

SustainaWeekly

Industry's reaction to the gas crisis

- ▶ **Sectors:** Despite gas consumption falling sharply in industry in the first half of this year, the sector's output continued to increase. Greater energy efficiency and diversifying the energy mix (especially more oil) are key measures that industrial companies have employed to mitigate high gas prices.
- ▶ **ESG Bonds:** The euro bank debt market welcomed three green deals last week, split between covered bonds, senior preferred and senior non-preferred debt. The latter two saw green issuance from somewhat smaller banks in the periphery, which in the end also needed to pay relatively large new issue premiums.
- ▶ **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.

In this edition of the SustainaWeekly, we focused on industry's reaction to the gas crisis. Looking at data for the first half of this year, it is extraordinary to see the sector continuing to grow, despite a collapse in gas consumption. At this stage we do not have sufficient data to breakdown the drivers behind this divergence. The positive take would be that industry has managed to step up its energy efficiency, which would be a boost for the transition as well as helping the sector to financially cope with the crisis. However, there is also a good deal of evidence that companies have switched to other fossil fuels, especially oil, which of course would not be a step forward. Our second topic is a review of last week's ESG bond issuance. We look at some of the trends in bank green bond issuance, as well as how investors reacted to utility bonds against the background of proposals for a power price cap.

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

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Gas consumption in Dutch industry scaled down

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- ▶ **Despite gas consumption falling sharply in industry this year, the sector's output continued to increase through to June**
- ▶ **Greater energy efficiency and diversifying the energy mix (especially more oil) are key measures industrial companies have employed to mitigate high gas prices**
- ▶ **With recession fears and erratic energy markets, uncertainty for companies remains high for the time being**

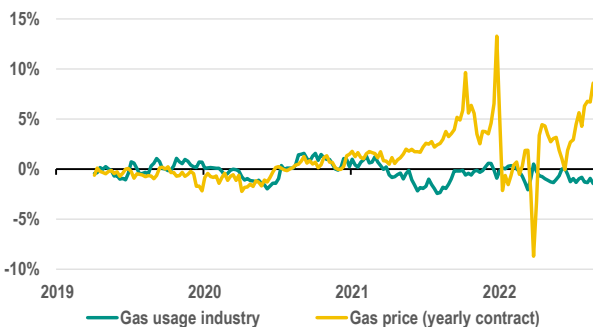
Arranging the production process and distribution in the chain as efficiently as possible has long been recognised as a necessity in industry. The sector is ahead of other sectors when it comes to taking measures to further improve energy efficiency. The ecological dimension of these measures remains evident, but today the economic side is increasingly demanding attention. Indeed, today's high gas prices are forcing industrial companies to diversify their current energy sources more, where possible. After all, business continuity has now also become a top priority.

Gas versus oil

In the first 34 weeks of 2022, gas consumption in the entire industrial sector in the Netherlands was almost 29% lower compared to the same period last year. This was mainly due to the high natural gas prices. However, the downward trend in gas consumption in industry started after the first quarter of 2021, when gas prices started to rise significantly. The higher gas prices have proved to be an incentive for many industrial companies not only to work more energy-efficiently, but also to explore cheaper alternatives to gas, both in end products and in production processes. Compared to 2021, TTF gas prices for monthly and annual contracts increased by a factor of 3 to 5 in the first half of 2022. At the end of 2021, the gas price fell sharply and briefly, after which an erratic pattern can be seen in the remainder of 2022, at a relatively high price level.

Gas usage industry versus gas price

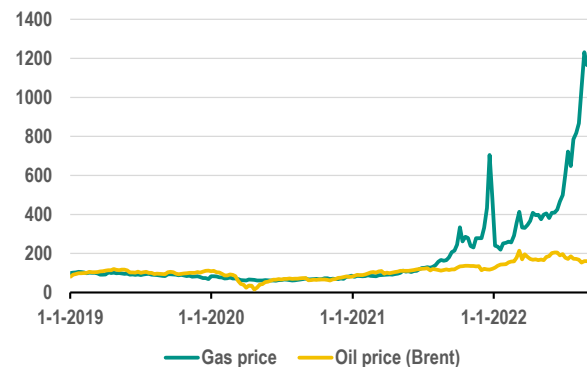
in % on yearly basis



Source: CBS, ABN AMRO group Economics

Gas price versus oil price

Index (Q1-2019=100)



Source: Refinitiv, ABN AMRO Group Economics

According to our forecasts, the tightness will keep the gas market in its grip for a while. It will keep prices high compared to historical averages until 2025-26. The perspective of such a long period of high prices forces companies to think about energy consumption and efficiency in the long term. However, it is not only gas prices that have risen sharply. European electricity prices are also skyrocketing. This is because not only the higher gas prices, but also the higher coal prices and the prices for CO2 rights are passed on into electricity prices. Therefore, speeding up electrification does not offer much relief at the moment, both from an economic and an ecological point of view. The oil price, however, shows an opposite trend. The peak of the oil price this year was USD 133 for a barrel of Brent oil in the first week of March. However, concerns about the global economic outlook has seen oil prices fall sharply back below USD 100/barrel. As an economic slowdown normally goes hand-in-hand with a lower demand for energy. Due to the large price difference between gas and oil, some companies in a position to do so have switched to oil as an energy source instead of gas. We judge - [see note here](#) - that the main

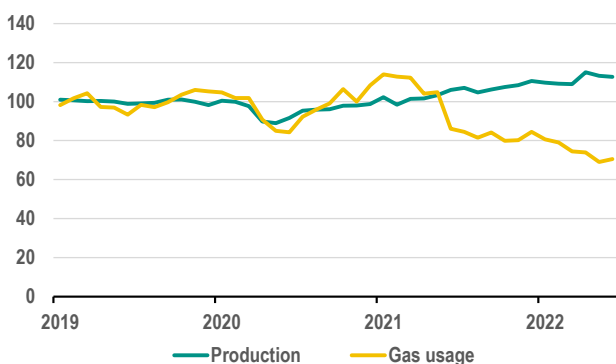
risks to oil prices are on the upside. Despite downward revisions in oil demand, tighter supply will result in continued upward price pressure.

Output versus confidence

Despite the fact that gas consumption has fallen sharply in industry this year, the sector's production was increasing through June. In the first six months of 2022, industrial production rose by an average of around 9% on a yearly basis. During this period, customer demand still held up somewhat. However, it had also to do with the filling of relatively low inventories and the fear of supply constraints. Various indicators from the PMI purchasing managers' index - a confidence indicator in manufacturing - show that final demand has recently started to contract. The September PMI, for example, shows a clear decrease in new orders (including export orders) and an increase in stocks in Dutch manufacturing industry.

Gas usage industry versus production industry

Index (2019=100)

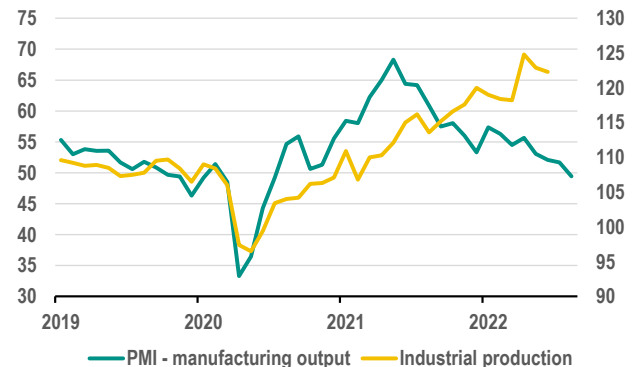


Source: Refinitiv, CBS, ABN AMRO Group Economics

Manufacturing output versus PMI confidence indicator

Index (>50=growth, <50=contractio)

Index (2015=100)



Source: Refinitiv, CBS, ABN AMRO Group Economics

The continued slowdown in growth in Dutch manufacturing is mainly due to lower demand for industrial products and semi-finished goods ([see note here](#), Dutch only). For the first time in two years, the manufacturing PMI output index is in contraction. These are clear signs that market conditions in manufacturing are worsening.

Gas usage in industrial sectors

More than three quarters of the total natural gas consumption in the Netherlands is accounted for by economic activities in sectors. The largest share of this is consumed by industry (40% share), closely followed by energy supply (over 37% share). Agriculture follows at some distance with a 12% share of total consumption by sectors. The three sectors together - industry, energy supply and agriculture - account for almost 90% of gas consumption by Dutch sectors.

Within Dutch industry, six subsectors then dominate in terms of volumes of gas consumed. These are the food industry, the paper industry, the chemical industry, the oil industry, the construction materials industry and the basic metal industry. These six sectors together accounted for 85-90% of total industrial gas consumption in 2020. The chemical industry accounts for more than half of the gas consumption, followed by the food industry with 15% and then the oil industry (13%).

A high gas price is an incentive for many companies to reduce their gas consumption, switch to alternative energy sources and/or implement efficiency measures in the production process. In industry, this transition has partly started since the second half of last year. Production has continued to increase since then, while gas consumption has fallen sharply. However, differences can be seen per subsector of the industry.

In the oil industry, both production and gas consumption are lower on an annual basis. However, the rate of decline varies. For example, in the first half of 2022, production decreased by more than 7% on average, while natural gas consumption decreased by 56% on average in the same period. Here, the use of gas as an energy source has mainly replaced oil. The base metals industry also shows a 17% decrease in gas consumption in the first half of this year and a 1% decrease in production. The demand for metals has partly weakened during 2022.

Trend in gas consumption and production by industrial subsectors

index (2019=100)



Source: CBS, ABN AMRO Group Economics

The other sectors show a decrease in gas consumption, while production increases on average. In the chemical industry, gas consumption in the first six months of this year fell by an average of 28% year-on-year, while production increased slightly by 1%. This sector is also able to use oil partly in the production process as an energy source, but here gas is also an important input for some end products. In the food industry, gas consumption has also declined; by June 2022, by 8% on average on an annual basis, while production increased slightly (by 1% in the first six months of this year on an annual basis). Here, gas consumption shows a very erratic pattern, with peak gas consumption in the winter months. However, these peaks decrease slightly over the years. In the building materials industry, gas is by far the largest component of the energy mix. Coal, electricity and oil are also part of this mix. But here too, a tilt in the mix has taken place to counteract the higher price of gas.

Rationalisation

The current high gas prices are an incentive for some private institutions to become more energy efficient and thus to reduce energy costs. Especially for large-scale consumers of natural gas - such as many companies in industry - this translates directly into lower production costs and therefore a better return. Companies can improve their energy efficiency with sometimes simple measures. Examples include optimising production processes, smarter heat consumption and maximising the circular use of raw materials.

But high gas prices also invite more diversification in the industrial energy mix, provided this is technically possible, of course. In the short term, this will reduce costs. But in the long term, alternatives to gas will not be volatility of the market. As a result, uncertainty about energy bills and thus business continuity will remain high for many industrial companies for the time being.

Smaller banks access market with green senior bonds, as greenium returned in covered bond market

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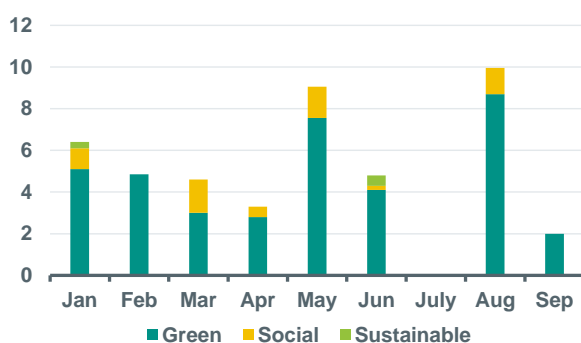
- ▶ Last week, two green senior euro bank bonds were issued as well as one green covered bond
- ▶ Green format likely strengthened demand for Italian Banco BPM and Spanish Abanca senior bonds, indeed demand was actually higher than this year's average for green senior paper
- ▶ However, both issuers paid relatively large new issue premiums
- ▶ ING Diba issued a green covered bond through its own curve, marking a return of the greenium
- ▶ Utility issuers see impact of proposed price caps

The euro bank debt market welcomed three green deals this week, split between covered bonds, senior preferred and senior non-preferred debt. The latter two saw green issuance from somewhat smaller banks in the periphery, which in the end also needed to pay relatively large new issue premiums. This, in turn, was in line with the key message from last week's note that greeniums in the bank debt market have been under pressure this year, likely reflecting ongoing high volatility (see [here](#)). Having said that, the green format of these bank bonds probably helped support demand for the bonds of Spanish **Abanca** and Italian **Banco BPM**, as current, volatile market conditions have made it more difficult for smaller banks to enter the primary market (i.e. the execution risk has risen substantially).

Abanca Corporation Bancaria issued the third green senior preferred euro benchmark so far this year, as it raised EUR 500mn with a 6NC5 bond at MS +305bp. The final spread was 20bp lower than IPTs, but still implied a new issue premium (NIP) of roughly 40bp. This was double this year's average NIP paid for green senior preferred paper. Investor demand was reported at EUR 1.2bn, translating into a 2.4x bid-to-cover ratio, which was actually higher than this year's average of 1.9x. The proceeds will be used to finance green projects that are included in the issuer's SDG framework. These are focussed on renewable energy generation (wind and solar) that have 'clear and measurable environmental benefits'. Thus far, the bank has identified EUR 737mn of eligible green projects (319 individual plants), which save around 375K t CO₂eq/year (see [here](#)). The issuer itself has a 20.5 ESG Risk Rating at Sustainalytics (medium risk), the result of a medium-risk 39.1 Exposure Score and a strong 50.3 Management Score.

Issuance of ESG euro bank debt (incl. covered bonds)

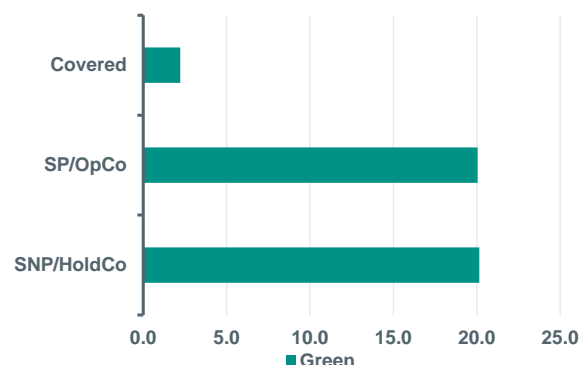
EUR bn



Source: Bloomberg, ABN AMRO Group Economics.

Average new issue premiums for green bonds in 2022

Average new issue premium, bp



Source: Bloomberg, ABN AMRO Group Economics.

Banco BPM was the second Italian issuer this year to issue a green senior non-preferred bond, following quickly after **Intesa Sanpaolo** that was in the market a week earlier. Banco BPM issued an EUR 500mn 4y bond (rated Ba2/BB+ by Mood's/Fitch) at MS +385bp. The order book was EUR 950mn, which seemed a bit underwhelming given that the issuer

paid a new issue premium of a whopping 135bp. Apparently, this reflects the still clear risk-off mood that most investors have taken this year. Still, the bank noted ([here](#)) that 120 investors had participated in the deal, of which 70% were dedicated ESG investors. Most investors were asset managers (61%) and banks (20%), while a regional split showed that Italian investors were dominant (43%), followed by the UK (24%), France (14%), Benelux (8%) and Germany, Austria, Switzerland (7% altogether).

Interesting to note is that all new issuance of Banco BPM has been in green or social format so far this year, as it already issued a 5y social senior preferred bond in July and a 5y covered bond in March. The proceeds of the bonds will be used to finance projects included in the issuer's Green, Social and Sustainability Bonds Framework ([here](#)). The proceeds of green bonds can be used for new and existing financing related to green buildings, renewable energy, energy efficiency, pollution prevention & control, sustainable water infrastructure, and low-carbon transportation. The bank's total portfolio of green eligible loans was EUR 3.4bn at the end of June, the majority of which was related to green buildings (EUR 3bn), while EUR 350mn was linked to renewable energy projects. It was also notable that Banco BPM worked together with CRIF Real Estate Services in order to create a reference framework related to technical standards for Italian residential properties that could then be used to identify eligible green mortgage loans (e.g. the top 15% most carbon efficient buildings). Banco BPM runs a medium ESG risk according to Sustainalytics (26.3 ESG Risk Rating), stemming from a medium (46.8) Exposure Score and an average (45.9) Management Score.

Finally, German **ING Diba** managed to issue a green covered bond through its own curve. It issued a EUR 1bn 8y green covered bond at MS +2bp, which compared to our fair value estimate of MS +3bp. Demand for the deal was EUR 1.5bn. That the issuer managed to achieve a 1bp greenium stood in contrast to recent other green covered bonds that all paid positive new issue premiums. ING Diba has EUR 85bn of mortgages on its balance sheet (total assets are EUR 182bn), of which EUR 3.2bn qualify for green financing. In total, the bank's eligible green portfolio totals EUR 13bn (see [here](#)). Furthermore, the ING Group has a 22.3 (medium risk) ESG Risk Rating, the result of a medium (54.5) Exposure Score and a strong (63.6) Management Score.

Greenium when you're exposed to electricity price cap

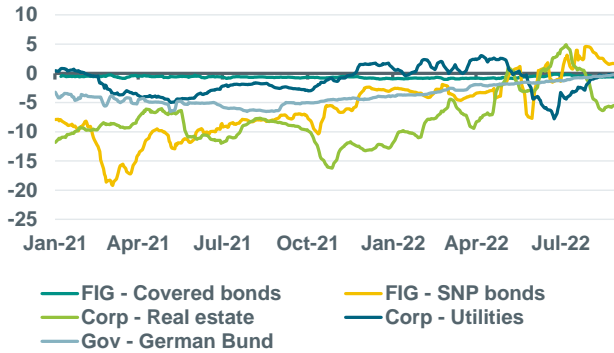
Last week the capital markets for European utility companies had their ups and downs, but we did not see anything in the utility space that was hugely out of line with broad market developments, neither on the equity nor on the debt space. This was despite the backdrop of imminent government intervention in power markets, with the European Commission calling for a EUR 200 per MWh price cap on electricity being generated from non-gas sources such as wind, solar, hydro, nuclear and coal. Nordic hydroelectric utility **Statkraft** (A3 composite credit rating) and Northern European wind-power champion **Orsted** (BBB1 composite credit rating) were in the market for green bond deals. Both utilities largely operate assets which could be affected by the suggested price cap and indeed both issuers saw spread widening taking shape. To illustrate that it is not only new issue driven, the spreads on the Vattenfall 2029 0% green widened by 10bp last week. Same rated Orsted 2028 2.5% green bond (issued in June this year) saw its spreads jump by 17bp.

But while price caps generally have a negative connotation, in the case of utilities they hardly matter when a large share of the production is contracted, such as through PPA's. The bulk of these contracts were likely agreed during a period when wholesale power prices (which act as a reference for price setting) were at much lower than what they are today. Hence, while creditors lose the upside on Orsted being able to charge as much as EUR 200 per MWh, we would have expected spreads on the secondary bonds to remain stable, not widen as they did. Orsted ultimately paid 9bp of new issue concession on its new deal, yet Statkraft, which has considerably less hedging applied on its entire generation fleet printed its new bond at a 10bp greenium. Therefore, while the energy cap drove a widening of spreads on the secondary of Statkraft as well, the new bond investors were drawn into Statkraft's high earnings potential under a EUR 200MWh price cap. This makes sense, given that Statkraft's cost to generate electricity is only EUR 10 per MWh according to its latest investor presentation, leaving still ample profit potential. Not that this profit potential really mattered as Statkraft already operated at 0.2x ND/EBITDA at the end of 2021. Finally, this was Statkraft's first visit to the bond market after 5 year absence. Adding to this scarcity, a green label could have also driven a higher bid in the name.

ESG in figures

ABN AMRO Secondary Greenium Indicator

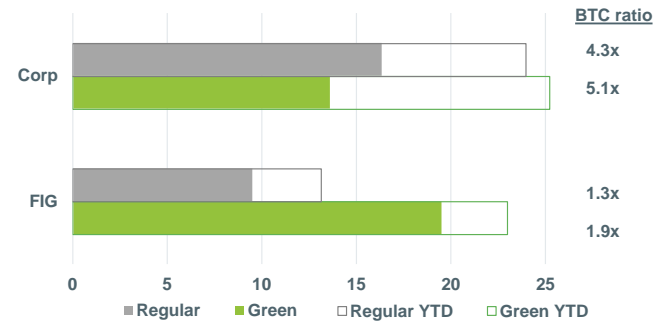
Delta (green I-spread – regular I-spread)



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

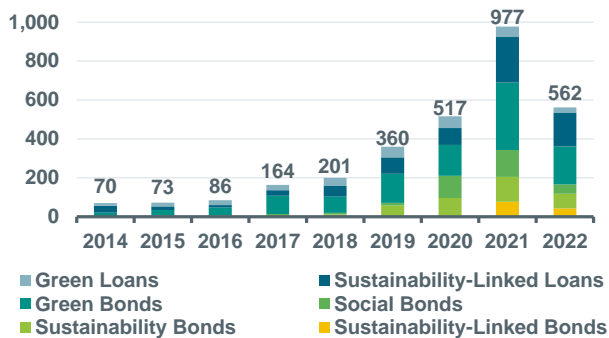
NIP in bps



Note: Data until 08-09-22. BTC = Bid-to-cover orderbook ratio. Source: Bloomberg, ABN AMRO Group Economics.

Sustainable debt market overview

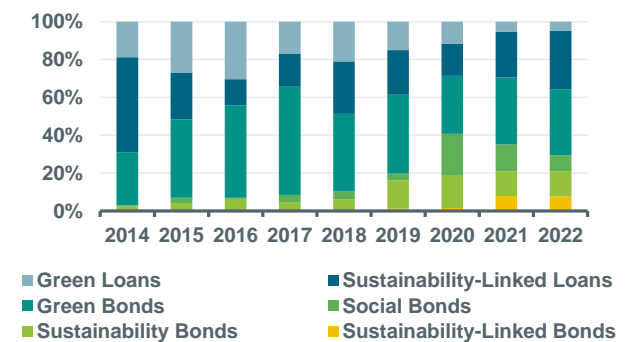
EUR bn



Source: Bloomberg, ABN AMRO Group Economics

Breakdown of sustainable debt by type

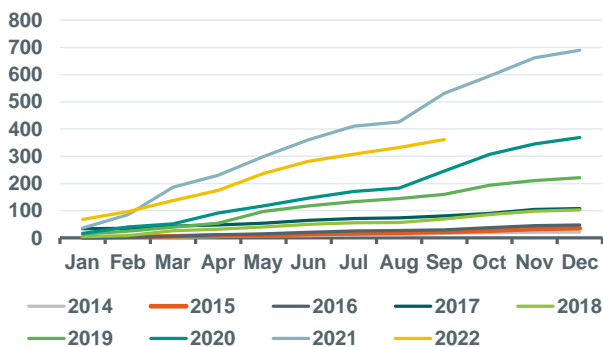
% of total



Source: Bloomberg, ABN AMRO Group Economics

YTD ESG bond issuance

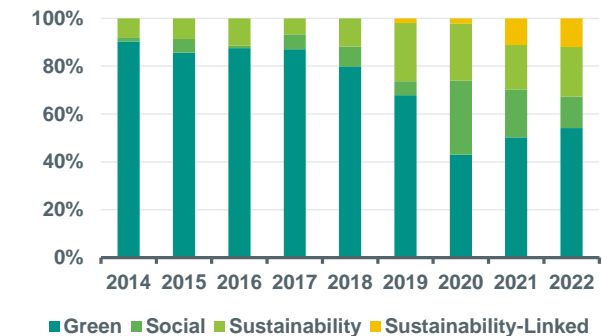
EUR bn



Source: Bloomberg, ABN AMRO Group Economics

Breakdown of ESG bond issuance by type

% of total

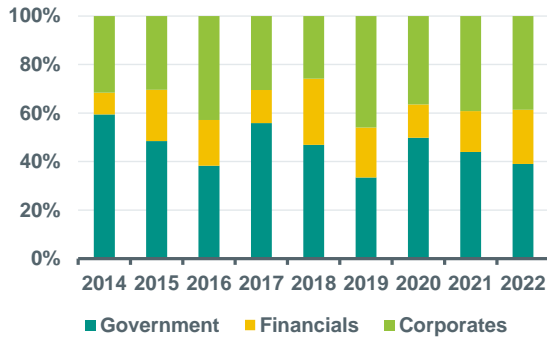


Source: Bloomberg, ABN AMRO Group Economics

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

Breakdown of ESG bond issuance by sector

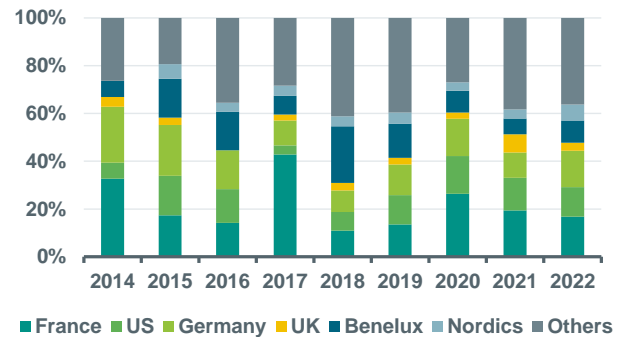
% of total



Source: Bloomberg, ABN AMRO Group Economics

Breakdown of ESG bond issuance by country

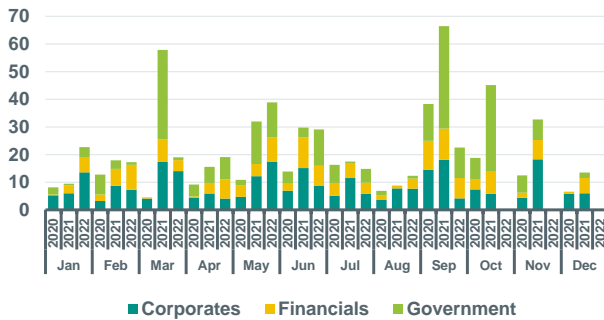
% of total



Source: Bloomberg, ABN AMRO Group Economics

Monthly Green Bonds issuance by sector

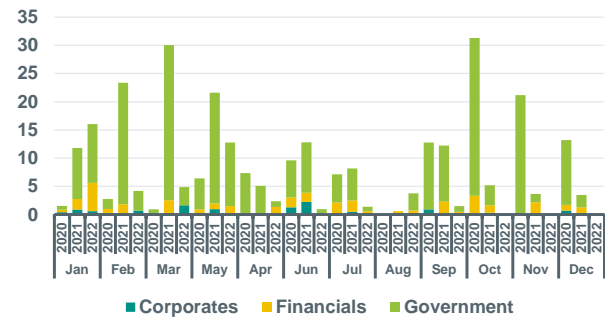
EUR bn



Source: Bloomberg, ABN AMRO Group Economics

Monthly Social Bonds issuance by sector

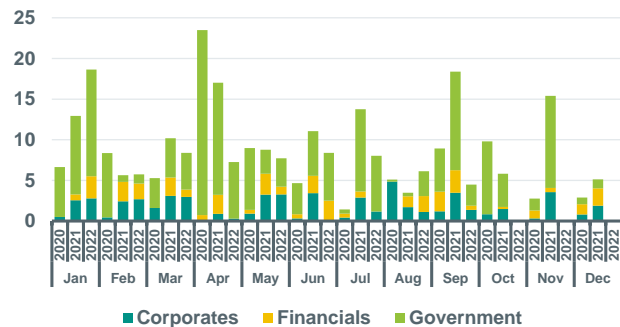
EUR bn



Source: Bloomberg, ABN AMRO Group Economics

Monthly Sustainability Bonds issuance by sector

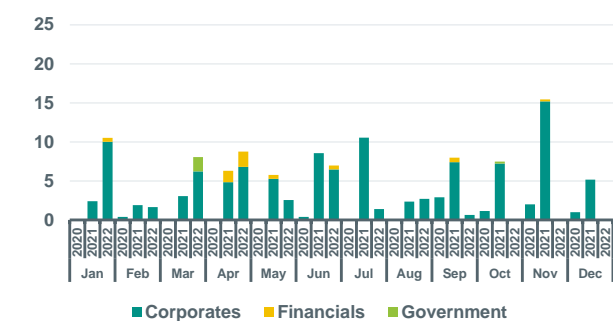
EUR bn



Source: Bloomberg, ABN AMRO Group Economics

Monthly Sust.-Linked Bonds issuance by sector

EUR bn



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)

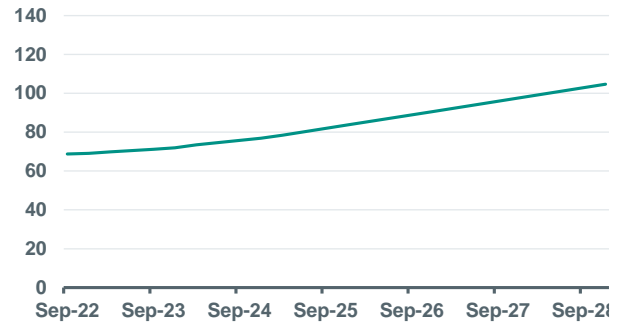
EUR/MT



Source: Bloomberg, ABN AMRO Group Economics

Carbon contract future prices (EU Allowance)

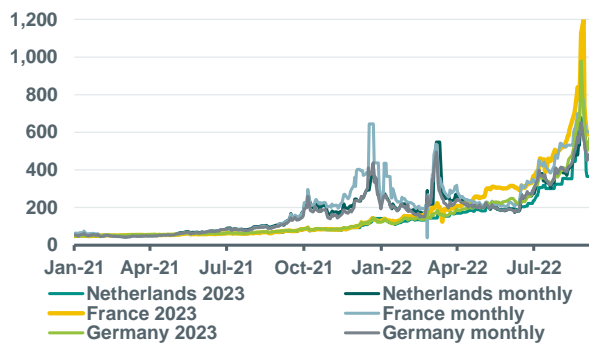
EUR/MT



Source: Bloomberg, ABN AMRO Group Economics

Electricity power prices (monthly & cal+1 contracts)

EUR/MWh

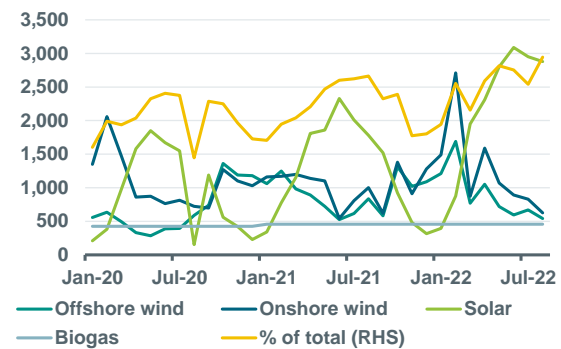


Source: Bloomberg, ABN AMRO Group Economics. Note: 2023 contracts refer to cal+1

Electricity generation from renewable sources (NL)

GW

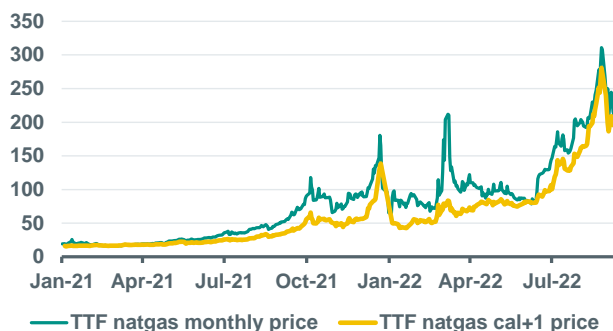
% of total



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

TTF Natgas prices

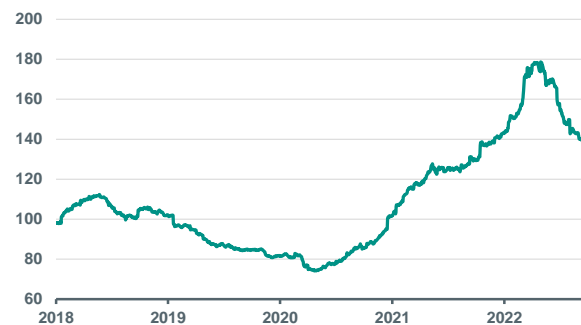
EUR/MWh



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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