 7. Focus on Switzerland

**Observation 1: Switzerland was not a pioneer, but it has caught up in leaps and bounds.**

Fig. 6

Swiss issuance of GSS+ bonds (CHF billion equivalent)[4]




The global spread of sustainable bonds began around 2015, but the Swiss market showed virtually no growth for a number of years. Bonds were only issued sporadically up to 2017, mostly by supranational and multilateral actors (e.g. the European Investment Bank). However, Switzerland too began to record rapid growth in 2019, with a sudden jump in new issuers and total issuance. This has been followed by fresh highs year after year ever since. Interestingly, the Swiss GSS+ bond market not only resisted the global downtrend in 2022, it actually recorded a 43% rise in issuance compared with the record year globally that was 2021. With issuance already having reached CHF 5.7 billion in the first half of 2024, a new high could be seen this year as well.

Overall, 87 issuers have placed 189 bonds to date with a total volume of CHF 34.2 billon, and a further ten conventional bonds have been subsequently reclassified as green. Some 187 of these, adding up to CHF 33.9 billion, are currently outstanding. Following higher growth than the international average between 2019 and 2023, GSS+ bonds have also increased their share of the Swiss market significantly: it was 10% or 11% respectively in 2023[5], meaning that one in ten bond issues qualifies as GSS+. Switzerland can thus be seen as the late starter in the international arena that has mostly caught up in just a few years and now ranks among the leading locations for GSS+ bonds.

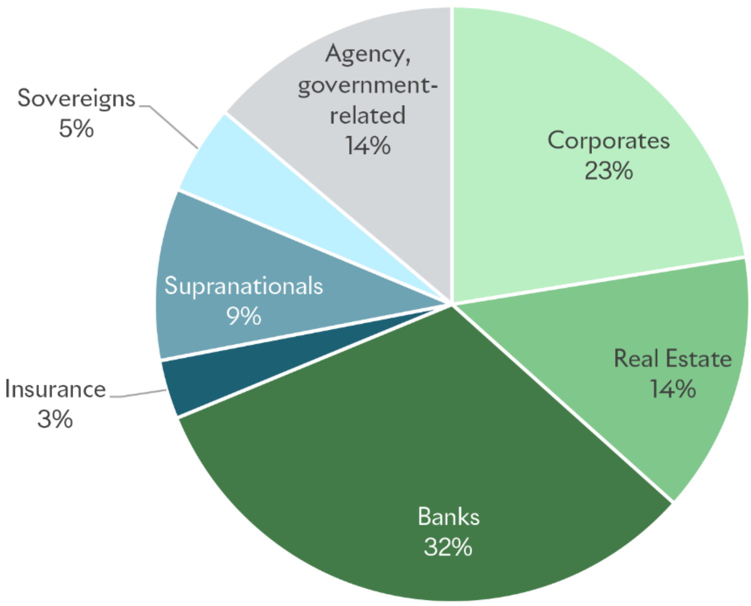
[4] Issuance volumes have been manually adjusted. Non-tradable tranches held by the issuer itself and subsequent reclassifications of previously issued conventional bonds, for example, are not included in this analysis. Furthermore, capital increases are assigned to the year in which they occurred rather than the year in which the bond was originally issued.
[5] See page 10.

**Observation 2: By international standards, Switzerland has a highly diversified pool of issuers.**

The market for GSS+ bonds is dominated more by financial institutions in Switzerland than it is in other countries. They are responsible for 49% of the outstanding volume, including 32% attributable to banks, 14% to real estate companies and 3% to insurers.

Fig. 7

Issuers by outstanding GSS+ bond volume




Corporates account for 23% of the total Swiss GSS+ bond volume, which is below the global average. These are primarily companies in the energy and transport industries. Sovereign issuers (5%) and public-sector entities (14%) are also underrepresented compared with the combined international figure of 24%, as are multilateral and supranational organisations (e.g. Eurofima and the European Investment Bank) with 9% of the outstanding GSS+ bond volume.

The largest single issuer is the real estate company PSP Swiss Property, which reclassified all of its outstanding bonds as green bonds in November 2022 and thus has 14 green bonds with an outstanding volume of around CHF 2.38 billion. The federal government is in second place with one outstanding green Confederation bond worth CHF 1.95 billion. The third-largest issuer is the Canton of Geneva with five GSS+ bonds and a total volume of CHF 1.28 billion. Münchener Hypothekenbank (eight bonds with a total volume of CHF 1.18 billion) is in fourth place, followed by Berlin Hyp (eight bonds, CHF 1.11 billion) in fifth. The two mortgage lenders are using green bonds to refinance their loans for energy-efficient renovations and sustainable newbuilds. Among the Swiss banks, Zürcher Kantonalbank is the largest issuer with five green bonds and a total outstanding volume of approximately CHF 1.03 billion.

It is clear that Switzerland boasts a highly diversified market for GSS+ bonds compared with the rest of Europe. In Germany, for instance, roughly half of the issued volume of sustainable bonds originates from banks, with a further third attributable to the government and other public-sector entities (including the individual states). Corporates play a secondary role there with a share of just 14.7%. The French market, meanwhile, is heavily dominated by state issuers. The French Republic is responsible for 12.3% of the outstanding volume, and sustainable bonds from public-sector entities (mostly state authorities) as well as local and regional governments account for 49.3%. In contrast to the Swiss market, corporates and financial institutions have almost identical shares of the French market with 18.4% and 18.5% respectively.

**Observation 3: The Swiss GSS+ bond market is also attractive for foreign issuers.**

Swiss GSS+ bond issuance totalled around CHF 8.5 billion last year. Foreign issuers made up an above-average share of this record figure – around CHF 5.2 billion. The largest issuer in 2023, for example, was the Dutch bank ABN AMRO with a CHF 800 million green bond programme. Foreign issuers, with GSS+ bonds accounting for 16.8% of their total issuance over the year as a whole, were in fact much more active than their domestic counterparts with a mere 4.6%. This remarkable difference suggests that the Swiss bond market appeals very strongly to foreign issuers. Indeed, there are indications that they are consciously saving up their limited green and social projects with a view to issuing GSS+ bonds in Switzerland (Global Capital 2023).

Domestic issuers' share of the GSS+ bond market may appear disappointingly low at first glance, but it should not be misinterpreted. The volume of GSS+ bonds issued to date, CHF 34.2 billion, is split roughly 50/50 between domestic and foreign issuers. The Swiss capital market's specific structure should also be borne in mind. For example, a third of the domestic bond volume is made up of Pfandbriefe, which are governed by a special law and do not currently qualify as green, social or sustainability bonds.

**Info box 3: Swiss Pfandbriefe**

With an outstanding volume of more than CHF 173.6 billion, Swiss Pfandbriefe constitute the largest asset class by far on the Swiss bond market. More than a third of the total volume of domestic bonds comes from the Swiss banks' two collective refinancing institutions, Pfandbriefbank schweizerischer Hypothekarinstitute AG and Pfandbriefzentrale der schweizerischen Kantonalbanken AG.

Governed by a special law, Swiss Pfandbriefe are unlike any other form of bond around the world, which makes them hard to reconcile with the ICMA frameworks for GSS+ bonds. As a result, they do not currently qualify as green, social or sustainability bonds. It would nevertheless be wrong to call them non-sustainable. On the contrary, the two institutions that issue them have a legal mandate to ensure long-term, stable and cheap refinancing for their member banks by providing loans from the proceeds of Pfandbrief issues.

These institutions thus make a substantial contribution to the sustainable and low-cost fundability of the buildings in which Swiss people live and work. Over and above this social aspect, however, they also support the pending transition to more sustainable, energy-efficient buildings. This will continue for decades and consume vast sums of money. Renovation projects can only be carried out if sufficient funding is available, which is why Pfandbriefe are vital to the environmental transformation of Swiss real estate.

**Observation 4: The Swiss GSS+ bond market is highly focused on real estate.**

Fig. 8

**Project purposes by issued GSS+ bond volume**[6]

| Use of proceeds | Share |
|---|---|
| Green buildings and infrastructure | 25.9 |
| Clean transportation | 24.3 |
| Energy smart technologies and energy efficiency | 13.4 |
| Renewable energy | 13.0 |
| Terrestrial and aquatic biodiversity conservation | 5.3 |
| Agriculture and forestry | 4.7 |
| Pollution prevention and control | 3.8 |
| General purposes | 3.4 |
| Climate change adaption | 2.9 |
| Eco-efficient products, production technologies and processes | 1.0 |
| Others | 2.3 |
| **Total** | **100** |

As outlined above, the focus of sustainable investments at the global level is very much on financing climate and environmental projects. The same is true in Switzerland. Bonds with green aims make up about 94.5% of the total volume. Green buildings constitute the biggest project category with a 25.9% share, followed by clean transportation with 24.3% and energy efficiency with 13.4%. Renewable energy comes next with 13%. It must be stressed, however, that the lines between the various categories are somewhat blurred. A glance at the bonds' prospectuses reveals that, in Switzerland especially, sustainable bonds tied to energy efficiency projects are primarily used for energy-efficient building renovations. The real estate sector is thus the largest beneficiary of GSS+ bonds. Other green projects in areas such as pollution prevention and control, biodiversity and climate change adaption play a far less important role. Meanwhile, 3.4% of the outstanding volume is available for general corporate purposes. This, by definition, corresponds to the proportion of sustainability-linked bonds on the Swiss GSS+ bond market. The two social bond categories – affordable housing and access to essential services – make up just 0.9% and 0.2% respectively.

This breakdown of the use of proceeds may not be much of a surprise. Indeed, the focus on transport and buildings seems logical from a climate perspective, since these are among the most significant $CO_2$ emitters in Switzerland and Europe as a whole. Both sectors of the economy – real estate in particular – benefit from established methodologies for measuring the climate impact of individual measures, making it easier to set up credible GSS+ bonds.

[6] GSS+ bonds can be used to finance multiple projects. Since the precise allocation of proceeds to each project cannot be systematically tracked, some bonds may have been counted more than once in this analysis.

## 8. Potential approaches to promoting GSS+ bonds

As explained above, Switzerland has mostly closed the gap to the rest of the world with regard to GSS+ bonds and now ranks among the leading locations for issuing such instruments. This has been made possible by a powerful ecosystem comprising issuers, the exchange, banks, asset managers, investors, rating agencies and second-party opinion providers. In terms of the breadth of issuers in particular, the Swiss GSS+ bond market stands out from its international competitors. Given the Federal Council's aim of turning the Swiss financial centre into a leading global hub for sustainable finance, this market position must be consolidated and ideally expanded. This should be done with the aid of market forces rather than well-intentioned but often obstructive regulation. Potential approaches to the continued promotion of GSS+ bonds are outlined below.

**Piecing together the puzzle:** The rise of sustainable finance is shaking up the financial centre. Many financial institutions have joined forces in net-zero alliances over the past few years. Self-regulation has been published by the Swiss Bankers Association (SBA) on integrating sustainability criteria into investment and mortgage advice and by the Asset Management Association Switzerland (AMAS) on transparency and disclosure for sustainability-related collective assets. Last but not least, the State Secretariat for International Finance (SIF) has worked with the industry to develop the Swiss Climate Scores, which are intended to create transparency regarding the alignment of financial investments with the Paris Agreement on climate change. These disparate elements must now be combined into a harmonious overall picture. Mortgage institutions with large enough portfolios, for example, could consider linking their obligations towards clients under the self-regulation to the issuance of GSS+ bonds in order to refinance loans granted for energy-efficient renovations via the capital market. Investment, wealth and asset managers, meanwhile, could look into how GSS+ bonds might be integrated efficiently into advice at the client and product levels despite (or perhaps even because of) their different aims. This would require dialogue with and between issuers and investors, which in turn would be conducive to establishing best practices. Issuers could thus be sure that their GSS+ bonds would actually be in demand, while investors would receive an investment opportunity that meets their expectations.

**Swiss Pfandbriefe with a GSS+ bond label:** Work must also be done to assess whether Swiss Pfandbriefe can be classified as sustainability bonds in view of their legal mandate and nature – and, if so, how this might be done. This would increase the share of GSS+ bonds on the Swiss capital market to around 30% at a stroke, which could also have a significant knock-on effect by encouraging other issuers.

**Taking advantage of synergies:** Reporting on sustainability is becoming more and more important for companies. Regulatory pressure is steadily mounting. Since 1 January 2024, for instance, public companies, banks and insurers that employ at least 500 full-time equivalents and have total assets of more than CHF 20 million or revenues of more than CHF 40 million must report publicly on climate issues. This reporting must include both the financial risks a company is exposed to through climate-relevant activities and the impact of its activities on the climate. Targets for reducing direct and indirect greenhouse gas emissions and measures for achieving these must also be formulated and described. Overall, companies will have to do more to embed sustainability and climate issues into their corporate strategies. The upside of this is that it might reduce the workload involved in structuring GSS+ bonds. Ways and means must therefore be sought to ensure that (regulatory) climate reporting and capital market financing work in synergy with each other.

**Raising awareness among cantons and communes:** The Swiss market for sustainable investments has a low proportion of domestic public-sector issuers compared with the international average. Besides the Confederation, only the Cantons of Basel-Stadt and Geneva and the City of Zurich have issued sustainable bonds. This contrasts with the large number of cantons (Aargau, Appenzell Ausserrhoden, Bern, Basel-Landschaft, Basel-Stadt, Geneva, Graubünden, Lucerne, Neuchâtel, Solothurn, St. Gallen, Thurgau, Ticino, Vaud and Zurich) and communes (Bern, Biel, Geneva, Köniz, Lausanne, Lugano, St. Gallen, Winterthur and Zurich) that issue traditional bonds to cover at least some of their financing needs. It is in fact the cities and cantons that have a wide range of projects (and above all projects of sufficient size) that are ideal for financing via GSS+ bonds due to their thematic focus (e.g. expanding public transport infrastructure, making public buildings more energy efficient and building social housing).

**Sustainability-linked bonds as an alternative:** Both in Switzerland and worldwide, the focus of GSS+ bonds is very much on financing the capital-intensive climate transition in the real estate and transport sectors. This is due first and foremost to the fact that many issuers simply cannot reach the de facto minimum threshold of CHF 100 million with other projects outside these two sectors, meaning that financing via "use of proceeds" instruments like green, social or sustainability bonds would hardly be worthwhile. Sustainability-linked bonds could be an alternative for companies that nevertheless wish to establish a presence on the GSS+ bond market. They are more flexible than green, social and sustainability bonds in that their proceeds can also be used for general corporate purposes, making it easier to reach the CHF 100 million threshold. In return for this flexibility, issuers contractually undertake to achieve predefined, measurable sustainability targets. However, it must be borne in mind that investors prefer "use of proceeds" bonds, which guarantee that the money raised will flow into sustainable projects.

**Improving taxation frameworks:** There are some calls at the international level for GSS+ bonds to receive tax breaks, but implementing these would require a clear definition of sustainability. No such definition exists at present, and creating one might arguably be counterproductive in view of the continuing, dynamic development of standards and methodologies. From a Swiss perspective, therefore, the focus should not be on preferential tax treatment of GSS+ bonds but on abolishing fiscal obstacles for all bonds generally, notably stamp duty and withholding tax. This would further strengthen the entire Swiss capital market and thus also the sustainable bonds segment, enhancing its appeal for foreign investors and opening up new opportunities for domestic issuers.

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**Author**
Remo Kübler, Head of Research & Real Estate

**Media contact**
Media Relations: media@sba.ch, +41 58 330 63 35



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