

Financing the Sustainability Agenda

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Summary

Financing the necessary innovations and investments for a successful decarbonisation in the EU is challenging. The main reasons are tighter banking regulations, increased bureaucracy for loan applications and portfolio reallocations away from carbon-intensive industries. In addition, there is the risk that government and corporate debt levels might become unsustainable. The EU has already put forward a green bond framework to finance decarbonisation. Yet a large part of the corporate sector, particularly the small and medium-sized enterprise sector, has no access to this financial instrument. The EU therefore still needs the right mixture of reforms to both unlock private lending and investment and ensure that they stay financially sustainable so that risks do not build up in the financial sector. This paper offers several recommendations for reforms to enhance the financing of such investments by strengthening and auditing EU funds, reinforcing incentives for the transformation and supporting European small and medium-sized enterprises.

Keywords Climate-neutral industry – Decarbonisation – Transition finance

Introduction

The EU has set legally binding targets for climate neutrality by 2050. To succeed in the transition to a low-carbon economy, companies need to continuously develop new and improved climate-friendly technologies and adopt or move towards low-carbon business models. This will require investments in digital technologies, automation and AI, as well as stable supply chains, all of which will need to be consistent with the EU taxonomy for sustainable activities. To succeed in decarbonising the economy, we estimate, based on a meta-analysis, that the EU will have to invest between €758 and €1,055 billion per year until 2050 in the industry, energy, transportation and building sectors.¹

For channelling the capital flows into environmental and climate protection investments, a key pillar of the EU Green Deal is the promotion of sustainable finance. The EU has adopted new regulations on sustainability reporting, most importantly the EU taxonomy defining sustainable activities, the EU Corporate Sustainability Reporting Directive and the EU Sustainable Finance Disclosure Regulation, which is tailored to financial companies. The main aim is to increase comparability and transparency regarding the inclusion of sustainability criteria.²

Small and medium-sized enterprises (SMEs) face several challenges

Financing the necessary innovations and investment volumes is challenging for the corporate sector due to tighter banking regulations, increased bureaucracy for loan applications and portfolio reallocations away from carbon-intensive industries, as well as government and corporate debt levels that might become unsustainable. How these immense volumes of investment are financed is particularly relevant to the successful mastering of the needed structural changes.

¹ M. Demary, *Wie hoch sind die Investitionsbedarfe in die klimaneutrale und digitale Transformation in NRW?*, Fin.Connect.Kompakt 01, Institut der deutschen Wirtschaft (Cologne, 2024).

² A. Neligan, T. Schaefer and E. Schmitz, *Nachhaltigkeitsbericht: ja, aber wie?*, Institut der deutschen Wirtschaft, IW Brief Report no. 38, (Cologne, 2024).

While the EU has developed a green bond framework for financing decarbonisation, a large part of the corporate sector has no access to this financial instrument. SMEs lack access to bond market investors since the needed issuing limits are too large for these businesses and bond investors are not interested in investing in small lot sizes. SMEs therefore depend on bank financing. However, bank financing will become more restrictive, as banks have to raise their equity capital to meet the requirements of the newest bank regulation package, namely, the Capital Requirements Regulation III and the Capital Requirements Directive VI. Schneider et al. estimate that banks will require €120 billion in additional capital to be ready for the implementation of the new bank regulations,³ while we estimate that EU banks will need to expand their capital base by a further €276 to €384 billion until 2030 to finance the above-mentioned needed investments in decarbonisation. Thus, bank capital can become a limiting factor for the financing of decarbonisation, and freeing up bank equity capital for new SME loans is as important as capital market investors embracing SME finance.

Since SMEs normally do not tap securities markets for financing but rely on bank loans instead, banks might have a hard time allocating their equity capital to finance the decarbonisation of the SME sector. Banks must expand their balance sheet during the financing of the transformation of the corporate sector. From a regulatory viewpoint, the denominator in banks' equity capital ratio is rising, and when the capital ratio declines like this, it risks becoming too low and banks having to expand their equity capital base to hold their regulatory equity capital ratio above the threshold value demanded by financial regulation during the financing of the transformation. Since bank equity capital is an important buffer against unexpected credit defaults, the efficient use of the existing bank capital is crucial for financing the transformation. However, banks can free up their equity capital by the securitisation of their loan portfolios and the placement of asset-backed securities in capital markets. Through these measures, SME finance can be linked to capital market investors. Promoting securitisations for financing the transformation of the SME sector is, however, crucial to avoid financing gaps for SMEs. Enabling securitisation will not only help to finance the transformation, but it will also strengthen the European Capital Markets Union by bridging the gap between bank finance and capital market finance.

Banks' loan supply between climate risks and transformation risks

Banks begin to decouple from customers whose credit risks have increased due to climate-related risks or the risk that their business model will become obsolete due to decarbonisation. Moreover, banks have to monitor the transformation risks of their customers, which could result from the unsuccessful transformation of business models and a lack of transformation towards climate neutrality. Thus, banks need more information from their customers, which increases the administrative burdens for SMEs when applying for finance. For example, the additional administrative costs for the first reporting according to the European Sustainability Reporting Standard to comply with the Corporate Sustainability Reporting Directive are estimated for large companies at around €1.7 billion in initial costs and €1.9 billion annually in recurring costs. The costs of the verification of reports by an external auditor result in up to €4 billion in additional annual costs and will increase in the future.⁴ Hence, SMEs might postpone necessary climate-relevant investments.

Banks and investment companies have already started to decarbonise their loan and asset portfolios by reallocating these portfolios away from carbon-intensive sectors. This could lead to financing problems for carbon-intensive SMEs that would like to invest in climate-friendly technologies but that might not be 'green' enough yet. For a successful structural change that promotes the decarbonisation of companies from hard-to-abate carbon-intensive sectors and that prevents SMEs in these sectors from having to leave the market,

³ Schneider et al., *Basel 'IV': What's Next for Banks?*, McKinsey & Company, Global Risk Practice (Munich, 2017).

⁴ EFRAG, *Draft European Sustainability Reporting Standards*, Centre for European Policy Studies and Milieu (Brussels, 2022).

the ability to match SMEs with appropriate funding has to be preserved during the transition. Therefore, the right framework conditions are needed for the financial sector and the real economy so that investments and innovations can be financed. Keeping corporate and government debt at sustainable levels is important during the decarbonisation process since a large volume of the needed investments will have to be financed by debt instruments.

Decarbonisation creates a dilemma for companies because the transformation of their business model can be a risky venture. At the same time, not transforming their business model is risky, too, since the future demand for their traditional product will vanish. This risk is especially prevalent for the makers of intermediate goods for combustion car production. Thus, not only climate risks affect the financial sector, but also the risks of the structural change in the corporate sector, which the financial sector supports. Corporate indebtedness could thus be a side effect of the transformation. The measurement and monitoring of these risks is as important as reducing financing gaps for the corporate sector.

Recommendations for financing the transformation better

The EU should focus on reforms for strengthening the incentives for investments in decarbonisation in the corporate sector, especially in SMEs, and for ensuring the smooth financing of these investments. We suggest the following reforms and measures.

Strengthening and auditing EU funds supporting the transformation

First, to finance the transformation and unlock private funds for that purpose, EU funds must be used to mobilise private capital through risk reduction or to set incentives to invest. This includes the use of revenues from the Carbon Border Adjustment Mechanism—for example, in the form of a transformation fund administered by the European Investment Bank (EIB). These funds must be used efficiently to set the right incentives to decarbonise and to fulfil the EU's objectives. Thus, central to the process is auditing EU funds and rethinking how they can be allocated to support innovations and investments in decarbonisation by better matching companies, banks and investors.

Second, the EIB plays a significant role in mobilising private capital. Strengthening the EIB to finance the transformation is therefore key. For example, the EIB can be an important anchor investor for infrastructure investment funds or initial public offerings connected to investments in climate neutrality.

Third, the EU should also implement a special investment fund targeted at financing carbon capture companies, carbon transportation and carbon-storage infrastructure since these investments might be too risky for private investors, especially at the development stage of the projects. Development grants and venture capital can be useful instruments in this context.

Strengthening incentives for the transformation

First, it is crucial to reform the EU energy tax and subsidy system to align with EU climate and energy objectives. The fossil fuel industry is still subsidised, with some of the subsidies being used for renaturation and others for investments in climate neutrality. Subsidies that do not set incentives for the transformation should be gradually reduced. Incentives could be strengthened further by a reformation of the EU Emissions Trading System and the EU Energy Taxation Directive so that tax rates fall in line with climate objectives and set the incentives to invest in climate-friendly alternatives. In addition, the consistency of the EU Emissions Trading System with other regulations must be ensured. Since many low-carbon technologies and carbon-removing technologies need to be developed, tax incentives for research and development (R&D) in low-

carbon technologies can foster the development of these technologies and ensure that companies gain competitiveness through technological progress.

Second, since much of the machinery and equipment currently used must be replaced by low-carbon alternatives before depreciation, companies must be made aware of the accelerated depreciation of carbon-intensive equipment, and incentives should be set for them to start their investments in decarbonisation early. However, the EU taxonomy can have a negative effect on the basic materials industry and defence industry, which needs to be addressed. Exemptions for these hard-to-abate sectors should be possible since, at the same time, CO₂ can be taken from the atmosphere by carbon capture and storage technologies. These technologies should be promoted to reach climate neutrality while also preserving sectors which are both carbon intensive and of strategic importance to the EU.

Third, supervisory agencies must analyse whether the risk from transformation falls into the existing risk categories, such as credit default risks and liquidity risks, or whether new risk categories must be developed. These supervisory bodies must be integrated into frameworks for measuring climate risks and the transformational risks of companies and oversee the incorporation of these risk factors into banks' risk management systems. Moreover, supervisory agencies must monitor the financing of the transformation and the resulting risk factors at the macroprudential level—that is, not only from the viewpoint of individual banks but within the banking system as a whole. Macroprudential risks can emerge from concentrated exposure to carbon-intensive sectors or non-performing loans due to company indebtedness during the transformation. It is important to address these risks before banks get into trouble, since banks react to risks by reducing lending and this could be counterproductive to a smooth financing of the transformation of the corporate sector.

Supporting European SMEs

First, bureaucratic costs for SMEs due to increased non-financial information requirements need to be reduced. Different standards apply to companies for reporting non-financial information and also to banks for measuring environmental, social and governance (ESG) conformity in their loan portfolios. As a result, an SME that tries to compare lending conditions between banks must supply many different ESG reports to the individual banks, which increases the costs of comparing lending conditions. The standardisation of ESG key performance indicators for SMEs' reporting to banks and customers can reduce costs for SMEs and increase transparency and thereby competition in the lending sector. The development of data-sharing services or data ecosystems for SMEs for reporting standardised ESG key performance indicators could increase the efficiency of the reporting, since the SMEs would only have to provide the information once per year to the data ecosystem, where banks and customers could retrieve it.

Second, financial obstacles for SMEs which arise because of banks' limited regulatory equity capital must be eliminated during the transformation given SMEs' high dependence on bank loans. Bank equity capital for the transformation could be freed up by the securitisation of loan portfolios and the placement of these in capital markets. Smaller and medium-sized banks, however, lack the personnel and organisational resources for securitisation transactions. In addition, their loan portfolios do not achieve the lot sizes that attract capital market investors. However, securitisation platforms for smaller banks could enable these banks to use this mechanism. The standardisation of loans and processes could reduce the costs and burdens for smaller banks, and would allow the smaller banks to pool their loans to achieve lot sizes that are worthwhile for capital market investors. The auditing and reforming of bank regulations that hinder the financing of SMEs would be a good starting point, together with initiatives that promote securitisation platforms for smaller banks in times of transformation.

Third, local investment funds should be promoted, and backed by EU funds. SMEs need silent-participation equity capital for financing the transition, to hold their debt at a sustainable level while investing in their carbon-neutral transformation. The risk structure of these funds should be managed so that investors with a higher risk tolerance can invest in the development of new ideas and disruptive business models while risk-averse retail investors can invest in more incremental innovations made by existing SMEs with stable cash flows.

Conclusion

The smooth functioning of financing climate-friendly investments is crucial for successful decarbonisation. This success can be hindered by lending policies that are too restrictive as well as by lending conditions that are too easy, which can lead to the build-up of credit default risks on banks' balance sheets and subsequent problems. The EU should therefore find a framework that unlocks private lending and investment and at the same time ensures that lending and investment stay financially sustainable so that risks do not build up in the financial sector. To this end, the EU should find the right mixture of reforming both regulations that hinder the financing of companies and regulations that prevent the financial sector from allowing risks on the balance sheet of financial institutions during the financing of the transformation. While the EU should promote private financing of the investments that lead to private profits, it should offer financing for the infrastructure and ground-breaking technologies with high social returns needed for climate neutrality; these are typically too risky for private companies and investors since the returns are widely dispersed and benefit competitors as well as initial investors. While risk-sharing between states and companies can enable the development of technologies for decarbonisation, tax incentives for R&D are a technology-neutral and competition-neutral way of encouraging private companies to develop the technologies needed for decarbonisation.

	Programme 1	Programme 2	Programme 3
	Strengthening and auditing EU funds	Strengthening incentives for the transformation	Supporting European SMEs
Project 1	<p>Improve the matching between companies, banks and investors by auditing EU funds and rethinking how they can be allocated for supporting innovations and investments in decarbonisation (e.g. guarantees for the securitisation of SME loans and investment funds). Use the EU's own resources (e.g. the Carbon Border Adjustment Mechanism) for the transformation by allocating these to the EIB.</p>	<p>Reform the EU energy tax and subsidy system, aligning it with EU climate and renewable energy objectives. Ensure a level playing field within the EU by gradually phasing out fossil fuel subsidies, including CO₂ content, and strengthening tax incentives for R&D in low-carbon technologies and the accelerated depreciation of carbon-intensive equipment. Ensure the consistency of the EU Emissions Trading System with other regulations.</p>	<p>Reduce bureaucratic costs for SMEs due to non-financial information requirements by standardising ESG key performance indicators that such companies must report to banks and customers (e.g. taxonomy-eligible turnover or taxonomy-aligned turnover). Develop data-sharing standards (a data ecosystem) for SMEs for the reporting of ESG data which can be accessed by banks and customers.</p>
Project 2	<p>Strengthen the EIB's ability to finance the transformation. Risks for investors can be reduced with the EIB as the anchor investor for infrastructure investment funds or initial public offerings.</p>	<p>Assess the impact of the EU taxonomy on the basic materials industry as an enabling activity for other industries and its impact on the defence industry to reform the taxonomy in case of conflicts with other policy goals, for example, defence and security.</p>	<p>Eliminate financing obstacles for innovative SMEs during their transformation and during the innovation life cycle by freeing up bank equity capital through promoting platforms for the securitisation of SME loans for smaller banks. Audit and reform bank regulations that hinder the financing of SMEs in times of transformation (e.g. capital requirements for unrated companies).</p>
Project 3	<p>Develop a special investment fund targeting the financing of carbon capture companies. Overcome market failures at the various stages of the innovation cycle by using instruments such as development grants, early- and later-stage venture capital.</p>	<p>Enable the monitoring of risks from climate change and transformation by developing frameworks for supervisory agencies on how to measure these risks for companies at the macroprudential level (e.g. concentrated exposure to carbon-intensive sectors, non-performing loans due to company indebtedness during the transition).</p>	<p>Promote local investment funds for SMEs backed by EU funds. SMEs need silent-participation equity capital for financing the transformation to hold their debt at a sustainable level while investing in their carbon-neutral transformation. Structure these funds so that investors with a higher risk tolerance can invest in the development of new ideas and business models while risk-averse retail investors can invest in the more incremental innovations of existing SMEs.</p>

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