# Obvion Green STORM 2019

**PRE-ISSUANCE VERIFICATION LETTER**

**LOW CARBON BUILDINGS CRITERIA OF THE CLIMATE BONDS STANDARD**

**Type of engagement:** Assurance Engagement
**Period engagement was carried out:** June 5 – 17, 2019
**Approved verifier:** Sustainalytics
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## Scope and Objectives

Obvion N.V. (Obvion), a Dutch mortgage provider and a wholly owned subsidiary of Rabobank,[1] has engaged Sustainalytics to review and verify that Obvion's Green STORM 2019 meets the requirements under the Low Carbon Buildings criteria of the Climate Bonds Standard.

The security will be part of Obvion's residential mortgage securitization program known as STORM. The aim of the Green STORM 2019 issuance is to refinance a mortgage asset pool with added environmental value, focusing namely on energy efficiency and energy performance. The security will refinance an existing mortgage loans portfolio with residential buildings in the Netherlands that are (i) among the top 15% most energy efficient, and therefore comply with CBI's standards for best performing in terms of carbon emissions, or (ii) that have demonstrated at least a 30% improvement in energy efficiency compared to an average house within the same building period, and therefore comply with CBI's standards for reductions in carbon emissions.

## Climate Bonds Standards Criteria

Pre-issuance requirements under Climate Bond Standards Version 2.1:

- Low Carbon Buildings Criteria
    - Residential Buildings Criteria: Residential buildings with an EPC label of A, as calculated using NEN7120+NV
    - Building Upgrades Criteria: Residential buildings which have been refurbished and retrofitted which leads to an increase of 2 notches in EPC (with a minimum after the increase of a C label) representing at least a 30% energy improvement

## Issuing Entity's Responsibility

Obvion was responsible for providing information and documents relating to:

- The details about the nominated residential buildings underlying the mortgage loans chosen for refinancing
- The details concerning the selection process for the eligible mortgage loans
- The process of management and disbursement of proceeds
- The details about the reporting commitments including frequency, key performance indicators and expected impact

## Independence and Quality Control

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of Obvion's green bond, issued to finance Nominated Projects, and provided an

[1] Statutory name: Coöperatieve Rabobank U.A.

independent opinion informing Obvion as to the conformance of the green bond with the Pre-Issuance requirements and Low Carbon Buildings Criteria of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by Obvion. Sustainalytics is not responsible if any aspect of the Nominated Projects referred to in this opinion including estimates, findings, opinions, or conclusions are incorrect. Thus, Sustainalytics shall not be held liable if any of the information or data provided by Obvion management and used as a basis for this assessment were not correct or complete.

Sustainalytics makes all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight over the assessment of the bond.

## Verifier's Responsibility

The work undertaken as part of this engagement included conversations with relevant Obvion employees and review of relevant documentation to confirm the green bond's conformance with the Climate Bonds Certification Pre-Issuance Requirements, which include:

- Conformance of Obvion's green bond with the Climate Bonds Standard Version 2.1
- Conformance with the Technical Criteria on Low Carbon Buildings Criteria
    - Conformance with the approved proxies for the "top 15%" for the Netherlands
- Conformance with the Internal Processes & Controls requirements
- Conformance with Reporting Prior to Issuance requirements

## Basis of the Opinion

Sustainalytics conducted the verification in accordance with the Climate Bond Standard Version 2.1 and with International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Information.

Sustainalytics planned and performed the verification by obtaining evidence and other information and explanations that Sustainalytics considers necessary to give limited assurance that the Obvion Green STORM 2019 securitisation meets the requirements of the Climate Bond Standard. Upon reviewing evidence and other information, Sustainalytics is of the opinion that Obvion will ensure compliance with Climate Bond Standard requirements.

## Conclusion

Based on the limited assurance procedures conducted of the Obvion Green STORM 2019 securitisation under the Low Carbon Buildings Criteria of the Climate Bonds Standard, nothing has come to Sustainalytics' attention that causes us to believe that, in all material aspects, the bond is not in conformance with the Climate Bond Standard's Pre-Issuance Requirements.

# Schedule 1: Green STORM 2019 Energy Efficient Properties Selection Process

This memo describes the methodology that Obvion applies to select energy efficient mortgage loans for its green RMBS programme in line with the Green Bond Principles; a selection of Dutch residential properties within the top 15% in terms of energy efficiency and a selection of improved (refurbished) properties with at least 30% energy efficiency improvement compared to an average house within the same building period.

**Dutch housing energy performance methodology**

The Green STORM 2019 green selection methodology is based on:
(i) the latest calculation methodology version 1.2 ('*Rekenmethodiek definitief energielabel inclusief indeling energielabelklassen*') of the Netherlands Enterprise Agency ('*Rijksdienst voor Ondernemend Nederland*' ("*RVO*")) which states the *provisional* Energy Performance Certificates ("EPC"), as provided in Figure 1 below, and the Energy Index ("EI") which is used to determine *definitive* EPCs; and
(ii) the Dutch Buildings Directive ('*Bouwbesluit*') which sets the Dutch Energy Performance Coefficient (EPCof) requirements for newly built residential houses as shown in Table 1, and which is in line with the European Buildings Directive.

EPC ranks houses based on their environmental impact with A being the best and G being the worst category, where EPC of A is the minimum environmental standard for newly built residential buildings. Every house in the Netherlands has received a provisional EPC based on property characteristics such as construction year and property type (see Figure 1 and 2). Homeowners are required to register a definitive EPC before the relevant property is sold or can register it on their own initiative. A definitive EPC has been audited by an expert; the expert does not visit the property in all cases but verifies the evidence provided by the homeowner (such as pictures or invoices). Using definitive EPCs increases the certainty of selecting mortgages that have actually improved by a minimum of 30%.

| | PROPERTY TYPE (C) | | CONSTRUCTION PERIOD (J) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | up to 1945 | 1946-1964 | 1965-1974 | 1975-1982 | 1983-1987 | 1988-1991 | 1992-1999 | 2000-2005 | 2006-2013 | 2014 and later |
| | | | J1 | J2 | J3 | J4 | J5 | J6 | J7 | J8 | J9 | J10 |
| C1 | Detached house | | G | F | D | C | C | B | B | B | A | A |
| C2 | Semi-detached house | | G | F | D | C | C | C | B | B | A | A |
| C3 | Terraced house (corner) | | G | F | D | C | C | C | B | B | A | A |
| C4 | Terraced house (mid) | | F | E | C | C | C | C | B | A | A | A |
| C5 | Multi-family home | Single-story | G | E | E | B | C | C | C | B | A | A |
| C6 | | Multi-story | F | E | C | B | C | C | A | A | A | A |

*Figure 1. Schematic overview of provisional Energy Performance Certificates based on building period and housing type (source: RVO, methodology version 1.2)*

| | PROPERTY TYPE (C) | | CONSTRUCTION PERIOD (J) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | up to 1945 | 1946-1964 | 1965-1974 | 1975-1982 | 1983-1987 | 1988-1991 | 1992-1999 | 2000-2005 | 2006-2013 | 2014 and later |
| | | | J1 | J2 | J3 | J4 | J5 | J6 | J7 | J8 | J9 | J10 |
| C1 | Detached house | | 317,757 | 155,488 | 152,518 | 121,453 | 48,331 | 66,958 | 148,054 | 86,182 | 73,990 | 47,930 |
| C2 | Semi-detached house | | 173,428 | 153,294 | 135,660 | 86,532 | 65,422 | 68,597 | 122,535 | 52,286 | 50,002 | 35,437 |
| C3 | Terraced house (corner) | | 128,955 | 155,585 | 198,324 | 152,180 | 74,636 | 47,750 | 60,210 | 34,741 | 44,315 | 41,566 |
| C4 | Terraced house (mid) | | 293,771 | 283,787 | 385,490 | 311,139 | 165,069 | 108,838 | 163,122 | 100,204 | 107,837 | 86,204 |
| C5 | Multi-family home | Single-story | 563,378 | 391,321 | 411,392 | 237,177 | 195,684 | 127,285 | 250,202 | 159,178 | 285,845 | 177,409 |
| C6 | | Multi-story | 768 | 10,894 | 10,524 | 17,015 | 7,097 | 2,129 | 4,074 | 4,017 | 3,597 | 585 |
| | | Total | 1,478,057 | 1,150,369 | 1,293,908 | 925,496 | 556,239 | 421,557 | 748,197 | 436,608 | 565,586 | 389,131 |
| | | % of total | 18.6% | 14.4% | 16.2% | 11.6% | 7.0% | 5.3% | 9.4% | 5.5% | 7.1% | 4.9% |
| | | % A of total | | | | | | | 0.1% | 1.3% | 7.1% | 4.9% |

*Figure 2. Division of provisional Energy Performance Certificates based on the number of houses as per October 2018 (source: website RVO, "voorlopige labels oktober 2018")*

**Dutch housing energy performance methodology – calculating efficiency improvement**

Energy Index (EI) is the measure that is used to determine the definitive EPC. Since 2015 it is based on the norm NEN7120+NV, previously it was based on the old norm ISSO 82.3. NEN7120+NV is an improvement of the old norm ISSO 82.3. According to the Second Opinion "*Inijking Energielabels*",[2] the new norm is equal to the old norm in complexity, but the most important difference is that the old norm is based on the original construction quality of the houses, while the new norm takes into account the fact that many people did the

[2] A.F. Kruithof and H.J.J. Valk, Nieman, Second Opinion Inijking Energielabels, 2015, https://zoek.officielebekendmakingen.nl/blg-440075.pdf

most obvious energy improvements over the past years (e.g. double glazing). Consequently, under the new norm, older houses have on average a better EPC/EI. By using the new norm the selection for refurbished houses will be stricter because the initial EPC/EI is better and therefore a refurbished property will need to improve to a higher EPC in order to be eligible. In other words, the selected properties will have a 30% additional energy efficiency improvement compared to an average home from the same building period.

**Identification of top 15% most energy efficient houses**

The provisional EPCs rank houses based on their environmental impact with A being the best and G being the worst category. Table 1 shows that the EPC of norm has become more stringent from 1996 onwards by lowering the EPC of norm for all newly build properties (the lower the coefficient, the more energy-efficient the property).

| Date in Dutch Building Directive | EPCof required for a building permit |
|---|---|
| 01/01/1996 | 1.4 |
| 01/01/1998 | 1.2 |
| 01/01/2000 | 1 |
| 01/01/2006 | 0.8 |
| 01/01/2011 | 0.6 |
| 1-1-2015 (current norm) | 0.4 |
| As of 1-1-2020 a new standard will be introduced: "*Bijna Energieneutrale Gebouwen*" (BENG), which is based on NTA 8800 and which will be compliant with the European Energy Performance of Buildings Directive (EPBD). It will include a scale based on BENG requirements (BENG 1, 2 and 3) and replace the current system of EPCof. Currently this scale is not yet approved by the Dutch legislator. On 26 April 2019 the Dutch government officially announced that the introduction of BENG is delayed until further notice. A new introduction date is not yet published. | |

*Table 1. Historic EPCof (applicable for newly build residential houses) per start date in the Dutch Building Directive*

To identify a portfolio consisting of the top 15% most energy efficient properties following the current applicable energy norms, all houses with an A label can be considered as a more energy efficient selection than houses with a lower energy label. In fact, properties with an A label constitute the top 13.3% of the Dutch housing market and therefore remain well within the top 15%. A more graphical display of the selection is shown in the red area in Figure 3 below.

| | PROPERTY TYPE (C ) | | CONSTRUCTION PERIOD (J) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | up to 1945 | 1946-1964 | 1965-1974 | 1975-1982 | 1983-1987 | 1988-1991 | 1992-1999 | 2000-2005 | 2006-2013 | 2014 and later |
| | | | J1 | J2 | J3 | J4 | J5 | J6 | J7 | J8 | J9 | J10 |
| C1 | Detached house | | G | F | D | C | C | B | B | B | A | A |
| C2 | Semi-detached house | | G | F | D | C | C | C | B | B | A | A |
| C3 | Terraced house (corner) | | G | F | D | C | C | C | B | B | A | A |
| C4 | Terraced house (mid) | | F | E | C | C | C | C | B | A | A | A |
| C5 | Multi-family home | Single-story | G | E | E | B | C | C | C | B | A | A |
| C6 | | Multi-story | F | E | C | B | C | C | A | A | A | A |

*Figure 3: Eligible properties for Green STORM 2019 (outlined in red)*

**Identification of refurbished houses with at least 30% energy efficiency improvement**

Although the most efficient A label properties represent the best-in-class properties in terms of energy efficiency, home improvements (refurbishments) of older properties are another important contributor to energy savings within the housing market. Therefore, it is important that the selection also includes these older refurbished properties that have improved their EPC. According to the Climate Bond Standard, properties that have realised at least 30% improvement in energy performance qualify for the standard. Figure 4 quantifies the improvements and shows that improvement of the Energy Index of at least 30% is equal to an increase of 2 notches in EPC (with a minimum of a C label after the increase). Improvements to definitive label A are considered eligible in any case since this would be an improvement to the best possible energy certificate.

| | | | TO | | | | |
|---|---|---|---|---|---|---|---|
| | EPC | | A | B | C | D | E |
| | | EI | 0.6 | 1.2 | 1.4 | 1.8 | 2.1 |
| FROM | C | 1.4 | -57% | -14% | | | |
| | D | 1.8 | -67% | -33% | -22% | | |
| | E | 2.1 | -71% | -43% | -33% | -14% | |
| | F | 2.4 | -75% | -50% | -42% | -25% | -13% |
| | G | 2.7 | -78% | -56% | -48% | -33% | -22% |

**Matching Obvion's mortgage loans with EPC-data**

In order to identify the current EPC's of Obvion's mortgage pool, Obvion matched the postal codes and addresses of the residential buildings that serve as collateral to the mortgage loans with externally provided EPC data. The data was provided by real estate data provider Calcasa. Calcasa has provided an overview of the energy performance certificates issued in respect of the properties that secure the relevant mortgage loans. For properties in respect of which definitive EPCs have been issued, Calcasa relied on the information given to it by the RVO. Since the RVO has not provided Calcasa with the provisional EPCs in respect of the properties, Calcasa calculated these provisional EPCs in accordance with the EPC methodology and by research of the Dutch residential housing market.

**Obvion's green pool selection**

Based on the analysis above, Obvion selected mortgage loans connected to houses with an A label on the basis of the relevant property type and construction period (red bordered area in Figure 3). Additionally, Obvion selected existing houses that have improved (refurbished) their energy efficiency to at least a definitive label A and those houses that have improved by at least two notches from the provisional EPC as per Figure 1 to the definitive EPC B or C (as a proxy for at least 30% improvement of energy efficiency) provided by the RVO database. Since Obvion's housing type data does not 1-on-1 match with the classifications used by the RVO, this was approached conservatively by classifying the properties in either an apartment (C5) or detached house (C1), and all other residential buildings as terraced houses (C4).

The above selection methodology leads to a total eligible provisional pool of assets for Obvion's Green RMBS. Obvion will randomly select a final pool from the provisional pool to match the final note size. The proceeds of the notes will be used to refinance these existing mortgage loans following the transaction documentation.

# Schedule 2A: Pre-Issuance General Requirements

| | |
|---|---|
| Selection of Nominated Projects and Assets: | *1.1* Statement on the environmental objectives of the bond<br><br>*1.2* Confirmation that Nominated Projects and Assets meet the Climate Bonds criteria<br><br>*1.3* Document a list of Nominated Projects and Assets<br><br>*1.4* Confirmation that Nominated Projects and Assets will not be nominated to other Climate Bonds<br><br>*1.5* Confirmation that Net Proceeds of the Green Bond shall not be greater than the value of the Nominated Projects and Assets |
| Internal Processes and Controls | *2.1.1* Tracking of proceeds<br><br>*2.1.2* Managing of unallocated proceeds<br><br>*2.1.3* Earmarking funds to Nominated Projects and Assets |
| Reporting Prior to Issuance | *3.1.1* Investment area of Nominated Projects and Assets<br><br>*3.1.2* Intended types of temporary investments for the management of unallocated proceeds<br><br>*3.1.3* Approach of Verifier<br><br>*3.1.4* Whether periodic Assurance Engagement will be undertaken, and the expected frequency of any periodic Assurance Engagements |

# Schedule 2B: Conformance to the Pre-Issuance Requirements

| Procedure Performed | Factual Findings | Error or Exceptions Identified |
|---|---|---|
| Verification of requirements specified under Selection of Nominated Projects and Assets | *1.1* The objective of the bond is to primarily use proceeds to refinance a mortgage asset pool with (i) Dutch residential properties within the top 15% in terms of energy performance in the Netherlands, and (ii) improved (refurbished) properties with at least 30% energy efficiency improvement.<br><br>*1.2* The Nominated Projects and Assets meet the Low Carbon Buildings Criteria of the Climate Bond Standard.<br><br>*1.3* The Nominated Projects and Assets include:<br>• mortgage loans that rank in the top 15% in terms of energy performance (using an approved proxy standard)<br>• mortgage loans for refurbished properties – with at least 30% energy efficiency improvement.<br><br>*1.4* Obvion's management confirms that the projects shall not be nominated to other Climate Bonds.<br><br>*1.5* Obvion's management confirms that the net proceeds of the bond shall not be greater than the value of the projects. | None |
| Verification of requirements specified under Internal Processes and Controls | *2.1.1* Obvion's management confirms that proceeds will be segregated and tracked in a systematic manner and will be exclusively used to finance Nominated Projects.<br><br>*2.1.2* Obvion's management confirms that all proceeds will be immediately allocated upon issuance to refinance eligible loans; hence no proceeds will be left unallocated.<br><br>*2.1.3* Obvion's management has confirmed that the proceeds from Green Storm 2019 will be fully allocated upon issuance, and that a third party has been appointed to review the allocation on a monthly basis; Rabobank commits to replace any loans with other eligible mortgages when needed in order to maintain full allocation. | None |
| Verification of requirements specified under Reporting Prior to Issuance | *3.1.1* Obvion's management confirms that the proceeds of the transaction will primarily be used to refinance mortgage loans that meet the eligibility criteria.<br><br>*3.1.2* Obvion's management confirms that unallocated proceeds shall be fully allocated upon issuance to refinance eligible loans.<br><br>*3.1.3* The bond's offer letter confirms that an approved third-party verifier has been appointed to confirm the bond's conformance with pre-issuance requirements of the Low Carbon Buildings Criteria of the Climate Bonds Standard.<br><br>*3.1.4* The bond's offer letter confirms that an approved third-party verifier will conduct post-issuance assurance exercise within a year's time to reaffirm conformance of the bond with the Low Carbon Buildings Criteria of the Climate Bonds Standard. No | None |

| | | |
|---|---|---|
| | third-party verifier has been appointed yet to conduct the Post-Issuance assurance exercise. Post-issuance will be carried out 12 months after issuance. However, conducting periodic Assurance Engagements over the term of the bond is at the discretion of the bond issuer, as per CBI guidelines | |

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The client is fully responsible for certifying and ensuring its commitments' compliance, implementation and monitoring.

## Sustainalytics

Sustainalytics is a leading independent ESG and corporate governance research, ratings and analytics firm that support investors around the world with the development and implementation of responsible investment strategies. With 13 offices globally, the firm partners with institutional investors who integrate ESG information and assessments into their investment processes. Spanning 30 countries, the world's leading issuers, from multinational corporations to financial institutions to governments, turn to Sustainalytics for second-party opinions on green and sustainable bond frameworks. Sustainalytics has been certified by the Climate Bonds Standard Board as a verifier organization, and supports various stakeholders in the development and verification of their frameworks. In 2015, Global Capital awarded Sustainalytics "Best SRI or Green Bond Research or Ratings Firm" and in 2018 and 2019, named Sustainalytics the "Most Impressive Second Party Opinion Provider. The firm was recognized as the "Largest External Reviewer" by the Climate Bonds Initiative as well as Environmental Finance in 2018, and in 2019 was named the "Largest Approved Verifier for Certified Climate Bonds" by the Climate Bonds Initiative. In addition, Sustainalytics received a Special Mention Sustainable Finance Award in 2018 from The Research Institute for Environmental Finance Japan and the Minister of the Environment Award in the Japan Green Contributor category of the Japan Green Bond Awards in 2019.

For more information, visit www.sustainalytics.com

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