

The State of the Netherlands

PRE-ISSUANCE VERIFICATION LETTER

SOLAR ENERGY, MARINE RENEWABLE ENERGY, WATER INFRASTRUCTURE, LOW CARBON BUILDINGS, AND LOW CARBON LAND TRANSPORTATION CRITERIA OF THE CLIMATE BONDS STANDARD

Type of engagement: Assurance Engagement

Period engagement was carried out: March 2019

Approved verifier: Sustainalytics

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Scope and Objectives

The State of the Netherlands has engaged Sustainalytics to review and verify that the State of the Netherlands' green bond meets the requirements under the (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard.

The State of Netherlands is one of the founding members of the European Union with the large majority of its territory in Western Europe. The Netherlands is one of the most densely populated countries in Europe with a population of approximately 17 million people and land mass of 41,526 km.

The State of Netherlands is committed to the UN Sustainable Development Goals as well as the Paris Agreement on Climate Change. In addition to alignment with the EU's established goal of 40% reduction of GHG emissions by 2030 compared to 1990 levels,¹ the Netherlands has set its own national target at 49% reduction and calls for a 55% reduction at the EU level by 2030.² In conjunction with its quantitative climate change goals, the Netherlands established the Delta Programme to ensure that flood risk management, freshwater supply, and spatial planning will be climate-proof and water-resilient by 2050.

The State of the Netherlands' Green Bond is intended to finance existing and future government expenditures that promote the Netherlands' realization of policy objectives aimed at decarbonizing the country's energy, housing and transportation sector, while building resilience to climate change in the following use of proceeds categories: (i) renewable energy, (ii) energy efficiency, (iii) clean transportation, and (iv) climate change adaptation & sustainable water management.

Climate Bonds Standards Criteria

Pre-issuance requirements under Climate Bond Standards Version 2.1:

- Solar energy
 - Onshore solar electricity generation facilities
- Marine renewable energy
 - Offshore wind energy
- Water infrastructure
 - Engineered water infrastructure
 - Flood defence
 - Water distribution
 - Nature-based water infrastructure
 - Flood defence
- Low carbon buildings
 - Residential property energy efficiency upgrades
- Low carbon land transportation
 - Public passenger transport infrastructure

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Issuing Entity's Responsibility

The State of the Netherlands was responsible for providing information and documents relating to:

- The details concerning the selection process for the expenditures related to solar energy generation, offshore wind parks, water infrastructure as part of the Dutch Delta Fund, project management, maintenance, planning and construction of the Dutch rail network and Scheme for Energy Performance in the Rental Sector.
- The details of the nominated expenditures
- The management systems for internal processes and controls for the nominated expenditures including: tracking of proceeds, managing unallocated proceeds and earmarking funds to Nominated Expenditures
- The details of commitments for reporting prior to issuance, including: investment areas, management of unallocated proceeds and frequency of periodic Assurance Engagements

Independence and Quality Control

Sustainalytics, a leading provider of ESG and corporate governance research and ratings to investors, conducted the verification of the State of the Netherlands' green bond, issued to finance Nominated Expenditures, and provided an independent opinion informing the State of the Netherlands as to the conformance of the green bond with the Pre-Issuance requirement and (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard.

Sustainalytics has relied on the information and the facts presented by the State of the Netherlands. Sustainalytics is not responsible if any aspect of the Nominated Expenditures 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 the State of the Netherlands 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 State of the Netherlands 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 the State of the Netherlands' green bond with the Climate Bonds Standard Version 2.1;
- Conformance with the Technical Criteria on (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard;
- 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 reasonable assurance that the State of the Netherlands Green Bond meets the requirements of the Climate Bond Standard. Upon reviewing evidence and other information, Sustainalytics is of the opinion that the State of the Netherlands will ensure compliance with Climate Bond Standard requirements.

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Conclusion

The State of the Netherlands' Green Bond is intended to finance existing and future government expenditures that promote the realization of policy objectives aimed at decarbonizing the country's energy, housing and transportation sector, while building resilience to climate change in the following use of proceeds categories: (i) renewable energy, (ii) energy efficiency, (iii) clean transportation, and (iv) climate change adaptation & sustainable water management.

Sustainalytics has assessed the expenditures of the Dutch State nominated for this Green Bond and concluded that the nominated expenditures align with the (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard.

Based on the limited assurance procedures conducted of the State of the Netherlands' inaugural Green Bond, Sustainalytics believes that, in all material respects, the State of the Netherlands' Green Bond is in conformance with the relevant criteria of the Climate Bonds Standard Pre-Issuance Requirements.

Schedule 1: Detailed Overview of Nominated Expenditures

Details of the Nominated Expenditure are provided below:

1) Marine renewable energy: Subsidies for the following wind offshore parks:

Name	Capacity	Number of windmills	Location
Gemini Offshore Wind Park	600 MW	150	Dutch North Sea
Luchterduinen Offshore Wind Park	129 MW	43	Dutch North Sea

2) Water infrastructure expenditures include a variety of projects. In the following table examples of projects financed are included in the description:

Expenditure name	Description
Flood risk management investments	<p>Second Flood Protection Program (HWBP-2): Investments to get flood defences up to legal standard</p> <p>Space for the River: Investments to bring safety along the Rhine branches and the downstream part of the dike Maas (from Hedikhuizen) into line with the legally required standard and contribute to improving the spatial quality of the river area, thereby strengthening the river area economically, ecologically and regarding landscape.</p> <p>Grensmaas and Zandmaas, nature development: primarily contributing to flood risk management and in addition, these projects realize nature that benefits the National Ecological Network (EHS).</p>
Freshwater supply investments	<p>The Delta Plan on Freshwater Supply 2015-2021: Large number of initiatives and measures to make the freshwater supply in the Netherlands more robust for the future effects of climate change and to tackle the bottlenecks that are already there.</p> <p>'Haringvliet Locks Management Decision' project: improves the situation for migratory fish, such as salmon, sea trout and glass eel and improves the fresh water to agricultural areas.</p> <p>The Water Authorities strive for a 30% improvement in energy efficiency in the period 2005-2020, including improvements in equipment.^{1,2}</p>
Management, maintenance, and replacement	<p>Monitoring water levels, water quality and information provision;</p> <p>Crisis management and prevention;</p>

¹ <https://www.uvw.nl/waterschappen-kunnen-energie-besparen-op-poldergemalen/>

² Example application of energy efficient equipment being applied at the Afluitdijk: <https://www.vanoord.com/news/2018-improvement-work-afsluitdijk>

	Regulation of use through licensing and enforcement;
	Complying with administrative agreements on water distribution and use (including in water agreements);
	Regulation of water distribution (updating and applying operational models, operation (storm surge) barriers, weirs, pumping stations and drains).
Experimentation	Measures and provisions in other policy areas such as nature, the environment or economic development, subject to the condition that these measures are related to measures for water safety or freshwater supplies.
Network-related costs and other expenditures	Equipment costs of Rijkswaterstaat (RWS) and the Delta Commissioner Staff Other network-related expenses of RWS and program expenses of the Delta Commissioner that cannot be directly allocated to the individual projects from this Delta Fund
Water quality investments	Water safety and water quality improvements, with particular attention paid to development possibilities and safety of shipping and to nature compensation, recreation and the improvement of the habitat of flora and fauna.

3) Low carbon buildings: Residential property energy efficiency upgrades:

Incentive Scheme for Energy Performance in the Rental Sector (STEP). STEP awards subsidies for refurbishments of rental housing, require a minimum improvement of two energy-index steps, but only grant subsidy when this also results in an improvement of a minimum of two EPC energy label steps.³ As part of the programme homes must be visited by a registered Energy Performance Advisor (EPA) in order to verify compliance with the energy efficiency improvements required by the programme.

According to the Climate Bond Standard, properties that have realized at least 30% improvement in energy performance qualify for the standard. Improvement of the Energy Index of at least 30% is equal to an increase of 2 notches in EPC.

4) Low Carbon Transportation:

Expenditures related to upgrading trajectories for higher-frequency passenger rail travel, railway capacity management, bicycle parking space at rail stations, and linkages to other modes of public transportation. In order to be eligible for Climate Bond Initiative Certification scheme, railway infrastructure must fulfill Criterion For 2017 Criterion 3: Emissions threshold for public passenger transport, which is 75gCO₂/passenger/km for 2020 and 56gCO₂/passenger/km for 2030.

³ STEP requirements available at: <https://www.rvo.nl/subsidies-regelingen/stimuleringsregeling-energieprestatie-huursector-step/voorwaarden-step/particulieren>

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In 2017, the average emissions for Dutch passenger trains were 6g CO₂/passenger/km. This performance is derived from data on the Dutch rail use,⁴ indicating 75% of Dutch passenger km transport via intercity electric trains, 20% local electric trains, and 5% local diesel trains, which emit 24 g CO₂/passenger/km. Given the average 6g CO₂/passenger/km, the State of the Netherlands' green bond fulfills the Climate Bond Initiative Criteria.

⁴ Data on the use of and emissions of the Dutch train systems can be found under "Personenvervoer" at: <https://www.co2emissiefactoren.nl/lijt-emissiefactoren/>

Schedule 2A: Pre-Issuance General Requirements

Selection of Nominated Projects and Assets:	1.1 Statement on the environmental objectives of the bond
	1.2 Confirmation that Nominated Projects and Assets meet the Climate Bonds criteria
	1.3 Document a list of Nominated Projects and Assets
	1.4 Confirmation that Nominated Projects and Assets will not be nominated to other Climate Bonds
	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
	2.1.2 Managing of unallocated proceeds
	2.1.3 Earmarking funds to Nominated Projects and Assets
Reporting Prior to Issuance	3.1.1 Investment area of Nominated Projects and Assets
	3.1.2 Intended types of temporary investments for the management of unallocated proceeds
	3.1.3 Approach of Verifier
	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 Expenditures	<p>1.1 The objective of the bond is to primarily use proceeds to finance existing and future government expenditures that promote the Netherlands' realization of policy objectives aimed at decarbonizing the country's energy, housing and transportation sector, while building resilience to climate change.</p> <p>1.2 The Nominated Projects and Assets meet the (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard.</p> <p>1.3 The Nominated Expenditures include those for:</p> <ul style="list-style-type: none"> - solar energy generation - offshore wind parks - water infrastructure as part of the Dutch Delta Fund - project management, maintenance, planning and construction of the Dutch rail network - Incentive Scheme for Energy Performance in the Rental Sector (STEP) <p>1.4 The State of the Netherlands confirms that the projects shall not be nominated to other Climate Bonds. While the construction of the nominated offshore wind projects has been part of other green bonds, the expenditures from the State of the Netherlands focus on subsidies for the ongoing production of renewable energy from these parks.</p> <p>1.5 The State of the Netherlands confirms that the net proceeds of the bond shall not be greater than the value of the projects.</p>	None
Verification of requirements specified under Internal Processes and Controls	<p>2.1.1 The State of the Netherlands confirms that proceeds will be tracked in a systematic manner and will be exclusively used to finance Nominated Projects.</p> <p>2.1.2 The State of the Netherlands confirms that unallocated proceeds will be managed according to the treasury policy of the DSTA.</p> <p>2.1.3 The State of the Netherlands has confirmed that the proceeds from the bond will be allocated to green expenditures on an annual basis. Monitoring will be conducted using realized expenditure levels as reported in the National Financial Annual Report.</p>	None
Verification of requirements specified under Reporting Prior to Issuance	<p>3.1.1 The State of the Netherlands confirms that the proceeds of the transaction will primarily be used to finance expenditures for solar energy generation, offshore wind parks, water infrastructure as part of the Dutch Delta Fund, project management, maintenance, planning and construction of the</p>	None

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Dutch rail network, and the Incentive Scheme for Energy Performance in the Rental Sector (STEP)

- 3.1.2** The State of the Netherlands confirms that unallocated proceeds shall be managed according to the treasury policy of the Dutch State. The investment instruments used by the Dutch State do not include greenhouse gas intensive projects that are inconsistent with the delivery of a low carbon and climate resilient economy.
- 3.1.3** The green bond framework confirms that an approved third-party verifier has been appointed to confirm the bond's conformance with pre-issuance requirements of the (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard.
- 3.1.4** The green bond framework 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 (i) solar energy, (ii) marine renewable energy, (iii) water infrastructure, (iv) low carbon buildings, and (v) low carbon land transportation criteria of the Climate Bonds Standard.

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In case of discrepancies between the English language and translated versions, the English language version shall prevail.

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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.

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