

Capital for the Transformation of the Automotive Industry

How investors and banks can take a leadership role in achieving the Paris climate goals in the automotive sector





Imprint

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Discussion Paper

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COVER PHOTO

The cover photo shows La Défense, the banking and office district in the west of Paris, with the Grande Arche, a "modern Arc de Triomphe," a symbol of the "triumph of humanity" and of the "hope in the future" where "people may meet freely" (Johan Otto von Spreckelsen, architect). La Défense is one of Europe's financial centres. It is located in the city where the international community agreed in 2015 to limit global warming to well below 2 degrees Celsius, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.

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Preface

Dear Readers,

With the Paris Climate Agreement, the international community of states agreed to limit global warming to well below 2 degrees Celsius – if possible to 1.5 degrees Celsius – compared to preindustrial levels. Achieving this goal requires a comprehensive decarbonisation of all areas of our economy and life. The automotive industry plays a prominent role in this because it is responsible for a significant share of global greenhouse gas emissions.

Large investments are necessary for the decarbonisation of the automotive industry. These can be financed only partially by the companies themselves. Manufacturers and suppliers are therefore particularly dependent on investors and banks. If global warming is to be effectively limited, investors must become enablers of decarbonisation and accelerate the change in the automotive sector.

How can this potential of investors and banks be harnessed? Above all, it is important that they are sufficiently informed about the extent to which the business strategies of their "clients" – the car companies – can contribute to compliance with the Paris Agreement. Only based on solid information can investors and banks persuade manufacturers and suppliers to pursue a Paris – compatible path.

However, responsibility for this does not lie solely with the investors and banks. It is the task of policymakers to lay the foundation that enables all relevant stakeholders to contribute to achieving the international climate targets. To this end, policymakers must establish a clear regulatory framework that is as long-term as possible and covers all the sectors, including the automotive industry. In this way, companies, investors and banks alike gain planning security and can invest in the transformation process.

In this paper, we focus on the potential of investors and banks to play a leading role in the decarbonisation of the automotive industry and provide initial recommendations on how this potential can be realised.

We wish you a stimulating read and look forward to a further debate.

Christian Hochfeld

Executive Director of Agora Verkehrswende on behalf of the Agora Verkehrswende Team Berlin, 22 November 2022

Results and recommendations

Investors and banks have the potential and the economic interest to take on a leading role in the transformation of the automotive industry.

Investors invest where they see profitable business models with the lowest possible risks. Climate protection is gaining importance as an evaluation criterion. This applies not least to the automotive industry, whose products have so far contributed greatly to global warming. Large amounts of private capital are necessary for the transformation of the automotive industry. Therefore, capital providers who want to hedge their investments against climate risks can exert a great influence and accelerate the transformation of the automotive sector.

Policy lays the groundwork for investors and banks to fulfil their leadership role by requiring automotive companies to report on climate change.

The Paris Climate Agreement is increasing the pressure on politicians and financial market regulators to move markets in the direction of climate protection. One important instrument is the reporting requirements for companies. In the future, the reports will show whether a company's business model and strategy meet the requirements of the Paris Climate Agreement. Beyond the reporting obligation, policymakers are developing climate-oriented framework conditions to create long-term planning and investment security for all relevant actors.

Automotive companies report transparently on the climate orientation of their business model and thus secure their access to capital.

Climate policy requirements for automotive companies are increasing worldwide – but not at the same pace everywhere. In order to protect themselves from these regulatory risks and to remain competitive in the long term, automotive companies are aligning themselves early with the Paris Climate Agreement. They prepare their strategies and measures transparently. They combine sustainability-related and financial factors in their risk analyses. Based on this information, the capital markets can direct their investments specifically towards climate-friendly business models. Access to capital is only possible for automotive companies with transparent climate reporting.

Rating agencies use company reports to assess the contribution of automotive companies to compliance with the Paris Climate Agreement now and in the future.

So far, climate-related risks have often been underestimated in credit assessment and credit ratings and excluded as "non-financial." In addition, company reports and ratings concentrate on the current financial year and at best compare them with previous ones. Only with an integrated assessment of the financial and sustainability factors can agencies give the capital markets a realistic picture of the potential investment risks. This also includes information on how companies will align themselves with the Paris Climate Agreement in the future.

A simplified assessment procedure is being developed for small and medium-sized enterprises in the automotive sector so that they too become attractive for climate protection capital.

Currently, business valuations primarily cover large companies. Unlike large companies, small and medium-sized automotive companies often do not have the processes and structures needed for positive valuations. They also have less capacity to respond to extensive and often diverse information and reporting requirements. However, as part of the transformation, they will also have to invest a lot in climate-impacting innovations and new business models. Therefore, simplified assessment procedures are needed for small and medium-sized enterprises in the automotive sector.

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planning security.

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List of abbreviations

ACEA Association des Constructeurs Européens d'Automobiles

(English: European Automobile Manufacturers' Association)

BaFin Bundesanstalt für Finanzdienstleistungsaufsicht (English:

Federal Financial Supervisory Authority)

BMWi Bundesministerium für Wirtschaft und Energie (English:

Federal Ministry for Economic Affairs and Energy)

CSRD Corporate Sustainability Reporting Directive

DNK Deutscher Nachhaltigkeitskodex (English: German Sustaina-

bility Code)

ESAP European Single Access Point

ESG Environmental, Social, Governance

EU European Union
GHG Greenhouse gas

GRI Global Reporting Initiative

IEA International Energy Agency

IPCC Intergovernmental Panel on Climate Change

KfW Kreditanstalt für Wiederaufbau (English: Credit Institute for

Reconstruction)

NDCs Nationally determined contributions

SBTi Science Based Targets initiative

SFDR Sustainable Finance Disclosure Regulation

SMEs Small and medium-sized enterprises

TCFD Task Force on Climate-Related Financial Disclosures

UN United Nations



Investors and banks play a central role in financing the transformation.

The Paris Climate Agreement of 2015 defines climate targets that are as necessary as they are ambitious. The binding international goal of limiting the increase in the average global temperature to well below 2 degrees Celsius, if possible to 1.5 degrees Celsius, and achieving greenhouse gas (GHG) neutrality after the year 2050 requires a comprehensive decarbonisation of all economic and social activities. More and more countries are now setting climate neutrality targets. The European Union (EU), China, the USA, Japan and South Korea are planning to achieve net zero emissions by 2060 at the latest. Germany has committed to becoming climate neutral by 2045. More than 40 countries worldwide want to achieve climate neutrality by 2050 – these countries are responsible for around three-quarters of global CO₂ emissions.¹

Transport sector and automotive industry are the focus of climate policy because of their high GHG emissions

Motorised road transport makes a significant contribution to energy-related GHG emissions with a global share of around 12 percent. Throughout its value chain, the Volkswagen Group alone is responsible for ${\rm CO_2}$ emissions equivalent to those of Australia.

Accordingly, more and more countries are discussing phasing out the internal combustion engine or have already decided to do so. Currently, almost 80 percent of petrol and diesel cars Germany exports go to countries that do not want to register any new combustion engine vehicles from 2040 at the latest. The sales markets for internal combustion vehicles will therefore shrink considerably in the coming years. Electric vehicles will take their place. Electromobility is considered an important lever for achieving the Paris climate goals in the transport sector.

- 1 IEA (2021)
- 2 IEA (2019)
- 3 Agora Verkehrswende (2021)
- 4 Agora Verkehrswende (2022)

Paris compatibility in the automotive industry, however, encompasses more than the electrification of transport. GHG emissions must be brought close to zero along the entire value chain, from the extraction of the required raw materials to the recycling of the vehicles within the framework of a circular economy. Therefore, the decarbonisation of supply chains is increasingly becoming a political priority.

Decarbonisation requires massive investments in the conversion of industry

The European Commission estimates that 180 billion euros in additional investments are needed annually to achieve its 2030 energy and climate targets.⁵ In doing so, it is counting on the involvement of the financial sector, which should ensure that more climate-neutral, energy and resource-efficient projects are launched as well as in the field of circular economy. A recent study concludes that an additional 100 billion euros, or 2.5 percent of Germany's gross domestic product, must be invested per year in order to achieve the country's climate protection goals for 2030. In total, the investment required amounts to 860 billion euros – 220 billion euros for transport alone.⁶ Currently, the European automotive industry invests around 60.9 billion euros per year in research and development, much of it specifically in decarbonisation.⁷

European requirements for the sustainability of investments are increasing

According to the European Commission, the investments needed for the decarbonisation of companies are to be financed primarily by private capital. In order to reorient capital flows towards sustainable investments⁸,

- 5 European Commission (2019)
- 6 BCG (2021)
- 7 ACEA (2020)
- 8 In the context of this study, capital flows for financing projects in the real economy are defined as investments. "Investments" refer to the investment of capital in corresponding assets (e.g. shares) or investment products (e.g. funds).

the Commission published the EU Action Plan for Financing Sustainable Growth in March 2018. In this context, the definition of sustainable investments is of paramount importance. With its taxonomy for sustainable economic activities, which came into force in July 2020, the EU has started to define the technologies that it considers sustainable on an industry-specific basis. The taxonomy also includes technical requirements for numerous transport sectors, such as road freight transport, passenger car transport, rail transport and inland waterways, as well as infrastructure for climate neutral road transport and public transport. Sustainable investments are those that are made in these technologies.

Because private investors in particular have so far known little about the existence of corresponding investment opportunities, an advisory duty for advisors in banks and for asset managers was introduced in early August 2022. In the future, they must actively ask investors whether they want to take the climate and other sustainability aspects into account in their investment. At the same time, it should be easier for investors to assess the quality of sustainable investment products.

To this end, the Commission has defined within the framework of the Sustainable Finance Disclosure Regulation (SFDR) which information providers of investment products that advertise the sustainable quality of their products or promise a positive climate or sustainability-related effect must provide. It has also been determined how this information is to be communicated.

In addition to the goal of redirecting investments, the European Commission is pursuing two other goals with its action plan.

On the one hand, capital market actors should integrate sustainability risks more strongly. In particular, the systematic integration of climate risks should minimise risks to the stability of the entire financial system and to the value of investments and financing (see Thesis 2).

On the other hand, the obligation for companies to disclose sustainability-related information is to be expanded; in this way, long-term sustainable corporate governance is to be strengthened. To this end, the Commission is planning to expand the reporting obligation

EU taxonomy for sustainable economic activities

The taxonomy is a central building block of the EU Action Plan on Financing Sustainable Growth. Its main objective is to channel capital into sustainable investments so that the Paris climate goals can be achieved. What constitutes sustainable investment from the perspective of the European Commission is defined within the framework of the EU taxonomy. It identifies the conditions under which an economic activity – for example the production of cement, the construction of a building or the transport of goods by road – can be classified as "sustainable." Any investment in such an activity is considered sustainable.

Overall, the EU taxonomy defines four conditions that an economic activity has to meet to qualify as sustainable: It must contribute positively to at least one of the six climate and environmental objectives9 defined in this context and at the same time must not significantly harm any of the other objectives. This condition is referred to as the "do no significant harm" rule. In addition, the activity must meet specific technical criteria and must be carried out in compliance with minimum social standards, such as the core labour standards of the International Labour Organisation. The EU taxonomy is the first legally binding definition of sustainability.

9 cf. European Commission (2022a): The EU's six environmental goals are climate change mitigation; adaptation to climate change; sustainable use and management of water or marine resources; transition to a circular economy; pollution prevention or control; and protection and restoration of biodiversity and ecosystems.

for companies with the Corporate Sustainability Directive (CSRD, see Thesis 7).

Sustainability requirements are also increasing for banks

In addition to investors, who provide companies with equity and debt capital through their investments, banks also play a central role in financing decarbonisation.

Loan financing is particularly important for the automotive industry in Germany, as most companies are small and medium-sized and do not have access to the capital market (see Thesis 6).

Banks are also affected by the EU action plan. They must take into account further regulations on the consideration of climate risks in their risk management practices. These rules are defined, among others, in the German Federal Financial Supervisory Authority's¹⁰ information sheet on dealing with sustainability risks. Investments in sectors and companies that are associated with particularly high climate risks will therefore no longer be financed by banks in the future, or only with a high-risk premium.

In order to be attractive to capital providers, rationally acting companies will strive to assure investors and banks that the capital they provide is not exposed to increased climate risks.

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Car manufacturers offer protection against climate-related risks by aligning themselves with the Paris Climate Agreement.

There is less and less time left to comply with the Paris Agreement.¹¹ However, the nationally determined contributions (NDCs) communicated so far are not sufficient to achieve the Paris climate targets.

Therefore, the pressure will increase on politicians and the regulatory authorities responsible for the financial market to create the necessary climate policy framework conditions. The shorter the remaining timeframe for meeting the Paris climate targets, the more consistently the aforementioned actors will have to apply regulatory and tax policy measures, for example, in order to accelerate the decarbonisation of companies and achieve the Paris climate targets.

Globalised value chains are particularly affected by climate risks

Regulators face the challenge of shaping national climate policies at a pace similar to that applied to the decarbonisation of global markets and value chains. While it is desirable that countries form alliances and agree on ambitious climate policies, experience shows that not all relevant countries will belong to such climate clubs. Regulatory bodies will therefore also have to take global developments into account in order not to jeopardise the competitiveness of national industries. This mixture of factors will lead to a situation in which policymakers in many parts of the world will have to take action at different times in the short term. Due to their global supply chains and markets, automotive companies are particularly affected. They will have to deal with a multitude of climate legislation in numerous countries, which poses a particular challenge for them.

Companies are confronted with the financial risks of climate policy – and so are investors and banks

Two aspects in particular are relevant here, both from a company perspective and from the point of view of investors and banks providing capital. On the one hand, short-term changes in the regulatory framework can harbour the risk of stranded assets. These are assets, for example production facilities or raw material stocks, whose value decreases due to external influences – sometimes even unexpectedly and at short notice. Regulatory measures in the context of climate policy can also be such a trigger.

On the other hand, regulatory measures and the way companies deal with them can influence the business and earnings opportunities of companies and thus their share price development as well as their ability to pay dividends and interest. This not only affects the ability of companies to finance investments from their own funds, but also the attractiveness of the companies' securities for investors and the risk assessment by banks. However, for example, declining investor demand for the corporate bonds of a particularly climate-damaging company can lead to the company having to pay a higher interest rate, which can make the bonds more attractive to those who do invest – at least in the short term.

A consistent focus on the Paris climate targets offers protection

Protection against regulatory risks is provided by a consistent alignment of the business model and the corporate strategy with the Paris climate targets. Instead of adapting to regionally or nationally different short-term interim regulatory objectives, the long-term climate protection targets should be the framework of action for companies. In doing so, companies must be able to assume that the states will consistently pursue the goals of the Paris Climate Agreement.

Investors and banks are increasingly taking into account the extent to which the companies they provide equity and debt capital to consider the physical and regulatory climate risks in a proactive and comprehensive manner. The reason for the heightened attention to corresponding risks is first of all the tightening regulatory requirements for dealing with climate risks, such as those specified in the BaFin information sheet. 12

("willingness to transform"). They also take into account whether the measures implemented by the companies are suitable for achieving their own strategic goals and also those of the Paris climate agreement in the long run.

In addition, it is also in investors' and banks' own interest to take these risks into account in their investment and financing decisions, as otherwise there is a risk of financial losses. Finally, societal expectations are also rising: investors and banks are increasingly answerable to a critical public for their investments' and financing decisions' compliance with the requirements of the Paris Climate Agreement. If investors and banks refuse to meet this expectation, they face a loss of social and especially political trust.

From the perspective of investors and banks, two aspects are relevant. First, whether the business model of a company can be decarbonised in principle and at an economically feasible cost ("transformation capability"). If not, the investors and banks will withdraw from financing. Numerous investors and banks already exclude companies from investment or financing that are active in coal mining or coal-fired power generation.

Second, it is relevant for investors and banks whether the companies have consistently geared their strategy towards achieving the Paris climate goals and have underpinned this with concrete goals and measures

12 BaFin (2020)

Physical climate risks

In addition to regulatory risks, physical climate risks are also relevant. Physical risks arise where the climate crisis leads to a permanent change in weather conditions and, for example, heavy rainfall, flooding, drought or strong winds occur. Such events can affect the production sites of automobile manufacturers and their suppliers as well as the global logistics chains. Automobile companies are obliged to record the changing weather conditions both at their own global production sites and at the sites of their suppliers, assess the risks involved and react to them as needed.



The more investors and banks base their decisions on climate criteria, the stronger their role becomes as drivers of decarbonisation.

With its action plan for financing sustainable growth, the European Commission wants to make the financial sector an "enabler" of corporate decarbonisation. By integrating climate criteria into investment and financing decisions, investors and banks are increasingly taking on another role – that of a driver of decarbonisation.

Transformation capability and willingness are "gate-keepers" for capital

The more investors and banks consider the companies' transformation capability and their willingness to protect their own capital, the more companies' access to capital will depend on whether they meet climate-related requirements. Companies that are not able and/or willing to transform have higher financing requirements and suffer competitive disadvantages – if they can still find financing partners at all and are not completely excluded from financing.

Anchoring climate-related criteria in the risk management practices of investors and banks thus not only protects financial market actors from the financial risks of the climate crisis and climate policy, but also has a risk-reducing effect in that companies must actively address the corresponding risks if they want to ensure access to equity and debt capital.

Green financing products have a particularly high driving force

Investors and banks have various options at their disposal to encourage companies to align their business models and strategies with the Paris Agreement. Financing has a particularly strong effect in this context, where the conditions, for example the interest rate to be paid by the company for loans, are linked to the achievement of climate goals. This incentivizes the correspon-

ding orientation of the companies. On the lending side, these include green loans and ESG-linked loans¹³.

In the case of green loans, a climate or environment-related purpose is specified and the loan is often provided by the banks with comparatively favourable conditions. Promotional loans from KfW and other banks are also very important in the financing of such projects because they provide such loans for climate-related investments at particularly favourable conditions.

In the case of ESG-linked and comparable loans, the conditions are linked to the achievement of climate or other sustainability targets agreed between the bank and the company. This can be, for example, a reduction in GHG emissions or an improvement in the ESG rating of the borrower by one of the established ESG rating agencies. Provided that the borrower achieves the agreed goals, it benefits from more favourable loan conditions. The current developments on the interest rate market with rising credit rates make this construction even more interesting from a company's perspective.

There are also comparable structures on the bond side. ¹⁴ Companies that issue green bonds invest the capital in precisely defined climate protection and environmental projects, such as wind farms or energy-efficient buildings. With ESG-linked bonds, the terms of the bonds are linked to improvements in the sustainability performance of the issuer. The basic idea is that issuers pay investors less interest if the climate or sustainability

- 13 The English term "ESG" (Environment, Social, Governance) stands for environment, social and good corporate governance. It is often equated with "sustainability".
- 14 cf. Bundesbank (2022): A bond is a security used for debt financing where the interest rate, term and repayment are fixed - ultimately a long-term loan. Bonds can be traded on the bond market.

target defined when the bond was issued is achieved. Here, too, issuers have a financial incentive to achieve the agreed targets.

Investors have additional opportunities to actively influence companies through engagement strategies

Investors who have acquired shares in a company ("shareholders") can influence the strategic orientation of the company, for example by using their voting and speaking rights at the company's general meetings. Various asset management companies have already defined in their voting guidelines that they can refuse to grant discharge to members of the executive board and the supervisory board of companies if they consider their climate strategy to be inadequate. Investors can also exert direct influence in bilateral dialogue with the companies and actively influence their climate strategy.



Based on integrated company valuations, capital providers make robust investment and financing decisions.

Climate, environmental and social aspects have so far played a rather minor role in conventional credit ratings and credit assessment. These ratings aim to provide investors with an informed assessment of the issuers' ability to meet their financial obligations arising from the raising of capital. This includes, for example, the ability to pay the interest on a corporate bond and to repay investors their capital at the end of the bond's term.

Since ESG aspects, for example the company's handling of the causes and consequences of the climate crisis, can have a manifest influence on business success and thus on the company's ability to pay and receive dividends, ratings that do not or only insufficiently take into account these ESG factors – which are also misleadingly referred to as "non-financial" – only provide an incomplete picture of the risk and opportunity situation of a company. They therefore lead to incorrect decisions about the appropriate risk premium: both the assessment of the risk-adequate interest rate on loans and bonds and the assessment of the probability of default on the payment of interest or repayment of loans and bonds can be incorrect.

Only an integrated company valuation provides a comprehensive basis for the assessment of financial risks and opportunities

A significant improvement can be achieved through an integrated company valuation, in which elements of conventional credit ratings and credit assessment are combined with economically relevant criteria from ESG ratings. Only such a holistic analysis of the risks and opportunities of companies provides a robust basis for financing and investment decisions.

Combining credit and ESG ratings in an integrated company valuation is a challenge, however, because the two types of ratings have so far differed significantly from each other. Not only do these ratings have different

clients, they also use different methods of information collection, preparation and assessment. Methods and processes must therefore be aligned in order to ensure the connectivity of ESG ratings to the systems of investors and banks. Cultural differences between financial and ESG analysts must also be taken into account, especially when specialised ESG rating agencies are taken over by conventional agencies.

ESG rating agencies will continue to provide additional specialised company ratings in the future

Given the large global client base and financial strength of credit rating agencies, it is likely that integrated corporate rating will be achieved by integrating ESG criteria into conventional rating rather than vice versa. For existing ESG rating agencies, the integration of ESG factors into conventional ratings does not necessarily mean that their analyses are no longer in demand. As integrated corporate rating will have a strong financial focus, other information interests addressed by ESG rating agencies will not be served by them. These include information on compliance with international standards, such as the principles of the UN Global Compact, which are particularly relevant for value-oriented investors, such as church investors and foundations.

ESG ratings and rating agencies

Ratings and rankings of ESG rating agencies are an important source for the assessment of companies' climate-related goals and measures. These agencies specialise in assessing companies on how they deal with sustainability-related challenges and how they comply with international standards, such as the ten principles of the UN Global Compact. The best-known ESG rating agencies include ISS ESG, MSCI ESG, Sustainalytics and Moody's ESG.

The agencies evaluate the sustainability-related structures and measures of the companies on the basis of comprehensive, mostly sector-specific catalogues of criteria (which often number hundreds). The main source of the ratings is the sustainability reports published by the companies.

The agencies sell ESG ratings to institutional investors15 as well as banks and asset managers, who want to take into account how individual companies deal with ESG issues that are particularly relevant in their view when investing capital or designing sustainable investment products. Compared to conventional credit rating agencies, ESG rating agencies are more independent in their assessment of companies. Their target group is the users of the ratings and not – as is usually the case with conventional credit ratings – the companies themselves.

15 cf. Bundesbank (2022): "Institutional investors are institutions that are active on the capital market alongside private investors (retail investors). These include, for example, banks, investment funds, insurance companies or public sector bodies. Since institutional investors are able to place large-volume buy and sell orders due to their size, they can often noticeably influence events on the financial markets with their investment decisions."



Integrated company valuations are future-oriented and transparent.

ESG ratings as a central building block of an integrated corporate assessment on climate-related risks and opportunities of companies still focus strongly on developments in the past. This is also due to the fact that the sustainability reports published by companies are a central, in some cases even the only, source for documenting and evaluating their corresponding goals and measures. Just like the annual reports, these reports also focus strongly on the past business or the previous reporting year. The sustainability reports contain information on structures and processes for identifying and managing climate-related risks as well as data on the company's energy consumption and greenhouse gas emissions. However, information is usually missing on the extent to which these structures and processes would have to be adapted in the future in order to contribute to compliance with the Paris Climate Agreement.

The assessment of Paris compatibility requires a more forward-looking approach

It is possible to draw conclusions from past developments as to whether a company is pursuing a systematic approach in dealing with the risks and opportunities of the climate crisis and has been able to make progress. However, with regard to the question of whether a company has consistently aligned its business model and corporate strategy with the goals of the Paris Climate Agreement, such an analysis based on past developments only provides a very limited basis for evaluation and decision making.

The assessment of Paris compatibility requires a more forward-looking analysis of the companies' goals, strategies and measures. This involves assessing whether the goals, strategies and measures they communicate are suitable for achieving comprehensive decarbonisation – and how robust the companies' statements are. If they take into account recommendations and guidelines for the derivation of science-based targets, such as those defined by the Science Based Targets initiative (SBTi), this speaks for the reliability of the statements.

Assumptions of the rating agencies must be transparent so that their assessments are comprehensible

Targets, strategies and measures to achieve the Paris climate goals can be assessed differently depending on the assumptions and assessments made, for example on the relevance of individual drive technologies in the future. In order to be able to understand the assessments of the planned decarbonisation paths of companies, such fundamental assumptions must be transparent and comprehensible for banks and investors. Only in this way can they compare the assumptions and assessments of the rating agencies with their own perceptions and thus check the informational value of the ratings, particularly with regard to their ability and willingness to transform.

However, the demand for a more transparent rating methodology and processes must also take into account that the rating agencies are private companies, for which the method – in particular the rating logic and the weighting of the individual indicators – as well as the design of the rating process constitute a central distinguishing feature in competition. Just as technical patents are trade secrets of other companies, the evaluation methods are trade secrets of ESG rating agencies. Nevertheless, ratings can only fulfil their purpose – the provision of reliable information on climate-related risks and opportunities for investors – if it is comprehensible how the ratings are arrived at and what assumptions they are based on.

Competing concepts promote the quality of climate-related analyses

Provided that the rating methods and processes are sufficiently transparent, it is not necessary to standardise the rating agencies' rating methods. Such standardisation is regularly requested by both companies and investors. Companies expect a reduction in the effort required to process the corresponding enquiries from ESG rating agencies and other ESG analysts – investors find it attractive to receive a uniform assessment of corporate

sustainability. However, it is precisely the diversity of approaches and the resulting competition between the concepts for the best analysis and assessment of the companies' ability and willingness to transform that can improve the quality of climate-related analyses by ESG rating agencies overall.



Simplified methods and processes are used to evaluate small and medium-sized automotive companies.

As mentioned above, ESG ratings are currently used primarily by institutional investors and asset managers to implement sustainability-related investment strategies or to design and launch corresponding investment products. When deciding which companies to rate, ESG rating agencies are guided by the information interests of these clients. On the one hand, the companies rated are active on the capital market, their shares are listed on the stock exchange, for example, or they issue corporate bonds. Since many investors base their investment universe on important stock and bond indices¹⁶, the companies listed in these indices are particularly interesting for ESG rating agencies. They assume that they can sell an ESG rating of a company that is relevant for numerous investors more frequently than ratings of companies in which only a few investors are interested. Against this background, the universes of ESG rating agencies include in particular the shares of large companies 17 listed in important equity and bond indices, such as the MSCI World. The universe of each agency includes between 10,000 and 20,000 companies worldwide.

ESG ratings' valuation methodology is strongly geared towards international blue chips

The focus on capital market-oriented large companies has two consequences in particular. On the one hand, corresponding analyses of the ability and willingness of the majority of smaller companies to transform are not available. Of the approximately three million companies in Germany that are subject to turnover tax, only a few hundred are analysed and rated by ESG rating agencies, including companies listed on the DAX 40, the MDAX

16 The investment universe describes all investment opportunities from which a portfolio manager can choose when making investment decisions.

and the TecDAX. For the most part, corresponding analyses are currently not available for small and mediumsized enterprises (SMEs), which are highly significant in the automotive industry.

On the other hand, the assessment methods and processes of the ESG rating agencies are strongly geared towards large international companies. Thus, a large proportion of the ESG criteria used focus on whether formal structures and guidelines exist; corporate sustainability reports are a central source for the preparation of the ratings. In SMEs, such formal building blocks of climate or sustainability management are often lacking and only a few companies publish their own sustainability reports. Although the currently discussed introduction of the CSRD would significantly expand the reporting obligation, which would then affect around 15,000 companies in Germany and around 49,000 in Europe, even this expansion would only cover a fraction of the total number of companies (see Thesis 7).

Banks develop their own assessment approaches for small and medium-sized loan customers

A lack of data and assessments of the climate strategies of SMEs poses problems for banks in particular, which should and want to provide loans for the transformation of such small and medium-sized automotive companies. They are essential providers of capital for SMEs. Therefore, many banks are currently working on their own approaches for capturing and assessing the climate-related risks and opportunities of their small and medium-sized lending customers. While there are various regulatory frameworks that banks must take into account in this context - for example, the requirements from the taxonomy regulation - no standard has yet been established for surveying and assessing companies' ability and willingness to transform. In this context, banks also face the challenge of taking into account the special features of an assessment of SMEs, in particular

¹⁷ So-called blue chips: high-turnover shares of large, internationally active companies.

the lack of formal structures as well as comprehensive sustainability reporting, and of developing suitable approaches.

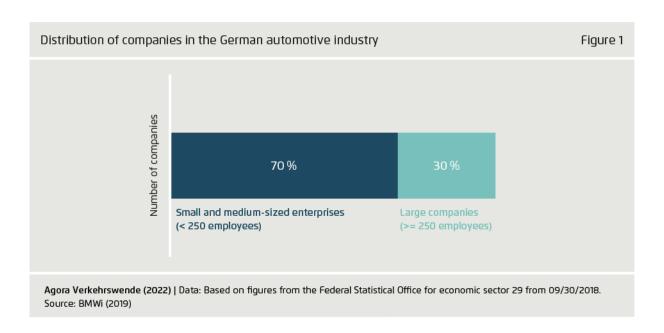
Standardisation of rating approaches reduces the burden on companies and protects against a race to the bottom Since there is no standard for surveying and assessing the transformation capability and willingness of SMEs, banks sometimes arrive at different results when examining and assessing individual companies – as do ESG rating agencies. This does not necessarily have to be viewed negatively, and here, too, a competition of approaches can lead to an improvement in the quality of climate-related analyses.

However, unlike ESG ratings for investors, the subjects of this assessment are SMEs with limited resources to respond to relevant inquiries. This means that a standardisation of the assessment approaches could reduce the effort for SMEs. In addition, a uniform approach by banks to assessing companies' ability and willingness to transform would have the advantage that companies would not be able to select the bank with the less stringent requirements and thus gain a competitive advantage.

Expansion of market-wide assessment systems can provide additional data

As a supplement – or alternative – to the assessment approaches developed by the banks, the expansion of

existing and market-wide systems can be useful. For example, by integrating corresponding criteria into the rating systems of players, such as Schufa or Creditreform, a high level of company coverage based on a uniform methodology could be achieved comparatively quickly – at least for the German market.





Automotive companies report in an integrated, standardised and externally validated way.

As described above, corporate sustainability reports are of great importance as a source of information for analysing and evaluating climate-related goals, strategies and measures. In them, companies report on goals and measures in dealing with climate and other sustainability aspects, often using national and international standards, such as the German Sustainability Code (DNK) or standards by the Global Reporting Initiative (GRI). With regard to the possibilities for investors and banks to assess the Paris compatibility of companies, there are currently three challenges in particular: the small number of companies that publish corresponding reports; the existing separation between sustainability and annual reporting; and the quality of the information on resilience and comparability.

CSRD significantly expands the reporting obligation – but coverage remains low

For now, only a small percentage of companies fall under the reporting obligations defined at European level. With the CSRD, the European Commission plans to expand the reporting obligation so that in future, instead of 11,600 companies across Europe, around 49,000 companies would be obliged to report comprehensively on their handling of sustainability issues.¹⁸

All large companies are to be subject to reporting requirements. Companies are considered large if they fulfil at least two of the following three criteria: an annual average of at least 250 employees; a balance sheet total of more than 20 million euros; and an annual turnover of more than 40 million euros. The reporting obligation is to apply to all capital market-oriented SMEs, with the exception of micro-enterprises.¹⁹

All relevant sustainability information is to be provided in a machine-readable format. In addition, standards for the presentation of the information and an obligation for external validation of the company information are to be introduced. The CSRD would thus lead to better availability and resilience of information on corporate sustainability – even if only a fraction of the companies operating in Germany or the EU are covered by the reporting obligation (see Figure 2). A possible extension of the reporting obligation to SMEs, which are basically exposed to the same climate risks as large companies, must strike a balance between the resources of the companies and the information interests of investors and banks.

Integrated company valuation requires integrated reporting

Classic key financial figures and sustainability-related data and information are documented in two separate reports – the annual report and the sustainability report. Even if it was already possible to combine them – for example with the expansion of the management report in the annual report to include a non-financial statement as part of the CSR Directive Implementation Act – these bits of information remain largely unconnected. Under the CSRD, the sustainability report has to be part of the (regular) management report. However, it is still not known whether this will lead to a genuine integration of financial and non-financial information.

In order to create a comprehensive and reliable basis for analysing and evaluating the Paris compatibility of companies as well as other climate-related risks and opportunities, integrated corporate reporting, as a counterpart to integrated corporate valuations, is also expedient. Integration should not be limited to the inclusion of a sustainability chapter in the annual report. Rather, it is a matter of comprehensively and systematically documenting the significance of climate-related developments for all aspects relevant to the annual report, for example the

¹⁸ Ernst Young (2021)

¹⁹ Under the relevant directive (2013/34/EU), companies qualify as micro-enterprises if they do not exceed two of the following three size criteria: 10 employees, 350,000 euros balance sheet total, 700,000 euros net sales.

management report and the risk report. Wherever possible, positive and negative impacts should also be monetised, whereby both the effects of the climate crisis on the financial situation of the companies and the effects of the financial possibilities on the handling of climaterelated risks and opportunities should be illuminated.

Standards enable a comparison of different companies

It is right and important that companies base their reporting on corresponding recommendations and standards, as defined for climate-related aspects in particular by the Task Force on Climate-Related Financial Disclosures (TCFD). The orientation towards standards leads to a better comparability of information and enables investors and banks to assess the status of individual companies in dealing with the risks and opportunities of the climate crisis in a sector comparison. The greater the influence of climate-related information, for example on the design of financing conditions, the more important it is that the

information communicated by companies is independently validated.

The planned establishment of the European Single Access Point (ESAP) can also be helpful here. Within the framework of this central database, companies are to provide standardised financial and sustainability data that can then be used, for example, by investors and banks in their climate-related risk analyses. Such a data source could make it much easier for investors and banks to analyse and evaluate the transformation capability and willingness of companies. Added value compared to the status quo arises in particular if the data is up-to-date, standardised and validated and SMEs also feed in their data in addition to the large companies that are already obliged to report.

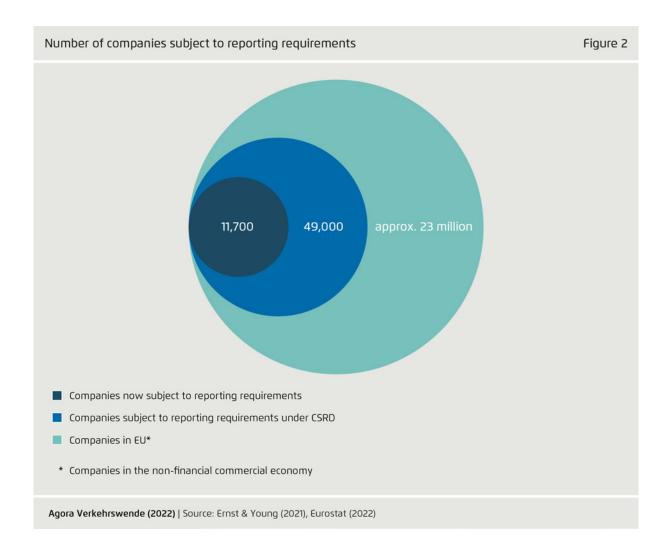
Task Force on Climate-Related Financial Disclosures (TCFD)

In order to be able to provide banks and investors in particular with comprehensive and comparable data on how companies deal with the risks resulting from the climate crisis, the TCFD, established by the Financial Stability Board of the G20 countries, published recommendations for standardised climate reporting in mid-2017.20

The aim of the recommendations is to quantify the financial impact of the climate crisis on companies. In this way, both companies and their investors should receive a sound basis for developing and implementing a climate strategy. In addition, the recommendations are intended to help in the decision making process regarding the granting of loans or the investment of capital. The recommendations relate to the following four fields of action:

- Governance: Disclosures on the coverage of climate-related risks and opportunities in corporate governance
- Strategy: Information on the manifest and potential impacts of climate-related risks and opportunities on the company's business activities, strategy and financial planning
- Risk management: Information on how a company identifies, assesses and manages climaterelated risks
- Metrics and targets: Description of the objectives and metrics used to assess and manage climaterelated risks and opportunities

20 TCFD (2017)



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Long-term climate policy gives investors planning security.

With the EU Action Plan on Financing Sustainable Growth, the European Commission has decided to delegate part of its responsibility for climate protection to the financial market. Instead of imposing direct requirements on the industries named in the taxonomy for their production processes and products, for example specific consumption and emission values, it calls on investors to check, when making investment decisions, whether a company manufactures products that meet the technical requirements of the taxonomy and to ensure that no other environmental goals and social standards are violated in their production. If this is the case, investors should provide capital to the companies so that they can finance their transformation.

The financial market's increased commitment to the Paris climate goals does not absolve policymakers of their responsibility

The rising numbers in the area of sustainable investment and in the granting of ESG-linked loans and comparable instruments suggest that the financial market is ready to take on this role. However, this does not absolve policymakers of their own responsibility for achieving the Paris climate goals. The focus here is on two aspects: the creation of long-term and consistent targets within which financial market actors and companies operate, and the use of instruments, such as emissions trading, alongside the involvement of the financial market.

Policymakers must set consistent and long-term guidelines for automotive companies, investors and

With regard to the framework conditions, it is particularly important to create investment and thus financing security. Ideally, policy should be guided by the "3 Cs": it should act cooperatively; be internationally coordinated as much as possible; and it should create the conditions for providing capital to companies that are capable and willing to transform.

The EU taxonomy is of particular importance here. Even if errors cannot be ruled out, in this way, companies are given more clarity as to the direction in which they should further develop their production and products in order to be able to achieve the EU's six climate and environmental goals. Investors and banks will have a concrete reference point for checking the sustainability of their investments and loans. However, the taxonomy currently still concentrates on the use phase of vehicles. It would be necessary for the entire value chain to be taken into account. It must also be possible to map the transformation progress of automotive suppliers with the taxonomy.

With the development of technical requirements, politics assumes great responsibility for the development of numerous industries, among them the automotive sector – including the risk of having backed the "wrong horse" in individual cases. It is therefore also their task to accompany the specified path consistently at all levels, for example within the framework of climate protection legislation, and to avoid breaks due to short-term changes in targets or strategies. Their main concern here must be to shape the framework conditions in such a way that they form a reliable basis for the orientation of the business model and for investment decisions to achieve the Paris climate targets.

Resilient and economically viable investment plans are in turn a central prerequisite for the financial commitment of investors and banks. This is particularly important from a financial market perspective, as financing decarbonisation in technologically driven sectors, such as the automotive industry, regularly represents a financial commitment at the frontier of technological development.

Redirection of capital must be complemented by further policy measures

Decarbonisation of the economy will not be achieved by redirecting capital alone. The legislature will also have to use other instruments to achieve the Paris climate goals. These include emission limits and the pricing of CO_2 emissions.

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Agora Verkehrswende is a Berlin-based think tank that seeks to promote climate-friendly mobility. Non-partisan and non-profit, it works together with key stakeholders in the fields of politics, business, academia and civil society to decarbonise the transport system. To this end, the think-tank team develops evidence-based policy strategies and recommendations.

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