The Green Bond

Your insight into sustainable finance

23 December 2021

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Transition Outlook

Lift-off in 2022

The structural cycle is somewhere between the culmination of the deflationary disruptive phase of the IT revolution and the start of a secular reflation phase driven by energy-related investment. High debt levels, low investment and monopolistic profits still hamper economic performance and generate financial tail risk, but 2022 could be the year when surging climate investments start to dominate and a long uptrend in yields and stock prices starts.

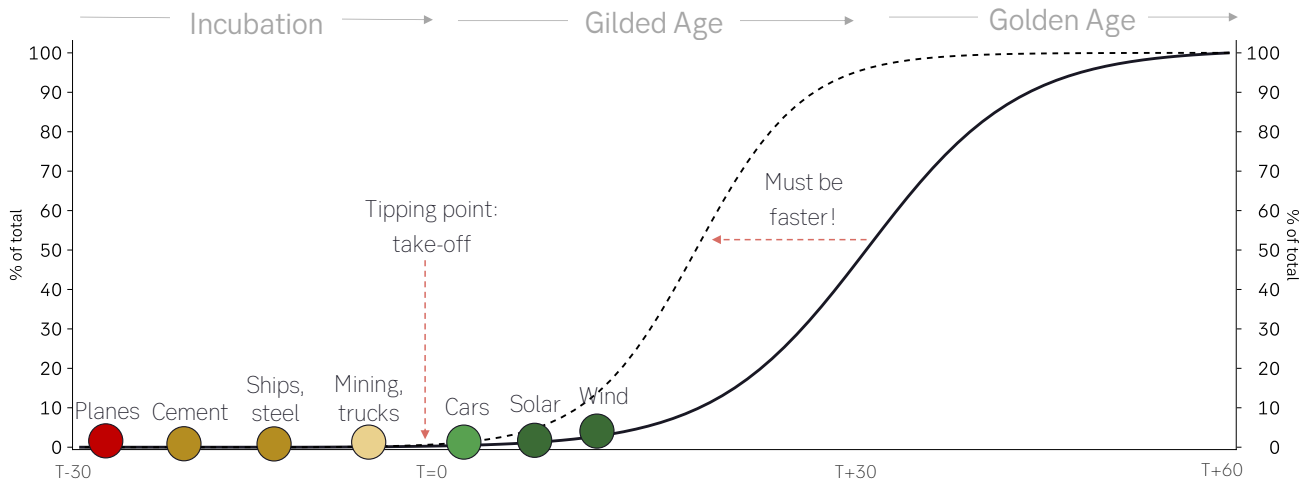
Energy transition remains too slow

The structural cycle or technology cycle level of our framework looks at trend returns through the prism of secular investment regimes, reflecting the three stages in our 30-30-30 technology diffusion model. Technologies spend 30 years in incubation before they are useful, then 30 years in disruption as scale effects kick in and 50% of ultimate diffusion is reached, and finally 30 years of more stable deployment of a now mature technology.

The current technology cycle is complicated by the de-coupling of energy from the broader cluster of radical new technologies that reached their tipping points in the 1980s. While computers, mobile communication, and the internet exploded into general use and lifted the living standards of billions in the process, nuclear power withered after having spent 30 years as the main contender to fossil energy, and it was only in the past decade that renewable energy reached cost parity and could start to scale.

As a result, we are on one hand seeing signs of a mid-life crisis in the IT technology cycle in the shape of high debt, low corporate investment, monopolistic profits, and rising inequality, but on the other hand we also have the opportunity to embark on a new technology cycle in energy, one that might ultimately allow the IT revolution to deliver its undisputed benefits without the externality of a looming climate disaster. However, we are also in a race against time, because delaying the energy revolution and dithering for the past 10 years when a new technology was ready allowed emissions to reach levels that are truly destructive and have to be addressed twice as fast as any revolution in the past.

Figure 1 Electrification + digitalisation = corporate capex super cycle



Source: SEB Strategy Research

Thomas Thygesen
thomas.thygesen@seb.dk

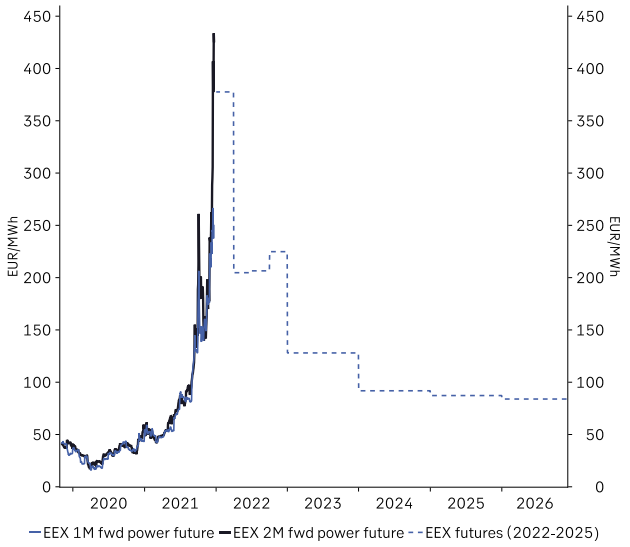
Elizabeth Mathiesen
elizabeth.mathiesen@seb.dk

The energy shortage is a potential capex catalyst

We think 2022 could be the year when the world finally breaks with a decade of stagnation in renewable energy investment and starts moving back to a more Paris-aligned transition path and the main reason is the energy crisis currently hitting Europe and Asia in particular.

The result has been a surge in the cost of energy and electric power, which has made all kinds of energy production extremely profitable. In Europe, where the power cost has increased the most, the advantage for clean energy is compounded by a doubling in the in the price of Emission Trading System emission rights from EUR 40 to more than EUR 80 per ton of CO_2. Even looking at long-term futures, renewable energy can now be sold for twice the cost of producing it.

Figure 2 German power futures rising

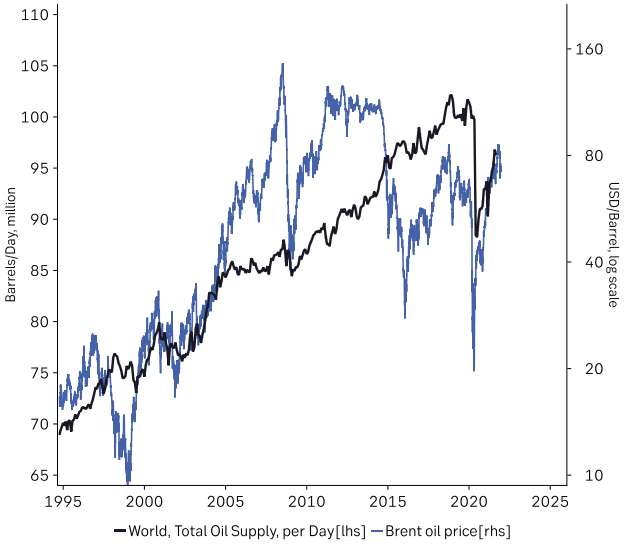


Source: SEB Strategy Research, Bloomberg

In China, authorities have resolved the immediate crisis by ramping up import and production of coal, which is not consistent with the long-term decarbonization strategy. However, China also announced that it will build 150 new nuclear plans within the next 15 years alongside significant investment in other types of energy technology.

As of today, there is, in our view, no real shortfall in global energy supply, the problem is as shown in Figure 3 mainly that supply has not been fully restored after the pandemic by OPEC+. Some of the pressure on European power prices can be alleviated by rerouting LNG flows by ship, but it takes time and in the near-term there is a risk of even more extreme prices in the coming months.

Figure 3 Shortage of oil in the future

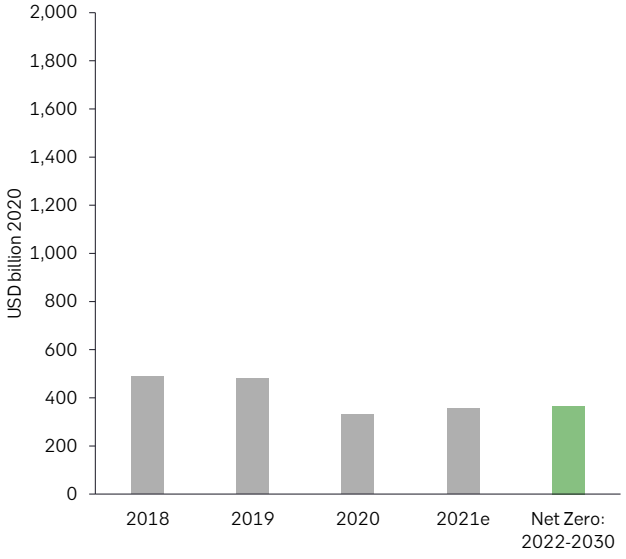


Source: SEB Strategy Research, Macrobond

However, the problem is not just about 2022. We can return to the pre-pandemic production level without major investments as the facilities remain in place. But what about the following years? If we need additional energy supplies, then the past years' investment level is too low, suggesting we now either have to ramp up investment or prepare for a long period of shortages and elevated prices.

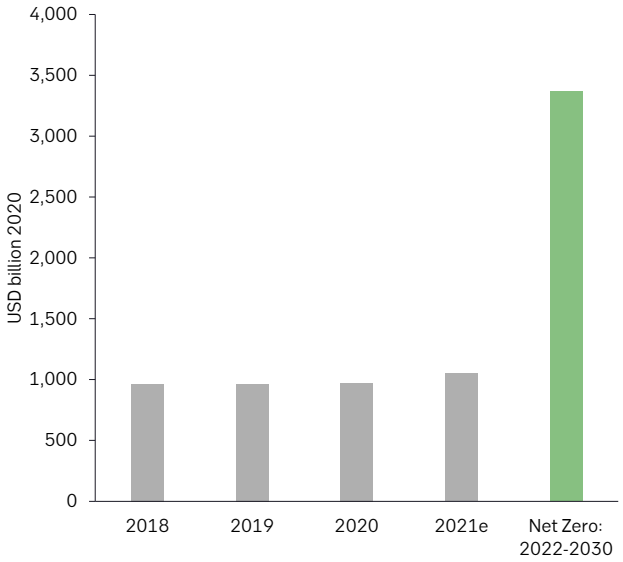
The problem is illustrated in Figure 4 and Figure 5 both from the latest IEA Energy Outlook. A polite way of putting it is that we have just the right level of oil and gas investment for a successful net-zero scenario – but we are USD 2.5tn too low when it comes to total energy investment because of a huge shortfall in clean energy investment.

Figure 4 Oil and natural gas production investments



Source: IEA World Energy Outlook

Figure 5 Clean energy & infrastructure investments



Source: IEA World Energy Outlook

Upside potential for energy investment in 2022

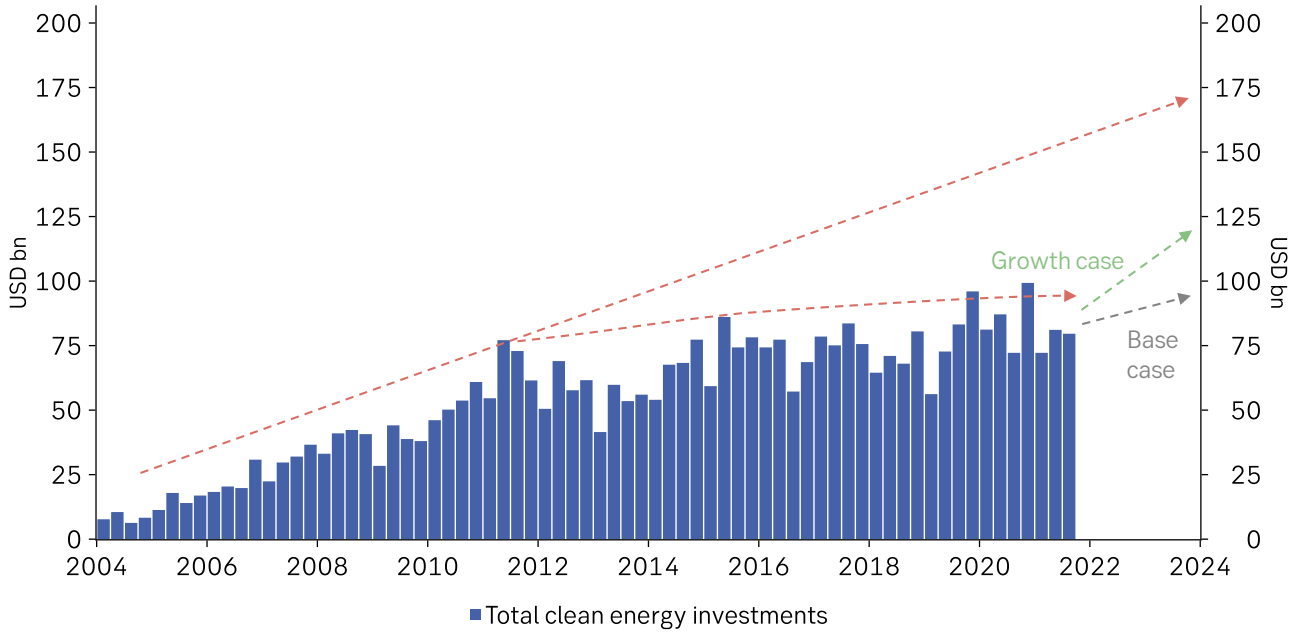
Energy demand is not very price-sensitive, we will heat our homes and transport ourselves to work even if it is expensive, so the risk here is that if we do not ramp up the supply of other energy types, then the oil price will eventually end up far above USD 100 at a level where oil producers will be happy to invest in new capacity. However, the profit motive is probably the strongest of all economic drivers, both for corporates and governments.

As a result, there is a window of opportunity for new investment in clean energy that will pave the way for a break with the disappointing flatlining trend of the past decade. Our base case, illustrated in Figure 6, is a shift to double-digit growth in 2022 with a potential for a blowout taking us on to a more exponential path. Governments will start spending more on infrastructure, in Europe with the support from the EU's green investment plan and in the US possibly helped by the Build Back Better plan that is currently held up in Congress.

But the real swing factor could come from corporates faced with sky-high energy bills and seeing the possibility of offsetting that cost by engaging in now extremely profitable investments in de-centralized renewable energy supplies.

We believe this will lead to a break above the USD 300bn annual level that has been the ceiling for renewable energy investment in the past decade. We expect global investment to jump by around 25% to close to USD 400bn in 2022, but we would not rule out an even larger gain.

Figure 6 Clean energy investments need to be ramped up



Source: SEB Strategy Research, Macrobond

Sustainable Debt Market Outlook

Green Bonds towards USD 1tn in annual issuance

Bond Market forecast

Strong growth in sustainable bond market to continue in 2022

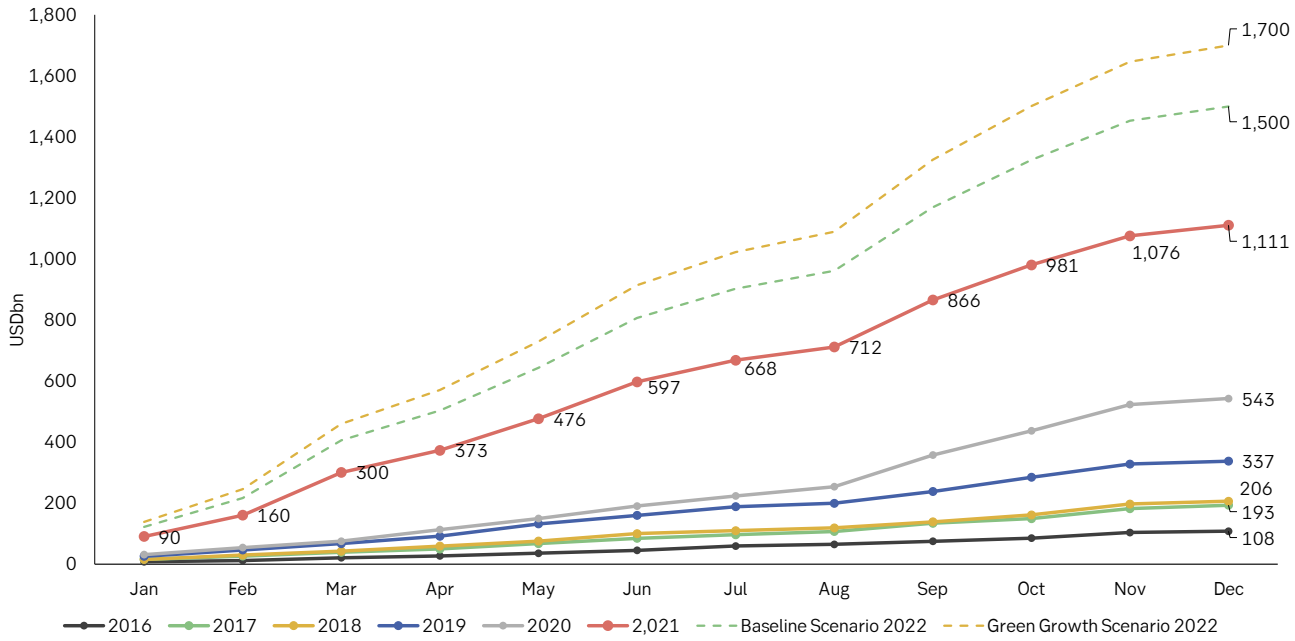
We forecast that sustainability-themed bonds will continue to grow strongly in 2022. Our Baseline Scenario assumes that new issuance of green, social, sustainability and sustainability-linked bonds will continue to increase at a rate of 35% YOY.

In our Green Growth Scenario new issuance in the sustainable bond market would grow even stronger – by 53% next year. While we don't expect another doubling of the market like in 2021, we are still very confident that sustainable bonds will continue to sharply increase and outperform conventional bonds next year.

Growth drivers: Carbon and renewable energy prices, COP26, and corporate commitments

Driven by a sudden increase in the price for gas, the carbon price under the EU's Emission Trading System has rocketed more than 50% since November 2021. With gas supply in jeopardy due to maintenance of major gas infrastructure and political tensions with Russia, the European benchmark carbon price could hit EUR 100 this winter[1]. This, together with the ever-improving economics of renewables, could drive sustainable bonds next year as more and more corporates want to lower their energy costs and increase security of supply.

Figure 7 Cumulative annual sustainable bond issuance



Source: Bloomberg New Energy Finance 30 November 2021, SEB estimates (December 2021) and forecast

Gregor Vulturius, PhD
gregor.vulturius@seb.se

Filip Carlsson
filip.carlsson@seb.se

[1] EU carbon price may hit 100 euros this year, buoyed by gas price surge | Reuters

New policies announced ahead of COP26 may also spur greater issuance of green and sustainability debt by Sovereigns, supranational institutions, and agencies (SSA). Out of the 24 major industrialized countries and regions which have submitted updated National Determined Contributions (NDC) to the Paris agreement, a total of 22 contained stronger emission reduction targets. Aside from the EU, China, the US, Japan, Korea and even Saudi Arabia submitted improved climate targets. However, scientist found that new and improved plans are still not enough to limit global warming to below 2°C[2].

Furthermore, surging commitments by corporates this year are a harbinger of strong growth in sustainable bond issuances next year. In 2021 alone, almost 1.500 companies have applied to join the Science-Based Targets Initiative (SBTi) and committed to setting emission reduction targets in line with the Paris Agreement. In the Nordics, corporates in the SBTi accounted for more than 50% of the total market capitalization of local stock exchanges[3].

Downside risk: Slowdown in social bonds, US policy and macroeconomic uncertainty

Throughout 2021, we have witnessed a slowdown in new issuance of social bonds from USD 95.3bn in Q1 to an estimated USD 26.1bn in Q4. This downward trend in the social bond market in largely due to fewer sovereign issuances as the world slowly emerges from the Covid-19 pandemic. In the Baseline Scenario, this downward trend will continue in 2022, resulting in a decline in new social bonds issuance compared to 2021.

Another key risk for sustainable bond markets in 2022 is US politics. Senator Joe Manchin's resistance to the Build Back Better Act casts a spotlight on the difficulties that the Biden Administration is facing in implementing its clean energy agenda. With the mid-terms coming up in November next year, the window for Democrats to channel new investments into green and sustainable infrastructure is quickly closing. Nevertheless, we still assume that new sustainable debt issuance will grow strongly in the US to at least USD 200bn next year driven by corporates and the financial sector.

Lastly, uncertainty about future monetary policy and economic growth may also adversely affect the sustainable bond market in 2022. Raising interest may dissuade some high-yield issuers from entering the market and higher (expected) inflation may cause investors to demand higher yields. Conventional economic wisdom would suggest that during inflationary periods – which is what many expected to be the case at least in the first half of 2022 – the level of capital expenditures made by firms tends to decrease.

Product forecast

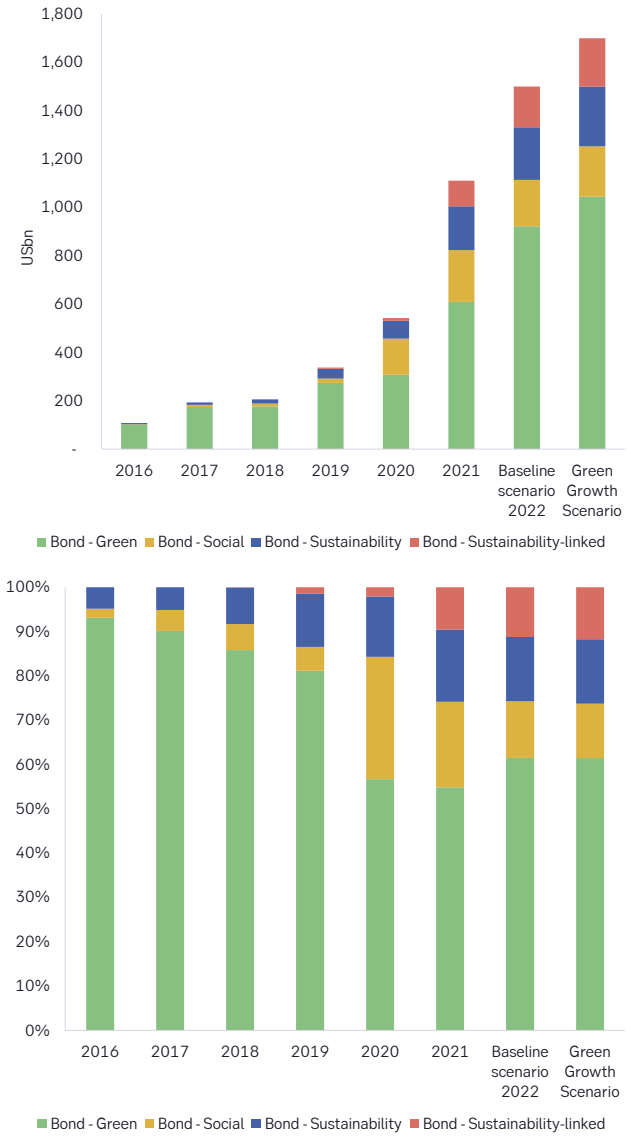
Looking at the different types of sustainable bonds, we anticipate that green bonds will remain in the leading position next year. In the Baseline Scenario, green bond issuance grows 51% to more than USD 900bn in 2022, while in the Green Growth Scenario, new issuance increases by 71% to just over USD 1 trillion. In historical terms, we expect that YOY growth in the green bond market will be slower than in 2021 (+104%) but still considerably higher than before the pandemic in 2019 (+12%). The main drivers of the green bond market next year will be: Corporates in the US, Europe, and Asia, as well as supranational institutions and sovereigns in Europe, including the EU.

Stainability bonds claim second place next year in our forecast. In the Baseline Scenario, new issuance of sustainability bonds increase 20% to less than USD 220bn in 2022 and in the Green Growth Scenario issuance grow by 36% to around USD 245bn. We expect that the growth in sustainability bonds next year will be spurred by corporates and financial institutions in Asia, North America, and Europe, and in the Green Growth Scenario also by SSAs.

[2] Global Update - Glasgow's 2030 credibility gap - Nov 2021 (climateactiontracker.org)

[3] SEB Calculations

Figure 8 Sustainable bond market by product type



Source: Bloomberg New Energy Finance 30 November 2021, SEB estimates (December 2021) and forecast

As already mentioned, we expect a decline or at least stagnation in the social bond market as governments are winding down Covid-19 recovery packages, which had focused primarily on social aspects. In the Baseline Scenario, we expect new social bond issuance to decrease by around 10% in 2022 and in the Green Growth Scenario to stay roughly at the same level as 2021. Both scenarios expect a strong decline in new social issuance by SSAs of more than 50% next year, which can only partially be compensated by corporates and financial institutions. Nevertheless, the emergence of new Covid-19 variants causing new lockdowns could force policy makers to revive social bond programs next year.

Finally, we forecast that sustainability-linked bonds will continue to be segment of the sustainable bond market with the strongest growth rate next year after having grown more than 9 times in 2021. In 2022, we expect new sustainability-linked bond issuance to increase by 60% and 90% in the Baseline and Green Growth scenarios, respectively. Given that SSAs have historically been absent from this market and that financial institutions only started to be active in 2021, we believe that corporates in the US, Europe and Asia will be responsible for the growth in sustainability-linked bonds next year.

Regional forecast

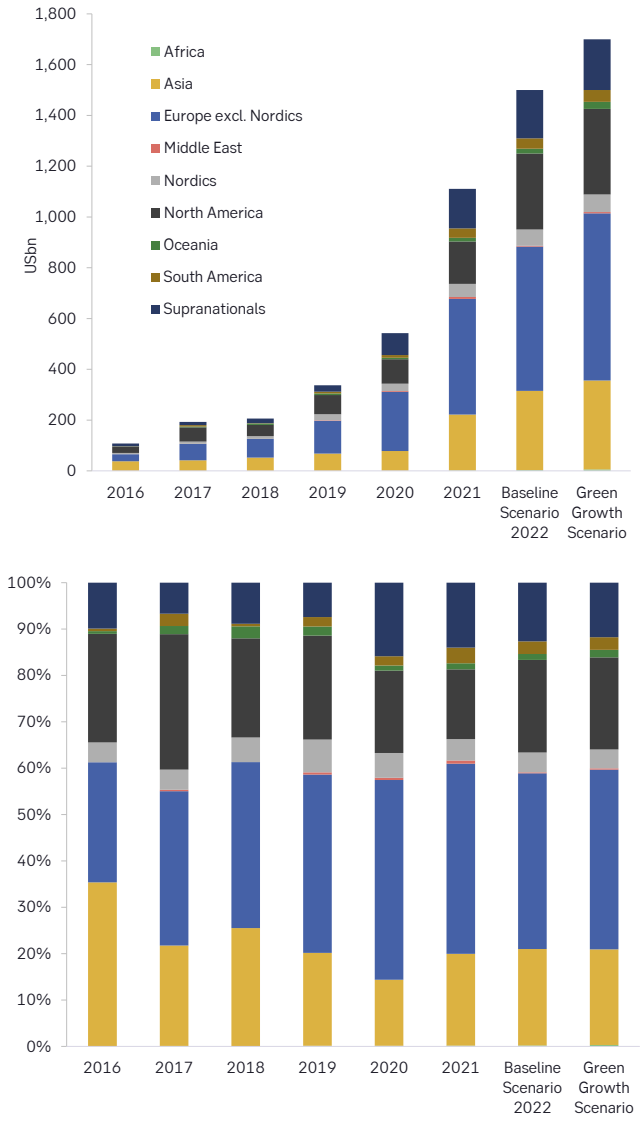
We expect that the sustainable bond market will see growth in all regions in 2022 except for the Middle East. Among major markets, North America is forecasted to see an increase in new issuance by 80% to 100% next year driven by climate and sustainable commitments by corporates and financial institutions. An unexpected surge in issuance by SSAs could lead to even stronger growth in US and Canadian sustainable bond market next year.

For Europe, excluding the Nordics, we expect growth ranging from around 25% to 45% next year for the Baseline and Green Growth scenarios, respectively. Growth in this region will be more evenly distributed between issuer types. The EU alone is expected to issue up to EUR 100bn of green bonds next year, helping to push the share of sustainable bonds of the total EUR dominated bond market towards 15% in 2022. We also believe that core European markets such as Germany, France, Spain, the Netherlands, and the UK will grow by more than 30% next year on the back of strong activities from corporates, sovereigns, and financial institutions.

According to our forecast, the Nordics will largely follow in lockstep with Europe and see annual growth in sustainable bonds of between 25% to 35% next year. With social and sustainability bonds being lacking in the region, growth in 2022 will come from green bonds and sustainability-linked bonds as corporates and sovereigns continue to tackle emissions in hard-to-abate sectors, like we have seen in 2021 with the steel industry.

Asia will continue to increase its share of the sustainable bond market next year and see growth of 40% to 60% according to the Baseline and Green Growth scenarios, respectively. We expect growth to be across the board, but particularly strong in green bonds and sustainability-linked bonds due to increasing activities from both corporates and sovereigns to spur emission reductions and industrial transition in line with new and enhanced climate policies announced by governments ahead of COP26 (e.g. China, South Korea and Japan).

Figure 9 Sustainable debt market growth by region



Source: Bloomberg New Energy Finance 30 November 2021, SEB estimates (December 2021) and forecast

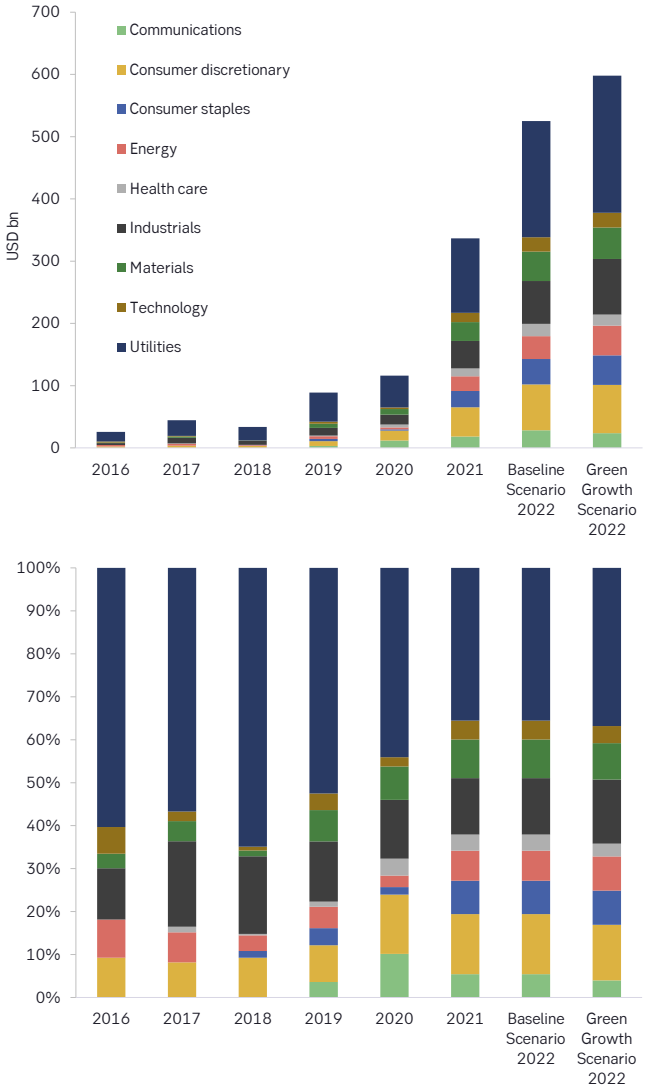
Corporate sector forecast

Looking ahead, we expect that the share of the corporate sector in the total sustainable bond market will increase from 21% in 2020 and 30% in 2021 to 35% in 2022. Reasons include the expected decline in social bond issuance by SSAs and stronger corporate commitments to aligning their emissions to the Paris Agreement.

In the Baseline Scenario, we expect that corporate sustainable bond issuance will increase by more than 55% next year with the same distribution across sectors as this year i.e., utilities capturing 35.5%, followed by consumer discretionary with 14% and industrials with 13%.

In the Green Growth Scenario, we forecast that corporate sustainable bond issuance will increase by more than75% next year. Growth will be unevenly distributed across sectors with new issuance from consumer staples companies and carbon-heavy sectors such as utilities, energy, industrials but even forecasted to grow 80% to 100% in 2022.

Figure 10 Corporate sustainable debt market by industry



Source: Bloomberg New Energy Finance 30 November 2021, SEB estimates (December 2021) and forecast

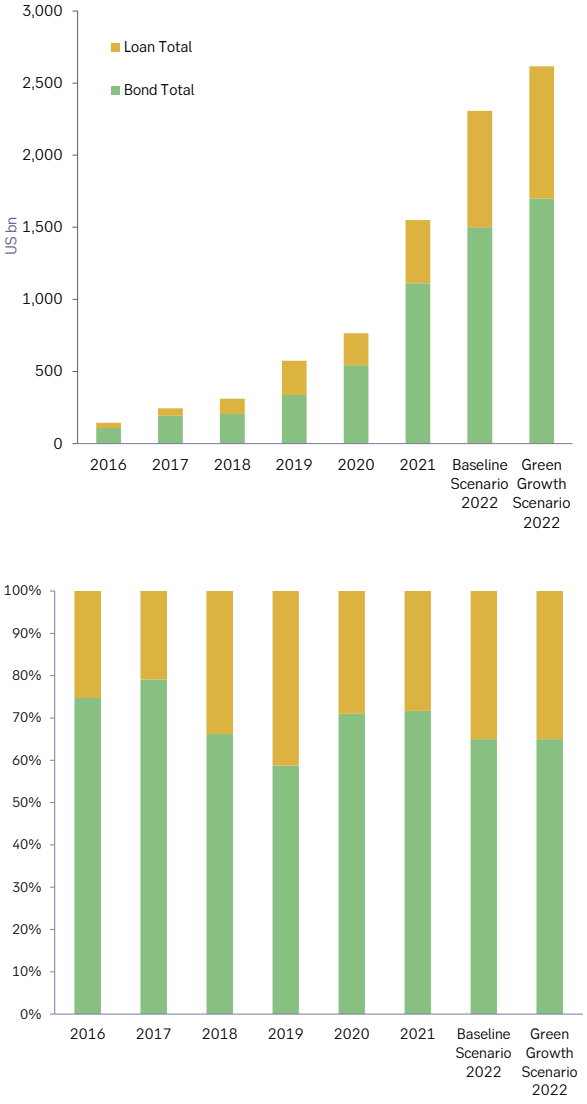
Combined sustainable bond and loan market estimate for 2022

The share of green and sustainability-linked loans of the total sustainable debt (bonds + loans) market has been around 40% in 2019 to around 30% in 2021.

Assuming that loans take a 35% share, we predict that the combined sustainable bond and loan market will reach between USD 2.3 trillion in the Baseline Scenario and USD 2.6 trillion in the Green Growth Scenario in next year – i.e. YOY increase of between 50% and 70%.

This would mean and that the exponential growth of sustainable finance is to set to continue in 2022.

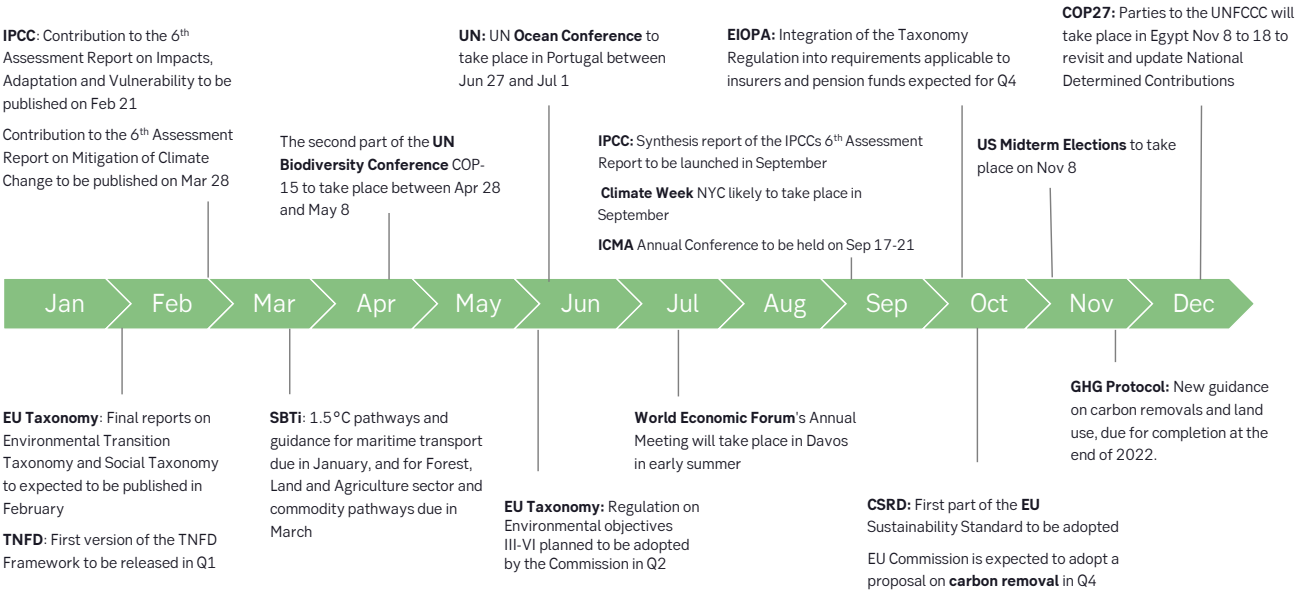
Figure 11 Combined sustainable bond and loan market estimate for 2022



Source: Bloomberg New Energy Finance 30 November 2021, SEB estimates (December 2021) and forecast

Important events in 2022

Figure 12 Timeline of events with relevance for Sustainable Finance



* The events outlined in this timeline are projected based on publicly available information and are subject to changes.

Source: SEB

With the world hopefully managing COVID-19 much better, next year will see a flurry of events in regulation, voluntary standards, science, and politics

In Europe, work on the Taxonomy Regulation will continue in 2022. Final reports on the Transition Taxonomy and the Social Taxonomy are expected to be published in February. These reports will deal with the complicated issues of eligible investments in fossil fuel energy and activities to support a just transition. Furthermore, the EU is also expected to decide on technical screening criteria for non-climate environmental objectives in Q2. Later, in Q4, the first part of the Corporate Sustainability Reporting Directive (CSRD) will be up for adoption by the European Council and Parliament.

At the UN level, there are three main events next year. The first is the UN Biodiversity Conference which aims to develop an "ambitious and transformative" plan to prevent nature loss. The second is the UN Ocean Conference, which strives to mobilize policy makers, investors, and business to preserve marine biodiversity and ecosystem services. The third is COP27 where countries will have to improve upon their National Determined Contributions once more to keep the goal of limiting global warming to well below 2°C alive.

Next year will also see a big push by the scientific community to support corporates and investors in better managing physical and transition risk and in taking science-based actions. The Intergovernmental Panel on Climate Change (IPCC) will release the two outstanding contributions to its 6th Assessment Report on climate change adaptation and mitigation in Q2. The IPCC will also release a synthesis report just in time of the UN General Assembly and Climate Week NYC in September. Furthermore, the Science-Based Targets imitative (SBTi) will publish new pathways and guidance documents for several sectors including maritime transport and agriculture.

Lastly, the US Midterm Elections will take place in November. With the outcome being anyone's guess at the moment, uncertainty about political actions on climate and sustainability in the US will increase even further in the second half of 2022.

The Green Bond Editorial Team

Thomas Thygesen
Head of Strategy, Head of Research
Climate & Sustainable Finance
thomas.thygesen@seb.dk

Elizabeth Mathiesen
Senior Strategist
Equity Strategy Research
elizabeth.mathiesen@seb.dk

Gregor Vulturius, PhD
Advisor
Climate & Sustainable Finance
gregor.vulturius@seb.se

Lina Apsheva
Analyst
Climate & Sustainable Finance
lina.apsheva@seb.se

Tine Vist
Quantitative Strategist
Equity Strategy Research
tine.vist@seb.dk

Lene Boe Nielsen
Quantitative Strategist
Equity Strategy Research
lene.boe@seb.dk

Filip Carlsson
Junior Quantitative Strategist
Macro & FICC Research
filip.carlsson@seb.se

Contacts at SEB

Hans Beyer
Chief Sustainability Officer of SEB
hans.beyer@seb.se

Christopher Flensborg
Head Climate & Sustainable Finance
christopher.flensborg@seb.se

The Climate & Sustainable Finance Team
greenbonds@seb.se

SEB Norway:
Ben Powell
Head Climate & Sustainable Finance in Norway
benjamin.powell@seb.no

SEB Finland:
Anssi Kiviniemi
Head of Sustainability in Finland
anssi.kiviniemi@seb.fi

SEB Germany:
Alexandra Themistocli
Head of Sustainable Banking in Germany
alexandra.themistocli@seb.de

SEB UK:
Renato Beltran
Client Executive, LC&FI
renato.beltran@seb.co.uk

SEB Hong Kong:
Carol Au-Yeung
Client Executive, Financial Institutions Coverage
carol.au.yeung@seb.se

SEB Singapore:
Eng Kiat Ong
Financial Institution Coverage Singapore
eng-kiat.ong@seb.se

SEB Denmark:
Lars Eibeholm
Head of Sustainable Banking in Denmark
lars.eibeholm@seb.dk

SEB USA:
John Arne Wang
General Manager
john.wang@sebny.com

SEB Baltics:
Aušra Šamšonienė
Sustainability Officer, Baltics
ausra.samsoniene@seb.lt

Viktors Toropovs
Sustainability Officer in Latvia
viktors.toropovs@seb.lv

Audrius Rutkauskas
Sustainability Officer in Lithuania
audrius.rutkauskas@seb.lt

Evelin Allas
Sustainability Officer in Estonia
evelin.allas@seb.ee

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You may be wondering why a Scandinavian bank chose a picture of bamboo for the cover. There is a reason for that too! Bamboo is one of the fastest growing plants on the planet, which makes it an efficient mechanism of carbon sequestration. Moreover, once grown, bamboo can not only be used for food, but also used as an ecological alternative to many building materials and even fabrics. Its great environmental potential makes bamboo a perfect illustration of our work and aspirations.

This report was published on 23 December 2021.

Cut-off date for calculations was 30 November 2021, unless otherwise stated.

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