NATIONAL GRID GREEN FINANCING FRAMEWORK

DNV GL INDEPENDENT ASSESSMENT

Scope and Objectives

National Grid PLC (henceforth referred to as "National Grid") is a utility company that owns and operates the high-voltage electricity transmission network in England and Wales, and operates, but does not own, the Scottish networks. National Grid also owns and operates electricity transmission and distribution networks in the North-Eastern United States. In addition, National Grid, through National Grid Ventures, develops, operates and invests in innovative energy projects across the US and the UK that are adjacent to its core regulated operations.

Although National Grid does operate gas networks, these are out of scope for the Green Financing Framework.

National Grid has long-standing commitments to reduce its carbon footprint, use resources responsibly and protect the natural environment. National Grid has also identified the eight Sustainable Development Goals (SDG’s) that are most relevant for its business.

National Grid has developed a Green Financing Framework (the “Framework”) under which it can raise debt to support the financing and/or refinancing of assets and expenditures of an environmentally sustainable nature across its activities.

DNV GL Business Assurance Services Limited (“DNV GL”) has been commissioned by National Grid to provide a review of the Framework. Our methodology to achieve this is described under ‘Work Undertaken’ below. We were not commissioned to provide independent assurance or other audit activities.

No assurance is provided regarding the financial performance of Bonds/Loans issued via the National Grid Framework, the value of any investments, or the long-term environmental benefits of the transaction. Our objective has been to provide an assessment that the Framework has met the criteria established on the basis set out below.

Responsibilities of the Management of National Grid and DNV GL

The management of National Grid has provided the information used by DNV GL during the delivery of this review. Our statement represents an independent opinion and is intended to inform National Grid’s management and other interested stakeholders in the Framework as to whether the Framework is aligned with the ICMA Green Bond Principles (GBP) and the LMA Green Loan Principles (GLP). In our work, we have relied on the information and the facts presented to us by National Grid. DNV GL is not responsible for any aspect of the projects or assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV GL shall not be held liable if any of the information or data provided by National Grid management and used as a basis for this assessment were not correct or complete.
Basis of DNV GL’s opinion

We have adapted our green bond eligibility assessment methodology to create a National Grid specific Green Finance Framework Eligibility Assessment Protocol (henceforth referred to as “Protocol”) - see Schedule 2. Our Protocol includes a set of suitable criteria that can be used to underpin DNV GL’s opinion.

As per our Protocol, the criteria against which the Framework has been reviewed are grouped under the four Principles:

- **Principle One: Use of Proceeds.** The Use of Proceeds criteria are guided by the requirement that an issuer of a bond/loan must use the funds raised to finance eligible activities. The eligible activities should produce clear environmental benefits.

- **Principle Two: Process for Project Evaluation and Selection.** The Project Evaluation and Selection criteria are guided by the requirements that an issuer of a bond/loan should outline the process it follows when determining eligibility of an investment using Green Bond/Loan proceeds, and outline any impact objectives it will consider.

- **Principle Three: Management of Proceeds.** The Management of Proceeds criteria are guided by the requirements that a bond/loan should be tracked within the issuing organisation, that separate portfolios should be created when necessary and that a declaration of how unallocated funds will be handled should be made.

- **Principle Four: Reporting.** The Reporting criteria are guided by the recommendation that at least annual reporting to the bond/loan investors should be made of the use of proceeds and that quantitative and/or qualitative performance indicators should be used, where feasible.

Work undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by National Grid in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

- Creation of a National Grid specific Protocol, adapted to the purpose of the Framework, as described above and in Schedule 2;

- Assessment of documentary evidence provided by National Grid on the Framework and supplemented by a high-level desktop research. These checks refer to current assessment best practices and standards methodology;

- Review of National Grid’s published material with regards to its environmental activities relating to the company;

- Discussions with National Grid’s management, and review of relevant documentation and evidence related to the criteria of the Protocol;

- Documentation of findings against each element of the criteria.

Our opinion as detailed below is a summary of these findings.
Findings and DNV GL’s opinion

DNV GL’s findings are listed below:

1. **Principle One: Use of Proceeds.**

   National Grid intends to use the proceeds of securities issued under the Framework to finance and re-finance environmental projects which fall under the following Eligible Categories:
   - Renewable Energy
   - Energy Efficiency
   - Green Buildings
   - Clean transportation
   - Pollution prevention and control
   - Environmentally sustainable management of living natural resources and land use.

   DNV GL has reviewed evidence and can confirm that an amount at least equivalent to the net proceeds from the funds raised under the Framework will be allocated to finance or refinance new or existing assets and expenditures of National Grid and its subsidiaries.

   National Grid has stated that, wherever possible, it aims to refinance Eligible Green Projects that have been completed or charged in the last three years but may also finance on-going and future Eligible Green Projects.

   National Grid has also provided a table mapping its Eligible Green Categories and the SDGs (United Nations Sustainable Development Goals).

   National Grid has also outlined the types of project within each category and associated selection criteria in order to determine eligibility.

   DNV GL concludes that the eligible categories outlined in the Framework are consistent with the categories outlined in the Green Bond Principles and the Green Loan Principles.

2. **Principle Two: Process for Project Evaluation and Selection.**

   DNV GL concludes that National Grid’s Green Financing Framework appropriately describes the process of project evaluation, selection and exclusions.

   National Grid has created a dedicated Green Financing Committee at National Grid PLC level, comprising of representatives of the sustainability, UK & US regulated businesses, National Grid Ventures and finance functions, chaired by the Group Treasurer. As this committee will assess all nominated projects from National Grid’s entities, this will ensure consistency of assessment for all Eligible Green Projects.

   Investments are proposed through business cases by the respective operational and/or finance teams of the US & UK Regulated businesses as well as National Grid Ventures. DNV GL can confirm that, as part of those, eligibility for inclusion in the Eligible Green Projects will be reviewed. National Grid will track the list of Eligible Green Projects via a register.

DNV GL has reviewed evidence and can confirm that the proceeds arising from future issuances will be adequately managed.

National Grid has confirmed that the proceeds from green financing will be tracked internally and each Operating Company will have a dedicated sub-portfolio of Eligible Green Projects with an amount equivalent to the net proceeds assigned for allocation. The balance of the proceeds will be updated quarterly to match allocations.

In the event that proceeds are unallocated, these will be invested as per the company’s liquidity management policy.

National Grid intends that the amounts represented by the Eligible Green Portfolio will exceed, or at least be equal to, the amount of funding raised under this Framework.


DNV GL can confirm National Grid has committed to producing appropriate reporting on the environmental impacts of its investments made under the Framework.

National Grid intends to report on the use of proceeds and environmental impacts within one year from the date of a green financing issuance under the Framework and annually thereafter. Green Bond allocation and impact Reporting will be made publicly available to investors. The reporting will be done in either a stand-alone report or as part of National Grid’s annual or sustainability reports and will be made available on National Grid’s website.

The allocation Report will detail the list of Eligible Projects financed, aggregated amount of allocation of the net proceeds to the Eligible Projects at category level, the proportion of net proceeds used for financing versus refinancing and the balance of any unallocated proceeds.

National Grid has also committed to measuring where feasible the impact of environmental projects through a wide range of proposed KPIs, which are listed in the Framework.

On the basis of the information provided by National Grid and the work undertaken, it is DNV GL’s opinion that the Framework meets the criteria established in the Protocol and that it is aligned with the stated definition of green bonds within the Green Bond Principles and green loans within the Green Loan Principles.

for DNV GL Business Assurance Services UK Limited
London, 13th November 2019

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DNV GL – Business Assurance

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Principal Consultant and Reviewer
DNV GL – Business Assurance
About DNV GL

Driven by our purpose of safeguarding life, property and the environment, DNV GL enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers’ decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight.

With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.
# SCHEDULE 1: DESCRIPTION OF CATEGORIES TO BE FINANCED THROUGH THE FRAMEWORK

<table>
<thead>
<tr>
<th>Environmental categories</th>
<th>Description</th>
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</table>
| **Renewable Energy**     | Investments and / or expenditures in projects that would increase the share of low carbon electricity below the threshold of 100g CO2e / kWh in power networks, including:  
  ➢ **Connection infrastructure**: connection and/or integration of low carbon electricity generation sources to the grid, including:  
    - Connection of renewable energy generation\(^1\)  
    - Connection of energy storage systems  
    - Infrastructure allowing the integration of renewable energy to the grid  
  ➢ **Transmission and Distribution infrastructure**: construction, operation and/or maintenance of electric power transmission and distribution networks, including:  
    - Extra-high voltage and high-voltage interconnected and interconnection systems, including subsea interconnectors  
    - High-voltage, medium-voltage and low-voltage distribution systems  
  ➢ **Renewable Energy generation**: acquisition, conception, construction, development and/or operation of renewable energy production plants, including:  
    - Solar PV and concentrated solar  
    - Wind  
    - Small scale hydro (<25MW) and run-of-river and tidal  
    - Bioenergy (sourced from sustainable feedstock) |

\(^1\)Connection infrastructure net of customer contributions
## Energy Efficiency

Investments and / or expenditures in projects that would reduce energy consumption, improve network / energy efficiency and/or reduce electricity grid losses, including:

- **Power Control devices**: devices and/or facilities allowing higher transmission, distribution and balancing efficiency, and/or better flexibility and technical availability of the grid.
- **Storage systems**: acquisition, conception, construction, development and/or operation of electricity storage facilities, aiming at power grid stabilisation and/or management of peak generation of renewable energy.
- **Retrofits**: replacements and / or improvements to reduce energy losses, improve resilience of the grid and improve energy efficiency, leading to energy savings of at least 20%, including:
  - Investment in new primary stations
  - Investment in replacement of LED lighting or ventilation
- **Smart Equipment**: devices and/or infrastructure allowing for energy efficiency, reliability, resiliency, and/or exchange of Renewable electricity between users, including:
  - Smart grids
  - Smart meters

## Green Buildings

Investments and / or expenditures in projects that would improve the energy efficiency performance of buildings, including:

- **Acquisition or construction of existing or new commercial buildings that have achieved or expect to achieve the below certification**:
  - BREEAM ≥ “Very Good”
  - LEED: ≥ “Gold”
  - or similar recognized standard

**Renovations of existing buildings** that achieve energy savings of at least 30% in comparison to the baseline performance before the building renovation.
## Clean Transportation

Investments and/or expenditures in projects that would reduce greenhouse gas emissions from transports, including:

**Infrastructure for clean transportation:** construction, development, operation, acquisition and maintenance of electric grid infrastructure supporting sustainable mobility and cleaner vehicles with a lower environmental impact, including:

- Electric vehicle charging stations
- Transmission and Distribution systems and facilities supporting clean transportation, such as network extensions or capacity upgrades.

- **Renewal of the Group’s fleet,** including passenger cars, light commercial vehicles and large vehicles for:
  - Electric vehicles
  - Hybrid vehicles (threshold of 50g CO2/km until 2025)

## Pollution Prevention & Control

Investments and/or expenditures in projects that would reduce waste and greenhouse gas emissions, including:

- **the construction, development, operation and maintenance of facilities, systems or equipment aiming at reducing greenhouse gas emissions,** including:
  - SF6 alternative or replacement projects
  - g3 technology
- **Greenhouse gas control devices,** including:
  - SF6 release monitoring equipment

- **Waste prevention, reduction and recycling:** projects and programmes aimed at reducing, reusing and recycling office and industrial recovered assets and wastes, including:
  - Recovered assets reusing and recycling programmes
  - Industrial waste reusing and recycling programmes

- **Transforming technology:** projects aimed at using and recycling energy and material wastes to reduce our emissions and carbon footprint, including:
  - Heat-to-energy facilities and technologies
Environmentally sustainable management of living natural resources and land use

Investment and / or expenditures on projects that would reduce the impact on land and terrestrial biodiversity, such as:

➢ the sustainable management and value enhancement of our land
➢ the preservation and restoration of natural landscapes
➢ grid improvements, including:
  o the substitution of overhead line by underground cables
# SCHEDULE 2: NATIONAL GRID SPECIFIC SUSTAINABILITY FINANCING FRAMEWORK ELIGIBILITY ASSESSMENT PROTOCOL

## 1. Use of proceeds

<table>
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<tr>
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<th>Requirements</th>
<th>Work Undertaken</th>
<th>DNV GL Findings</th>
</tr>
</thead>
</table>
| 1a   | Types of Financing Framework | The bond must fall in one of the following categories, as defined by the Green Bond Principles:  
• Use of Proceeds Bond  
• Use of Proceeds Revenue Bond  
• Project Bond  
• Securitized Bond  
Green loans are defined as any type of loan instrument made available exclusively to finance or re-finance, in whole or in part, new and/or existing eligible Green Projects. | In addition to reviewing the evidence below, we had several detailed discussions with National Grid. Evidence reviewed:  
• National Grid Green Financing Framework November 2019 | The Framework outlines the type of Bonds and Loans expected to be issued under the Framework such as, but not limited to:  
• Green bonds  
• Green Loans  
• Other unspecified financing instruments  
The specific type of bond/loan will need be further assessed on an individual basis. |
| 1b   | Green Project Categories | The cornerstone of a Green bond/loan is the utilisation of the proceeds which should be appropriately described in the legal documentation for the security. | Evidence reviewed:  
• National Grid Green Financing Framework November 2019 | We conclude that the Framework appropriately describes the proposed utilisation of proceeds. The specific utilisation of proceeds of each issuance will need to be further assessed on an individual basis |
| 1c   | Environmental benefits | All designated Green Project categories should provide clear environmentally sustainable or social benefits, which, where feasible, will be quantified or assessed by the issuer. | Evidence reviewed:  
• National Grid Green Financing Framework November 2019 | The Framework outlines the expected environmental benefits that will be realised by any Bonds/Loans issued under the Framework. Specific quantifiable benefits of each issuance will be agreed on a case by case basis and subject to further assessment. |
## 2. Process for Project Selection and Evaluation

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| 2a   | Investment-decision process | The issuer of a Green Bond/Loan should outline the decision-making process it follows to determine the eligibility of projects using Green Bond proceeds | Evidence reviewed:  
- National Grid Green Financing Framework November 2019 | We conclude that the Framework appropriately describes the process of project selection. The specific issuances will need to be further assessed on a case by case basis. |
| 2b   | Issuer’s environmental and governance framework | In addition to information disclosed by an issuer on its Green Bond process, criteria and assurances, Green Bond investors may also take into consideration the quality of the issuer’s overall framework and performance regarding environmental sustainability. | In addition to reviewing the evidence below, we had several detailed discussions with National Grid. Evidence reviewed:  
- National Grid Green Financing Framework November 2019  
We also performed reviewed environmental and social governance documentation:  
- National Grid non-financial performance highlights for the 2018/19 reporting year  
- Northeast 80x50 Pathway whitepaper  
- The National Grid book | We conclude that from the information provided, the Framework is in line with National Grid’s wider approach to managing environmental sustainability. |
### 3. Management of proceeds

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<tbody>
<tr>
<td>3a</td>
<td>Tracking procedure</td>
<td>The net proceeds of a Bond/Loan should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner and attested to by a formal internal process that will be linked to the issuer’s lending and investment operations for Green Projects.</td>
<td>In addition to reviewing the evidence below, we had several detailed discussions with National Grid. Evidence reviewed: National Grid Green Financing Framework November 2019</td>
<td>We conclude that the Framework commits National Grid to tracking use of proceeds in an appropriate manner and attested to by a formal internal process.</td>
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<tr>
<td>3b</td>
<td>Tracking procedure</td>
<td>So long as the Bond/Loans are outstanding, the balance of the tracked proceeds should be periodically reduced by amounts matching eligible green investments or loan disbursements made during that period.</td>
<td>Evidence reviewed: National Grid Green Financing Framework November 2019</td>
<td>We conclude that there is a clear process in place for the tracking of the balance taking into account disbursements.</td>
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### 4. Reporting

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<th>Work Undertaken</th>
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<tr>
<td>3c</td>
<td>Temporary holdings</td>
<td>Pending such investments or disbursements to eligible Projects, the issuer should make known to investors the intended types of temporary investment instruments for the balance of unallocated proceeds.</td>
<td>Evidence reviewed:</td>
<td>We conclude that National Grid has appropriately disclosed how it will manage any unallocated proceeds within its liquidity portfolio.</td>
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<td>4a</td>
<td>Periodical reporting</td>
<td>In addition to reporting on the use of proceeds and the temporary investment of unallocated proceeds, issuers should provide at least annually a list of projects to which Bond and where appropriate Loan proceeds have been allocated including - when possible with regards to confidentiality and/or competitive considerations - a brief description of the projects and the amounts disbursed, as well as the expected environmentally sustainable impact.</td>
<td>In addition to reviewing the evidence below, we had several detailed discussions with Pennon. Evidence reviewed:</td>
<td>We confirm National Grid has committed to annual green reporting which will be made available through as either a stand-alone report or Annual Report or Sustainability Report which will provide investors with information on the selected projects and include quantification of the environmental benefits of the selected projects. It is noted that loans will not have public reporting due to the nature of these financial instruments.</td>
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