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Overview of the "Green" Swiss Financial Market

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Authors: Jonas Buol (Project Lead), Bettina Buomberger, Konstantin Meier, Dr. Matthias Retter, Dr. Marc Schmidli

FOEN support: Romina Schwarz (Project Lead), Dr. Loa Buchli, Thomas Stadler, BAFU Abteilung Umweltbeobachtung und Ökonomie

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Table of contents

List of Graphs

List of Tables

List of Figures

1 Executive Summary

This report is based on a request of the Swiss Federal Office of the Environment (FOEN). FOEN wants to receive a comprehensive overview of the green and sustainable financial market landscape in Switzerland, based on a desktop research and the experience of PwC subject matter experts.

Overview of the sustainable and 'green' financial market in Switzerland:

The financial sector is an important pillar of the Swiss economic system and Switzerland has a long tradition of being a financial centre of global relevance (e.g. it is the number one destination for offshore-wealth). With its supply of money (loans, insurance services, equity and other financial products) the financial sector has a significant direct and indirect impact on the sustainable development of the economy. One of the key findings of this report is that there is a general trend towards sustainable investments in Europe. In Switzerland, the volume of sustainable investments has increased since 2005 by 23 percent on average per year, and this trend is assumed to continue.[1] However, sustainable investments represent a niche and their share of the overall volume in the market is with roughly 4 percent still low.[2] This is surprising as there is evidence (refer to 'The Added Value of Sustainable Investment' in this study) that responsible investments create additional values for investors. The market overview revealed that Switzerland is still in a leading position, but that other financial centres are catching up in becoming a hub for sustainable finance. Without influencing the markets by regulations or major incentives, there will not be a very big step towards sustainable finance; rather we will see gradual growth corresponding to the overall worldwide development of sustainable financial markets.

Conclusions derived from the research:

- **Lack of comprehensive definitions and transparent communication:** Although all sustainable investment vehicles have in common that they include to a certain extent environmental, social and governance (ESG) criteria, there is no universal definition available of what a sustainable or green investment is and what reporting requirements have to be fulfilled. Research has identified that many sustainable investment funds lack in clear and transparent communication. An analysis revealed that out of 46 sustainable investments funds worldwide, including also Swiss-managed vehicles, more than half of the sample is mediocre to weak with regards to transparency.[3] This can create disarray among investors which could hamper further growth in this area. Even though the benefits of transparency on the business performance are widely accepted, until now there is no common, globally accepted definition of sustainability reporting. The sustaina-

[1] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, pp. 35-36)
[2] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 40)
[3] (Verbraucherzentrale Bremen, 2014)

bility reporting should in fact be used more comprehensively to cover all financial and operational risks, to improve relations with stakeholders (including employees) and for a more informed decision-making process.

- **Broad range of standards, lack of standardized information:** There is a wide range of initiatives for sustainability standards, labels and indices for the financial market. Yet they differ immensely in how they incorporate ESG criteria. Most of them are phrased rather vaguely and allow room for interpretation. This leads to the fact that until all investors implement the same investment principles, there is a commercial incentive to meet only the minimal requirements. The sustainable financial products also lack definitions and criteria and should therefore be analysed regarding their actual impact.

- **Switzerland not attractive as fund domicile:** The potential of Switzerland becoming a domicile for the sustainable fund industry, as proposed by the authors of the whitepaper 'Path to the Sustainable Financial Centre Switzerland', is from our point of view rather low. The complex tax structure in Switzerland, especially the withholding tax and stamp duty, creates a disincentive for the establishment of sustainable funds. Furthermore, due to complex regulations setting up a fund in Switzerland takes much more time than as for example in Luxembourg. If Switzerland wants to become competitive against the global fund domicile Luxembourg, in practice, it would most probably have to first eliminate the withholding tax and improve regulations. However, this would present a highly delicate endeavour. At the same time, such endeavours could be considered as an integral element in the political discourse regarding the future of the Swiss financial sector and its positioning against the competing markets.

- **Low Incentives for pension funds to consider ESG:** Pension funds are highly regulated in Switzerland. It is their duty to guarantee long-term returns for beneficiaries. Often no other formal incentives exist for pension fund managers to set up an ESG strategy and manage investments accordingly. In addition, there is evidence that beneficiaries at Swiss pension funds want their schemes to invest sustainably.[4] Further education of pension fund members and how they can influence the strategy themselves has been identified as a reasonable way forward. Moreover, policy measures and their key learnings are presented.

Main PwC Recommendations:

- **Integrate ESG-Aspects into current transformation:** The financial centre Switzerland is transforming, due to pressure (e.g. need for automated information exchange) and regulations from abroad. We believe it is the right time to use these changes to foster sustainable finance as well and to establish ESG concepts now. We recommend private and public sector to join forces to achieve this overreaching goal.

[4] (RobecoSAM, 2014, Responsible-Investor.com)

- **Definitions and standards need to be improved:** Before talking further about sustainable finance, terms and definitions should be more precise. There is a need for developing a common language and understanding, what corresponding definitions mean for Switzerland and to make sure that all parties are talking about the same. The level of standardization at the moment is rather low. There is the need for a widely accepted standard that supports stakeholders in differentiating finance companies with a strong sustainable investment approach against companies with a very basic strategy. Besides or even instead of finding a definition of general ESG reporting requirements, it could be considered to define standard reporting protocols for the individual sustainability factors. This would lead for them to be comparable. An important prerequisite for this approach is that companies need to report on the indicators with the most material impacts.

- **Foster the role of HNWIs:** Many opportunities lie in the area of wealth management of the high net worth individuals (HNWIs) as they show an increasing interest in sustainable investments. Furthermore, they are not restricted in taking risks in their investment decisions. From 2009 to 2012, the investments of European HNWIs into sustainable investment vehicles increased by 58 percent whereas their overall wealth increased by 18 percent. As most of the offshore-wealth stems from HNWIs this trend offers a great opportunity for Switzerland. HNWIs are obviously an important group that must be supported in order to make the financial sector more sustainable.

- **More information and education as well as private sector collaboration:** We see especially in the private sector more possibilities for collaboration (e.g. in developing common definitions or standards). Investors should be more informed about sustainable finance initiatives. This could be done for example by academia, pension funds, asset managers or investment consultants. There could also be more effect in the exchange with leading sustainable pension funds nationally and internationally, with the aim of raising the awareness how ESG criteria could be integrated into the investment strategy

- **Political support of long-term thinking:** The government also has an important role supporting ESG to become an integral part of finance activities. With policies, regulations, incentives or by acting as a role model, governmental organisations can foster long-term thinking. Switzerland stands in international competition, therefore all measures need to be reflected in an international context and decisions should not be made in an isolated way. Switzerland is an an important player and could take a leading role in order to support a development towards a more sustainable finance industry.

2 Introduction

Scope and Approach

2.1 Background and Objectives of this Report

'The UNEP-Inquiry provides a vehicle for taking a strategic look at how the financial system can play its part in mobilizing capital for a low-carbon, resilient economy.' Rachel Kyte, Group Vice President, World Bank Group

This report is based on a request of the Swiss Federal Office of the Environment (FOEN). FOEN wants to receive a comprehensive overview of the green and sustainable financial market landscape in Switzerland, e.g. find out more about the current status of the developments of the Swiss sustainable financial market, the risks and opportunities, the potential of the realization of measures and instruments towards a sustainable finance and where Switzerland stands in an international context. There are some topics defined by the FOEN that will be covered, such as initiatives on the integration of environmental, social and governance (ESG) criteria for financial institutions, sustainable financial services and products, sustainability reporting and transparency, funds and pension funds. They will form the core elements of this paper. The recommendations of the whitepaper 'Path to a Sustainable Financial Centre Switzerland' will be integrated in this paper. Furthermore, there will be discussion on where the opportunities of each of the covered topics lie as well as a PwC expert opinion.

In addition to that, this report serves as a background paper for FOEN supporting the Environment Programme of the United Nations (UNEP) with its current project of the "Inquiry to the Design of a Financial System." UNEP has recognized that the financial system must be sustainable in the way that it enables the transition to a resource efficient, green economy. They believe that policy makers together with financial market actors and other stakeholders concerned with the health of the financial system and its potential for shaping the future economy need to act now. This is why they have started the Inquiry into the Design of a Sustainable Financial System which aims to develop policy innovations for a sustainable financial system. The Inquiry, extending over 18 months from the beginning of 2014 to mid-2015, will map current best practice, draw together principles and frameworks, catalyse new thinking, and ultimately lay out a series of policy options for advancing a sustainable financial system. To do so it will engage with global financial experts and commission-relevant research, build on country engagements as well as contribute to related initiatives across the UN system and elsewhere.

Up to today there exists no commonly applied definition of sustainable or green finance. For this paper, **sustainable finance** will be defined as follows (see chapter 3.1 for the detailed derivation of the definition):

Sustainable finance is defined as financial products and services, under the consideration of environmental, social and governance factors throughout the whole risk management and decision making process, provided to promote responsible investments which create a positive environmental, social and governance impact.

As per this definition, sustainable finance includes environmental, social and governance aspects and therefore green finance is an inherent element of sustainable finance.

The topic of 'sustainable finance' consists of 'impact investing', 'philanthropy' and other subcategories, which cannot really be isolated and looked at in separation. Whenever possible, this report will focus on environmental factors in isolation.

2.2 Approach and Structure of this Report

Our proceeding is based on a common and optimized approach to acquire and develop knowledge and to give an informed estimation on opportunities as well as to express an expert opinion on the subject. The main part of this report is based on designated desktop research by qualified experts of the PwC sustainability and climate change team. National and global experts regarding the specific regulatory and financial institutions (i.e. pension funds and funds) were involved to reach a solid coverage of this complex topic.

The report is divided into five modules which were specified by the FOEN:

- An overview of the Swiss sustainable financial market (chapter 3),
- Sustainable investment principles and products (chapter 4),
- Sustainability reporting for the financial sector (chapter 5),
- Sustainable funds and (chapter 6)
- Pension funds (chapter 7).

3 Market Overview

Overview of the sustainable and 'Green' Financial Market in Switzerland

Financial institutions are an integral part of the worldwide economy and society. In Switzerland in particular, a significant share of the country's GDP comes from the finance industry. In 2012, the financial sector in Switzerland generated a gross value added of about CHF 62 billion and employed about 262'000 people. The federal government, cantons and communities benefit from significant tax revenues from the financial sector. In 2012, tax revenues from the financial market, i.e. withholding tax, stamp duty, VAT from financial services as well as corporate and personal income tax are estimated to a total of approximately CHF 17 billion. This corresponds to roughly 13 percent of total tax revenues.[5]
In the light of its economic significance as driver for growth, the financial sector plays an important role in the transition towards a sustainable economy. With the provision of loans, equity, insurance and other financial products and services the financial sector has a significant direct and indirect impact on the sustainable development of the economy.

In this chapter, an overview of the Swiss financial market will be provided as well as its status regarding the implementation of sustainable – i.e. environmental, social and governance – criteria. In addition, Switzerland will be put into an international context and the restrictions and drivers of sustainable finance and investments will be highlighted. In a first step, it is important to shed some light on common definitions of sustainable finance.

3.1 Definitions of Sustainable Finance

On one hand, there exist many different wordings to express the same, i.e. sustainable/green finance/investments. On the other hand, some financial market actors might use the same wording but at a closer look have diverging activities in regards to sustainable finance. This jungle of definitions often creates disarray for investors. It can be stated that there is a lack of clear communication[6].
Therefore, it is very important to have a close look at what is really meant when someone is talking about sustainable finance, green finance, responsible finance, sustainable investment, green investment, social investment, etc.

[5] (Rufer & Grass, 2013, pp. 20-21; p. 28)
[6] (Saluzzi, 2013)

In the following, some common definitions are highlighted. As a general definition, **sustainable and responsible investment** can be described as:

An investment style or financial discipline that combines investors' financial objectives with their concerns about Environmental, Social and Governance (ESG) issues.[7]

A similar definition but slightly more detailed is provided in the report 'Mapping Sustainable Finance in Switzerland', phrased with the term **sustainable finance:**

Sustainable finance refers to those activities that seek to integrate considerations of environmental, social and governance (ESG) issues in financial sector activities, including asset management, banking, insurance, financial research, and other financial services.[8]

Sustainable finance includes the consideration of ESG criteria and therefore is inherently reflecting green finance

With regards to the banking sector only, PwC adopts the following definition of **green finance:**

For the banking sector, green finance is defined as financial products and services, under the consideration of environmental factors throughout the lending decision making, the investment decision making and throughout other key financial services such as IPOs, ex-post monitoring and risk management processes, provided to promote environmentally responsible investments and stimulate green technologies, projects, industries and businesses.

In the literature available the term 'responsible finance' is mentioned often. Responsible finance means the inclusion of ESG criteria and it can therefore be used as a synonym for sustainable finance. In the context of this report, the term 'sustainable' is mainly used rather than 'responsible' or 'green'. Also instead of 'green finance' the term 'sustainable finance' is used. As per the definition, sustainable finance includes social and government aspects and environmental criteria. Therefore green finance – as considering environmental friendly financing – is an inherent element of sustainable finance.

In the realm of sustainable finance respectively sustainable investment a wide range of strategies exist. Table 1 below provides an overview of different sustainable investment strategies. Nevertheless, the degree or extent of 'sustainability' in an investor's investment strategy can vary significantly. A quote in the 2012 Eurosif study about 'High Net Worth Individuals & Sustainable Investment' is a good illustration for the complexity of sustainable investment strategies:

'*There is great confusion over sustainability as a topic and investments in this area can be as different as chalk and cheeses. There is much idealism in*

[7] (Eurosif, 2012, p. 7)
[8] (Knoepfel & Imbert, 2013, p. 2)

the space; those who take a very practical approach and those whose commitment is skin deep. Nuclear power is an example of how difficult it is to establish what is sustainable with many 'sustainable' investors excluding this approach, while others [...] see it as the only real solution to our energy crisis.'[9]

3.1.1 Sustainable Investment Strategies

The landscape of sustainable investment strategies can be very diverse. However, a general categorization of investment strategies can be made. In the report 'Marktbericht Nachhaltige Geldanlagen 2014' of the Forum Nachhaltige Geldanlagen (FNG) sustainable investments strategies are classified into eight categories:

Table 1: Overview of Sustainable Investment Strategies

Exclusions	This approach excludes systematically certain investments or investment classes such as companies, countries or industries from the investment universe, if they infringe specific criteria.
Best-in-Class	In this strategy, the best companies – based on ESG criteria – within an industry, category or class are selected.
Engagement	Long-term dialogue with companies, in order to improve their behaviour regarding ESG criteria.
Impact Investment	Investment in companies, organisations or funds with the goal of having an influence not only on financial returns but also social and ecological matters.
Integration	Explicit inclusion of ESG criteria respectively risks in the traditional finance analysis.
Sustainability-themed Investment	Investments in themes or assets which are related to the promotion of sustainability and which have a connection to ESG.
Norms-based Screening	Screening of investments against their conformity with specific international standards and norms which have a reference to ESG criteria. Examples are the UN Global Compact, OECD Guidelines for multinational companies and the ILO conventions. Norms that do not have an explicit link to ESG count as exclusions.
Voting	Exercise of voting rights of the shareholder during the General Assembly in order to influence the company's policy towards ESG criteria.

Source: (Forum Nachhaltige Geldanlagen, 2014)

For further information on strategies for sustainable investment, see also (Weber & Remer, Social Banks and the Future of Sustainable Finance, 2011, S. 104-105).

As an illustrative example for an investment strategy applying the exclusion classification the investment screening of the Alternative Bank Switzerland

[9] (Eurosif, 2012, p. 7)

could be mentioned. As sector-specific environmental exclusion criteria they implemented – among others – the following:

- Destruction of protected natural habitat
- Experiments on animals for cosmetics
- Threat to the biological, cultural and ethnical diversity
- Production and usage of pesticides and/or industrial chemicals

(Non-comprehensive list of exclusion criteria, only a few criteria were selected for illustration purposes).

In the introduction of this chapter the significance of the financial sector in Switzerland was pointed out. The international standing of Switzerland in the context of sustainable finance will be highlighted in the next paragraphs.

3.2 Switzerland as Sustainable Financial Market in an International Context

The Forum für Nachhaltige Geldanlagen describes an increasing interest and potential of sustainable financial products[10] in Europe. In 2013, they show that in Germany, Austria and Switzerland there was an overall increase of 12 percent to a volume of EUR 135 billion (approx. CHF 166 billion) compared to 2012. In Switzerland, they show a volume of CHF 56.7 billion respectively roughly EUR 47 billion (an increase of 17 percent). In 2013, the volume in Austria was EUR 7.1 billion (an increase of 27 percent) and in Germany EUR 79.9 billion (an increase of 9 percent).[11]

In Switzerland, the share of private/retail investors in 2013 was 41 percent against 59 percent institutional investors. In 2012, the split was 46 percent private investors against 54 percent institutional investors.[12] Compared to other European countries the share of institutional investors is rather low. In Germany, the share on institutional investors is 75 percent and in Austria 86 percent (see figure 1).

An explanation for the high non institutional investor share in terms of impact could be the high share of foreign money that is managed in Switzerland. In this context, HNWIs play an important role in Switzerland.[13]

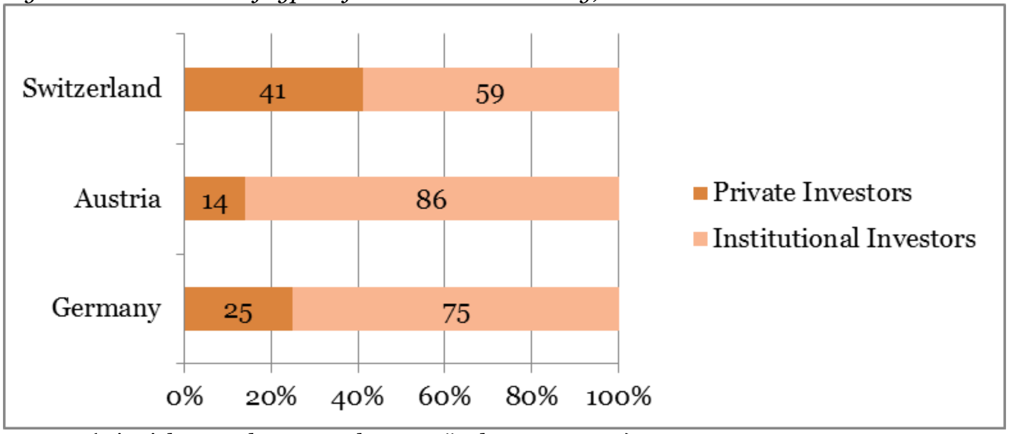
[10] Criterion for the consideration of financial products in their analysis is an explicitly written investment policy which includes ESG criteria. See Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 7.

[11] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, pp. 13, 35)

[12] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 40)

[13] (Eurosif, 2014, p. 62)

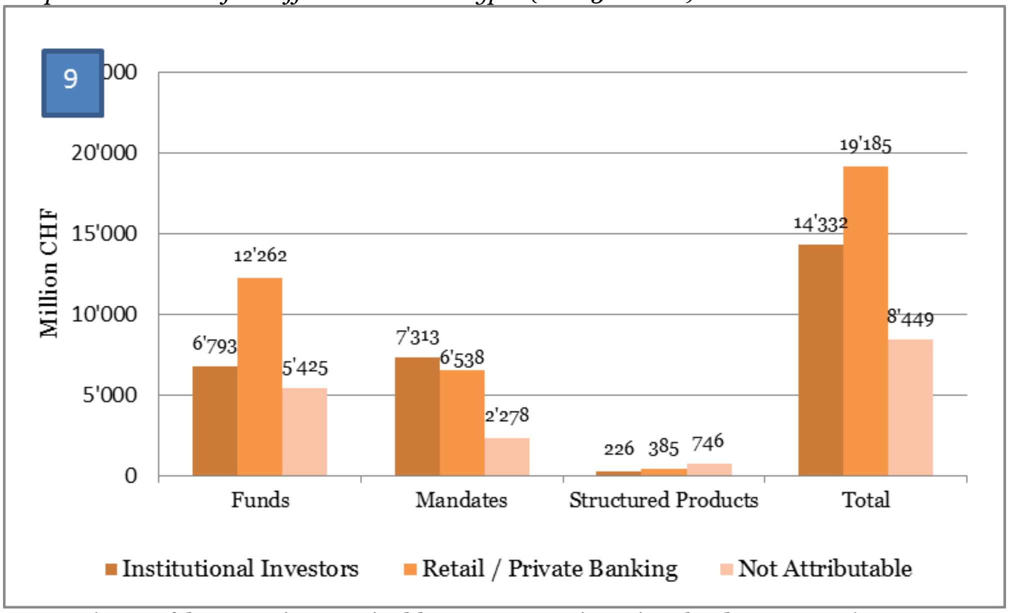
Figure 1: Distribution of types of investors in Germany, Austria and Switzerland



Source: (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 16)

Amongst the institutional investors the most important players are investment foundations (e.g. family offices), corporate pension funds, churches and welfare organisations.
Graph 1 displays the split of AuM, divided in funds, mandates and structured products, among institutional investors, retail / private banking and other investors in Switzerland. Out of the total sustainable investment market volume, approximately 58 percent are funds, 38 percent mandates and 4 percent structured products.[14]

Graph 1: Total AuM for Different Investor Types (Dec. 31st 2010)



Source: (Knoepfel & Janezic, Sustainable Investments in Switzerland 2010, p. 10)

The general trend in Europe towards a stronger market penetration of sustainable Assets under Management (AuM) also reflects a worldwide trend. According to research performed by Credit Suisse this is also supported by academic research. While the abbreviation ESG used to be inexistent in financial jour-

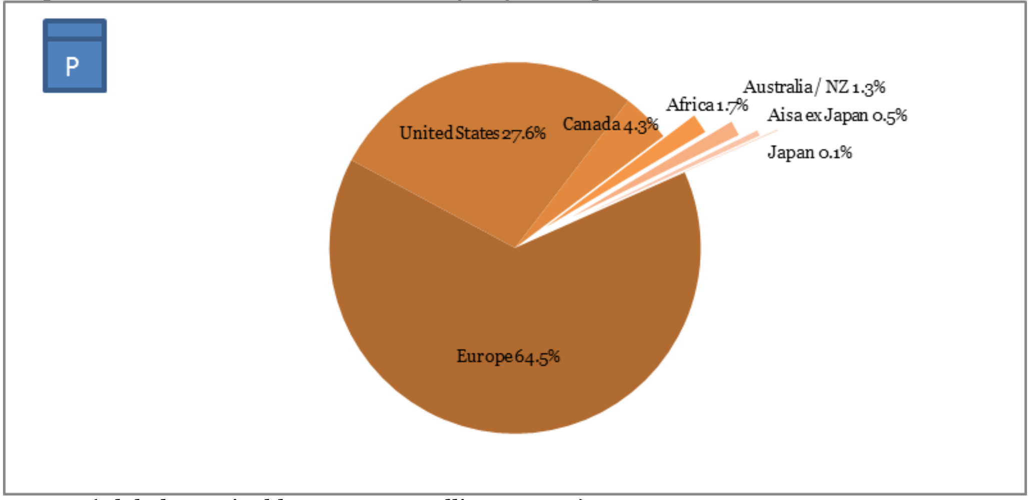
14 Data available only for 2010. For a definition of mandates and structured products, please go to the glossary.

nalism in 2005, in 2011 it appeared in 38 articles in renowned global financial journals.[15]

Nevertheless, there exist significant regional differences regarding the volume of sustainable investments. As depicted in graph 2 below, the big bulk of sustainable investments worldwide are made in Europe. Almost two-thirds of total sustainable assets are managed in Europe.

There is a general trend towards sustainable investments in Europe

Graph 2: Global Sustainable Investment by Region (in percent)



Source: (Global Sustainable Investment Alliance, 2013)

Whereas in the United States the growth in sustainable AuM has been relatively gradual over the past 15 years, Europe has shown considerable momentum in this respect.[16] As stated above, the volume of sustainable investment funds, mandates and structured products in Switzerland has increased to CHF 56.7 billion by the end of 2013. Since 2005, the volume of sustainable investments in Switzerland has increased by 23 percent on average per year.[17] It is assumed that this trend will continue and according to the FNG study, financial institutions predict for the next three years an increase of sustainable investments in Switzerland of 20 to 50 percent. However, the volume of the overall sustainable investments is still quite low with a share of approximately 4 percent.[18] Even with the optimistic growth scenario of 50 percent over the next three years, the share of sustainable investments of the overall investment volume will not reach the threshold of 6 percent ceteris paribus.

Besides the positive impact of such investments from an ESG perspective, many investment analysts and fund managers believe that it is extremely difficult to add value to the investment by focusing on ESG issues.[19] However, the next chapter provides a focus on the added value sustainable investments can generate. In particular, the sell-side of the investment universe will be looked at more closely, focusing on banks as being suppliers of sustainable investment vehicles.

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[15] (Credit Suisse, 2012, p. 2)
[16] (Credit Suisse, 2012, p. 2)
[17] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, pp. 35-36)
[18] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 40)
[19] (Dr. Sullivan, 2013, p. 5)

3.2.1 The Added Value of Sustainable Investment

A study published by Credit Suisse highlights some interesting findings which give an indication on the added value the consideration of sustainability criteria can generate in financial analysis. Credit Suisse's sustainable investment framework serves as a good case study to illustrate how sustainability considerations have found their way into financial analysis of a big global bank.
Credit Suisse has a sustainable investment framework in place called Intangible Value Assessment (IVA) Rating which measures a company's exposure to ESG-related risks and opportunities according to the MSCI framework, MSCI is a leading sustainability analytics company. Each company is assessed in terms of exposure to the ESG-related risks and its capability to handle them. The idea of this rating is to analyse companies against certain ESG criteria and put them in relation to their peers. Table 2 provides an example of an overview of the industry-specific criteria that MSCI has identified within each competitive set of industries. The range of the rating goes from AAA (best performer) to CCC (worst performer).[20] The ESG matrix is illustrated in the table below. For example, for the finance industry, according to the matrix key environmental issues are carbon emissions, energy efficiency, water stress, e-waste and opportunities in green buildings. With regards to social key issues labor-operational, health & safety, responsible investing, etc. are seen as relevant. Finally, corruption and instability, financial system and instability and corporate governance are the governance-related key issues.

Table 2: Industry Specific Key Issue Grid (MSCI ESG)

	Environmental key issues	Carbon Emissions	Upstream Carbon Emissions	Energy Efficiency	Insuring Climate Change Risk	Water Stress	Biodiversity and Land Use	Raw Material Sourcing	Financial Environmental Impacts	Toxic Releases	Packaging Materials & Waste	E-Waste	Opportunities in Env. Technologies	Opportunities in Green Building	Opportunities in Renewable Energy	**Social key issues**	Labor - Operational	Health & Safety	Labor - Supply Chain	Raw Material Sourcing - Social	Product and Services Quality	Product Safety - Chemicals	Product Safety - Financial	Privacy & Data Security	Responsible Investing	Insuring Health and Demographic Risk	Opportunities in Nutrition and Health	Access to Communications	Access to Finance	Access to Healthcare	**Governance-related key issues**	Corruption and Instability	Financial System Instability	Corporate Governance
Energy		X					X			X			X		X			X														X		X
Materials		X		X		X	X	X		X	X		X				X	X				X										X		X
Industrials		X		X		X				X			X				X	X														X		X
Consumer		X	X	X		X		X		X	X		X				X	X	X	X	X	X		X			X					X	X	X
Health Care										X											X									X		X	X	X
Financials		X		X	X				X				X	X			X	X					X		X	X			X			X	X	X
Information Technology			X	X		X						X	X						X	X		X		X				X				X		X
Telecommunication Services						X											X											X					X	X
Utilities		X								X					X									X										X

Source: (Credit Suisse, 2012, p. 3).

Their analysis has shown that companies rated as best-in-class performers (AAA) have the lowest and least dispersed volatility over the long run. A further result of the study is that the lower the IVA rating, the lower is the share of companies paying dividends. The share of AAA-companies paying dividends is 10 percent higher compared to the total amount of companies and even 20 percent higher in comparison to CCC-rated companies.[21] From a sustainability perspective it can be argued whether it makes sense to pay out dividends to the

[20] (Credit Suisse, 2012, p. 3)
[21] (Credit Suisse, 2012, pp. 5-6)

Companies with a good ESG performance show lower volatility and higher dividends in the long run than bad ESG performers

shareholders or whether it's not better to reinvest the money. Choosing a middle course is probably the best decision. On the one hand, continuous investments are important for sustainable economic performance, on the other hand, paying dividends is an important element to attract investors. However, the capability of a company to pay dividends is certainly a sign of its financial strength and stability. Thus, these findings indicate that investments in financial vehicles which integrate certain ESG criteria do have a positive impact on the economic return. It would be presumptuous to claim that they have superior performance compared to conventional investments at all times. However, it disproves the widespread assumption that sustainable investments are not profitable.

Further evidence is delivered by a meta-study conducted by Mercer called 'Shedding light on responsible investment: Approaches, returns and impacts'[22]. This research concludes that out of 36 studies examined, 20 studies show evidence of a positive relationship between ESG factors and financial performance and only three show evidence of a negative relationship. We can assume that the financial performance of companies is also influenced through the changing mind-set that comes along with the consideration of ESG criteria. A company adequately considering ESG risks is most probably more rigorous in also considering other risks and by doing so supporting positively the overall performance.

Another meta-study conducted by the Deutsche Bank which surveyed more than 100 studies on sustainable investing around the world states that sustainable companies are more stable in value and less prone to crises. They are correlated with superior risk-adjusted returns at a securities level. Companies which perform well in sustainability and ESG ratings have lower cost in terms of debt (loans and bonds) and equity. This is due to the fact that these companies are identified as low risk ones. The study also shows that sustainability and financial performance correlate from a market as well as from a balance sheet perspective. Normally, during a financial crisis sustainable companies exhibit a better performance than non-sustainable ones (better down-side-performance).[23]

Yet, another meta-study of the Steinbeis Research Center for Financial Services executed in 2013 demonstrates that the stock-market price of sustainable companies perform at the same level as non-sustainable ones, the rate of return is similar for sustainable companies in comparison to non-sustainable ones, and that there is no significant difference in the profit of sustainable compared to non-sustainable companies. The meta-study analysed 195 relevant studies which fulfil scientific requirements.[24]

To sum up, the above-mentioned example of the sustainable investment framework demonstrates that the topic of sustainability has entered the arena

[22] (Mercer , 2009, p. 2)
[23] (Deutsche Bank, 2012, p. 5)
[24] (Steinbeis Research Center for Financial Services, 2013, p. 10)

of finance. They do not only talk about sustainability but they integrate it into their financial analysis altogether. Furthermore, the evidence from the meta-studies demonstrates that sustainable companies can be considered serious and important players in the financial market. In the next paragraphs, the drivers and restrictions of the integration of sustainability criteria in financial institutions will be highlighted in more detail, starting with another study which had a closer look at the landscape of the Swiss banks.

3.2.2 The Level of Integration of ESG Criteria in Swiss Banks

As a basis of this chapter a study which was conducted in a joint effort by KPMG and WWF in 2012 is used. The study is called 'Environmental performance of Swiss banks – Shifting gears towards next generation banking'. In this study, eight Swiss banks were taken as basis for their analysis, ranging from big global banks over cantonal banks to smaller private banks.[25]
The reason why there is a focus on banks in this chapter is the crucial role they play in the transition to a sustainable economy as they have the ability to catalyse the transition by influencing the behaviour of their clients in investing their money in more sustainable sectors.

The authors of the study elaborated some interesting findings which provide an indication of the level and depth of the integration of ESG criteria in the daily business of Swiss banking. The most striking finding is that the majority of the banks limit their ESG investment to the development of niche portfolios of dedicated socially responsible products. There is reason to believe that *'[…] little attention is given to integrating ESG factors into the various steps of the mainstream investment process such as macro-economic analysis, definition of the asset allocation or portfolio construction and implementation of all assets under management (AuM) under the control of the bank'*.[26] This implies that environmental considerations respectively issues are not considered as being of general strategic importance but rather seen as potential sector-specific downside risks which have to be managed.

Banks limit their ESG investment to the development of niche portfolios and rarely integrate ESG factors in the mainstream investment process

Important to mention is that the level of risk exposure of the bank – which usually correlates positively with the size of the bank – has an influence on the extent ESG factors are managed. Banks with a high risk exposure to environmental issues and high ability to have a greater impact on solving the environmental challenges have integrated ESG issues better than smaller banking institutions. Therefore, global banks seem to be better prepared to deal with environmental issues than smaller regional banks.[27] Exceptions are smaller banks with a clear sustainability commitment such as Alternative Bank Schweiz (ABS) and Freie Gemeinschaftsbank. These banks will be discussed in more detail further below. However, in general it is no surprise that banks with a global reach and with more ESG risk exposure seem to be better equipped against sustainability risks as they have a clearer business case than smaller regional banks.

[25] (KPMG Advisory NV & WWF Schweiz, 2012)
[26] (KPMG Advisory NV & WWF Schweiz, 2012, p. 12)
[27] (KPMG Advisory NV & WWF Schweiz, 2012, p. 13)

3.2.3 *Restrictions for Greater Integration of ESG Factors in the Financial Investments*

In the following some of the key restrictions for a greater integration of ESG factors in the financial investment decisions are highlighted. In order to be able to identify ways to promote the establishment of sustainable finance it is important to first receive an idea of the key obstacles of its emergence.

Obstacle 1: Lack of demand from asset owners

Investment managers on the sell-side are starting to pay greater attention to ESG issues in their investment processes

In a study conducted by UN Principles of Responsible Investment (PRI), Dr. Sullivan mentions the lack of demand from asset owners, i.e. pension funds, investment foundations, insurance companies and individual investors, for responsible investment as one of the key obstacles for sustainable investments (in the report investments considering ESG issues are called 'responsible' investments).[28] This lack of demand is the reason why investment managers do not commit too many resources to sustainable investment as there is no case for that. These findings come from interviews conducted with investment management companies.

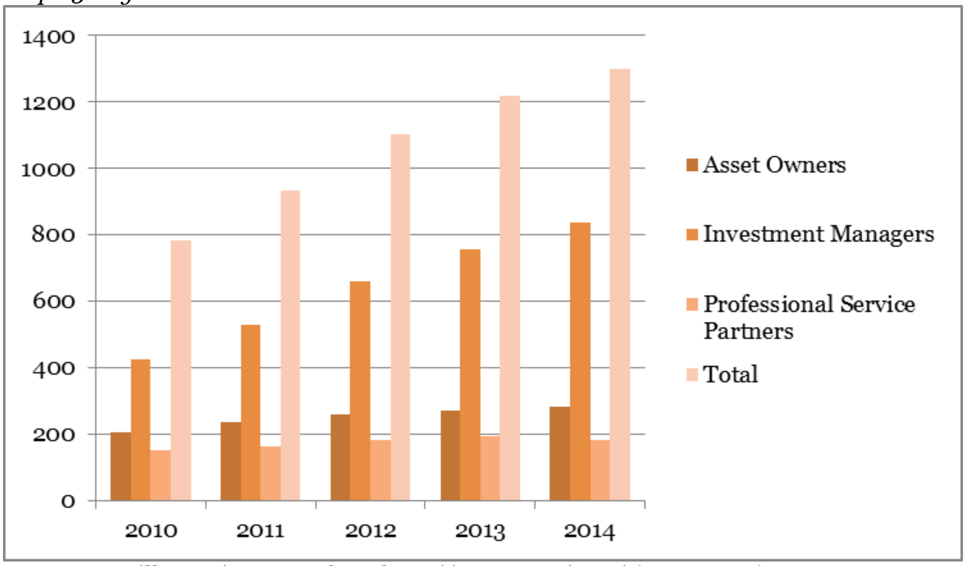
The situation is somewhat different with actors on the sell-side, i.e. investment managers, different banks, and this corresponds amongst others with the facts presented in chapter *3.2.1 The added value of sustainable investments*. According to Dr. Sullivan investment managers on the sell-side are starting to pay greater attention to ESG issues in their investment processes and encouraging their research providers to support them in this endeavour. They also highlight as a key driver the growth in number of asset owner signatories to the PRI.[29]

Graph 3 illustrates the PRI signatories worldwide divided into the categories *Asset Owners* (such as pension funds, investment foundations and insurance companies, etc.), *Investment Managers* (such as investment banks, retail banks, funds, etc.) and *Professional Service Partners* (such as research providers, rating agencies, etc.). The graph underpins the above mentioned statement that the total number of PRI signatories is growing. For this analysis current figures (from 2010 to October 2014) were considered. In numbers, there is an increase in total PRI signatories of 66 percent, i.e. from 783 in 2010 to 1262 in 2014. The group of *Asset Owners* increased by 33 percent from 207 signatories in 2010 to 276 signatories in 2014. The number of *Investment Managers* rose from 425 to 837 in the same time span, representing an increase of 96 percent. *Professional Service Partners* increased from 151 in 2010 to 193 in 2013 but decreased to 182 by 22 October 2014, resulting in net increase of 20 percent from 2010 to 2014.
The over-proportional growth of *Investment Managers* compared to *Asset Owners* can be explained with the fact that there exist more investment managing companies than institutional asset owners and if they want to meet the

[28] (Dr. Sullivan, 2013, p. 6)
[29] (Dr. Sullivan, 2013, p. 6 & 21)

requirements of the asset owners as being their clients, they have to become PRI signatories as well.

Graph 3: Signatories to PRI worldwide



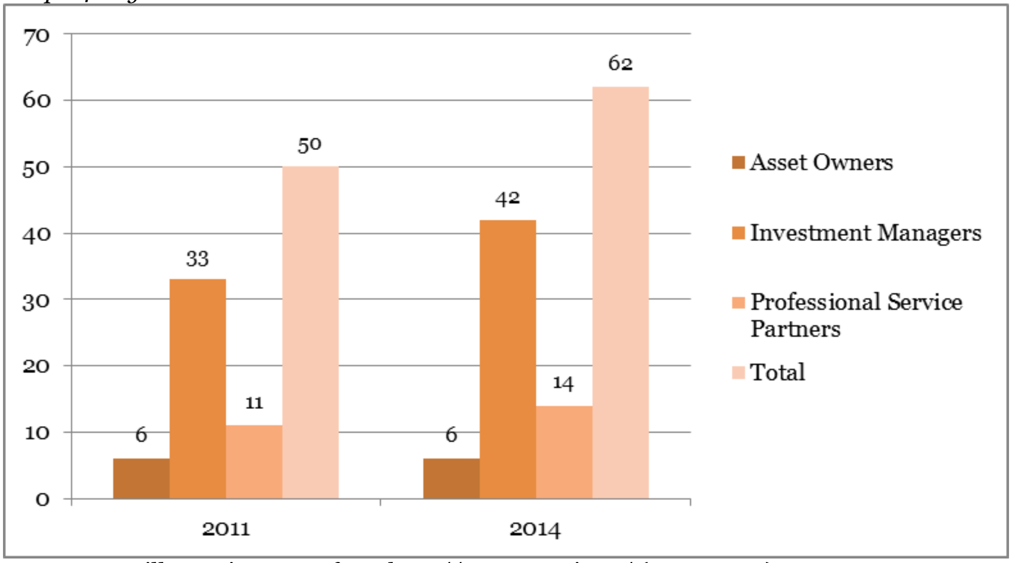
Source: Own illustration. Data from http://www.unpri.org/ (22.10.2014)

Relatively low number of institutional asset owners among PRI signatories worldwide

Graph 4 displays the same figures but for Switzerland only. Available data shows an increase in total PRI signatories comparing 2011 against 2014 of 24 percent. In the same time span (2011 to 2014) the worldwide increase was 40 percent.

The group of *Asset Owners* did not change since 2011 and has still a number of 6 signatories. The number of *Investment Managers* rose from 33 to 42 in the same time span, representing an increase of 27 percent. *Professional Service Partners* grew from 11 to 14, also an increase of 27 percent.
The low number of institutional asset owners amongst the PRI signatories in Switzerland shows that in this respect Switzerland is lagging behind compared to the global developments. The number of PRI signatories in all the categories in Switzerland (62 in total) compared to the direct neighbours Germany and Austria is high. As of 22 October 2014, Germany has a total of 54 PRI signatories and Austria only 7. However, the UK is home of 185 PRI signatories, clearly indicating a higher commitment of its financial institutions in this respect.

Graph 4: Signatories to PRI in Switzerland



Source: Own illustration. Data from http://www.unpri.org/ (22.10.2014)

Obstacle 2: Short-term thinking

An additional important element that hinders investments in sustainable assets is the short-term nature of investments.[30] The pursuit of many investors for short-term profits of their assets leads companies to focus on short-term financial performance rather than to concentrate on the longer-term profits respectively the long-term success over 10 to 20 years. Yet, it lies in the nature of sustainable investments that profits will only manifest in the long run as ESG issues by nature provide only longer-term benefits. For example, a lot of sustainable investments are made in the space of renewable energy such as wind farms. These usually represent illiquid assets with a capital intensive investment horizon of 10 to 20 years. For investors with a short-term perspective, these kinds of investment vehicles are not attractive and will never be as they will never yield short-term profits. There is a need for financial product innovation to overcome short termism.

Obstacle 3: Lack of capacity

As a third, but not less important point, it is noteworthy to mention that according to the PRI study there is a lack of capacity of individuals and different players in the financial field to use ESG information effectively for investment decisions.[31] This lack of capacity is aggravated by a lack of clear and transparent communication. As outlined above in *chapter 3.1 Definitions of Sustainable Finance* there exist various definitions for the broader spectrum of sustainable finance which requires certain knowledge of the different characteristics. According to Saluzzi, the range of sustainable investment vehicles and the sustainability concept behind them is so broad that it causes confusion among investors.[32]

[30] (Dr. Sullivan, 2013, p. 6)
[31] (Dr. Sullivan, 2013)
[32] (Saluzzi, 2013)

To sum it up, it is the interaction of all three obstacles which can lead to stagnation in sustainable investments. If each obstacle is analysed individually, there will be no improvement as they are interconnected: the lack of capacity leads to the focus on conventional investment vehicles which are thought to deliver short-term profits. In the end this leads to a lack of demand for sustainable investments as investors – if they lack capacity – are looking for and measured against short-term profits and are therefore not interested in long-term benefits.

Approach to solving the problem

One of the most important points to overcome the obstacles is to have robust academic and practical evidence that ESG issues are financially material – especially in the long run – for companies and consequently also for investors. If it can be proven that sustainable investments make sense financially, demand for sustainable investments will increase. However, in this context it is not enough to only look at the common financial figures used in accounting, but also on ESG aspects. If this is possible, the total impact of a company can be estimated; and in doing so, the true financial value can be measured.

In Switzerland, there are about 220 organizations with a clear focus on sustainable finance

Once investors realize how the real value of a company can be measured – basically once the lack of capacity is overcome – demand for sustainable investments will increase and long-term thinking become critical.

3.2.4 The Swiss Universe of Interested and Active Parties and Platforms in Sustainable Finance

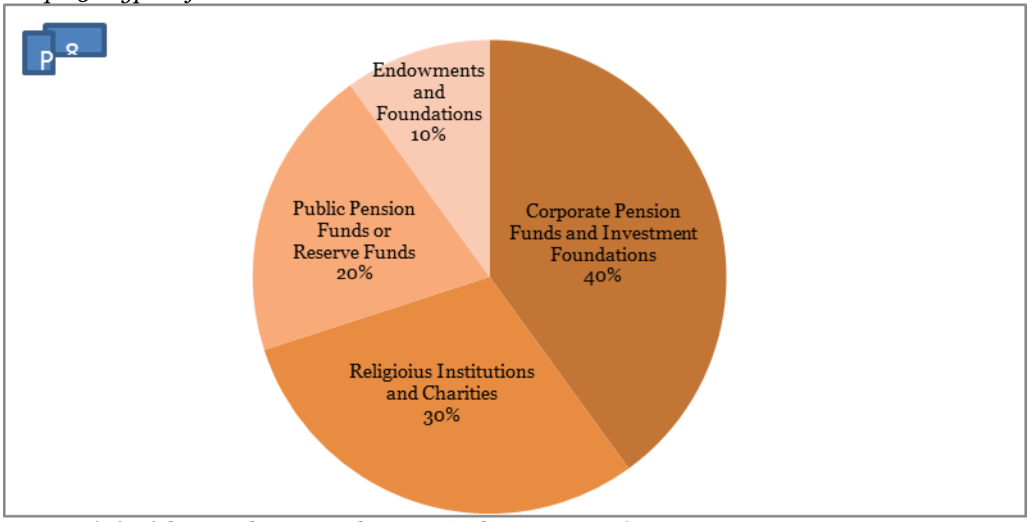
Switzerland has a diverse landscape of institutions engaging in sustainable finance. According to Knoepfel und Imbert (2013) there are about 220 individual Swiss organizations with a clear focus on sustainable finance. They can be sorted into the following categories:

- Asset management:
  - General – Investment managers active in traditional asset classes such as public equities and fixed income, or with a broad range of asset class activities including both traditional and alternative assets
  - Alternative investments – In the context of sustainable investing, this can refer to cleantech private equity, infrastructure, sustainable agriculture or forestry, carbon finance, and other non-traditional asset classes with a sustainability element
  - Intentional impact – Investments intentionally directed at achieving defined social goals, besides providing a financial return to investors. Examples include microfinance and other themes related to poverty alleviation or environmental protection. From an asset class perspective, intentional impact investments are often a subset of Alternative Investments
- Pension funds
- Banking – Retail, private, commercial and investment banking
- Financial research
- Insurance

- Academia
- Think tanks and applied research
- Philanthropy and foundations
- Governmental organizations

The Eurosif Study of 2014 shows that in Switzerland corporate pension funds and investment foundations are the predominant group of the institutional investors, followed by religious groups and charities (see graph 5).

Graph 5: Types of Institutional Investors in Switzerland



Source: (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 41)

The majority of these actors, categorized by Knoepfel and Imbert, focussing on sustainable finance constitute the asset managers, followed by pension funds and philanthropy and foundations.
Below a list of well-known financial actors in Switzerland:

- Globalance (banking)
- ResponsAbility (asset management)
- Pictet (banking/asset management)
- Credit Suisse (banking / asset management)
- UBS (banking / asset management)
- ZKB (banking / asset management)
- Swisscanto (asset management)
- Swiss Re (insurance)
- Zurich Insurance Group (ZIG) (insurance)
- Bank J. Safra Sarasin (banking)
- Alternative Bank Schweiz (banking)
- Freie Gemeinschaftsbank (banking)
- RobeccoSAM (asset management)
- Inrate (financial research)
- SusiPartners (asset management)
- Nest (philanthropy and foundations)
- Ethos (philanthropy and foundations)
- Actares (philanthropy and foundations)
- Notenstein Privatbank (banking)

Besides the individual institutions active in sustainable finance, groups of organizations play an important role as they provide higher visibility for sustainable finance within the larger financial sector, coordinate critical activities such as market research, and provide a venue for organizations and the individuals that compose them to meet and exchange information.[33] In Switzerland, Swiss Sustainable Finance (SSF), founded in September 2014, could become a major player as a forum for collaboration.

Knoepfel and Imbert (2013) identified 26 associations based in Switzerland or at least with substantial Swiss membership. UN Principles for Sustainable Insurance (PSI), Schweizerische Bankiervereinigung (SBVg) 'Swiss Banking', the Swiss Finance Institute and the Center for Responsibility in Finance (University of Zurich) were added as well because they are important organisations which also need to be considered.
In table 3 below there is a categorization of these organisations according to their activity area.

[33] (Knoepfel & Imbert, 2013, p. 7)

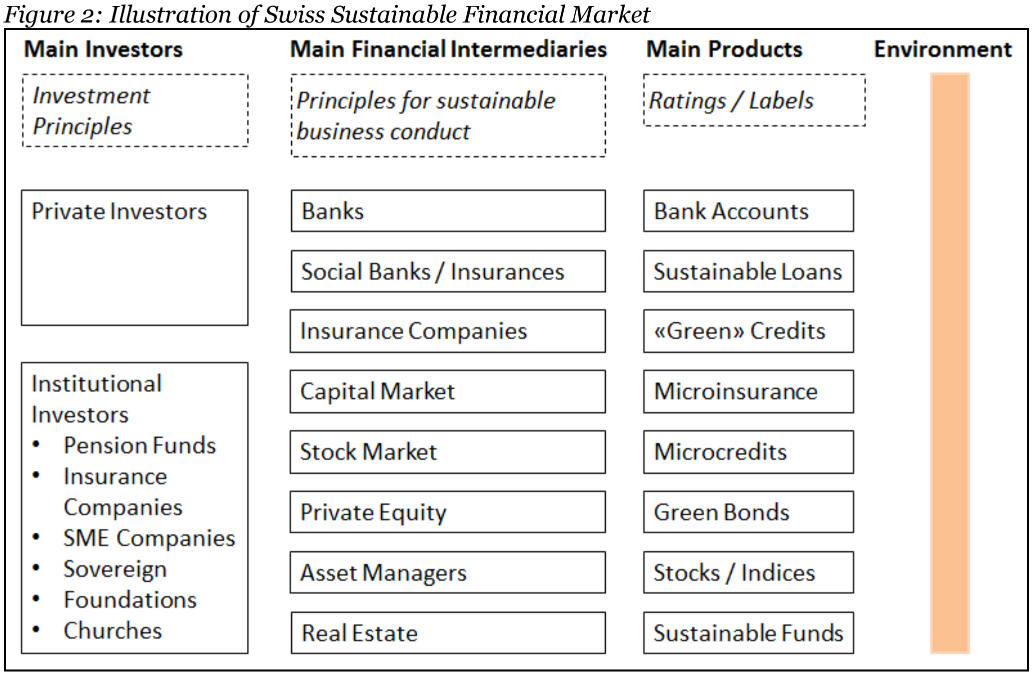
Table 3: Swiss Sustainable Finance Associations and Platforms by Activity Area

Think tanks, applied research	Personal membership, networking organisations	Financial research
• Club of Rome • Ethos Académie • Forum Nachhaltige Geldanlagen (FNG) • Global Impact Investing Network (GIIN) • öbu • Principles for Responsible Investment (PRI) • Sustainability Finance Geneva (SFG) • Swiss Sustainable Finance (SSF) • Swiss CFA Society • Swisscleantech • The Geneva Association • The United Nations Environment Programme Finance Initiative (UNEP FI) • UN Global Compact Switzerland • World Microfinance Forum Geneva (WMFG)	• CSR Geneva • Ethos Académie • Forum Nachhaltige Geldanlagen (FNG) • Green Buzz • Green Drinks • HUB Zurich • oikos international • Sustainability Finance Geneva (SFG) • Swiss CFA Society • Swiss Financial Analysts Association (SFAA)	• Eurosif • Forum Nachhaltige Geldanlagen (FNG) • Principles for Responsible Investment (PRI) • Sustainability Finance Geneva (SFG) • Swiss CFA Society • Swiss Financial Analysts Association (SFAA) • Swiss Sustainable Finance (SSF) • The United Nations Environment Programme Finance Initiative (UNEP FI) • Swiss Finance Institute
Asset Management – General	**Asset Management – Intentional impact**	**Asset Management – Alternative investments**
• Eurosif • Forum Nachhaltige Geldanlagen (FNG) • öbu • Principles for Responsible Investment (PRI) • Sustainability Finance Geneva (SFG) • Swiss Financial Analysts Association (SFAA) • Swiss Sustainable Finance (SSF) • The United Nations Environment Programme Finance Initiative (UNEP FI) • UN Global Compact Switzerland	• Ashoka Switzerland • Eurosif • Forum Nachhaltige Geldanlagen (FNG) • Global Impact Investing Network (GIIN) • HUB Zurich • Principles for Responsible Investment (PRI) • Sustainable Finance Geneva (SFG) • Swiss Sustainable Finance (SSF) • World Microfinance Forum Geneva (WMFG)	• Eurosif • Forum Nachhaltige Geldanlagen (FNG) • Principles for Responsible Investment (PRI) • Sustainable Finance Geneva (SFG) • swisscleantech • Swiss Sustainable Finance (SSF) • The United Nations Environment Programme Finance Initiative (UNEP FI)
Philanthropy and foundations	**Other service providers**	**Pension funds**
• Ashoka Switzerland • proFonds • Society of Trust and Estate Practitioners (STEP) • Sustainable Finance Geneva (SFG) • SwissFoundations	• Eurosif • Forum Nachhaltige Geldanlagen (FNG) • Principles for Repsonsible Investment (PRI) • Sustainable Finance Geneva (SFG)	• Principles for Responsible Investment (PRI) • Swiss Sustainable Finance (SSF) • UN Global Compact Switzerland
Banking	**Insurance**	**Academia**
• öbu • Swiss Sustainable Finance (SSF) • The United Nations Environment Programme Finance Initiative (UNEP FI) • Schweizerische Bankiervereinigung (SBVg) 'Swiss Banking'	• The Geneva Association • Swiss Sustainable Finance • The United Nations Environment Programme Finance Initiative (UNEP FI) • Principles for Sustainable Insurance (PSI)	• oikos international • Center for Responsibility in Finance (University of Zurich) **Government organizations** *None*

Source: Based on Knoepfel and Imbert (2013, p.7)

To summarize and illustrate the Swiss Sustainable Financial Market the figure below can be used as an overview.

Figure 2: Illustration of Swiss Sustainable Financial Market



Source: own illustration

In chapter 3.2.3 three key restrictions for sustainable investments were identified and discussed. Usually, as counter weight to obstacles there exist also drivers that enable the emergence of something. This is also true in relation to sustainable investments.

3.2.5 Main Drivers for Sustainable Investments

PwC conducted a study in China on green finance incentives and identified three drivers of green finance[34]:

1. National policies and initiatives (regulatory setting)
2. Market leadership and opportunities for new products
3. Stakeholder pressure

There exist of course major differences between the political systems of China and most Western countries. Drivers which presuppose governmental actions such as national policies to change the regulatory setting in China may therefore be a characteristic for China and not applicable for Western countries. Nonetheless, as financial markets are very international and highly competitive there are many elements which serve as a good starting point and from which universal drivers can be derived.

Institutional investors, private investors and a changing regulatory setting are identified as main drivers for sustainable investments

In addition to that and with more focus on Europe, the main drivers for the increase in sustainable investments will be, according to FNG, a growing interest of institutional and private investors and the changing regulatory setting.[35] In this context, international initiatives aiming at pushing the transition to a sustainable financial system play an important role. As will be elaborated be-

[34] (PwC China, 2013)
[35] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 40)

low, there exist already several cross-border initiatives which are gaining significance on the agendas of bank executives as well as government officials.

International initiatives promoting regulatory changes

On an international level several initiatives have been launched to promote the establishment of sustainable finance. The United Nations Environment Programme (UNEP) is at the forefront of accelerating the transition to a Green and inclusive economy. The United Nations Environmental Programme Finance Initiative (UNEP FI) is the most prominent collaboration platform with the aim to bring together public and private financial institutions (i.e. from the sectors banking, insurance and investment) from around the world. The initiative consists of over 200 members.[36] In 2011, they released the UNEP FI Guide to Banking & Sustainability which provides all the banks with a baseline standard to help drive sustainability issues.[37]

In addition to that, in January 2014, UNEP launched the Inquiry into the Design of a Sustainable Financial System to advance design options to drive policy changes, regulations, norms and standards in order to align the financial systems worldwide.[38]

One assumption they mention in the Inquiry that low interest rates implemented by central banks could improve the viability of green investments. In the Inquiry they mention only green investments but their argumentation can be applied to sustainable investments in general. Their argument is that low interest rates result in less discounting of the future and therefore, potentially more weight would be attached to long-term development, R&D and sustainability.[39] At the same time, low interest rates generate an incentive to fund projects which otherwise would not be funded because they are too risky.[40] This could of course be an approach but it also bears the risk for inefficiencies as companies are not forced to be productive.

Listed below are examples of common International Policies with the goal of sustainability:

- UN Principles for Responsible Investments (UN PRI)
- UN Environment Programme Finance Initiative (UNEP FI)
- Equator Principles
- Environmental and social principles of the European Investment Bank

These principles will be discussed further in chapter 4 of this report.

A recent study has analysed the trends in the use of environmental provisions in Regional Trade Agreements (RTA).[41] This study reveals an upward trend of environmental provision in RTAs. In this context, green growth is mentioned

[36] www.unepfi.org/about
[37] (United Nations Environment Programme, 2011, p. 7)
[38] (UNEP Inquiry, 2014)
[39] (Binswanger, 2009) cited in (Zadek & Robins, 2014, p. 33)
[40] (Garrison, 2012) cited in (Zadek & Robins, 2014, p. 33)
[41] (George, 2014, p. 11)

as one of the factors influencing the negotiation of environmental provisions. The promotion of green growth respectively the transition to a sustainable economy will not happen without the inclusion of the main actors – the financial industry.

There are forerunners and product innovators among hesitators

According to a study on green finance from 2009, there is a big variance between the banks regarding the adoption of green finance into their business model. In the study, 100 banks are grouped into four clusters: forerunners, process developers, product innovators and hesitators.[42]
The two groups of particular relevance are the forerunners and the product innovators:

Sustainable market development are characterised by product innovators and forerunners

Product innovators represent banks that have reacted to the demand for climate change related lending and investment products. This includes 'climate loans' with reduced rates to clients that are reducing their carbon emissions, using renewable energy sources, or showing adaption to climate change. Investment banks that fall into this cluster were found to offer project finance, private equity, and venture capital on technologies or projects targeting climate change mitigation and adaption. Some of the banks with asset management also offer thematic funds, such as a green fund that targets green investments.

The forerunners have been taking green issues at the strategic level for many years by gradually incorporating ESG issues into the overall strategy, making environmentally and socially responsible investments by adopting international standards, such as Equator Principles (EPs) and UNEP FI. These kinds of banks e.g. ask for a higher risk premium for clients with higher carbon exposure or exposed to emission trading schemes. In asset management, climate change considerations are integrated in mainstream analysis for markets, regions, sectors, and companies, and are reflected in the valuation of assets. Climate-change related risks and opportunities are disclosed in prospectuses and investment proposals, and advisory services to clients on climate change issues are being offered.[43]

A development in recent years is the growth within emerging markets. In India, both local and international banks are active in promoting sustainable investments and financing.[44] Four large privately-owned banks in Brazil were also found to be promoting sustainable finance in various guises, from advanced teams in the analysis of social and environmental risks in credit finance, to offering dedicated green credit financing lines.[45]

3.2.6 Sustainable Finance in an International Context

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42 (Furrer, Swoboda, & Hoffmann, 2009)
43 (PwC China, 2013, pp. 25-26)
44 (The Climate Group, 2010)
45 (UNEP, 2011)

Switzerland has a comprehensive long standing sustainability track record. However, other countries such as the UK, Luxembourg, Germany, and China have a similar base and are claiming to become the centre for sustainable finance.

Switzerland is recognized for its engagement in sustainability. It is one of the few countries that have sustainability anchored in its constitution and its commitment to environmental quality is renowned. As already mentioned above, Switzerland has a strong base in sustainable finance where a considerable number of financial institutions have committed to sustainable finance. However, other countries such as the UK, Luxembourg, Germany, and China have a similar base and are claiming to become the centre for sustainable finance.

In this section of the report the aim is to provide a short overview of selected countries and of their current status regarding developments in sustainable finance. Throughout this report more insights into international sustainability trends in sustainable finance are presented.

Luxembourg

Luxembourg is a global fund centre. It is the largest European fund domicile and the second largest fund centre in the world after the US. In figures, Luxembourg has a total of EUR 2'400 billion AuM which are managed across more than 13'000 investment fund units.[46]

Regarding sustainable investments Luxembourg is the leading domicile for responsible investing in Europe. Investments in sustainable funds have increased in Europe since 2010 by 19 percent from EUR 199.9 billion to EUR 237.9 billion.[47] More details on sustainable funds are presented in chapter 6.

UK

Regarding sustainable funds, the UK is under the top three domiciles for carbon funds (a sub-category of environmental funds). Investors in such funds are mainly public or semi-public institutions, governments, public agencies and Development Finance institutions.[48]

Germany

With the shared language in place, there are overlapping activities and resulting drivers between Switzerland and Germany. For example multi-national associations such as the Forum Nachhaltige Geldanlagen (FNG) operate a joined approach within Germany, Austria and Switzerland. Outreach also emerges out of Frankfurt and its position as a European hub of finance. Moreover, the German Government set in place the 'Energiewende', which requires substantial financing, thereby becoming a major driver of sustainable investing.[49]

China

China, as the largest carbon emitter in the world, has ambitious plans to shift its current economic model to a more sustainable model for economic devel-

46 (ALFI, 2013, p. 6)
47 (The Association of the Luxembourg Fund Industry (ALFI), 2013)
48 (KPMG & ALFI, 2013, p. 32)
49 See e.g. conference under the patronage of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, held in Berlin 14. May 2013 entitled: ' Nachhaltig investieren, Nachhaltigkeit finanzieren'.

opment. Banks play a crucial role in this journey. Chinese banks are catching up focusing more on sustainable finance and some Chinese banks e.g. CIB or SPDB are already publicly recognized as leaders in green finance.[50] CIB for example is recognised as the "greenest Chinese bank", and in general being a game changer to lead the business in the sector. Also, it helps the bank to avoid and mitigate the potential environmental & social risks within from the loans it has issued, as claimed by the bank.

3.3 Further Considerations

3.3.1 Role of High Net Worth Individuals

High net worth individuals (HNWIs) are important players in the financial markets due to their financial strength. According to Andres Knörzer, former Head of Asset Management at Bank Sarasin and since December 2013 Head of Asset Management at Notenstein Privatbank, HNWIs are often pushing innovation as they have the freedom and the financial capabilities to invest in new ideas.[51] Although the idea to include ESG criteria in investment decisions is not brand new, sustainable investments are still considered as alternative investments and not yet mainstream. The rationale that ESG issues can be crucial for the long-term financial performance is not yet broadly accepted. However, the Eurosif study on HNWIs and sustainable investment 2012 shows that sustainable investments by European HNWIs have increased by 58% between 2009 and 2012. Compared to an increase in overall wealth of HNWIs in Europe of 18% in the same timespan this suggests an increasing interest of these individuals to invest in sustainable assets. [52]
In regards to the investment strategies used by HNWIs (see the different categories in the corresponding chapter above), HNWIs favour sustainability themed investments, most often in water and green energy.[53]

According to the World Wealth Report 2014, 329'800 HNWIs were domiciled in Switzerland. This corresponds to an increase of 16.8 percent compared to 2012. In the light of the increasing demand of HNWIs for sustainable investments this indicates great opportunities in this area. More details on the growth potential of this are elaborated below.

Eurosif further estimated the amount invested into sustainable investment vehicles by European HNWIs to be EUR 1.15 billion in 2011.[54] The shift of assets to more sustainable investments continues. Thematic sustainability investments tend to be focused on environmental issues such as energy and climate.[55]

In Switzerland there is a big potential for sustainable investments through HNWIs

Almost one fifth of all sustainable investment mandates in Switzerland belong to HNWIs. These investors, as opposed to institutional investors, have no par-

[50] (PwC China, 2013, p. 10)
[51] (Eurosif, 2012, S. 4)
[52] (Eurosif, 2012)
[53] (Eurosif, 2012, S. 6)
[54] (Eurosif, 2012, p. 9)
[55] (Eurosif, 2012, pp. 10-12)

ticular formal or regulatory investment constraints to deal with and are therefore more open in general to long-term investment with different risk profiles.[56]
Further details with regards to the regulatory restrictions will be set out in chapter 6 of this report.

To sum it up, it was shown that there is an increase in sustainable investment from HNWIs. It would be wrong to assume that the reason for this increase is a general increase of HNWIs' wealth. That is certainly not the case. As the increase of sustainable investments is disproportionate compared to the HNWIs increase of wealth, the only explanation is that the share of the HNWIs wealth is more and more consciously directed towards sustainable investments.

3.3.2 Offshore Wealth

According to a BCG study, offshore wealth rose by 6.1 percent in 2012 to USD 8.5 trillion worldwide, with Switzerland being the most popular destination for foreign investors. Offshore wealth is projected to increase over the next years to USD 11.2 trillion until 2017.[57]
However, wealth management in Switzerland is faced with intense and increasing pressure, particularly from tax authorities from the U.S. and the EU. U.S and European governments are eager to obtain as much information on depositors in the hope of minimizing tax evasion and maximizing tax revenue.[58]

Therefore, it is of utmost importance that offshore centres position themselves not only as possessing skills and expertise but also as embracing full transparency and integrity. And that is where a direct link to sustainable investment can be established. Transparency and integrity are two key pillars of sustainability in general. In the chapters 4 and 5 of this study we will shed more light on the developments regarding transparency of financial products and the trends in sustainability reporting.

For Switzerland to stay the leading offshore centre, sustainable investments could play a crucial role

Most of the offshore money deposited worldwide stems from HNWIs and they will most likely continue to seeking solutions for diversification. The number of HNWIs is increasing steadily year after year. In 2013, 1.76 million new HNWIs were counted worldwide, corresponding to an increase of 15 percent compared to 2012.[59] Thus, one can assume that wealth will continue to be invested offshore. As we have outlined above, sustainable investments by HNWIs have increased significantly over the last years. Switzerland is the most important single offshore centre globally and is expected to remain the most important location for offshore wealth.[60] However, other countries and regions such as Singapore and Hong Kong are catching up and will become more prominent offshore centres in the future. Therefore, the ability to attract

[56] (Eurosif, 2014, pp. 25-62)
[57] (Beardsley, et al., 2013, p. 11)
[58] (Beardsley, et al., 2013, p. 11)
[59] (Capgemini, RBC Wealth Management, 2014)
[60] (Beardsley, et al., 2013, p. 12)

new offshore wealth plays a crucial role for Switzerland to remain the leading centre. Against the backdrop of increasing investments by HNWIs into sustainable investment vehicles it is important for Switzerland create right regulatory and fiscal conditions in order to meet the need for sustainable investments. In chapter 6 we will elaborate in more detail on the restrictions and incentives in Switzerland in this respect.

3.3.3 Growth Potential of Sustainable Investments

Considerable growth potential in the space of private investors

As has been outlined in the previous part of this report, there exists considerable growth potential for sustainable investments by HNWIs. In 2012, the share of private investors' wealth in Europe invested in sustainable funds was only 6%. Compared to the 31% market share of private investors' wealth in the total European fund industry, this is rather low.[61] These figures show that there is considerable potential in the space of private investors.
Nevertheless, more than half of the sustainable investments stem from institutional investors.
However, in order to reap this potential some improvements have to be made towards more transparency and clear communication. [62]

Green bond market is the growth success story within the field of institutional investors

The market for green bonds is on the point of growing fast. The Zurich Insurance Group (ZIG) has recently announced to invest up to USD 2 billion in green bonds. It was only in November 2013 when ZIG announced to invest USD 1 billion in green bonds. Now they have already doubled the amount. The company has up to date invested over USD 400 million and has according to own statements the largest portfolio of green bonds globally.[63]
ZIG is a good example of an institutional investor with a clear commitment to sustainable investment.

Green bonds are per definition financial vehicles used to finance environmental and climate protection projects. Until 2013, such kinds of projects were exclusively financed by supranational institutions such as the World Bank but since then, also used by companies as financial instrument. Experts assume that in 2014 emissions of green bonds will amount to USD 40 billion worldwide.[64] There will be more information on green funds in chapter 4.

ABS and Freie Gemeinschaftsbank are growth stories of banks with dedicated focus on sustainability

In Switzerland there exist two banks with a dedicated focus on sustainability: the Alternative Bank Schweiz (ABS) and the Freie Gemeinschaftsbank. Both banks have a commitment to do social/ethical and ecological banking. They are highly transparent compared to conventional banks. For example, they publish the names, amounts and purposes of credit grants in their annual report.[65]
In 2013, ABS grew in all areas of business. They acquired approximately 2'000 new clients and recorded an influx of new money of 11 percent resulting in

[61] (Saluzzi, 2013)
[62] (Saluzzi, 2013)
[63] (Zurich Insurance Group (ZIG), 2014)
[64] (Neue Zürcher Zeitung, 2014)
[65] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 41); (öbu, 2014)

total of client deposits of CHF 1.28 billion. 82 percent of the projects that are financed by the bank via credits generated a societal or environmental added value. Lending for projects in the area of renewable energies has again increased in 2013 and accounts for about 12 percent (CHF 112 million) of the overall credit portfolio.[66]
ABS is a good example of a Swiss bank with a clear commitment to sustainable investment. While it is a good example for a bank being entirely focussed on sustainability it also shows that that it has not achieved a considerable and significant size yet and only has a minor impact on the mainstream investment community. Another recognized example of a sustainable bank is 'Globalance'.

3.3.4 Role of the Commodity Traders

Switzerland is the world centre for commodity trading. And commodity trading is an important driver of the Swiss economy. In 2010, the economic value added of this sector was CHF 18 billion, which corresponds to a share of the overall Swiss GDP of 3.6 percent. Half of the overall GDP growth came from commodity trading. Earnings from the commodity trading industry have overtaken those of the financial industry which makes commodity trading the most important economic sector in Switzerland. Due to the stable political system which guarantees a functioning legal framework, together with the secured financing of commodity trade more and more commodity traders have settled in Switzerland in the recent years.
Commodity trade finance plays a crucial role in the commodity trade business. According to Boston Consulting Group and Schweizerische Bankiervereinigung (SBVg) the business for commodity trade finance will have rising annual profits of up to 4 percent until 2015. Thus, for the Swiss banks this business area will have a promising future.[67]

Despite or maybe even because of the increasing economic importance of the commodity trading business for Switzerland, the number of critical voices – e.g. from NGOs – has also grown. Most prominently, the commodity trading sector together with financial investors is often made responsible for the rising food prices and accompanying famines in some parts of the world. The sector is having an increasing reputational problem, whether justified or not.
For this reason, big commodity trading companies, for example GlencoreXtrata, have embarked on a sustainability strategy in order to be more transparent on the environmental and social impact of their business. In the light of increasing public awareness of the impact commodity trading business sustainability issues become more and more important for this sector.

3.4 PwC Expert Opinion

Summary

The finance industry in Switzerland is a very important sector and is one of the most important pillars of the Swiss economy. Sustainable finance is a growth area, but still not mainstream and in many cases ESG aspects are not considered at all. Many financial institutions have expressed in one way or the other

[66] (Alternative Bank Schweiz (ABS), 2014)
[67] (SwissBanking, 2013, pp. 14-15)

the commitment to consider sustainability issues in their business. However, it is not at all always transparent or comparable what the definition of sustainable, responsible or ESG investing really is and to what extent sustainability aspects are then integrated in financial products. This makes it very difficult to receive reliable figures that can be compared in an international context. But for sure, so far Switzerland is not an innovative leader providing incentives to foster sustainable finance. The legal frameworks of a country play a crucial role in attracting investments. Switzerland is famous for being a tax haven. However, this does not apply to the financial industry, specifically not to the fund industry. We elaborate more on that in chapter 6 *Fund domicile Switzerland*. At this point we want to already anticipate that the fiscal structure of the financial system is highly complex and therefore of limited attractiveness for foreign investors seeking sustainable investment opportunities. In the sections below we further summarize the potential, opportunities and risk of a development towards a centre for sustainable or green finance.

Potential

It was already outlined in this chapter that there are many innovative market players that offer sustainable financial products or services and are able to combine the two competitive assets of Switzerland: the long-lasting experience of the Swiss finance industry and sustainability knowledge of Switzerland. Sustainability is an important pillar and written down in the constitution of Switzerland. Also the business case of sustainability as such has become more attractive in recent years. Research has shown that sustainable investments have lower volatility in the long-run than conventional investment vehicles and in some cases are even more profitable.

Nevertheless, financial institutions still consider high quality ESG criteria only for the development of niche portfolios in the area of sustainable investment. They rarely integrate high quality ESG factors into their mainstream business activities. In our view, this is definitely a point which offers great potential for improvement and which is relevant, if Switzerland wants to uphold a leading position in sustainable finance. We believe that the inclusion of ESG risk considerations is having a positive effect on the overall business performance. Why? Because a company that adequately considers ESG risks in their risk framework will most probably also have a more rigorous approach in relation to other risks. This will certainly have a positive impact on the overall performance. Integration into the mainstream business also requires a certain level of transparency and visibility allowing the customers or institutional investors to recognize the integration and become aware of their own impact resulting from the decision power they have. We see some momentum for sustainable finance in Switzerland and we believe that more players will create sustainable finance products or implement ESG aspects in their current business strategy.

Risks and Opportunities

In the report it was described that there are barriers that could slow down the development of sustainable finance, but the most important barrier could be the lack of demand. If there is no market for sustainable financial products or services, there will also be no supply. Sustainability is considered a trend and negative effects of climate change are becoming more and more obvious, which are also supported by different credible reports from United Nations working groups. Therefore it could be anticipated that public interest for sustainability issues will further increase and stakeholder will further expect the financial market to be part of the solution and not an element of the problem. This will also require further improvements in transparency and quality of information. 'Verbraucherzentrale Bremen' has recently conducted an analysis on ethical-ecological investment funds worldwide[68]. Only 13 of 46 investment funds analysed have a very high or high transparency. Almost half of the total sample is rather in-transparent. Amongst the funds investigated are also a couple of Swiss-managed equity funds, e.g. Swisscanto, UBS, Swiss & Global (RobeccoSAM), Sarasin, Lombard Odier, etc. All of them are considered as being mediocre to very weak with regards to transparency. In order to build trust with clients, it is eminent to provide them with products that are understandable and transparent. For Switzerland, with its growth in sustainable investments - in particular from the HNWIs side – it is of utmost importance to keep the trust of its clients and to further strengthen it in order to attract additional investors or offshore capital. Transparency is a key element to build and regain trust no matter whether it's about green finance or 'traditional' products.

Beside barriers there are also drivers for a positive development towards sustainable finance. Important finance, industrial or service companies can raise the quality level for a whole industry by being a successful frontrunner or first mover. Other companies are then under pressure to catch up with this company by providing same quality standards. Stakeholder pressure or legislation can also be drivers for a movement towards sustainable finance.

Switzerland is still perceived as a leading spot for sustainable finance. However, other financial centres are very similar. If Switzerland wants to keep a leading position, the key elements outlined above and further discussed below should be met sooner or later. This should be aligned to the current repositioning of the Swiss finance sector in general.

3.5 PwC Recommendations

Clear and comprehensive definitions

We see a strong need for more comprehensive definitions of what could be considered as sustainable or green finance and more standardisation, overall and within subcategories. This need is also recognised by many important stakeholders from the industry. As already pointed out, it is not possible at the moment to have a clear understanding what sustainable finance really is, because the quality of ESG implementation varies extremely. Further standardisation of definitions is important to measure sustainable investments, compare different countries or create reliable and standardized products for investors. The actors of the finance industry have a responsibility and duty to take action and foster progress.

[68] (Verbraucherzentrale Bremen, 2014)

Improvement of standards

There are basically two options to make standards better and more effective: improve current standards or create a better standard. Current standards show deficits, because they are not specific or formalized enough. There should be a dialogue about which standards are important for Switzerland and how the quality of these standards and principles could be improved. Standards should be more binding and could even become a requirement for a listing at a stock market; otherwise the quality of the sustainable finance investments will remain as diverse as it is now. Another discussion could be, if these standards or initiatives will ever meet the quality requirements of the leaders in the market. Therefore a 'Swiss sustainable finance label' could be an interesting alternative to existing initiatives. The various stakeholders should consider these options, as this could provide Switzerland with a competitive advantage in global competition.

Provide incentives and regulations

The governments of countries can play an important role in fostering sustainable finance by providing incentives or adjust regulation. The government in Switzerland has not been very active so far in influencing sustainable finance. We recommend governmental organisations to get involved in the discussions, check if market conditions or regulations are favourable and adjust such conditions, if this could lead to a more sustainable finance environment. Specific recommendations are discussed in the different sections of this report. As there are already many ongoing discussions in the finance industry (e.g. 'too big to fail', 'Weissgeld-Strategie', etc.), the inclusion of ESG aspects could be combined with these approaches and does not explicitly need a separate regulation or initiative.

Foster education and innovation

Regardless of the many different organisations that are active in the sustainable finance market, in general the topic as such lacks awareness compared to the impact and importance the topic has. Investment mechanisms are driving the decisions of companies, their behaviour and as a result the share price. We believe it is crucial that all organisations that have a stake in ESG investing activities collaborate more in order to create more awareness for sustainable investing. This is already on the agenda of various organisations from private sector, consulting, academia, asset managers, etc. and needs further efforts. This will also help to increase demand for sustainable finance products and support ESG investment decisions to become more mainstream. There is also an opportunity to change the brand of the Swiss financial industry. In the past the industry was seen as conservative and discreet. A development towards a centre for sustainable finance would need innovations and a dynamic environment.

More stakeholder engagement and developments of business strategies

There is nothing more powerful than customer expectations or needs. If more stakeholder increase pressure on companies, they will move for sure. Asking questions from different stakeholder groups (NGOs, HNWIs, insured persons, shareholders, etc.) will create further pressure on finance companies and encourage them to gain a deeper understanding on how ESG is considered in their investment decisions and how this could even be an attractive business case for them. Some have already adjusted their business model in a proactive way as they see a market potential for ESG investment. For example some banks with a sustainable finance model were able to profit in the recent years from the various issues in the finance sector and increase their client base. Even though there were setbacks for some sustainable markets or business models (e.g. price decrease of emissions certificates), there were successful business models or products in the area of sustainable finance and other actors have developed promising products and services in that field.

Governmental influence in order to foster long-term thinking

In order to monetize ESG effects in a positive way, it is important that long-term thinking and acting is predominant. Current markets often fail to capitalize ESG benefits, as even pension funds (with a long-term orientation) use sometimes short-term thinking in their investment decisions. Here governmental bodies can play a role by providing incentives or define regulations that would foster a long-term thinking in investment decisions. This is also elaborated in more details later in this report (see also chapter 7).

4 Sustainable Investment Principles and Products

Broad Overview of Sustainable Financial Services and Initiatives

This chapter is designed to evaluate the different sustainable investment principles and products. It will assess the implementation, content and set up of the different initiatives. It will be focusing on the best known initiatives such as the UN Principles for Responsible Investment, the OECD Declaration on International Investment and Multinational Enterprises, the Environmental and social principles of the European Investment Bank, the Equator Principles, UNEP FI Guide to Banking and Sustainability, the Green Bonds Principles, and the Natural Capital Declaration.

4.1 Introduction to Sustainable Financial Services and Initiatives for the Finance Sector

The following principles are all global in scope but vary in so far as to what their target audience is (all institutions or only a particular area such as banks) and according to their application (mandatory or voluntary). With the exception of a few (i.e. Environmental and Social Principles of the EIB) the principles focus what should be avoided rather than what should be pursued.

The main reason why investors invest their money is to receive a monetary return on their investment. Only recently the trend to also pay attention to externalities such as Environmental, Social and Governance (ESG) criteria has arisen. Now, globally, many investors are actively looking not only at the positive monetary impact for the company they invest in, but also for the environmental and social impact that may result locally, regionally or even globally. This kind of investor is typically investing in environmental and social themed areas where the investee companies provide a sustainable product or service. There are various definitions and ways of handling sustainable products and services in the different countries. A sustainable product or service is usually qualitatively referred to as one that results in environmental or social benefits.[69]

In the previous chapter it was shown that sustainable investments have increased. As mentioned above there is no clear global comprehensive definition of sustainable products and services. Some institutions did provide an analysis

[69] (Goodall & Malmberg, 2013, p. 5)

with their own definitions. These numbers were collected from publicly available sources and will be shown in this report. However, it cannot be guaranteed that the data is complete or comprehensive.

As already mentioned in chapter 3, the Forum für Nachhaltige Geldanlagen describes an increasing interest and potential of sustainable financial products in Europe. In 2013 they show that in Germany, Austria and Switzerland there was an overall increase of 12 percent to a volume of EUR 135 billion (approx. CHF 166 billion). In Switzerland they show a volume of CHF 56.7 billion (an increase of 17%). The shown trend is accompanied by a growing number of green financial products such as green loans, sustainable project finance, green, ethic or social funds, microcredits etc. However, many stakeholders admit that they do not fully understand the investment system and capital markets. There is big variety of products and all of them seem to consist of different components.[70]

Given that there is no clear definition there is also no clear measurement of impact as of today

Given that there is no clear definition there is also no clear measurement of impact as of today. However, there is a need for a solid impact assessment for the various products; only then can be assessed where the biggest leverage lies. There are already some initiatives to measure parts of the impact such as a tool designed by WBCSD[71] (measuring socio-economic impact) or Total Impact Measurement and Management by PwC[72]. Nevertheless, there is a need for a reduction of complexity and more transparency on all the existing products, services and principles. The experiences of international players (e.g. institutional investors, such as pension funds, insurances, and the Swiss National Bank) can provide insights on how to develop them.

The goal of this module is to provide a deeper understanding of the different products, initiatives, and standards and to discuss the relevance of the various initiatives and to evaluate a possible role of Switzerland in promoting investment with a positive impact on the environment.

4.2 Sustainable Investment Initiatives

General and global sustainability standards and initiatives have been in place for many years. To name the most important ones: it started in 1972 at the United Nations conference on the Human Environment in Stockholm. There it was agreed on 26 principles[73] to the preservation and enhancement of the human environment, yet there was no strategy on how to implement these principles. The United Nations Environment Program was created as a result. In 1980 there was the World Conservation Strategy (set up by the UNEP). In 1998, there was the Brundtland report published – UN's first environmental strategy. In 1992, the next major sustainability event was the Rio Earth Summit on environment and development. In 1999, there was the start of the United Nations Global Compact (with 7'000 corporate signatories in 135 countries,

[70] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, pp. 13, 35); (Dr. Sullivan, 2013, p. 4)
[71] (WBCSD, 2014)
[72] (PwC, 2013)
[73] (26 Principles of Human Environment, 1972)

it is the world's largest voluntary corporate sustainability initiative today). In 2010, the ISO 26000 standard for social responsibility was launched.

One of the main drivers of these initiatives are the United Nations (UN) and their working groups. The UN initiatives are usually trying to work directly with the different industries in order to tailor them to their needs. Only recently the importance of this issue has also been recognized by several other stakeholders such as not-for-profit organizations as well as investors and the financial institutions. Some of the financial institutions have set up self-regulation initiatives. Naturally, at first the principles were rather broad and then they became more specific.

As mentioned above, the standards and principles vary widely in their scopes and applications, i.e. all institutions versus a specific institution, mandatory versus voluntary, negative screening versus positive screening and also geographical application.

4.2.1 Principles

UN Principles for Responsible Investment

Most probably the best known initiative is the UN Principles for Responsible Investment (UN PRI). The UN PRI was launched in April 2006 by a group of public institutions (UNEP Financial initiative and the global compact). It is globally used and promoted. The PRI are a set of investment principles targeted at institutional investors. The PRI scheme is voluntary, global in scope and not sector specific. As of October 2014 there are 1262 signatories from more than 30 countries, 62 thereof are Swiss signatories (i.e. Suva, Nest Sammelstiftung, Pension Fund City of Zurich (PKZH), etc.) and almost 800 of them from over 30 countries have publicly disclosed their progress towards implementing responsible investment. The PRI is representing USD 45 trillion of assets under management.[74]

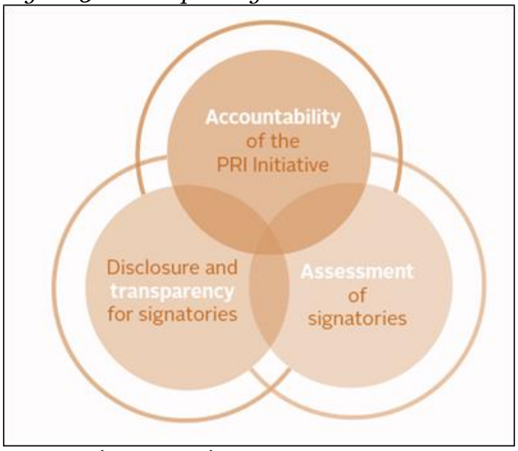
The PRI consist of six rather broad principles as a guideline for institutional investors:

1. We will incorporate ESG issues into investment analysis and decision-making processes.
2. We will be active owners and incorporate ESG issues into our ownership policies and practices.
3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.
4. We will promote acceptance and implementation of the Principles within the investment industry.
5. We will work together to enhance our effectiveness in implementing the Principles.
6. We will each report on our activities and progress towards implementing the Principles. [75]

[74] (PRI, 2014)
[75] (UNPRI, 2006)

The PRI are formulated rather vaguely and open to interpretation. For example, what exactly is an appropriate disclosure? Starting from 2013 all PRI signatories were required to report annually on how they have implemented their responsible investment commitments through a self-evaluation. For this cause there was a new reporting framework designed to ensure accountability, encourage transparency and provide an annual assessment to foster continuous learning. This means it is them who decide as to whether or not these principles were followed or not or if progress was made. Because of these self-evaluations it is almost impossible for a stakeholder to compare which of the signatories are integrating them better.

Figure 3: The Reporting Framework



Source: (PRI, 2014)

OECD Declaration on International Investment and Multinational Enterprises

The oldest set of principles in this overview is the OECD Declaration on International Investment and Multinational Enterprises. It was first adopted by the OECD member countries in 1976. They have been revised several times since. The latest valid version is from 2011. Opposed to the other principles, the OECD's Declaration is signed by the government of a country instead of individual companies. The Declaration consists of recommendations on responsible business conduct of multinational enterprises. The list of the more than 17 recommendations can be found on the OECD webpage.[76]

Analogous to the PRI, this framework is global, public and voluntary. However, some of the matters covered in the guidelines might be regulated under the national law of a given country. All of the 34 OECD countries subscribed to the declaration but also 12 non-OECD countries signed it. The recommendations are similar to the PRI rather broad and vague in their focus and could be interpreted in different ways. As an example 'Enterprises should contribute to economic, environmental and social progress with a view to achieving sustainable development'[77].They are important to the financial industry because many of the financial services companies invest internationally and are multinational.

IFC Performance Standards on Environmental and Social Sustainability

[76] (OECD Website, 2011)
[77] (OECD Guidelines for Multinational Enterprises, 2011)

The International Finance Corporation (IFC) Performance Standards on Environmental and Social Sustainability were originally adopted in 2006, the Sustainability Framework has been updated in 2012. The Sustainability Framework helps the party responsible for implementing and operating a project that is being financed, or the recipient of the financing, depending on the project structure and type of financing to do business in a sustainable way. It promotes sound environmental and social practices, encourages transparency and accountability, and contributes to positive development impacts. The IFC's Performance Standards, which are part of the Sustainability Framework, have become globally recognized as a benchmark for environmental and social risk management in the private sector. The standards are:

- Performance Standard 1: Assessment and Management of Environmental and Social risk and Impacts
- Performance Standard 2: Labor and Working Conditions
- Performance Standard 3: Resource Efficiency and Pollution Prevention
- Performance Standard 4: Community Health, Safety, and Security
- Performance Standard 5: Land Acquisition and Involuntary Resettlement
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Performance Standard 7: Indigenous Peoples
- Performance Standard 8: Cultural Heritage

The IFC is the private sector lending arm of the World Bank. These performance standards help IFC investment and advisory clients to manage and improve their environmental and social performance through a risk and outcomes based approach. The IFC requires investment clients to have a sustainability policy as part of a client's overall environmental and social management system. They apply to all investment and advisory clients whose projects go through the IFC's initial credit review process after January 1, 2012. The IFC Performance Standards are also applied or referred to through the Equator Principles. IFC reviews implementation performance, as reported in the client's Annual Monitoring Report and updates on the Environmental and Social Action Plan, against the environmental and social conditions for investment and the client's commitments. If a non-compliance is found, the IFC will work with the client to bring it back into compliance, and if the client fails to re-establish compliance, the IFC will exercise its rights and remedies as appropriate.[78] All Equator Principle signatories are also using the IFC Performance Standards and there are some other financial institutions that do as well.

Environmental and Social Principles (ESP) of the European Investment Bank

Another important standard is set by the Environmental and Social Principles (ESP) of the European Investment Bank (EIB). The ESP are an example of public but mandatory investment principles. They were launched in 2009 and were re-launched in 2014. These Principles and Standards are based on the European environmental law. They are namely:

[78] (IFC, 2014)

1. The integration principle: it requires that environmental considerations are appropriately weighed in all aspects of EIB work, including through a transparent development and implementation of its corporate strategy, operational plans, objectives and targets, sector lending policies as well as in the projects it finances (Article 6).
2. The principle of aiming at a high level of environmental protection (Article 95 (3) and Article 174 (2)).
3. To maximize social well-being.

The ESP apply to all financial support to sustainable investment projects. The focus lays on climate change, biodiversity and ecosystems. They are meant to increase environmental and social benefits and to decrease environmental and social costs.[79]
As one of the few existing principles, the ESP are mandatory. The EIB aims to add value by enhancing the environmental and social sustainability of all the projects that it is financing and all such projects must comply with the environmental and social requirements of the bank. They apply whenever the bank is the primary or co-investor. This means that the EIB can insist that its principles and standards are followed as a condition of making the investment.

Equator Principles
The Equator Principles (EPs) are a well-known and widely applied risk management framework in the banking sector. They are based on the International Finance Corporation's (IFC) performance standard on social and environmental sustainability. Equator Principle Financial Institutions commit therefore to applying the IFC Standards in all financed projects, and thus bear the burden of ensuring adherence. The EP were formed in July 2010 and are a credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions. This means, they specifically only apply to one activity of the bank; project finance. The EPs are adopted voluntarily by financial institutions and are applied where total project capital costs exceed USD 10 million. It is an example of self-regulation and a private standard:

1. Review and Categorization
2. Environmental and Social Assessment
3. Applicable Environmental and Social Standards
4. Environmental and Social Management System and Equator Principles Action Plan
5. Stakeholder Engagement
6. Grievance Mechanism
7. Independent Review
8. Covenants
9. Independent Monitoring and Reporting
10. Reporting and Transparency

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[79] (European Investment Bank, 2009)

Currently 80 financial institutions in 34 countries have officially adopted the EPs, covering over 70 percent of international project finance debt in emerging markets[80].
Because the EP only cover project finance they are rather specific. The accountability is so far not regulated. The EP association does not have the right to enforce those principles given that they are voluntary. In emerging countries the private equity markets are still underdeveloped. This could lead to a big potential of social and environmental benefits.

UNEP FI Guide to Banking and Sustainability
Furthermore, there exists the UNEP FI Guide to Banking and Sustainability from October 2011. The Commission Board decided to develop a Guide to Banking & Sustainability, based directly on the UNEP Statement of Commitment by Financial Institutions on Sustainable Development.
The Guide is supposed to:

- Offer UNEP FI's banking members a clear and practical interpretation of the UNEP Statement, and how to comply with the Statement in the specific context of banking.
- Provide all banks seeking to embark upon (or further advance on) the long road to sustainability with a baseline standard.
- Forward an explanation of UNEP FI and signatories' vision according to the banking and sustainability agenda, to the broader community of stakeholders. It is their belief that the UNEP Statement, as the only United Nations standard specifically aimed at the finance sector, offers a unique foundation for all banks in their efforts to drive sustainability issues. [81]

The UNEP FI are sector specific in order to have a specific guidance for banks (instead of the more general PRI) and consolidate the local and specialized standards such as the EPs. It is voluntary. The description of each point of the guideline is rather extensive and also underlined with an example. It is more detailed compared to the other mentioned principles and the points are phrased in a way of what should be done rather than what should not be done. Over 200 financial institutions from around the world are signatories to the principles, 9 of them are from Switzerland (e.g. Argonaut Services GmbH, Credit Suisse, Helvetia).

UNEP FI Principles for Sustainable Insurance
The Principles for Sustainable Insurance is an initiative of the United Nations Environment Programme Finance Initiative. They were launched at the UN Conference on Sustainable Development (Rio+20) in June 2012. They are a framework for the global insurance industry to address environmental, social and governance risks and opportunities. The insurance industry's core business is to manage risk. In recent years more and more insurers have been responding to environmental, social and governance (ESG) issues at varying levels and scales. The principles are a voluntary and aspirational framework.

[80] (Equator Principles, 2011)
[81] (United Nations Environment Programme, 2011, p. 7)

The principles are:

1. We will embed in our decision-making environmental, social and governance issues relevant to our insurance business.
2. We will work together with our clients and business partners to raise awareness of environmental, social and governance issues, manage risk and develop solutions.
3. We will work together with governments, regulators and other key stakeholders to promote widespread action across society on environmental, social and governance issues
4. We will demonstrate accountability and transparency in regularly disclosing publicly our progress in implementing the Principles.

The UNEP FI PSI is a sector specific guideline for insurance companies. It is a voluntary set of principles. It has 43 signatories worldwide among them Swiss Re.

The Green Bond Principles

The Green Bond Principles (GBP) is a voluntary process-guideline for issuing green bonds issued by a consortium of four leading banks. They were published in January 2013 and are intended for a broad use by the market. The GBP promote integrity in the development of the green bond market by ensuring the information necessary to evaluate the environmental effect of their green bond investment is available. This is done by transparently describing and standardising the approach for issuance of a green bond. They provide the issuers a clear guidance on the key components that need to be included before launching a trustworthy green bond.

The components are:

1. Use of Proceeds: The key element of a green bond is the utilization of the proceeds of the bond. For a 'green use' of proceeds bond or of a proceeds revenue bond, the issuer should declare the suitable green project categories in the use of proceeds section of the legal documentation for the security. The GBP recommend that all designated green project categories grant clear environmental benefits that can be quantified and/or assessed or at least described.
2. Process for Project Evaluation and Selection
3. Management of Proceeds: The net proceeds of green bonds should be stored in a sub-portfolio or otherwise tracked by the issuer and attested to by a formal internal process that will be linked to the issuer's lending and investment operations for projects.
4. Reporting

As the principles are designed to be industry wide, green bond issuers and investors as well as banks are invited to apply for a membership. The governance framework of GBP sets out the membership eligibility, which requires organizations to have issued, underwritten, or invested in green bonds. The GBP support investors, banks, investment banks, underwriters, placement agents by transparently disclosing information about the content of the green bonds; and they assist underwriters by moving the market towards standardising

transactions through disclosures. As of October 2014, there are 66 members of the GBP, including Credit Suisse and Zurich Insurance Group.[82]
The GBP are quite specific given that green bonds are financial products. However, there is still some room for interpretation, e.g. 'where feasible assess the impact'. The GBP want the integrity of the implementation of the sustainability criteria not only to be reported but also to be externally assured.

Natural Capital Declaration

Another recent initiative is called the Natural Capital Declaration (NCD). It was launched at the UN Conference on Sustainable Development in 2012 (Rio+20). The Natural Capital Declaration (NCD) is an initiative by the finance sector which fosters the integration of natural capital considerations into loans, equity, fixed income and insurance products, as well as towards more transparency in accounting, and reporting frameworks.
The four commitments are:

1. Understanding the impacts and dependencies of financial institutions on natural capital (directly and through customers) which can translate into material risks or opportunities.
2. Embedding natural capital considerations in financial products and services.
3. Achieving a global consensus for the integration of natural capital in private sector accounting and decision-making.
4. Achieving a global consensus on integrated reporting and disclosure. [83]

The Natural Capital Declaration was signed by more than 40 CEOs of different financial institutions from around the world. There are also a number of supporters who observe the NCD. The NCD was just the declaration of the commitment. In 2013, it was underlined with a roadmap in order to actually implement the principles. The roadmap assesses gaps and options to structure work under the NCD. A lean management has been set up to help the financial institutions implementing the NCD. The roadmap has three goals:

1. Stimulate financial institutions that have signed up to make and show progress towards implementing the NCD commitments.
2. Develop practical tools and metrics to integrate natural capital in all asset classes and relevant financial products.
3. Increase the number of financial institutions that endorse the NCD at the CEO level so at to generate a greater level of awareness and acceptance about the importance of this topic for the sector.[84]

The NCD are again rather vaguely formulated. They can be interpreted widely. However, the roadmap shows actual gaps and helps the finance institutes on how to close these gaps, and there are several case studies to help with the interpretation and illustrate best practice. Additionally, there are four working groups set up to help the institutions with the implementation. It is private,

[82] (Green Bond Principles, 2014)
[83] (Natural Capital Declaration, 2014)
[84] (Natural Capital Declaration Roadmap, 2013)

global and voluntary. The NCD has 28 signatories and 12 observers, only one of them from Switzerland.

Table 4: Summary of Investment Principles Criteria

Principles	Content	Initiated by	Target Audience	Application	Force of Application
UN Principles for Responsible Investment	Set of principles to promote responsible investment	UN	Institutional investors	1262 signatories (276 Asset owners, 837 Investment Managers, 182 Professional Service Partners)	Voluntary
OECD Guidelines	Recommendations on responsible business conduct of multinational enterprises	OECD	Universal	All OECD Member Countries (34) and 12 non OECD Member Countries	Voluntary
IFC Environmental and Social Performance Standards	Framework that helps to set project up in a sustainable way	IFC and World Bank	All markets, closely linked with EP	All that adopt EP, and more	Voluntary for financial institutions, Mandatory for clients
EIB Environmental and Social Principles and Standards	Principles for sustainable investment projects	EIB	Universal		Mandatory
Equator Principles	Risk management framework	Equator Principle Association	applies globally, to all industry sectors and to four financial products	80 adopters	Voluntary
UNEP FI Guide to Banking and Sustainability	Helps bank to develop in a sustainable direction and drive sustainability issues	UN	Financial Services Industry	200 signatories	Voluntary
UNEP FI Principles for Sustainable Insurance	Framework for the global insurance industry to address environmental, social and governance risks and opportunities	UNEP FI	Insurance Sector Specific	42 signatories	Voluntary
Green Bond Principles	Guideline for issuing green bonds	4 Banks	Bank Sector Specific	66 members	Voluntary
Natural Capital Declaration	Fosters the integration of natural capital into products	Finance Sector	Universal	28 Signatories, 12 observers	Voluntary

Source: own illustration

The overview above is not a comprehensive list of all the principles and standards that exist. How credible each of these principles is cannot be allocated. So far, there is no definition of credibility for those principles. However, all of the ones mentioned above were driven by credible institutions such as the UN, the European Investment Bank and the OECD, with an according reflection on the principles. Another indication of credibility is usually transparency. The more transparent they are, the more credible they are. With an assurance of the self-declared data, the credibility of the principles as well as the company could develop further. Another point is that when a set of principles is not credible they usually disappear from the market.

As important as the credibility is the question whether or not a company which has signed one of these principles is in fact more performant than others? Is there an impact to be realized from it? If an impact could be demonstrated, it would become more interesting for companies to sign that given set.

In summary, the most variation in the standards and principles is seen in whether a network has started them as a self-regulation program or public organization has started them. The public organization behind many of these principles is the UN. Most principles are phrased rather vaguely and leave a lot of room for interpretation. Often they rely on self-evaluation and there is no need to disclose externally on how exactly the principles were implemented. UN PRI and GBP are the only ones that insist on a reporting and even assurance of the actual implementation of the criteria.
A third party assurance of the implementation of those principles would lead to more credibility, more accuracy and a better comparability.

4.2.2 Networks

Added to the standards there are also networks and forums created. One example is the Global Impact Investing Network (GIIN). It was formally constituted in 2008 after the Rockefeller Foundation gathered a small group of investors to discuss the needs of the emergent impact investing industry. The GIIN is a not-for-profit organization dedicated to increasing the scale and effectiveness of impact investing. Impact investments are investments made into companies, organizations, and funds with the intention to generate a measurable social and environmental impact alongside a financial return. Because individual investors and service providers lack the capacity and mandate to solve infrastructure and market-level challenges on their own, the GIIN's programmatic programme aims at integrating the challenges faced by investors. It also serves as a forum – not as a guideline – for identifying and addressing the systemic barriers that hinder or impede the impact investing market.[85]

The list above is not comprehensive; there are many other smaller, specific and local initiatives. It can be summarized that for several years now there have been initiatives to encourage investors, investees and service providers to organize the sustainable financial sector. Yet, so far there is not one overarching initiative that encompasses all ideas and issues.
To complete the overview there exist also various sustainability standards and principles for the non-financial sectors. In summary, it can be asserted there is

[85] (GIIN, 2014)

no lack in activity and initiative but there is a direct need to show where the impacts of the initiatives lie.

4.3 Sustainable Products

For an overview of the financial market there is a need to illustrate the financial products as well. There are various sustainable products which are offered by financial institutions. Financial service providers also integrate relevant information in regard to natural capital in the risk assessment of their respective products and services.
On the basis of a broad diversity of asset classes and product spectra there are various examples, which include but are not limited to:

1.) Credits
To the individual the market offers many retail products such as ‘green mortgages’ (i.e. lower interest rates for new constructions (Econova) or reconstructions (Ecosana) at Alternative Bank Schweiz) or so-called ‘green car loans’. This means the lower the greenhouse emissions from the car purchased, the lower the interest rate. The relevant specifications differ widely and issuing organizations include Alternative Bank Schweiz, Credit Suisse, UBS, and cantonal banks. Also climate-focused credit card programs are for example available from Barclay Green Card, GrünCardPlus MasterCard or Cornercard Climate Credit Card. The last one offers offsetting the carbon footprint which was created with the credit card. It is calculated using pre-determined information on different expense categories: restaurants, plane travel, gas stations, retailers, mail orders, etc. It invests in gold standard offsetting projects such as two wind farms in New Caledonia. Further products are sustainable loans, which enable loan takers with a positive sustainable impact to benefit. These loans are for example offered by Banca Etica, Triodos Bank and SMTB (see box).
With respect to the mechanisms behind these products the credit institutions assess the risks thoroughly. Their importance for the business leads to a constant development of the screening approaches. An important milestones in the practice of Swiss financial institutions was in for example the enhance environment assessment in the 1990s with the integration of contaminated soils. With regard to a global credit (e.g. towards farming companies in water scarce areas in 2009) there was further detailing. The initiative, which was developed by UNEP FI, includes guidelines and decision making processes to further integrate water aspects and to be even more specifically integrated in the risk analysis and credit granting process. The paper which was supposed to show best practice examples for certain geographical areas also served as a guideline for Swiss finance institutions.[86]

[86] (UNEP FI, 2009)

BOX: SMTP and its sustainable loan product

In 2012 the Japanese Bank Sumitomo Mitsui Trust Bank (SMTB) signed at the Rio+20 conference the Natural Capital Declaration as one of the first financial institutions. At this point it was the only Japanese Bank and it made good use of that fact by positioning itself in the Japanese market as sustainable bank. With its signature the SMTB committed itself to the integration of Natural Capital in the decision-making process. The bank decided on launching a new credit product: Environmental Rating Loans with the Evaluation of natural Capital Preservation.
This product is based on an evaluation of the activities of the credit receiver. As special feature not only operational information is evaluated but also the impact the supply chain of the company has. With this sound analysis the disadvantages of the non-transparent conventional ecological reporting of a company could be balanced with a comprehensive overview of all the natural capital elements such as greenhouse gases, water and land. Furthermore, SMTB decided on using an empirical calculation approach which exceeded the specifications of the well-known Trucost (2013): 'Natural Capital at Risk. The Top 100 Externalities of Business.' With this the SMTB was the first financial institution worldwide to formally integrate natural capital in the credit granting process.[87]

2.) **Project Finance**
Green project financing (water or solar power specific); active commitment to investments in the renewable and clean tech sectors such as the Deutsche Bank, ABS, Standard Bank (South Africa). This is covered in the Equator principles applied where total project capital costs exceed USD 10 million.

3.) **Savings Accounts at Social Banks**
There are several banks which are social and ecological. The money they manage is used to invest in social and ecological projects and businesses such as organic farmers, innovative e-bike services and climate projects. Examples for social banks are Alternative Bank Schweiz, New Resource Bank in San Francisco (USA).

4.) **Sustainable Funds**
Sustainable Funds, climate-specific or ethical funds (e.g. Eco Performance Fund (UBS), Barclays Charity Fund, etc.), funds with a focus of ecological, social or sustainable criteria, and also private equity impact funds (invest in business models that benefit low-income communities in emerging markets).

5.) **Insurance Policies**
Insurance companies budget the risks for natural catastrophes into their premium calculation. Insurance companies have a stronger commercial incentive than most other institution to assess these risks accurately, as they need to know what liabilities might arise. The reference to the natural environment and its changes is part of the insurance business. Swiss Re offers a good example of a solid risk framework.[88]

[87] (SMTH, 2013)
[88] (Swiss Re, 2014)

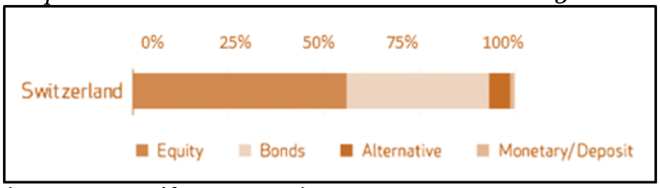
6.) And many others

Not all can be shown in this report, as their number goes beyond this report's scope. To name a few more:

- Microfinance or micro insurance programs of various banks and insurance providers.
- Sustainable index offerings (Dow Jones Sustainability Index, CDP Leadership Index, etc.).
- Environmental trading desks have been set up in several banks with commodities trading and brokerage services. J.P. Morgan's desk for example is one of the leading market makers in exchange-traded and over-the-counter (OTC) environmental products, including European Union Allowances (EUAs) and Certified Emission Reductions (CERs). For these commodities, the firm offers swaps, options and investor structures to help clients better manage their exposure to environmental risk.[89] Another example is the Standard Bank in South Africa.
- Formal integration of carbon risks in their portfolio (e.g. Globalance).
- Green bonds and climate awareness bonds refer to bonds whose use of proceeds is earmarked to finance a specific project generating a direct environmental or climate benefit. Typical projects' use includes, for instance, renewable energy, energy efficiency, waste management, clean transportation, etc. which are in some countries even tax-exempt are offered by AAA banks (e.g. International Finance Corporation (IFC), the World Bank). Corporate (self-labelled) green bonds are a new phenomenon that might be an explanation for the extensive green bond market growth in 2013.[90]

These products should be looked at in the context of the SRI Asset Allocation in Switzerland. At Swiss level, equities represent more than 50% of the SRI assets in December 2013. By contrast, the allocation to bonds is more than 30%. Allocations to so-called alternative assets (real estate, commodities and hedge funds) add up to something above 5%. The allocation to money markets only makes 1% up to 3%.

Graph 1: SRI Asset Allocation in Switzerland in 2013



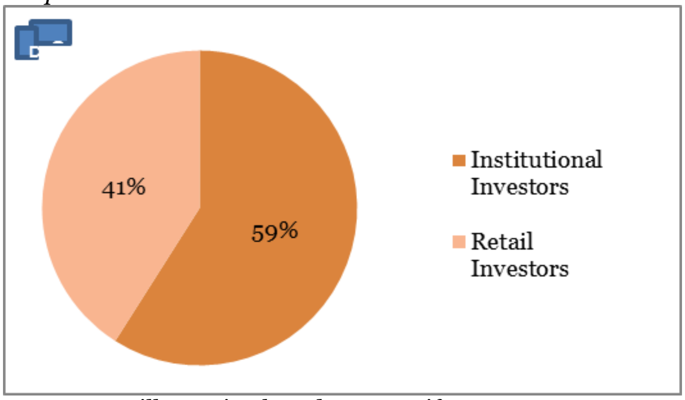
(Source: Eurosif, 2014, p. 31)

However, there is a lot of non-transparency regarding the above mentioned products. They all have a different making, focus and investor group. Some of these products are created using the best-in-class approach, negative screen-

[89] (JP Morgan)
[90] (Eurosif, 2014, p. 32)

ing, positive screening, shareholder advocacy[91], others via sustainability ratings (such as Dow Jones Sustainability Index, MSCI Sustainability Indexes, Principles for Responsible Investment or Equator Principles), others yet are produced by the firm's own standards and ratings (such as FormaFutura). There is an increasing amount of sustainable products available. Nevertheless, there are only very few products on the market that meet all the needs (such as transparency) of the stakeholders. However, the funds seem to have the biggest variety and also have a high importance to institutional investors, given that the Swiss green financial market consists of 59% institutional investors[92]. Thus, the funds seem to be predestined to have the biggest leverage and impact.

Graph 2: Swiss SRI Market



Source: own illustration based on Eurosif, 2014, p. 62

One question that comes up is on the actual impact of those products. Do they make a difference in the end? As of today, the impact of most of the sustainable financial products has not been assessed in detail. However, it is recommended to perform solid analysis to decide on where the biggest leverage could lie.

4.4 International developments Improving Quality and Transparency for Financial Products

Other than the principles, the indices serve a different purpose. They try to tackle one of the weaknesses of the principles: transparency. They are motivated by the demand for transparency of sustainability performances for individual companies by the investors. Private and institutional investors both want to have a better understanding of the companies they invest in.

The demand for the rating and ranking of companies in indices in relation to ESG issues is therefore given. There is also a commercial explanation for this phenomenon. Due to a possible reduction in financial returns in the short-run when implementing the ESG principles, investors have a commercial motiva-

[91] In chapter 3.1.1 Sustainable Investment Strategies there is a table with further explanations on the different approaches.
[92] (Dittrich, Kunzlmann, Tober, & Vögele, 2014, p. 5)

tion to encourage their competitors to do the same and therefore levelling the field.

For more transparency and less complexity for the investors indices such as Carbon Disclosure Project (CDP), Dow Jones Sustainability Index (DJSI), the FTSEf4good, the MSCI Index, and the Green Bond Index were created. They are all examples of renowned sustainability ratings that serve as benchmarks. One challenge of these mentioned ratings is the multi-functionality of some of those ratings.

CDP

CDP is rated as the most credible rating in 2013 by Rate the Raters

CDP has two sets of indices: The Climate Disclosure Leadership Index (CDLI) and the Climate Performance Leadership Index (CPLI). To qualify for either leadership index, a company has to make its responses to CDP public and submit it via CDP's online response system. Both scores are based solely on self-reported information.[93] The CDP Indices are a rating showing transparently the carbon emissions and the performance related emission reduction activities of a company. It is based on a questionnaire and a company's self-declaration. The index cannot be invested in.

DJSI

Being in one of the indices of DJSI is for many companies a strategic goal

The Dow Jones Sustainability Indices, a Swiss innovation with global relevance, can be used as a benchmark for investors who want to integrate sustainability considerations into their portfolio. The DJSI family is offered cooperatively by RobecoSAM Indices and S&P Dow Jones Indices. The family tracks the stock performance of the world's leading companies in terms of economic, environmental and social criteria. They use the best in class approach from companies who want to implement best practices.[94] The DJSI uses a questionnaire with a mix of self-evaluation and desktop research by analysts. The methodology of the rating system is still rather non-transparent which lead many companies to not participate anymore.
Being in one of the indices of DJSI is for many companies a strategic goal and is then used as a reputational tool. They advertise it on their website and hope for other investors to buy their shares.
RobecoSAM, one of the parties that offer the DJSI is an asset manager as well. It offers different services such as funds, mandates, and private equity.[95]

FTSE4 Good

The FTSE4 Good Index Series was created to measure the performance of companies which implemented strong ESG practices. It can be used in the same way as the DJSI as a benchmarking index or to identify environmentally and socially responsible investment.
FTSE the provider of FTSE4Good is a global indexing tracker. Their indices cover all major markets and asset classes in different indices.[96]

93 (CDP, 2013)
94 (Dow Jones Sustainability Index, 2014)
95 (RobecoSAM, 2014)
96 (FTSE4Good, 2014)

Green Bond Index

The Green Bond Index the GBI is designed to reproduce the fixed income market's funding projects and initiatives with direct positive environmental impacts. These indices can serve as benchmarks for dedicated Green Bond funds. In addition they can be used as informational measures of green bond risks and return. Institutional clients can licence their index linked investment products, separately managed accounts and structured products.[97]

MSCI Sustainability Indices

The MSCI Sustainability Indices serve the same purpose as the indices mentioned above. It offers several different products: the best in class index, the socially responsible and the environmental one as well as the ex-weapons on. The MSCI is a provider of investment supporting tools ranging from large pension plans to specialized hedge funds.[98]

MSCI itself offers a wide range of products and services – including indexes, portfolio risk and performance analytics, and ESG data and research. It is a provider of investment decision support tools, ranging from large pension plans to boutique hedge funds.

Country specific indices

Switzerland also has such an index, the SXI Switzerland Sustainability 25®. The index is built out of the Swiss Market Index expanded. A total score is derived for each company provided by a third party research provider. The higher the score is, the more sustainable the company. All companies that are considered sustainable and belong to the SMI expanded are eligible and ranked according to their total score. The best 25 companies are selected.[99]

There are several other indices such as Responsible Investment Universe Index[100] (Vienna, 2009), Shanghai Stock Exchange Social Responsibility Index[101] (2009), Warsaw Stock Exchange launches Respect Index[102] (June 2009).

Credibility of ratings

'Rate the raters' analyses the credibility of the different sustainability ratings. Because most of the above mentioned indices are also used as ranking and benchmarking systems, they show up in the graph below. In 2013, CDP was rated as most credible of all the indices. The credibility was measured by asking investors: 'How credible do you find the following rankings and rating to be?'. The raters are supposed to use a 5-point scale. The red illustration shows high credibility and the green one the not so credible one. The white part is when the raters chose the middle.

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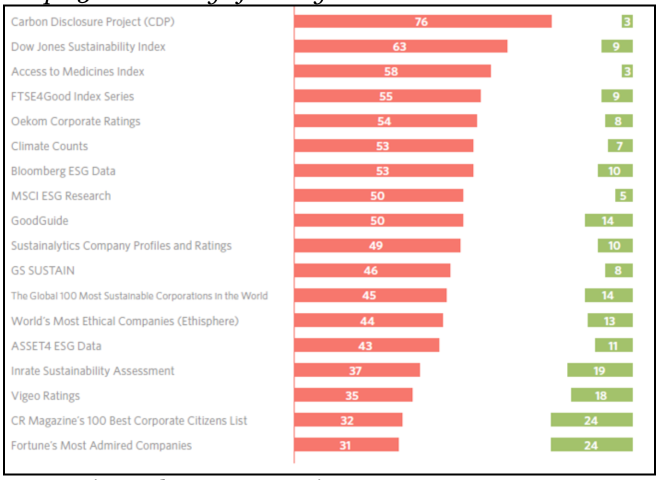
97 (Green Bond Index, 2014)
98 (MSCI, 2014)
99 (SIX Swiss Exchange)
100 (Responsible Investment Universe Index, 2014)
101 (Shanghai Stock Exchange Social Responsibility Index, 2014)
102 (Respect Index, 2014)

Graph 3: Credibility of Ratings



Source: (Rate the raters, 2014)

Most of these sustainability indices perform in line with the market according to a Credit Suisse study

A study from Credit Suisse shows that most of these indices perform in line with the market and do not deviate from it. Furthermore, in companies with a best-in-class rating volatility is low and not very dispersed, compared to companies with a worse integration of ESG criteria.[103]

Most effect seems to manifest in the reputation of the leaders and on the reporting activities of the companies. Whether they actually have a development impact on the companies has not been proven.

4.4.1 Labels

Along with the idea of the ratings, there are also several initiatives for the introduction of labels in order for customers to see the environmental and social impact of the products they buy. When buying a product they want to know what they buy and understand what they are paying for. Therefore, products need to be transparent and also the accompanying fees need to be understandable.[104]

There are for example the label for funds of European Sustainability Investment Forum (EUROSIF), the Novethic SRI label, Novethic Green Fund Label, LuxFLAG, Ethibel Pioneer, SRI Diamond Standard, and the responsible Investment Association (RIAA) to name a few.[105]

The objective of these labels is awarding a quality label to an eligible fund/bond. Its function is to reassure the investors that the fund/bond is actually used to invest, directly or indirectly in what it claims to be investing in (e.g. microfinance, environment, and social institution). The labels are often created by independent, non-profit associations that want to foster transparency, and sustainability.[106]

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[103] (Credit Suisse, 2012, p. 6)
[104] (The Sustainability Forum (TSF); Sustainable Finance Geneva, 2013, p. 35)
[105] (SRI Rating Label, 2014)
[106] (SRI Rating Label, 2014)

Labels for sustainable finance are developed

The German consumer protection ministers have decided to have a label for sustainable financial products developed. This was in May 2014 and was addressed at the Federal Ministry of Justice and Consumer Protection.[107]

In order to become more transparent there should be some awareness raised and training available to the new generation who works in the financial industry. Even as many institutional investors recognise the importance of environmental, social and governance (ESG) issues in their investing practices and they are investing a considerable amount of time and money into this research, they have not reached a suitable solution yet. They have yet to make considerable development on integrating ESG topics into their investment processes.

Pressing need for raising awareness for ESG in education and training

Up to this day a significant number of investors continue to believe that ESG issues are simply not financially material or relevant to their investments. Also investment analysts and fund managers have not yet found the added investment value through the focus on ESG issues. This is also due to the fact that many investment analysts are not trained to look on ESG issues as a potential source of investment value. The Chartered Financial Analyst qualification is one of the only educations that now include some discussion of ESG issues.[108]

4.4.2 Other Measures to Increase Transparency

Other possible measures for the increase in transparency are:

- Regulations for the institutional investors to publish information on social and ecological aspects of their investments via their portfolio and stock politics like the EU has done (see chapter 5.1 for more details).
- Encouragement of a more active shareholder culture which will be discussed in chapter 7 with the example of pension funds.
- Further support of early warning, risk and control functions for insurers and re-insurers.
- Raising awareness in the society, potentially through universities and among the companies.
- Case study on the impact of sustainable financial indices and products.
- Advancement of knowledge regarding the gathering and processing of material sustainability information with basic research and development, facilitation of exchange, transfer of know-how, especially in regard to the international collaboration for a sustainable development (especially for institutional investors and private financial precautions).

As shown above with deciding on which investor has the biggest impact and which of the financial products have the biggest impact as well as further encouragement of transparency and governance politics important drivers, such as the UN, can be supported in their endeavour to do so. Better availability and meaningful information regarding environmental and sustainability topics would encourage the players in the financial market to integrate it directly in their decision making process and in their risk and capital allocation. At the

[107] (Verbraucherschutzministerkonferenz, 2014, p. 62)
[108] (Dr. Sullivan, 2013, p. 3;7)

same time the government can anticipate the pressure on the regulatory framework from the society and can act on it. Furthermore, with various measures obstacles in the area of know-how and availability of relevant sustainability information can be tackled.

4.5 Relevance and Opportunities

To put the above mentioned principles, standards and indices into context, there is a need to know about the volume of the green financial market.

According to Eurosif's European Sustainable Responsible Investment (SRI) study 2014, all surveyed sustainable and responsible investment strategies are continuing to grow, and they do so at a faster rate than the broad European asset management market.

The European Fund and Asset Management Association (EFAMA) estimates the overall asset management industry in Europe to be managing EUR 16.8 trillion assets (investment funds and discretionary mandates) at the end of 2013. In addition, the total market capitalization of listed equity in Europe is estimated at EUR 9.8 trillion, this leads to the assumption that there is still room in order to cover the European listed equities with ESG Engagement.[109] As mentioned in chapter 4.1 the Forum für Nachhaltige Geldanlagen measured EUR 135 billion to be invested in sustainable financial products in Europe. The asset management report also states that the overall client category of the European Asset Management Industry consists of 76 percent institutional investors and 24 percent retail investors which gives a similar picture as graph 5 with the institutional investors being the big player in the SRI. Out of the institutional investors the insurance companies make 42 percent and the pension funds 32 percent the rest is split between other investors.[110]

According to Eurosif's European Sustainable Responsible Investment (SRI) study of 2014, all surveyed sustainable and responsible investment strategies are continuing to grow, in aggregate, with no exception, and they do so at a faster rate than the broad European asset management market. Systemic ESG integration covers about 40 percent of all forms of integration, covering EUR 2 trillion of all European professionally managed assets. This means compared to the numbers above this is a share of 20 percent of the invested assets (N.B. the numbers might have changed slightly, the base years are different for the two statistics). The study covers 13 European countries.

According to the Eurosif survey engagement of responsible investment is increasing in Europe

The survey also illustrates that engagement of responsible investment is increasing in Europe. It is growing in the amount of assets and also incorporating new markets. In addition it is covering more asset classes than in previous years. In terms of asset allocation, equities – the traditional SRI asset – represented about half of the European SRI assets at the end of 2013, up from 33% late 2011. The allocation to bonds decreased to 40% last year compared to 2011. Of that, about 21% were invested in corporate bonds and 17% in sovereign bonds, a breakdown provided in the Eurosif study for the first time. Allocation to real estate and commodities recorded significant growth.[111]

PwC also conducted a survey in 2013 called 'Putting a price on value' for Private Equity (PE) and their approach to ESG issues. More than 100 PE houses in 18 countries globally responded, managing more than USD 860 billion of

[109] (EFAMA Investment Fund Industry Fact Sheet, 2014)
[110] (Asset Management Report, 2014)
[111] (Eurosif, Shareholder Stewardship, 2013, p. 12), (Eurosif, 2014, p. 7)

assets. The link between ESG issues and value creation proved to be difficult to measure. Even the most sophisticated Private Equity (PE) houses see the challenge in understanding, quantifying and communicating the value that good ESG management can deliver. Furthermore, ESG management is still mainly geared towards risk, rather than opportunity.[112]

Same as the European investment industry the share of the institutional investors who invest sustainably is large in Germany, Switzerland and Austria. Even though Germany's industrial investors share has decreased in 2013, it still adds up to 75% of the market. In Switzerland the share of institutional investors is 59 percent (5 percentage points increase). In Austria they cover 86 percent of the market (also increase of 5 percentage points). The experts of the study expect the institutional investors to be the drivers of the sustainable market in the future. In all three countries the participants of the study expect further growth in the sustainable investment of up to 50 percent in the next three years.[113]

4.5.1 Insurance Sector Specifics

Of the institutional investors an interesting category, particularly on environmental matters, is the insurance sector. As mentioned above they and pension funds are mostly the largest group of institutional investor in developed countries. By default they have to focus on the long-term risk assessment. They have been engaged in environmental issues from an early stage, predominantly for a better understanding of long-term risks. Insurance companies have a stronger commercial incentive than most of their competitors to assess these risks accurately, since the premiums they charge are calculated to cover any possible future payments. Therefore, they need to know what liabilities might arise.

Swiss Re and Zurich are applying major responsible investment initiatives

Thus, insurance companies have a strong commercial incentive to invest responsibly, because their long-term profitability is dependent upon their ability to minimize liability payments relative to premiums. Insurance companies have to pay if negative impacts on sustainable development result in economic liabilities in the long run. Swiss Re (PRI and PSI signatory) and Zurich Insurance Group (PRI signatory) as an example understand this concept and they have incentive to show transparently what they do in this area, e.g. by investing in sustainable products and assets. This can than also result in a better ranking for themselves in sustainability ratings.

SUVA is also applying responsible investment approaches

The SUVA (Schweizerische Unfallversicherungsanstalt) – another large institutional investor – is a social insurance provider. The SUVA decided in 2013 to invest their portfolio responsibly by following the UN Global Compact. They also signed the UN PRI.[114]

[112] (PwC, Putting a price on value, 2013)
[113] (Forum Nachhaltige Geldanlagen, 2014, p. 16)
[114] (Enz, 2014)

A study on the insurance sector shows that the three best ranked insurance companies are Swiss Re, the Italian Assicurazioni Generali and the Dutch Aegon. As none of them reached a rating higher than C+ (on a scale from A+ to D-), there exists clear potentials for improvement and differentiation for any company. This situation will lead to a strong competition foremost in the European sector but also on a global level. Globally, the Swiss institutes will face other signatories of the Principles for Sustainable Insurance (PSI) from e.g. Italy, the Netherlands, Brazil, the Philippines and South Africa

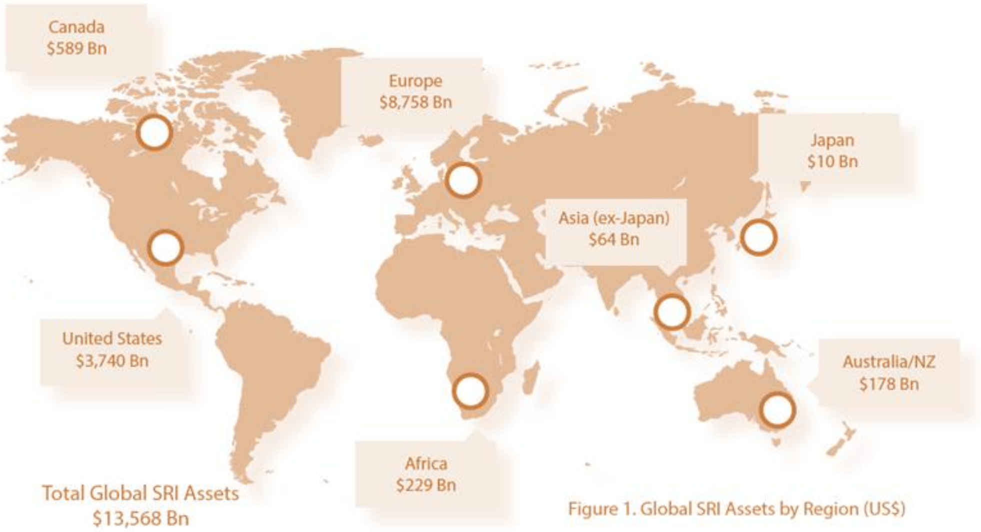
Given that insurance industry plays a critical role in providing financial protection and security to the community, they have an enormous interest in reducing risks. Therefore, risk management is their core business. Consequently, opportunities might arise for insurance companies to consult industry and trade companies on technical and organizational issues regarding risk reduction. As an example the decrease of the premium when certain quality and environmental standards are met can be mentioned.

In addition, analogue to the Equator Principles for banks, they can implement environmental and social standards when underwriting and taking over risks from industrial or infrastructural projects or another way would be to check ESG risks and the performance of sustainability standards and then broach it with business partners. To which extent these potential opportunities materialize is unclear. In any case the leading role is only reachable when the different companies and associations communicate about the competitive advantages and together advance in one direction.

4.6 Switzerland in an International Context

To put the numbers in the chapter before into an international context the Global Sustainable Investment Alliance (GSIA) provided a composite picture and analysis of the sustainable investment assets in key financial regions worldwide. The report was published at the beginning of 2013 together with Eurosif.

Figure 4: Total Global SRI Investments in 2012



Source: (Global Sustainable Investment Alliance, 2013, p. 9)

The report shows that, globally, at least USD 13.6 trillion worth of professionally managed assets incorporate ESG criteria into their investment selection and management. This represents 21.8% of the total assets managed professionally in the regions covered by the report.[115]

In Switzerland the amount of 56.7 billion Euro was invested in sustainable assets in 2013

The volume of sustainable assets in Germany, Austria and Switzerland covered EUR 124.5 billion in 2013. This reflects an increase of 12 percent compared to the previous year. Only in Switzerland the amount of EUR 56.7 billion was invested in sustainable assets in 2013. This represents an increase of 17 percent (n.b. the increase is not only due to performance but also to a change in the methodology).

In Switzerland, as in the other European countries, the insurance industry, the Swiss National Bank and the pension funds, and the Swiss Old Age and Survivors Insurance (AHV) in particular represent a substantial part of the institutional investors.[116]

The Swiss financial market is going through significant changes. This could be used as an opportunity to redefine the strategy and become more sustainable and transparent or even to take over a leading role in the global sustainable financial market.

In recent months there were several scandals, tax dilemmas and conflicts of interest in the financial sector, mostly in relation to banks. Society wants the market to become more sustainable, the governance functions to work and to have more transparency regarding the strategies. Therefore, the Swiss financial market is going through significant changes. This moment could be used as an opportunity to redefine the strategy and become more sustainable and transparent. Maybe even to take over a leading role in the global sustainable financial market. For this to happen there is the need of new guidelines and policies.[117]

As a part of natural capital, water was one of the first topics to be integrated in Swiss financial institutions; a possible explanation thereof is the broad understanding of it given that Switzerland has a lot of water as a natural resource. Comprehensive assessment methods, meaning along the whole value creation chain of a company and its impact on natural capital, was developed with Swiss financial institutions in the years following 2000. It was as a specialized product already integrated into the according decision and portfolio strategy processes. Therefore, Switzerland used to have a leading position in the definition and marketing of sustainable assets. Remarkable is that in the recent years there was almost no engagement towards a deeper analysis or development of innovative analytical approaches. Furthermore, at the moment there is no active working group or membership of any Swiss financial institute in the UN Natural Capital Declaration. The only company from Switzerland is FormaFutura in the role of an observer.[118]

In consideration of the situation, the biggest leverage and impact will most probably be found with the institutional investors. This should be looked into.

[115] (Global Sustainable Investment Alliance, 2013)
[116] (Forum Nachhaltige Geldanlagen, 2014, p. 16)
[117] (The Sustainability Forum (TSF); Sustainable Finance Geneva, 2013, p. 7)
[118] (Signatories of the UN Natural Capital Declaration, 2014)

Yet also for the private investors the barriers of entry should be lowered. There are many opportunities in Switzerland to invest in green products, yet some banks only want investors with the capacity to invest large sums of money.

4.7 PwC Expert Opinion

Summary

There is a wide range of labels, indices, initiatives and standards for sustainable finance available. They differ in the extent in which they include and define ESG criteria. To an interested stakeholder it might not be evident which of the existing ones is the most comprehensive, all inclusive and has the best quality. Many of the principles and commitments are written with a wording such as 'where appropriate' or 'where possible'. The integration of environmental and social criteria is therefore limited to a self-evaluation rather than an actual requirement. Furthermore, the lack of a clear guidance and full transparency on how to integrate investment principles leaves room for interpretation. In a summary, the main impact of investment principles and standards may be to encourage attempts to mitigate the worst effects of investments rather than foster real sustainable investments. Rating companies have an important role to foster transparency. They put pressure on low performing companies and create competition under the leading companies to become even more successful in ESG aspects. The leading sustainability rating companies have achieved that ESG has more recognition at top management levels.

Potential

In general, the above described labels, indices, initiatives and standards want to encourage changes of investment decisions, yet this is supposed to be achieved within commercial constraints. Sustainability is often treated like an initiative rather than an integrated part of strategies. Consequently, the potential for investment principles to support sustainable development is not yet being fully realized. There should be a more comprehensive approach underlying the decision making itself. All ESG criteria should have the same weight as the commercial ones. Additionally all business activities should offer social, environmental and economic outcomes. We believe there is a need for a thorough monitoring and measurement of the impact of investment principles. These monitoring systems should be comparable in order to figure out which ones have the biggest impact. The next generation of investment principles should focus more on impact and be clearer in the phrasing to be more powerful in bringing about investments that support sustainable development. The biggest potential of Switzerland is probably that assets are managed by Swiss based companies or funds that create value for the country and the economy. This is probably more important than if funds would only be listed in Switzerland. The PwC 'Total Tax Contribution - TTC' approach used in frequent studies outlines that TTC is not only consisting of profit taxes, but does include much more taxes (e.g. people taxes, property taxes, etc.) which are sometimes even more beneficial for a country. A lot of the assets managed by Swiss companies are flexible and already invested abroad (e.g. in emerging markets), therefore the aim should be that the biggest part of the 'investment value chain' is managed in Switzerland.

Total Tax Contribution - TTC' is not only consisting of profit taxes, but does include much more taxes (e.g. people taxes, property taxes, etc.) which are sometimes in sum even more beneficial for a country

Risks and Opportunities

Financial institutions have the purpose maximising monetary returns in relation to risk for their shareholders. Even though many companies no longer see sustainability as a moral issue, but as a key business risk and opportunity, there is still a lot of uncertainty about how sustainable investment in fact impacts the risk-reward relationship. This leads to the situation, that as long as not all investors implement the same investment principles, there is in fact a monetary incentive to meet only the minimal requirements. All the described aspects and issues are interlinked and are in the end a mix of various measures combined with some dynamics in the market. Especially positive dynamics are necessary for to foster real movement towards sustainable finance. An isolated or simplified 'one size fits all'-approach will not lead to effective improvements.

4.8 PwC Recommendations

Establish better definitions and standards

As already pointed out in Chapter 3 of this report, a structured approach to sustainable finance and a clear definition what to understand, include, how to measure, how to report, etc. will be of importance in order foster comparable sustainable financial products to evolve. But first, it has to be analysed which of these financial products could or do already have the biggest positive and sustainable impact. Then it should be considered which measure would be adequate for the product that has the biggest impact. This should be followed by a diligent and accurate research of all the existing guidelines, principles and standards for that product. Only then will it make sense to develop a new guideline/initiative/label. And best to do so in coordination with one of the existing standard setters. This new overarching standard could then serve as leverage for other products internationally.

Switzerland could take a leading role

Switzerland has a very strong position to influence further developments regarding sustainable finance as outlined earlier in this report. As Switzerland is already involved in various initiatives (e.g. UNEP) and is the basis of head offices of many important players in the financial and sustainability sector, the country is well positioned to take a leading role in international sustainable finance initiatives. The federal institutions could take a moderating role, bringing together the various interests of the different Stakeholders (e.g. asset managers, institutional investors, rating agencies, NGO's, commodity traders, public, pension funds, etc.) with the objective to make sustainable finance more sustainable. Based on this collaboration and common understanding the federal institutions could help to create a competitive advantage for Switzerland as a centre for sustainable finance. As there will also be resistance against a proactive role of Switzerland, it is important to have some leading stakeholder groups on board as show cases.

Additional incentives and regulations

There are three dimensions that could lead to more sustainable finance: Awareness rising, incentives and regulation. Measures in all these dimensions are probably necessary to foster sustainable finance. The importance of sustainable finance is hardly ever mentioned in the media and therefore not very present in public. As a first step, there should be initiatives helping people to start realising that behaving sustainable is more than just buying 'clean' products or services that it could also mean caring about how their money is invested by their insurance company, bank or pension fund. Incentives could be provided by the government – for example that financial income out of responsible investments can be declared with a lower tax rates. This would also raise awareness for sustainable products. In order to implement such a measure, a specific labelling (i.e. certification of products) would be necessary. In practice, this could be a fair solution, as some sustainable finance investments (e.g. bank accounts at some sustainable financial institutions) have a lower return (e.g. lower interest rates) than conventional investments with no positive environmental or social impact. Regulation could also be beneficial, but experience shows that there is in general more resistance against new regulations than providing advantages. Therefore it could be more effective to foster awareness, provide incentives and consider regulations as a supporting measure if needed.

More collaboration and competition

We further recommend encouraging role models such as the SUVA to share their information about their investment strategy and the resulting impact. Also private sector companies have shown that it could pay off to promote a sustainable investment business cases or products. This could set new best practice standards for industries or services. More transparency leads to a better comparability and a better understanding of the finance sector companies and their products. This comparability should result in more competition to fulfil transparency requirements and position the company as best-in-class. More external information and transparency also means that the quality behind the data and information needs to be improved as otherwise companies would risk serious brand damage, if they do not fulfil what they have reported. Collaboration regarding sustainability within sectors could lead to standardisation. The World Business Council for Sustainable Development (WBCSD) Cement Sustainability Initiative (CSI) is only one example of an industry sector initiative that improved standardisation of approaches. This example could be used also as a leading example for the finance industry.

5 Reporting

Standardised Framework Accounting for Sustainability

This chapter provides an overview of sustainability reporting. It starts with the historical background and today's initiatives on operational as well as portfolio reporting. Switzerland's sustainability reporting is then put into an international context. The chapter is concluded with the PwC expert opinion and recommendation.

5.1 Introduction to Sustainability Reporting

The history of sustainability reporting is rather new. The idea that companies should supplement their financial accounting with information on their environmental, social and governance performance first emerged in the 1990s. In 1992 at the UN Conference on Environment and Development (UNCED) there were only few companies which engaged in sustainability reporting in any form. And they focused mainly on their environmental policies and performance which was due to an increasing media attention on environmental problems.

Calls for sustainability reporting initially came from advocacy groups and investors, as well as some business leaders. But governments also played a major role in formally recognizing the importance of the sustainability reporting. The environmental reporting was specifically recognized by the world's governments in the Agenda 21, one of the main outcomes of the UNCED conference. '*Governments should encourage corporations: a.) To provide relevant environmental information through transparent reporting to shareholders, creditors, employees, governmental authorities, consumers and the public; b.) To develop and implement methods and rules for accounting for sustaining development.*[119]'

Over time, some countries have introduced mandatory sustainability disclosure requirements for businesses. the UK for instance introduced legislation in 2006 and updated it in 2013; Sweden adopted legislation in 2007; Spain in 2011; Denmark amended its legislation the same year and France in 2012, also South Africa, India, Indonesia and other countries have a law or regulation on disclosing sustainability issues for certain companies.

[119] (UN Sustainable Development, 1992, p. 74)

Just in 2013 the European Commission launched a new EU Directive with the objective to increase EU companies' transparency and performance on environmental matters. The Directive will apply to large public-interest entities with more than 500 employees, i.e. approx. 6'000 large entities across the EU. Companies concerned will be required to disclose in their management report relevant and material information on policies, outcomes and risks, including their implemented due diligence strategy, and relevant non-financial key performance indicators concerning e.g. environmental aspects.[120] However, specific reporting requirements for financial companies regarding ESG are not planned. But local legislations further consider the implementation of ESG reporting duty, e.g. in the UK pension funds will have to report on ESG investment strategies in the future.[121]

93% of the largest 250 global companies do disclose sustainability information and more than 50% disclose information in the annual report

Whilst in many other countries there is no regulation to disclose sustainability issues in a sustainability report, 93% of the largest 250 global companies do it anyway. The survey from 2013 also reveals that more than half of those reporting companies (51%) include their sustainability information in their annual financial reports.[122]
78% of all companies with sustainability reporting worldwide use the Global Reporting Initiative (GRI) reporting guidelines. Among the world's 250 largest companies this rate is even 83%.[123] Thus GRI is the biggest sustainability reporting framework.

In looking forward, there are three relevant pathways:

'The voluntary [sustainability reporting] approach has run its course" Andrew Raingold, Executive Director, Aldersgate Group

1.) Integrated Reporting (IR) as an evolution in reporting that shows impacts and materiality to date.
Current reporting often does not show a clear business case and financial relevance of ESG issues. Neither an explanation why the ESG factors that might be/are value drivers for the business. Therefore, the investors cannot use it to integrate the information into their investment strategy and decision-making processes.[124] To overcome such shortage, there is an ongoing development towards IR, which is also supported by assurance providers (see chapter 5.3).

2.) Consistent frameworks and questionnaires by rating agencies.
Where directly comparable company reporting is absent, there is space for consistently addressed sustainability rating requirement by e.g. Dow Jones Sustainability Index, MSCI Index, oekom research or CDP. Their credibility and public perception has been illustrated in Graph 5 above.

3.) Globally accepted frameworks driven by investors themselves.

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[120] (EU Commission, 2014)
[121] (Mair, 2014)
[122] (KPMG, 2013)
[123] (KPMG, 2013, p. 11)
[124] (Dr. Sullivan, 2013, p. 6)

A new trend in the financial service industry is the disclosing of the carbon footprint of their assets under management

A new trend in the financial service industry is the disclosing of the carbon footprint of their assets under management. There is the recently launched (26 September) Montreal Carbon Pledge which is supported by the United Nations Environment Program Finance Initiative (UNEP FI). It will help the financial institutions to measure the long-term investment risks associated with climate change and carbon regulation.[125] It is used to support the goals of the Portfolio Decarburization Coalition which is supposed to mobilize financial markets to catalyze economic decarburization.[126] The disclosure of the carbon footprint could of course be broken down to each product and extended to not only emissions of the products but other components of natural capital.

To summarize, there are different drivers in for sustainability reporting such as governments, non-profit organizations, business leaders and investors themselves. The benefits of transparency on the business are widely accepted, a majority of companies use the GRI to disclose their information. The impact of a regulation on the disclosure of sustainability information has yet to be examined based on the large sample of the EU initiative. Until now there is no common, globally accepted definition of sustainability reporting.

5.2 Financial Service's Sustainability Reporting Initiatives

Companies are confronted with sustainability issues every day. In order to provide a long-term business success, the overarching issues of climate change, energy efficient technology, biodiversity, water use and many other factors need to be taken into account. They have to be integrated into the operating business model of businesses. To account for these effects, monitoring, measuring and reporting has become more important. Because they lead to a better assessment of financial risks, to improved relations with stakeholders (including employees), to a more informed decision-making process and corporate strategy, to improved performance and to the development of new products and services. More and more, sustainability reporting is seen as an important element of good governance and even a license to operate.

5.2.1 Operational Reporting

There is a large array of initiatives regarding sustainability reporting. A selected sample will be described in the following section. The selection will be done based on how well it is known and the frameworks designed for the financial industry.

Global Reporting Initiative

The most widely known reporting framework is the one from the Global Reporting Initiative (GRI). In May 2013 the GRI has launched their 4th generation of principles; the GRI G4. As mentioned above 78% of all companies with sustainability reporting worldwide use a version of the Global Reporting Ini-

[125] (The Montreal Carbon Pledge, 2014)
[126] (The Portfolio Decarbonization Coalition, 2014)

tiative (GRI), i.e. G3, G3.1 or G4. GRI is an international not-for-profit organization. The (GRI) promotes the use of sustainability reporting as a way for companies and organizations to become more sustainable and contribute to a sustainable global economy. G4 was developed in order to have more transparency on economic, environmental, social and governance performance. It also stresses the importance of external assurance in order for the information to be more credible. This allows for stakeholders to understand and compare the different firms and to take an informed decision on whether they want to invest or not. For the development of G4 multiple stakeholders were involved, resulting in it focusing more on material issues. There are sector supplements which take into account the different areas of business the companies are in.[127]

In G4 there are two options of application levels: the core and comprehensive application. The focus of those options is on the process of identifying materiality. Material aspects are those that reflect the organization's significant economic, environmental and social impacts or substantively influence the assessments and decisions of stakeholders. This is a change from the previous principles GRI G3 and G3.1, which were consisting of three levels of application, A, B and C. This was sometimes confusing to stakeholders, as some of them mistook the level of application as a rating or a qualifier.

GRI provides a Financial Services Sector Supplement (FSSS) which serves organizations in the sector with a tailored version of GRI's Sustainability Reporting Guidelines

GRI provides a Financial Services Sector Supplement (FSSS) which serves organizations in the sector with a tailored version of GRI's Sustainability Reporting Guidelines. It includes the original guidelines and has additional commentaries and performance indicators, developed especially for the sector. These supplements capture the issues that matter most for companies in the financial services sector, such as product portfolio, the assessment of the implementation of environmental and social policies, active ownership, community investment strategies and programs, performance related to inputs (e.g., material, energy, water) and outputs (e.g., emissions, effluents, waste), policies and practices on accessibility to financial services, fair design and sale of financial products. The reports can either be declared to GRI, be checked by GRI or just self-declared on the company website.[128]

Generally Accepted Accounting Principles

The financial reporting in general is determined by the world's two main accounting systems: International Financial Reporting Standards (IFRS) – used in the European Union and many other countries – and the Generally Accepted Accounting Principles (GAAP). The GAAP are a framework of guidelines for financial accounting used in any given jurisdiction. Both systems include standards, conventions and rules that accountants use to record, prepare and summarize financial statements. While risk assessment and disclosure is incorporated in these systems, natural capital specifically is not incorporated.

In addressing such challenges, the NCD promotes development of methodologies that can integrate natural capital considerations into the decision making

[127] (Global Reporting Initiative, 2014)
[128] (GRI G4 FS Sector Supplement, 2014)

process of all financial products and services – including in loans, investments and insurance policies. A working group develops a methodological system for accounting for the impacts, benefits and dependencies on natural capital at the company and portfolio level in order to ultimately apply it to a financial institution's own balance sheet.[129]

Natural Capital Coalition

The Natural Capital Coalition, a multi-stakeholder initiative, is seeking to create a harmonized framework that will help standardize how natural capital is accounted for and quantified

The Natural Capital Coalition wants to develop a framework for natural capital – the Natural Capital Protocol (NCP). Supporting organisations are, among others, the United Nations Environment Programme, the accountancy profession (represented by CIMA, ICAEW, IFAC, Accounting for Sustainability and others) and WWF. Supporters from the financial sector include the World Bank's International Finance Corporation (IFC), the Inter-American Development Bank and the National Australia Bank, with new members continuing to join.[130] The reasoning behind the Natural Capital Protocol is rather similar to the globally aligned GHG Protocol by which the World Resources Institute and the World Business Council for Sustainable Development harmonized GHG emissions measurement some years ago.[131]

The NCP will be developed in 2015 and is intended to serve the same purpose as GHG Protocol but for natural capital. The NCP will therefore enable measurable integration of natural capital considerations in business and finance.[132] At present it remains with the above mentioned supporters from the financial sector to work out a standardisation and how to best apply NCP for better financing decisions.

Sustainability Accounting Standards Board

The Sustainability Accounting Standards Board (SASB), an independent non-profit organization has taken up the topic of disclosing and accounting for sustainability information as well. It is based in the USA and its intent is to develop and disseminate sustainability accounting standards that help publicly-listed corporations disclose material factors in compliance with SEC requirements. The SASB wants to increase the transparency and usefulness information regarding the corporate performance on environmental, social and governance issues and its impact and value for the different stakeholders. The accounting standards are accompanied by according education and outreach.[133] SASB has developed provisions standards for the financial sector. This was done in a multi-stakeholder process consisting research supported by Bloomberg technology, data and analytical tools.

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129 (Natural Capital Declaration, 2014)
130 (SASB Financials, 2014)
131 The Greenhouse Gas Protocol (GHG Protocol) is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions. http://www.ghgprotocol.org/
132 (Natural Capital Coalition, 2014)
133 (SASB, 2014)

Integrated Reporting

There is a common acceptance of integrated reporting (IR) as the next step for corporate reporting, even that integrated reporting will replace sustainability reporting in the long term. Integrated reporting is about combining financial and sustainability information in one report and aligning it along a company's value chain. So far only a few companies are doing it. The advocates of IR believe that IR can be the catalyst for integrated management. Because it shows a close involvement of CEOs and other board members it is crucial to reach a comprehensive view of the business. This involvement and view lead to a consensus on material issues and to one overall business strategy. However, critical voices say that IR might decrease the communication and therefore the importance around the whole sustainability topic.

The renowned International Integrated Reporting Council (IIRC), a global coalition of regulators, investors, companies, standard setters, accounting professionals and NGOs developed a new reporting framework that should lead to more value creation over time. An integrated report represents a concise communication about how an organization's strategy, governance, performance. If this is followed thoroughly it should lead to the creation of value over the short, medium and long term. The Integrated Reporting Framework <IR> was launched in December 2013. It is meant to accelerate the adoption of IR globally.

The <IR> focuses on bringing more structure and efficiency to the reporting process. It fosters a way of 'integrated thinking' to break down internal silos and to reduce duplication. It is supposed to improve the quality of the available information for investors and lead to a more efficient allocation of capital. The focus lies on long-time value creation and a more financially stable global economy.[134]

Of the companies that include sustainability information in their annual reports, almost 60 percent (58%) do so in a separate chapter. They do not integrate the sustainability data into the overview of the business strategy, performance and value. The other 42% are starting to make the link between sustainability and business strategy by integrating sustainability information in the annual financial report.[135]
The benefits of the IR seem not to have crystallized and materialized just yet.

Syngeriz

Syngeriz, a non-profit organization from France, has also developed a framework to account for natural capital in integrated reporting. It is called the '*Designing and Modelling an integrated financial – Natural Capital Accounting and Reporting Framework by Synergiz*'.[136] Compared to the other described initiatives, Syngeriz has no broad recognition.

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[134] (The IIRC , 2014)
[135] (KPMG, 2013, p. 28)
[136] (Synergiz, 2014)

5.2.2 Portfolio Reporting

In addition to the initiatives regarding operational company reporting there are initiatives going in the direction of quantifying and disclosing the amount of carbon used for a whole portfolio. An example is the Montreal Carbon Pledge.

The Montreal Carbon Pledge has as of today 12 signatories. Among them are several pension funds (i.e. AP4, Environment Agency Pension Fund, CalPERS, etc.). It will help investors to quantify the carbon content of a portfolio. The disclosure of the carbon footprint of each product or the whole portfolio will enable the stakeholders to understand the risks better. And carbon is not only an environmental but a financial risk imperative. Knowing the quantity of carbon of a portfolio will help financial companies to identify risks and identify opportunities that might impact business operations significantly and therefore this lead to more informed business decisions. This will also help avoiding the carbon bubble.

This concept could in a further step be enhanced by breaking it down to each of the products offered by a company as well as with information on different aspects of natural capital such as water or other environmental indicators with material impact.

There are some companies who have not signed the Montreal Carbon Pledge yet but decided themselves to report on their portfolio strategy. Zurich Insurance Group is a good example for this. Manual Lewin, Head of Responsible Investment at Zurich states that: '*As part of our impact investing strategy, we announced in November 2013 a mandate to invest up to USD 1 billion in green bonds issued by the World Bank, International Finance Corporation and other development finance institutions. In line with the development of the international green bond market, we have doubled our original commitment in July 2014. Market conditions permitting, we will invest up to USD 2 billion in green bonds in various currencies funded by our European and US balance sheets. Green bonds allow us to generate market-level returns, while having a positive impact. The proceeds of green bonds are used for projects that mitigate climate change, help communities adapt to the consequences of climate change or generate other measurable environmental benefits.*'[137]

National Stock Exchanges competing for their clients put up sustainability as a differentiator - London, New York and Frankfurt have yet joined the Sustainable Stock Exchanges (SSE) initiative.

There are of course many other disclosure frameworks such Disclosure of Environmental Externalities (DEE), Environmental P&L, Extra Financial Environmental Reporting (EFER), Environmental Financial Reporting (EFR), Verein für Umweltmanagement und Nachhaltigkeit in Finanzinstituten (VfU)[138] and many more. This report cannot consider all of them.

5.2.3 The Role of Assurance and the Stock Exchanges

[137] (Zurich Insurance Group Responsible Investment, 2014)
[138] (VfU, 2014)

Sustainability reporting seems to almost be a standard business practice. This is closely followed by the need to make the reporting more credible and have it assured by an external party. More than half of the world's largest companies invest in external assurance. There is hope that smaller companies will follow their lead as it has been seen with other sustainability topics in the past. Sustainability reporting has become a listing requirement on several stock exchanges in non-OECD countries, including Brazil, China (incl. Hong Kong), Malaysia and South Africa.[139] And stock exchanges in
Columbia, Mexico, Peru, Poland, Thailand and Turkey have joined the UN-backed Sustainable Stock Exchanges (SSE) initiative.[140] The SSE is also joined by exchanges in
London, New York and Frankfurt which can be classified more with characteristics of the Swiss Stock Exchange. This last fact might boost the interest of companies in sustainability reporting.

It can be summarized that there are many initiatives going on in all the different sectors, countries and associations. A law mandating companies to disclose their information is in place in some countries. There will be more information available about the development and impact of these regulations for example in the EU in due time. Some Swiss companies are leaders in that they already disclose their strategy about the reduction of carbon in their portfolios. More transparency can lead to more informed business decisions internally, a better view on where a company stands in the benchmark which again can lead to more competition and to more efficiency. Transparency leads to a higher credibility as well.
There are two main approaches of sustainability reporting. There is the disclosure of the sustainability data in a separate report and there is the approach to fully integrate it into the financial framework. This and the different disclosure frameworks, calculation methods, reporting tools, principles and definitions leads to company reporting not being comparable each other. This means it remains difficult for investors to compare performances between industry peers.
A common reporting framework for all the different countries and institutions is not feasible because of all the different regulations, rules and laws. Therefore, the initiative for more materiality within the reporting should be supported (such as GRI G4). The content of the reports should remain variable but there should be common reporting protocols defined for each individual indicator. This will leave room for the different regulatory and compliance frameworks of the countries and will enable the comparability of each single indicator. One important fact that should always be considered when writing a report is to reflect on who the reports are written for. The target audience should be considered before indulging in a new creation of a standard.

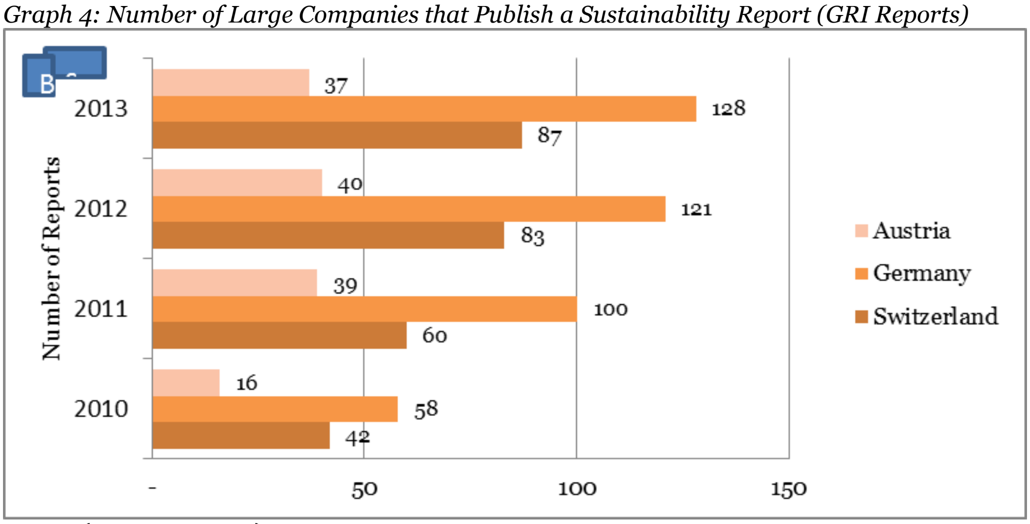
[139] (KPMG, 2013, p. 24)
[140] (Sustainable Stock Exchanges (SSE) initiative, 2014)

5.3 Switzerland's Opportunities for a Positioning in an International Context: Relevance and Opportunities

The competitiveness of the Swiss financial market needs to be looked at in an international – especially European – context. According to a survey conducted by BSD Consulting there is a trend towards more sustainability reporting. But it is not so widespread. In Switzerland in 2013 there were 111 published sustainability reports (with the GRI Standard) by small, medium and large companies.

There is a trend seen towards more reporting of sustainability information in the last few years. The figure below shows the number of reports of large enterprises (>250 employees or ≥ EUR 43 million turnover – not necessarily listed at the stock exchange). With the only exception of Austria which had less reports in 2013 than in 2012. The study discovered the same trend in small and medium enterprises.

Graph 4: Number of Large Companies that Publish a Sustainability Report (GRI Reports)

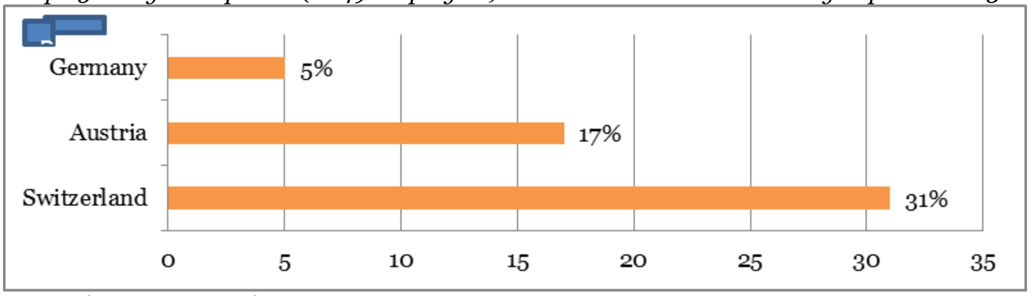


Source (BSD, 2014, p. 8)

Switzerland is a forerunner in comparison to the other German-speaking countries

In relative terms this means that 31% of all large companies in Switzerland (> 249 employees) publish their sustainability information in a designated report; in Germany this number is less than 10%. Given that Germany has a much larger number of companies (more than 13'000 large companies), this means that Switzerland is a forerunner in comparison to the other German-speaking countries. Yet there is still a lot of improvement in order to hit the 100% mark.

Graph 5: Large Companies (>249 Employees) that Published a Sustainability Report in 2013

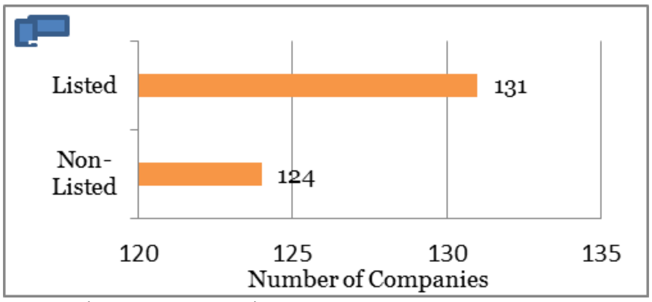


Source (BSD, 2014, p. 9)

The BSD study did not disclose which of the companies mentioned above are listed at the stock exchange and which ones are not. However, they report a total of 131 listed companies that published a sustainability report (Graph 6). Out of 252 reports that were published by large companies (Graph 4) this is 52%.

For Switzerland itself BSD states that 22% of the companies listed in the Swiss Performance Index SPI published a GRI report with information on sustainability in 2013 and/or 2012.[141]

Graph 6: Number of Reporting Organizations: Listed and Non-listed in 2013 in Germany, Austria and Switzerland

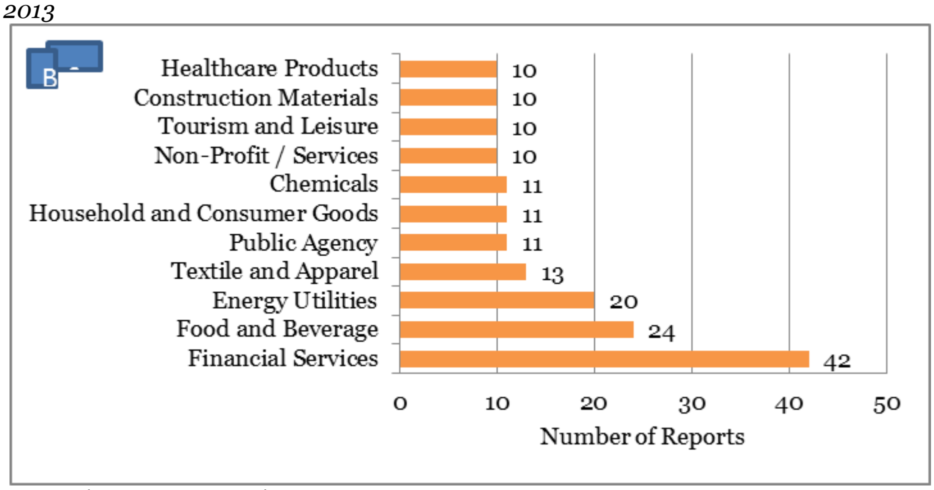


Source (BSD, 2014, p. 9)

Financial Sector specifics

In Germany, Austria and Switzerland the sector that publishes most sustainability reports is the financial services sector.

Graph 7: Number of Published GRI-Reports by Industry in Germany, Austria and Switzerland 2013



Source (BSD, 2014, p. 12)

[141] (BSD, 2014, p. 11)

Instead of regulating the disclosure by governmental intervention, another idea could be to regulate it through the admission for the listings at the stock market exchanges.

Overall, Switzerland is the country that publishes the most sustainability reports (in relation) of the German-speaking ones examined in BSD's study. Yet 31% of all large companies is a number that can be scrutinized, especially with the large companies which are listed at the Swiss Stock exchange being an even smaller percentage of 22%. There is a big potential for improvement quite visibly. In order to move forward it will be crucial to further incentivize sustainability reporting and to receive more transparent information on companies' performances. In this context it should be mentioned that the UN-backed Sustainable Stock Exchanges (SSE) initiative invites the SIX Swiss Exchange to become a partner by making a voluntary public commitment to promote improved ESG disclosure and performance among listed companies. This invitation should be assessed thoroughly.

5.4 PwC Expert Opinion

Only 22 % of large companies listed at the Swiss Stock exchange publish sustainability reports.

SIX Swiss Exchange could become a partner of the Sustainable Stock Exchanges initiative

Summary

Sustainability reporting was designed as a complement to financial reporting. It transparently provides information on organizational performance data which is directly relevant to sustainable development. It furthermore provides a basis for governments, businesses and the wider community to understand and improve their contribution to a sustainable economy and development. There are different drivers for sustainability reporting such as governments, non-profit organizations, business leaders and investors themselves. The benefits of transparency on the business activities are widely accepted. It leads to a better assessment of financial risk, to improved relations with stakeholders (including employees), to a more informed decision-making process and corporate strategy, to improved performance and to the development of new products and services. The sustainability reporting should be used more comprehensively to cover all financial and operational risks, which is also a concept of integrated reporting. Therefore the reporting should not only provide basic company information, but also information about the investment strategy and sustainable financial products, based on materiality principles.

Potential

Until now, there is no common, globally accepted definition of sustainability reporting. Furthermore, there are two main approaches of sustainability reporting (separate reporting and integrated reporting). Also there are different calculation methods, reporting tools, principles and definitions used for the different ESG indicators. This means company reporting is not really comparable. As step in the direction of comparability we recommend to further include materiality analysis in reporting, something leading companies already do. Whereas leaving the reporting approach of the indicators variable for each company, the reporting protocols of the individual factors should be further standardized. This would lead to the individual indicators to be comparable. Instead of regulating the disclosure by governmental intervention, another idea could be to regulate it through the admission for the listings at the stock market exchanges. The disclosing of non-financial information could be made mandatory as already required by some countries. This could boost the desire for a common sustainability reporting standard. 'The Sustainable Stock Exchange Initiative - SSE', initiated by the United Nations, also sees the important roles of stock exchanges. The SSE initiative invites stock exchanges globally to become a 'Partner Stock Exchange' within the SSE by making a voluntary public commitment to promote improved ESG disclosure and performance among listed companies. The Swiss Stock exchange is not yet an official partner of the SSE. With SIX Swiss Exchange signing up to the UN-backed Sustainable Stock Exchanges (SSE) initiative, there are ample opportunities which may entail 'report or explain' requirements. We recommend engaging into a dialogue with SIX Swiss Exchange who is invited by the UN-backed Sustainable Stock Exchanges (SSE) to become a member. SIX Swiss Exchange has in the past pointed to the new view of the globalization of financial markets and the increasing competition from abroad. With London, New York and Frankfurt just joined the SSE initiative, SIX may have an interest to move up to its 'peers'.

Risks and Opportunities

In Switzerland, as opposed to other countries, there is no regulation on the need to report on sustainability issues. An opportunity could arise to investigate in the countries where it is regulated by the government, if it actually had an impact on the performance of the economy and if it had a positive impact on the development.

Because there is also criticism about sustainability reporting: it is said to be used to 'greenwash' a company by improving a company's reputation while highlighting positive initiatives and leaving out others. Some companies merely believe it to be a waste of time and money. As illustrated above there are also questions about the accuracy and completeness of data reported, as well as its correlation with financial performance. The accuracy issue can be tackled by hiring a third party to assure the data. Completeness on the other hand is more difficult: because there is no regulation on the disclosure of the data, a company can decide what to share with the public, even some reporting guidelines and standards require a materiality assessment based on stakeholder needs. Furthermore there is also a lot of hidden carbon/water use etc. in many areas of investment activities, such as the carbon or water in a portfolio or a single product, which is at the moment not accounted nor reported.

5.5 PwC Recommendations

Application of reporting standards

As outlined in this section, many companies already report on ESG indicators or initiatives. Especially stock listed companies produce comprehensive sustainability reporting. From our market experience, making sustainability reporting a formal requirement would not be a problem for the twenty Swiss Market Index (SMI) companies and also for most of the Swiss Performance Index Companies (SPI) it would not be a major problem to report basic sustainability data. Especially the finance industry is well prepared for, as many companies do already have a very strong sustainability reporting. Making sustainability reporting compulsory for companies could further standardize sustainability reporting and could provide investors and other stakeholders with more information about ESG. We encourage further discussing the option of defining basic compulsory standards for sustainability reporting, as already planned or introduced by other countries or the EU for stock listed companies.

Better implementation of materiality concepts

Beside the aspect that it would be beneficial that more companies report on sustainability issues, it is also important that quality of reporting further increases. Institutions such as GRI or the IIRC promote therefore the materiality principle. This actually means that companies should describe how they manage their core sustainability impacts. Applying such a guideline or standard would basically mean that an insurance company or a bank would need to describe how 'sustainable' the investment approach is, supported by key performance indicators. This recommendation goes along with the idea in the recommendation above of making the reporting of sustainability data compulsory for large companies.

Seek Assurance for data and processes

'Control is better than trust'. This principle is already addressed for financial information, where an audit is mandatory for all bigger companies. For sustainability data it is not yet an official requirement. Nevertheless leading companies already seek assurance for their sustainability reporting. Again this could become a requirement for stock listed companies, otherwise rating companies or investors can never be sure about data quality of ESG reporting they receive from companies they rate or invest in. We see considerable differences in data quality and reporting approaches of important companies in our daily work, therefore we believe a mandatory assurance for sustainability information could enhance data quality and value for companies and their stakeholders.

6 Fund domicile Switzerland

Incentives and Restrictions for a Sustainable Investment Hub

In this chapter there is a focus on the sustainable fund landscape in Europe and particularly in Switzerland. Details regarding the size of sustainable public funds markets in Switzerland and Europe overall will be provided. Furthermore, special attention will be paid to the proposal which is formulated in the whitepaper 'Path to the Sustainable Financial Center Switzerland' to strengthen Switzerland as an international hub for green funds. In particular, there will be an assessment of the following proposition:

- Creation of new regulatory conditions to make the fund domicile Switzerland more attractive.[142]
- Provision of tax incentives in order to stimulate the supply but also the demand of sustainable investment vehicles.[143]

First, some background information on the sustainable fund landscape will be described, followed by a critical assessment of the abovementioned suggestions.

6.1 Overview of the Sustainable Fund Industry

The number of sustainable public funds in Europe has risen significantly over the past years. In Germany, Austria and Switzerland, according to data publicly available on the data base of the Sustainable Business Institute (SBI), there are 310 accredited sustainable funds in Germany, 213 in Austria and 184 in Switzerland in 2014. As per June 30, 2014 there were 395 funds accredited in Germany, Austria and Switzerland in total. As some of these funds are accredited in more than one country, the total number of the funds for all the three countries is smaller than the sum of the stand-alone figures for each country. The figures show that Switzerland is lagging behind with regard to the number of sustainable funds compared to its direct neighbours Germany and Austria. However, this does not necessarily mean that Switzerland is also lagging behind with regard to the volume of money invested in sustainable funds.
As already mentioned earlier in this report there is no universal definition for sustainable investment. In order to be able to receive an overview of the total

[142] (The Sustainability Forum Zürich (TSF) and Sustainable Finance Geneva (SFG), 2012, pp. 17, 36-37)
[143] (The Sustainability Forum Zürich (TSF) and Sustainable Finance Geneva (SFG), 2012, p. 39)

amount of sustainable funds, the public funds listed on the platform of the SBI include those investment vehicles which explicitly state that they consider social, environmental and/or ethical criteria.[144]

The spectrum of these sustainable funds is very diverse. In order to receive an impression of them, they can be categorized into three subgroups: 1) sustainability and ethic funds, 2) sustainable theme funds and 3) other funds such as microfinance funds, donation funds, etc. Besides the several kinds of funds, there exist also several types of funds whereof equity funds constitute the funds in which the bulk of the money is invested (EUR 24.2 billion), EUR 9 billion were invested in annuity funds, EUR 7.2 billion in mixed funds, EUR 460 million in umbrella funds and EUR 933 million in exchange-traded funds (ETFs).[145]

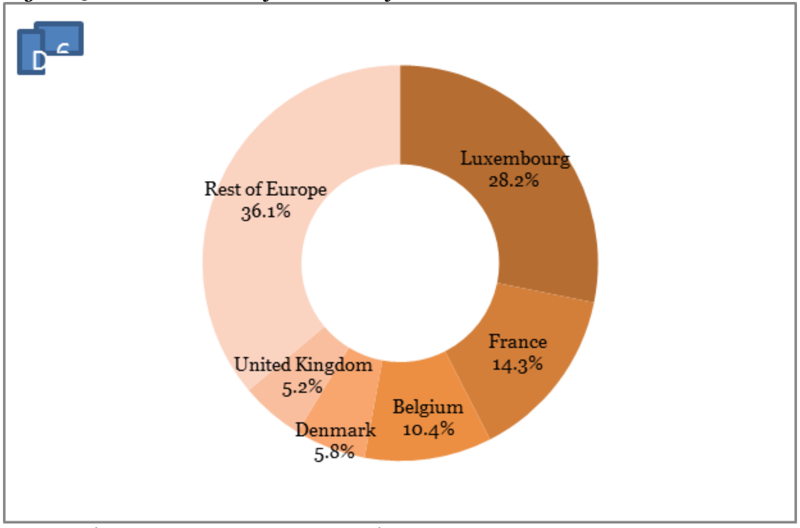
As per June 30, 2014 there were roughly EUR 43 billion invested in these funds in Germany, Austria and Switzerland.

6.2 The Sustainable Fund Industry in an International Context

Luxembourg is the leading domicile for responsible investing in Europe.[146] According to the European Responsible Investing Fund Survey 2013, investments into responsible investment (RI) funds (using the concept of Environmental, Social and Governance 'ESG' as classification) have increased in Europe since 2010 by 19 percent from EUR 199.9 billion to EUR 237.9 billion. The number of RI funds in Europe amounts to 1'775 funds. In relation to the overall fund market in Europe, this represents 3.4 percent of the total number of funds.[147] The distribution of sustainable funds by domicile looks as follows:

Predominance of Luxembourg as hub of Responsible In-vestment funds

Figure 5: RI in Percent of Number of Funds



Source: (KPMG & ALFI, 2013, p. 14)

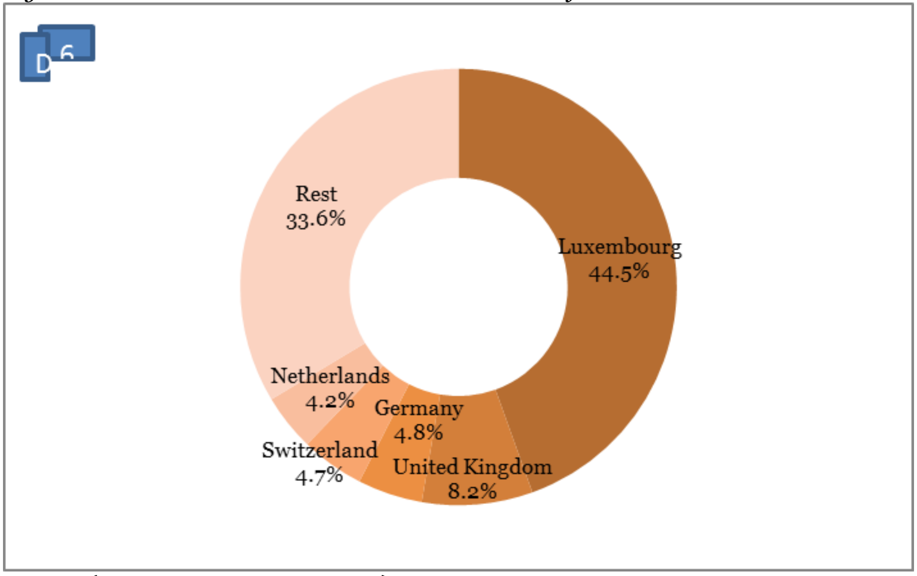
Figure 5 shows the predominance of Luxembourg as hub of RI funds with 28.2 percent of the number of funds, followed by France with 14.3 percent and Bel-

[144] (Sustainable Business Institute (SBI), 2014)
[145] (Sustainable Business Institute (SBI), 2014)
[146] (The Association of the Luxembourg Fund Industry (ALFI), 2013)
[147] (KPMG & ALFI, 2013, p. 4)

gium with 10.4 percent. The size of the global sustainable investment market (assets) was according to the survey at least USD 13.6 trillion (EUR 10.3 trillion) as of the end of 2012.[148]

Whereas the volume of investments into RI funds has increased overall – including the whole universe of environmental, social and ethical themed funds, ESG mixed funds, etc. – the survey highlights that there has been a decrease in environmental themed funds (except carbon funds). This trend can be graphically seen in the illustration below (Graph 8). Between 2010 and 2012 the amount of money invested in such funds decreased by 30 percent to EUR 6.8 billion. However, they remain the biggest group among the thematic sustainability funds. In terms of domiciles, Luxembourg is also ahead in this respect of the other European countries. The share of Switzerland in the universe of registered environmental themed funds is 4.7 percent which accounts for roughly EUR 1.3 billion (see figure 6).

Figure 6: Environmental Themed Funds in Percent of AuM



Source: (KPMG & ALFI, 2013, p. 23)

There are several reasons for the decrease in environmental themed funds. The financial crisis together with the lack of international commitment to tackle climate change lead investors to divest from these funds. Furthermore, and also as a negative consequence of the crisis, several governments were cutting back their subsidies for alternative energy production. Additionally, the disillusioning outcomes of the UN Climate conference in Durban left a mixed picture on the future of this sector.

Despite positive signals regarding recovery of these funds it is hard to predict whether the recovery of environmental themed funds will materialise indeed.[149]

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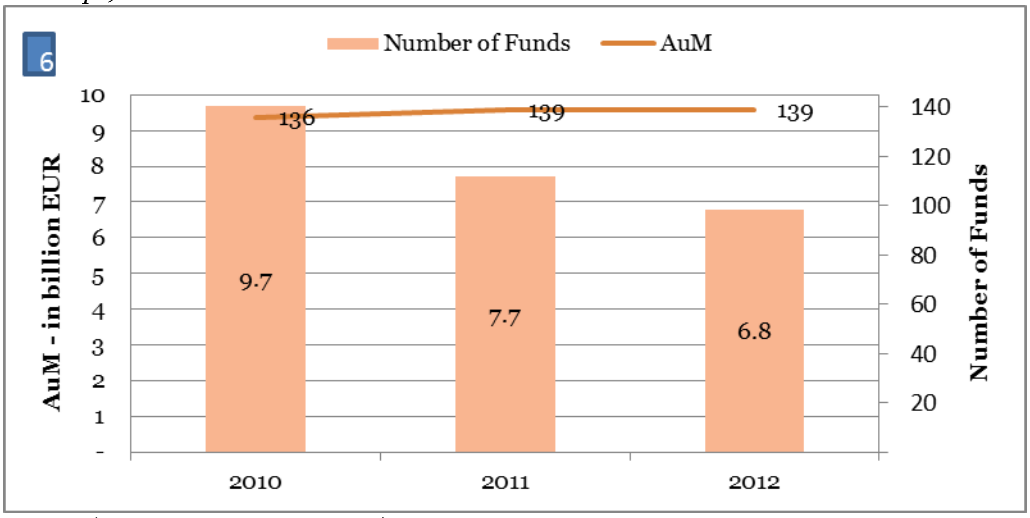
[148] (KPMG & ALFI, 2013, pp. 13-15)
[149] (KPMG Advisory NV & WWF Schweiz, 2012, p. 25)

Graph 8: Change Renewable Energy / Climate Change Funds (Environmental Themed Funds in Europe)



Source: (KPMG & ALFI, 2013, p. 24)

6.3 Facilitation and Incentives to Stimulate Supply and Demand

In the whitepaper 'Path to the Sustainable Financial Center Switzerland' the authors see the potential of Switzerland to become an international hub for sustainable investment funds. The Swiss financial centre is of significant international importance due to its wide range of specialised financial service providers with a particular focus on wealth management.[150] In addition, Switzerland has high environmental standards in place and political as well as regulatory stability. These factors, amongst others, are perceived as good preconditions in a journey towards a sustainable financial system.[151]

In general, two main incentives to stimulate investments into sustainable funds can be identified. Firstly, the supply of sustainable investment funds can be triggered through the introduction of an innovative and effective legal/regulatory environment. The regulatory environment is a crucial success factor of each financial centre. Secondly, the supply and demand of sustainable investment funds can be stimulated by fiscal adjustments, such as tax reductions or exemptions for sustainable investment funds.
An example of tax exemption for sustainable funds can be found in the Netherlands:

[150] (Federal Council, 2012, p. 6)
[151] (The Sustainability Forum Zürich (TSF) and Sustainable Finance Geneva (SFG), 2012, p. 2)

Figure 7: Dutch Tax Exemption for Green Investments

Dutch tax exemption for green investments 8

In 1995, the Netherlands introduced the Green Funds Scheme, a tax incentive for individual investors to put money into green projects that benefit the environment. Investing in green funds or saving money at 'green banks' earns lower-than-market interest rates. This is compensated by a tax incentive. In return, the banks charge green projects a lower interest rate.

Source: (The Sustainability Forum (TSF); Sustainable Finance Geneva, 2013)

Usually, tax exemptions as in the Netherlands where income from green funds is taxed at a reduced rate, work well as incentives to trigger investments. This is especially true for countries with political stability and a predictable legal system. Nevertheless, it would be short-sighted to believe that there exists a one-fits-all solution that could be applied to all countries which fulfil the above mentioned requirements. Furthermore, it should be considered that while the tax exemption triggers investments the positioning should be appropriately defined. Compensation of lower-than-market interest rates basically means that an indirect subsidy is provided which is not a market instrument but a regulatory intervention. To what extent these incentive mechanisms are feasible for Switzerland will be discussed below.

6.3.1 *The Regulatory Setting in Switzerland*

Switzerland has regulations in place which do not favor the emergence of a hub for sustainable investment funds

Switzerland is often perceived and illustrated in the media as being a tax haven with little financial regulation. This might be the case for corporate and income tax (for Swiss residents). The picture is a bit different in the context of financial institutions, particularly investment vehicles such as sustainable investment funds.
Switzerland has regulations in place which do not favour the emergence of a hub for sustainable investment funds.

The relevant regulations in Switzerland affecting investment decisions of insurance companies are the Swiss solvency regulations (The Swiss Solvency Test (SST)). The driver of this regulation is the Solvency II regulation initiated by the EU commission in 2009.
The Solvency II directive is a world-leading standard that requires insurance companies to focus on managing all of the risks facing their organization. Solvency II is meant to provide incentives for insurance companies to use their capital more efficiently and to rely on sound internal risk management and internal control processes. In the context of Solvency II, capital costs are becoming increasingly important as the play a crucial role in product development and strategic decisions.

The relevant regulations in Switzerland affecting investment decisions of banks are the Basel III regulations. Important to know in this respect are also the new regulation for the equity ratio. They have a significant impact related to sustainable investments, similar to the Solvency II regulations for insurance companies.

Both regulations require financial institutions to back certain investments with a certain equity ratio. For sustainable investments this has the implication that they are seen as comparable to high-risk investments such as private equity investments. Therefore, the equity ratio requirements are very high and not favouring the investment into sustainable investment vehicles.

6.3.2 The Fiscal Environment in Switzerland

Although Switzerland is internationally perceived as a tax haven, the tax situation in relation to funds, including sustainable investment funds, does not attract foreign investment into sustainable funds. Especially for foreign investors Switzerland is not attractive due the complex tax structure of the fiscal system in Switzerland with regards to foreign investments.

The complex tax structure with withholding tax, stamp tax, sales tax, etc. creates a disincentive for the influx of foreign investments because it is accompanied with a huge bureaucratic burden.

In the whitepaper mentioned above there is a call for tax exemption of sustainable investments funds in order to incentivize increasing foreign investment into this sector. In particular, they mention tax exemption for investment products focused on energy efficiency and renewable energy projects that contribute to the Swiss Energy Strategy 2050 or other environmental and social projects.[152] As illustrated above, Luxembourg is the leading hotspot regarding sustainable investment funds. In particular, besides its legal structure Luxembourg has an extremely competitive tax system that attracts a lot of foreign investment managers.

As mentioned above, Switzerland has a complex tax structure. If Switzerland wanted to become competitive with locations such as Luxembourg, it would most probably have to eliminate the withholding tax. In the context of the direct democratic political system in Switzerland with many different stakeholders, this would politically be a highly delicate endeavour as the withholding is still a strategic element in tax agreements with other countries and is considered as established concept. At the same time such endeavours could be considered as an integral element in the political discourse regarding the future of the Swiss finance sector and its positioning against the competing markets.

6.4 PwC Expert Opinion

Summary

Fund management is strategically more important than being a fund domicile

The sustainable fund industry is growing and already has a considerable impact. The important fund domiciles are the Benelux countries and France, due to favourable regulatory environment. Many funds are managed by Swiss institutions and registered in Luxembourg.

As already outlined in our potential considerations in chapter 4 of this report, funds do not only create economic value for a country by paying profit taxes. Total Tax Contribution (TTC) is much higher, as PwC shows in a study that

[152] (The Sustainability Forum (TSF); Sustainable Finance Geneva, 2013, p. 39)

will be published in 2015. Therefore we believe it is very beneficial that major funds are managed in Switzerland and the aim should be to keep them here, rather than try to become the most important domicile for registered funds.

Potential

We have outlined above that Switzerland is not an attractive location for a hub of sustainable investment funds. The main problem in the context of the regulatory environment for companies in Switzerland is the Swiss Solvency Test (SST). In the context of SST, sustainable investment funds are treated as private equity investments and therefore rated as high risk investments which have to be supported with an appropriate equity ratio. In general, sustainable investment such as investments in a solar power parks, are additionally highly capital intensive and therefore also long-term investments. The requirement of having a high equity ratio makes such investments not attractive.

Investments in sustainable funds should benefit from being classified as bonds instead of private equity-like investments

In order to be able to overcome this obstacle, investments in sustainable funds should benefit from being classified as bonds instead of private equity-like investments.

Risks and Opportunities

With regards to the level of investors, incentives could be generated by providing tax exemptions for sustainable investments. However, this might prove to be difficult. The Swiss tax environment is rather complex and the only way to attract foreign investment would be by via the elimination of the withholding tax. As we have already mentioned, this is politically delicate and would affect many other areas.

6.5 PwC Recommendations

Be a hub for fund management, rather than a domicile

As outlined above, with the current tax and regulatory structure it is not easy to be more attractive for fund registrations, because of the withholding taxes and complex regulation. Changing this would actually mean changing the whole Swiss tax system. Therefore we recommend rather fostering asset management in Switzerland with incentives than regulations. Further considerations would be necessary to provide more detailed answers how this could be achieved.

Support the HNWIs investment strategies

In the description of the sustainable financial market, we have already pointed out the importance of the High Net Worth Individuals and the impact of offshore wealth. That implies that a lot of wealth is already within Switzerland and belongs to a group that invests more and more in sustainable investments. Compared to pension funds, HNWI’s are not restricted in taking risk and are therefore better able to invest in private equity or funds investing in sustainable assets. We believe that incentives, that also need further considerations, could be provided to this group in order to encourage even more sustainable investment done by that group. If successful, this could create additional scale effects also for other investors.

Easier access for small private (retail) investors

Currently sustainable investments are mainly available for people with considerable financial capital and not offered as mainstream product to small private investors. Small investors do have limited access sustainable investment opportunities. To provide a better supply for sustainable financial products could be an important step to create awareness. Therefor more innovative business models, as showed for example by Alternative Bank Schweiz, are necessary to achieve this objective. This will take more time as introducing ESG investment criteria to institutional investors, but the approach could have considerable other long-term benefits because more people are then themselves responsible investors and therefore part of the game. There are various measures that could support these recommendations.

7 Pension Funds

Guaranteeing long-term returns for Beneficiaries with a Sustainable Investment Strategy

Pension funds are one of the biggest institutional investors in many countries. In Switzerland in 2012 there were 2073 pension funds that managed more than CHF 670 billion. This amount includes almost 3.9 million pension fund members. Because of their size and importance they are further analysed in this report in regard to their sustainability strategy and investments. There will be some examples of best practice pension funds, a detailed description of different approaches to strategies and lessons learned from other countries.

7.1 Introduction

Because pension funds comprise a big part of the institutional investors in many countries, it makes them an important player in the capital markets. Their primary objective is to maximize and secure long-term returns and by that to insure the pension funds' liabilities to the pension fund members, and to manage the risks. This sometimes presents a conflict of aims. More and more they are under pressure from their members and the society at large to better leverage their investment power for responsibility and sustainability. Whereas in some countries such as the USA, UK, the Netherlands and Norway there is some remarkable progress in integrating ESG criteria in the design of pension fund investment strategies, in Switzerland this potential is still underdeveloped.

Some pension funds use sustainability as a part of a systematic investment process in order to balance the basic elements such as security, rate on return and liquidity. This process is fostered by pension funds by assigning for example a sustainability expert in the board or their portfolio strategy committee or they use a sustainability advisor for the portfolio commission.[153] This integration has also partly taken place in Switzerland with the result that the largest Swiss pension funds started thinking about the integration of UN PRI or the implementation of ESG risks.[154]

With their investment strategy and by exercising their voting rights, pension funds could have a major impact on companies to integrate ESG criteria. Some examples of role models on how to implement sustainable criteria in the investment strategy are PGGM (NL) and CalPERS (USA). In Switzerland there is

[153] (Staub-Bisang, 2011)
[154] (Stremlau, 2014)

a lack of sustainable investment strategies and disclosure on the voting strategy of pension funds. At the moment the initiative to invest in sustainable companies has to come from the pension funds themselves given that they have an intrinsic interest in long term investment and therefore in sustainability. The interest of the pension fund members in a sustainable strategy has been confirmed by a recent pension fund survey by RobecoSAM. The majority of the insured members (72%) are calling for more sustainable investment strategies from their pension funds. In addition 79% of the pension fund members believe that sustainable investment strategies lead to better long term investment decisions.[155] However, in Switzerland there are only a few, Nest-Sammelstiftung and Abendrot for example that already have a comprehensive ESG approach. Nonetheless, there are pension fund advisors that have strategically integrated ESG criteria in their advices such as Ethos and Actares. Others such as the American Institutional Shareholder Services (which also advises pension funds in Switzerland) are integrating ESG criteria to a lesser extent.

A special feature regarding pension funds in Switzerland is that the employer pays at least 50% of the capital and the employees pay the rest. This leads to a co-determination on a basis of parity. The pension fund members, including the ones who receive a pension, are therefore often under-represented and have a limited saying in the design of the portfolio strategy; even though it is their money which is being invested. One instrument of influencing the strategy is by voting for a representative in the board. This representative could take on a key function in relevance to sustainability. On this note it has to be mentioned that the employee cannot choose their pension fund, rather the employer decides on the pension fund. This means in the end the employer has a bigger leverage by default.

7.2 National and International Landscape of 'Green' Pension Funds

The non-for-profit pan-European sustainable and responsible investment (SRI) membership organisation (Eurosif) researched the focus on sustainability of corporate pension funds in 2011. The results showed that 56% of the surveyed pension funds already integrate ESG criteria.[156] A growing trend thereof can especially be noted by active organisation in the UK, Norway and the Netherlands. Another proxy to the situation in Germany is the study of Union Investment in 2014 that looked at 32 retirement and pension funds. The study shows that 59% of the surveyed organisations integrate sustainability criteria in their portfolio strategy, 41% do not. A further specification showed that 15 pension and retirement funds invested 52% of their assets sustainably.[157] The participants named an equal importance for ecological, social, ethic and governance criteria; however no further detailing regarding ecological criteria was available. This means the portfolio strategies of the individual organisation is very dependent on its individual ecological respectively economic focus and therefore its pension fund members or boards.

155 (RobecoSAM, 2014)
156 (Eurosif, Corporate Pension Funds and Sustainable Investment Study, 2011)
157 (Investment, 2014, p. 16)

To illustrate the international landscape, the following four examples are provided:

1.) CalPERS is one of the largest pension funds in the USA that has a long standing commitment to sustainable investment. The goal of its investment program is to achieve sustainable, risk-adjusted returns consistent with its fiduciary duty. As a significant institutional investor with a long-term investment time horizon, sustainable investment means implementing ESG criteria in their investment strategy. CalPERS have just now committed to measure and publicly disclose the carbon footprint of its investment portfolio.[158]

2.) Another example is PGGM, one of the largest trustees of pension fund capital in the Netherlands. Their vision is *'to contribute to a higher and more stable return through the integration of responsible investment in its investment policy'*[159]. How PGGM implements such a strategy concretely will be outlined later in this report.

3.) Another renowned ecological leader with a very stringent portfolio strategy is the Norges Bank Investment Management (NBIM) which also oversees Norwegian pension contributions. In 2009 NBIM launched their principles on climate change and exclusion of investment in connection with palm oil. Their principles are seen as a best practice. NBIM was globally the first institutional investor to set expectations for companies regarding sustainable water management. NBIM's ecological requirements are regarded as active shareholder politics and they are measured on an annual basis. For this reason NBIM started a partnership with Carbon Disclosure Project (CDP) which allows for compliance data to be shared directly. Furthermore, NBIM prompted CDP in October 2013 to include water risks more thoroughly in their questionnaire. This reinforces the leading position further.[160] Also regarding climate change the NBIM has a leading position this is shown by their commitment to exclude coal and oil from their portfolio. [161] This is interesting given that the fund is funded by money out of the oil and gas industry.

'Only two out of nine German corporate pension funds believe the implementation of ESG criteria to be in their responsibility as fiduciary' Susanne Bergius, Handelsblatt Business Briefing Nachhaltige Investments

4.) In Switzerland there are only a few pension funds with ecological-ethical criteria such as Nest-Sammelstiftung and Abendrot. They follow the principle, that investments will be chosen according to ecological criteria and also define exclusions such as gene-modified technology in farming.[162] Relevant for Switzerland is also the international foundation Ethos. It was founded in 1997 by two pension funds from Geneva who wanted to actively manage their interests as shareholders. By now

[158] (CalPers, 2014) and also Montreal Pledge by PRI; http://montrealpledge.org/
[159] (PGGM, 2014)
[160] (Bergius, Business Briefing Nachhaltige Investments Nr. 11, 2013)
[161] (Bergius, Business Briefing Nachhaltige Investments, 2014)
[162] (Nest, 2014)

approximately 150 institutional investors are part of Ethos. The foundation owns Ethos Services which is responsible for the overall portfolio management and consulting. It is specialized in sustainable investments. Ethos advises pension funds and discretionary asset management with a Socially Responsible Investment (SRI) approach in the volume of more than CHF 2 billion. It exercises voting rights, acts as advisor at general meetings and fosters a direct dialogue with companies. The Ethos foundation believes to have encouraged a rethinking of Swiss companies.[163]

The above mentioned examples are certainly leaders in the design of sustainable investment strategies and can be used as best-practice examples for sustainable pension funds.

From the perspective of green finance an active shareholder involvement is very promising. This approach is often used in Anglo-Saxon countries (e.g. CalPERS), Scandinavia (e.g. AP-Fonds 1-4), the Netherlands (e.g. MN), and France (e.g. Fonds des Réserve pour des Retraits). Pension funds or university foundations are the leaders in this area. NBIM has started this in 1997. They publicly report on their engagements. Some shareholders have sold their shares when they believed that the dialogues were of no avail.

7.2.1 Examples of Sustainable Pension Funds

An example of using publicity and an active shareholder approach is the above mentioned Californian pension fund CalPERS. In 2005 they threatened to withdraw from General Motors' (GM) and Ford's shares if they did not publicly disclose their greenhouse gas emissions and climate strategies. Ford then shared the information immediately.[164] Even though this approach is not yet established among the German-speaking pension funds, it could be considered to encourage green finance.

One recommendation is to incentivize such exchanges among pension funds inspired from the roundtable of CalPERS in 2012

In addition an exchange of pension and retirement funds among themselves might be beneficial for a green financial market; this might lead in certain circumstances to a slightly more intensive competition. An international reference is for example the roundtable of CalPERS in 2012. The knowledge exchange with the ESG peer groups such as APG Asset Management (Netherlands), AustralianSuper (Australia), BT Pension Scheme (UK), Florida State Board of Administration (USA), Government Employees Pension Fund (South Africa), Norges Bank Investment Management NBIM (Norway), Ontario Teachers' Retirement System (Canada), PGGM (Netherlands), Previ (Brasil), TIAA-Cref (USA) and Universities Superannuation Scheme (UK) helped CalPERS to position themselves and to decide on new activities.
Currently exchanges of that kind seem not to take place among Swiss pension funds. One recommendation is to incentivize such exchanges. An independent third party could possibly adopt this function.

[163] (Ethos Foundation, 2014)
[164] (Aktives Aktionärstum Engagement weit verbreitet, 2014)

British Environment Agency Pension Fund operates with an ecological strategy - aiming at a clear environmental benefit the assessment of titles includes their life-cycle impacts

'As of October 2014 and the Montreal Carbon Pledge, signals confirm that major institutional investors are taking fossil fuel divestment and decarbonisation strategies seriously. This will also challenge state funds including implications for AHV/IV/EO.'

'For Swiss pension beneficiaries, investments that combat water scarcity are the number 1 ESG expectation'

The British Environment Agency Pension Fund

Another approach to transfer international best practice to the Swiss market context of federal pension providers is the following one: The British Environment Agency Pension Fund (AuM of approx. CHF 3.6 billion) is a pension fund of the Environment Agency which operates already with an ecological strategy, thereby satisfying the core mission of the agency. To integrate these ecological standards in the long term investment strategy of the pensions, the policy states that 24% of the fund has to be invested in sustainable investments. Therefore, the Environment Agency has opted for a comprehensive and advanced risk and portfolio strategy. Aiming at a clear environmental benefit the assessment of titles includes their life-cycle impacts. Moreover, the Environment Agency Pension Fund has just now committed to measure and publicly disclose the carbon footprint of its investment portfolio by signing the Montreal Carbon Pledge. The regulations for the realization do not focus on thematic funds such as water, renewable energy or clean tech or even on exclusion criteria. Moreover there is a comprehensive (such as life cycle effects) risk and portfolio strategy envisioned. In any case the integration of ecology in the pension fund management of the Environment Agency is promising. It could be interesting for Swiss Federal Organisation bodies to look further into this system.

Second AP Fund

Comprehensive risk analysis also triggered the state-owned Second Swedish AP Fund as one of northern Europe's largest pension funds to not investing in a number of companies constituted by fossil-fuel based energy.[165] Utilizing state-of-the-art risk ratings, their decision will help to protect the Fund's long-term return on investment.

Pension Funds and Water

More than 1200 pension scheme beneficiaries from around Switzerland were recently asked what kind of sustainable investing they wanted their schemes to invest in? As a top priority, 75% felt that Swiss pension funds should invest in companies that combat water scarcity.[166] This finding confirms that Swiss citizen, while having sufficient water resources from the Alps, are aware of this environmental challenge on a global scale and wish to take action. In this respect it shall be demonstrated how some leading European pension funds such as PGGM, SWIP, Hermes, MN and Nordea actively engage in global water management: To live up to the responsibilities of sustainable investing and incorporating the increasing challenges of global water management the whole group started an initiative under the framework of PRI. The goal of the initiative was to identify water risks of farming (the largest amount of water consumption globally) in the food & beverage, retail and fashion industries. The analysis determined the water stress of 78 global companies along their supply chain. This integration of information of natural capital in the investment strategy proved to be a first class example for exemplary acting of pension

[165] (AP 2, 2014)
[166] (RobecoSAM, 2014, Responsible-Investor.com)

funds. The initiative was acknowledged and appreciated by the White House.[167] A press release of president Obama stated that the financial services positioned themselves as innovative creators of sustainable economic activity under the consideration of climate change. After the launch of the engagement of the founding members in the Netherlands, the UK, Scandinavia and the US, Swiss pension funds are also free to join the initiative.

Lessons Learned from pension fund regulation initiatives

Lastly in this chapter, there are lessons learned from regulatory undertakings. Germany for example recognized the need for adjusted pension schemes for the future of society and thereby complemented its public pension insurance scheme with the input of private and corporate pension funds. Animated, amongst others through discussions abroad such as the UK, the Lower House of German Parliament decided in 2002 to install a disclosure policy for sustainability criteria for pension funds and in 2005 for pension plans.[168] Based on the regulation of disclosure there was an assumption that the ethic-ecologic market would grow. The reasoning behind this was that there would be an increased demand by investors of relevant products if such a passage was to be found in the regulations of the pension funds. This would lead to the pension funds and pension plans to report in writing about the application of ESG criteria of the financial contribution, at first, once the contracts are signed and then subsequently year on year. But there were some elementary lessons learned from the regulation: the disclosure policy did in the end not increase the market and help pushing ESG integration, as was suggested. Such a fallback was unexpected. However, after further analysis it can be stated that this might have been due to a gap in the regulatory framework. There is a structural hook in the German Insurance Supervisory Act that allows for complete exclusion of ESG–criteria-assessment in the investment process to circumvent the required reporting requirement altogether.[169]

There are also Swiss motions regarding the regulation of investment strategy of pension funds by politicians such as the one from Konrad Garber (Council of States) about ‘Langfristanlagen von Pensionskassen in zukunftsträchtige Technologien und Schaffung eines Zunkunftsfonds Schweiz’ (13.4184),motion 13.3484 (Grüne Fraktion) which wants to simplify the investments of pension funds in Swiss energy infrastructures as well as interpellation by Bastien Girod regarding the carbon bubble and the investment strategies of pension funds (14.3234).[170] However, parliamentary advances which want to influence the investment strategy of pension funds based on ideological reasons are usually turned down.[171] Also the current Swiss primacy does not allow for investment risks to be transferred to the pension fund members by supporting specific industries, sectors or projects.

[167] (The White House, Washington. Obama Administration, 29. July 2014)
[168] (Versicherungsaufsichtsratsgesetz, pp. §§10, 115 and 118b)
[169] (Stremlau, Altersvorsorge: Treuhänderische Pflichten bei der Anlage von Pensionsgeldern, 2014)
[170] (Bundesversammlung, 2014)
[171] (Gemperli, 2014)

Other regulatory learnings for Switzerland concern the Minder initiative, which was approved in a referendum in March 2013. It mandates Swiss companies to hold binding shareholder votes on executive compensation and requires Swiss pension funds to participate in voting. However, due to the way the Swiss parliament transposed Minder initiative into law, the voting requirement only covers shares that are held directly.[172] In turn, tactics resulted in schemes that are divesting their direct holdings and shifting to equity funds. From the voting emerges a requirement to report to their beneficiaries on how they voted. *'This is all a bit too much exposure for Swiss pension funds that are known for staying behind the scenes'* said an interviewee. [173]

Relevant experience regarding disclosure requirements should also be considered into further thinking about this topic.

7.2.2 Investment Strategies and Regulatory Context

In Switzerland in 2012 there were 2073 pension funds that managed more than CHF 670 billion. They contain almost 3.9 million pension fund members.[174]

The table below provides a direct peer-to-peer view of the different strategies used by a selection of pension funds in Europe. It can be seen that a there exists a rather wide range between leaders and laggards.

Table 5: Overview of Sustainable Portfolio Strategies of Selected European Pension Funds and Finance Institutes

Pension Fund	Country	Core-Strategies			Broad-Strategies	
		Exclusion Criteria	Best-In-Class Approach	Thematic Investments	ESG-Integration	Active Shareholder Politics
AP-Fonds 1-4	Sweden					☑
AP-Fonds 7	Sweden	☑				
Ausgleichsfond AHV/IV/EO	Switzerland		☑			☑
Environment Agency Pension Fund	England	☑			☑	
Fonds des Réserve pour des Retraits	France	☑	☑			☑
Hannoversche Kassen	Germany	☑	☑	☑	☑	☑

[172] (Responsible-Investor.com; 2014)
[173] (Responsible-Investor.com; 2014)
[174] (BFS, 2012)

Pension Fund	Country	Core-Strategies			Broad-Strategies	
Metallrente	Germany	☑	☑		☑	
MN	Netherlands	☑		☑	☑	☑
NBIM	Norway	☑		☑		☑
Nest-Sammelstiftung	Switzerland	☑	☑	☑	☑	☑
Pensionskasse der Zürcher Kantonalbank	Switzerland	☑	☑		☑	☑
PGGM	Netherlands	☑		☑	☑	☑
VBV-Pensionskasse	Austria	☑	☑	☑	☑	

Source (Staub-Bisang, 2011), (PwC 2014)

Swiss Regulatory Context

From a regulatory perspective, there are three different kinds of pension funds in Switzerland. The corporate pension funds, the multi-employer plan (Sammelstiftung) which are independent and multi-employer plans which are run by insurance companies. The corporate pension funds in Switzerland are regulated by the ‚Bundesgesetz über die berufliche Alters-, Hinterlassenen und Invalidenvorsorge‘ (BVG) which is further explained in the ‚Verordnung über die berufliche Alters-, Hinterlassenen- und Invalidenvorsorge‘ (BVV 2). The supervision of insurance companies is regulated by the 'Versicherungsaufsichtsgesetz' (VAG). The multi-employer plans run by insurance companies are additionally regulated by Solvency II and Basel III.

In Switzerland there exists no obligation for pension funds to report on their ESG policies. Since 2002 the BVV 1 regulation dictates for Swiss pension funds to establish rules on exercising shareholder rights (to develop voting/engagement strategy). Pension funds themselves do not have to vote at general assemblies, but with the BVV and the VegüV (Verordnung gegen übermässige Vergütungen bei börsenkotierten Aktiengesellschaften; Ordinance against excessive compensation at publically listed companies) there is a legal basis for engagement.[175] In the context of this regulation, it is sufficient to report either that the pension fund always follows the board's proposals or that it does not exercise its voting rights.[176] The BVV 2 regulates the investment possibilities of pension funds (starting from article 49). It is a rather extensive and dense set of regulations.[177] Sustainable assets or strategies are not mentioned specifically.
In Solvency II and Basel III the investment framework was constructed in a way which even discourages the investment in sustainable funds. Sustainable assets are classified under alternative assets and are treated as private equity. This means they are classified as high risk and need to provide a higher equity ratio. The classification should have sustainable assets to be bonds or even

[175] (Bundesrecht, Verordnung gegen übermässige Vergütungen bei börsenkotierten Aktiengesellschaften, 2014)
[176] (Eurosif, Corporate Pension Funds and Sustainable Investment Study, 2011)
[177] (Bundesrecht, 2014)

create their own asset class. This would be much more attractive for pension funds and might lead to a change in the investment strategies.

The biggest association of Swiss Pension Funds is called ASIP. It was created in 1997 with the merger of five pension fund associations. The ASIP has more than 1000 pension funds members. The goal of ASIP is to ensure the security of occupational pension and address the sector's concerns.[178]
As a conclusion it can be stated that leading international pension funds already integrate sustainable criteria in their investment process. The initiative has to come from the pension fund themselves or from an independent neutral driver, regulatory changes seem not to have influenced the investment strategies to be more sustainable. The pension fund members or the independent drivers could together for instance support established partnerships and networks to work toward a more active shareholder politics and ownership of sustainable investments.

7.3 PwC Expert Opinion

Summary

As described above, the pension funds in Switzerland are not yet driving responsible investment efforts. To continually and actively encourage pension funds to a more sustainable investment approach there are lessons learned from the comparison of the Swiss situation with the international landscape:

- Underdeveloped awareness and know-how of Swiss pension fund members on their potential influence on investment strategy and therefore on ESG issues.
- The voting power of the pension fund members should be increased relative to the voting power of the company within the pension fund board.
- No leadership role of ESG investment of public pension funds such as AHV.
- Incomprehensive transparency and disclosure of incorporation of ESG criteria in the decision making process of pension funds and of exercising the voting rights during the general assembly at targeted or invested stock-listed companies in order to influence the company's policy towards ESG criteria.
- Lacking theoretical and empirical background about the impact of the integration of ESG criteria and the impact on the return of investment.
- Lack of sustainable investment vehicles for pension funds, especially green bonds.

To tackle these challenges there seems to be a need for several measures. It starts with raising the awareness and the know-how transmission about the influence of pension fund members on the investment strategy.

[178] (ASIP, 2014)

Potential

We have highlighted that the integration of ESG criteria in the strategy of pension funds seems to have room for improvement. Currently, there are no exchanges about sustainable investment strategies among Swiss pension funds or with international leaders thereof taking place. We believe it could be an effective approach aligning strategies among pension funds in Switzerland as well as to include the Swiss government to take a role in the discussion. An independent institution which follows the idea of a sustainable financial system could possibly adopt the function of the moderator.

Risks and Opportunities

As opposed to the change of actual regulation towards more sustainability federal government bodies are advised to work on its thought leadership by investigating how its sustainability mission could also be applied to its pension management, for example by learning from the pension fund management of the Environmental Agency in Britain. Because key learnings from Germany suggests that policy measures are of limited effect and – in the instances such as the ones mentioned above – cannot achieve greater ESG integration with pension funds. Also the shareholder politics could be further analysed and a more active shareholder culture could be encouraged. This might lead to more sustainable investment strategies.

7.4 PwC Recommendations

The present signals of sustainable investments, 'decarburization' strategies, or the 'Montreal Carbon Pledge' confirm that major institutional investors are taking issues related to natural capital more seriously than before. It is recommended to use such momentum and engage with national funds including AHV/IV/EO.

Increasing influence of insured persons

The mentioned survey from RobeccoSAM showed a great interest from insured persons in knowing how their pension funds invest 'their' money. These results could be used as an encouragement for pension fund members to select a representative of their liking to the board and therefore have more weight in the decision-making process. In order to raise the transparency and disclosure of ESG investment strategies, one role model example from the public sector could be designed, also here a regulatory change might be considered. There is also a further need for empirical data material on the connection between ESG criteria integration and return on investment. Additionally there is a necessity to spend some time and research into the creation of more sustainable investment vehicles. Questions that need to be asked are who should lead this initiative? Who is the appropriate driver for more sustainable investment strategies? The pension funds themselves or an external driver such as an independent party?

Support and adopt new initiatives

Internationally, there are pension funds that are more proactive regarding ESG than Swiss ones, and Switzerland needs to make sure not to lose connection to such developments. Leading international pension funds are engaged in shaping and adopting standards. An example is the creation of the 'UN PRI Montreal Carbon Pledge', introduced in September 2014, which requires commitments to measure and publicly disclose the carbon footprint of investments portfolios on an annual basis. We recommend Swiss pension funds to be more active and get more involved in international initiatives in order to gather knowledge and adopt initiatives early enough.

Governmental bodies – Incentives, regulations and acting as role models

One challenge we think the Federal Administration could tackle is the problem of the voting power. If pension fund members had more power this could in some cases lead to a new balance in the decision making process regarding investment strategies. Yet, it might also lead to a less sustainable one. This is also a reason why the Federal Administration should investigate further on the topic of disclosure. An awareness program might help to educate the pension fund members and raise their interest of knowing which strategy their pension fund is following. More educated pension fund members might want to change the investment strategy. Furthermore there would be an opportunity to change regulations and define 'responsible investment' as a separate asset class with according limits. Another option we see is to incentivize the sustainable investment strategies of role model pension funds.

Glossary

Alternative Investment
An investment that is not one of the three traditional asset types (stocks, bonds and cash). Most alternative investment assets are held by institutional investors or accredited, high-net-worth individuals because of their complex nature, limited regulations and relative lack of liquidity. Alternative investments include hedge funds, managed futures, real estate, commodities and derivatives contracts.

Asset Management
Range of services offered by banks for the active management of a client's assets under a portfolio management mandate.

Assets under Management
Assets under management (AuM) measures the total market value of all the financial assets which a financial institution manages on behalf of its clients.

Bond
Unsecured general debt obligation in the form of a security usually with a fixed interest rate or no interest (zero-coupon bond). With few exceptions (such as perpetual bonds), these instruments have a fixed maturity, e.g. bond issues, medium-term notes.

Buy Side
Refers to advising institutions concerned with buying investment services. Private equity funds, mutual funds, life insurance companies, unit trusts, hedge funds, and pension funds are the most common types of buy side entities.

Carbon Disclosure Project
The Carbon Disclosure Project is an organization based in the United Kingdom which works with shareholders and corporations to disclose the greenhouse gas emissions of major corporations.

Commodity
Goods of uniform quality, that are produced in large quantities by many different producers; the items from each different producer are to be considered equivalent. These can be natural resources such as coal, oil, gas and metals but also harvested items such as grains.

Desktop Research
Desktop research (also known as secondary research) involves the summary, collation and/or synthesis of existing research rather than primary research, where data is collected from, for example, research subjects or experiments

Equator Principles
The Equator Principles is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making.

Financial Institution
An establishment that focuses on dealing with financial transactions, such as investments, loans and deposits. Conventionally, financial institutions are composed of organizations such as banks, trust companies, insurance companies and investment dealers.

Financial Sector
The financial sector is made up of firms that provide financial services to commercial and retail customers. This sector includes banks, investment funds, insurance companies and real estate.

Fixed Income
A type of investing or budgeting style for which real return rates or periodic income is received at regular intervals at reasonably predictable level.

Fund
see 'Investment Fund'.

Global Reporting Initiative
The Global Reporting Initiative (GRI) is an international not-for-profit organisation. To enable all companies and organizations to report their economic, environmental, social and governance performance, GRI produces free Sustainability Reporting Guidelines.

Green Bond
Financial vehicles used to finance environmental and climate protection projects.

Green Finance
see 'Sustainable Finance'.

Greenwashing
Greenwashing is the practice of making an unsubstantiated or misleading claim about the environmental benefits of a product, service, technology or company practice. This can make a company appear to be more environmentally friendly than it really is.

Hedge Fund
Private collective investment vehicle which is active in the global capital markets, seeks to achieve absolute returns and capital appreciation. Hedge funds use a variety of investment techniques, are lightly regulated and often accept only a very limited number of investors so as to ensure that their investment strategy remains flexible.

High Net Worth Individual
People with assets that can be invested of at least 1 million USD are considered to be High net worth individuals (HNWI).

Impact Investing
Impact investments are investments made into companies, organizations, and funds with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below-market to above-market rates, depending upon the circumstances.

Institutional Investor
Organization with substantial (mostly continuous) investment needs which trade large volumes of securities, e.g. insurance companies, pension funds, investment funds, etc.

Integrated reporting
An integrated report (IR) combines a company's financial report and sustainability report in order to give a concise view about how an organization's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term.

Investment Fund
Entity in which investors pool their capital for joint investment. The assets are managed by the fund management company for the account of the investors based as a rule on the principle of risk distribution. Depending on the type of investment fund, the assets may be invested in securities, money market instruments or in real estate; investments can also be made in special fund products and asset allocation funds.

Investment Horizon
The total length of time that an investor expects to hold a security or portfolio.

Investor
Person or institution purchasing securities or tangible assets for the purpose of earning a return or receiving the monetary value.

Montreal Carbon Pledge
Signatories of the Montreal Carbon Pledge commit to measure and publicly disclose the carbon footprint of their investment portfolios on an annual basis.

Mandate
Allocation of funds to an investment manager to be managed for a specific purpose or style. May combine the use of stocks, bonds, commodities, Forex and options in accordance to the needs of the investor.

Natural capital
Reference to the stock of natural resources, such as water and oil. Unlike other forms of equity (such as machines and buildings), which can be created on a regular basis, many natural resources are nonrenewable. Natural capital includes many resources that humans and other animals depend on to live and function, which leads to a dilemma between depleting and preserving those resources.

Offshore Wealth
Assets booked in a country where the investor has no legal residence or tax domicile.

Pension Fund
A fund established to facilitate and organize the investment of employees' retirement funds contributed by the employer and employees. The pension fund is a common asset pool meant to generate stable growth over the long term.

Portfolio Decarburization
Actions taken by investors to measure, disclose and reduce the greenhouse gas emissions associated with their portfolios.

Principles for Responsible Investment
The principles for responsible investments (PRI) are a set of globally used and promoted sustainable investment principles targeted at institutional investors.

Private Equity
Privately negotiated transactions in public or private companies with a view to increasing their value in order to exit from the investment at the desired point in time. Private equity firms can invest in companies at various stages of their development, from financing startups (venture capital), through providing capital to rapidly growing businesses (growth capital) to leveraged buyouts of mature businesses (buyouts).

Retail Investor
Individual investors who buy and sell securities for their personal account, and not for another company or organization.

Risk
Exposure to damage or financial loss, e.g. a fall in the price of a security, or insolvency on the part of a creditor.

Risk Management
(1) Management tool designed to broadly and systematically identify, quantify and manage banking-related risk exposure.
(2) Service package provided by banks to commercial clients to help them limit risk exposure through the use of hedging instruments.

Sell Side
It is a general term for a firm that sells investment services to asset management firms or corporate entities. These services encompass a broad range of activities, including broking/dealing, investment banking, advisory functions, and investment research.

Share Index
Indicator showing changes in the average prices of shares or groups of shares on the stock market.

Stakeholder
A person, group or organization that has interest or concern in an organization.

Stamp Duty
Duty imposed in connection with the issuance of securities, the transfer of ownership of securities and other documents or deeds, and the payment of insurance premiums.

Structured Product
A type of investment vehicle specifically designed to meet an investor's financial needs by customizing the product mix to adhere to the investor's risk tolerance. Structured products are generally created by varying the amount of exposure to risky investments and often include the use of various derivatives.

Sustainability Reporting
A sustainability report is a report published by a company or organization about the economic, environmental and social impacts caused by its everyday activities.

Sustainable Development
Sustainable development is a road-map, an action plan, for achieving sustainability in any activity that uses resources and where immediate and intergenerational replication is demanded. As such, sustainable development is the organizing principle for sustaining finite resources necessary to provide for the needs of future generations of life on the planet.

Sustainable Finance
Financial products and services under the consideration of environmental, social and governance factors throughout the whole risk management and decision making process that are provided to promote responsible investments which create a positive environmental, social and governmental impact.

Sustainable Investments
An investment style or financial discipline that combines investors' financial objectives with their concern about environmental, social and governance 8ESG) issues.

Swiss Solvency Test
The Swiss Solvency Test (SST) is a risk based capital standard for insurance companies to determine the amount of risk bearing capital and the required capital.

Volatility
Measure of the fluctuations in the price, or rate of return, of a security within a specific period. Usually expressed as an annualized standard deviation.

Withholding Tax
In Switzerland, this source tax is imposed at the current rate of 35% on domestic income from capital gains and lottery winnings in excess of CHF 50. Tax payments can be reclaimed by persons filing Swiss federal tax returns or credited against cantonal tax liabilities. Individuals and companies domiciled abroad may claim a refund of Swiss withholding tax under double taxation treaties concluded between their country of domicile and Switzerland.

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Contacts

Engagement Partner
Dr. Marc Schmidli
PricewaterhouseCoopers AG
Birchstrasse 160, CH-8050 Zürich
Schweiz

Telefon +41 58 792 1564
marc.schmidli@ch.pwc.com

Engagement Manager
Stephan Hirschi
PricewaterhouseCoopers AG
Birchstrasse 160, CH-8050
Zürich Schweiz

Telefon +41 58 792 2789
stephan.hirschi@ch.pwc.com

PricewaterhouseCoopers AG
Birchstrasse 160, CH-8050 Zürich
Schweiz