

Group Economics | Financial Markets & Sustainability Research | 19 September 2022

Marketing Communica

SustainaWeekly

A closer look at the updated NGFS scenarios

- Economist: NGFS has released updated and improved climate scenarios. For the first time, the scenarios include projections of the potential losses from extreme weather events. The impact of carbon revenues on the economy, depending on exactly how they are used, is also taken more explicitly into account.
- Strategist: ABN AMRO has conducted a survey with dedicated ESG investors across North-Western Europe. The survey had a total of 18 questions and 39 investors participated. We provide a short preview of the results by highlighting a few of the answers received.
- ESG Bonds: KPN was in the market with a debut green bond in a hybrid format. The metals & mining company Anglo American also issued an inaugural SLB. German high voltage grid operator Amprion joined peers in the market by issuing a debut green bond, with proceeds directed to sustainable transmission systems.
- Sectors: Dutch greenhouse gas emissions are much lower in 2022, mainly due to less gas consumption in industry, agriculture and the built environment. High gas prices have led many industrial companies to implement necessary alternatives and measures to ensure business continuity in particular.
- Social Impact: Nearly three-quarters of AEX companies mention social impact in some way on their main websites. Do companies use social impact strategically, as a way to improve their image? Or are they truly making a social impact? Most academic research shows that both perspectives are true.
- 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 cover a wide range of topics. We kick-off by looking at the updated NGFS climate scenarios, we then go on to review the results of our ESG investor survey, assess the ESG bond issues of last week and the most recent data on Dutch emissions. Finally, in a new section focused on Social Impact, we look at the drivers behind corporate communication on social impact. Enjoy the read and, as always, let us know if you have any feedback!

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New NGFS scenarios

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- Network for Greening the Financial Sector (NGFS) releases updated and improved climate scenarios
- Results show that immediate action is the least costly in the long run
- Using carbon revenues for government investment works best to mitigate GDP impact of carbon price

NGFS releases updated and improved climate scenarios

On 6 September the Network for Greening the Financial Sector (NGFS) released the third vintage of its climate scenarios. This new version includes updates on GDP and population pathways as well as the most recent climate commitments made at UN Climate Conference (COP26) in November 2021. For the first time the scenarios include projections of the potential losses from extreme weather events (acute physical risk, in particular cyclones and river floods) to complement the chronic physical risk (trend changes in agricultural and labour productivity due to temperature change) impacts on the macroeconomy that were already included in the previous version. The scenarios also include the latest trends in renewable energy technologies and key mitigation technologies. Moreover transition risks are represented with increased granularity in certain sectors. The scenarios do not yet account for the impact of the war in Ukraine.

NGFS scenarios in short

The NGFS scenarios have been developed to provide a common starting point for analysing climate risks to the economy and financial system. The NGFS has six scenarios in three categories: orderly, disorderly and hot house world. Orderly scenarios assume climate policies are introduced early and become gradually more stringent. In the orderly scenarios, both physical risks (chronic impact on productivity, acute impacts from extreme weather events) and transition risks (as result of policy and regulation, technology development and consumer preferences) are relatively subdued. Disorderly scenarios assume higher transition risk due to policies being delayed or divergent across countries and sectors. Hot house world scenarios assume some climate policies are implemented in some jurisdictions, but globally efforts are insufficient to halt significant global warming. The scenarios result in severe physical risk including irreversible impacts like sea-level rise.

A key indicator of the level of transition risk is the shadow emissions price, a proxy for government policy intensity and changes in technology and consumer preferences. This shadow price is a measure of overall policy intensity. Governments are pursuing a range of fiscal and regulatory policies, which have varying costs and benefits.

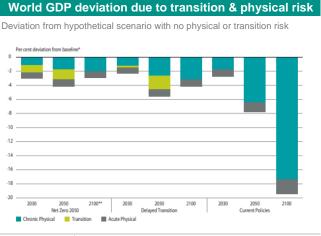
Results show that immediate action is the least costly in the long run

Reaching global net zero CO2 emissions by 2050 will require an ambitious transition across all sectors of the economy. The climate scenarios continue to show that immediate coordinated transition will be less costly than inaction or disorderly transition in the long run. For the world economy, the net-zero scenario is shown to have a moderately negative impact on world GDP compared to baseline. Stringent mitigation in line with the net-zero 2050 scenario will already be beneficial by 2050 and strongly reduces risks towards the end of the century.

GDP impacts from transition risk are more markedly negative in the disorderly scenarios as the speed of the transition combined with investment uncertainty affects consumption and investment. GDP losses from physical risk vary in line with different temperatures projected for each scenario. Physical risk in hot house world scenarios (such as Current Policies) will lead to the strongest negative impact on GDP with economic costs diverging significantly after 2040. For all scenarios and time scales, physical risks outweigh transition risks. GDP losses from physical risk are higher in the third vintage scenarios compared to the second, due to the (high-level) inclusion of acute physical risk for the first time, and an increase in the damage estimates from chronic physical risk. GDP losses from chronic physical risks reach more than 6% in 2050 and up to

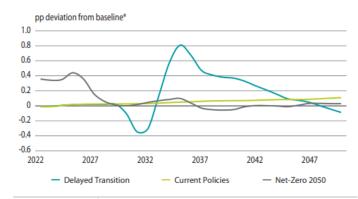
18% by the end of the century in the Current Policies scenarios. This damage is concentrated in countries that already have a warmer climate.

In terms of inflation, the implementation of carbon prices in the Delayed Transition scenario tends to raise energy costs in first instance, initially weighing down on prices compared to the baseline (as lower demand and financial market losses hit output). Rising carbon prices subsequently feed through to modest increases in inflation and unemployment before returning to prior trends. In the net-zero scenario for Europe and China inflation tends to first rise and then decline compared to the baseline. In the Current Policy scenario inflation tends to rise at a very modest pace.



Inflation rate in Europe

Deviation from hypothetical scenario with no physical or transition risk



Source: NGFS 3rd vintage climate scenarios, NIGEM model with REMIND inputs

Source: NGFS 3rd vintage climate scenarios. NIGEM model with REMIND inputs and damage estimates from Kalkuhl & Wenz (2020)

Using carbon revenues for government investment works best to mitigate GDP impact of carbon price

In the new scenarios, an important issue is taken into account more explicitly: namely the use of carbon revenues. In a climate scenario, the impact of the carbon price itself is modelled via different channels, with the price channel being the most obvious one. However, when a carbon price is implemented, carbon revenues flow to (usually) government coffers. These revenues than have a separate impact on the economy, depending on how they are used. The carbon revenues can, for instance, be used to pay down government debt, with the result being lower government debt but no direct effect on economic activity. The revenues can also be used to lower taxes to the private sector generally, or to support to households specifically. Lastly, the revenues can be turned into government investment in for instance the energy transition.

The NGFS explores these different options in a sensitivity analysis for the net-zero scenario. Their findings show that the carbon price impact (the combined effect of the "carbon price increase channel" and the "use of carbon revenues channel") triggers a decrease in GDP and an increase in inflation in the short term. Different ways of carbon recycling lead to (limited) differences in economic outcomes. The analysis shows that a full recycling through public investment leads to the most beneficial effects on GDP. The effects are different per country, which can be explained by among others the degree of energy intensity or different carbon price levels. For the US, the GDP impact becomes positive around 2040 in the "recycling through government investment" option, while the other options cannot fully absorb the negative shock coming from higher carbon prices. For Germany the GDP impact is less and becomes positive in 4-5 years in the public investment recycling scenario.

The inflationary impact of the public investment recycling option is also the strongest, with a 4% increase of US inflation from baseline. In all cases, however, inflation returns to baseline within a 5-year period following the carbon price increase. This is among others due to an increase in policy interest rates. All the options lead to higher interest rates, with the effect again the largest when recycling is done through government investment. If recycling is done through paying down government debt, interest rates return to baseline quickly (after 5 years), while the other options have monetary policy tighter for longer.

ABN AMRO ESG Investor Survey 2H22 Preview

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- ABN AMRO has conducted a survey with dedicated ESG investors across North-Western Europe
- The survey had a total of 18 questions and 39 investors participated
- In this note, we provide a short preview of the results by highlighting a few of the answers received

Please reach out if you would like to receive the complete note that includes the results across all questions.

ABN AMRO has conducted a survey with dedicated ESG investors in order to better understand their dynamics, investment behaviour, preferences and screening criteria. The survey had a total of 39 respondents, with a good diversification in terms of regions. The majority of the investors seemed to be from asset managers, which does seems to be aligned with the fact that also the majority of dedicated ESG bond funds are managed by these type of investors. Also 64% of the respondents are portfolio managers, while 20% are ESG analysts / strategists.

Most of the investors rely now on alignment with the EU Taxonomy to assess ESG instruments

As shown in the graphs below, when investors were asked to rank their preferred standard used when assessing ESG instruments, the majority of investors chose the EU Taxonomy and/or the EU Green Bond Standard (GBS) as the most relevant one. This indicates a clear shift away from prioritizing a market-driven standard such as the ICMA Green Bond Principles, likely also driven by the fact that upcoming regulation will require investors to disclose the proportion of their portfolio that aligns with the EU Taxonomy.

Interestingly as well, the investors that have chosen the EU Taxonomy as their preferred standard, are also mostly investors with either a "buy and hold" investment strategy, or a passive one. This indicates that investors who clearly prioritize the ESG profile of a bond/issuer are also the ones who put more weight into transparency in terms of alignment with the EU Taxonomy.

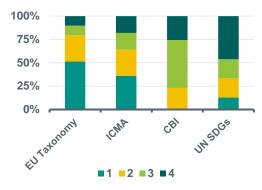
A closer look at the results also shows us that the Climate Bond Initiative (CBI) certification ranks on average as the third preferred standard by investors, though none chose it as the most relevant one. It therefore reinforces the idea that CBI is a nice "addition" for investor screening, but should not be replaced by other relevant standards such as the EU Taxonomy or the ICMA Green Bond Principles.

The ICMA Green Bond Principles has also been on average chosen as the second most relevant standard used by ESG investors, but still 36% have chosen it to be the more relevant that the EU Taxonomy, for example.



...Climate Bond Initiative certification has not been selected by any investor as the preferred standard Question: What is for your institution the most relevant external standard

when assessing ESG instruments? (1= most relevant;'4= not relevant at all)



Source: ABN AMRO Group Economics.

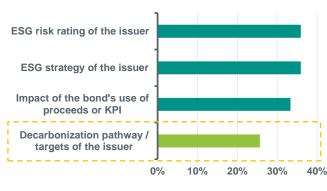
The ESG strategy and ESG profile of an issuer are the most important criteria when analysing investments into ESG instruments

72% of the investors that responded to our survey have indicated that they most commonly evaluate the ESG risk rating of the issuer and/or the its ESG strategy when assessing investments in ESG bonds. This is an interesting shift, as in the past, a higher emphasis was usually put into the use of proceeds of the ESG bond. Investors have therefore started to have a more holistic view of the issuance, by starting to assess also how the ESG bond fits within the issuer's profile and strategy. Our most recent results seem to indicate that one could even argue that the issuer's ESG profile is deemed as more important than the bond's use of proceeds or KPI when determining investment by ESG investors.

Also a small minority of respondents (26%) indicate that they look at the issuer's decarbonization strategy when evaluating investments. For that, the most relevant standard used is the Science-Based Target initiative (SBTi). Also 40% of the investors have indicated that a company's reporting quality and transparency are also key for this analysis. Investors also mention a company's carbon footprint pathway (both historical and future), including decarbonization milestones, to be relevant for assessment.

ESG profile and strategy are the most important indicators for investors

Question: When analysing ESG instruments, which of the following criteria would you judge as most relevant? (Multiple answers allowed)

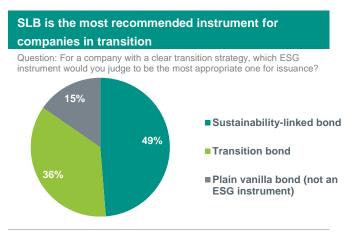


When assessing decarbonization pathways, investors mostly want to see SBTi approved targets Question: (For those that selected decarbonization pathway) Specify your



Investors seem to encourage issuers in transition to make use of ESG bonds

When asked which instrument a company in transition should make use of when coming to the market, the vast majority of investors (85%) has recommended it to be an ESG bond (see graph on the next page). Only 15% has indicated that a company with a clear transition strategy should make use of plain vanilla bonds. Investors seem therefore keen to participate in the transition pathway of issuers and encourage those issuers to issue ESG bonds.



Source: ABN AMRO Group Economics

Source: ABN AMRO Group Economics

Source: ABN AMRO Group Economics

When looking into specifically which ESG bond was advised, 49% of the investors have indicated that the most appropriate one for issuance would be a Sustainability-Linked Bond (SLB). 36% of the respondents, however, would prefer the company to still use a traditional "use of proceeds" ESG bond, and perceive therefore perhaps this one to be more impactful in this case.

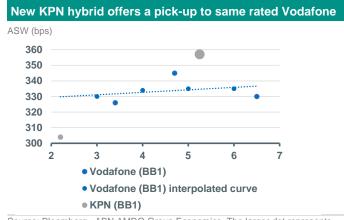
Several corporate issuers come to the market with debut ESG bonds

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- In this note we review a few of the ESG bonds issued by corporates last week
- KPN was in the market with a debut green bond in a hybrid format
- The metals & mining company Anglo American also issued an inaugural SLB
- German high voltage grid operator Amprion joined peers in the market by issuing a debut green bond, with proceeds directed to sustainable transmission systems

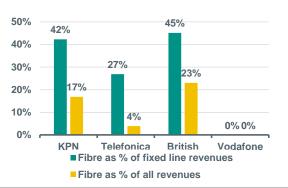
The new KPN hybrid deserves a greenium

Dutch telecommunications company KPN came to the market last week with a debut green hybrid bond. While KPN's senior bond in SLB format trades at a small greenium to its closest peer bonds (issued by Vodafone), we note that the new hybrid landed at 22bp of pick-up to the interpolated Vodafone hybrid curve.



Source: Bloomberg, ABN AMRO Group Economics. The larger dot represents green bond, x-axis = duration

The use of proceeds on the new KPN hybrid will largely go into expanding the fibre optics (a.k.a. fibre) fixed line connections. Fibre optic produces nearly 37% less carbon emissions than for example traditional coax cable internet connections, according to a study on a sample of German homes. Closest peer Vodafone has no pure fibre internet offering, it still uses coax cable with bits of fibre. But also lower rated Telefonica is less advanced than KPN in the monetization (hence use) of fibre optics. This can be seen in the chart below, which shows the percentage of fibre internet revenues against fixed line revenue and total revenues of the issuers as per latest financial filings. Only BT has a (slightly) higher penetration of fibre internet than KPN. Still, against Vodafone, the KPN bond stands out in terms of green benefits.

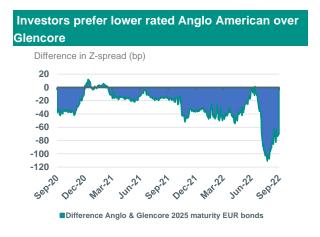


KPN and BT stand out as energy savers on network

Source: Company Q2/H2 2022 filings, ABN AMRO Group Economics, for KPN only fibre retail revenues were made available

Anglo American SLB fails to confirm investor appetite for transition businesses

In the metals & mining space, EUR denominated investors have for quite some time preferred pure play miner Anglo American over the more diversified miner and trading characteristics of Glencore. This comes despite Anglo American's one notch lower credit rating of BBB2 composite vs Glencore's BBB1 composite. Perhaps Glencore's trading business (through which it traded over USD100bn of energy products last year) and involvement in more scandals (as reflected in its high risk ESG Risk Rating by Sustainalytics) play an important role in lower investor appetite in Glencore. This makes investors more comfortable pursuing Anglo American, despite Anglo American's lower diversification and smaller size. The chart below shows the difference in spread between Anglo American and Glencore bonds in the 2025 maturity. This gap persists till today, despite warnings flagged by various US metal makers that demand for steel is slumping across a variety of endproducts. Given that Glencore is also diversified in energy trading, it has more immunity than pure play miner Anglo American to the warnings flagged by the metal makers.



Source: Bloomberg, ABN AMRO Group Economics

Strangely, in the USD bond market Anglo American spreads trade wider to Glencore. The issuer perhaps felt that it could put this higher appetite by EUR investors to work in a longer maturity and even went for an SLB format for a 2029 bond, the first time for the issuer and also for a mining company in the EUR IG bond space. KPI's were related to CO2 reduction (scope 1 and scope 2), reduction in fresh water extraction and off-(mining)site job creation.

According to our investor survey we note that ESG bond investors are (desperately) searching for transition company bonds, but in reality appetite seems weak judging by the new Anglo American SLB deal. Step ups were huge ranging from 40 to 120bp depending on missing 1 or all three targets (remember a couple of months ago we were seeing 12.5 to 25bp step ups. In fact, 80% of the EUR SLBs outstanding make use of a 25bps step-up). A week earlier, the Enel and Henkel offered much smaller step-ups (albeit in the case of Enel for a potential longer penalty horizon could be in play if Enel were to continue to miss targets after the test date). The SPO on the KPI's was carried out by ISS ESG, which found the scope 1 and 2 reduction targets to be aligned with the 1.5 degree scenario of the Paris Agreement (although there is no Science-Based Targets initiative validation given also difference in methodology). There was limited evidence to properly assess the ambition level of the other two targets (abstraction reduction of fresh water in water-distressed region and off-site jobs creation for every on-side job).

The new Anglo 32's SLB priced 28bp outside of the 9.5y duration Glencore, and if we had to take the 48bp tighter spread on the euro Anglo American 1.625% 2026 vs the Glencore 3.75% 2026 on this 9.5y maturity it should have landed at roughly MS+150bp. Therefore, we calculate a whopping 75bp of new issue concession on the new Anglo American SLB. This deal was not a showcase of high investor appetite for sectors in transition, quite the opposite. Especially since there has been change in trend in Anglo American's non-SLB bonds vs Glencore (i.e. they continue to trade at tighter spreads) we can rule out that it might have to do with the warnings flagged by steel companies. Let us therefore hope it does not discourage other issuers in transition industry preparing themselves for a SLB.

Amprion higher capex resulted in a benchmark against lower rating issuer

There were quite a few utility companies issuing bonds last week, but only Italian integrated player A2A and German high voltage grid operator Amprion came with ESG (green) offerings, both in green bond format. It was Amprion's second public bond market deal (although we note that Amprion's deal from last year is flagged as SSD format in Bloomberg).

Orderbooks were over 5 times the offering, while on last year's offering they topped at 3 times. But UK/US transmission company National Grid 'only' paid 20bp of concession on a regular bond 10y deal 2 days before. On news site Global Capital we understood that Amprion was benchmarked against German DSO and retail operator E.On (see <u>here</u>). Admittedly, E.On has a well populated curve to serve as a pricing benchmark, plus it is also mostly composed by green issuances. But E.On operates distribution networks and does so in various countries (albeit with a focus on Germany). It also operates retail businesses, which buy and sell electricity and deliver a sizeable contribution to EBITDA. Hence, E.On is also usually seen more as an integrated utility company, rather than a regulated DSO/TSO. Amprion, like Eurogrid, is a fully regulated company and therefore both can be considered close peers. On top of that, E.On is also rated one notch lower by Moody's, while both Eurogrid and Amprion carry the same BBB1 composite rating.

However, Eurogrid's lower capex requirements could have been the driving factor behind Amprion not being benchmarked against its closest peer. Eurogrid is set to spend roughly EUR 5.6bn in capex over the course of 2022-2026 (5y), while Amprion will spend a whopping EUR 28bn over the course of 2022-2031 (10y). Amprion's higher capex ticket size comes presumably from the larger industrial activity in West Germany where Amprion operates. Amprion starts the higher capex assignment with roughly 16% of FFO/ND, slightly above Eurogrid's 12% FFO/ND position (as of FY21). Still, Moody's expects Amprion to come out with high single digit FFO/ND (between 6% and 8%) once the high capex gets underway. Eurogrid's FFO/ND is set to land in the 10-11% range, therefore a considerable difference and the main reason why the new Amprion deal was benchmarked against one notch lower rated E.On. Still, should Amprion's FFO/ND remain in the high single digits as expected, its one notch better credit rating still makes it a better proposition than E.On.

Reduced gas consumption cuts Dutch greenhouse gas emissions

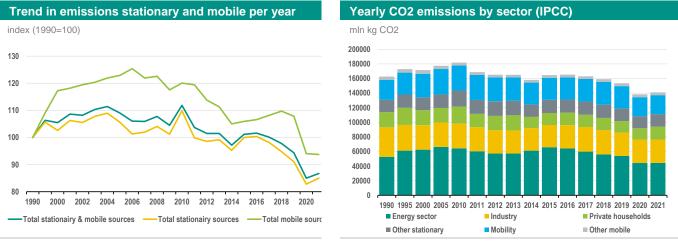
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- The reduction in emissions over the years has been slow, with the transport sector in particular making far less miles compared with the other sectors
- Greenhouse gas emissions are much lower in 2022, mainly due to less gas consumption in industry, agriculture and the built environment
- High gas prices have led many industrial companies to implement necessary alternatives and measures to ensure business continuity in particular

Burning fossil fuels to produce energy accounts for about 72% of global greenhouse gases (GHGs), according to *the Center for Climate and Energy Solutions* (C2ES). Reducing fossil fuels (such as gas) and replacing them with renewable sources is therefore a top priority amongst policy makers. Dutch industry has significantly reduced its gas consumption in recent months, mainly due to higher costs. More energy-efficiency measures, replacing gas for oil, for instance, halting production lines and sometimes completely ceasing all activities were, however, at the root of this. As a result, the transition to a more sustainable energy mix is still a long way off.

Slow reduction GHG emissions

The European *Green Deal* aims for climate neutrality by 2050. This is also the ambition of the Dutch government. But achieving this goal will require large-scale action in many sectors. For example, to achieve the 2030 target alone (60% reduction in GHG emissions from 1990 levels), a GHG reduction of over 50% is needed. Every part of the Dutch economy will have to contribute to this. 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 decreased by 10% in the first half of 2022 compared to the same period in 2021.



Source: CBS, ABN AMRO Group Economics

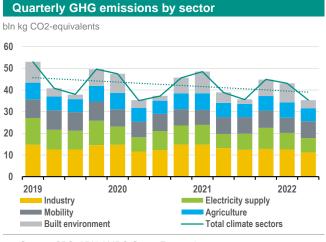
Source: CBS, ABN AMRO Group Economics

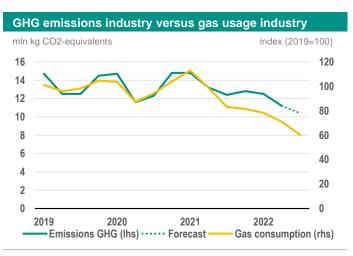
Since 1990, the Netherlands has reduced GHG emissions by about 15%. Looking only at CO2 emissions, this represents a 13% reduction in emissions since 1990. The energy sector, industry and private households have contributed the most to this with reductions between 16-20% since 1990, while transport has achieved only a 5% reduction in GHG emissions so far. Overall, the pace in reduction in emissions over the past years has been very slow.

The downward trend in GHG emissions set in late. From 1990 to 1997, emissions increased at first, before declining slightly in an erratic pattern. From 2010 - after the 2008-2009 financial crisis - emissions declined more sharply year-on-year. From 2014, GHG emissions increase again, especially from mobile sources (such as passenger cars, road freight, shipping, aviation, etc.). At the time Covid-19 and lockdowns occur in 2020, an abrupt sharper reduction in GHG emissions can be observed. However, with easing Covid-19 measures in 2021, a slight recovery in emissions is again visible.

Less gas consumption, less GHG emissions

Last week, CBS published GHG emissions figures for the second quarter of 2022. The figures showed that GHG emissions in the second quarter of this year were 9% lower than a year ago. This was mainly due to lower natural gas consumption in industry, agriculture and the built environment. In energy supply (electricity sector), emissions remained almost the same. Natural gas consumption in this sector was almost 20% lower in the second quarter year-on-year, but electricity production from coal increased by 40% year-on-year. Production from renewable sources also increased significantly - by 25% year-on-year in Q2 2022 - but this source was not able to offset the power supply sector's GHG emissions.





Source: CBS, ABN AMRO Group Economics

Source: CBS, ABN AMRO Group Economics

Due to the mild spring, gas consumption in the second quarter of 2022 was much lower year-on-year, partly because it was relatively cold in 2021 and thus heat demand was higher. But speaking of an increase of efficient energy usage by building owners remains questionable. Indeed, total emissions of GHG in the built environment in the second quarter of 2022 is at almost identical levels as in the second quarter of 2019 and 2020.

The correlation between industrial gas consumption and GHG emissions in industry was high until the first half of 2021. An increase or decrease in gas consumption meant also an increase or decrease in GHG emissions. But since the gas price skyrocketed, this relationship has decoupled to some extent. The trends in both still decreased, but the decline in gas consumption was much higher than the decline in emissions. From the available data, there is also a forward looking element. Data in relation to industrial gas consumption is almost 3 months ahead of the data in terms of GHG emissions. From the trends and the parallel between the two quantities, it is therefore very plausible to state that GHG emissions in the third quarter of 2022 will again be a lower than the level in 2021.

Gas measures

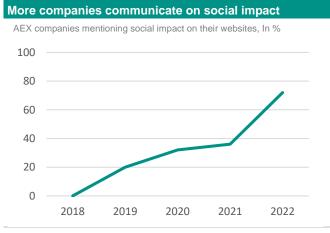
High gas prices caused many industrial companies to look for necessary alternatives to ensure business continuity. More energy efficiency measures were introduced, for instance, or natural gas was replaced with oil or renewable sources, where possible of course. But on the other hand, production lines were also regularly shut down or operations were completely halted. With continued higher costs for natural gas, this will become an unstoppable trend within the industrial sector, and in other gas intensive sectors. The shock in the natural gas market triggers many – sometimes drastic – measures among entrepreneurs. The measures taken have initially a direct impact and are focussed on business economics, to keep things going. This puts, however, a brake on the transition to a more renewable energy mix.

Waiting on social impact

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- Social impact plays a big role in the public relations of companies
- And the general public is increasingly interested
- But what exactly is social impact?
- Will the EU taxonomy provide clarity?
- And is the market for social bonds as big as the hype suggests?

Social impact is becoming more and more important for companies. At least, when one looks at their communication. For instance, of the companies that are listed on the Dutch benchmark stock index, the AEX, 72% now mention social impact in some way on their websites. This was 0% five years ago. Half of the companies mentioning social impact focus do so by focusing communication on how social impact is provided for others, such as banks providing the possibility to invest in social impact.



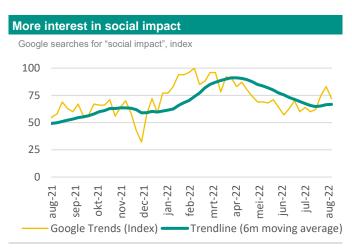
Source: ABN AMRO Group Economics

All that communication creates some suspicion: do companies use social impact strategically, as a way to improve their image? Or are they truly making a social impact? Most academic research shows that both perspectives are true. For example, various academic studies (for instance by Wichaisri & Sopadang - see <u>here</u> and Ait Sidhoum & Serra see <u>here</u>) show that companies choose which UN SDGs they want to address based on increased competitive advantage or in other words, self-interest. However, other studies (for instance, by ElAlfy & Weber see <u>here</u>) show that companies choose social impact goals based on what is actually relevant to their business. Choosing goals that companies can influence is an indicator that they are actually able to reach those goals.

To put it simply: companies actually want to make a social impact but also think they benefit from communicating about that.

The general public is increasingly interested in social impact

And there is a market for that communication. News websites and Google searches show an increase in interest in social impact around the time that the first draft of the proposal for a development of a social EU Taxonomy was released. But apart from this uptick in January/February, the general trend is also upward. The same goes for trends on social media, although they are also heavily influenced by companies themselves communicating about social impact.



Sources: Google Trends, ABN AMRO Group Economics

The problem with buzzword or search term research however, is that is can reflect a multitude of different causes. For example, it could mirror a media trend. If journalists write about a subject that is considered vague, that drives media consumers to do their own research. In this case it wouldn't necessarily mean that the general public is interested in buying from or investing in companies that claim to make a social impact.

But what exactly is social impact?

Vagueness is exactly the issue that surrounds social impact. Most definitions of social impact are very broad and are somewhere along the lines of "the positive effect that an intervention has on people or communities". A lot of definitions have the word "positive" in them, such as "positive effect" and "positive intervention", which is of course highly subjective. A good example of the subjectivity involved would be Russia's invasion of Ukraine in February. German defence industry lobby group BDSV then stated that "The invasion of Ukraine shows how important it is to have a strong national defence." BDSV appealed "to the EU to recognize the defence industry as a positive contribution to 'social sustainability' under the EU taxonomy." While some would argue that weapons are never a positive intervention, the EU indeed in a policy paper the same month links the defence industry's access to finance and investment to "horizontal policies on sustainable finance". This proposal never was, however, never turned into policy.

And a good example of the broadness could be found by looking at government activity or government bonds. Government activity is by definition an intervention in markets and since a democratic mechanism decides we should intervene, one could say it's a "positive intervention". It's likely that this broadness is the reason state treasury agencies are hesitant in issuing social (impact) bonds. Their core business already is social impact: building a hospital or improving the education system clearly is a positive intervention that effects people or communities.

Will the EU taxonomy provide clarity?

The EU taxonomy, that came into force on 12 July 2020, is a classification system on economic activities that qualify as environmentally sustainable. Social impact is not yet a part of this classification. The social taxonomy has been put on hold until at least the end of this parliamentary term, which is in 2024. Lack of political will and "absence of international standards" were cited as reasons it wasn't included in the EU taxonomy that came into force in July.

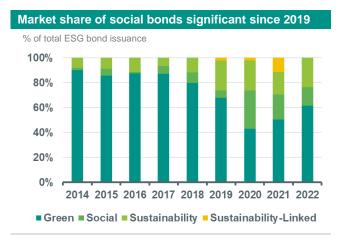
However, a trading bloc as big as the EU could of course set these standards themselves and potentially urge this then to be used internationally. The Platform on Sustainable Finance, the group convened by the European Union that did the groundwork for the EU taxonomy, indeed stated that the EU should become the global "standard setter." But that global standard, which will be there by 2024 or later, is still largely unknown.

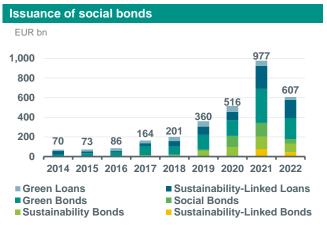
And is the market for social bonds as big as the hype suggests?

In the meantime businesses can claim that their activities constitute 'social impact' and therefore raise capital directed to those activities by issuing 'social (impact) bonds'. A risky undertaking in the sense that the public could be wary of activities

that seem to be there for PR reasons only. And while companies suffer just from bad press around greenwashing concerns, investors on the other hand have been under increasing regulatory scrutiny. In May, German prosecutors a raided a financial institution on accusations that ESG-credentials in investment products were overstated. Japanese regulators are taking a similar course.

In this unknown terrain: there are still a lot of investments in social impact going on. Companies for example issued healthcare related social bonds during the Covid-years. The market share of social bonds as a percentage of total ESG debt has been significant since 2019. In 2021, over EUR 138 bn of social bonds were issued. An investment flow this big in uncertain times and on an unknown terrain, points at actual value-driven demand, other than following up on a hype.



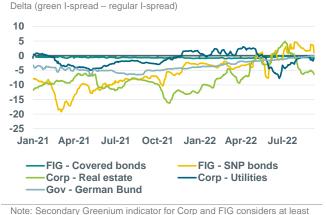


Source: Bloomberg. Note: YTD data as of 15/09/2022.

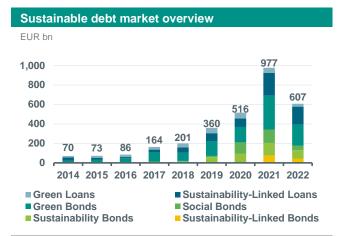
Source: Bloomberg. Note: Figures hereby presented take into account only issuances larger than EUR 250m and in the following currencies: EUR, USD and GBP. YTD Data as of 16/09/2022.

ESG in figures

ABN AMRO Secondary Greenium Indicator

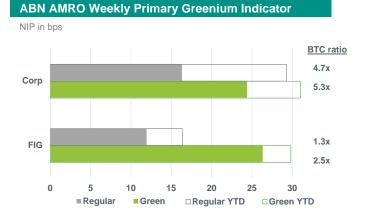


five pairs of bonds from the same issuer and same maturity year (except for Corp real estate, where only 3 pairs were identified). German Bund takes into account the 2030s and 2031s green and regular bonds. Delta refers to the 5-day moving average between green and regular I-spread. Source: Bloomberg,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

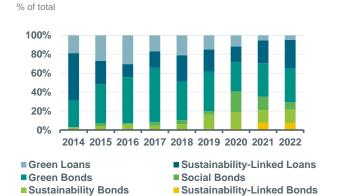


Source: Bloomberg, ABN AMRO Group Economics

YTD ESG bond issuance EUR bn 800 700 600 500 400 300 200 100 0 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 2014 2015 2016 2017 -2018 2019 2020 2021 2022

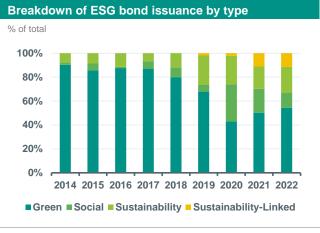


Note: Data until 15-09-22. BTC = Bid-to-cover orderbook ratio. Source: Bloomberg, ABN AMRO Group Economics.



Source: Bloomberg, ABN AMRO Group Economics

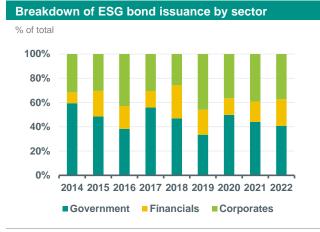
Breakdown of sustainable debt by type



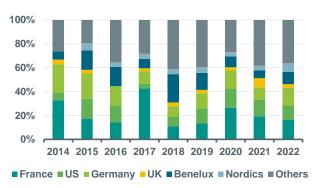
Source: Bloomberg, ABN AMRO Group Economics

Source: Bloomberg, ABN AMRO Group Economics

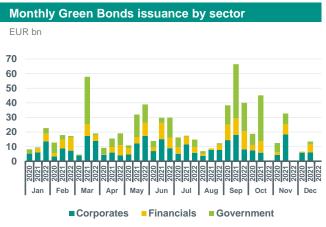
Figures hereby presented take into account only issuances larger than EUR 250m and in the following currencies: EUR, USD and GBP.



Breakdown of ESG bond issuance by country % of total



Source: Bloomberg, ABN AMRO Group Economics



Source: Bloomberg, ABN AMRO Group Economics

Source: Bloomberg, ABN AMRO Group Economics

EUR bn

35

30

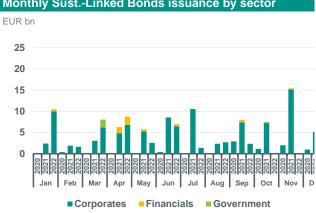
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Source: Bloomberg, ABN AMRO Group Economics

Monthly Social Bonds issuance by sector

5 0 Feb Mar Mav Apr Jun Jul Aug Sep Oct Nov Dec Jan Corporates Financials Government

Source: Bloomberg, ABN AMRO Group Economics



Monthly Sust.-Linked Bonds issuance by sector

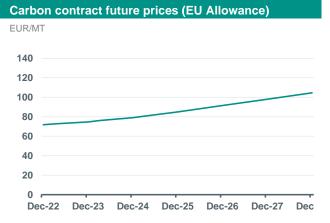
Figures hereby presented take into account only issuances larger than EUR 250m and in the following currencies: EUR, USD and GBP.

Monthly Sustainability Bonds issuance by sector EUR bn 25 20 15 10 5 0 Feb Mar Apr May Jun Jul Aug Sep Oct Dec .lan Nov Corporates Financials Government

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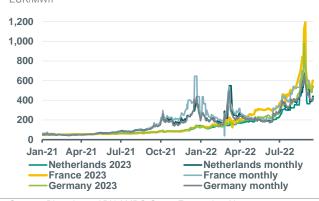
Source: Bloomberg, ABN AMRO Group Economics





Source: Bloomberg, ABN AMRO Group Economics

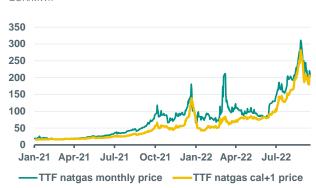
Electricity power prices (monthly & cal+1 contracts) EUR/MWh



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



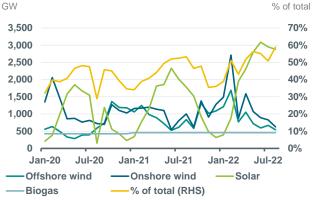
EUR/MWh



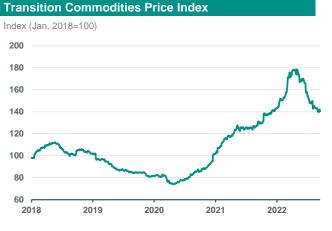
Source: Bloomberg, ABN AMRO Group Economics

Electricity generation from renewable sources (NL)

Source: Bloomberg, ABN AMRO Group Economics



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



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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