Green Bond Funds Impact Report 2020

Financing the transition to a more sustainable world

L'attention des investisseurs est attirée sur le fait que ces fonds présentent, au regard des attentes de l'Autorité des marchés financiers, une dénomination disproportionnée sur la prise en compte des critères extra-financiers dans leur gestion.

L'attention des investisseurs est attirée sur le fait que ces fonds présentent, au regard des attentes de l'Autorité des marchés financiers, une communication disproportionnée sur la prise en compte des critères extra-financiers dans leur gestion.

NN investment partners

For professional use only

Foreword

We are proud to be publishing this green bond impact report about what should prove to be a watershed year for responsible investing. A year when Covid-19 caused us to re-establish priorities and focus on what we need to do to secure the future of our planet. The effects of lockdowns on our day-to-day lives also had a positive tangible impact in the form of clear skies, cleaner water, an unprecedented fall in carbon emissions and reduced pressure on natural ecosystems: all beneficial environmental trends that we must safeguard in a post-pandemic world.

The crisis has brought climate back to the top of the agenda of many governments, companies and supranational organizations across the world as they commit to a green recovery. The European Green Deal, for example, which aims to make Europe climate-neutral in 2050 and, at a country level, the Paris Agreement, both lay out clear targets. But it is also very obvious that climate action needs to occur at national and international level and via high-level programmes and initiatives if we want to have a realistic chance of achieving these goals. This makes it all the more remarkable that sustainability in investing often only focuses on companies when sovereigns and supranational entities will play such a crucial role.

The scope and size of the public debt market make it the perfect arena to tackle climate issues. Green bonds, with their clear use-of-proceeds structure, can target climate-related projects and have direct environmental impact. Issuers include supranational bodies, governments and government-related entities as well as companies, enabling investors to finance concrete real-world impact on all levels. These can range from the EU's Europe-wide green spending plans and more sustainable national public transport systems, to individual corporate projects for low-emission vehicles or new wind farms.

Investors and other stakeholders are increasingly demanding more tangible evidence that their money is making a positive difference in the world and that steps are being taken to address environmental issues. At the same time, as for any fixed income investor, a balanced risk and return profile is crucial. Allocating to green bonds enables investors to generate positive environmental impact with their fixed income portfolios without sacrificing liquidity and returns. Our green bond strategies provide us with a valuable vehicle through which we can put our capital to work and clearly show our investors how we do it. The aim of this report is to do just that.

Edith Siermann
Head of Fixed Income Solutions
and Responsible Investing

NN Investment Partners in numbers

We manage EUR 300 billion (USD 367 billion) of assets for institutions and individuals worldwide, employ around 1,000 staff and have offices in 15 countries across Europe, North America, Latin America and Asia (as of 31 December 2020).

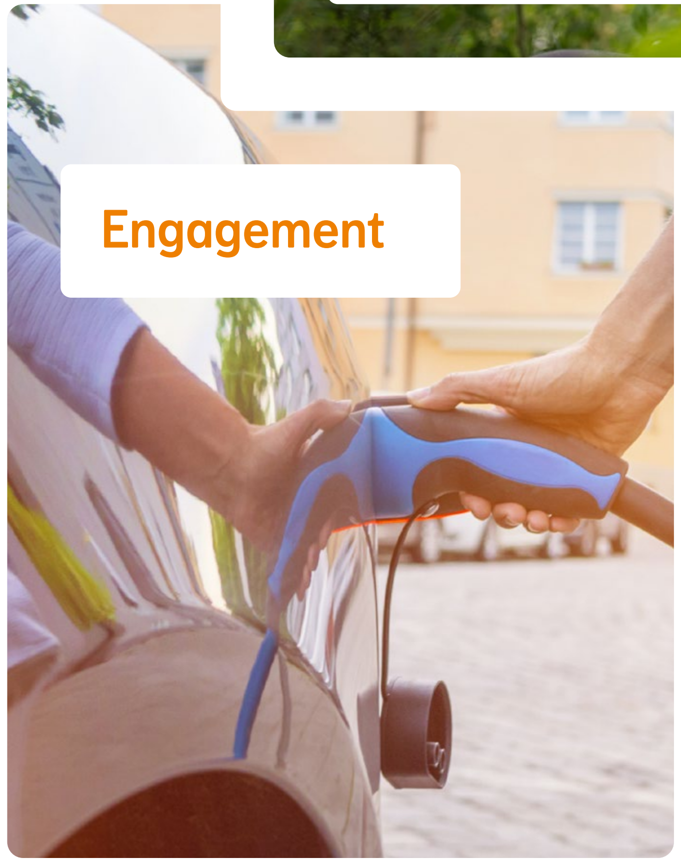
Content


Our green bond highlights in 2020

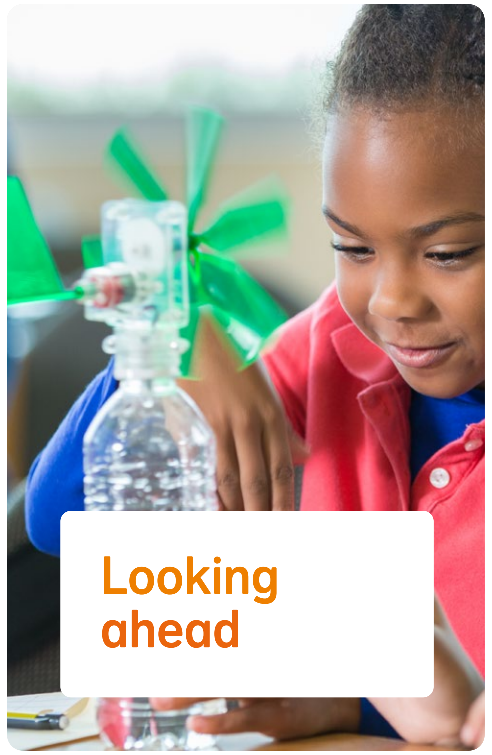

Green bond market


How we invest in green bonds


Our green bond portfolios


Engagement


Our environmental impact


Looking ahead

Our green bond highlights for 2020

Making a positive and demonstrable environmental impact is our key goal and four of our seven highlights relate to the impact our strategies made in 2020. Engaging with issuers to work towards a cleaner world is a vital part of this process. Our ability to track and assess the green bond universe helps us choose investments that really make a difference, and the recognition we receive is proof of our success.

Click on a box to read more

The impact calculation methodology in this report is different from the one used in our monthly strategy briefs (see page 36).

561,211 metric tons CO_2e annual greenhouse gas emissions avoided

333 megawatts (MW) renewable energy capacity added

835 gigawatt hours (GWh) annual renewable energy output

42 gigawatt hours (GWh) annual energy savings

755 bonds tracked and assessed in our database

3 awards for our NN (L) Green Bond fund

Environmental Finance Bond Awards 2021 Winner Green bond fund of the year

97 engagement dialogues With 92 issuers in 9 sectors

Green bond market

A diverse, liquid, international fixed income market

In less than a decade, the green bond market has transformed from a niche impact market to one of the most dynamic segments in fixed income, becoming a mainstream market in its own right. The real growth started in 2014, when the International Capital Market Association (ICMA) published the first Green Bond Principles, increasing transparency for investors and clarifying requirements for issuers.

2020 - Bouncing back quickly after Covid-19

The impact of Covid-19 only temporarily derailed the green bond market from its growth path of recent years. By the third quarter of 2020, it had bounced back with record issuance of EUR 74 billion. Triple-A-rated issuers including Germany, which is building a green yield curve, and Sweden tapped the market in 2020. Outside Europe too, sovereign issuers came to the market, with Egypt launching its first green bond. Despite the impact of the pandemic, corporate issuers continued to issue green bonds over the course of the year, maintaining their share of the total market at around 40%.

2021 – Accelerating growth path

Now that we are on the path to stability, issuers appear to be refocusing on a green recovery and on the ongoing climate crisis and Paris Agreement targets. The pandemic has placed an even stronger emphasis on environmental issues and this has boosted issuance. As a result, the strong growth in the second half of 2020 has continued in 2021. Green bond issuance hit a new monthly high in March of EUR 58 billion, easily breaking the previous September 2020 record of EUR 44 billion. Not only is the growth impressive in size, an increasing breadth of issuers are also tapping the green bond market. In March, Italy issued a EUR 8.5 billion inaugural green bond that was nearly ten times oversubscribed, and France, the largest green bond issuer, returned to the market with its second green bond. In the corporate segment, more industrial, communication and technology companies are turning to the green bond market to finance green projects, in what was traditionally more the domain of the financials and utilities sectors.

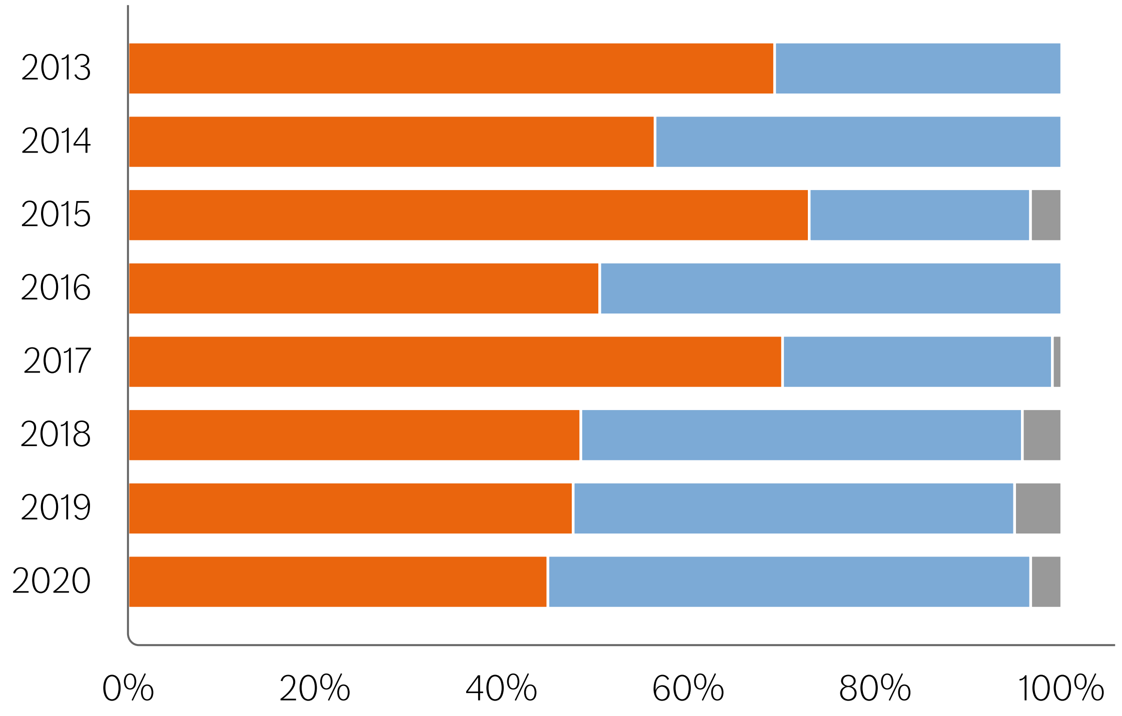
The interactive chart below gives a snapshot of the green bond market at the end of 2020. It gives a breakdown of the types of issuer, the sectors they come from as well as the regions, currencies and ratings. Although different market characteristics are changing at different speeds, the chart reveals that the growing green bond market is also becoming more diversified.

Green bond market characteristics in 2020

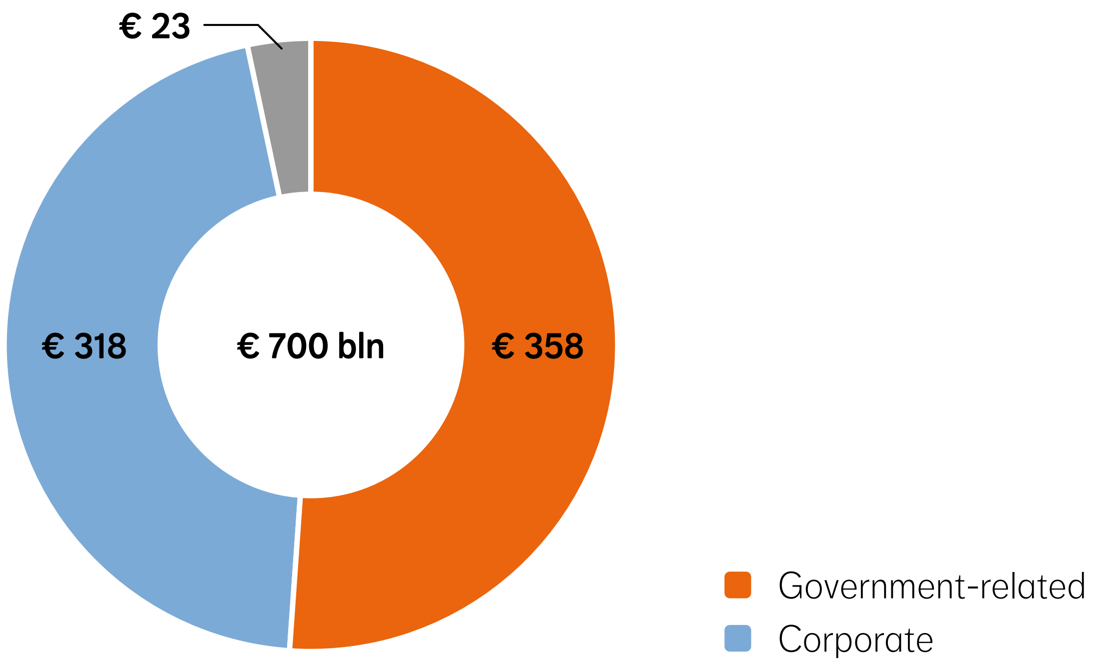
Click here to show issuance by:

Type | Sector | Region | Currency | Rating

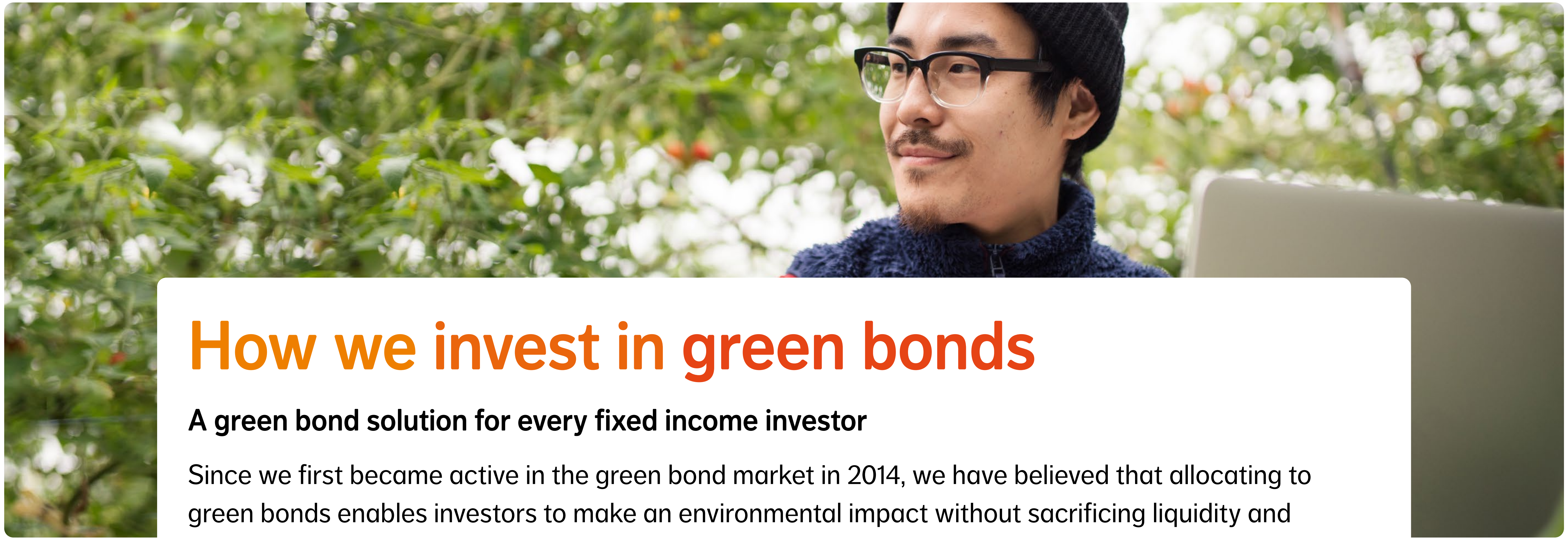
Annual issuance by type (%)



Market exposure by type (billions)



Source: Bloomberg, NN Investment Partners (31/12/2020)



How we invest in green bonds

A green bond solution for every fixed income investor

Since we first became active in the green bond market in 2014, we have believed that allocating to green bonds enables investors to make an environmental impact without sacrificing liquidity and returns. Over the years we have developed and fine-tuned our approach as the market has grown and become more sophisticated, but our conviction remains unchanged. Every fixed income investor can finance positive change and generate solid financial performance, but today's market gives them far more scope to do this than it did even one or two years ago.

The future success of companies and governments will be determined by their ability to change and adapt to the requirements of a more sustainable role. We believe active management is essential in ensuring that we select bonds that are truly green and deliver a measurable positive impact while also offering attractive financial returns. NN Investment Partners is a frontrunner in the green bond market with a dedicated team of green bond experts and a full range of green bond funds.

In this section we look at how green bond investing works at NN IP. We first describe our philosophy and approach to green bond investing, before moving on to why investors choose us to manage their green bond allocations. Finally we look at two of the main tools we employ to carrying out our green bond analysis and to track and assess bonds and measure their impact.

Our philosophy and approach

Creating a truly green investment universe

We believe the "greenness" of a bond is determined not just by the projects it finances but also by the issuer's strategy. This means we apply our own strict approach to creating a true impact universe. We never take a green label at face value, which is why our analysts and portfolio managers carry out their own thorough evaluation of a company's activities, future plans and intention to improve business practices. We have implemented a two-step process: stringent green bond assessment followed by an active investment approach based on solid credit analysis.

In-depth analysis forms the basis of our dark green approach

We start the investment process with our very strict green bond screening which assesses alignment with the ICMA Green Bond Principles and sector and project criteria, and includes an assessment of the ESG profile of the issuer. This leads to a green bond universe with a significant environmental impact and ensures that we and our investors are insulated from any form of greenwashing. As green bonds are self-labelled instruments, we use external information from the issuer and other sources but always carry out our own assessment. Bonds have to be tracked at issuer and project level to ensure that all investments are truly green. Inconsistent availability of data can make it difficult to establish exactly how green issuers are, and some companies can issue green bonds for individual projects without having any intention of addressing core sustainability issues. We believe that it is imperative to assess both quantitative and qualitative indicators at project, company and even market level on an ongoing basis.

Regular dialogue, transparent reporting

Frequent dialogue with issuers throughout the bond's life, from pre-issuance to impact reporting, also plays a central role in our green bond analysis. It enables us to learn more about issuers and offers us an opportunity to advise them on best practice. From an investor's perspective, reporting on impact achieved is key. We strongly believe that allocating to green bonds enables investors to reduce the carbon footprint of their fixed income portfolios without sacrificing liquidity and returns, but we need to demonstrate this in a transparent way. Engagement and impact reporting are covered in more detail on pages 26 and 18.

Active investment approach using traditional financial and ESG analysis

Pursuing an active management style plays an important role in choosing the right green bonds and building a portfolio. It helps us achieve a higher degree of impact and enhances risk-adjusted returns. Our active approach enables us to be more selective and to take a high-conviction view from both a fundamental and ESG perspective. As a result, we can construct more diversified, less concentrated portfolios, targeting those bonds that offer the best return from our green bond universe. This approach gives us a competitive edge in global green bond markets, as our thorough top-down and bottom-up analysis enables us to identify true impact and true value.

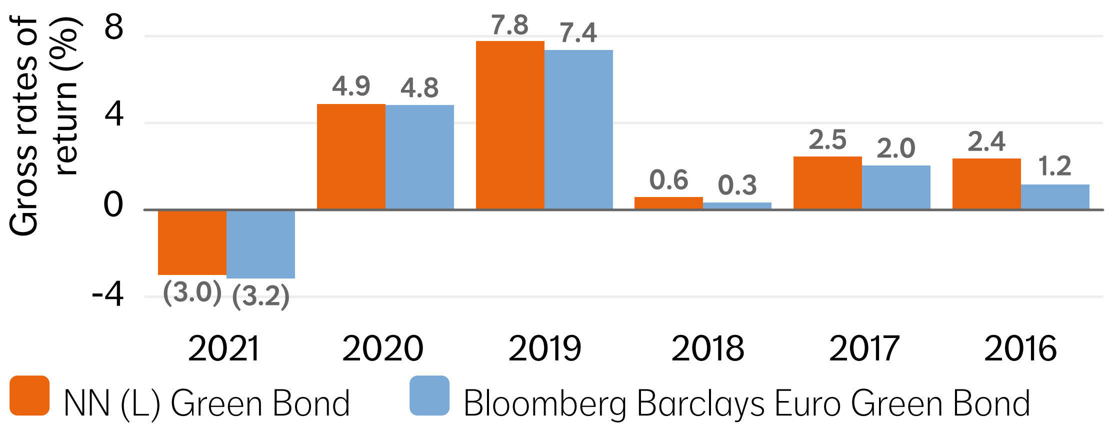
Bram Bos
Lead Portfolio Manager Green Bonds

Why do clients choose NN Investment Partners?

Green bond pioneer with a solid financial and impact track record

Investing with integrity and solid credit analysis

Our dedicated green bond team of portfolio managers and analysts is part of our global investment grade credit department and its investment process is fully aligned with our regular credit process. This enables the green bond portfolio team to work closely with our other credit analysts to assess whether a bond and its issuer align with our green bond criteria and also fulfil the fundamental credit requirements. Our Responsible Investing team also approves every green bond before it is eligible for investment. As a result of this stringent selection process, we reject about 20% of the total outstanding issues in the official global green bond universe.



Data as of 30 April 2021

Disciplined investment style, consistent performance

We apply a disciplined investment style characterized by a low tracking error, which leads to consistent and stable investment returns. This approach means the green bond strategies offer benefits to both impact and traditional fixed income investors. Our green bond strategy has historically generated strong financial returns, adding 47 basis points per annum since inception.

Granular green bond analysis, strong sustainability pedigree

Our in-house green bond analysis is supported by our proprietary assessment methodology and database, giving us a comprehensive overview of the market and its constituents. Our clear approach to creating and reporting on impact has gained recognition, with several responsible investing labels and awards from independent agencies, such as MSCI AA, 4 Morningstar globes, Scope AA+, Towards Sustainability (Belgium) and Greenfin (France). We publish regular reports on our strategy's financial and impact performance as well as insights and research on trends and developments in the green bond market.

Recognized market leader, five-year track record in green bonds

Our long track record and full range of green bond products have made us the partner of choice for many clients wishing to invest in green bonds. Our total green bond assets under management have grown to almost EUR 4 billion since we launched our first strategy in 2016. We have expanded our product range over the years and now offer four fund variants, offering building blocks for a wide range of investors and portfolios. Our flagship aggregate green bond fund has a 5-star Morningstar rating. Our experience and position in the market have enabled us to develop strong relationships with corporate and government-related issuers.

Douglas Farquhar
Client Portfolio Manager Green Bonds

Our green bond assessment methodology

Stringent and transparent issuer analysis

Our Green Bond Assessment Methodology (GBAM) has been constructed using the latest green bond project level assessment criteria from the ICMA's Green Bond Principles, the Climate Bonds Initiative Taxonomy and the EU Taxonomy. It builds on these external market guidelines but also reflects what the team deems to be the crucial mitigation and adaptation criteria for green bond issuers. We ensure our GBAM is regularly updated to reflect the latest scientific and regulatory developments.

Assessment of a full range of issuer types

For all types of issuer the first step in the process is the same:

Step 1 – Use-of-proceeds thresholds & criteria

Do the activities in the use of proceeds of the bond meet the GBAM thresholds and criteria for those particular activities? If not, the bond is not eligible.

Step 2 – ESG requirements for corporate issuers

If Step 1 is passed, the issuer should meet our ESG requirements and the ESG risk rating threshold as per the GBAM. Issuers with high-profile controversies reported in the media are excluded. Those with lesser controversies can also be excluded if the controversy was within the past two years. In these cases, an engagement call will be conducted with the issuer to determine whether or not it has put new policies and mitigative solutions in place to minimize the risk that the controversy will reoccur. If the engagement provides sufficient confidence in their strategy, the issuer can still be eligible if they are aligned with the 2°C[1] scenario, as verified by their own science-based target or by external data. If the engagement does not provide a satisfactory answer, this issuer will be excluded. If the issuer's operations have some exposure to controversial sectors, as defined by NN IP's policy for sustainable and impact funds[2], this should be minimal and below a predefined percentage.

There are additional requirements for bank issuers and for issuers with plastic-related activities. In the case of banks these relate to controversies in their lending activities. Issuers with plastic-related activities have to meet additional criteria related to their position in the plastic supply chain.

Step 2 – ESG requirements for government-related issuers

If Step 1 is passed, the issuer should meet the government ESG criteria, which consist of a general ESG country rating as well as a carbon intensity score for the country. If the country does not meet the required ESG score, it is not eligible. If it meets the ESG score, but the carbon intensity is too high, the issuer can still be eligible if they are aligned with the 2°C scenario. This alignment should be a public commitment with a science-based target. If both criteria are met, the bond is eligible for investment.

Isobel Edwards
Green Bond Analyst

1 https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.
2 NN Investment Partners Responsible Investment Viewpoint policy

Our green bond database

Constantly tracking and monitoring our universe

Our green bond database mainly tracks green bonds that are constituents of the Bloomberg Barclays MSCI Global Green Bond Index and that are denominated in either euros or US dollars. The database has three sections (bond overview, project allocation and impact reporting) for each of the bonds we track. It plays a crucial role in our impact reporting as it enables us to assess and report on the project allocation and impact metrics for all the bonds and issuers we follow.

NN IP green bond database – numbers*

- Tracks and assesses 755 bonds covering 10 sectors in 47 countries/regions
- 151 bonds (20%) labelled non-green/ineligible for our green bond portfolio
- Impact data on 478 bonds is available in the database

* data is as of end March 2021.

We started tracking green bonds when we launched our first strategy in 2016. Since then we have refined our approach and the way we gather and record information about the bonds we invest in. As the market has become more sophisticated and the range of data and information has improved, our database has grown and developed too.

We add new bonds to our database when they are launched and we track them from this point. Whether we invest or not and whether the bonds qualify as green under our selection criteria does not affect whether we track them. This is why our database also includes bonds that we label as non-green. This ensures that we can maintain a clear overview of the market and its constituents. In the case of some bonds we may leave the project allocation and impact reporting sections blank. This is because either this information is unavailable (the company has not yet issued a green bond report) or the data is unsuitable for use.

Bond overview

The green bond team documents the assessment process on the bond overview page. This includes the alignment of the issuer's green bond framework with the ICMA Green Bond Principles, the project-level alignment with CBI taxonomy and the NN IP Green Bond Assessment Methodology, and the issuer-level sustainability assessment.

Project allocation

The project allocation section tracks the use-of-proceeds allocation, the percentage of financing versus refinancing, the regional allocation, and the contributions to the United Nations' Sustainable Development Goals (SDGs). We report on our portfolio-level project allocation on pages 14-17.

Impact reporting

The impact metrics are collated and standardized in the impact reporting section of the database to enable monthly and annual portfolio-level impact calculations. We report on our portfolio-level impact on pages 18-25.

Kaili Mao
Green Bond analyst

Product overview

An extensive range of green bond funds

€ 3.8 bln
AuM

32
professionals

5 years
track record

4 funds
full strategy range

NN Investment Partners launched its first green bond fund in 2016. In the years since, as the market has expanded, we have introduced new funds to give investors a broader range of ways to allocate to green bonds and to lower the barrier to introducing green bonds into traditional fixed income portfolios. Our fund range comprises four funds, all of which have the same investment philosophy and approach.

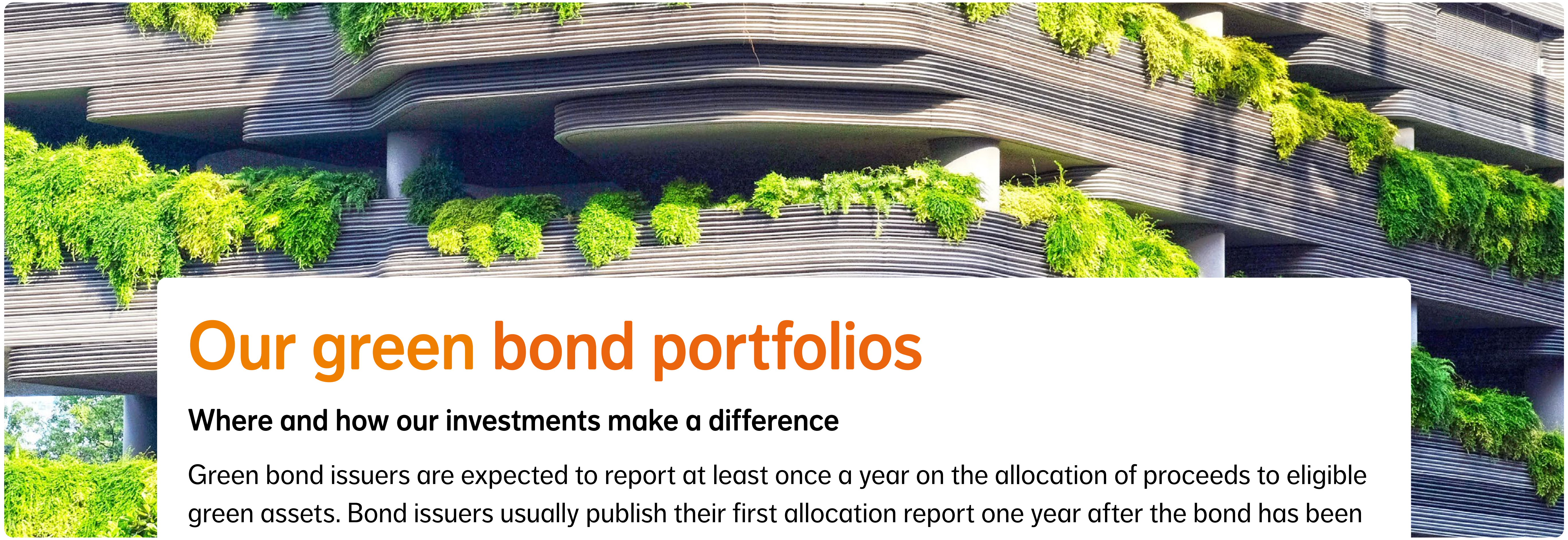
NN (L) Green Bond was launched in 2016 and invests primarily in global investment grade green bonds denominated in euros and issued by both sovereigns and companies. **NN (L) Green Bond Short Duration** has the same investment profile, but uses futures to hedge the duration back to 2 years. This makes it ideal for investors who want to protect their portfolio against rising interest rates while taking action on climate change. Although there are some slight differences in the positioning between it and NN (L) Green Bond due to portfolio management, NN (L) Green Bond Short Duration largely mirrors the main fund.

In the last two years we have also issued **NN (L) Corporate Green Bond**, which invests exclusively in green bonds issued by companies, and **NN (L) Sovereign Green Bond**, which invests exclusively in green bonds issued by sovereigns and other government-related entities. In addition to our funds, we also manage a number of bespoke mandates for our clients, to reflect client-specific investment parameters. Our mandate assets are included in the total asset under management numbers.

NN IP's green bond fund range

	NN (L) Green Bond	NN (L) Green Bond Short Duration	NN (L) Corporate Green Bond	NN (L) Sovereign Green Bond
Inception date	26 February 2016	1 April 2019	29 February 2020	31 March 2021
Investment universe	Global green bonds	Global green bonds	Global corporate green bonds	Global government and government-related green bonds
Benchmark	Bloomberg MSCI Euro Green Bond Index	No benchmark	Bloomberg MSCI Euro Corporate Green Bond Index	Bloomberg MSCI Euro Green Treasury and Government-Related Bond Index
Duration	Benchmark duration	2 year	Benchmark duration	Benchmark duration
Fund AuM	EUR 1,398 million	EUR 184 million	EUR 492 million	EUR 138 million
Number of issuers	110	109	84	38
Number of bonds	197	189	142	63
Currency risk	100% hedged	100% hedged	100% hedged	100% hedged
SFDR	Article 9	Article 9	Article 9	Article 9

Data as of 30 April 2021



Our green bond portfolios

Where and how our investments make a difference

Green bond issuers are expected to report at least once a year on the allocation of proceeds to eligible green assets. Bond issuers usually publish their first allocation report one year after the bond has been issued. We maintain a record of this information in our green bond database as it provides us with valuable information on the issuer's strategy and intentions and enables us to calculate and report on the realized environmental impact of our portfolio holdings.

There is also increasing demand among investors for issuers to disclose the expected and realized impact of their green bonds, for example in their green bond report or in a dedicated impact report. Issuers can also increase the quality and reliability of their reporting by having a financial auditor assure their post-issuance reports.

In this section we focus on the regional allocation, use of proceeds and the contribution made to the UN Sustainable Development Goals (SDGs) of two of our four green bond portfolios – our aggregate Green Bond fund and our Corporate Green Bond fund. The portfolio of the Green Bond Short Duration fund mirrors the aggregate fund and our Sovereign Green Bond fund was only recently launched.

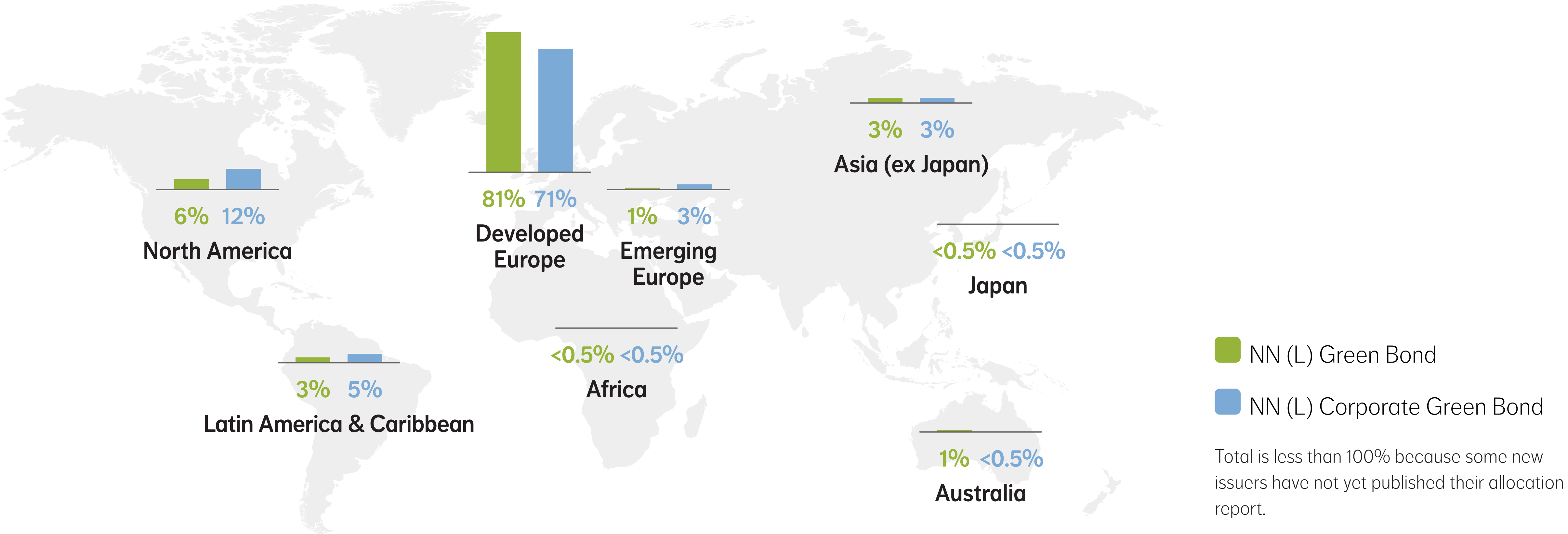
Regional allocation

EU still dominant but US and Asia are gaining ground

Europe still has the largest green bond market for both corporate and government-related issuers, also supported by potential supranational issuance, for example from the EU. But issuance has been increasing elsewhere too – in the US, where the Biden administration could pave the way for more sustainable investments, and in Asia, where several countries have made a carbon-neutral pledge.

The high percentage allocation of our funds to Europe has remained fairly constant over the years and shows the dominance of European issuers. This is particularly evident for our aggregate fund, which reflects the volume of European sovereign issues of recent years and their weight in the aggregate market indices. The heavy Europe weighting also highlights the difference in quality of green bond frameworks and transition plans, where US and Asian issuers still trail their European peers. In our database, 87% of green bonds from the 27 EU countries are labelled green, while this figure is only 58% for US, Chinese, South Korean and Japanese issuers.

Regional allocation of NN (L) Green Bond and NN (L) Corporate Green Bond in 2020



Total is less than 100% because some new issuers have not yet published their allocation report.

Use of proceeds

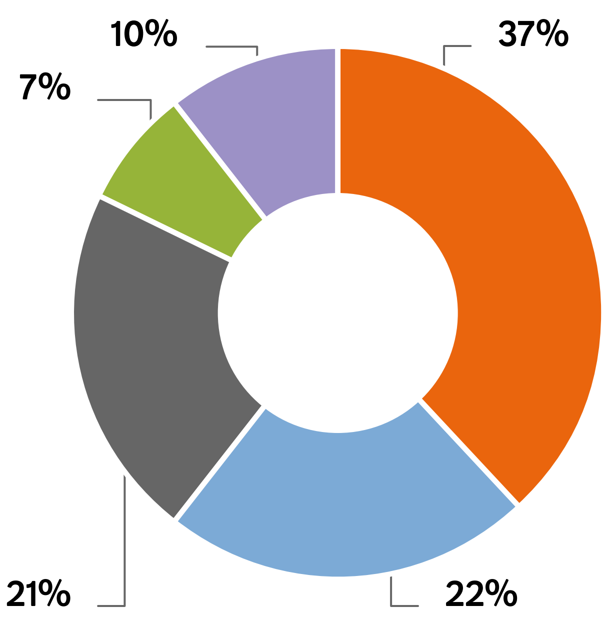
The cornerstone of every green bond

The use-of-proceeds structure is a key characteristic of green bonds. It is one of the four components of the International Capital Market Association's Green Bond Principles, the most widely adopted standard for green bonds. This principle stipulates that all designated green project categories should make a clear contribution to environmental objectives. The use of proceeds and how it contributes to these goals should be assessed and, where feasible, quantified by the issuer and reflected in the legal documentation for the security.

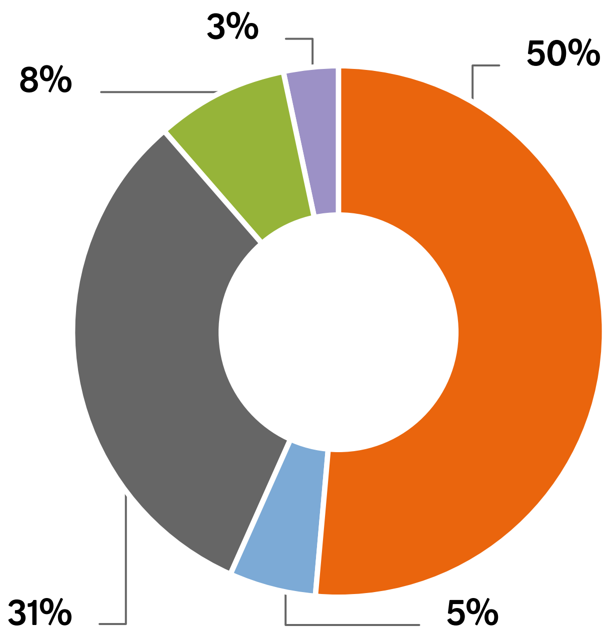
The energy sector (electricity, heat and transport) accounts for 73%[1] of global greenhouse gas emissions, so it is not surprising that alternative energy is the largest use-of-proceeds category in our portfolios. The differences between the proceeds allocation for the public and private sectors are reflected in the allocation percentages for our two funds. The low-carbon transportation segment is a good example. Governments and government-related entities are investing heavily in infrastructure to electrify and modernize public transportation systems, while private-sector car manufacturers are still in the early stages of developing and mass producing low-carbon-emission vehicles.

Use of proceeds in 2020

NN (L) Green Bond



NN (L) Corporate Green Bond



- **Alternative energy:** includes wind power, solar power, hydropower, biomass, etc.
- **Low-carbon transportation:** includes electrification and modernization of railway and metro, electric buses, full electric vehicles, etc.
- **Green building:** includes construction of new residential and commercial buildings with top energy performance and building renovation to improve energy efficiency, etc.
- **Energy efficiency:** includes fibre-optic deployment, smart grid, LED lighting, etc.
- **Other:** includes sustainable natural resources, sustainable water and wastewater management, pollution prevention and control, etc.

Total is less than 100% because some new issuers have not yet published their allocation report.

1 Emissions by sector - Our World in Data

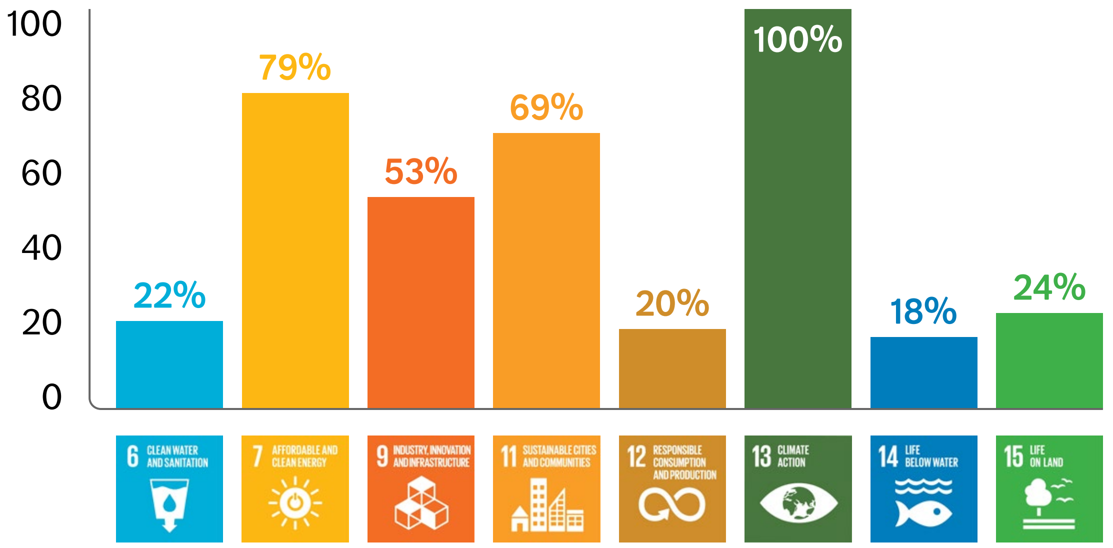
SDG contribution

Focus on the goals that tackle climate and environmental issues

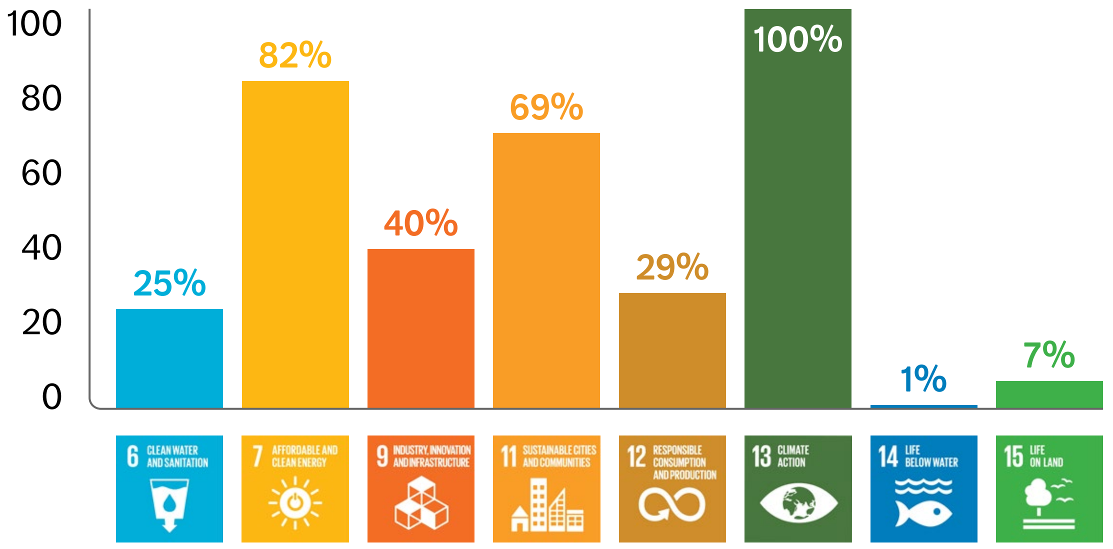
The Sustainable Development Goals (SDGs) form part of the 2030 Agenda for Sustainable Development, a UN resolution drawn up in 2015. The 17 goals aim to end poverty and other deprivations, improve health and education, reduce inequality, and spur economic growth, while tackling climate change and preserving our oceans and forests. NN IP's green bond funds focus on the 8 SDGs that cover climate- and environment-related issues. We assess the SDG contribution each individual green bond makes, based on the specific projects it is financing and the direct SDGs those projects contribute to. This means we do not include indirect SDG contributions.

The difference between our corporate and aggregate funds is also evident in the SDG contributions they make. Our aggregate fund's public sector exposure is reflected in its larger contribution to SDG 14 Life Below Water and SDG 15 Life On Land. This is because governments are more likely to incorporate the sustainable management of natural resources into their proceeds allocation and finance projects relating to biodiversity research and protection, and soil rehabilitation, for example.

SDG exposure* of NN (L) Green Bond in 2020



SDG exposure* of NN (L) Corporate Green Bond in 2020



* Portfolio positions can have exposure to multiple SDG themes

Our environmental impact

Positively contributing to the implementation of the Paris Agreement

Regular and transparent reporting is a powerful tool in green bond investing as it provides the ultimate proof that the proceeds are truly allocated to eligible green projects with environmental benefits. Despite the impact reporting needs of investors and market guidelines such as the ICMA Green Bond Principles, CBI Climate Bonds Standard, and the EU Green Bond Standard, green bond issuers only have a voluntary commitment to report on their contribution to tackling climate change.

In this section we look at a number of the most commonly reported green bond impact metrics. These are annual greenhouse gas emissions (GHG) avoided, renewable energy capacity added and annual renewable energy output, and annual energy savings. We first look at the impact our green bond portfolios made for each of the metrics we report on and then look at examples of individual bonds in portfolio, the details of the projects they financed and how they contributed to this impact. The impact calculation methodology in this report is different from the one used in our monthly strategy briefs (see page 36).

When reporting on our impact, we focus on two of our four green bond portfolios – our aggregate fund, NN (L) Green Bond, and NN (L) Corporate Green Bond. The portfolio of NN (L) Short Duration Green Bond mirrors the aggregate fund in terms of impact intensity (impacts per million euros invested) and to calculate its total impact this impact intensity figure should be multiplied by its assets under management (see page 13). We do not include NN (L) Sovereign Green Bond as this was only launched in March 2021.

Greenhouse gas emissions

Combatting climate change and slowing global warming

Annual greenhouse gas emissions avoided is by far the most frequently reported green bond impact metric. The avoided emissions can come from a broad range of projects. These could be renewable energy plants to help reduce fossil fuel usage and public transportation to encourage people to travel less with private cars. Other projects that fall into this category include those that finance green buildings, designed to reduce the overall impact of the built environment through efficient use of resources (energy and water), and optical fibre to improve energy efficiency. Greenhouse gas emissions are measured in carbon dioxide equivalent (CO_2e). This metric signifies the amount of CO_2 for any type of greenhouse gas which would have the equivalent global warming potential.

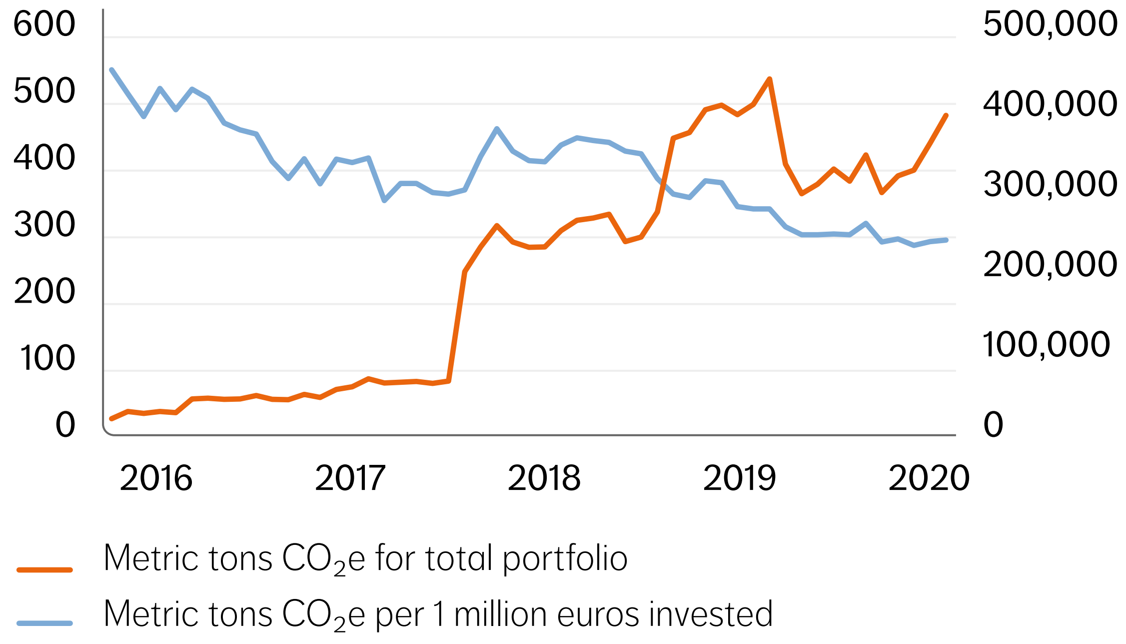
Numbers are per million euros invested

Click here for the **total impact** of our green bond portfolios

	NN (L) Green Bond	NN (L) Corporate Green Bond
GHG emissions avoided (metric tons CO_2e)	278	412
Equivalent to annual emissions of:		
EU households[1]	17	25
Passenger cars[2]	111	165

1 Source: European Environment Agency and Eurostat
2 Source: Milieucentraal

Annual GHG emissions avoided (CO_2e) for NN (L) Green Bond



Note: This graph shows monthly reported annual GHG emissions avoided since the fund's inception in 2016. The December 2020 figure in this graph is slightly different to our reported impact GHG emissions avoided number for 2020 because it does not include the updated impact of those issuers who provided 2020 updates after year-end. The decline in portfolio total emissions avoided in February 2020 is because assets moved out of the aggregate fund into our then-new corporate fund.

Our green bond portfolios' impact in 2020

The GHG emissions avoided through the two green bond portfolios included in this assessment totalled 561,211 metric tons of CO_2e in 2020. The total portfolios' impact and impact per million euros invested are shown in the table. The higher emissions avoided per million euros invested for our NN (L)

Corporate Green Bond can be explained by the higher allocation percentage to the alternative energy category. Alternative energy projects usually make a greater impact on avoiding greenhouse gas emissions as they directly replace the use of fossil-fuel-based energies.

The total GHG emissions avoided for our NN (L) Green Bond fund portfolio has increased since inception, in line with the increase in AuM. However, our monthly impact reports since 2016 reveal a decrease in the quantity of GHG emissions avoided per million euros invested, from over 500 to below 300 metric tons. This trend is aligned with our expectations that the path towards the Paris Agreement's goals will drive down GHG emission baselines, which form a key element in calculating the GHG emissions avoided metric.

PORTFOLIO CASE STUDY[1]

Société du Grand Paris

Société du Grand Paris is a 100% state-owned infrastructure entity that only issues green bonds to finance its Green Euro Medium Term Note programme.

Impact attributable to the bond:
62.9 metric tons CO_2e emissions avoided per million euros invested

Project contributing to the impact: The Green EMTN programme is dedicated exclusively to financing the new electrified and automated metro lines of the Grand Paris Express. The eligible assets include 200 km of new lines, 68 stations, the extension of line 14, and the six operation centres that make up the new network.

Company target alignment: The company's sole public mandate is to build lines (15, 16, 17, and 18) that are connected to the existing infrastructure, which is supported by the Green EMTN programme. The new metro will help reduce greenhouse gas emissions, with annual savings of 755,000 – 1.3 million metric tons of CO_2 equivalent once it is completed.

Green bond key information

Year of issuance:	2018
Use of proceeds:	100% allocated to low-carbon transportation
Contribution to SDGs:	11, 13

1 Source: 2019 Green Bond Report (2020 report was not available at the end of May)

PORTFOLIO CASE STUDY[1]

Berlin Hyp

Berlin Hyp is a real estate and mortgage bank headquartered in Berlin. The issuer had EUR 5.15 billion worth of green bonds outstanding at the end of 2020.

Impact attributable to the bond:
14.5 metric tons CO_2e emissions avoided per million euros invested

Project contributing to the impact: Berlin Hyp provides long-term financing for one of the MesseCity Köln project buildings which is located in the centre of Cologne. The building has been given a Gold certification by DGNB[2]. During the construction phase, a high level of energy efficiency (partly due to heat recovery) and sustainable management throughout the lifecycle were top priorities. The architectural concept, which features a low ratio of window surfaces to façade surface, is designed to reduce heating and cooling requirements over the long term, thus saving energy.

Company target alignment: Berlin Hyp aims to be carbon-neutral by 2050 for all three scopes[3] and for one third of financing across its entire loan portfolio to be green by 2025. The issuer's green bond programme is contributing to this target by allocating 100% of the proceeds to green building loans, contributing to energy saving by reducing Scope 3 emissions.

Source: green-bonds (berlinhyp.de)

Green bond key information

Year of issuance: 2017
Use of proceeds: 100% allocated to green building
Contribution to SDGs: 11, 13

1 Source: Annual Reporting Green Bonds 2019/20
2 DGNB is the German sustainable building council. It developed its own certification system for sustainable construction in 2009. It is internationally recognized as the Global Benchmark for Sustainability. The DGNB System | DGNB System (dgnb-system.de)
3 Scope 1 and 2 emissions are directly generated by the company (e.g. production plants) or related to its upstream activities, whereas Scope 3 includes emissions are a consequence of a company's operations, but aren't directly owned or controlled by it.

Renewable energy

A key element of sustainable development

Renewable energy has received by far the most proceeds allocation across all categories in our portfolio. Apart from the main two renewable energy types, wind and solar, there are also other sources, such as hydropower, bioenergy, geothermal and tidal, although there are far fewer projects in these areas financed by green bond proceeds. Renewable energy capacity is measured in megawatts (MW) and annual renewable energy output in gigawatt hours (GWh).

Numbers are per million invested

Click here for the **total impact** of our green bond portfolios

	NN (L) Green Bond	NN (L) Corporate Green Bond
Renewable energy capacity added (MW)	0.16	0.26
Equivalent to capacity of # wind turbines[1]	0.06	0.10
Annual renewable energy output (GWh)	0.40	0.65
Equivalent to annual electricity usage of # EU households[2]	109	175

1 Source: WindEurope
2 Source: ODYSSEE-MURE
3 Source: EnBW Green Bond Impact Report 2020

Our green bond portfolios' impact in 2020

In 2020, our two green bond portfolios added 333 MW of renewable energy capacity and had an annual output of 835 GWh of renewable energy. The total portfolios' impact and impact per million euros invested are shown in the table. The higher impact per million euros invested for our NN (L) Corporate Green Bond fund is also due to the higher percentage allocation to the alternative energy category.

PORTFOLIO CASE STUDY[3]

Energie Baden-Württemberg

EnBW is a German energy company that focuses on renewable forms of energy, electricity and telecommunications networks.

Impact attributable to the bonds:
429 MW renewable energy capacity added

Project contributing to the impact: The largest allocations are for the offshore Hohe See and Albatros wind farms, which are located in the North Sea. The wind farms have a total of 87 turbines and 640 MW installed capacity, 320 MW of which is attributable to the two 2019 green bonds.

Company target alignment: EnBW allocated 84% of its 2019 green bonds proceeds to offshore wind, 14% to onshore wind, and 2% to solar PV (photovoltaic). The company plans to attain carbon neutrality by 2035 by phasing out coal and switching to renewable energy. It aims to generate 50% of

Source: EnBW

its total energy output from renewable energy installed capacity by 2025, mainly consisting of wind and solar. The proceeds allocation is fully aligned with its company-level target.

Green bond key information

Year of issuance: 2019
Use of proceeds: 100% allocated to renewable energy
Contribution to SDGs: 7, 13

1 Source: Verbund Impact Reporting 2020

PORTFOLIO CASE STUDY[1]

Verbund

Verbund AG is an electric utility company based in Austria. It generates, transports, sells, and trades electricity and other forms of energy throughout Europe.

Impact attributable to the bond:
411 GWh annual renewable energy output as of 2019

Project contributing to the impact: Ybbs-Persenbeug is a run-of-river hydro-power facility. The proceeds will be used to replace the six old Kaplan turbines and improve the control system technology. This project will increase the production of the current Ybbs-Persenbeug power plant by more than 77 GWh.

Company target alignment: As part of its 2030 strategy, Verbund aims to maintain the value of the group's existing hydropower generation, which accounts for over 90% of the renewable energy capacity, optimizing the flexible generation portfolio and seizing available opportunities to expand hydropower.

Green bond key information

Year of issuance: 2014
Use of proceeds: 42% allocated to hydro-power plants
Contribution to SDGs: 7, 13

Energy savings

Maximizing the efficient use of our resources

We invest to increase energy efficiency and reduce energy consumption. This helps cut the use of fossil fuels and avoid more greenhouse gas emissions. Energy savings are measured in gigawatt hours per year.

Our green bond portfolios' impact in 2020

The energy savings of the two green bond portfolios included in this assessment totalled 42 GWh in 2020. The total portfolios' impact and impact per million euros invested are shown in the table below. Energy savings are mainly from three use-of-proceeds categories: energy efficiency, green building, and low-carbon transportation. As seen from the use-of-proceeds chart on page 16, the allocation to a combination of these three categories is higher for NN (L) Green Bond than for NN (L) Corporate Green Bond, so the annual energy savings per million euros invested for NN (L) Green Bond is higher.

Numbers are per million invested

Click here for the **total impact** of our green bond portfolios

	NN (L) Green Bond	NN (L) Corporate Green Bond
Annual energy savings (MWh)	26	14
Equivalent to annual electricity usage of # EU households[1]	7	4

1 Source: ODYSSEE-MURE
2 Source: Green Bond Allocation Statement for 2019 Green Bond

PORTFOLIO CASE STUDY[2]

Digital Realty

Digital Realty owns and operates data centres worldwide. It offers cloud and information technology services, communications and social networking, financial services, manufacturing, energy, healthcare and consumer products.

Impact attributable to the efficiency upgrade projects:
6.2 GWh energy savings annually

Project contributing to the impact: Digital Realty's operational efficiency initiatives target cooling, airflow, and lighting systems to drive down overall energy use. Example project types include replacing single-speed fan motors with higher-efficiency variable-speed motors, retro-commissioning building management systems, airflow optimization in data halls, and LED lighting upgrades.

Company target alignment: Digital Realty aims to be in line with the 1.5°C scenario and has committed to reducing Scope 1 and 2 GHG emissions by 68% per square foot by 2030 from a 2018 base year. Energy conservation is one of the key methods the company is using to contribute to this target.

Green bond key information

Year of issuance: 2019
Use of Proceeds: EUR 3.45 million allocated to projects to upgrade efficiency
Contribution to SDGs: 11, 13

11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION

PORTFOLIO CASE STUDY[1]

Telefónica

Telefónica is a telecommunication and digital services company which offers connectivity, digital services and technological solutions.

Impact attributable to the bond:
40 GWh energy savings annually

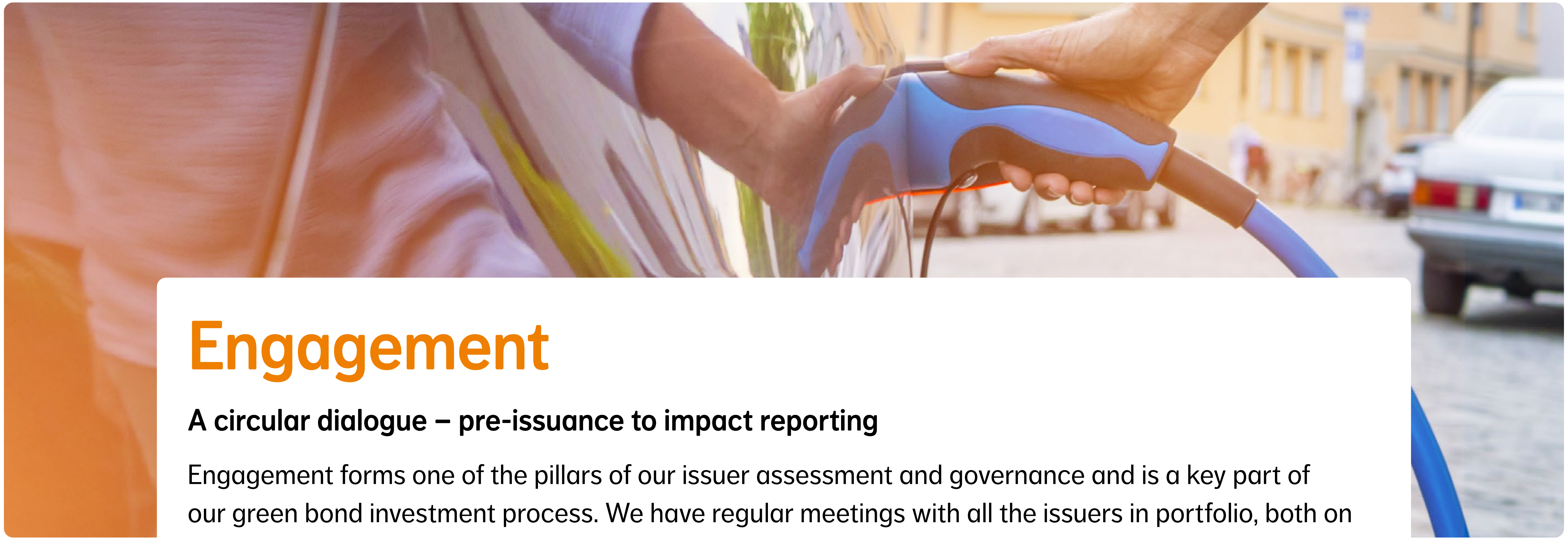
Project contributing to the impact: Telefónica allocated the green bond proceeds to upgrading its fixed network by replacing the copper with fibre optics. Fibre optics are 85% more efficient than copper and significantly reduce the amount of electricity consumed in the network.

1 Source: Telefonica Green Financing 2020

Company target alignment: Telefónica has made a commitment to reduce absolute Scope 3 GHG emissions from fuel and energy-related activities by 25% by 2025 from a 2016 base year. Two of the most important measures supporting this commitment are to put 100% of retail customers onto a fibre network by 2025 and reduce energy consumption by shutting down the copper network and the systems that support it.

Green bond key information

Year of issuance: 2020
Use of proceeds: 100% allocated to energy efficiency
Contribution to SDGs: 7, 9, 13



Engagement

A circular dialogue – pre-issuance to impact reporting

Engagement forms one of the pillars of our issuer assessment and governance and is a key part of our green bond investment process. We have regular meetings with all the issuers in portfolio, both on broader ESG topics and on specifics relating to their green bond frameworks and their environmental risks and strategies. Engagement also enables us to advise current and prospective issuers on how to further enhance their sustainability.

In this section we explore our approach to engagement at NN Investment Partners, highlighting the reasons why dialogue is such an important part of green bond investing. We start the conversation prior to a bond's issuance and focus on building up a mutually beneficial relationship with the issuer. They offer us insights on their business and strategy; we can inform them on best practice and what investors are looking for.

After discussing our engagement philosophy and approach, we give a snapshot of our engagement activities in 2020 and look more closely at the engagement process using three case studies that show how we engage with both sovereign and corporate issuers.

Dialogue mitigates risk of greenwashing

Entering and maintaining an active dialogue is an important part of our overall assessment of an entity – corporate, govern-ment or supranational – and its bonds. It helps us learn more about an issuer and its sustainable strategy. Although there are plenty of market guidelines in place, such as the Climate Bond

Initiative's Climate Bonds Standard and the International Capital Market Association's Green Bond Principles, green bond issuers only have a voluntary commitment to report on their contribution to climate change. This and the self-labelled nature of green bonds mean that greenwashing is a significant risk for investors that want to make a clear positive impact and avoid reputational damage. Engagement is an important tool in mitigating this risk. Regular contact gives us a better understanding of both the issuer and the individual bond issue and helps ensure we do not invest in entities that are not as "green" as they might first appear to be.

Pre-issuance engagement

NN IP's green bond team engages with almost every issuer that we are potentially interested in adding to the portfolio at pre-issuance stage. This is to ensure we gain a complete picture of the issuer – their core business activities and sustainability strategy – and sufficient information to carry out a bond-level assessment. An increasing number of issuers also contact us prior to the issuance stage, when they are still putting together their green bond framework. This trend has been strengthened by the increased regulation, especially in the Eurozone, and with the introduction of the EU Taxonomy. Engagement also enables us to advise current and prospective issuers on the best market practices to further enhance their sustainability and improve reporting. Such guidance can relate to improving the governance process for the selection of eligible projects and setting the selection criteria thresholds for each category of use of proceeds.

Ongoing dialogue to follow up on use of proceeds and impact reporting

We maintain a dialogue with most of the issuers in whose bonds we are invested and for the bonds that we have labelled as green and non-green in our database. We engage with non-green issuers too, as we want to help them improve their green bond frameworks and meet our strict standards.

The NN IP approach – top-down engagement and bottom-up dialogue

In our top-down engagement, NN IP's Responsible Investing team focuses on specific ESG targets in two ways. The first is controversy engagement, where we focus on companies that severely and structurally breach our norms-based criteria in the areas of governance, human rights, labour, environment, and bribery and corruption. The second is thematic engagement, which addresses chosen themes that have a material impact on society, and where we believe our engagement efforts can achieve beneficial change. Our current environment-related engagement themes focus on utilities, oil & gas and deforestation, areas also targeted by green-bond-financed projects. In addition to these two top-down approaches, our analysts and portfolio managers maintain regular bottom-up dialogues with investee companies on ESG subjects we believe have a material impact on their value. This bottom-up dialogue is what we focus on in this report.

We also specifically target issuers where we have questions on their annual allocation and impact report. These discussions help ensure transparency on how the proceeds are being allocated and that the quality of reporting meets expectations. In the light of the new EU Taxonomy, we are also engaging more frequently with issuers on the information that is required to carry out the taxonomy alignment exercise, as many are not yet able to carry out this assessment themselves. This is also an area where we can help them become better prepared for the more strictly regulated environment for sustainable investments that is to come.

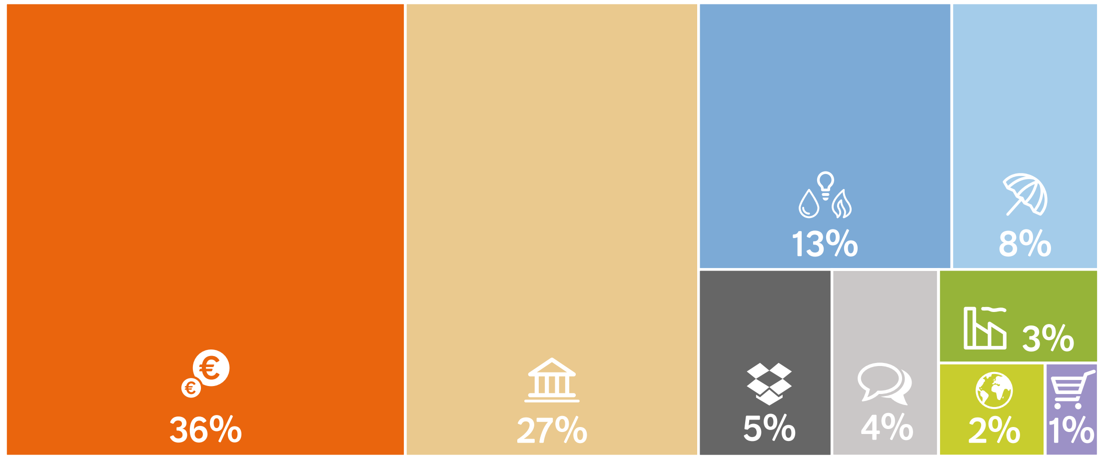
Engagement – 2020 in numbers

During 2020, we had 97 engagement dialogues with 92 issuers. These took place either in face-to-face meetings, video calls or or via an exchange of emails. Our engagement efforts cover the full range of issuer types. In 2020, we engaged with 9 sovereign issuers, 34 government-related issuers and 49 corporate issuers. We carried out fewer engagement activities in the first quarter of the year with the outbreak of the Covid-19 pandemic and resulting market unrest, but this picked up again in the second half of 2020.

In 2020, 61 percent of all our engagement dialogues left us with a positive impression. This means that the issuer had a credible green bond framework and sound company-level transition plan and was also transparent and open to communicating with us. In general the number of positive impressions slightly decreased from 2019 to 2020. This reflects more stringent sustainability regulations and the increase of non-European issuers.

Improved regulation and greater demands from investors are raising the bar for issuers, making the goals that are set for engagement increasingly challenging. At the same time, the number of green bond issuers from North America and Asia is picking up and their sustainability ambitions still lag those of their European peers. However, in general the average quality of the dialogues by which we were positively impressed is increasing. This reflects increased efforts to integrate sustainability more fully and improve transparency in terms of reporting and disclosure.

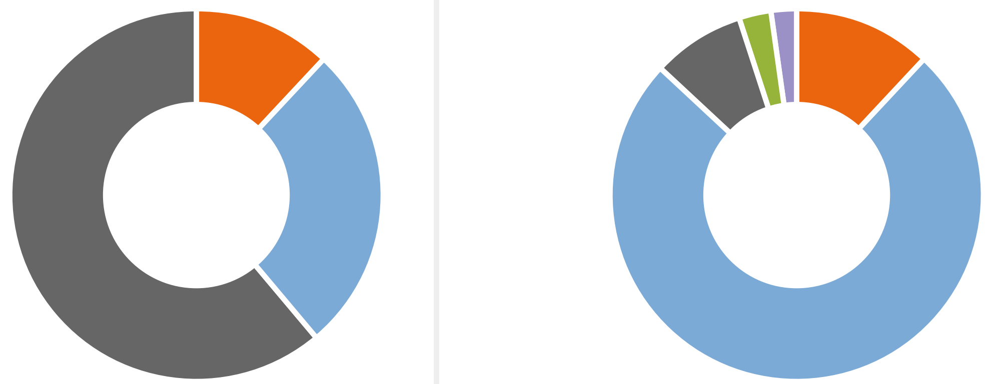
Engaged with 92 issuers across different sectors[1] in 2020



Financials
Government
Utilities
Consumer Discretionary
Materials
Communications
Industrials
Supranational
Consumer Staples

1 Bloomberg Industry Classification Systems

Impression of engagement and issuers, risk exposure by region (92 issuers)



12% Negative
27% Neutral
61% Positive

12% Asia
75% Europe
8% North America
3% South America
2% Supranational

ENGAGEMENT CASE STUDY[1]

The State of the Netherlands

In May 2019, the State of the Netherlands issued its inaugural green bond. The current outstanding amount is EUR 10.7 billion and the proceeds are allocated to four main categories.

Key information

Rating	ISIN	Second party opinion
AAA	**NL0013552060**	**Sustainalytics**

Use of proceeds:

- **Renewable energy:** to stimulate sustainable energy production (offshore wind and solar)
- **Energy efficiency:** to promote energy savings in the rental housing sector
- **Low-carbon transportation:** development, maintenance and management of the railway infrastructure
- **Climate change adaptation & sustainable water management:** for the Delta Fund[2]

At the beginning of 2019, we met the Dutch State Treasury Agency (DSTA) for a pre-issuance engagement prior to the launch of their inaugural green bond. The discussion was mainly focused on the issuance plan and the use of proceeds, with the NN IP green bond team sharing its views on the eligibility of the DSTA's green bond criteria. While the issue details were being finalized, a second discussion took place on the detailed proceeds allocation and the impact reporting methodology.

Based on the credible green bond framework, we deemed this issue to be green and eligible for our green bond portfolios. One year after issuance, the DSTA published their first allocation and impact report and arranged a third meeting with us in September 2020 to discuss this. Here we also talked about certain information that we thought could be better incorporated for subsidy-based impact reporting. In contrast to corporate issuers, sovereign issuers usually include subsidies, for example, for the renewable energy industry, as part of their green expenditure to be financed with green bonds. Including both the value of the subsidy and the overall value of the underlying project enables investors to estimate what proportion of the impact can be attributed to the individual subsidies.

Testimonial from the DSTA

Dutch State Treasury Agency
Ministry of Finance

"The DSTA actively reaches out to investors to gather feedback on their green bond programme. NN IP is a highly valued partner for this type of feedback. Over the last years the DSTA has had various exchanges of views with NN IP – input for the green bond framework, feedback on the green bond report, discussion on future developments in the green bond market. Bram and his team are outspoken on these issues which contributes to the further development of the DSTA's strategies and actions in the green bond market."

1 Source: Bloomberg, State of the Netherlands Green Bond Framework For more information on the issuer: http://english.dsta.nl
2 The Delta Fund is used to finance the Delta Programme, which aims to ensure that the Netherlands is well protected from flooding, can adapt to extreme climate events and has adequate supplies of freshwater.

ENGAGEMENT CASE STUDY[1]

Swisscom

Swisscom AG is a Swiss telecom company that operates public telecommunications networks and offers network application services. The issuer published its green bond framework in March 2020 and issued its inaugural EUR 500 million green bond in May 2020.

Key information

Rating	ISIN	Second party opinion
A	**XS2169243479**	**Sustainalytics**

Use of proceeds:

- **Energy efficiency:** improvement mainly from FTTH (fibre-to-the-home) network deployment and TDM[2] phase-out
- **Renewable energy:** to reduce the CO_2 footprint by installing off-grid solar electricity or biomass heating systems
- **Low-carbon transportation:** to reduce energy consumption by replacing company diesel cars with electric vehicles

We had two meetings with Swisscom AG in 2020 and 2021. The first one took place before the bond was issued and focused on Swisscom's green bond framework and corporate transition plan. The second meeting was after the company issued its allocation and impact report focusing on the EU Taxonomy alignment. During the post-issuance engagement, we discussed the details of the projects Swisscom's green bond is financing and how they comply with the EU Taxonomy for assessment of climate mitigation contribution and Do No Significant Harm. Based on initial information shared during this conversation, we assessed the total alignment of Swisscom's 2020 green bond with the EU Taxonomy to be 50%. Swisscom subsequently provided additional relevant information on, for example, the adaptation of its telecommunication networks to future climate risk. A further alignment exercise based on this additional input brought the bond's EU Taxonomy alignment up to 100%.

Testimonial from Swisscom

"We also much appreciated the open discussion with NN IP. The non-deal roadshow is part of our engagement journey with investors to proactively reach out for feedback. We continuously strive to improve, and it helps us to have an open dialogue with NN IP to understand where there are important focus topics or where to increase the level of information."

1 Source: Bloomberg, Swisscom Green Bond Framework. For more information on the issuer: www.swisscom.ch
2 Time-Division Multiplexing

ENGAGEMENT CASE STUDY[1]

Iberdrola

Iberdrola is a multinational electric utility company headquartered in Bilbao, Spain. As of end-2020, 73% of their installed capacity was renewables, followed by combined cycle gas plants (18%) and nuclear (6.6%). Iberdrola was one of the first utility companies to initiate its green transition and issue green bonds. Since its inaugural green bond in 2014, Iberdrola has issued EUR 11.2 billion worth of green bonds to finance its energy transition strategy.

Key information

Rating	ISIN	Second party opinion
BBB+	**XS1398476793**	**Vigeo Eiris**

Use of proceeds:

Iberdrola's 2020 green bond framework covers renewable energy, smart grids, energy transition and distribution, and energy efficiency. Its green bond has so far mainly focused on renewable energy (onshore wind, offshore wind, and solar).

Our engagements with Iberdrola started in 2017 and focused on its transition plan and eligible green assets. Iberdrola aimed to have completely phased out coal-fired power plants in 2020 and the company has achieved this according to its 2020 annual report. Offshore wind is the most profitable renewable energy source for Iberdrola and has also become one of its important transition tools. As a result of this, Iberdrola has set a target of having between 12 and 18 GW of operating capacity installed by 2030. The company's efforts in the field of energy transition are much appreciated. Their eligible green assets include hydropower, and during the first engagement meeting in 2017, we advised them to seek additional verification to ensure both social and environmental issues are assessed. Following the release of the draft EU Taxonomy, Iberdrola also added power density criteria for its eligible hydropower projects, demonstrating its efforts to try to align with the taxonomy.

Testimonial from Iberdrola

"All the meetings that we have had with NN IP have been very helpful and constructive. We consider NN IP to be one of the dark green leaders of the investor community. We have especially appreciated the discussions we have had regarding different sustainable financing options. Both Iberdrola and NN IP are on the same road, firmly committed to a sustainable strategy to fight against climate change and protect the planet and contribute to our communities. We are looking forward to having further dialogues and conversations with them in the near future."

1 Source: Bloomberg, Iberdrola Framework for Green Financing. For more information on the issuer: www.iberdrola.com

Looking ahead – the future is green

Increasingly global well-regulated market for every fixed income investor

Achieving the challenging climate targets set out in the Paris Agreement and by the UN Sustainable Development Goals in less than a decade will require green financing on a scale that far exceeds what we have seen so far. New regulations, the EU's planned green bond issuance and the booming sovereign market should raise the bar for transparency and disclosure, boost liquidity and diversity in the market, and encourage a broader range of corporate issuers to go green.

Strong international growth as climate moves up the agenda

Although Europe remains dominant, with more sovereign issuers such as Spain and the UK expected to tap the green bond market for the first time in 2021, the focus on green bonds has been increasing elsewhere. In the US, the Biden administration could pave the way for a green US Treasury, while emerging green bond markets look set to grow too, led by China, which is aiming for carbon neutrality before 2060. Furthermore, the scheduled issuance of the new Next Generation EU Bonds, around EUR 230 billion of which is dedicated to environmental projects, should boost the supranational share of the green bond universe from 2021 onwards. Finally, the corporate issuer base also continues to broaden and become more diversified, from both a sector and regional perspective.

New regulations to establish global standard for green bonds

With the US having rejoined the Paris Agreement and the EU having committed to a green recovery, we can expect a wave of new climate regulations and incentives, which will have a huge impact on the investing landscape. The EU's Green Bond

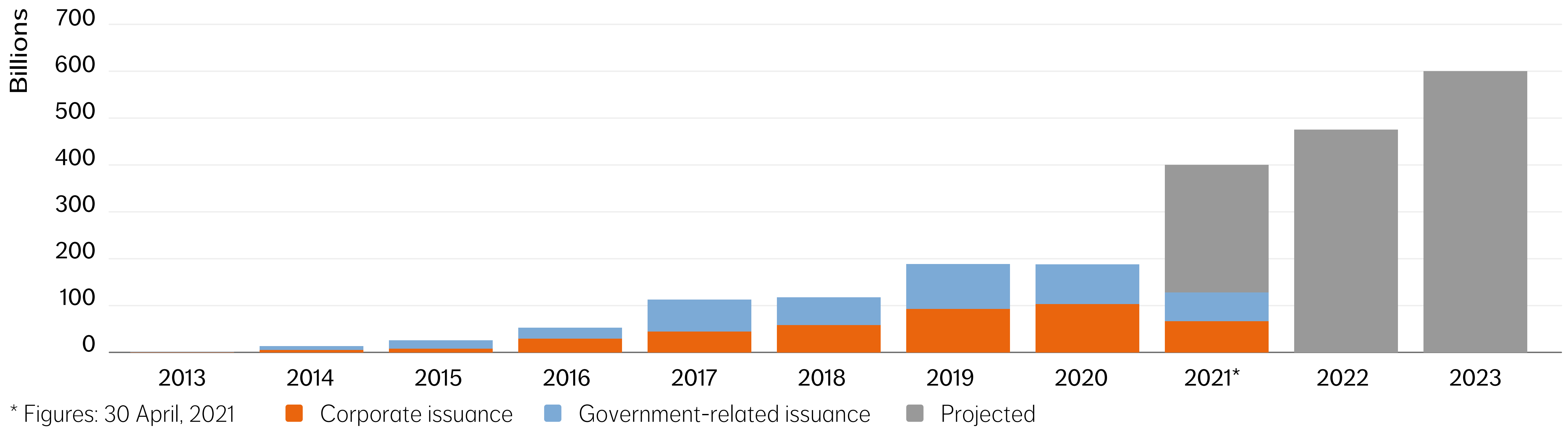
Standard and the EU Taxonomy, both of which form part of the broader Sustainable Finance Action Plan, are to be implemented in 2021/2. These steps will improve transparency and reporting in the sustainable fixed income market, reduce the likelihood of greenwashing and help further streamline green investment. As the impact of the climate crisis becomes increasingly evident, a broader range of stakeholders is looking to invest in solutions that finance climate change mitigation and support the environment. The pandemic has brought the urgency of the climate crisis to the fore, with governments and companies looking to increase their green spending.

Traditional bonds with green benefits for every fixed income investor

Green bonds have become a mainstream fixed income segment that every bond investor should consider when constructing their portfolio. In addition to their transparent use-of-proceeds structure and focus on climate change mitigation and adaptation, these liquid, diversified investments offer similar attributes to traditional bonds and an appealing risk-return profile. We expect demand for green bonds to continue to grow strongly, in line with the market's growth.

As a result of this positive outlook for the green bond market and the stronger-than-expected green bond issuance so far in 2021, we have raised our projection for full-year issuance to EUR 400 billion. This will push the global green bond market well above the EUR 1 trillion mark by year-end, up from EUR 700 billion at the end of 2020. In the next two years, we expect the market to continue to grow rapidly, exceeding the EUR 2 trillion threshold by the end of 2023.

Global green bond issuance (in EUR)



* Figures: 30 April, 2021

About NN IP

Managing assets responsibly. Because it matters and it works.

As a responsible investor, we aim to improve our clients' returns and the world we live in. We do this by looking beyond financial performance, because the people we work for and with, represent more than the investments we manage.

What we do

We invest responsibly, adapt constantly

Managing assets for investors worldwide, we see active investing as a way of benefiting our clients and society as a whole. We use data and technology to adapt our investment approach to changing markets.

Our investment approach to creating long-term value

Markets are complex and not fully rational. We believe an adaptive approach creates long-term value. Fundamental analysis, real-time data and artificial intelligence help us understand what affects our clients' assets. We invest responsibly, as this contributes to attractive returns and a sustainable future.

Our people, culture & heritage

We put our resources, expertise, and networks to use for the well-being of our customers, the advancement of our communities, the preservation of our planet, and for the promotion of a stable, inclusive, and sustainable economy. Our purpose is to help people care for what matters most to them. Because what matters to them matters to us. At NN Investment Partners we use responsible investing to bring this to life.

Impact calculation methodology

Verify – Standardize & Document – Update

Our impact metric calculation is based on the data we have assessed and collected in our green bond database. When tracking green bonds, we follow a **Verify – Standardize & Document – Update** methodology to enable us to harmonize the allocation and impact figures reported by various issuers and report in a transparent way on the projects we finance via the bonds we hold in portfolio.

Verify

The annual allocation and impact report is usually published one year after a green bond is issued. We assess the allocation and impact report based on our standardization methodology (mentioned in the next **Standardize & Document** section) and engage with the issuer if the reporting does not follow best practice or if there is key information missing. For example, if the issuer reports GHG emissions avoided from both renewable energy generation and renewable energy transmission, we will request them to separate the GHG emissions avoided numbers for these two activities. We generally only use the avoided emissions from the renewable energy generation figure as we want to avoid double counting. The exception to this is when the emissions avoided from renewable energy transmission are due to an energy efficiency improvement. In such cases we also use these figures.

Standardize & Document

After the assessment of the allocation and impact data, we document the figures in our database. As issuers utilize a range of reporting methodologies, we usually harmonize the data and then record the standardized data in the database. Below we give an outline of how we standardize each of the allocation and impact metrics.

Use of proceeds and regional allocation: The allocation for these two metrics is usually reported clearly by issuers and the information can be used without further adjustments. Exceptions to this are when issuers report using their own self-defined categories. In this case, we assess the projects being financed and assign them to the corresponding ICMA Green Bond Principle categories.

SDG contribution: Issuers have different views on what projects contribute to which SDGs. Some issuers report more conservatively on SDGs, while others include both direct and indirect contributions. In our green bond database, we record only the SDGs each financed project directly contributes to when documenting bond-level SDG contributions.

Impact metric: Impact is the reporting area with the most varied assessment and reporting methodologies. In terms of reporting scope alone, there are at least three methodologies. In order of most general to most specific, these are: reporting based on (1) the total green asset pool at company level, (2) the aggregate green bond financing, and (3) on each individual project financed by a green bond. As a result, we usually prorate any impact figures that are not based on specific green bond financing. We then apply a standardized impact intensity calculation, which is defined as the impact figures per million eligible assets. The impact attributable to the bond is then calculated using the impact intensity and the size of the issue.

Update

If a green bond's proceeds have not been fully allocated in the first year, the issuer will usually update their allocation and impact report annually until the proceeds have been fully allocated. Our green bond database will send us a notification on the issue anniversary of each green-labelled bond we track, so that the green bond analysts can check and update the allocation and impact figures.

To aggregate specific bond information at portfolio level, we need the portfolio level share of allocation and impact per bond. This is calculated as the percentage of a certain bond's total issuance amount that the fund holds. In this report, we use the portfolio holdings on 31 December 2020 for this calculation. The aggregated fund level use of proceeds, regional allocation, SDG contribution and impact metrics can then be derived by adding together the portfolio level share weighted bond allocations/SDG contributions/impacts.

However, using this methodology will cause us to underestimate the portfolio level impact. The two main reasons for this are outlined below:

1. There is no impact data available for newly issued bonds

Issuers usually only publish their allocation and impact reports one year after a bond has been issued. For the newly issued bonds in our portfolio, we usually look for older bonds from the same issuer. If both the new and older bonds fall under the same framework from the same issuer and are subject to the same eligible asset pool, we will assume the new issue's impact is the same as that of the older bond. However if the bond is an inaugural issue, we take a conservative approach, do not include it in our total and assume the impact is zero.

2. Unresolved doubts on an issuer's impact reporting

If doubts exist as to how an issuer arrives at the impact figures they give us and these remain unsolved after engagement, we will leave the impact for this issuer blank and assume it is zero. This could be the case if the impact figures are not prorated or are subject to double counting.

The impact data in this report vary from those included in the December 2020 monthly strategy brief as we have updated our portfolio-level impact calculation and implement a more conservative methodology. The change is to remove the estimated impact for green bonds from repeat and new issuers where the first bond-specific impact report is not available. We now assume that the impact for all above-mentioned green bonds is zero until the impact report for each bond is published by the issuer.

This publication has been written to provide our clients and prospects with an update on NN Investment Partners' activities related to green bond impact investing. For regular updates on our green bond activities, we invite you to follow us on:

@NN Investment Partners   @NNIP   nnip.com
