

Group Economics | Financial Markets & Sustainability Research | 25 September 2023

Marketing (

SustainaWeekly

Will SMEs hamper the transition to Net Zero?

- **Economist:** EU climate disclosure requirements will not apply to most SMEs. Surveys suggest that SMEs are behind larger firms in their progress in developing decarbonisation strategies, while SMEs are responsible for more than 60% of emissions. Although SMEs are not covered by the regulation, their importance to banks and corporates means that the these larger institutions effectively need to play a key role in the SME transition.
- **Strategist:** The watered down version of the German heating law would still allow old heating installations to be replaced again with fossil fuel powered ones. German residential real estate bond issuers are already lagging science-based targets for carbon reduction. The bond market could become sceptical if these issuers were to tamely follow government policy and keep the transition to low carbon heating highly back-ended.
- Policy & Sectors: The topic 'climate' received plenty of attention from the outgoing Dutch cabinet in the 2024 Budget Memorandum. All climate sectors will benefit from more supportive climate policies and further scaling up public and private sustainable investments. The climate measures of the outgoing Dutch government to reduce GHG emissions for next year are in most cases additions to existing climate measures rather than major new initiatives.
- ESG in figures: In a regular section of our weekly, we present a chart book on some of the key indicators for ESG financing and the energy transition.

The EU Corporate and Sustainable Reporting Directive (CSRD) requires businesses to regularly disclose information on their societal and environmental impact and the sustainability risks they are exposed to. SMEs will largely not be covered. In the first note of this SustainaWeekly, we assess whether the exemption of SMEs from climate regulation more generally will hamper the transition to Net Zero. In a separate note, we go on to focus on the impact of the watered down German heating law on residential real estate bond issuers. Finally, we provide an analysis of the climate policies of the outgoing Dutch cabinet's 2024 Budget Memorandum and the impact on sectors.

Enjoy the read and, as always, let us know if you have any feedback!

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Will SMEs hamper the transition to Net Zero?

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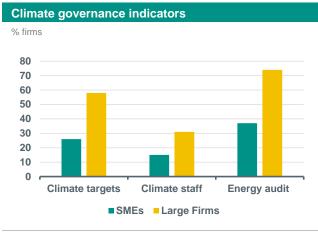
- The EU is implementing climate disclosure requirements for firms, with the idea that additional transparency will spur progress
- As it stands, the requirements will not apply to most SMEs, while the German government appears to be pushing for the legislation to exclude even a proportion of large firms
- Surveys suggest that SMEs are behind larger firms in their progress towards developing decarbonisation strategies...
- ...While SMEs are responsible for more than 60% of emissions, so are vital for a successful transition
- Although SMEs are not covered by the regulation, their importance to banks and corporates that are, means that the these larger institutions effectively need to play a key role in the SME transition

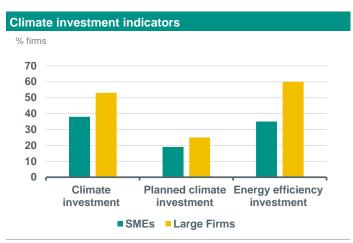
The EU Corporate and Sustainable Reporting Directive (CSRD) requires businesses to regularly disclose information on their societal and environmental impact and the sustainability risks they are exposed to. This is part of a plethora of measures to encourage a timely transition to Net Zero, with the idea that increased transparency is the first step to spur progress. The rules will start to apply from next year for companies with over 500 employees (with reports due the year after) and will be extended to all large companies (more than 250 employees though some supplementary financial metrics are also used to define this category) from 2025. This means that SMEs will largely not be covered (except those that are listed from 2026, though they can opt out until 2028).

Last week the CSRD was in the news as the Financial Times reported that Germany is seeking to exempt even more companies from the regulation by seeking to raise the threshold for companies covered from 250 to 500 employees (see here). Smaller companies are typically excluded from all kinds of regulation due to the costs and bureaucratic burden, so of course it is a fair discussion. However, it does raise the issue of the exemption of SMEs from climate regulation more generally and the impact this may have on the transition to Net Zero. We explore this subject in this note.

SMEs are lagging behind when it comes to climate ambitions

There is evidence that SMEs are lagging behind in rolling out their climate and decarbonisation strategies compared to larger firms. The EIB's Investment Survey (see here), which took a deep dive into European firms and climate change, points to this discrepancy across a number of indicators. For instance, a significantly lower proportion of SMEs had set climate targets, had dedicated climate staff, had conducted an energy audit and/or invested/planned to invest in climate change or energy efficiency (see charts directly below).





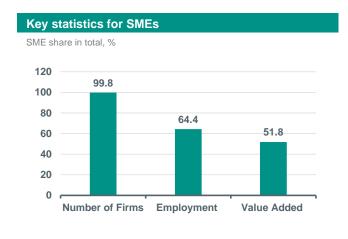
Source: EIB, ABN AMRO Group Economics

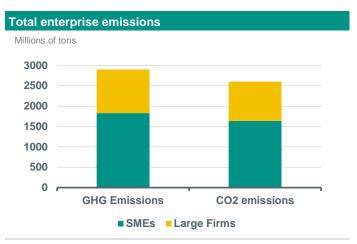
Source: EIB ,ABN AMRO Group Economics

Does it matter if SMEs do not do too much to decarbonise given their small size? The answer, as we will show in the next section, is a resounding yes. They might be small, but there are a lot of them.

SMEs are vital for the transition

It has often been said that small businesses are the backbone of the economy. This is more than just a platitude often heard by politicians. The statistics bear this out. They are a crucial importance on the basis of a whole range of economic indicators, while it also logically follows, they are therefore also responsible for significant emissions. As can be seen in the chart below on the left, SMEs dominate large firms in terms of employment share and are roughly equal in terms value added. How this translates exactly into emissions requires making estimates as emission data are typically estimated on a country and sector level. Such estimates have been made by the European Commission (see paper here). The research notes that the average SME emits only 67 tons of CO2 and 75 tons of greenhouse gases compared to respective emissions of 20,027 and 22,345 from the average large enterprise. However, due to their large number, the collective share of SMEs in total enterprise emissions is high at 63.3% of all CO2 and greenhouse gas emissions by enterprises.



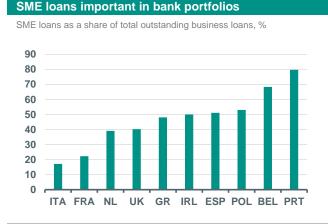


Source: European Commission, Eurostat

Source: European Commission

Banks and large corporates play a key role in SME transition

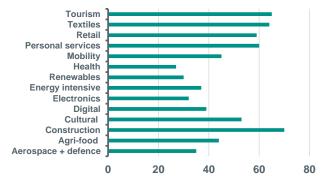
So SMEs are responsible for a lot of emissions, whilst at the same time, they are excluded from some important climate regulation, does that mean they will hamper the transition to Net Zero? Not necessarily, as there will very likely be impetus for SMEs to take steps from banks and large corporates that are subject to disclosure requirements, as well as other climate regulation and pressure from their stakeholders. This is because the carbon footprint of SMEs is essentially part of the carbon footprint of banks and large corporates. Bank loans to SMEs make up a significant part of total outstanding business loans (see chart on the left), while SMEs play a key role in value chains across sectors (see chart on the right). Scope 3 emissions for both banks and most large corporates are the dominant part of their carbon footprint, so they will not be able to report on the climate objectives without knowing the carbon footprint of SMEs and they will not be able to decarbonise if their SME clients/partners do not do so.



Source: OECD

SMEs important in sector value chains

Share of SME in value chain, %



Source: European Commission

Steps to help the SME transition

Although SMEs are excluded from climate disclosure regulations due to the costs and administrative burden, as they still need to move in this direction in any case, this does not really solve the barriers they face to make the transition. Indeed, Germany's apparent proposal to exclude even more firms would not be a step forward. A more constructive approach is to help remove the obstacles companies face to decarbonise.

SMEs often lack the tools and financial resources needed to reduce their carbon footprint. The SME Climate Hub - a non-profit global initiative that aims to empower SMEs to take climate action – conducted a survey of SMEs to understand the barriers small businesses face and what they need to be successful (see here). The top reasons stated as preventing SMEs from taking action were skills and knowledge (58%), lack of funds (55%) and lack of time (44%). To take greater action, companies noted that they need tools for measuring and monitoring emissions (61%), financial support (60%) and network of peer companies to reach out to and learn from (54%).

Banks and larger corporates can and already are providing support in providing SMEs with support in these areas as are governments. The SME Climate Hub – and other organisations - provide educational, measurement and reporting tools. However, given the results of this and other surveys, there appears to be a need for the various actors to go further. For instance, the sustainability consultancy BSR recommends (see here) an independently-led data repository of Scope 1, 2 and 3 emissions jointly accessible to banks, corporates, and SMEs to avoid duplication of reporting efforts and allow SMEs to focus on climate action as well as other knowledge solutions.

German property bond issuers do not have the luxury to kick the carbon can down the road

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- The watered down version of the German heating law would still allow old heating installations to be replaced again with fossil fuel powered ones
- German residential real estate bond issuers are already lagging science-based targets for carbon reduction
- The bond market could become sceptical if these issuers were to tamely follow government policy and keep the transition to low-carbon heating highly back-ended

Earlier this month, the German government finally approved the contentious heating law (Gebaudeenergiegesetzes). As heating from building accounts for a large share of Western European country emissions, including Germany, lowering energy usage through insulation and switching to sustainable energy sources in buildings has been earmarked by many as critical to reach overall climate objectives.

But many deem this law to be a "watered down" version of the first proposal, which in the earlier draft would have eliminated the use of fossil fuel powered systems in **all** new and replaced heating installations, as these new installations would need to use at least 65% renewable energy. As it currently stands, this requirement only applies to newly-built homes in new residential areas. For existing buildings, the status quo of being able to replace gas-powered boilers with other gas boilers, for example, is still allowed. This will be the case at least until the municipality has established its own heating plan, including the use/expansion of district heating. Such plans might take until 2028 before being finalised and many argue that this watered down plan will drive unnecessary delay in much desired energy efficiency investments. Also, it relies a lot on municipalities being able to successfully expand heat networks in this rather short time-frame, which itself would depend on the switch to industry-scale renewable energy sources to power these heat networks.

Public German residential real estate already lagging science-based carbon reduction pathways

German residential real estate issuers such as **Vonovia**, **LEG Immobilien** (LEG) and **Grand City** have set themselves portfolio carbon reduction targets. One could argue that, besides their general reduction in property development due to the uncertain market for real estate, such delays by government policy could also alter these companies' renovation plans and portfolio carbon reduction plans. Indeed, issuers tend to strongly link their commitment to the German Climate Change Act in their ESG publications and the leeway created by the government could lead to these issuers pushing emission reductions even further out in time.

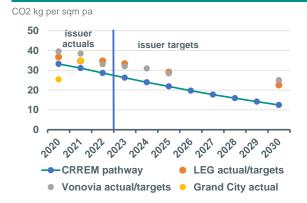
Such a delayed action by these issuers could be disastrous. To illustrate, we compare the existing ambitions for portfolio carbon reduction against what is already being prescribed by Carbon Risk Real Estate Monitor (CRREM), a science-based energy intensity- and carbon reduction pathway for German multifamily residential real estate to limit global warming to the 1.5 degrees Celsius target. Clearly the charts on the next page show that the issuers are already lagging the desired pathway and have already planned more back-ended renovation/retrofits of heating installations.

Issuers trailing 1.5 degrees required energy reduction



Source: CRREM, issuer sustainability filings, ABN AMRO Group Economics

Issuers trailing 1.5 degrees required carbon reduction



Source: CRREM, issuer sustainability filings, ABN AMRO Group Economics

Effectively, the German residential issuer carbon reduction targets, it seems, are not yet aligned with SBTi 1.5 degree pathway. This is also confirmed by public filings. Only LEG had submitted their plans to SBTi last year, but so far they have not been validated. We were also surprised by the lower reported energy- and carbon intensity of Grand City in 2021 vis-à-vis Vonovia (there is only 2021 data available for Grand City), especially since Grand City has a larger share of properties with weaker EPC labels than Vonovia. We therefore put less value on the reported values by Grand City.

Grand City has a higher share than Vonovia in weaker property labels



Source: issuer sustainability filings, ABN AMRO Group Economics

Transition risks and lower carbon intensity alternatives put bond investors on close watch

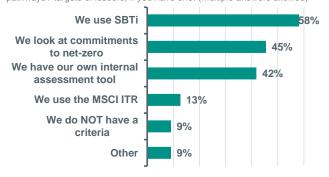
With the current emission reduction profile of these issuers already being more back-ended, further extensions would put more pressure on the issuers to complete retrofits in a narrower timeframe and also rely on a successful roll-out of heat networks in Germany. This could make ESG-focussed investors more cautious, especially if such delays are accompanied with transition risks. These transition risks could transpire for example if the Government were to declare buildings being unfit for further operation if they do not meet a certain energy label (perhaps as a reaction to lagging behind emission targets) or the government suddenly decides to scrap the generous subsidies for renovation and retrofits.

But besides investors being put-off by higher transition risks, we also note that the German residential real estate issuers rely on the public bond market for a large part of their funding. As such, they are also in competition for funding with real estate issuers in other sub-sectors and other countries. These alternatives could offer more front-ended carbon reduction opportunities and therefore attract more ESG-focused capital. For example, issuer **Covivio** has already brought down emissions to 9kg per sqm pa on its French office portfolio, while Vonovia and LEG currently report 33kg. Furthermore, Covivio's carbon reduction plan has been validated by SBTi.

At the moment, it seems that the 60bp differential between Covivio and Vonovia in the longest available maturity (2031) is entirely driven by the difference in leverage, with Vonovia operating at the higher leverage of the two. But when debt investors start to become even more conscious of issuers' emissions, the bid for German residential real estate bonds could weaken vis-à-vis these lower carbon real estate bond alternatives. Indeed, our recently published ESG survey highlighted that the buy-side is already using criteria to evaluate decarbonisation pathways and the Science Based Target Initiative (SBTi) was flagged as most widely used (combined with other criteria nevertheless – see below). In case the German residential real estate issuers start to deviate further from science-based initiatives due to lax government law, while the CRREM pathway has been designated as a science-based initiative, investors could start to penalize the issuer by demanding a higher credit spread.

Our latest ESG survey reveals that investors are using criteria to evaluate decarbonisation

Question: Please specify your institution's criteria to evaluate decarbonization pathways / targets of issuers, if you have one. (Multiple answers allowed)



Source: ABN AMRO H2 2023 ESG investor survey

Outgoing Dutch cabinet does not leave climate out in the cold

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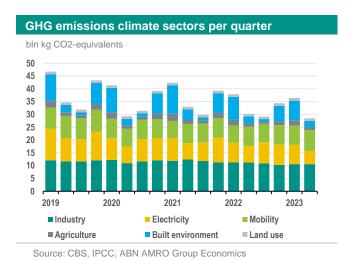
- The topic 'climate' received plenty of attention from the outgoing Dutch cabinet in the 2024 Budget Memorandum
- All climate sectors will benefit from more incentivising climate policies and further scaling up public and private sustainable investments
- The climate measures of the outgoing Dutch government to reduce GHG emissions for next year are in most cases additions to existing climate measures
- For major new climate initiatives, we have to wait for the next cabinet to be installed

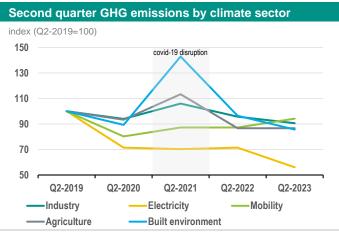
The Dutch Budget Memorandum 2024 brought a series of additions to existing climate measures. Despite the outgoing status of the Rutte IV government, this edition of the Budget Memorandum remained anything but climate policy-poor and was still able to offer some advances in the climate perspectives of sectors and companies in the Netherlands for next year. The initiatives in the 2024 Budget Memorandum partly echo the call from businesses, institutions and bodies for an accelerated and structurally sustainable transition to net zero. For the measures with greater impact and new climate initiatives, however, we will have to wait for the November elections and be patient with a new cabinet's climate plans. Nevertheless, emission reduction gains can still be made next year in the major climate sectors, such as industry, electricity, built environment, mobility and agriculture. In this analysis, we look at the current trend in emission reduction and the impact of the climate plans from the 2024 Budget Memorandum on emissions from climate sectors.

Emissions in climate sectors

The main focus in the 2024 Budget Memorandum was on spending power developments and poverty reduction. For the fight against poverty, the outgoing Dutch cabinet earmarks EUR 2 billion next year. The climate agenda also received plenty of attention in the Budget Memorandum 2024, despite the fact that major parts of climate policy have been declared 'controversial' and therefore cannot be taken forward. New climate policy on upcoming important themes - think of the Energy Act or the introduction of road pricing, for instance – can potentially provide a lot of CO2 gains, but only a new coalition will decide on the final implementation and exact policy details. There is a chance that there will be accented differences in specific environmental policies for agriculture, mobility or industry, for example.

However, climate neutrality in 2050 remains the ambition, also for a new Dutch cabinet. To achieve this goal, however, much climate action is still needed in various sectors of the Dutch economy. Every part of the Dutch economy will have to contribute to the climate target. According to the first preliminary emission figures from CBS and RIVM/Emissions Registration (based on regulations from the UN Intergovernmental Panel on Climate Change, IPCC), GHG emissions in the Netherlands from all climate sectors combined decreased by 6% in the second quarter of 2023 compared to the same period in 2022. It is a continuation of the 4% annualised emission reduction seen in the first quarter of 2023.





Source: CBS, IPCC, ABN AMRO Group Economics

Reduced natural gas consumption due to high gas prices after the corona pandemic contributed notably to the decrease in GHG emissions. Especially in agriculture (greenhouse horticulture), industry (in making food, paper, metal, building

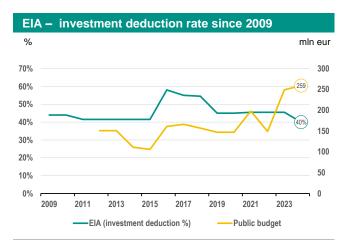
materials, chemical and also petroleum products) and households (built environment) there has been a rationalisation in gas consumption. Most climate sectors showed annualised reductions in the second quarter of 2023. The sharpest reductions took place in the electricity sector (-22%), built environment (-11%) and industry (-5%). According to CBS, the electricity sector produced 42% less electricity from coal and 2% less from natural gas. In the agriculture sector, annualised emissions remained stable Q2-2023, while the mobility sector was the only sector to record an increase in GHG emissions in Q2-2023, of as much as 8% year-on-year. This was mainly due to an increase in petrol consumption. Road transport is the biggest polluter in the mobility sector. It accounts for about 95% of the mobility sector's total emissions. The acceleration of electrification in the mobility sector still faces obstacles, not only in passenger transport, but also for commercial vehicles. Affordability, range (especially for freight transport), refuelling infrastructure and charging infrastructure are the biggest challenges. With this, the mobility sector remains a difficult sector to decarbonise. To accelerate decarbonisation in this and also other sectors, targeted and incentivised climate policies are often the driving force.

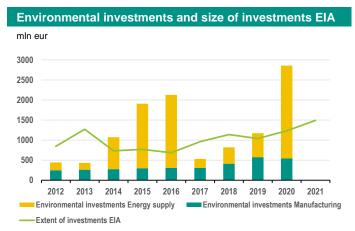
Investing in sustainability

Climate is given adequate attention by the outgoing Dutch cabinet in the 2024 Budget Memorandum. The current cabinet's climate policy still assumes a 60% reduction in emissions by 2030 compared to 1990 levels. This level of ambition is 5%-points above the 55% emission reduction target the starting point of the *EU Green Deal*. Thus, the government is hedging against any setbacks in the 2030 reduction target.

The good news is that within many of the economic sectors of the Dutch economy, the transition to a low-carbon or carbon-free mode is now well underway. However, some sectors still lag behind and many GHG emissions still need to be reduced there. These sectors would benefit from more ambitious climate policies and a further scaling up public and private sustainable investments, among other things.

The Dutch government wants to encourage investment in energy-saving assets as well as renewable energy. To this end, the Energy Investment Allowance (EIA) has been in place since the late 1990s. Through this scheme, companies can obtain tax benefits if they invest in energy-efficient techniques and renewable energy. On average, the net tax benefit for companies is around 12% of the investment amount. Under the existing scheme, if such an investment - in, for example, machinery and other sustainable business assets, solar panels for electricity generation or in process efficiency - ultimately uses sustainable energy and/or reduces CO2 emissions and/or is energy efficient, companies can deduct 45.5% of the investment cost from profits. By 2023, EUR 249 million has been earmarked for the EIA subsidy pot.





Source: RVO, ABN AMRO Group Economics

Source: CBS, RVO, ABN AMRO Group Economics

Investments in tangible fixed assets for the purpose of protecting, restoring or improving the environment are on the rise, thus increasing the use of the EIA. Next year, the EIA budget increases by EUR 10 million to EUR 259 million. However, the proportion that can be deducted drops to 40%. The government - through the EIA scheme - will continue to prioritise stimulating investments by entrepreneurs in further sustainability measures at companies in the years up to 2028.

Furthermore, next year investments will also be made in flood protection to prevent flooding, which will benefit both households and businesses. The King's Speech also touched upon the fact that the nitrogen and nature policy will be

continued, to protect nature. At the same time, this will provide more clarity to avoid, for example, stagnation in the issuing of building permits for new construction, and will offer more future prospects for farmers.

Sector specific climate plans

The Climate Act sets the national climate goals for 2030 and 2050. From this a Climate Plan is drawn up, which is largely shaped by the Climate Accord, which in turn was formed following the involvement of many private and public organisations, representing different interests. It thus forms an anchor in climate policy, although of course there are no guarantees for this in the political arena. All kinds of additional climate measures can also be taken or adjustments can be made to existing agreements or measures.

According to the Netherlands Environmental Assessment Agency (in Dutch in brief PBL), realisation of the statutory 55% target is within reach, if all goes well. In its analysis, PBL points out that 'delays due to elections and the formation of a new cabinet (and possible changes in scheduled plans) pose an additional threat to meeting this target. The room for manoeuvre until 2030 is very limited.' The 2024 Budget Memorandum contains a variety of climate measures to reduce GHG emissions, which we briefly outline below for each climate sector. For a comprehensive overview of climate measures by sector, see here.

Mobility

The mobility sector is one of the sectors where GHG reduction is struggling. Releasing more funds for investment in charging infrastructure and other financial incentives (for households, for example) will help here to get greening in the mobility sector closer to the targeted trajectory. To encourage emission-free driving, vehicles with CO2 emissions of 0 grams per kilometre are exempt from purchase tax (in Dutch in brief BPM). This exemption applies until 1 January 2025. In addition, schemes such as the *Incentive Scheme for Private Electric Cars* (in Dutch in brief SEPP) and the *Emission-Free Business Cars Incentive Scheme* (in Dutch in brief SEBA) will also remain available next year.

The 8% increase in GHG emissions in the second quarter of 2023 is mainly caused by an increase in petrol consumption. Indeed, this was 12% higher than in the second quarter of 2022, according to CBS. In the mobility sector, sustainable energy carriers - such as electricity and hydrogen - should eventually lead the way. Investments will also be made in these next year. A possible increase in excise duty on petrol will reduce the number of car kilometres driven. This could have a beneficial effect on GHG emissions. If the increase is blocked by a parliamentary majority, the number of car kilometres will remain at least the same next year, and thus GHG emissions from the mobility sector too.

Built environment

Ideally, further decarbonisation of the built environment should be tackled first with more insulation of houses and buildings. Only after that, sustainable heat devices and installations (such as a heat pump or district heating) can further accelerate the sustainability process and a largely gas-free built environment can be achieved. But there is still a long way to go. The government had launched the National Insulation Programme (in Dutch in brief NIP) with the aim of further scaling up sustainability in the built environment. This programme continues to be rolled out. For 2023 and 2024, the cabinet is making a total of about EUR 1 billion available to the NIP for municipalities. Non-energy efficient houses will be tackled first (these are the houses with energy label E, F and G). Ultimately, this programme should insulate a total of some 2.5 million non-energy-efficient homes by 2030.

In addition, for other homes, subsidies will also be provided next year for insulation measures such as floor, roof, cavity and wall insulation, and for replacing single-glazing with double-glazing (HR++ glass) or triple-glazing. Subsidies are also available for DIY enthusiasts to save costs when insulating their homes, thus relieving the burden on scarce professionals and allowing them to concentrate on more complex work and projects. Individuals can also take advantage of the *Sustainable Energy and Energy Saving Investment Subsidy* (in Dutch in brief ISDE) next year. Through this scheme, homeowners can receive compensation for investments in solar boilers, heat pumps and energy-saving insulation measures. The government will also focus on low-emission, circular and bio-based building and will make subsidies available for this in the coming year.

Agriculture

Agricultural activities cause emissions such as methane, nitrous oxide (both livestock farming) and CO2 (mainly greenhouse farming and land use). Government policy remains focused on reducing these emissions, including smart land use, which can help store CO2. Further development of existing techniques and innovation in new techniques remains indispensable.

Subsidies remain available for this too. The government remains committed to a sustainable future for farmers and will offer support for business succession.

The 2024 Budget Memorandum also states that the reduced energy tax rate for the greenhouse horticulture sector will be abolished and, in addition, a restriction will be imposed on the exemption of electricity generation. These reduced rates were once introduced to keep the tax burden on energy in greenhouse horticulture equal to the tax burden on energy in energy-intensive industry. With the abolition, the cabinet hopes to give greenhouse horticulture an incentive to become more sustainable, with a further reduction in GHG emissions. The cabinet also proposes to tax own-use heat and electricity with an energy tax from 1 January 2025, also with the aim of encouraging sustainability. This should then also apply to industry.

Industry

Despite industry being one of the biggest polluters, the cabinet embraces the sector. Indeed, the cabinet argues that 'a climate-neutral, circular industry can become a new driver of the earning power of the Netherlands.' Initially, climate policy in industry focuses on energy-intensive industry. In fact, there is still a world to be won there when it comes to GHG emission reduction. Tailor-made agreements will be constructed with the large emitters of GHGs in this part of industry in the coming year to further reduce GHG emissions and prevent displacement of GHG emissions. For energy-intensive industry, subsidy schemes (fiscal and non-fiscal) have also been tightened or abolished with respect to fossil energy use, and there will be rate adjustments in energy taxation. However, the new cabinet will also want to have a say in this, as these measures could potentially have a negative impact on the business climate in the Netherlands.

The minimum CO2 tax has been set as of 1 January 2023 to provide more investment certainty. From 1 January 2024 (and subsequently also on 1 January 2025), the levy will be further increased to further encourage sustainability. Industry has many decarbonisation techniques at its disposal, of which efficiency measures, further electrification, more sustainable use of raw materials and fuel substitution are among the most important. Many various subsidies are available for investing in these techniques (see here), most of which will remain available next year as well. The government thus remains committed to achieving a low-carbon and innovative industry in the long term. Furthermore, the price for CO2 emissions for industry will be increased from 2024, in order to further encourage sustainable investments. This also applies for sector energy supply.

Energy supply

The demand for electricity is going to increase in the coming years, especially due to the trend towards electrification that has started in many sectors, especially in industry and mobility. These sectors face a major sustainability challenge and need future-proof energy networks, with stable energy infrastructure and supply. The energy supply therefore requires a move away from fossil electricity generation and towards renewable sources. That is also what the policy aims at. For now and for the longer term. However, the availability of those renewable sources are still relatively limited available in the Netherlands and their security of supply is also a challenge for stable future energy supply. Regarding the energy infrastructure, the coming year will see further investments in the expansion and reinforcement of the electricity grid by national and regional grid operators. This is an important precondition for further electrification in the other sectors and at the same time badly needed to meet the climate targets. In addition, the government is aiming for a nationwide (smart) charging network to facilitate the growth of electric passenger transport.

ESG in figures

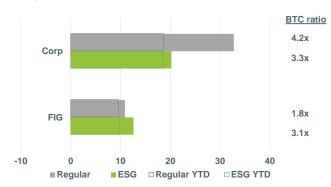
ABN AMRO Secondary Greenium Indicator



Note: Secondary Greenium indicator for Corp and FIG considers at least five pairs of bonds from the same issuer and same maturity year (except for Corp real estate, where only 3 pairs were identified). German Bund takes into account the 2030s and 2031s green and regular bonds. Delta refers to the 5-day moving average between green and regular I-spread. Source: Bloomberg, ABN AMRO Group Economics

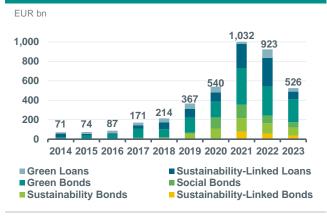
ABN AMRO Weekly Primary Greenium Indicator

NIP in bps



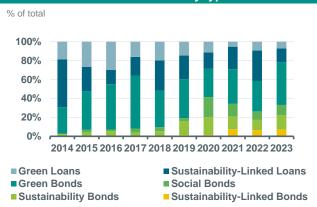
Note: Data until 22-09-23. BTC = Bid-to-cover orderbook ratio. Source: Bloomberg, ABN AMRO Group Economics

Sustainable debt market overview



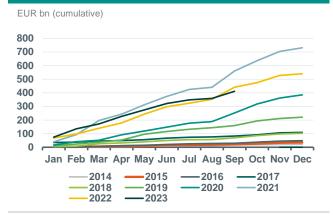
Source: Bloomberg, ABN AMRO Group Economics

Breakdown of sustainable debt by type



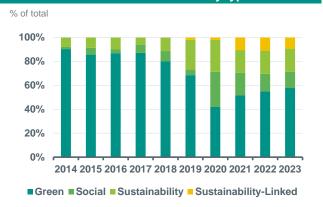
Source: Bloomberg, ABN AMRO Group Economics

YTD ESG bond issuance



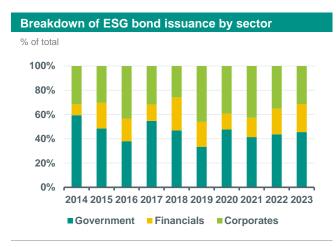
Source: Bloomberg, ABN AMRO Group Economics

Breakdown of ESG bond issuance by type

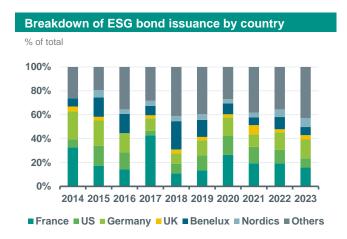


Source: Bloomberg, ABN AMRO Group Economics

Figures hereby presented take into account only issuances larger than EUR 250m and in the following currencies: EUR, USD and GBP.

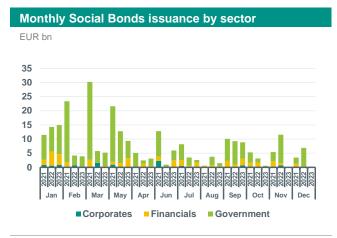


Source: Bloomberg, ABN AMRO Group Economics

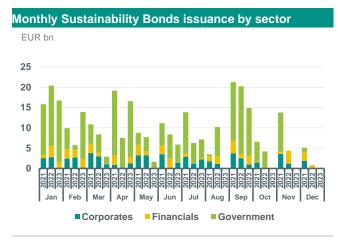


Source: Bloomberg, ABN AMRO Group Economics

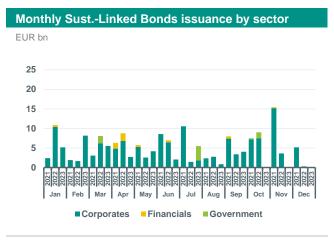
Source: Bloomberg, ABN AMRO Group Economics



Source: Bloomberg, ABN AMRO Group Economics



Source: Bloomberg, ABN AMRO Group Economics

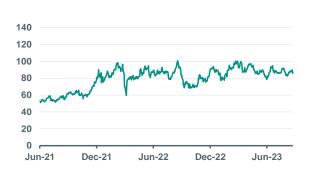


Source: Bloomberg, ABN AMRO Group Economics

Figures hereby presented take into account only issuances larger than EUR 250m and in the following currencies: EUR, USD and GBP.

Carbon contract current prices (EU Allowance)

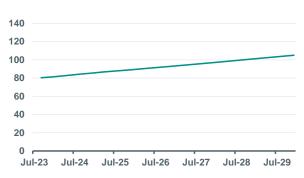
EUR/MT



Source: Bloomberg, ABN AMRO Group Economics

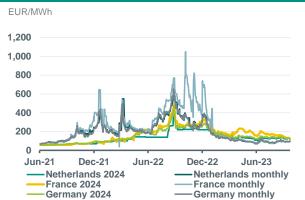
Carbon contract futures curve (EU Allowance)

EUR/MT



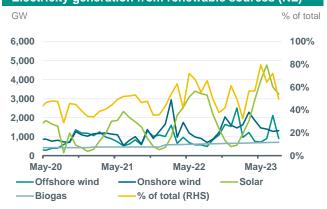
Source: Bloomberg, ABN AMRO Group Economics

Electricity power prices (monthly & cal+1 contracts)



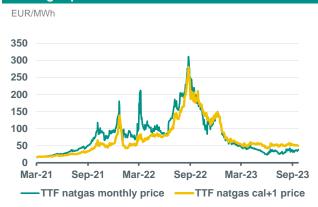
Source: Bloomberg, ABN AMRO Group Economics. Note: 2024 contracts refer to cal+1

Electricity generation from renewable sources (NL)



Source: Energieopwek (Klimaat-akkoord), ABN AMRO Group Economics

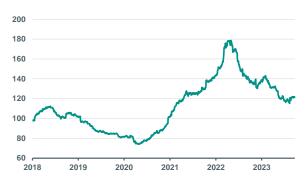
TTF Natgas prices



Source: Bloomberg, ABN AMRO Group Economics

Transition Commodities Price Index

Index (Jan. 2018=100)



Note: Average price trend of 'transition' commodities, such as: corn, sugar, aluminium, copper, nickel, zinc, cobalt, lead, lithium, manganese, gallium, indium, tellurium, steel, steel scrap, chromium, vanadium, molybdenum, silver and titanium. Source: Refinitiv, ABN AMRO Group Economics

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