Swisscanto Invest
by Zürcher Kantonalbank

Focus on sustainability
Better investment decisions thanks to ESG Integration

From niche to mainstream – July 2016

Swisscanto Invest by Zürcher Kantonalbank
Sustainability Research, Asset Management
nachhaltigkeitsresearch@zkb.ch
0800 850 050

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Summary

ESG integration encompasses any classic financial analysis approach which is enhanced by environmental (E), social (S) and governance (G) factors and which exploits the ensuing opportunities and risks to reach better investment decisions. Swisscanto Invest by Zürcher Kantonalbank consistently integrates ESG factors into its fundamental investment process. This identifies substantive risks which have not yet been priced into the valuation and brings another dimension to conventional financial analysis. We have developed a database which collates key ESG information per company. This publication provides a brief introduction to Swisscanto Invest's integration of ESG and uses a specific case study to illustrate its benefits. Finally, we present the individual indicators in greater detail.

Roland Wöhr

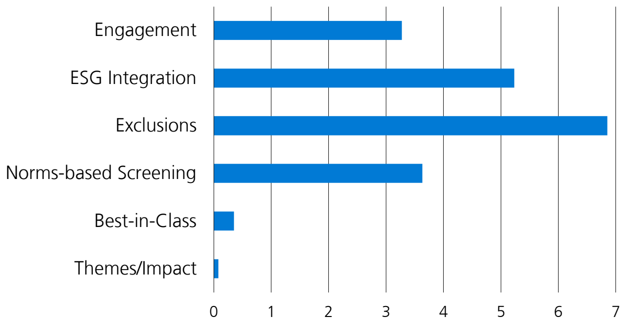
1 From niche to mainstream

Whilst the volume of purely sustainable investments is indeed increasing every year, albeit while remaining a niche product, investors' and asset managers' interest in considering sustainability in a wider sense, by integrating ESG, has risen sharply. But what does this buzzword actually mean?

1.1 Institutional investors take action

More and more investors and asset managers have become convinced that they can reach better investment decisions by integrating sustainability factors. The volume of investments which integrate ESG factors has significantly increased at more than EUR 5.2 trillion (more than 30% of total European investments), putting them in second place immediately after the application of exclusion criteria *(Figure 1).*

Figure 1: SRI strategies in Europe, in EUR trillion
(SRI = Socially Responsible Investment)



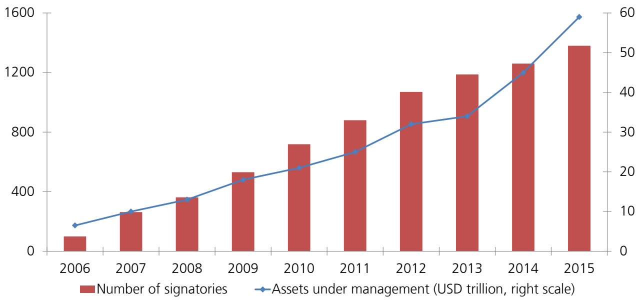
Source: Eurosif 2014

This increasing interest is based on significant investor initiatives, such as the UN Principles for Responsible Investment (UN PRI), with more than 1,400 signatories worldwide and assets of USD 59 trillion under management *(Figure 2).* These United Nations' principles for responsible investment, launched by Kofi Annan in 2006, are directed at institutional investors such as pension funds, investment funds, banks and insurers. Two of the key principles which signatories undertake to implement are:

- Inclusion of ESG topics in the investment analysis and decision-making processes (principle 1)
- Active shareholder behaviour and integration of ESG factors into shareholder policy and practice (principle 2).

In 2009 Zürcher Kantonalbank was Switzerland's first full-service bank to sign up to the UN PRI and initiate various activities, including the launch of the sustainability indicator in 2011, which intuitively displays fundamental sustainability risks in collective investments to promote transparency on the one hand and investor awareness on the other. This information is published as a standard for Swisscanto Invest's own funds and third-party funds in the bank's investment universe. With effect from 2015 the concept was extended to customer securities account analysis. The market is also heading in this direction: Morningstar and MSCI have followed suit from the start of 2016 with similar fund screenings.

Figure 2: Trend in signatories to the UN PRI



Source: UN PRI

1.2 Fiduciary duty

Increasingly, the current concept of fiduciary duty in asset management extends beyond traditional financial analysis to include consideration of ESG factors, as these have a positive impact on the risk/return characteristics of investments. The Swiss Association for Responsible Investments, recently founded by major institutional investors, also aims to promote integration of ESG criteria and engagement in order to fulfil the fiduciary management obligation. The founding members include the canton of Zurich's BVK pension fund, compenswiss (Swiss State old age and life assurance/disability compensation fund), comPlan, the Swiss Post Office's pension fund, Swiss Railways' pension fund, PUBLICA, the government pension fund, and insurance company Suva. Swisscanto Invest accepted the challenge of systematically incorporating ESG criteria into its investment processes - not just for sustainable investments, but for fundamental analysis of all companies in actively managed equity investments.

2 ESG integration

ESG integration is understood to mean any classic financial analysis approach which is enhanced by environmental (E), social (S) and governance (G) factors and which exploits the ensuing opportunities and risks to reach better investment decisions. An essential prerequisite for ESG integration is the availability of relevant information. The opportunities and risks derived from this can be incorporated quantitatively into valuation methods – when determining future cash flow, for example or cost of capital - or contribute to an investment decision in the form of qualitative input. The opportunities for implementation and the potential for new developments are considerable. Frequently, however, the use of ESG factors in the investment process has not been systematically organised to date and has therefore been less than transparent.

3 Risks at a glance

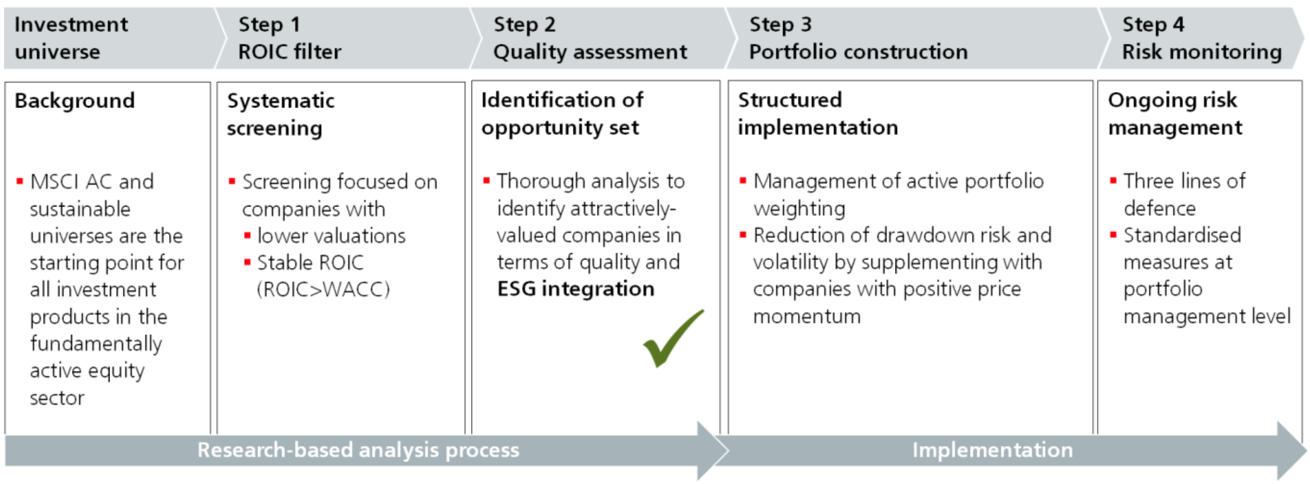
Swisscanto Invest systematically integrates ESG factors into the investment process for all traditional active equity investments. The investment philosophy's objective is to generate above-average yields by identifying businesses which are attractively valued, have a proven management track record and a high-quality business model. To achieve this, equities are subjected to a detailed fundamental analysis and collated into portfolios *(Figure 3)*. ESG factors are taken into account as part of the quality assessment (step 2), in order to identify substantive risks which have not yet been priced into the valuation.

Rapid availability, relevance and comprehensibility of the information are central to practical use by the twenty-plus analysts and portfolio managers. For this purpose, we have developed a proprietary tool which concisely brings together the relevant environmental, social and governance data for a company on one page *(Figure 4)* at the push of a button and which includes the following sections:

- A company's valuation in the environmental, social and governance dimensions (graphically and with key data), including warnings relating to critical aspects (section: ESG)
- Data relevant to corporate governance (section: Data for Management Track Record)
- Key performance indicators and questions about engagement activities at meetings with the company's management.
  (Section: Industry Specific KPIs and Questions for Management)

The *glossary* on page 8 onwards explains the individual indicators in further detail.

Figure 3: Investment process for active equity investments



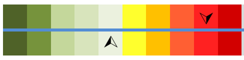
Source: Swisscanto Invest

Figure 4: ESG tool, case study - RWE AG

RWE AG ZKB-NAU: No GICS Industry Group 5510 - Utilities

Environmental - Social - Governance (ESG)

ESG-Indicator ⓘ *last update: 09.06.2016*



Company
Industry Group

Documentation

Environment ⓘ

Company
Industry Group

		Best		Worst
Carbon Footprint:	t CO2e/ USD Mio Sales	22	**2961**	12'401
Impact Ratio:	Env. Cost/Sales	0.2%	18.7%	361.9%
	Env. Cost/EBITDA		141.3%	

Issues: ⓘ

- Environmental Controversies
- High Environmental Impact Sector

Social ⓘ

Company
Industry Group

		Best		Worst
Reputation Index: (0 to 100)	current	0	**29**	53
Peak (0 to 100)	last 2 years		58	

Issues: ⓘ

- Workplace Safety
- Labor Practices
- Exclusion Criterium

Governance ⓘ

Company
Home Market

		Best		Worst
Governance Score: (0 to 100)	Home Market	100	**7**	1
	Global		**20**	
ISS Governance QuickScore: (10 to 1)		1	3	10

Issues: ⓘ

- Leadership (several issues)
- Business Operations (several issues)
- Shareholder Rights (Controversies)
- Compensation (Pay Performance Link, Other Issues)

Data for Management Track Record

Leadership

DP-Name	Flag	DP-Definition
Combined CEO/Chair		ⓘ
Independent Lead Director		ⓘ
Independent Board Majority		ⓘ
Executives on Board (other than CEO)		ⓘ
Unitary or Two Tier Board System		ⓘ
Independent Audit Committee		ⓘ
Independent Compensation Committee		ⓘ
Oversized Board (vs regional standards)		ⓘ Board Size: 20
Undersized Board (vs regional standards)		ⓘ
Overboarded Non-Exec Directors		ⓘ
Overboarded Exec Directors		ⓘ
CEOs from other companies on Board		ⓘ
Overboarded Audit Committee Members		ⓘ
Auditor Fees		ⓘ
Entrenched Board		ⓘ
Board Integrity		ⓘ
Board Attendance Failures		ⓘ

ISS Governance Scores (1 best, 10 worst)

DP-Name	Score	DP-Definition
ISS Governance QuickScore (overall)	3	ⓘ
ISS Board Score	4	ⓘ
ISS Audit Score	5	ⓘ
ISS Compensation Score	2	ⓘ
ISS Shareholder Score	9	ⓘ

Shareholder Rights

DP-Name	Flag	DP-Definition
One share, One vote		ⓘ
Controlling Shareholder		ⓘ
>20% of outstanding shares held by one shareholder		
Controlling Shareholder Concerns		ⓘ
Voting Rights Limits Shares Held		ⓘ
Poison Pill		ⓘ
Golden Shares		ⓘ
Annual Director Elections		ⓘ
Proxy Access		ⓘ
Bylaws Amendments		ⓘ

Compensation

DP-Name	Flag	DP-Definition
Executive Pay Disclosure		ⓘ
Advance Disclosure of CEO Performance Targets		ⓘ
CEO Pay (vs. Peers) Total Summary		ⓘ
CEO Pay Perks & Other Compensation		ⓘ
Say on Pay Policy		ⓘ
Equity pay aligned to share price performance		ⓘ
Pay aligned to better performance vs. Peers		ⓘ
Pay varies in line with annual operating performance		ⓘ
Dilution Concerns		ⓘ
Significant Vote Against Pay Practices		ⓘ
Clawbacks		ⓘ
Golden Hellos		ⓘ
Golden Parachutes		ⓘ
Severance Vesting		ⓘ
Salary Gap		ⓘ

Accounting & Reputation

DP-Name	Flag	DP-Definition
Accounting & Governance Risk (AGR)	Average	ⓘ
Revenue Recognition		ⓘ
Expense Recognition		ⓘ
Asset-Liability Valuation		ⓘ
Auditor Report Concerns		ⓘ
Internal Controls		ⓘ
Restatements or Special Charges		ⓘ
Accounting Investigations		ⓘ
Stakeholder Fraud and Abuse		ⓘ
Product Liability		ⓘ
Controversial Product Impact		ⓘ
Tax Evasion or Offshore Finance		ⓘ

Impact: Industry Specific KPIs and Questions for Management GICS: 551030 (Multi-Utilities) Internal Use Only

Key Performance Indicators

KPI 1 Energy mix / Greenhouse gas efficiency of production
KPI 2 Renewable energy: Percentage of installed capacity / Long-term Strategy
KPI 3 Occupational health & safety performance

Questions for Management

Business Ethics
- Does your company have a strong policy against bribery and corruption? Do you enforce these policies, with clear guidance to employees on how to behave appropriately when confronting an unethical situation? How do you ensure your whistleblower programmes are communicated through various channels to encourage employees to report violations without fear of retaliation?
- Do you have a company-wide safety management system that is compliant with OHSAS18001? What programmes have you put in place to formally track and disclose the health and safety statistics of employees?
- How do you assure compliance with operational saftety requirements. How do you actively and steadily improve your safety standards and transparency?

Environment
- Does your company have company-wide processes to assess biodiversity impacts for new projects? Are biodiversity experts and local stakeholders involved in this assessment?
- What percentage of your revenues/generating capacity comes from renewable sources of energy? How much are you investing in renewable forms of energy?

Environment
- Do you have programmes and goals in place that aim to increase energy efficiency and the utilization of green energy by end users?
- Does your company have a clear investment plan in place with regard to smart grids? Do you have guidelines concerning the safety of the user data that will be created by smart grids?

Source: Swisscanto Invest, Trucost, MSCI ESG, RepRisk, Asset4, Bloomberg

4 Case study – RWE

4.1 Red light for coal-fired power

We present the ESG tool using German energy company RWE AG as a specific example *(Figure 4).* By using the ESG indicator it is possible to quickly identify that RWE is at the red, i.e. problematic, end of the scale. The ESG indicator provides a simplified analysis based on a central criterion per dimension (environmental, social and governance)[1].

The Environment indicator highlights that the company's CO_2 emissions figures are high (in relation to sales); at RWE coal-fired power accounts for 40% of production capacity. Red warnings due to environmental controversies, such as environmental pollution from coal mining and dismantling costs for nuclear power stations not provided for, are also given.

The Social section includes workplace safety incidents. The reputation risk index shows a consistently high exposure to controversial topics, with a maximum value of 58 in the last two years.

Several aspects of RWE's Corporate Governance receive critical ratings. Detailed information in the lower part of the *figure* shows, for example, that in the Leadership section the Supervisory Board, audit and remuneration committees are insufficiently independent. In total 60 indicators on leadership, compensation, shareholder rights and accounting and reputation provide detailed information about potential risks where company management is concerned. The analyst is able to immediately identify and evaluate relevant ESG risks, whether these are already included in the corporate valuation, or whether there are fundamental reservations about the business model.

4.2 Understanding of key economic drivers

The understanding of a sector's economic drivers is decisive for successful investment. In many sectors ESG topics are extremely material. Drivers which are particularly relevant are amalgamated in another section covering the sector for the company being analysed. These are the following for the energy sector:

- The intensity of greenhouse gases generated by electricity production and targets in this regard
- renewable energies' share of production and the strategy in this regard, and
- business ethics and workplace safety management

The transition from fossil fuels or nuclear energy to renewable energies and the decentralisation of energy supply represent an enormous challenge for the electricity industry. RWE's business model is only sustainable if the company has clear objectives for helping to shape the transition from fossil fuels.

Specific questions from analysts and portfolio managers serve as a basis for discussing ESG factors relevant to the business model directly in meetings with the company's management. In RWE's case discussion of its business strategy regarding the transition from fossil fuels is required. In addition to active exercising of voting rights and submitting shareholder proposals at general meetings, direct dialogue with management or the supervisory board counts as a form of engagement, i.e. institutional shareholders' active influence on companies. Increasingly this not only addresses corporate governance topics, such as compensation, but also environmental and social themes. In this way investors call for improvements in companies which are neglecting their environmental and social risks and therefore also entering into a financial risk.

5 The systematic approach to better decisions

The systematic collection and processing of this ESG information adds another dimension to conventional financial analysis and leads to better investment decisions. By consistently integrating ESG analyses into the fundamental investment process, Swisscanto Invest by Zürcher Kantonalbank is emphasising the growing importance of ESG factors in successful investment.

[1] The indicators are explained in greater detail in the glossary which starts on page 8.

Glossary: indicators in detail

The environmental, social and governance indicators used in the ESG tool originate from the following sources:

- Trucost (assessment of the impact of corporate activities on the environment)
- RepRisk (assessment of companies' and projects' reputation risks)
- MSCI GMI (assessment of companies' corporate governance)
- Asset4 (ESG data for companies)

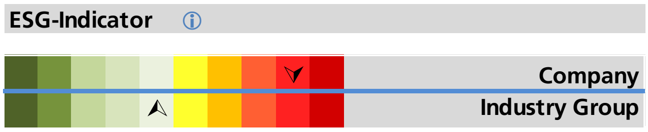
ESG indicator

The ESG indicator is a simplified analysis based on a central criterion per dimension (environmental, social and governance, each with one-third weighting).

Dimension	Criterion for companies
Environment	CO_2 emissions per sales
Society	Reputation risk indicator
Corporate governance	Corporate governance rating

The company's ESG indicator is shown on a 10-part scale within the GICS[2] Industry Group (above the blue line in *Figure 5*) and the GICS Industry Group ESG indicator (median value) relative to all companies (below).

Figure 5: ESG indicator



Source: Swisscanto Invest

Environment

Figure:

- Carbon footprint of Trucost company compared to the GICS Industry Group
- Global comparison of the GICS Industry Group's carbon footprint (median)

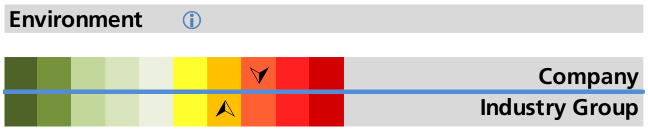
Data:

- **Carbon footprint** of the company (CO_2e emissions/sales, in tonnes/mn USD, provide by Trucost) and the best and worst company in the Industry Group
  CO_2e: CO_2 equivalent, a chemical compound's (relative) greenhouse gas potential indicates the extent to which a specified mass of a greenhouse gas contributes to global warming pro rata to carbon dioxide (CO_2).
  One kg of methane (CH_4) released is offset by a CO_2e value of 25, for example. This means that one kg of methane released into the atmosphere has the same impact on the climate as 25 kg CO_2.
- **Impact ratio** (environmental costs per sales and per EBITDA, in %): total of (external) environmental costs (CO_2, water, waste, etc.) in relation to sales. The total (external) environmental costs of business activity (direct costs: from operations, indirect costs: from the supply chain), relative to sales. The number indicates the possible extent of a company's potential environmental costs if political measures were to be used to implement the polluter-pays principle. The impact ratio makes it possible to compare companies' environmental pollution, regardless of their size, sector or region.

Issues:

- Environmental controversies
- High environmental impact sector
- Transparency of environmental data publication (emissions reporting)

Figure 6: Environmental section



		Best		Worst
Carbon Footprint:	t CO2e/ USD Mio Sales	22	**2961**	12'401
Impact Ratio:	Env. Cost/Sales	0.2%	**18.7%**	361.9%
	Env. Cost/EBITDA		**141.3%**	

Issues:

- Environmental Controversies
- High Environmental Impact Sector

Source: Swisscanto Invest, Trucost

[2] GICS = Global Industry Classification Standard

Social

The RepRisk Index (RRI) is a risk measure which quantifies criticism of a company and its exposure to controversial environmental, social and governance topics. It evaluates the source's relevance and the messages' frequency and content (severity, currency).

Figure:

Company and sector RepRisk Index. The values are broken down as follows:

RRI 0-25 = Scale 1-5
RRI 25-50 = Scale 6-7
RRI 50-75 = Scale 8-9
RRI >75 = Scale 10

Data:

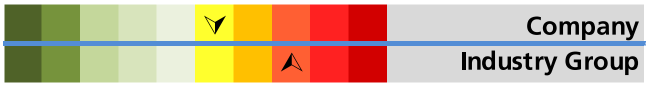
- Company's RepRisk Index (RRI): current value (0-100; 0 = no incidents)
- RepRisk Index peak for the last two years
- Red arrow if deterioration within last 30 days

Issues:

- Workplace safety
- Labour practices
- Customers
- Controversial products

Figure 7: Social section

Social ⓘ



		Best		Worst
Reputation Index: (0 to 100)	current	0	**29** ↗	45
Peak (0 to 100)	last 2 years		**58**	

Issues: ⓘ

- Workplace Safety
- Labor Practices
- Exclusion Criterium

Source: Swisscanto Invest, RepRisk

Governance

MSCI GMI evaluates the corporate governance of companies worldwide, with more than 150 key metrics from the fields of Supervisory Board, remuneration, ownership and control and financial reporting.

Figure:

- Company's MSCI GMI corporate governance score compared with the domestic market
- Domestic market median compared globally

Data:

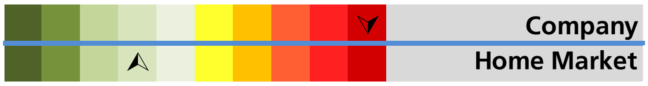
- MSCI GMI corporate governance score (0-100; 0 = worst, 100 = best company)
- ISS governance quick score

Issues:

- Accounting and governance risk (AGR; see below)
- Company management/Supervisory Board (leadership)
- Business operations
- Shareholder rights
- Compensation

Figure 8: Corporate governance section

Governance ⓘ



		Best		Worst
Governance Score: (0 to 100)	Home Market	100	**7**	1
	Global		**20**	
ISS Governance QuickScore: (10 to 1)		1	**2**	10

Issues: ⓘ

- Accounting & Governance Risk (AGR) - aggressive
- Leadership (several issues)
- Business Operations (several issues)
- Shareholder Rights (Controversies)
- Compensation (Pay Performance Link, Other Issues)

Source: Swisscanto Invest, MSCI GMI

The **AGR model** (Accounting & Governance Risk) evaluates the integrity of a company's financial reporting and corporate governance. Experience has shown that the AGR analysis can indicate risks such as group actions, accounting adjustments and intervention by the financial market supervisory authority, i.e. aggressive balance sheet accounting and risky corporate governance practices increase the probability of negative incidents.

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