In 2017, Deutsche Hypothekenbank (Actien-Gesellschaft) (Deutsche Hypo) commissioned ISS-oekom to assess and confirm the sustainable added value of an asset pool to be (re-)financed by Green Bonds (Green Pfandbriefe as well as Green Seniors). The assessment of the green bond asset pool was conducted using the criteria and indicators of Green Bond KPIs developed by ISS-oekom.

Additionally, Deutsche Hypothekenbank commissioned ISS-oekom to carry out an annual reassessment in order to provide investors with assurance that the asset selection still complies with the eligibility criteria and that new projects are selected accordingly. The aim of the Green Bond issuances is to finance mortgage loans secured by commercial real estate mainly in Germany but also in Great Britain, BeNeLux, France, Poland and Spain. Deutsche Hypo aims to contribute to the reduction of greenhouse gas emissions by financing energy efficient buildings.

ISS-oekom's mandate included the following services:

- Definition of Green Bond KPIs ("ISS-oekom Green Bond KPIs") containing a clear description of the eligible asset category and the social and environmental criteria assigned to this category for evaluating the sustainability-related performance of the assets financed through the proceeds of the bonds.
- Analysis of the alignment of the Green Bonds to be issued out of the green bond asset pool against the ICMA’s Green Bond Principles.
- Evaluation of compliance of the green bond asset pool with the ISS-oekom Green Bond KPIs criteria.
- Review and classification of Deutsche Hypo's sustainability performance on the basis of the ISS-oekom Corporate Rating.

ISS-oekom's overall evaluation of the Green Bond Programme of Deutsche Hypo is positive:

- Deutsche Hypo 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 Green Bond Principles (Part I of this Second Party Opinion).
- The overall sustainability quality of the selected assets for inclusion in the green bond asset pool in terms of sustainability benefits and risk avoidance and minimisation is good (Part II of this Second Party Opinion).\(^1\)
- The issuer itself shows a good sustainability performance (Part III of this Second Party Opinion).

\(^1\) The sustainability performance of the bonds issued may differ from this assessment depending on the assets selected for inclusion in the bonds.
There are some aspects for which more specific selection or performance criteria would be recommended as these could add to the overall quality of the Green Bond Programme: Firstly, ISS-oekom recommends including minimum requirements regarding energy efficiency improvements for renovations. Additionally, it would be beneficial to complement the existing energy efficiency requirements with minimum (transparency) requirements regarding water use as well as tenant health and safety, especially for those buildings that do not have green building certificates.
1) Use of Proceeds

The proceeds of the Green Bonds (Green Pfandbriefe as well as Green Seniors) to be issued by Deutsche Hypo will be exclusively used to finance the construction, acquisition or energy efficiency renovation of energy efficient buildings. These Green Buildings serve as collateral for loans granted by or to be granted by Deutsche Hypo.

The total asset pool comprises EUR 1,691,139,096.77. Details regarding the projects included in the asset pool as of 23 August 2018 are listed in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Country</th>
<th>Type of building/project</th>
<th>Green building certification</th>
<th>Level of certificate</th>
<th>Energy certificate available</th>
<th>Construction year</th>
<th>Year of last renovation</th>
<th>Share of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>DGNB</td>
<td>Platin</td>
<td>No or no information</td>
<td>2008</td>
<td></td>
<td>1.9%</td>
</tr>
<tr>
<td>2</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Platin</td>
<td>Yes</td>
<td>2010</td>
<td></td>
<td>1.7%</td>
</tr>
<tr>
<td>3</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>DGNB</td>
<td>Gold</td>
<td>No or no information</td>
<td>No information</td>
<td>2011</td>
<td>3.9%</td>
</tr>
<tr>
<td>4</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>LEED</td>
<td>Gold</td>
<td>No or no information</td>
<td>2006</td>
<td></td>
<td>0.7%</td>
</tr>
<tr>
<td>5</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Platin</td>
<td>Yes</td>
<td>2009</td>
<td></td>
<td>0.8%</td>
</tr>
<tr>
<td>6</td>
<td>DE</td>
<td>Other retail</td>
<td></td>
<td>Yes</td>
<td></td>
<td>1958</td>
<td>2011</td>
<td>2.1%</td>
</tr>
<tr>
<td>7</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Gold</td>
<td>Yes</td>
<td>2012</td>
<td></td>
<td>1.7%</td>
</tr>
<tr>
<td>8</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>DGNB</td>
<td>Platin</td>
<td>No or no information</td>
<td>1969</td>
<td>1996</td>
<td>2.2%</td>
</tr>
<tr>
<td>9</td>
<td>DE</td>
<td>Production and storage building</td>
<td></td>
<td>Yes</td>
<td></td>
<td>2010</td>
<td></td>
<td>1.6%</td>
</tr>
<tr>
<td>10</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Gold</td>
<td>Yes</td>
<td>1995</td>
<td></td>
<td>3.0%</td>
</tr>
<tr>
<td>11</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td></td>
<td>Yes</td>
<td></td>
<td>1962</td>
<td>2009</td>
<td>0.1%</td>
</tr>
<tr>
<td>12</td>
<td>DE</td>
<td>Office building w/o A.C.</td>
<td></td>
<td>Yes</td>
<td></td>
<td>1924</td>
<td>2009</td>
<td>1.3%</td>
</tr>
<tr>
<td>13</td>
<td>DE</td>
<td>Hotel building (4 or 5 star hotels)</td>
<td></td>
<td>Yes</td>
<td></td>
<td>1986</td>
<td>2013</td>
<td>2.6%</td>
</tr>
<tr>
<td>14</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td></td>
<td>Yes</td>
<td></td>
<td>2012</td>
<td></td>
<td>0.4%</td>
</tr>
<tr>
<td>15</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>DGNB</td>
<td>Gold</td>
<td>No or no information</td>
<td>1998</td>
<td>2006</td>
<td>1.7%</td>
</tr>
<tr>
<td>16</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Gold</td>
<td>Yes</td>
<td>2014</td>
<td></td>
<td>1.3%</td>
</tr>
<tr>
<td>17</td>
<td>DE</td>
<td>Hotel building (up to 3 star hotels)</td>
<td></td>
<td>Yes</td>
<td></td>
<td>2016</td>
<td></td>
<td>0.8%</td>
</tr>
<tr>
<td>18</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Silber</td>
<td>No or no information</td>
<td>2011</td>
<td></td>
<td>1.9%</td>
</tr>
<tr>
<td>19</td>
<td>DE</td>
<td>Office building w/o A.C.</td>
<td>DGNB</td>
<td>Gold</td>
<td>Yes</td>
<td>2013</td>
<td></td>
<td>0.6%</td>
</tr>
<tr>
<td>20</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Gold</td>
<td>Yes</td>
<td>2013</td>
<td></td>
<td>1.2%</td>
</tr>
<tr>
<td>21</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td></td>
<td>Yes</td>
<td></td>
<td>2011</td>
<td>2013</td>
<td>1.1%</td>
</tr>
<tr>
<td>22</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td></td>
<td>Yes</td>
<td></td>
<td>2015</td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>23</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td></td>
<td>Yes</td>
<td></td>
<td>1964</td>
<td>1994</td>
<td>2.7%</td>
</tr>
<tr>
<td>24</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td></td>
<td>Yes</td>
<td></td>
<td>2005</td>
<td></td>
<td>3.0%</td>
</tr>
<tr>
<td></td>
<td>Country</td>
<td>Building Type</td>
<td>Certification</td>
<td>Energy Performance</td>
<td>Date of Certification</td>
<td>Energy Efficiency</td>
<td></td>
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<td>---------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>DE</td>
<td>Hotel building (4 or 5 star hotels)</td>
<td>Yes</td>
<td>2005</td>
<td>1.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>FR</td>
<td>Retail building (shopping center)</td>
<td>BREEAM</td>
<td>No or no information</td>
<td>2013</td>
<td>4.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>DE</td>
<td>Office building w/o A.C.</td>
<td>DGNB</td>
<td>Silber</td>
<td>Yes</td>
<td>2014</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>DGNB</td>
<td>Gold</td>
<td>Yes</td>
<td>2016</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>2010</td>
<td>4.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>DE</td>
<td>Apartment building</td>
<td>Yes</td>
<td>2015</td>
<td>1.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>Yes</td>
<td>2016</td>
<td>1.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>1964-2006</td>
<td>1.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>LEED</td>
<td>Gold</td>
<td>No or no information</td>
<td>No information</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>2007</td>
<td>2.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>DE</td>
<td>Other retail</td>
<td>Yes</td>
<td>2013</td>
<td>0.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>NL</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>1958-2009</td>
<td>3.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>PL</td>
<td>Retail building (shopping center)</td>
<td>Yes</td>
<td>2016</td>
<td>1.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>DE</td>
<td>Hotel building (4 or 5 star hotels)</td>
<td>Yes</td>
<td>2017</td>
<td>0.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>LEED</td>
<td>Platin</td>
<td>Yes</td>
<td>2018</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>LEED</td>
<td>Platin</td>
<td>Yes</td>
<td>2019</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>DE</td>
<td>Production and storage building</td>
<td>Yes</td>
<td>2016</td>
<td>0.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>DE</td>
<td>Production and storage building</td>
<td>Yes</td>
<td>2016</td>
<td>0.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>2016</td>
<td>1.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>DE</td>
<td>Apartment building</td>
<td>Yes</td>
<td>2016</td>
<td>0.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>PL</td>
<td>Retail building (shopping center)</td>
<td>DGNB</td>
<td>Gold</td>
<td>No or no information</td>
<td>2007</td>
<td>2.4%</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>PL</td>
<td>Office building with A.C.</td>
<td>BREEAM</td>
<td>Very Good</td>
<td>No or no information</td>
<td>2016</td>
<td>2.4%</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>Yes</td>
<td>2017</td>
<td>1.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>FR</td>
<td>Office building with A.C.</td>
<td>BREEAM</td>
<td>Excell ent</td>
<td>No or no information</td>
<td>1880-2016</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>DE</td>
<td>Hotel building (4 or 5 star hotels)</td>
<td>Yes</td>
<td>1900-2010</td>
<td>0.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>DE</td>
<td>Production and storage building</td>
<td>Yes</td>
<td>2016</td>
<td>0.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>DE</td>
<td>Production and storage building</td>
<td>Yes</td>
<td>2017</td>
<td>0.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>DE</td>
<td>Retail building (shopping center)</td>
<td>DGNB</td>
<td>Gold</td>
<td>No or no information</td>
<td>1971-2016</td>
<td>3.8%</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>1950-2015</td>
<td>1.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>NL</td>
<td>Apartment building</td>
<td>BREEAM</td>
<td>Very Good</td>
<td>No or no information</td>
<td>2017</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>55</td>
<td>PL</td>
<td>Office building with A.C.</td>
<td>BREEAM</td>
<td>Excell ent</td>
<td>Yes</td>
<td>2016</td>
<td>1.8%</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>DE</td>
<td>Production and storage building</td>
<td>Yes</td>
<td>2018</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57</td>
<td>PL</td>
<td>Office building with A.C.</td>
<td>LEED</td>
<td>Platin</td>
<td>Yes</td>
<td>2012</td>
<td>1.2%</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>PL</td>
<td>Office building with A.C.</td>
<td>LEED</td>
<td>Platin</td>
<td>Yes</td>
<td>2012</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>59</td>
<td>NL</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>1870-2013</td>
<td>0.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>DE</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>2020</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>UK</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>2009-2009</td>
<td>1.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>UK</td>
<td>Hotel building (up to 3 star hotels)</td>
<td>Yes</td>
<td>2012</td>
<td>0.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>UK</td>
<td>Office building with A.C.</td>
<td>Yes</td>
<td>2009-2009</td>
<td>1.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2) Process for Project Evaluation and Selection

Deutsche Hypo has established a Green Building Commission to define minimum requirements for inclusion of an asset in the green bond asset pool. The Green Building Commission consists of members of the sustainability team who support the sustainability management. The eligibility criteria for inclusion of an asset in the green bond asset pool are regularly reassessed to ensure that they meet the minimum standards expected in the target markets. A financed building qualifies as a Green Building – as defined by Deutsche Hypo – if the eligibility criteria valid at the time of financing are met.

Currently, Deutsche Hypo’s Green Building Commission has set the following minimum requirements for an asset to qualify as a Green Building:

Energy certificate with a maximum end energy demand or consumption in kWh/m²a by building type:

- 50 kWh/m²a for new residential properties
- 75 kWh/m²a for old residential properties
- 30 kWh/m²a for logistics buildings
- 70 kWh/m²a for retail buildings (shopping malls, department stores)
- 95 kWh/m²a for other retail buildings
- 95 kWh/m²a for hotel buildings (up to 3 star hotels)
- 105 kWh/m²a for hotel buildings (4 to 5 star hotels)
- 110 kWh/m²a for production and storage buildings (with heating)
- 110 kWh/m²a for office buildings without air conditioning
- 135 kWh/m²a for office buildings with air conditioning

or

Green building certification:

- LEED Silver or above
- BREEAM Good or above
- DGNB Silver or above (for certificates given after 01.07.2015: Gold or above)
- HQE Basic or above

If the use of renewable energies reduces the primary energy demand or consumption and it is thus below the end energy value, the primary energy demand or consumption is used for the assessment.

Further, properties of clients active in controversial business areas cannot be financed. If a property is leased by a controversial entity, it cannot be financed either. If it turns out that a Green Building is rent out to a tenant active in controversial business areas, the property will be removed from the green bond asset pool.
3) Management of Proceeds

The treasury department regularly verifies, whether buildings already earmarked as suitable for a Green Bond emission still meet the eligibility criteria. If an asset no longer meets the eligibility criteria, it is replaced by another asset. An asset no longer meets the eligibility criteria, if the green building or energy efficiency certificate expired or if a tenant active in controversial business areas occupies the building.

Deutsche Hypo seeks to ensure that eligible assets within the green bond asset pool exceed the total proceeds of outstanding and to be issued bonds. In the case of unallocated proceeds, Deutsche Hypo will invest these in deposits of financial institutions which show a good sustainability performance validated by a recognised sustainability rating agency (i.e. financial institutions rated ‘Prime’ by ISS-oekom).

4) Reporting

Use of proceeds reporting:

Deutsche Hypo will publish a Green Bond Reporting on its website\(^2\) on an annual basis.

The Green Bond Reporting will contain the following aggregated information:

- Volume of eligible assets in the green bond asset pool
- Carbon avoidance of all eligible assets in comparison to a relevant average
- Information on Green Buildings (e.g. green building certificates, location, sustainability criteria)

Moreover, Deutsche Hypo will publish information on outstanding bonds on a regular basis.

External Review (Assurance):

Deutsche Hypo has commissioned ISS-oekom to review the implementation of the Green Bond Principles and the sustainability quality of the Green Bond Programme. This Second Party Opinion will be published on Deutsche Hypo’s website\(^4\).

\(^2\) [www.deutsche-hypo.de](http://www.deutsche-hypo.de)
1) ISS-oekom Green Bond KPIs

The ISS-oekom Green Bond KPIs serve as a structure for evaluating the sustainability quality of the use of proceeds of Deutsche Hypo’s Green Bond Asset Pool. It comprises firstly the definition of the use of proceeds category offering added social and environmental value and secondly the specific sustainability criteria by means of which this added value and therefore the sustainability performance of the Green Bond Asset 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 Asset Pool and which can also be used for reporting. Details on the individual criteria and indicators for the categories can be found in Annex 1 „ISS-oekom Green Bond KPIs“.

2) Evaluation of the assets

ISS-oekom has evaluated whether the assets included in the Green Bond Asset Pool match the categories and criteria listed in the ISS-oekom Green Bond KPIs. The evaluation was carried out using information and documents provided to ISS-oekom on a confidential basis by Deutsche Hypo (e.g. energy certificates). Amounts outstanding were used to calculate the share of underlying assets which fulfil an indicator requirement.
Findings

Green buildings (commercial real estate)

Sustainability Risks and Benefits 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.

Pre-requisite: All buildings underwent a detailed selection process that ensures good standards regarding energy efficiency.

- 1. Involvement of local residents at the planning stage (only applicable for new builds)
  - Regarding the 11 newly constructed or renovated buildings in the asset pool, no information is available on the involvement of local residents at the planning stage.

- 2. Environmental standards for site selection (only applicable for new builds)
  - 8 of the 9 newly constructed or renovated buildings with a floor space of above 5,000 m², accounting for 87% of the respective asset pool's volume, are inside metropolitan areas. For the 1 newly constructed building outside metropolitan areas, accounting for 13% of the respective asset pool's volume, an environmental impact assessment is not available. For 1 additional newly constructed building, no information on floor space is available.
  - 10 of the 11 newly constructed or renovated buildings, accounting for 89% of the respective asset pool's volume, were developed on brownfield sites. The 1 remaining project, accounting for 11% of the asset pool, was developed on a greenfield site.

- 3. Access to public transport
  - 59 building projects, accounting for 98% of the asset pool, are located within a maximum of 1 km from one or more modalities of public transport. The 4 remaining projects, accounting for 2% of the asset pool, are within a maximum of 2.3 km from a modality of public transport.
4. Social standards for construction
- 100% of newly constructed or renovated building projects are located in countries where high labour standards are in place for construction work conducted by own employees and contractors (e.g. ILO core conventions).
- For 100% of newly constructed or renovated building projects, high standards regarding health and safety for both own employees and contractors are in place (provided for by national legislation).

5. Environmental standards for construction
- For all 11 newly constructed or renovated building projects in the asset pool, no information is available on environmental standards during construction/renovation (e.g. measures to reduce water, waste and energy consumption and adequate management of waste streams at construction sites).

6. Sustainable building materials
- For all 11 newly constructed or renovated building projects in the asset pool, no information is available on sustainable procurement measures regarding building materials (e.g. recycled materials, third-party certification of wood based materials).

7. Safety of building users
- For 49 building projects located in Germany, accounting for 51% of the asset pool, operational safety is ensured by constructional measures (e.g. fire safety, exit routes) (based on national legislation). For 14 projects, accounting for 49% of the asset pool, no detailed information on safety is available.

8. Water use minimisation in buildings
- For 21 building projects, accounting for 41% of the asset pool, adequate measures to reduce water use are in place (e.g. greywater recycling, efficient applications). For the remaining projects, no information is available on adequate measures.

9. Labels / certificates
- 27 building projects, accounting for 49.9% of the asset pool, achieved good scores in green building certificates, i.e. minimum BREEAM “Very Good”, LEED “Gold”, DGNB “Silver / Gold”3, or HQE “Excellent”. For the remaining 36 projects, building certificates are not available or no certificates were issued. These projects account for 50.1% of the asset pool.

10. Sustainable use / purpose of buildings
- For 100% of building projects, production facilities of armaments, pesticides, tobacco and generation facilities for environmentally controversial energy forms such as nuclear power or fossil fuelled power are excluded by Deutsche Hypo.

Controversy Assessment
- A controversy assessment on the underlying assets did not reveal any controversial activities or practices that could be attributed to Deutsche Hypo.

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3 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.
In the ISS-oekom Corporate Rating with a rating scale from A+ (excellent) to D- (poor), Deutsche Hypo was awarded a score of C+ and rated “Prime”, meaning that it fulfils ISS-oekom’s demanding requirements regarding sustainability performance in its sector.

As at 20 September 2018, this rating puts Deutsche Hypo in place 7 out of 49 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 impact of lending and other financial services/product
- Statutory ESG-standards linked to the geographical allocation of the lending portfolio
- Customer and product responsibility
- Employee relations and work environment

In three out of the four key issues, Deutsche Hypo achieved a rating that was above the average for the sector. A significant outperformance was achieved in “Employee relations and work environment” and “Customer and product responsibility”. Regarding “Statutory ESG-standards linked to the geographical allocation of the lending portfolio” Deutsche Hypo scores slightly below the average for the sector.

In recent years, the company was not involved in any controversies 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 with a controversy score of 0. The industry’s average is also “minor”.

Details on the rating of the issuer can be found in Annex 2 “ISS-oekom Corporate Rating of Deutsche Hypothekenbank (Actien-Gesellschaft)”.

ISS-oekom AG
Munich, 27 September 2018
Disclaimer

1. 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.

2. 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 selection criteria is based solely on random samples and documents submitted by the issuer.

3. 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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About ISS-oekom

ISS-oekom 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. ISS-oekom 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. ISS-oekom’s analyses therefore currently influence the management of assets valued at over 600 billion euros.

As part of our Sustainability 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.

Contact: ISS-oekom, Goethestraße 28, 80336 Munich, Germany, tel: +49 / (0) 89 / 54 41 84-90, e-mail: info@oekom-research.com
Annex

- Annex 1: 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 Deutsche Hypo’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.

Use of Proceeds

Green buildings (commercial real estate)

The proceeds of the Green Bonds to be issued by Deutsche Hypo will be exclusively used for financing Green Buildings. For buildings to qualify as Green Buildings – as defined by Deutsche Hypo – they have to meet the following requirements:

• The annual end energy demand or consumption does not exceed set limits (e.g. 70 kWh/m²a for retail buildings)

or

• External green building certificates must fulfil a minimum level (e.g. BREEAM good or above)

and

• Sustainable use of the building is ensured (no production facilities of armaments, pesticides, tobacco, pornography and generation facilities for environmentally controversial energy forms such as nuclear power or fossil fuelled power)
In order to ensure that the environmental and social risks linked to the financed projects are prevented and the opportunities clearly fostered, a set of sustainability criteria has been established for the project category. A possible quantitative indicator, allowing for measurement of progress and regular reporting, completes each criterion.

A. Green buildings (commercial real estate)

1. Involvement of local residents at the planning stage (only applicable for new builds)
   Quantitative indicator:
   - Percentage of loans allocated to building projects for which residents are involved at the planning stage (e.g. information of residents, dialogue platforms).

2. Environmental standards for site selection (only applicable for new builds)
   Quantitative indicators:
   - Percentage of loans allocated to large-scale building projects (> 5,000 m²) outside metropolitan areas for which an environmental impact assessment is carried out.
   - Percentage of loans allocated to building projects that are developed on brownfield sites.

3. Access to public transport
   Quantitative indicator:
   - Percentage of loans allocated to building projects that are located within a maximum of 1 km from one or more modalities of public transport.

4. Social standards for construction
   Quantitative indicator:
   - Percentage of loans allocated to building projects with high labour and health and safety standards for construction work conducted by own employees and contractors (e.g. ILO core conventions).

5. Environmental standards for construction
   Quantitative indicator:
   - Percentage of loans allocated to building projects for which resource efficiency (e.g. water, energy) and adequate management of waste is guaranteed by the implementing construction companies.
6. Sustainable building materials
Quantitative indicator:
• Percentage of loans allocated to building projects for which sustainable procurement measures regarding building materials are in place (e.g. recycled materials, third-party certification of wood based materials).

7. Safety of building users
Quantitative indicator:
• Percentage of loans allocated to building projects for which the operational safety is ensured by constructional measures (e.g. fire safety, elevator safety).

8. Water use minimisation in buildings
Quantitative indicator:
• Percentage of loans allocated to building projects for which measures to reduce water use are in place (e.g. water metering, high-efficiency fixtures and fittings, rainwater harvesting).

9. Energy efficiency of buildings
Quantitative indicator:
• Percentage of loans allocated to building projects that received good scores in the energy efficiency ratings of the respective buildings certificates (BREEAM, LEED) or that are proven to be part of the top 15% of the local market in terms of energy efficiency.

10. Labels / Certificates
Quantitative indicator:
• Percentage of loans allocated to building projects that obtained a BREEAM “Very Good”, DGNB “Silver / Gold”\(^4\), LEED “Gold” or HQE “excellent” or better certification.

11. Sustainable use / purpose of buildings
Quantitative indicator:
• Percentage of building projects for which production facilities of armaments, pesticides, tobacco and generation facilities for environmentally controversial energy forms such as nuclear power or fossil fuelled power can be excluded.

Controversies
• Description of controversial projects (e.g. due to labour rights violations, environmental accidents, adverse biodiversity impacts).

Possible impact indicators: Energy consumption and avoidance of CO\(_2\) emissions
• Average primary energy consumption (in kWh/m\(^2\)).
• Annual CO\(_2\) emissions (in kg/m\(^2\)) compared to the local average.

\(^4\) 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.
ISS-oekom Corporate Rating

Deutsche Hypothekenbank AG

| Industry | Financials/Mortgage & Public Sector
Finance | Status | Prime |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Country</td>
<td>Germany</td>
<td>Rating</td>
<td>C+</td>
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<tr>
<td>ISIN</td>
<td>DE000DHY4614</td>
<td>Prime Threshold</td>
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</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Company name</th>
<th>Country</th>
<th>Grade</th>
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</thead>
<tbody>
<tr>
<td>Berlin Hyp AG</td>
<td>DE</td>
<td>B-</td>
</tr>
<tr>
<td>Nederlandse Waterschapsbank N.V.</td>
<td>NL</td>
<td>B-</td>
</tr>
<tr>
<td>de Volksbank N.V.</td>
<td>NL</td>
<td>B-</td>
</tr>
</tbody>
</table>

Legend:  
- Industry
- Company
- Prime

**Key Issue Performance**

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

**Distribution of Ratings**

49 companies in the industry

**Rating History**

**Controversy Monitor**

<table>
<thead>
<tr>
<th>Company</th>
<th>Controversy Score</th>
<th>Controversy Level</th>
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</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Maximum Controversy Score</td>
<td>Controversy Risk</td>
</tr>
</tbody>
</table>

- Minor
- Moderate
- Significant
- Severe

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Deutsche Hypothekenbank AG

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).

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.