



SECOND PARTY OPINION (SPO)

Re-verification of the Sustainability Quality of the Issuer and Green Asset Pool

Münchener Hypothekenbank eG 31 July 2019

Sustainability Quality of the Green Bond Asset Pool



CONTENTS

Overall Evaluation of the Green Programme	3
ISS-oekom ASSESSMENT SUMMARY	3
Contribution of the Green Funding Products to the UN SDGs	4
ISS-oekom SPO ASSESSMENT	5
PART I: GREEN BOND PRINCIPLES	5
PART II: SUSTAINABILITY QUALITY OF THE GREEN BOND ASSET POOL	10
Private Mortgages for Energy Efficient Buildings	10
Commercial Real Estate	11
PART III: ASSESSMENT OF MÜNCHENER HYPOTHEKENBANK'S ESG PERFORMANCE	13
ANNEX 1: ISS-oekom Corporate Rating	15
ANNEX 2: Methodology	20
About ISS-oekom SPO	21



Overall Evaluation of the Green Programme

Münchener Hypothekenbank (MünchenerHyp) commissioned ISS-oekom to assist with its Green Bond Programme by assessing three core elements to determine the sustainability quality of the Bond Programme:

- 1. MünchenerHyp's Green Bond framework benchmarked against the International Capital Market Association's (ICMA) Green Bond Principles (GBPs).
- 2. The asset pool whether the projects aligned with ISS-oekom's issue-specific key performance indicators (KPIs) (See Annex 2).
- 3. MünchenerHyp's sustainability performance, according to the ISS-oekom Corporate Rating.

ISS-oekom ASSESSMENT SUMMARY

SPO SECTION	SUMMARY	EVALUATION ¹
Part 1: Performance against the GBPs	The issuer has defined a formal concept for its Green Bonds regarding use of proceeds, processes for project evaluation and selection, management of proceeds and reporting. This concept is in line with the ICMA GBPs.	Positive
Part 2: Sustainability quality of the asset pool	The overall sustainability quality of the asset pool in terms of sustainability benefits, risk avoidance and minimisation is good based upon the ISS-oekom Green Bond KPIs. The Green Bond KPIs contain a clear description of eligible asset categories which include new and existing commercial green buildings and residential mortgage loans for energy efficient buildings. All assets of the asset pool are located in highly regulated and developed countries. Legislative frameworks in those countries set minimum standards, which reduce environmental and social risks.	Positive
Part 3: Issuer sustainability performance	The issuer itself shows a very good sustainability performance and has been classified as 'Prime' within the methodology of the ISS-oekom Corporate Rating. It is rated 2 nd out of 79 companies within its sector as of 31.07.2019.	Status: Prime Rating: B- Prime threshold:

¹ The ISS-oekom's present evaluation will remain valid until any modification of the Green Bond Framework or addition of new asset categories into the asset pool by the issuer and as long as the issuer's Corporate Rating is not materially downgraded (last modification on the 04.10.2018). The controversy check of the underlying assets has been conducted on the 11.07.2019.



Contribution of the Green Funding Products to the UN SDGs

Based on the assessment of the sustainability quality of the green bond asset pool and using a proprietary methodology, ISS-oekom assessed the contribution of the MünchenerHyp's green bond programme to the Sustainable Development Goals defined by the United Nations (UN SDGs).

This assessment is displayed on 5-point scale (see Annex 2 for methodology):

Significant	Limited	No	Limited	Significant
Obstruction	Obstruction	Net Impact	Contribution	Contribution

Each of the green bond's Use of Proceeds categories has been assessed for its contribution to, or obstruction of, the SDGs:

USE OF PROCEEDS CATEGORY	CONTRIBUTION OR OBSTRUCTION	SUSTAINABLE DEVELOPMENT GOALS
Commercial Green Buildings	Significant contribution	11 SUSTAINABLE CITIES AND COMMUNITIES
Private mortgages loans for energy efficient buildings	Limited contribution	11 SUSTAINABLE CITIES AND COMMONTIES

The issuer's green bond programme significantly contributes to the SDG 11 thanks to its Use of Proceeds categories promoting sustainable buildings.



ISS-oekom SPO ASSESSMENT

PART I: GREEN BOND PRINCIPLES

1. Use of Proceeds

The Use of Proceeds of any MünchenerHyp sustainable funding product will be applied to new or existing lending through MünchenerHyp's Green Mortgage Loan programme or certified environmental loans for commercial mortgages.

In November 2015, MünchenerHyp implemented a green loan for the retail mortgage lending which is distributed via the Cooperative Financial Network within Germany. This loan has been verified by ISS-oekom (formerly oekom research AG). The assets for MünchenerHyp's sustainable funding products meet the following criteria:

Eligibility criteria:

For buildings to qualify as Green Buildings – as defined by MünchenerHyp – they have to meet the following requirements:

For private mortgage loans

Residential buildings with a maximum annual energy demand of 70kWh/m2. From 2020 onwards, residential buildings with a maximum annual energy performance of 55kWh/m².

Residential buildings that obtained an energy performance certificate of "B" or higher (on a scale of H to A+). Grandfathering for green loans granted since November 2015.

For commercial buildings

DGNB (min. Gold or Platinum)
BREEAM (min. Very Good, Excellent or Outstanding)
LEED (min. Gold or Platinum)
HQE (min. Excellent or Exceptional)
BREEAM NL (min. 40% or better)
Energy Performance Certificate (EPC) (min. Level A or better)
or

top 15% of national building stock by energy performance.

The Use of Proceeds relate to the categories Energy Efficiency and Green Buildings as described in the Green Bond Principles. They contribute to the environmental objective of climate change mitigation and the achievement of UN Sustainable Development Goal 11: Sustainable Cities and Communities, and SDG 7: Affordable and Clean Energy, specifically:

Target 7.3. By 2030, double the global rate of improvement in energy efficiency.

Opinion: ISS-oekom considers the Use of Proceeds description provided by MünchenerHyp Green Bond Framework as aligned with the GBPs. The project categories are aligned with the broader strategy of the issuer towards sustainability and the expected environmental and social benefits are clearly stated. ISS-oekom endorses the more stringent eligibility criteria for private mortgage loans from 2020 onwards.

Sustainability Quality of the Green Bond Asset Pool



2. Process for Project Evaluation and Selection

The internal Project Evaluation and Selection Process will ensure that the proceeds of all MünchenerHyp sustainable funding products are allocated to new lending or existing loans that meet the criteria set out above.

The Green Bond Working Group (GBWG), a subgroup of the MünchenerHyp sustainability committee, will lead the process. The GBWG will verify the eligibility and data quality of existing loans regarding potential issuance of a green benchmark. The GBWG consists of members from the following MünchenerHyp departments:

- Treasury
- Sustainability
- Controlling / Risk Management

MünchenerHyp's Head of Treasury or a Treasury colleague will chair the GBWG.

On a quarterly basis, the data quality of sustainable retail and commercial loans will be checked by the loan department to verify the clearly defined product category and the aforementioned sustainability performance criteria. Data will be verified using:

- Information from a building's energy certificate (Energieausweis) with a maximum primary energy demand of 70kWh/m2 per year; or from 2020 onwards with a maximum energy demand of 55kWh/m2 per year; or
- Confirmation that the building meets the conditions from the respectively applicable KfW programme; or
- The year of construction for new buildings (according to national regulation (German EnEV), minimum energy performance criteria have to be met for new buildings)

Commercial loans will only qualify as certified environmental loans if there is applicable evidence in form of an energy performance certificate or documentation of Sustainability Building certification which meets the minimum requirements stated above.

By the end of every quarter the process will show the balance between the proceeds of sustainable funding products and MünchenerHyp's green lending book. The sustainability manager will receive the data from the Transaction Management department and will inform the sustainability committee accordingly.

Additionally, the Risk Controlling department and Transaction Management will conduct a quality check of the loan data on a regular basis in order to verify that the green loans (retail and commercial) are compliant with the MünchenerHyp Green Bond Framework. Based on the above evaluation the GBWG will review on at least an annual basis the allocation of the proceeds to the Eligible Use of Proceeds and approves these loans as Eligible Loans. The GBWG is also responsible for future changes to the framework or criteria. These will only be applicable for future issuance and the new version will be published via MünchenerHyp's website.

Opinion: ISS-oekom finds that MünchenerHyp has well defined and transparent criteria for evaluating and selecting eligible projects for Green bond proceeds. Various departments are involved in the Project Evaluation and Selection Process. Additionally, a quality check of the loan data is conducted on a regular basis to ensure compliance with the Green Bond Framework. However, improvements can be made on the commitment to transparency in the case of controversies.

Sustainability Quality of the Green Bond Asset Pool



3. Management of Proceeds

The Green Loans and Certified Environmental Commercial Loans to which the proceeds of all MünchenerHyp sustainable funding products will be allocated will fall into a cover pool of MünchenerHyp's loans for residential and commercial real estate. The Pfandbrief Act does not permit a separation of green loans outside the legal cover pool. Due to this fact MünchenerHyp has decided to implement the following process to clearly identify green and certified environmental loans:

The green loan for retail mortgage lending has a designated new internal product group and new modules have been programmed in the legal system to identify energy efficient loans. These loans are checked on a quarterly basis whether the required proof has been provided or not. In the case of missing evidence reminders will be sent to the intermediary Cooperative Bank. If the proof is still missing within the next quarterly control the loan will lose its classification as a sustainable loan and will not remain in the product group for green loans.

Accordingly, certified commercial loans new modules have been programmed in the legal system reflecting all qualifying certificates matching the criteria within the green bond framework. The competent credit analyst should send the certificate to the sustainability manager after granting the loan. A quality check is run as well during the quarterly reporting. The programmed fields in the legal system allow a clear analysis of certified environmental loans, after which a double check of the completeness and eligibility of all certificates takes place. In case the documentation is still missing, the colleague in charge will be asked to provide the certificate. Any missing certificate will cause the derecognition from the sustainable portfolio within the cover pool.

The GBWG will decide on the allocation of eligible assets to the proceeds of the bonds.

As described in the introduction, the MünchenerHyp business model supports a permanent cycle of green loan granting and the issuance of sustainable funding products. In the event of prepayment of loans, amortisation, sold or otherwise becoming ineligible, MünchenerHyp commits to replace these assets with other eligible loans. In the unlikely event of a shortfall in the green loan cover pool section, appropriate investments of the unallocated proceeds in sustainable assets will be made until the volume of green loans will be sufficient again. Regarding the refinancing of green and sustainable loans, which are not yet booked into the cover pool or its non-cover-pool eligible part, Treasury will use the quarterly reporting as a guidance. The reporting will disclose the volume of loans in the cover pool and the non-cover-pool eligible part versus the volume of issued sustainable funding products.

The Management of Proceeds is governed by the Treasury department as part of the daily steering of liquidity ratios and all legal regulations involved. Pending allocation, the proceeds of each MünchenerHyp sustainable funding products will be subject to MünchenerHyp's normal liquidity policy ("Treasury Handbuch").

Opinion: ISS-oekom finds that MünchenerHyp follows, within the Pfandbrief Act, best market practice by earmarking the proceeds. Intended types of temporary investment instruments for unallocated proceeds are disclosed and back-up options are subject to sustainable criteria.

Sustainability Quality of the Green Bond Asset Pool



4. Reporting

In its annual sustainability report, MünchenerHyp informs in detail about the company's corporate responsibility strategy and presents how sustainability aspects are anchored in the Bank's core business of financing private and commercial property. MünchenerHyp is committed to a high degree of transparency.

With the publication of its sustainability report including the GRI disclosures, MünchenerHyp inform in detail about activities and results in its four corporate responsibility areas (responsibility towards employees, responsibility for society, responsibility for the environment and responsibility in business activities). Key performance indicators make its non-financial performance transparent. The requirements of the Global Reporting Initiative (GRI) were taken into account when selecting MünchenerHyp's focus areas and key figures.

In the future MünchenerHyp will provide further information with regards to sustainable funding products:

Allocation Reporting

On a quarterly basis, MünchenerHyp will provide information on the allocation of the net proceeds of its sustainable funding products on its website. Such information will be provided until all the net proceeds have been allocated and beyond. The information will contain at least the following details:

- Details (e.g number and volume) of green loans financed through MünchenerHyp's sustainable funding products separated into retail and commercial lending in the cover pool; and
- II. The remaining balance of unallocated proceeds.
- III. The reporting will disclose the volume of loans inside and outside of the cover pool versus the volume of all sustainable funding products outstanding. Regarding the sustainable funding of green and sustainable loans not yet in the cover pool or its non-cover-pool eligible part, Treasury will use the quarterly reporting as a guidance.

Impact Reporting

MünchenerHyp will provide an impact reporting on a portfolio basis using the metrics recommended under the Harmonized Framework for Impact Reporting2, namely:

Certified Green Buildings and green retail real estate

- CO2 emission avoided
- Average energy demand (where available)

The comprehensive, scientific analysis for the impact reporting will be conducted by an external verifier. The report will be available on the website of MünchenerHyp after publication.

 $^{^2\} https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/20151202-0530\text{-}FINALRevised-Proposal2.pdf}$

Sustainability Quality of the Green Bond Asset Pool



Opinion: ISS-oekom finds that the transparency on the level of expected reporting and on the type of information to be reported is aligned with the Green Bond Principles. The allocation reporting on a quarterly basis is seen positively as it is more frequent than market standards. Also, positively assessed are the already defined and stated metrics that will be included in the impact reporting.

External review

MünchenerHyp Bank has obtained a Second Party Review from ISS-oekom to confirm the alignment of this Green Bond Framework with the 2018 Green Bond Principles.



PART II: SUSTAINABILITY QUALITY OF THE GREEN BOND ASSET POOL

Evaluation of the assets

Private Mortgages for Energy Efficient Buildings

Sustainability Benefits and Risks of the Asset Category

Residential mortgages for energy efficient buildings are beneficial from an environmental point of view as they contribute to climate protection through optimised energy use. Due to the small scale of work and resources involved in building residential housing as well as due to the fact that the buildings are in Germany, environmental and social impacts from the construction of residential housing are comparably low.

However, fair banking practices need to be in place in the retail client business in order to mitigate potential social risks, e.g. over-indebtedness or foreclosure.

All projects selected for the sustainable funding products are located in highly regulated countries.

Association of the Asset Category with the SDGs

As a Use of Proceeds category, private mortgages for energy efficient buildings has a limited contribution to the SDG 11 "Sustainable cities and communities". Additionally, when considering the deeper ESG management, they can be associated to other SDGs. The table below presents the findings of an ISS-oekom assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS-OEKOM ESG KPI

ASSOCIATION WITH THE SDGS

Energy Efficiency prerequisites







Construction standards

100% of the assets are located in countries, where high labour and health and safety standards are in place for construction and maintenance work (e.g. ILO core conventions).



Responsible treatment of costumers with debt repayment problems

For 100% of projects, pre-emptive actions to prevent client debt repayment problems are in place (e.g. covenants limiting

✓ indebtedness, conservative loan-to-value ratios, long-term fixed interest rates).



Sustainability Quality of the Green Bond Asset Pool



For 100% of projects, sustainable solutions for customers with debt repayment problems are in place (e.g. debt counselling, foreclosure as a last resort).



For 100% of projects, the creditor excludes the selling of contractually serviced loans (e.g. required customer consent in case of sale).



Controversy assessment

Due to a low controversy risk, ISS-oekom does not carry out a controversy assessment for private mortgage loans.

Commercial Real Estate

Sustainability Benefits and Risks of the Asset Category

Green buildings are beneficial from an environmental point of view as they contribute to climate protection through optimised energy efficiency and air quality. Green buildings help to conserve natural resources and reduce environmental impact through reduction of wastewater and waste. From a social point of view, green buildings can improve occupant health and comfort.

At the same time, there are possible sustainability risks that need to be taken into account. Possible social risks stem from working conditions at construction sites, the integration of new buildings into the social context and the safety of building users. Environmental risks stem from impacts on biodiversity at the planning stage, as well as from poor resource efficiency during construction phase and at the use stage.

The projects selected for the sustainable funding products are located in highly-regulated and developed countries.

Association of the Asset Category with the SDGs

As a Use of Proceeds category, commercial real estate has a significant contribution to the SDG 11 "Sustainable cities and communities" when achieving high standards regarding energy efficiency. Additionally, when considering the deeper ESG management, they can be associated to other SDGs. The table below presents the findings of an ISS-oekom assessment of the assets (re-) financed against KPIs and the association with SDGs based on a mapping methodology.

ASSESSMENT AGAINST ISS-OEKOM ESG KPI

ASSOCIATION WITH THE SDGS

Energy Efficiency prerequisites

All the assets underwent an appropriate and detailed selection process that ensures good standards regarding energy efficiency.







Site selection

- 100% of the assets are developed on brownfield sites (e.g.✓ previously developed land that is not used anymore at the time of construction).
- 15 LIFE ON LAND
- 100% of the assets are located within a maximum of 1km from one or more modalities of public transport.



Construction standards

100% of the assets are located in countries, where high labour and health and safety standards are in place for construction and maintenance work (e.g. ILO core conventions).



No information is available on the sustainable procurement regarding building materials (e.g. recycled materials).



Water use minimization in buildings

15 buildings out of 21, accounting for 59% of the asset pool, provide for measures to reduce water consumption (e.g. high-efficiency

fixtures and fittings, rainwater harvesting). For the remaining 6 buildings, accounting for 41% of the asset pool, insufficient information is available.



Safety of buildings users

100% of funds allocated to building projects for which the operational safety is ensured (e.g. fire safety, elevator safety)



Sustainability labels / Certificates

100% of the asset pool obtained a (or an equivalent of) BREEAM

"Very Good", DGNB "Gold", LEED "Gold", HQE "excellent", BREEAM

NL "40%", EPC ("Level A") certificate or better certification.



Controversy assessment

A controversy assessment on the included projects did not reveal any controversial activities or practices that could be attributed to the building projects.

The methodology for the asset evaluation can be found in Annex 2.



PART III: ASSESSMENT OF MÜNCHENER HYPOTHEKENBANK'S ESG PERFORMANCE

The ISS-oekom Corporate Rating comprises a rating scale from A+ (excellent) to D- (poor).

COMPANY	RATING	STATUS
Münchener Hypothekenbank eG	В-	PRIME

This means that the company performed well in terms of sustainability, both compared against others in the industry and in terms of the industry-specific requirements defined by ISS-oekom. In ISS-oekom's view, the securities issued by the company therefore all meet the basic requirements for sustainable investments.

As of 04.10.2018, this rating places Münchener Hypothekenbank 2nd out of 79 companies rated by ISS-oekom in the Financials/Mortgage & Public Sector Finance sector.

In this sector, ISS-oekom has identified the following issues as the key challenges facing companies in terms of sustainability management:

- Sustainability impacts of lending and other financial services/products
- Statutory ESG-standards linked to the geographical allocation of the lending portfolio
- Costumer and product responsibility
- Employee relations and work environment

In all four key issues, MünchenerHyp achieved a rating that was above the average for the sector. A significant outperformance was achieved in "Sustainability impacts of lending and other financial services/products", "Customer and product responsibility" and "Employee relations and work environment".

The company does not face any controversy, which is in line with its sector's minor controversy risk.

Details on the rating of the issuer can be found in Annex 1.

Robert Hassler, Head of ISS-oekom London/Munich/Rockville/Zurich

Sustainability Quality of the Green Bond Asset Pool



DISCLAIMER

- 1. Validity of the SPO: For MünchenerHyp's potential Green funding product issuances occurring between 07/2019 and 07/2020.
- 2. ISS-oekom uses a scientifically based rating concept to analyse and evaluate the environmental and social performance of companies and countries. In doing so, we adhere to the highest quality standards which are customary in responsibility research worldwide. In addition, we create a Second Party Opinion (SPO) on bonds based on data from the issuer.
- 3. We would, however, point out that we do not warrant that the information presented in this SPO is complete, accurate or up to date. Any liability on the part of ISS-oekom in connection with the use of these SPO, the information provided in them and the use thereof shall be excluded. In particular, we point out that the verification of the compliance with the se-lection criteria is based solely on random samples and documents submitted by the issuer.
- 4. All statements of opinion and value judgements given by us do not in any way constitute purchase or investment recommendations. In particular, the SPO is no assessment of the economic profitability and credit worthiness of a bond but refers exclusively to the social and environmental criteria mentioned above.
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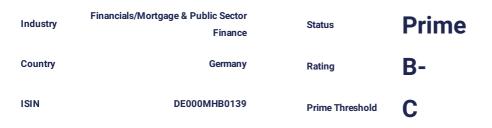
ANNEX 1: ISS-oekom Corporate Rating

The following pages contain extracts from MünchenerHyp's 2019 ISS-oekom Corporate Rating.

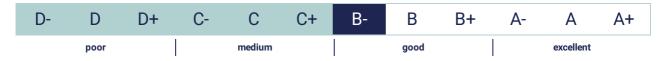


ISS-oekom Corporate Rating

Münchener Hypothekenbank eG







The assessment of a company's sustainability performance is based on approximately 100 criteria, selected specifically for each industry. A company's failure to disclose, or lack of transparency, regarding these matters will impact a company's rating negatively.

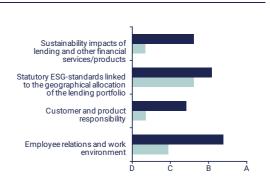
Industry Leaders

Company name	Country	Grade
(in alphabetical order)		
Berlin Hyp AG	DE	B-
Münchener Hypothekenbank eG	DE	B-
de Volksbank N.V.	NL	B-



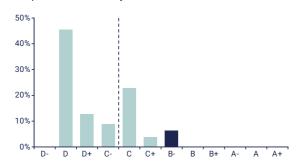
Key Issue Performance

Rating History



Distribution of Ratings

79 companies in the industry





Controversy Monitor

Company Industry 0 Maximum Controversy Score Controversy Score -2 Controversy Level Controversy Risk Minor Minor Moderate Significant Moderate Significant Minor Severe Minor

Severe



Münchener Hypothekenbank eG

Analyst Opinion

Amery Guelker Sector specialist



Sustainability Opportunities

The bank provides financing with a high social value through the issuance of ESG covered bonds which proceeds are used for local housing cooperatives. Furthermore, the bank offers green mortgages and promotional loans on preferential terms to private customers. The loans primarily target energy efficiency construction of new buildings and ecofriendly refurbishments for existing ones. These loans amounted to 15% of total loan origination in 2017. In addition, Muenchener Hypothekenbank increasingly finances commercial real estate with green building certificates. The company is in the process of issuing another green bond covered by these assets.

Although green and social financing is growing substantially over the last years, they still do not constitute the majority of the bank's portfolio.

Sustainability Risks

The company's mortgage (and public sector) loan portfolio is located almost entirely in countries with fairly good environmental and social minimum standards, with more than 80 per cent of the portfolio to be attributed to Germany. Muenchener Hypothekenbank considers some social and environmental factors in the loan origination process (e.g. on resource efficiency) for both its commercial and private client business and has developed capacities to manage these risks, despite the fact that it remains unclear to what extent the requirements are obligatory to its clients. In addition, certain controversial aspects are precluded from commercial loans, including armaments, and the bank has formulated a policy in responsible investments for its own account (largely a liquidity portfolio). Customer-risk issues are adequately addressed through reasonable measures concerning responsible debt repayment and aspects of conscientious marketing. Also, it has taken some steps to maintain responsible sales practices. Staff-related issues are well-managed throughout the company. Muenchener Hypothekenbank has comprehensive measures in place for maintaining the work-life balance and health of its employees while having increased its headcount over the last years. With regard to internal governance processes, Muenchener Hypothekenbank applies several policies addressing relevant compliance issues, most notably on insider trading, money laundering and issues of corruption. Appropriate implementation is sufficiently secured through trainings, risk assessments and anonymous reporting channels in case of misconduct.

Governance Opinion

The bank operates under the legal framework of a registered cooperative and is owned by its 75,000 members, primarily a network of local cooperative member banks and customer-owners. The governance design ensures separation of managerial and supervisory function and separate persons hold the positions of CEO and chairman of the board of directors, which overwhelmingly is occupied by independents. The company has independent committees on audit, remuneration and nomination affairs in place. The compensation of the executives team is only published as a combined figure and not split up according to long-term incentives, fixed and variable amounts.

Regarding the company's governance of sustainability, a committee on sustainability works under the auspices of the executive management. In line with some general lack of transparency regarding management compensation, it remains unclear whether executives are rewarded also upon relevant ESG criteria.

Policies on almost all relevant compliance topics are implemented, with detailed emphasis on issues of insider dealings, money laundering and gifts and favours. Application of the rules is ensured by, inter alia, employee trainings, compliance risk assessments and adequate whistleblowing procedures



Münchener Hypothekenbank eG

Methodology - Overview

ISS-oekom Corporate Rating - The ISS-oekom Universe comprises more than 3,900 companies (mostly companies in important national and international indices, but also small and mid caps drawn from sectors with direct links to sustainability as well as significant non-listed bond issuers).

The assessment of a company's social & governance and environmental performance is based on approximately 100 environmental, social and governance criteria, selected specifically for each industry. All criteria are individually weighted and evaluated and the results are aggregated to yield an overall score (rating), in which the key issues account for at least 50 per cent of the total weight. In case there is no relevant or up-to-date company information available on a certain criterion and no assumptions can be made based on predefined standards and expertise, e.g. known and already classified country standards, the criterion is graded with a D-.

In order to obtain a comprehensive and balanced picture of each company, our analysts assess relevant information reported or directly provided by the company itself as well as information from independent sources. In addition, our analysts actively seek a dialogue with the assessed companies during the rating process and companies are regularly given the opportunity to comment on the results and provide additional information.

An external rating committee assists the analysts at ISS-oekom with the content-related design of industry-specific criteria and carries out a final plausibility check of the rating results at the end of the rating process.

Analyst Opinion - Qualitative summary and explanation of the central rating results in three dimensions:

- (1) Opportunities assessment of the quality and the current and future share of sales of a company's products and services, which positively or negatively contribute to the management of principal sustainability challenges.
- (2) Risks summary assessment of how proactively and successfully the company addresses specific sustainability challenges found in its business activity and value chain, thus reducing its individual risks, in particular regarding its sector's key issues.
- (3) Governance overview of the company's governance structures and measures as well as of the quality and efficacy of policies regarding its ethical business conduct.

Controversial Business Practices and Areas - In addition to the rating, ISS-oekom undertakes a comprehensive analysis of relevant controversies with respect to numerous business practices and areas for each company. Thereby, our clients have the possibility to consider, either separately or in addition to the rating, the behaviour and the activities of a company in areas they view as especially critical.

With regard to business practices, each controversial case is examined and categorised based on whether it can be clearly attributed to the company. Additionally, the extent of the company's responsibility and the severity of the case are assessed. For the classification of the severity of the misconduct, the concrete negative effects are systematically evaluated. In addition, it is considered whether, to what extent and with what success the company has taken steps to mitigate the impact, to compensate it and to prevent similar incidents from occurring in the future.

To account for the varying levels of severity of the controversies, these are classified into the following three categories: moderate controversies, severe controversies and very severe controversies. Additionally, potential controversies are presented. These constitute issues which could be reclassified into one of the three controversy categories in case new information is reported. The classification follows a clear and uniform methodology for which ISS-oekom has defined specific evaluation parameters and their possible manifestations along a scale, based on international norms and standards and its own understanding of sustainability.

In the Business Practices section, the number of relevant and active cases is displayed in the respective cells. For each criterion, the sum of all corresponding cases for each sub-category is shown in the first line. In the Business Areas section, the activity is marked "x" and summarised as "yes" or "no". The percentage thresholds in the column headers generally refer to the Net Sales of the assessed company. As Net Sales are not an adequate reference value for all companies, these thresholds can refer to other values in individual cases (e.g. for different financial service providers).

Current cases are summarised in the "Comments" field. Irrespective of active cases, criteria marked as "Risk Exposure" indicate the company's risk exposure to controversies based on its business activities.

For the assessment of cases only those sources that have been classified by ISS-oekom as reliable are used. In addition to proven misconduct or activities of companies, alleged misconduct or activities are also assessed when the facts and circumstantial evidence provided by those sources, taking into account the experience of specialised analysts for each topic, is estimated to be sufficiently reliable. This applies not only to alleged practices, but also to the alleged serious negative effects of such practices.



Münchener Hypothekenbank eG

Methodology - Overview

Controversy Monitor - The Controversy Monitor is a tool for assessing and managing reputational and financial risks associated with companies' negative environmental and social impacts.

The controversy score is a unit of measurement for the number and severity of a company's current controversies. All controversial business areas and business practices receive a negative score, which can vary depending on the significance, number and severity of the controversies. Both the company's score and the maximum score obtained in the industry are displayed.

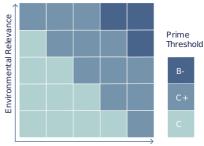
For better classification, the scores are assigned different levels: minor, moderate, significant and severe. The industry level relates to the average controversy score.

Only controversies for which reliable information from trustworthy sources is available are recorded. In addition to proven misconduct and activities of companies, alleged misconduct and activities are also assessed when the facts and circumstantial evidence provided by those sources, taking into account the experience of specialised analysts for each topic, is estimated to be sufficiently reliable. It should be noted that large international companies are more often the focus of public and media attention. Thus, the information available on those companies is often more comprehensive than for less prominent companies.

Distribution of Ratings - Overview of the distribution of the ratings of all companies from the respective industry that are included in the ISS-oekom Universe (company portrayed in this report: dark blue).

Industry Classification - The social and environmental impacts of industries differ. Therefore, based on its relevance, each industry analysed is classified in a Sustainability Matrix.

Depending on this classification, the two dimensions of the ISS-oekom Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the ISS-oekom Prime Status (Prime threshold) are defined (absolute best-in-class approach).



Social & Governance Relevance

Industry Leaders - List (in alphabetical order) of the top three companies in an industry from the ISS-oekom Universe at the time of generation of this report.

Key Issue Performance - Overview of the company's performance with regard to the key social and environmental issues in the industry, compared to the industry average.

Major Shareholders & Ownership Summary - Overview of the company's major shareholders at the time of generation of this report. All data as well as the categorisation system for the investor types is based on information from S&P Capital IQ.

Rating History - Development of the company's rating over time and comparison to the average rating in the industry.

Rating Scale - Companies are rated on a twelve-point scale from A+ to D-:

A+: the company shows excellent performance.

D-: the company shows poor performance (or fails to demonstrate any commitment to appropriately address the topic).

Overview of the range of scores achieved in the industry (light blue) and indication of the grade of the company evaluated in this report (dark blue).

Sources of Information - A selection of sources used for this report is illustrated in the annex.

Status & Prime Threshold - Companies are categorised as Prime if they achieve/exceed the minimum sustainability performance requirements (Prime threshold) defined by ISS-oekom for a specific industry (absolute best-in-class approach) in the ISS-oekom Corporate Rating. Prime companies rank among the sustainability leaders in that industry.



ANNEX 2: Methodology

ISS-oekom Green Bond KPIs

The ISS-oekom Green Bond KPIs serves as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of the use of proceeds of MünchenerHyp's Green Bond Programme.

It comprises firstly the definition of the use of proceeds category offering added social and/or environmental value, and secondly the specific sustainability criteria by means of which this added value and therefore the sustainability performance of the assets can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the assets and which can also be used for reporting.

To review the KPIs used in this SPO, please contact Federico Pezzolato (details below) who will send them directly to you.

Asset evaluation methodology

ISS-oekom evaluates whether the assets included in the asset pool match the eligible project category and criteria listed in the Green Bond KPIs.

All percentages refer to the amount of assets within one category (e.g. wind power). Additionally, the assessment "no or limited information is available" either indicates that no information was made available to ISS-oekom or that the information provided did not fulfil the requirements of the ISS-oekom Green Bond KPIs.

The evaluation was carried out using information and documents provided to ISS-oekom on a confidential basis by MünchenerHyp (e.g. Due Diligence Reports). Further, national legislation and standards, depending on the asset location, were drawn on to complement the information provided by the issuer.

Assessment of the contribution and association to the SDG

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary method, ISS-oekom identifies the extent to which MünchenerHyp's Green Bond contributes to related SDGs and has a positive association with their respective subtargets.

The contribution assessment is split into two Levels:

- 1. **Level 1:** Contribution and/or obstruction of the Use of Proceeds categories to be financed through the bond to the UN SDGs
- 2. Level 2: Association of the assets' ESG performance with further SDGs

Sustainability Quality of the Green Bond Asset Pool



About ISS-oekom SPO

ISS-oekom is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries regarding their environmental and social performance.

As part of our Sustainable (Green & Social) Bond Services, we provide support for companies and institutions issuing sustainable bonds, advise them on the selection of categories of projects to be financed and help them to define ambitious criteria.

We assess alignment with external principles (e.g. the ICMA Green / Social Bond Principles), analyse the sustainability quality of the assets and review the sustainability performance of the issuer themselves. Following these three steps, we draw up an independent SPO so that investors are as well informed as possible about the quality of the bond / loan from a sustainability perspective.

Learn more: https://www.isscorporatesolutions.com/solutions/esg-solutions/green-bond-services/

For Information about SPO services, and this Green Bond Programme, contact:

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