Our culture and governance
Our values guide, inspire and unite us

Our values are the foundation of our culture and provide the basis for our company-wide policy framework.

We empower people to be their best, and respect each other and the world we live in

We communicate proactively and honestly, while being accessible and open

We act with integrity and do business with the future in mind

Living our Values programme

The Living our Values programme was launched in 2014 to encourage and support employees in applying the values in their daily work.

Raise awareness

The NN statement of Living our Values explains what NN stands for, for internal and external stakeholders. We take steps to ensure all employees are aware of our values throughout their NN careers. During the new employee onboarding programme we introduce our values, NN Code of Conduct, brand and work environment. In the Netherlands, new employees must also take the Oath for Financial Institutions, which is included in the NN statement of Living our Values.

Engage

To raise awareness of the values and engage our employees, we organise Values week across 12 countries, hosted by local business units. This year’s internal activities centred around the theme ‘Let’s talk’. Employees had the chance to jointly reflect on and discuss our values in sessions, such as a dilemma workshop by Compliance, our approach to innovation, and how we work together.

Values week in the Netherlands

In a survey, 71% of participants felt the Netherlands’ Values week provided a good opportunity to reflect on our values (2018: 81%), 60% felt it stimulated discussion (2018: 70%) and 95% would encourage colleagues to join the next edition (2018: 98%). As participation and ratings were down compared with 2018, we will use the survey outcomes, including suggestions for improvements, to evaluate how to ensure Values week remains relevant.

Stimulate open dialogue

In 2019, Management Board members and senior management continued to play an active role in the Living our Values programme and gave their support for candid dialogue, with many countries’ CEOs participating directly in Values week. Following his official appointment as CEO of NN Group, David Knibbe joined a Let’s talk session with colleagues to openly share his personal story and what matters to him, including his successes and failures, reflecting his own commitment to live by our values.
Our culture and governance – Our values continued

**Embed**
Our values are reflected in the company-wide policies, standards and processes that guide us in our interaction with each other, customers and other stakeholders. The values support an open, honest dialogue and provide a strong basis for a healthy company culture. They are also used as a starting point for hiring new employees. For example, in our NN traineeship programme we use a special tool to look for characteristics in candidates that correspond with our values.

**Setting an example**
The leadership profile of all managers requires them to act as role models in terms of living our values. In 2019, the profile was updated to better reflect the leadership skills needed to seek new solutions to the challenges the company faces. These capabilities are still strongly founded on our company’s values.

As part of our global engagement survey, we asked colleagues how they felt their manager performs on living our values. Particularly encouraging were the scores of 8 for the statement 1 feel encouraged by my manager to meet our high standard of integrity (2018: 7.9) and 7.8 for My manager consistently acts as a role model when it comes to living our NN values (2018: 7.7).

**Monitor**
We monitor the effectiveness of the Living our Values programme to gain insights into areas of attention and make recommendations for improvement. We ask employees questions on our values in our employee engagement survey. The Management Board and the values project team use these outcomes to evaluate the Living our Values programme. Results remained high and stable (up 0.1) compared with 2018.

<table>
<thead>
<tr>
<th>Segment</th>
<th>NN Group Results</th>
<th>Difference with Nov 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care</td>
<td>8.2 +0.1</td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td>8.0 +0.1</td>
<td></td>
</tr>
<tr>
<td>Commit</td>
<td>8.1 +0.1</td>
<td></td>
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</tbody>
</table>

**Consultation with stakeholders**
In general, the feedback from business units was that the three values: care, clear, commit, remain very recognisable for employees, so there is no urgent need to change them. This was reflected in the NN Group-wide response to the engagement survey question on whether employees feel connected with our values: 7.9 (2018: 7.8; external benchmark: 7.6).

Throughout the year several consultations took place with senior management, the Living our Values project group, our Supervisory Board and the Central Works Council. During these sessions, the existing culture, and whether it is desirable to implement any changes, was also discussed. Improved cooperation internally as well as externally was mentioned repeatedly as a topic for improvement. This assumption was also supported by the continued low engagement survey score on the question In NN Group, departments cooperate effectively to get the job done (2019: 6.4; 2018: 6.2).

**Way forward**
In 2020, to help improve cooperation, we will develop a communications and culture programme around the theme ‘Connect’ and implement the other improvements proposed by the review process.

As part of the maintenance of our values, we will also seek feedback from various external stakeholders, such as supervisory bodies. We will also take into account that the wording remains in tune with both the environment in which our company operates and regulatory requirements, such as the Oath for Financial Institutions in the Netherlands.

**Consumer perception**
The perception of customers and the general public on how NN is living its values is measured using the Global Brand Health Monitor (GBHM). The 2019 GBHM showed that the values remained strongly embedded in the NN brand, with at least 55% of customers recognising each of the values in all markets, except for Japan.

**Evaluate**
As part of our programme cycle, we use the monitoring results to continually improve the programme. This assessment is discussed in the Management Board and Supervisory Board annually.

The Management Board is responsible for ensuring our values continue to foster a culture focused on long-term value creation. In 2019, with the NN values five years old, it seemed a natural moment to review whether the wording of the NN statement of Living our Values was still relevant.

We focused on alignment with:
- Internal developments and feedback
- External regulations and expectations
- Trends and developments in society
NN Code of Conduct

In January 2019, Group Risk and Group Compliance launched the Risk Culture Check-in. All business units performed a self-assessment on how they perceived the risk culture within the business unit. The business units also assessed head office control functions on their risk culture.

This two-way assessment is the basis for a constructive dialogue with senior management of NN on how we manage risk culture within the company, the conduct we encounter in doing so, and in which areas we can improve. This assessment model and related dialogue has created a 360-degree loop in order to deliver content and statements to underpin the risk appetite statement ‘Employee Conduct & Business Culture’ in the Control framework. The process is led by Group Risk, in close cooperation with Group Legal & Compliance within the business units.

Other incidents and concerns

In 2019, Corporate Security & Investigations was involved in 95 cases (2018: 100 cases). In six cases, disciplinary measures were taken (e.g. a warning, reprimand, termination of employment or instant dismissal). Employees concerned were informed in writing by the imposed disciplinary measures.
How we are organised

NN Group N.V. (NN Group) is a public limited liability company (naamloze vennootschap) incorporated under the laws of the Netherlands.

### Supervisory Board

The Supervisory Board is responsible for supervising the management of the Executive Board and the general course of affairs of NN Group and its businesses. The Supervisory Board also assists the Executive Board with advice. Read more in the Report of the Supervisory Board on pages 10-20 and in the Corporate governance chapter on pages 21-31 of the Financial Report.

### Executive Board

The Executive Board is entrusted with the management, the strategy and the operations of NN Group under supervision of the Supervisory Board. Read more in the Corporate governance chapter on pages 21-31 of the Financial Report.

### Management Board

The Management Board is entrusted with the day-to-day management of NN Group and the overall strategic direction of NN Group. Read more in the Corporate governance chapter on pages 21-31 of the Financial Report.

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**The interests of NN Group and our stakeholders**

In performing their duties, the Executive Board, Management Board and Supervisory Board must carefully consider and act in accordance with the interests of NN Group and the business connected with it, taking into consideration the interests of all stakeholders of NN Group. The organisation, duties and way of working of the Executive Board, Management Board and Supervisory Board can be found in the charters of the respective Boards. These are available on the NN Group website.

**Dutch Corporate Governance Code**

NN Group is subject to the Dutch Corporate Governance Code (the Code). The application of the Code by NN Group during the financial year 2019 is described in the publication Application of the Dutch Corporate Governance Code by NN Group, dated 11 March 2020, which is available on the website of NN Group. This publication is to be read in conjunction with the Corporate governance chapter on pages 21-31 of the Financial Report.

**NN Group Compliance Function Charter**

NN Group is committed to upholding its reputation and integrity through compliance with applicable laws, regulations and ethical standards in each of the markets in which the company operates. All employees are expected to adhere to these laws, regulations and ethical standards, and management is responsible for ensuring such compliance. Compliance is therefore an essential ingredient of good corporate governance. The purpose of the NN Group Compliance Function Charter is to help businesses effectively manage their compliance risks. This document is available for download on the NN Group corporate website.
Management Board

The Management Board is entrusted with the day-to-day management and overall strategic direction of NN Group.

From left to right:
Satish Bapat  Chief Executive Officer NN Investment Partners
Dailah Nihot  Chief Organisation and Corporate Relations
Tjeerd Bosklopper  Chief Executive Officer Netherlands ad interim and Chief Transformation Officer
David Knibbe  Chief Executive Officer and chair of the Executive Board and Management Board

Fabian Rupprecht  Chief Executive Officer International Insurance
Janet Stuijt  General Counsel
Delfin Rueda  Chief Financial Officer, Chief Risk Officer ad interim (per 1 January 2020) and vice-chair of the Executive Board and Management Board

Not photographed: Jan-Hendrik Erasmus  Chief Risk Officer, who stepped down on 31 December 2019

Board diversity

- Male 6
- Female 2

Management Board nationality mix

- Dutch
- Other
Stakeholder engagement and international commitments

NN Group engages in ongoing dialogue with stakeholders on a variety of topics, ranging from products, services and business performance to our role in society. By endorsing national and international initiatives, we underline our ambitions and join forces with other organisations to achieve more.

**Stakeholder engagement**

We see stakeholder engagement as a vital part of our efforts to earn their trust and support, and of our duty as a responsible and engaged company. NN Group identifies stakeholders based on their potential to influence or be influenced by our business. Important stakeholder groups include customers, employees, investors, business partners and society, including regulators and societal organisations. We seek feedback from these groups on key topics that matter to them. This helps us align our business interests with the needs and expectations of relevant stakeholder groups, and is a source of information for strategy development and decision-making processes.

Our dialogue with stakeholders takes many forms: day-to-day interaction and regular feedback sessions with customers on our products and services; works council meetings and continued dialogue with our employees; briefing sessions and roadshows for analysts and investors; regular bilateral contact with regulatory bodies, government agencies and other organisations (including non-governmental organisations, trade unions and industry associations); and roundtables with policymakers, academics and peers.

During 2019, we considered a number of different developments and topics that were brought to our attention by and/or discussed with different stakeholders. For a non-exhaustive overview, see the next page.

**National and international commitments**

As a company based in the Netherlands, we adhere to Dutch law and the Dutch Corporate Governance Code. We observe the laws and regulations of the markets in which we operate. We also adhere to relevant international standards and guidelines, including the UN Global Compact and the OECD Guidelines for Multinational Enterprises.

To underline our ambitions, NN Group and/or our respective businesses have endorsed various national and international initiatives, and we are a member of various relevant international organisations. For an overview, please visit our website.

**Commitment of the financial sector to the Dutch Climate Agreement**

In July 2019, along with some 50 other financial institutions, NN signed a commitment to the Dutch Climate Agreement. In doing so, a financial institution commits to contribute to the reduction of greenhouse gas emissions and the financing of energy transition. Signatories should disclose the carbon footprint of their relevant investments from book year 2020 onwards, and disclose action plans that contribute to achievement of climate goals by 2022 the latest.

Since 2017, NN has disclosed the carbon footprint associated with a large portion of our proprietary assets. You will find an update on pages 63. In addition, we encourage the energy transition, for example through our voting and engagement work, and make sustainable and impact investments.

We continuously enhance our approach to address climate change into our strategy, policies and activities. Read more in the sections on Responsible Investment on pages 37-39. Our response to the Task Force on Climate-related Financial Disclosures on pages 52-55, and our separate analysis of the carbon footprint of proprietary assets. Furthermore, we are working on initiatives to further develop goals and targets.

**International Corporate Social Responsibility (ICSR) covenant**

The ICSR covenant for the Dutch insurance sector celebrated its first anniversary in July 2019. The covenant aims to ensure that insurers identify and mitigate any potential negative environmental, social and governance (ESG) impacts they face through their investments.

The covenant’s signatories (all Dutch insurers, the government, one trade union and six NGOs) pool their knowledge and experience, identify ESG risks, and initiate steps to mitigate those risks. Insurers are expected to have due diligence processes in place to address ESG risks and, where necessary, to develop, adjust and improve their policies. Publication of policies and restricted lists are required, as are disclosures on voting and engagement activities with investee companies. Read more in the annual report of the covenant’s independent Monitoring Committee, including its recommendations, on www.imvocovenanten.nl/nl/verzekeringsector/nieuws/jaar-2018-2019-verzekering.
In 2019, NN refined its Responsible Investment (RI) Framework policy. Amongst other things, by publishing our Statement on Coal (see page 37). We also engaged with issuers to address ESG risks and support their transition to a more sustainable economy. Read more on pages 38-39 and in NN IP’s Responsible Investing Report 2019. For an overview of fixed-income bonds by type of issuer held on the NN Group balance sheet, see page 142 of the Financial Report (Note 49).

**Our approach to human rights**
Respect for human rights is an integral part of our values, as confirmed in the NN statement of Living Our Values. The principles contained in the UN Guiding Principles for Business and Human Rights guide us in implementing human rights in our business activities and interaction with stakeholders.

Our NN Group Human Rights Statement serves as an umbrella document and relates to various policies, such as our Human Capital and RI Framework policies, and a Guidance paper on Human Rights for Investors.

Early 2020, we conducted a review of our human rights policies and processes. The findings enable us to further strengthen our approach across the organisation in the coming year.

### Stakeholders, engagement, topics and outcomes

<table>
<thead>
<tr>
<th>Stakeholder group</th>
<th>Engagement</th>
<th>Topics discussed</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers (retail)</td>
<td>Client panels, NPS survey, Global Brand Health Monitor</td>
<td>Products and services, customer experience, complaint management</td>
<td>Improve products and customer processes, increase customer satisfaction</td>
</tr>
<tr>
<td>Customers (institutional)</td>
<td>Client survey, client events, client roundtables</td>
<td>Legislative changes, client satisfaction, responsible investment</td>
<td>Product and process improvements, ICSR sector covenant requirements</td>
</tr>
<tr>
<td>Financial advisors, brokers, agents</td>
<td>Training</td>
<td>Products and services, rebranding from Delta Lloyd to NN</td>
<td>Stimulate good cooperation, increase financial advisor satisfaction, ultimately leading to customer satisfaction</td>
</tr>
<tr>
<td>Shareholders, analysts, investors</td>
<td>Annual shareholders meeting, analyst calls, investor meetings</td>
<td>Strategy, financial and operational developments, capital position, approach to ESG</td>
<td>Inform and engage shareholders, analysts and investors</td>
</tr>
<tr>
<td>Employees</td>
<td>Townhall meetings, works councils, unions, international leadership and other conferences, surveys</td>
<td>Values, Code of Conduct, reorganisation, integration process, engagement</td>
<td>Informed and engaged employees, values-driven culture</td>
</tr>
<tr>
<td>Investee companies</td>
<td>Voting at shareholder meetings, dialogue with company management, engagement</td>
<td>Financial and operational developments, corporate governance, climate change, human rights, (non-) financial disclosures</td>
<td>Create value through consistent and transparent voting behaviour, improved disclosures, improved decision-making, including on ESG issues</td>
</tr>
<tr>
<td>Regulators, government bodies</td>
<td>Meetings, reporting, information exchange</td>
<td>Economic and financial market developments, risk assessments, regulation, ICSR sector covenant, sustainable finance</td>
<td>Ensure compliance with, and discussion of impact of regulation</td>
</tr>
<tr>
<td>Non-governmental organisations</td>
<td>Correspondence, meetings, reports, benchmarks</td>
<td>Investments in coal-related companies, controversial weapons and weapon trade, benchmarking methods</td>
<td>NN Statement on Coal</td>
</tr>
</tbody>
</table>
Our response to the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD)

At NN Group, we have covered climate change as part of our Annual Report since the financial year 2017. Our climate change related disclosure reflects NN’s response to the recommendations of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD), published in June 2017. This response is structured along the four TCFD pillars: governance, strategy, risk management, and metrics and targets.

Goverance
The NN Group Executive Board ensures that the company has adequate internal risk management and control systems in place so that it is aware of any material risks run by our company and that these risks can be managed properly. Each year, the Executive Board defines the company’s risk appetite, related limits and tolerances. This is ratified by the Supervisory Board. Risk management processes are covered as part of the NN Group Financial Report (Note 49).

The Executive Board’s responsibilities include the formulation of the company’s strategy in line with its view on long-term value creation. This includes the non-financial aspects relevant to NN, such as environmental, social and governance (ESG) matters. The Supervisory Board supervises the policy pursued by the Executive Board, while the Management Board is responsible for the company’s day-to-day management and overall strategic direction. These responsibilities are laid out in the respective charters of these Boards as published on our corporate website.

The Chief Organisation & Corporate Relations has Corporate Citizenship, which includes sustainability, in her portfolio. In addition to this, each of our Board members integrate sustainability into their respective businesses or functions where relevant. To steer and advise the Management Board on the implementation of the overall sustainability direction, we have a dedicated Corporate Citizenship team. This team works closely together with the different businesses and functions to steer and advise on the implementation of the overall strategy.

In May 2019, as part of our Supervisory Board’s permanent education programme, there was a session on NN’s approach to addressing climate-related risks and opportunities. In March 2020, NN’s Management Board discussed and confirmed NN’s approach to climate change risks and opportunities.

ESG-related governance within our investment activities
The NN Group Responsible Investment (RI) Framework policy describes our approach to taking into account ESG factors in our investment process. The Management Board decides on adjustments to the RI Framework policy and related restricted list, taking into account the recommendation of the ESG Committee of NN Investment Partners (NN IP). In 2019, responsible investing-related items appeared on the agenda of the Management Board four times.

At NN IP, the executive team provides strategic direction and oversees the implementation of the RI Framework policy in the investment processes. The executive team receives input from NN IP’s ESG Committee. The committee is chaired by the Chief Investment Officer (CIO) of NN IP and comprises the Responsible Investment team and senior representatives from NN IP’s various business segments, as well as the CIO of NN Group and representatives of Corporate Citizenship. To support the investment teams in the integration of ESG within the investment process, and to further drive the development of responsible investing and engagement, NN IP has a dedicated Responsible Investment team, which report to the CIO of NN IP.

Climate change dialogue
To support TCFD implementation NN has established a so-called Climate Change Dialogue: a multi-disciplinary working group, advising the Management Board on climate risks and opportunities. In 2019, the Dialogue convened to discuss climate-related initiatives within the organisation such as the climate-related scenario analysis work, and explore the emerging area of climate change-related litigation. Climate change cases against organisations are becoming increasingly prevalent and as such we wanted to increase our efforts to understand risks associated with climate change related legal action. The Dialogue’s insights were presented to the Management Board in March 2020.

Strategy
Climate change already presents current risks and opportunities, and it is expected that these will increase over the mid to long term. NN Group therefore considers climate change to be an emerging development with potential for considerable risk to our long-term business model and strategy.

NN distinguishes (a) physical and (b) transition risks from climate change, as described below. The materiality and time horizons over which these risks impact our business activities relate to specific types of business, asset portfolios, geography and a range of other differentiating factors as illustrated in the three cases below:

• Our property & casualty (P&C) business is predominantly a one-year renewal business, and consideration of these risks in the underwriting and pricing processes is therefore on a relatively short time horizon (one to three years)
• Many of our product development and strategy updates are based on three-to five-year time frames
• Our investment strategies backing the life and income insurance liabilities need to consider the impacts of climate change over a period well beyond the next five years

Transition risks
Transition risk concerns the transition to low-carbon economies. This may adversely affect individual businesses, sectors and/ or the broader economy, impacting our investment portfolios and thus the asset side of our balance sheet. Overall, NN anticipates that the global pricing of financial assets will increasingly be influenced by factors such as public policy, technological developments and changing consumer preferences. Such trends and changes are likely to materialise over the medium term. However, our investments are also exposed to specific short-term risks, such as sudden possible adjustments to market sentiment around climate risks impacting segments and investments in our portfolio.
Physical risks

Physical risks relate to the physical consequences of climate change. These risks are particularly relevant to our non-life insurance business, where weather events such as windstorms or hail can lead to higher expenditures (claims and operational costs), thus affecting the margins of our P&C insurance products. Several studies show that the occurrence of these severe weather events will be more likely in the future. Our business unit NN Non-life offers P&C insurance solutions to the Dutch and Belgian markets. In addition, NN offers a range of non-life products in Spain and Poland.

As well as impacting on our liabilities, physical risks could also impact our investment portfolio. For example, a severe windstorm or flooding might damage buildings within our European real estate portfolio which could result in asset impairments or indirectly affect our clients’ ability to pay their mortgages.

Finally, prolonged and multiple periods of heatwaves or other consequences of rising temperatures may result in increased mortality and morbidity, thereby impacting our life and income insurance liabilities. Long-term threats are difficult to predict, but at this time, we expect this to have less impact on our life and income insurance liabilities than other risks, such as changes in demographics or pandemics. It should be noted though that whilst pandemic outbreaks can be attributed to a number of interrelated factors, climate change is likely to increase the risks by spreading of disease vectors into areas that formerly did not experience these.

Climate-related opportunities

Despite the various threats it poses to the world, climate change could also create opportunities. Helping our customers adapt to climate change, or supporting them in opportunities related to a lower carbon economy, could generate new sources of revenue. For example:

- Within our asset management business, we continue to see strong interest from investors interested in impact investing and green bond solutions. NN IP is the largest market participant of open-ended green bond funds. During 2019, NN IP expanded its green bonds range of funds by adding a short-duration variant.
- NN’s Non-life department has conducted research to capture the carbon footprint linked to our non-life activities. The project also sought possibilities for creating and expanding our role in the circular economy. We will take further steps in this area in 2020.
- Nationale-Nederlanden in the Netherlands launched a web-based platform, Powerly, to help users make their homes more sustainable. It provides customers with tailored advice on energy-efficient measures, then helps them take these measures by connecting them up with partners.

Finally, proactively addressing climate change can improve our reputation, and therewith positively influence customer satisfaction. Of course, the opposite can also occur if we fail to adequately address stakeholder expectations (see also key risk: Good Corporate Citizenship on page 12). For instance, our P&C customers might be displeased if they were charged higher insurance premiums, making affordability an issue, or if they discovered they had been unaware of uninsured risks. We therefore focus on informing our customers clearly and being transparent about coverage, as well as helping initiate adoption and resilience in a changing environment.

Scenario analysis for investments

To get more insight into specific drivers of climate-related risks and opportunities that may impact investment performance, NN has worked on scenario analyses for our proprietary assets. Supported by external sustainability consultant, ERM, we have developed various distinctive analysis and models. Focused on the largest asset categories on the NN Group balance sheet: (i) government bonds (approximate 36% of total balance sheet assets), (ii) residential mortgages (23%) and (iii) non-financial corporate exposures (15%). Where possible we considered a relevant short-, medium- and long-term scenario, aligned with the TCFD recommendations.

We performed an analysis on potential transition risk for government bond holdings issued by six countries that together represent over 70% of the portfolio. Government bonds are typically assessed on the ability and willingness of a government to honour debt obligations. Climate and energy policies are one of several factors that could influence the ability of a government to repay debt. We took the view that countries that have a well-developed long-term strategy for achieving greenhouse gas (GHG) emission reductions consistent with the Paris Agreement are more likely to face lower transition risks. Therefore, we examined the difference between a country’s energy-related GHG emissions between a business-as-usual (BAU) and a low-carbon transition scenario (2°C) for the time periods 2022 and 2030. The difference is indicative of the potential magnitude of the transformation required for a country transition to a low-carbon economy. We complemented this quantitative assessment with evaluation of climate policies, targets, and related economic impact assessments to develop an initial risk rating.

For NN’s residential mortgage portfolio, we analysed physical risks. Physical risks for mortgages in the Netherlands are mainly related to damage caused to properties by flooding events (including surface water flooding caused by heavy rainfall, river flooding, and coastal flooding). These events could either lead to a value decrease of collateral and/or impact on the ability of a houseowner to pay their mortgage.

For this assessment, we used data from local institutions (‘Risicoaard’ for the baseline scenario and ‘Klimaateffectatlas’ for the future scenario) that have projected flooding hazards. The future data set considers the projected impact of climate change (associated with a 2°C temperature rise by 2050) and planned improvements to the Dutch water defence systems during the coming decades (as defined in the Water Act). By comparing the data to properties in NN’s mortgage portfolio, we assessed which regions and properties have a high or higher flooding risk, both in the baseline and future scenarios (2050). We also compared this regional data with more specific data on houseowners that gives an indication of the financial ability of the houseowner to cope with potential damages as a result of flooding.

We also analysed potential transition risks associated with NN’s Dutch mortgage portfolio. The realisation of the Dutch government’s ambition to decarbonise the housing market will require strong incentives and policy regulation. Such policies are drivers of transition risk, as they could require borrowers to make upfront investments in new heating systems or energy efficiency improvements. We took the energy label as a simple indication of the likelihood that a homeowner will be required by regulation to make energy efficiency improvements. In some circumstances, this additional cost could compromise the ability of some borrowers to repay their mortgage. We therefore combined the energy label categories of our mortgage book with indicators of credit risk to evaluate transition risk levels in 2030 and 2040. This analysis provides us with a starting point for further refinements, and furthers our discussion on how we can help support our customers in making their house more energy-efficient over the coming decades.
For non-financial corporate exposures (mainly bonds and listed equity), NN developed a screening tool to identify, based on high-level scenario-based analysis, segments of the portfolio where there is likely to be greater potential climate-related risks and opportunities that could impact investment performance. The drivers of climate-related risks and opportunities relate to the transition to a lower carbon economy and changes to physical climatic conditions. The results were translated into heat maps. The exercise will inform our prioritisation of further analytical work and other steps.

**Solvency and resilience testing**

In our insurance business, we explicitly consider large catastrophic losses in economic capital modelling in order to ensure NN Group is resilient to such extreme scenarios. The Solvency II supervisory framework requires that insurers hold sufficient capital to cover the losses of a 1-in-200-year event, over a one-year time period. In addition, insurers also consider risks beyond this one-year time period as part of their Own Risk and Solvency Assessment (ORSA), and hold a level of capital that is in line with their defined risk appetite.

NN Group, and each of its regulated (re)insurance subsidiaries, prepares an ORSA at least once a year. The ORSA includes the outcomes of stress tests and/or scenario analyses that are aligned with identified key risks. NN Group considers climate change to be an emerging risk that may impact our business model over the long term. As such, the ORSA took into account the scenario-based analysis performed on our own general account investment portfolio to better understand the impact on our business. Specific consideration was given to government bonds and mortgage analyses. The initial outcome of these analyses, based on current understanding and the scenarios shown, imply that in the short-term climate change will not materially affect our business. In the longer run (2030-2050), it is an area for further consideration, given the considerable investments that will be required by both governments and individual house owners to deal with the transition and physical risks, as well as the macro and micro economic consequences. NN will continue to assess and monitor these potential impacts on our business model and balance sheet.

The impact of climate change on our underwriting business is also included as part of NN Group’s ORSA. A stress test conducted by our NN Non-life entity was used to evaluate the impact of climate change on the consolidated balance sheet and capital position of NN Group. The modelled scenario included a sudden shock caused by four windstorm events in Europe, and was partly based on the stress test initiated in 2018 by the European Insurance and Occupational Pensions Authority (EIOPA). While noting that this scenario showed negative effects for NN Non-life, it also shows that those effects would be manageable on NN Group’s consolidated balance sheet. This was in line with stress tests performed in 2018.

NN Non-life also studied the impact of climate change leading to a gradual but systemic increase in catastrophic events, and the impact of this on the consolidated balance sheet and capital position. The study concluded that climate change will not materially affect Non-life business in the short term (3-5 years), pointing out that this is an area for further consideration in the longer run (2030-2050).

At an industry level, NN Group cooperates with 17 other insurance companies in the TCFD Insurer Pilot, as part of the UN Principles of Sustainable Insurance (PSI). We do this as part of our efforts to further develop risk assessment tools and better understand the impact of climate change on our insurance underwriting business. This initiative aims to jointly establish standards, methods and tools that will support scenario analysis by including the assessment of climate-related physical and transition risks within insurance portfolios.

**Risk management**

NN Group’s risk policy framework ensures that all risks are managed consistently and that NN Group operates within set risk tolerances.

**Processes within investments**

NN Group has a policy framework in place to ensure that our assets are invested responsibly. Amongst other things, the policy includes a requirement to systematically incorporate ESG factors into the investment process. The consideration of ESG factors, alongside traditional financial data, helps us to make more informed decisions and optimise the risk-return profile of investment portfolios. At NN IP, assessing the materiality of ESG factors, such as climate change, is an integral part of the investment process, where the analysts identify material risks and opportunities within the investment case. In doing so, they make use of information from various ESG research agencies, including Sustainalytics, MSCI, Bloomberg and ISS-Ethix Climate Solutions.

In addition to analysing individual investment-level risks, we carry out analysis at a portfolio level to assess potential climate risks and opportunities, and to inform the content and implementation of a broader climate change strategy. For example, we measure the carbon intensity of our proprietary investments, which gives us insights into our highest carbon risk exposure and is useful for, amongst other things, engagement purposes.

We consider engagement to be an important tool for managing climate risks. This means we enter into a dialogue with companies and explain which goals we would like them to achieve. Although we prefer to change behaviour through engagement, we may decide to exclude a company when it is not willing to engage in a dialogue, or where we believe not enough progress is being made. In 2019, we expanded our environmentally-focused exclusion criteria to include, in addition to oil sands, thermal coal. This involves group-wide exclusionary criteria for companies that derive more than 30% of their revenues from thermal coal extraction.

For NN Group’s proprietary investment portfolio, we additionally announced an objective to reduce our investments in thermal coal mining and/or coal power to close to zero (defined as between 0 and 5%) by 2030. This decision affects a portfolio of bonds in the mining and utility sector of approximate EUR 2 billion. Whilst most of these bond holdings will mature before 2030, we have some longer-dated exposures. These will be closely monitored, and if by 2030 the companies have not reduced their coal-related business to 5% or lower they will be sold. Through this policy, NN aims to give a strong signal to companies of the need to phase out coal in order to achieve climate targets in line with the Paris Agreement.

To learn about further actions that we could take to support the objectives of the Paris Agreement, NN joined the Paris Aligned Investment Initiative of the Institutional Investor Group on Climate Change (IIGCC). The Initiative aims to help develop a common understanding of concepts relating to alignment with the Paris Agreement, and explore options for approaches and
methodologies that investors can use to align their portfolios to the Paris Agreement, and test these approaches for different asset classes.

**Processes within insurance underwriting**

Within our P&C insurance business, we manage physical climate risks in a number of ways. NN helps customers take precautionary measures, with the aim of preventing and minimising claims caused by windstorms, fire or other events. We monitor our claims experience, and reprice or adjust contract conditions where necessary. NN’s P&C portfolio is predominantly annually renewable, allowing repricing over the short term. We apply such measures cautiously, as over the longer term insurance product affordability for our clients remains an important consideration for us when making strategic choices.

We let insights from catastrophe models guide our risk management process in terms of pricing/underwriting. For this, we use external vendor models which use meteorological modelling that reflects observed storms and patterns in order to estimate the impact and damage that would be caused by large natural catastrophes, such as windstorms. NN uses a multi-year forward-looking approach. Catastrophe models are also part of the risk management process in terms of solvency/capital management.

Portfolio diversification and tracking concentration risks are other key risk-mitigating steps. NN’s wide product range offers a broad variety of non-life insurance protection cover options against damage and loss from a wide range of causes. In addition to our P&C products, our portfolio comprises income products, such as disability and accident insurance, that are less sensitive to windstorm or climate change.

Finally, external reinsurance will, under certain conditions, partially mitigate potential impacts. We have a group-wide catastrophe reinsurance programme in place to protect against the severity and frequency of large natural catastrophes. Reinsurance covers are placed with a broad and diversified panel of strongly-capitalised external reinsurers, and reduce the losses to NN Group from both large events and multiple smaller ones. Both the applicability of the external vendor models, as well as the reinsurance structure and cover, are reviewed annually on renewal.

Regarding climate-related transition risks, our processes to identify, manage and mitigate these risks for insurance underwriting portfolios are less developed compared to physical risks. However, we took a number of steps during the year:

- We raised awareness of the benefits of including ESG issues in the insurance underwriting processes by including a heatmap in the quarterly Financial Risk Dashboard of NN Non-life. This heatmap gives an indication of the levels of potential ESG risks across lines of business. We based it on a published working paper of the UN PSI Initiative, titled ‘Underwriting environmental, social and governance risks in non-life insurance business’.
- Several NN Non-life teams participated in awareness raising sessions organised by the group’s Corporate Citizenship team. Amongst others, the area of change litigation was discussed with legal & compliance staff. In recent years, there has been an increase in climate-related litigation against governments, but also complaints against companies have risen. This can have consequences for NN in the event that we insure them. Given the relative size of NN’s general liability insurance portfolio to corporate clients, we currently foresee risks in this area to be low. However, we will monitor developments.

- We decided to align our thermal coal policy for insurance underwriting with the investment side. This means that we will stop providing (non-life) insurance services to companies that derive more than 30% of their revenues from thermal coal mining or use at least 30% thermal coal for power generation. These thresholds will phase down to 5% by 2030. These measures will additionally support in mitigating the climate related transition risks.

**Metrics and targets**

**Carbon footprint – own operations**

At NN Group, we are committed to reducing the environmental impact of our own operations. We have set quantitative targets to reduce our GHG emissions and consumption of scarce resources. Read more on page 40.

**Carbon footprint – proprietary assets**

NN Group measures the carbon footprint of its proprietary assets. In 2019, we measured the carbon footprint of our residential mortgage portfolio for the first time. Combined with the already established analysis of government bonds, corporate fixed income investments and listed equity, the total assessed amount is now EUR 165 billion. This represents 80% of our total asset portfolio which comprises general account assets of the insurance entities, and the assets of NN Bank and NN Group.

As best practice methodologies are still developing, we continue to assess the best ways to consistently measure the carbon footprint for our portfolio. In 2019, we made a change in the way we calculate the portfolio carbon footprint metric. We now use a company’s enterprise value (a measure of a company’s total value) as a denominator to attribute emissions to both equity and debt positions within our portfolio. This change contributed to the decrease in the portfolio carbon footprint for these asset categories. The new methodology is in line with recommendations made by the Platform Carbon Accounting Financials (PCAF) as it better represents the share of a total company value that has been financed by investors with both equity and bond positions, and avoids double counting.

We also calculated the weighted average carbon intensity for the listed equity and fixed income portfolio. Compared to 2018, the total carbon intensity figure remained stable, although it somewhat declined for corporate fixed income while increased for equities. Refer also to the table on page 62. Further background on the methodology and analysis of the results is available in a separate publication, called ‘Analysis of carbon footprint of proprietary assets’, on NN Group’s corporate website in the Investors/Annual Report section.

**Other metrics and targets (investments):**

- NN IP’s AuM in sustainable and impact strategies: EUR 22.7 billion by year-end 2019
- Amount of green bonds and infrastructure debt projects in the areas of energy and resource efficiency held in the proprietary fixed income portfolio: EUR 821 million by year-end 2019
- GRESB score, as an indicator of the sustainability performance of the proprietary private real estate portfolio: 85 out of 100. Amount the assessment covers: EUR 7 billion or 93% of total real estate exposure
- Amount of securities covered by the coal phase-out strategy for the proprietary portfolio: EUR 2 billion
- Number of company dialogues and engagements conducted by NN IP analysts and ESG specialists: 662
- Percentage of shareholder resolutions focused on environmental issues and climate change where NN IP voted ‘for’: 96% (71 out of 74 proposals)