ESG in Dutch mortgages: challenges and opportunities

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The Dutch residential mortgage market and the ESG investor

Professional investors seeking attractive yields and stable long-term cash-flows are increasingly turning to less-liquid alternative credit instruments, including residential mortgage loans. These mainly long-duration loans form a good fit with many institutional investors' liabilities. But mortgage loans also bring challenges for investors who incorporate environmental, social and governance (ESG) criteria and objectives in their portfolios. Residential construction results in substantial levels of carbon dioxide emissions. Moreover, the exact energy efficiency of the residential real estate underlying the mortgage loans in a mortgage portfolio is often difficult to measure; making it more sustainable can be a complex and costly process.

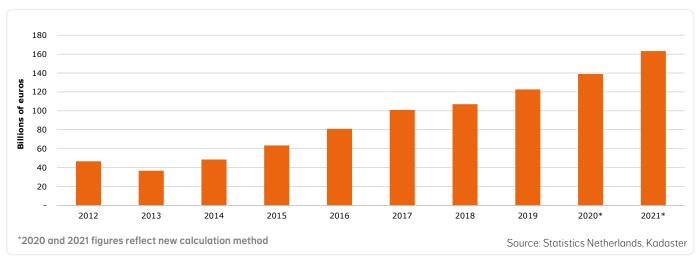
Fortunately, the European legislative and regulatory environment is evolving in a way that addresses such concerns. The European Union's Green Deal, the Sustainable Finance Disclosure Regulation (SFDR), and the EU Taxonomy all help boost transparency for investors and stimulate them to allocate to sustainable assets. These developments are in line with NN Investment Partners' intention to make its residential mortgage strategies more suitable for the responsible alternative credit investor.

The Netherlands' EUR 750 billion mortgage market is Continental Europe's third-largest, after Germany and France. Outstanding mortgage loans are equal to more than 90% of the country's GDP. Institutional investors are playing a growing role as mortgage lenders; their share of the nation's new mortgages doubled from 10% in early 2014 to 20% in 2021, according to the Cadastre, Land Registry and Mapping Agency (Kadaster).

NN Investment Partners (NN IP) applies ESG criteria to its portfolio of more than EUR 44 billion of European mortgages, the large majority of which are in the Netherlands, and we help our origination partners NN Bank and Venn set ESG policies for mortgage lending. Our portfolio managers optimize ESG factors and set eligibility criteria for future mortgage assets. Through our positions in a number of prominent lobby groups, we make our voice heard by policymakers at the national and European levels.

In this publication we aim to provide an overview of the ESG-related challenges NN IP encounters as it works on the transition to a carbon-neutral society. We examine ways to improve the sustainability of a mortgage portfolio and how to measure energy efficiency. We discuss the effect of EU regulations and how NN IP is addressing all these challenges.





Making Dutch mortgage portfolios more sustainable

The Dutch government is pushing homeowners to increase energy efficiency, through measures ranging from subsidies for energy-saving measures to the abolition of natural-gas connections to new homes. Household energy consumption contributes to some 13% of the nation's total energy consumption; natural gas and electricity account for 70% and 17% of residential usage respectively. These figures illustrate the ample scope for overall carbon footprint reduction through increased home energy efficiency. Mortgage lenders can play a big role in making homes more energy efficient and sustainable by helping homebuyers finance energy efficiency improvements.

The Netherlands has set several objectives to reduce carbon emissions from buildings. The National Climate Agreement of 2019 contains agreements with industry sectors on what they will do to help achieve the country's climate goals. Chief among the agreements with the buildings sector is that by 2050, some 7 million existing residences and 1 million buildings will stop using natural gas. In the first phase of this process, 1.5 million homes will be upgraded by 2030. New buildings will no longer be heated by natural gas; existing buildings need to be improved to accommodate fossilfree heating. Revisions to the energy tax system will offer stronger incentives for energy efficiency and CO2 reduction.

Measuring effectiveness

Energy labels

One key step to increase the overall transparency of European mortgage investments will be better-aligned definitions. An example is the wide disparity within Europe among energy labels, which are being increasingly used to classify the level of individual residences. A home's energy

label is based on the carbon emissions resulting from the fossil-sourced energy consumed for heating, cooking, hot water and other household functions. European energy labels differ widely due to varying accreditation bodies and calculation methodologies. The Netherlands uses the same energy labels throughout the country, while countries like Italy have different energy labels for each province. An "A" label in Puglia, for example, signifies a different underlying energy-consumption per square meter from an "A" label in Emilia-Romagna; neither align with the "A" labels in other EU member states.

The percentage of the total national housing stock that even has an energy label differs from country to country. Some 40% to 50% of the Dutch housing stock currently has an energy label; 23% of these, or between 9% and 12% of the total housing stock, are registered as "A" label, compared with 3% of the total stock in Spain. EU regulations introduced in 2021 require all EU residential buildings to have an energy label by 2035. By that time, energy labels across member states should also be harmonized, so that an "A" label in the Netherlands will represent the same energy consumption as an Italian "A" label.

Improving carbon footprint calculations

How much CO2 does a given household emit? NN IP was among the first parties to start measuring annual carbon footprints, having started in 2017. We determine the carbon footprint of a mortgage portfolio based on the combined energy-consumption of all the residential buildings underlying a mortgage portfolio. In line with current legislation, NN IP is changing the assessment from the assumed energy consumption per residential unit to actual energy-consumption per building starting in 2022. We are also developing stress-test scenarios on the whole portfolio based on climate-change assumptions.

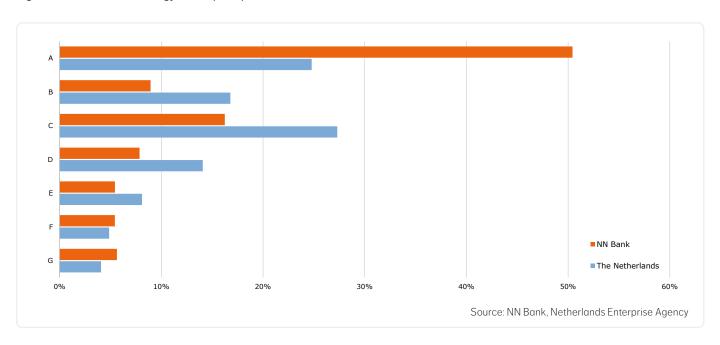
Helping homeowners to become more sustainable

NN Investment Partners invests in mortgage loans to Dutch homebuyers from NN Bank and Venn Hypotheken. Many of the NN Bank loans we invest in are for newly built properties. About 79% of the residential units financed had energy labels; at the end of 2020, half of those labels were "A" labels (see Figure 2). The overall carbon footprint of properties in the Netherlands has improved in the past decade. The average Dutch energy label among the NN Bank loans has risen from "D" ten years ago to between "B" and "C" today. We estimate that it will take at least until 2050 before all properties in the Netherlands have an "A" energy label, because more than half of Dutch homes do not have energy labels and only about 260,000 receive a new label every year.

Modelling Netherlands-specific climate risk scenarios

Much of the Netherlands lies below sea level and several major European rivers flow through the country on their way to the sea. About 60% of the country is susceptible to flooding. At the same time, many regions face the risk of subsidence, or sinking of the earth's surface, due to low groundwater levels. NN IP is investigating the potential impact of climate change on its mortgage portfolios and testing various ways to map our climate risk. Consequently, we can use the results as an input for the periodic stress tests we perform on the portfolios. Climate-based stress tests can help our investors to detect potential vulnerabilities in the mortgage portfolio and help us to see how we can mitigate the risks in the portfolio.

Figure 2: Distribution of energy labels (2020)



Europe's regulatory impact: investor transparency and sustainable buildings

The European Union is becoming an engine of sustainability improvement throughout the region, including in the region's housing stock. Policy packages like the European Green Deal, the EU Taxonomy and the Sustainable Finance Disclosure Regulation will increase transparency for investors and stimulate them to allocate to sustainable assets. The Energy Performance of Buildings Directive reflects the European Commission's emphasis on building renovations as a means of reducing carbon emissions as well as energy poverty across the EU.

The European Green Deal, an ambitious set of proposals focused on protecting the environment for the benefit of citizens and future generations and supporting the economic sectors hardest-hit by the Covid-19 pandemic, includes policy tools aimed at ensuring that the financial system supports the transition towards sustainable businesses and the availability of more ESG-compliant investment opportunities. As part of the Green Deal, the European Commission proposed plans in July 2021 to target a 55% cut in greenhouse gas emissions by 2030 compared to 1990 levels. To do so, the EU aims for a 60% reduction in buildings' greenhouse emissions, a 14% cut in their energy consumption and an 18% decrease in energy consumption related to heating and cooling. In addition, it intends to at least double renovation rates in the next ten years. A focus area is to improve the energy efficiency of existing buildings and reduce their CO2 emissions.

Recognizing the growth in sustainability awareness among private and public investors, the European Commission created the **EU Taxonomy**, a document that specifically defines sustainable investments. The Taxonomy came into force in 2020 and provides a classifi-

cation system for identifying economic activities that can be considered environmentally sustainable. While it does not specifically mention mortgages as a distinct economic activity, its definitions can be applied to the underlying financial objectives in the buildings sector, such as financing new construction and renovations, and the financing of the purchase of existing buildings. The Netherlands is helping lead the transition in terms of Taxonomy integration, preparation for SFDR reporting and innovative mortgage product offering.

The Sustainable Finance Disclosure Regulation (SFDR) took effect in March 2021 and applies to investment firms, pension funds, asset managers, insurance companies, venture capital funds, credit institutions offering portfolio management, and financial advisors. The SFDR pushes these financial market participants to invest more sustainably and to be more transparent about how they integrate sustainability into their investment decisions and recommendations. It also introduces a classification system with new disclosure requirements for investment products.

At the heart of the buildings sector's energy transition is the Energy Performance of Buildings Directive (EPBD). A set of revisions to this directive proposed last year aims to improve the energy performance of lower-labelled existing residences. This would be accomplished by renovations of about 30 million building units on the Energy Performance Certificate scale and upgrading them to level F. The proposed revisions would also address the intra-Europe disparities in assigning labels mentioned earlier.

How NN IP is facing the challenges

NN IP's integrated ESG approach to mortgages

NN IP is steadily overcoming the challenges of integrating ESG in mortgage investments. We have been including material ESG criteria into the investment process for more than a decade. In 2021, we made a big leap forward by bringing our mortgage portfolios into line with these strict standards. We set a strict ESG policy for our portfolios. Our integrated ESG approach includes collaboration with our lender partners, including NN Bank and Venn Hypotheken, to ensure that ESG criteria are factored into the loans we invest in. Our majority stake in Venn and our seat on the company's board allow us to help set ESG policy for the company's mortgage origination.

Our mortgageintegration policy ensures that the portfolios we manage contribute to the transition to a low-carbon economy. Such contributions include encouraging borrowers to improve the energy-efficiency rating of their homes. We also promote a more inclusive society by expanding access to home loans among borrower segments such as the elderly and the self-employed. Additionally, through our positions in several prominent lobby and industry groups that are working to improve ESG regulation and stimulate the financing of energy-efficient residential real estate, our voice is heard by policymakers at the national and European levels.

Measuring, monitoring and reporting

As part of our constant efforts to promote and integrate sustainability criteria in our mortgage strategies, we regularly measure the energy efficiency of the properties in the underlying mortgage portfolio. We have formulated indicators to assess the attainment of our environmental

and social objectives. With a view to the ongoing changes in European regulation and the renovation wave for existing residential property, we engage with the originators on how to encourage the borrowers to renovate their existing properties. Furthermore, we annually assess our mortgage portfolios and originators. This is done in an extensive review whereby originators are scored on different elements, as is discussed below.

Measuring the carbon footprint

Within NN IP we determine the carbon footprint of a mortgage portfolio based on the assumed energy-consumption that is linked to the energy label of the residential real estate unit mortgaged as security for the mortgage loan. Currently, we are moving this assessment from the assumed energy consumption to the actual energy consumption per residential unit. We determine the carbon footprint for all portfolios to the extent possible and discuss with the originators what could be done to decrease the carbon footprint of the underlying properties.

Annual ESG report

We provide an annual ESG report for our strategies outlining their environmental, social and governance contributions. The report provides an overview of developments in the ESG space that occurred in the previous year and may occur in the near future. It also gives details concerning the mortgage offerings and services of our partner lenders and their societal contributions and mortgage investment governance.

ESG classification and annual review

Every year, we evaluate our portfolios using our ESG Classification Methodology, which assigns scores from 1 to 5 to each answer in a questionnaire submitted by the loan originators that cover a range of environmental,

social and governance topics. In addition, we evaluate mortgage providers each year, as we also do for new mortgage portfolios, by assigning a score of 1 to 5 on five topics: performance, people, philosophy, process, planet. These evaluations are based on input derived from the underlying transaction documentation, quarterly and monthly reports, and meetings and other communication. Based on these scores, we formulate action items and follow up with the mortgage provider to improve on the topics that score below average. Both the ESG Classification and the annual review have direct consequences for the mortgage providers. For those that score below average, we recommend improvements before advising them to increase the portfolio, and we try to persuade them to update their ESG strategy.

A voice for a greener housing market

As one of Europe's largest mortgage asset managers, NN IP has a pronounced voice in different lobby groups. We hold a seat on the board of Energy Efficient Mortgages NL (EEM NL) Hub, an initiative that brings together mortgage lenders, investors, service providers and other stakeholders in the Dutch housing and mortgage market as part of the EU's Energy Efficient Action Plan (EEAP).

An important objective of the EEAP is to demonstrate energy efficiency's risk-mitigating effect for mortgage lenders; a lobby at the European Commission has been set up to reduce capital charges for financial institutions holding energy-efficient mortgages. NN IP's role in the EEM NL hub, a platform that allows ample opportunity for dialogue with European and the Dutch authorities, enables it to voice its views on how to make the Dutch mortgage market "greener" and align European legislation with Dutch legislation.

The measurement of household energy consumption is still based largely on assumed data. NN IP's participation in the Platform Carbon Accounting Financials (PCAF) has served as an outlet for promoting the use of actual rather than assumed data in determining the energy consumption data per residential unit.

A leading asset manager in an attractive mortgage market

Housing remains a cornerstone of community development. A thriving community is key to the development of a healthy society and economy. Affordable shelter is an important aspect of well-being, a fact that has become even more evident amid the increasing number of extreme weather events that destroy many homes, disrupting lives and livelihoods. Given the material systemic importance of mortgages, which financially underpin most home purchases, lenders and asset managers have a responsibility to help make the economy more sustainable.

From a risk/return and long duration perspective, Dutch mortgages are among the most attractive mortgage investments in in the Eurozone. As a leader in the transition in terms of Taxonomy integration, preparation for SFDR reporting and innovative mortgage product offering, the Netherlands is setting a benchmark for other European countries. NN IP, for its part, has materially and comprehensively integrated ESG into its international; mortgage portfolio, one of Europe's largest.

For the coming years, the financial and asset management industry will have to adapt to new ESG regulations. The implications of the regulations are now unfolding and their consequences have not yet fully materialized. NN IP and its lending partners are leading the drive towards a zero-carbon economy and a more inclusive society. We take a degree of pride in our achievements, yet we are humbled by the immensity of the transformation taking place and remain committed to continuing our progress.

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