

## The path to an in-house ESG score

Become independent from scoring by  
major financial service providers  
and rating agencies



actico | whitepaper

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## C Introduction

### The path to an independent ESG score

Investors and lenders are increasingly preferring companies that operate in an environmentally friendly, socially minded and decent manner. These can be identified by means of a good ESG score. However, more and more banks, fund operators, asset managers and investment consultants no longer want to rely on the scoring supplied by the major financial service providers and rating agencies, and instead want to use their own scoring system to meet customer requirements and to simultaneously stand out from the competition. ACTICO Platform has the necessary tools for implementing efficient workflows pertaining to ESG rating.

## C 1. ESG as an investment strategy

Sustainable investments are trending worldwide. Private assets in particular are increasingly being channelled into investment products with high environmental, social and governance standards. In Germany, this is developing rapidly: Around 8.9 billion euros from private investors flowed into sustainable funds and mandates in 2019. This equates to growth of 96 percent, according to the 2020 FNG Market Report. In the pandemic year 2020, the rise amounted to a further 21.4 billion euros – growth of 117 percent compared to the end of 2019. Across all segments, the 2021 [FNG Market Report](#) for Germany shows a total volume of 335.3 billion euros in sustainable investments. For the second time in a row, this is an increase of around a quarter compared to the previous year.



*Today our world is changing faster than ever before – economic, geo-political, and environmental challenges abound. However, taking shortcuts is not the pathway to achieving sustainable competitive advantage, nor is it an avenue toward satisfying customers. In times such as these, a company must invest in the key ingredients of profitability: its people, communities and the environment.*



Warren Buffett, CEO Berkshire Hathaway, in the „[Johns Manville 2011 Sustainability Report](#)“

**1.1.**

## In the beginning, there were ‘green’ investments

Previous movements involving ‘green’ investments constitute one of the starting points. More and more private investors count environmental and climate protection, renewable energy generation and resource-saving production processes among the worthwhile investment strategies for laying the financial basis of a greener economy.

This development has also been taken up on a larger scale. In 2006, the investor initiative ‘Principles for Responsible Investment’ (UNPRI) was founded in cooperation with the United Nations, its environmental programme UNEP and the UN Global Compact. Already here, it became clear that ‘green’ investments were not the only factor and social standards were also being taken into account. In 2015, the United Nations then decided on its Sustainable Development Goals for 2030. At EU level, noteworthy initiatives include the action plan for financing sustainable growth, which was adopted in 2018 and is being continued in the ‘European Green Deal’ investment programme, as well as the EU taxonomy regulation adopted in 2021, a transparency offensive that intensifies disclosure requirements and standardises reporting with regard to sustainability criteria.



**“ Sustainable development is more than a goal.  
It is our responsibility to our planet and  
future generations ”**

Antonio Guterres, United Nations

## 1.2.

## Better conscience and better returns

In addition to ecological standards (“environment”) and social standards (“people”), Warren Buffet mentions another aspect that determines the sustainability of a company: “communities”. This means responsible organisation of companies and their management principles, ruling out practices such as bribery and business with warmongers or with companies that engage in slave or child labour, exploit rural workers or illegally clear forests. These three (environmental, social and governance) factors are brought together under the acronym ESG.



The **ESG score** is a measure of the overall risk that a company faces in the three categories defined by **environmental**, **social** and **governance** concerns. The risk assessment incorporates up to 400 aspects that cover all areas of sustainable and responsible business operations. The more sustainably the business is run, the lower the risk of problems arising in these areas and having a negative impact on price development and/or earnings. Thus, a good ESG score means low overall risk.

Commitment to nature and people does more than just help to keep a clear conscience. Compliance with ESG criteria has also proven to be a financially successful investment strategy. Already in the past, it was shown that ESG investments yielded returns that were at least no worse, and sometimes even better, than the market average.

A January 2020 study by Bank of America (BofA) concluded that over the previous five years, the return on ESG investments had been up to three percent above the market average each year. As a result, “beating the benchmarks” appeared in first place on its list of the top ten reasons to look into ESG investments. For companies managed according to ESG criteria, a statistically significant risk reduction can indeed be seen in practice. The risk-adjusted dividend is correspondingly higher.

In addition, lower susceptibility, especially in times of crisis, reduces the volatility of such investments, as was shown once again during the corona pandemic. S&P Global Market Intelligence analysed 26 ESG-based ETFs and investment funds with managed assets of more than 250 million US dollars.

In the phase from the 5th of March 2020, which the WHO describes as the start of the global pandemic, to the 5th of March 2021, 19 of these funds had outperformed the S&P 500. These top performers gained between 27.3 percent and 55.0 percent, but the S&P 500 only rose by 27.1 percent.

**1.3.**

## The importance of ESG is growing

It is therefore no surprise that the ESG score is now also being taken into account in the field of corporate financing. ESG-linked loans, also known as sustainability-linked loans or positive incentive loans, are loans with financing costs linked to the company's sustainability performance: If the ESG rating improves, the costs fall – and vice versa. Moreover, a good ESG score boosts a company's reputation, not only among investors and lenders, but also when it comes to recruiting, from management level to specialists.

Private commitment, political pressure and the financial success of the ESG investment strategy have contributed to a broad 'ESG movement' in the financial world. Today, numerous products and indices evaluated on the basis of ESG criteria enable investors to direct financial flows into sustainable companies and to closely follow the development of this market segment. According to expert estimates, investments in sustainability could grow to around 30 trillion US dollars by 2030.

**2.**

## Methodological shortcomings in scoring

Be they stocks, bonds, various securities, property funds or ETFs – ultimately, all forms of investment represent financial resources that flow into companies. The increasing number of investors wanting to invest their money sustainably makes it necessary to evaluate and classify these financial products according to the companies or industries behind them, using the aforementioned ESG criteria. However, some of the ESG scoring available to date has shortcomings that can shake customer confidence.

**2.1**

### Different evaluation standards

When creating ESG scores, there are different strategies that follow the various investor strategies. Some follow the best-in-class principle and invest on the basis of implemented or planned measures. Here, objectives and programmes for increasing sustainability are incorporated.

The other strategy is oriented towards negative criteria and represents 'divestment', meaning withdrawal from certain industries. This means that companies whose business purpose includes processing tobacco or alcohol, gambling, the manufacturing or trading of weapons, or the extraction, processing or intensive consumption of fossil fuels cannot receive a positive ESG score.

There are also other options, such as considering which risks are unavoidable, which are manageable in theory and how many of them are actually managed in practice. Furthermore, various types of groups can be formed, within which, companies are ranked, be it by industry, size or region.

The first strategy puts BMW, for example, in a very favourable position. This car manufacturer has set itself ambitious goals for significantly reducing its carbon footprint: A decrease of 80 percent in production, 40 percent in operation and a further 20 percent in the supply chain are to be achieved by 2030, and electric cars are to make up at least 50 percent of new sales. With the second strategy though, BMW gets left by the wayside. After all, the vast majority of the vehicle fleet it is currently selling is designed to burn fossil fuels.

In another case, it was noticed that a manufacturer of ‘fast fashion’, meaning fashion items that are only worn a few times and soon end up in the rubbish, received a very good rating, even though this business activity is anything but sustainable. Closer research also revealed that minimum wage standards had also been breached.

Such incidents undermine trust in ESG scoring, as does the fact that different providers’ evaluations cannot be compared with one another. Incomprehensible evaluations raise suspicions of greenwashing, i.e. that marketing statements rather than the actual business activities lead to a positive ESG rating. Moreover, the differing evaluation standards and strategies can give the impression that the ratings are more or less arbitrary and therefore of little relevance.

## 2.2

## Inconsistent data pool

### 2.2.1 Corporate data

With the so-called CSR Directive (Directive 2014/95/EU on Corporate Sustainability Reporting), the EU obliges larger companies to regularly disclose business activities’ ecological and social aspects, which more or less correspond to the aforementioned ESG criteria. There are similar developments in other regions of the world as well, some on a voluntary basis, some mandatory. In the USA, this includes the rules of the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC) and the Sustainability Accounting Standards Board (SASB). In Japan, the Japanese Stewardship Code and Japanese Corporate Governance Code standards are relevant.

Even Chinese companies have now picked up on the ESG trend. In the past, reporting on ecological and social achievements was solely based on the requirements of whichever Five-Year Plan was currently applicable, but Chinese corporations are now increasingly following the recommendations of the Hong Kong Stock Exchange ESG Reporting Guide, so as to document their sustainability efforts in an internationally recognised manner.

### 2.2.2 Insufficient market coverage

The planned reform of the European CSR Directive, the first draft of which was presented in April 2021, is intended to significantly expand the group of companies concerned and to improve the quality, transparency and consistency of information to be reported in the EU area. But this is still up in the air. Moreover, a relevant proportion of companies will still not be required to disclose sustainability factors – neither inside nor outside the EU.

The major financial service providers focus on companies that are represented in the globally relevant indices. Small and medium-sized companies of lower significance receive no ESG score from MSCI, S&P, Refinitiv and others. This means that a significant part of the market remains unrated – and thus invisible to investors who are oriented towards sustainability.

### 2.2.3 Independent sources

In addition to the data that companies publish on a mandatory or voluntary basis and the information provided by all kinds of agencies and service providers, it has turned out that blogs, forums and social media channels can also be a treasure trove of company-related information, including some that can be relevant to the ESG score.

To date though, such information is rarely included in the assessment of a company's sustainability. This is because evaluation of such 'unstructured data' has long been considered too complex – in other words: costly and time-consuming. PanAgora Asset Management, an investment consultancy from Massachusetts, uses artificial intelligence (AI) to fill the gaps in a company's image. This not only enables a company's credibility to be checked, but also ensures that the information is extremely up to date. Act Analytics in Toronto and the team at HSBC Global Research in London, for example, also use linguistic analyses based on natural language processing (NLP) to evaluate profit announcements and news portals.

## C 3. The path to an in-house ESG score

Today, banks, fund operators, asset managers and investment consultants are faced with the question of whether they want to continue working with evaluations from specialised service providers or to work out their own ESG scoring system. According to a survey by SquareWell Partners, 30 of the 50 top asset managers in the USA are already working with their own corporate sustainability ratings systems.

The reasons are obvious: On one hand, there is a lack of trust in the service providers' ESG models, which sometimes lead to widely varying results and, on the other hand, to incomprehensibly good ratings for critical industries. Another big issue is that of how to stand out from the competition on the basis of ESG ratings that are often supplied by only half a dozen providers. Where standard ratings are used, standard recommendations are also made, and in investment behaviour, this monoculture dilutes returns. In contrast, in-house rating makes it possible to evaluate additional products, set distinct priorities and find attractive investment opportunities away from the mainstream.

In view of the practically unlimited IT resources that cloud providers make available at acceptable prices, along with the advances in the fields of process automation and user-friendliness, a broad group of users can now create their own ESG scoring systems economically, on the basis of a suitable platform..

### 3.1

## Different data sources

First of all, there is the question of which data is at all accessible. Linking existing data sources is only one part of the solution. This can be self-collected internal data, or raw ESG data from financial service providers whose data sources must be reliably integrated and taken into account in the decision-making process.

In addition, it is important to access up-to-date but unstructured data sources, such as sustainability reports, blogs, social media channels or agency reports. ACTICO Platform has all the tools necessary for this. It helps data scientists to consolidate data from different sources and formats, so that it is available for the subsequent steps and can be easily integrated. The system can be supplemented (via ACTICO Workplace) by a user-friendly user interface (UI) that enables any remaining information gaps to be filled manually.

### 3.2

## Modular rule set

The entire ESG scoring process is mapped in the context of decision modelling. This is where the business analysts and subject matter experts contribute their knowledge, so as to design suitable business rules for ESG scoring: deciding on the evaluation concept, which criteria are included with which weighting, whether there are exclusion criteria and much more.

For this purpose, ACTICO Modeler is available: a graphical developer tool, with which subject matter experts create the rule set using graphical symbols and links. It comprises individual rules, which in turn can be put together from sub-rules. In this way, employees' knowledge is made utilisable for the long term and is available for new use cases at any time.

From this, ACTICO Modeler generates executable program code that can be integrated into the existing application landscape using various APIs. Ultimately, there will always be occasions when the composition and weighting of the sustainability criteria will need to be adjusted: To adapt the ESG scoring to the current risk situation when external circumstances or the legal situation change, for example. Or to create customer-specific variants. Here too, ACTICO Platform provides important support for the management of variants and versions.

### 3.3

## Transparent machine learning

Wherever there has so far been no clear decision-making logic for data processing, machine learning comes into play. This can be used, for example, to generate relationships and decision-making paths from historical data, or to develop algorithms that automatically extract information from texts using NLP. These are merged with the business rules in a ModelOps repository, so that they are available as decision automation components

– integrated, for example, via web services or Java APIs, or executed as a batch job overnight. This means there is no longer anything standing in the way of largely automatic data processing for calculating the ESG score.

It is important that the components are managed in a legally compliant manner. The [legal framework for AI](#) presented by the European Commission in April 2021 stipulates that for important private and public services, such as those in the financial industry, the results of algorithms must be clearly traceable, the calculations logged and the algorithms themselves precisely documented. Accordingly, every decision with input and output is documented for auditors automatically, as are all changes to the rule sets: Who changed what and when? ACTICO Platform also allows the [Shapley values](#) to be disclosed in a chart for all ML algorithms used. This means that for each criterion that goes into the algorithm, the degree to which this input factor influenced the final result is calculated. In this way, users can fulfil the traceability obligation.

### 3.4

## Data-driven decision-making and reporting

If all products' ESG scores are available, the financial consultant can suggest suitable investment assets based on the customer's wishes – such as minimums for the total score or for each of the three E/S/G categories, exclusion of certain industries or a focus on others, and much more. Decision applications, which are also available in the form of graphical user interfaces in the browser, make it easy for the user to store the selection rules and to package the results in visually appealing reporting.

Here, the customer not only gets the ESG score listed, but also a visual evaluation that makes it easier for them to reach a decision. Disclosure of the influencing factors and their weighting increases transparency, along with the customer's trust in their financial consultant.

### 4

## Conclusion

Climate protection, environmental protection, fair working conditions and management boards that strictly adhere to the law – consumers are casting a more critical eye over companies. Missteps in these areas have loud echoes, and the furore in social media is often followed by a slump on the stock market. The ESG score, intended to assess a company's sustainability, conveys how great the risk of this happening is.

While more and more investors are focusing on sustainability, more and more providers of financial products are wanting to introduce their own ESG scoring system, so as to stand out and to fully cover the market they serve. This is because there are gaps in what the major financial service providers and rating agencies offer, and the results cannot always be explained.

Setting up an in-house rating system requires data, data and more data, alongside efficient processes, automated workflows and a portion of artificial intelligence. ACTICO Platform meets these requirements comprehensively. It offers effective support, ranging from data acquisition to data consolidation, the creation of data models, decision-making and the communication of results to customers. Efficient processes guarantee a quick ROI.

In addition to meeting these minimum requirements, ACTICO can also provide other advantages: Higher efficiency and lower error rates than with an Excel sheet, utilisation of employees' knowledge on a permanent basis, and a simplicity of use that makes it possible to master parts of the programming by using graphical tools instead of bringing in programmers. Banks, fund operators, asset managers and investment consultants can thus equip themselves for the – sustainable – trend towards sustainability.

## About ACTICO

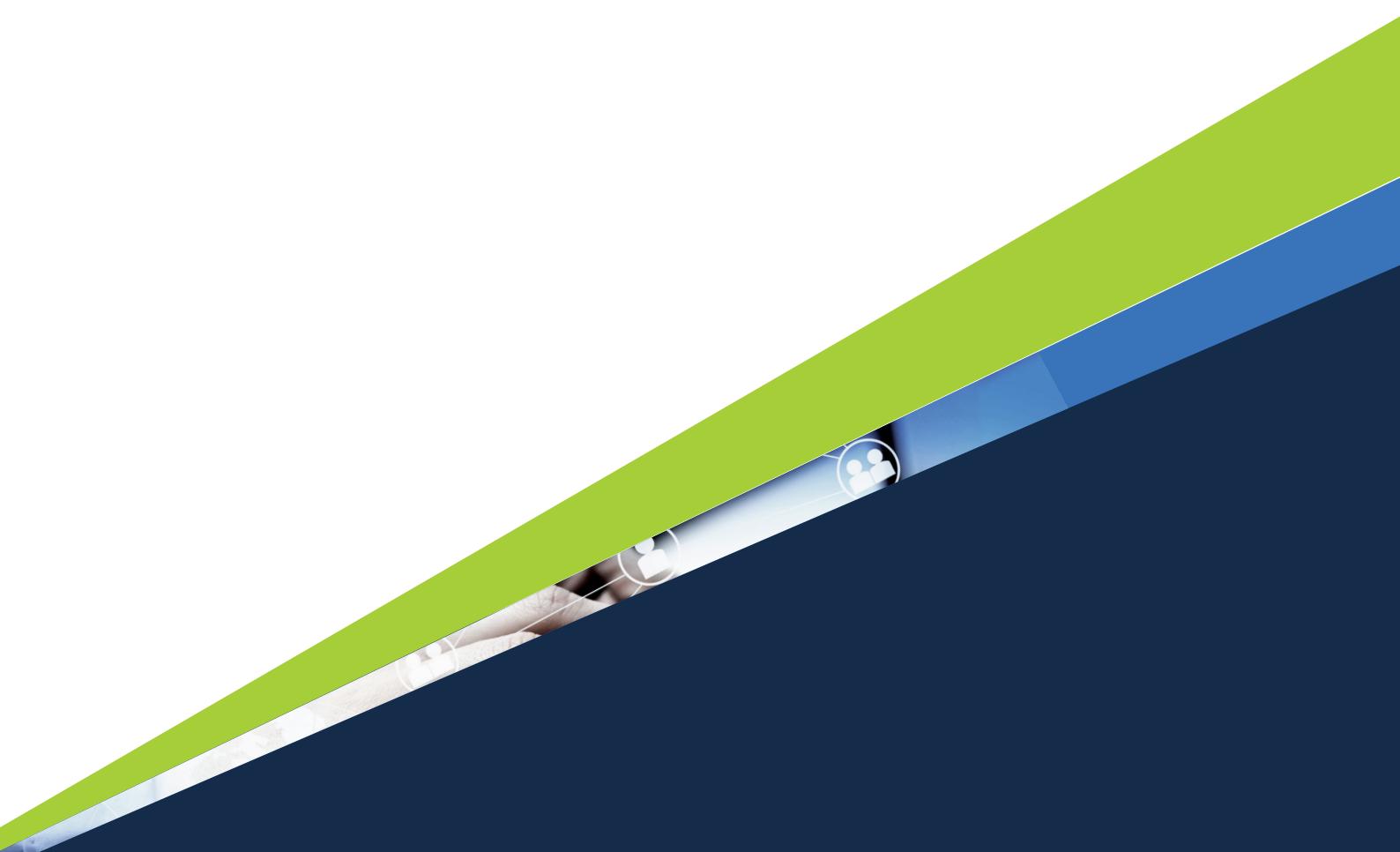
**We help companies around the world make smarter decisions that drive higher growth and gain competitive advantage.**

ACTICO is a leading international provider of software for intelligent automation and digital decision-making. The company provides world-class software and tools used in a variety of industries that improve day-to-day decision-making and end-to-end automation.

ACTICO's solutions are used to manage risks, meet regulatory compliance obligations, prevent fraud, improve digital customer loyalty and optimize operations. They combine human knowledge and artificial intelligence with powerful automation technology. The adaptive, cloud-based software helps companies gain agility, drive business excellence and achieve higher customer satisfaction.

With years of experience serving businesses worldwide, ACTICO has a proven ability to process large amounts of data and develop reliable, robust, and scalable applications. ACTICO technology is used by companies on almost every continent, from small and medium-sized businesses to Fortune 500 companies.

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