



Assessment of the Sustainability Quality of the Green Bond Programme of Volkswagen Immobilien

12 March 2018

Aim and Scope of this Second Party Opinion

Volkswagen Immobilien commissioned oekom research to assist with its Green Bond Programme by confirming the sustainable added value of an asset pool, from which assets for Green Bond issuances will be chosen. The assessment of the Green Bond Programme was conducted using the criteria and indicators of oekom Green Bond KPIs.

oekom research's mandate included the following services:

- Definition of Green Bond KPIs ("oekom Green Bond KPIs") containing a clear description of eligible
 asset categories and the social and environmental criteria assigned to each category for
 evaluating the sustainability-related performance of the assets (re-)financed through the proceeds
 of the bonds.
- Analysis of the alignment of the Green Bonds to be issued out of the Eligible Green Project Portfolio against the ICMA's Green Bond Principles.
- Evaluation of compliance of the Eligible Green Project Portfolio with the oekom Green Bond KPIs.
- Review and classification of Volkswagen Immobilien's sustainability performance on the basis of the oekom Corporate Rating.

Overall Evaluation of the Green Bond Programme

oekom's overall evaluation of the Green Bond Programme of Volkswagen Immobilien is positive:

- Volkswagen Immobilien has defined a formal concept for its Green Bond Programme regarding use of proceeds, processes for project evaluation and selection, management of proceeds, and reporting. This concept is in line with the Green Bond Principles (Part I of this Second Party Opinion).
- The overall sustainability quality of the Eligible Green Project Portfolio in terms of sustainability benefits and risk avoidance and minimisation is good (Part II of the Second Party Opinion).
- The issuer itself shows a good sustainability performance (Part III of this Second Party Opinion).



Volkswagen Immobilien applies good selection criteria regarding energy efficiency. Nevertheless, there are some aspects for potential improvement of the sustainability quality of the Green Bond Programme. In order to enhance the overall sustainability quality, more projects should include measures for sustainable procurement of building materials and measures regarding water use minimisation in buildings.



Part I – Green Bond Principles

1) Use of Proceeds

The proceeds of the Green Bonds to be issued by Volkswagen Immobilien will be used exclusively to finance assets matching Volkswagen Immobilien Green Bond Framework. This framework consists of the following two project categories: green buildings and clean transportation.

All assets in the Eligible Green Project Portfolio are either residential building projects (e.g. for single-family homes or apartments) or commercial buildings (offices and logistic centres). All assets are situated in Germany or Slovakia, and include new builds and refurbishments.

Details regarding the assets included in the Eligible Green Project Portfolio are listed in the following table (based on loans outstanding):

	Category	Description	Volume and share of Green Bond assets
A	Green Buildings	Residential buildings	EUR 336m (55%)
		Commercial office buildings	EUR 96.5m (16%)
		Commercial production and logistics buildings	EUR 176.6m (29%)
В	Clean Transportation	Infrastructure for electric, hybrid and other clean energy vehicles and for other forms of transportation such as public, rail, non-motorized, multimodal transportation.	EUR 0m (0%)
TOTAL			EUR 609.1m (100%)

2) Process for Project Evaluation and Selection

Volkswagen Immobilien has set up the process of evaluation and selection as follows:

Projects financed and/or refinanced through the future Green Bond proceeds are evaluated and selected based on compliance with the eligibility criteria set forth in the Use of Proceeds by the Issuer's Green Bond Committee. The Green Bond Committee will oversee the entire Green Bond process, including the evaluation and selection of eligible projects originated across relevant business lines.

For assets to qualify under Volkswagen Immobilien's Green Bond Framework – as defined by Volkswagen Immobilien – they have to meet certain requirements, in accordance with the methodology defined by an external specialised Green Buildings consultant.



Eligible assets are buildings that comply with criteria specified in the issuer's Green Bond Framework. Volkwagen Immobilien's requirements can be summarised as follows (set limits that shall not be exceeded):

Green residential buildings which meet the following regional, national and internationally recognised regulations, standards or certifications:

- a) New or existing residential buildings belonging to top 15% low carbon buildings in Germany
 - i. EnEV 2009 (EnEV: German Energy Saving Ordinance, "Energieeinsparverordnung") regulation and later
 - ii. Existing or refurbished residential buildings that meet energy efficiency classes "Energieeffizienzklasse" A+, A, B
 - iii. Renovated buildings that exceed the new building's energy target by a maximum of 40%
- b) New, existing or refurbished green residential building which received at least following classifications:
 - i. Volkswagen Immobilien Blue Building and Blue Building Plus Standard¹
 - ii. DGNB "Silver", NWO09 and later

Green commercial office buildings which meet regional, national or internationally recognised regulations, standards or certifications in either:

- a) New or existing office buildings belonging to top 15% low carbon buildings in Germany
 - i. German office buildings with an Energy Performance Certificate under EnEV 2007 regulation and later

or

or

- ii. German office buildings from 1995 with a maximum site energy consumption of 120 kWh/m²/a (assumption based on research from German Energy Agency Dena). The German Energy Passport for commercial buildings (Energieausweis Nichtwohngebäude) is an example of an instrument that VOLKSWAGEN IMMOBILIEN will use to verify compliance.
- iii. Renovated buildings that exceed a new building's energy target by a maximum of 40%

¹ Blue Building is an internal certification by Volkswagen Immobilien. Blue Building sets the requirements for thermal comfort, visual comfort, acoustic comfort, opportunity for individual tenants to control local environment, availability and design of outdoor space, and a link to nearby community facilities. The Technical University Braunschweig provided an opinion on the criteria, stating that the criteria meet the requirements of sustainable building practices. The university also advised to define CO2 emission reductions compared in relation to a reference building. Currently Blue Building certified buildings are at least 30% more efficient than the applicable EnEV law requires. Blue Building Plus is the advanced standard with additional sustainable elements.



- b) New, existing or refurbished green office buildings which received at least following classifications:
 - i. Blue Building and Blue Building Plus,
 - ii. LEED "Gold " NC or CS v3 and later.
 - iii. DGNB "Silver", NBV09 and later
 - iv. BREEAM "Very Good",
 - v. ENERGY STAR "85"
 - vi. or equivalent or higher level of certification; The certified buildings must also have a good energy performance.

Green commercial production and logistics buildings which meet regional, national or internationally recognised regulations, standards or certifications in either:

- a) New or existing logistics/ production buildings belonging to top 15% low carbon buildings in Germany or
 - i. EnEv 2009 regulation and later.
 - ii. Renovated buildings that exceed a new building's energy target by a maximum of 40%
- b) New, existing or refurbished green logistics/ production buildings which received at least following classifications:
 - i. Blue Building and Blue Building Plus
 - ii. LEED "Gold" NC or CS v3 and later.
 - iii. DGNB "Silver" NIN09 and later,
 - iv. BREEAM "Very Good",
 - v. ENERGY STAR "85"
 - vi. or equivalent or higher level of certification; The certified buildings must also have a good energy performance.

3) Management of Proceeds

Volkswagen Immobilien intends to allocate the proceeds from the Green Bonds to an Eligible Green Project Portfolio, selected in accordance with the use of proceeds criteria and evaluation and selection process presented above.

Volkswagen Immobilien will strive, over time, to achieve a level of allocation for the Eligible Green Project Portfolio which, after adjustments for intervening circumstances including, but not limited to, sales and repayments, matches the balance of net proceeds from its outstanding Green Bonds. Additional Eligible Green Projects will be added to the Issuer's Eligible Green Project Portfolio to the extent required to ensure that the net proceeds from outstanding Green Bonds will be allocated to Eligible Green Projects.



Whilst any Green Bond net proceeds remain unallocated, VWI will hold the balance of net proceeds not yet allocated to eligible projects in its liquidity portfolio of money market instruments at its own discretion.

4) Reporting

Use of proceeds reporting

Volkwagen Immobilien will annually publish a Green Bond Report on its website that provides:

• The amount of proceeds that has been allocated within each project category, including the respective percentage of refinancing of existing loans and financing new loans

Impact reporting

Volkswagen Immobilien plans to report on the environmental and social impacts of its Green Bonds. The issuer aims to include the following indicators in the reporting:

- Estimated ex-ante annual energy consumption in KWh/m² or energy savings in MWh.
- Estimated annual GHG emissions reduced/avoided in tons of CO₂ equivalent.



Part II - Sustainability Quality of the Eligible Green Project Portfolio

1) oekom Green Bond KPIs

The oekom Green Bond KPIs serve as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of Volkswagen Immobilien Eligible Green Project Portfolio. 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 Eligible Green Project Portfolio can be clearly identified and described.

The sustainability criteria are complemented by specific indicators, which enable quantitative measurement of the sustainability performance of the Green Bond and which can also be used for reporting. Details on the individual criteria and indicators for the categories can be found in Annex 1 "oekom Green Bond KPIs".

2) Evaluation of the Assets within the Eligible Green Project Portfolio

Method

oekom research has evaluated whether the assets included in the Eligible Green Project Portfolio match the categories and criteria listed in the oekom Green Bond KPIs. The evaluation was carried out using information and documents provided to oekom research on a confidential basis by Volkswagen Immobilien (e.g. location of the buildings, internal guidelines). Further, national legislation and standards, depending on the asset location, were drawn on to complement the information provided by Volkswagen Immobilien.



Findings

A. Green Buildings

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. Further, green buildings help to conserve natural resources and reduce environmental impact through the reduction of waste and wastewater. 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.

All projects selected for the Green Bond are located in highly-regulated and developed countries.

Energy Efficiency prerequisites

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

All the projects belong to the top 15% of low carbon buildings in their respective countries.

All the new builds meet the criteria of EnEV 2009 or higher, while all residential new builds received a Blue Building or Blue Building Plus certification.

All the refurbished buildings achieved an Energy Efficiency Class of "B" or better.

- 1. Environmental standards for site selection
 - No information is available on policies for responsible site selection.
 - ✓ 123 projects, accounting for 80% of the asset pool's volume, are located within a maximum of 1 km from one or more modalities of public transport. The remaining 5 projects, accounting for 20% of the respective asset pool's volume, are not within the 1 km threshold.
- 2. Construction standards
 - ✓ 100% of the projects 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).
 - 4 projects, accounting for 12% of the asset pool's volume, provide for sustainable procurement regarding building materials (e.g. recycled materials, third-party certification of wood-based



materials). Regarding the remaining 124 projects, accounting for 88% of the asset pool's volume, no information is available on sustainable procurement.

- 3. Water use minimisation in buildings
 - 4 projects, accounting for 12% of the asset pool's volume, provide for measures to reduce water consumption (e.g. high-efficiency fixtures and fittings, rainwater harvesting). Regarding the remaining 124 projects, accounting for 88% of the asset pool's volume, no information is available on measures to reduce water consumption.
- 4. Safety of building users
 - 4 projects, accounting for 12% of the asset pool's volume, provide for measures to ensure operational safety (e.g. requirements for fire protection). Regarding the remaining 124 projects, accounting for 88% of the asset pool's volume, no information is available on measures to ensure operational safety.
- 5. Sustainability labels / certificates
 - ✓ 18 projects, accounting for 50% of the asset pool's volume, obtained a (or an equivalent of) BREEAM "Very Good", DGNB "Silver / Gold"², LEED "Gold", HQE "excellent" certificate or better certification. 4 projects, accounting for 12% of the asset pool's volume, obtained a Blue Building Plus certificate. For the remaining 106 projects, accounting for the other 38% of the asset pool's volume, sufficient information is not available on certificates.

Controversies

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

² With effect from 1 July 2015, DGNB updated its certification scheme, now ranging from "Bronze" to "Platinum": The "Bronze" certificate will be replaced by "Silver", "Silver" by "Gold" and "Gold" by "Platinum" for new certifications with immediate effect. "Bronze" will only be used for existing buildings in the future. The evaluation system and the assessment methodology remain unchanged.



Part III – Assessment of Volkswagen Immobilien's Sustainability Performance

In the oekom Corporate Rating with a rating scale from A+ (excellent) to D-(poor), Volkswagen Immobilien was awarded a score of C and classified as "Prime", meaning that it fulfils oekom research's demanding requirements regarding sustainability performance in its sector.



As of 12 March 2018, this rating puts Volkswagen Immobilien in place 8 out of 243 companies rated by oekom research in the Real Estate sector.

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

- Climate protection, energy efficiency and renewables
- Green Building considerations
- Health and well-being of occupants
- Worker safety and accident prevention
- Environmental and social aspects in site selection

In all key issues, Volkswagen Immobilien achieved a rating that was above the average for the sector. An outperformance was achieved in Health and well-being of occupants, and worker safety and accident prevention.

The company has not committed any violations in the areas of controversial business practices or controversial areas of business, and thus does not breach any of the exclusion criteria which are frequently applied by investors. Overall, the company has a "minor" controversy level, which is the average level of the sector Real Estate.

Details on the rating of the issuer can be found in Annex 2 "oekom Corporate Rating of Volkswagen Immobilien".

Robert Haßler, CEO

oekom research AG

Munich, 12 March 2018



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About oekom research

oekom research is one of the world's leading rating agencies in the field of sustainable investment. The agency analyses companies and countries with regard to their environmental and social performance, oekom research has extensive experience as a partner to institutional investors and financial service providers, identifying issuers of securities and bonds which are distinguished by their responsible management of social and environmental issues. More than 100 asset managers and asset owners routinely draw on the rating agency's research in their investment decision making, oekom research's analyses therefore currently influence the management of assets valued at over 600 billion euros.

As part of our Green 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 verify the compliance with the criteria in the selection of projects and draw up an independent second party opinion so that investors are as well informed as possible about the quality of the loan from a sustainability point of view.

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Annex

- Annex 1: oekom Green Bond KPIs
- Annex 2: oekom Corporate Rating of Volkswagen Immobilien



Annex 1: oekom Green Bond KPIs

oekom Green Bond KPIs

The oekom Green Bond KPIs serve as a structure for evaluating the sustainability quality – i.e. the social and environmental added value – of Volkswagen Immobilien Eligible Green Project Portfolio. 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 Eligible Green Project Portfolio can be clearly identified and described.

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

Use of Proceeds

The Volkswagen Immobilien Green Bond Framework consists of the following project categories:

- A. Green Buildings
- B. Clean Transportation (Not included in the Eligible Green Project Portfolio)

Sustainability Criteria and Indicators for Use of Proceeds

In order to ensure that the environmental and social risks linked to the underlying assets are prevented and the opportunities clearly fostered, a set of sustainability criteria has been established for the project categories.



A. Green Buildings

Energy Efficiency prerequisites

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

1. Site selection

- Percentage of assets for which a policy on responsible site selection is in place (e.g. brownfield development, exclusion of protected areas and sites of high environmental value).
- Percentage of assets located within a maximum of 1 km from one or more modalities of public transport.

2. Construction standards

- Percentage of assets that provide for high labour and health and safety standards (e.g. ILO core conventions).
- Percentage of assets that provide for sustainable procurement regarding building materials (e.g. recycled materials, third-party certification of wood-based materials).

3. Water use minimisation in buildings

 Percentage of assets that provide for measures to reduce water consumption (e.g. water metering, high-efficiency fixtures and fittings, rainwater harvesting).

4. Safety of building users

 Percentage of assets that provide for measures to ensure operational safety (e.g. emergency exits, fire sprinklers, fire alarm systems).

5. Sustainability labels / certificates

 Percentage of assets that obtained a (or an equivalent of a) BREEAM "Very Good", DGNB "Silver / Gold"³, LEED "Gold", HQE "excellent" certificate or better certification.

Controversies

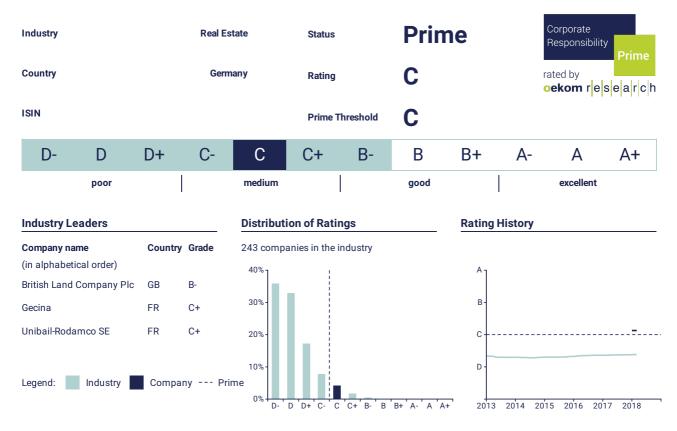
 Description of controversial projects (e.g. labour rights violations, accidents, insufficient community dialogue).

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oekom Corporate Rating

Volkswagen Immobilien GmbH



Key Issue Performance

Climate protection, energy efficiency and renewables Green building considerations Health and well-being of occupants Worker safety and accident prevention Environmental and social aspects in site selection

Strengths and Weaknesses

- + comprehensive strategy on tenant health, well-being and safety
- + several real estate projects with a high social benefit
- + comprehensive company-specific green building standard for the design of new developments
- + comprehensive supply chain management with respect to labour rights and working conditions
- no indication of a comprehensive strategy regarding energy efficiency and renewable energy in construction and demolition
- comprehensive biodiversity management system not clearly demonstrated

Controversy Monitor

Company			Industry	Industry			
Controversy Score		0	Maximum Controversy Score			-8	
Controversy Level		Minor	Controversy Risk	Controversy Risk		Minor	
Minor Mo	derate Signifi	cant Severe	Minor	Moderate	Significant	Severe	

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Volkswagen Immobilien GmbH

Methodology - Overview

oekom Corporate Rating - The oekom Universe comprises more than 3,800 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 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 oekom research 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.

Controversy Monitor - The oekom 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.

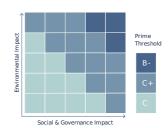
For better classification, the scores are assigned different levels: minor, moderate, significant and severe. The industry level relates to the average controversy score.

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 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 oekom Corporate Rating, the Social Rating and the Environmental Rating, are weighted and the sector-specific minimum requirements for the oekom Prime Status (Prime threshold) are defined (absolute best-in-class approach).



Industry Leaders - List (in alphabetical order) of the top three companies in an industry from the 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.

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).

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

Strengths & Weaknesses - Overview of selected strengths and weaknesses of a company with regard to the key issues of the industry from a sustainability point of view.