

Second-Party Opinion

State of the Netherlands Green Bond Framework

Evaluation Summary

Sustainalytics is of the opinion that the State of the Netherlands Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018. This assessment is based on the following:



USE OF PROCEEDS The eligible categories for the use of proceeds are aligned with those recognized by the Green Bond Principles. Sustainalytics considers that expenditures related to renewable energy, energy efficiency, clean transportation, climate change adaptation & sustainable water management will lead to positive environmental impacts and advance the UN Sustainable Development Goals (7) Affordable and Clean Energy, (9) Industry, Innovation and Infrastructure, (11) Sustainable Cities and Communities and (13) Climate Action.



PROJECT EVALUATION / SELECTION The State of the Netherlands' internal process for evaluating and selecting expenditures is aligned with market practice. Potential expenditures are initially screened by the Dutch State Treasury Agency (DSTA) before being evaluated and selected during the annual review carried out by the Green Bond Working Group, which is comprised of representatives from the DSTA, Ministry of Finance, Ministry of Economic Affairs and Climate Policy, and Ministry of Infrastructure and Water Management.



MANAGEMENT OF PROCEEDS The State of the Netherlands will annually review the expenditure level of eligible expenditures and will decide how proceeds are allocated to these expenditures. The State of the Netherlands intends to allocate at least 50% of net proceeds to eligible expenditures in the budget year of issuance or future years, while up to 50% of an issuance could be allocated to government expenditures realized in the budget year preceding issuance. Expenditures are tracked based on the National Financial Annual Reporting. Unallocated proceeds will be managed according to the treasury policy of the Dutch State and proceeds will be tracked and reviewed until full allocation. The Dutch State's processes for management of proceeds are aligned with market practice.



REPORTING The State of the Netherlands intends to publish an allocation report annually, within three months following the publication of the National Financial Annual Report. The report will include an overview of the allocation of Green bond proceeds to the eligible expenditure categories, a breakdown of allocation per expenditure category and the unallocated proceeds (if any). Impact reporting will be published annually in an impact report and will provide information on the relevant impact categories. Sustainalytics views the State of the Netherlands' allocation and impact reporting as aligned with market practice.

Evaluation date	18 March 2019
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Issuer Location	The Hague, Netherlands
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Introduction

The State of the Netherlands (the Netherlands, the Dutch State or “the country”), has developed the State of the Netherlands Green Bond Framework (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance and refinance, in whole or in part, 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. The Framework defines eligibility criteria in four areas:

1. Renewable Energy
2. Energy Efficiency
3. Clean Transportation
4. Climate Change Adaptation & Sustainable Water Management

The State of the Netherlands engaged Sustainalytics to review the State of the Netherlands Green Bond Framework, dated 15 March 2019, and to provide a second-party opinion on the Framework’s environmental credentials and its alignment with the Green Bond Principles 2018 (GBP).¹ This Framework has been published in a separate document.²

As part of this engagement, Sustainalytics held conversations with various members of the Dutch State Treasury Agency’s (DSTA) management team and received input from relevant government ministries to understand the sustainability impact of State processes and planned use of proceeds, as well as management of proceeds and reporting aspects of the Dutch State’s green bond. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the Dutch State Treasury Agency Green Bond Framework and should be read in conjunction with that Framework.

¹ The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

² The State of the Netherlands Green Bond Framework is available on the Dutch government’s website at: <https://english.dsta.nl/subjects/g/green-bonds>

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the State of the Netherlands Green Bond Framework

Sustainalytics is of the opinion that the State of the Netherlands Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018. Sustainalytics highlights the following elements of the State of the Netherlands Green Bond Framework:

Use of Proceeds:

- The eligible use of proceeds categories Renewable Energy, Energy Efficiency, Clean Transportation, Climate Change Adaptation & Sustainable Water Management – are recognized as impactful by the Green Bond Principles 2018. Sustainalytics views positively the inclusion of both climate change mitigation and adaptation measures in the Framework. Investments in renewable energy, energy efficiency and clean transportation will support the transition towards a low carbon economy, while climate change adaptation and water management expenditures will build the Netherlands' resilience to the physical impacts of climate change.
- The State of the Netherlands intends to use the net proceeds of the bond to finance and refinance government expenditures made within the budget year preceding the issuance of the green bonds, the budget year of issuance and future budget years. Furthermore, a maximum of 50% of an issuance can be applied to expenses incurred during the previous budget year.
- Sustainalytics highlights that all expenditures eligible under the framework must comply with the sector criteria of the Climate Bonds Standard. Furthermore, the State of the Netherlands has confirmed to Sustainalytics that it intends to have all bonds issued under the framework certified by the Climate Bonds Initiative (CBI). Sustainalytics views this as a robust practice that will facilitate alignment with a 2-degree global warming scenario, consistent with the commitments set out in the Paris Agreement.
- For renewable energy, the eligible expenditures fall under Economic Affairs and Climate Policy, Article 4, "An Efficient Energy Supply and Limiting Climate Change," portion of the National Budget. The Dutch State has confirmed to Sustainalytics that, with regards to renewable energy, the first issuance under the State of the Netherlands Green Bond Framework will only include expenditures for offshore wind and solar in the form of subsidies to the operators of the renewable energy facilities under the Netherlands' SDE subsidy programme.³ In future issuances, other types of renewable energy expenditures might be pursued, but the Dutch State would ensure alignment with the CBI standard through certification prior to using green bond proceeds to finance these expenditures.
- For energy efficiency, the main eligible central government budget code is included in article 4.1, "Energy Transition and Sustainability" for the built environment. While the Netherlands envisions possible future investments for both the commercial and residential building sector, the Dutch State has confirmed to Sustainalytics that the first issuance will focus on subsidies that are part of the Incentive Scheme for Energy Performance in the Rental Sector (STEP). STEP awards subsidies for refurbishments of rental housing, with the goal of improving buildings' Energy Index (EI)/Energy Performance Certificate (EPC) by at least two steps.⁴ 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. Sustainalytics views this approach as credible and highlights the accountability mechanism facilitated through on-site checks by qualified assessors to ensure energy performance objectives are achieved.
- Expenditures under clean transportation relate to project management, maintenance, planning and construction of the Dutch rail network, ranging from noise reduction, safety improvements and passenger accessibility to building new stations, improving the frequency of trains, addressing railway bottlenecks and enhancing the overall convenience for railway passengers, as well as supporting sustainable infrastructure such as bicycle parking.

³ The Promotion of Sustainable Energy Production (SDE subsidy programme provides an operating subsidy to producers of electricity from wind, solar, biomass and hydro facilities. The purpose of the subsidy is to compensate for pricing differentials between the cost of production and market prices. SDE description available at: http://www.rijksbegroting.nl/2019/voorbereiding/begroting,kst248548_15.html

⁴ The STEP subsidy requirements 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. STEP requirements available at: <https://www.rvo.nl/subsidies-regelingen/stimuleringsregeling-energieprestatie-huursector-step/voorwaarden-step/particulieren>

- Expenditures under Climate Change Adaptation & Sustainable Water Management include measures financed by the Dutch Deltafund that improve and ensure the Dutch flood defense, water infrastructure, fresh water supply and quality as well as preparedness of the systems for climate change, such as freshwater reserves for droughts. For more information on impact, see section 3.

Project Selection Process:

- The project evaluation and selection process for eligible expenditures is the responsibility of the inter-departmental Green Bond Working Group and takes place on an annual basis. While the State of the Netherlands prepares an initial list of projects, the Green Bond Working Group reviews the feasibility of including the expenditures, verifies if the expenditures comply with the criteria and definition of Eligible Green Expenditures of the Framework and approves the selected expenditures. The Green Bond Working Group is comprised of representatives from the Dutch State Treasury Agency (who is the Chair), Ministry of Finance, Ministry of Economic Affairs and Climate Policy and Ministry of Infrastructure and Water Management. Sustainalytics notes the broad representation of the Working Group, including stakeholders from relevant ministries, and considers this approach to be aligned with market practice.

Management of Proceeds:

- The Dutch State will monitor the expenditure levels of Eligible Green Expenditures and will allocate the proceeds of issued green bonds to Eligible Green Expenditures on an annual basis. This approach is based on realized expenditure levels as reported in the National Financial Annual Report. The allocation of the use of proceeds will be reviewed and approved by the Green Bond Working Group on an annual basis until full allocation. The unallocated proceeds will be managed according to the treasury policy of the DSTA. Sustainalytics considers that this process is in line with market practice.

Reporting:

- In line with market practice, the State of the Netherlands commits to publishing an allocation report. The allocation report will be published within three months following the release of the National Financial Annual Report of the year of issuance of the inaugural green bond,⁵ containing: (i) an overview of the allocation of issued green bonds to the main categories of Eligible Green Expenditures, (ii) a breakdown of allocated proceeds per type of expenditures and (iii) the amount of unallocated proceeds (if any). Moreover, the State of the Netherlands commits to annually update the allocation report until full allocation of green bond proceeds.
- The Netherlands also commits to publishing an impact report addressing the positive environmental impact of Eligible Green Expenditures across the eligible categories of renewable energy, energy efficiency, clean transportation and climate change adaptation and water management. Result indicators and environmental impact indicators are included for all categories:
 - Renewable Energy
 - Result indicators: Number of projects; Number of projects split per renewable energy technology; total subsidized renewable energy capacity (in MW);
 - Environmental indicators: Annual GHG emission avoidance (in CO₂ equivalent) savings; actual energy production (in MWh)
 - Energy Efficiency
 - Result indicators: Number of applications; number of houses upgraded for energy performance
 - Environmental indicator: Annual energy savings (in MWh); Annual Greenhouse Gas emissions reduction in (in CO₂ equivalent)
 - Clean Transportation
 - Result indicator: Realized projects (case studies); KM of infrastructure maintained
 - Environmental indicator: Annual passenger train kilometers
 - Climate Change Adaptation & Water Management
 - Result indicator: Total km and percentage of dykes reinforced to a safe level; Number and percentage of flood defenses reinforced to a safe level
 - Environmental indicator: Availability of flood defenses (kilometers); Reduction of flood risk/frequency
- The Dutch State will also provide updates caused by time-lags in the publication of specific environmental impact indicators. This reporting is in line with market practice.

⁵ The publication of the National Financial Annual Report takes place annually on the third Wednesday of May.

Alignment with Green Bond Principles 2018

Sustainalytics has determined that the Netherlands' Green Bond Framework aligns to the four core components of the Green Bond Principles 2018. For detailed information please refer to Appendix 1: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Strategy of the Issuer

Contribution of the Framework to the sustainability strategy of the State of the Netherlands

The Netherlands climate change strategy aligns with the ambition to achieve the *well below 2-degree* target outlined by the Paris Agreement. The EU has established a goal of 40% reduction of GHG by 2030 compared to 1990 levels,⁶ but the Netherlands has set its own national target at 49% reduction and calls for a 55% reduction at the EU level by 2030.⁷ Should these targets prove too ambitious for the EU, the Netherlands will strive to make agreements with like-minded countries in northwest Europe on pursuing more ambitious targets than required under EU country allocations.⁸

As a country that is vulnerable to the effects of climate change and, specifically, sea level rise, climate adaptation plays an important role in the Netherlands. On the national level, the Delta Programme has been established to ensure that flood risk management, freshwater supply, and spatial planning will be climate-proof and water-resilient by 2050. Additionally, to mitigate the impact of flooding, drought and temperature changes, the programme has developed a spatial plan to provide the government with an overview of which regions are most vulnerable to extreme weather conditions.

Furthermore, the Dutch State has acknowledged the importance of the green bond market and recognizes the need for closing the investment gap that is required for enabling climate targets to be reached.⁹ Having established quantitative and time-bound targets for greenhouse gas reduction, renewable energy and energy efficiency, Sustainalytics believes that by investing in projects such as wind and solar energy, energy efficiency in the built environment, passenger railway infrastructure and the Dutch Delta Programme, the Dutch State is well positioned to issue green bonds and that these green bonds will contribute to national and EU climate change mitigation and adaptation goals and strategies.

Well positioned to address common environmental and social risks associated with the expenditures

Advances in renewable energy, energy efficiency, clean transportation, climate change adaptation and sustainable water management are of critical importance to reduce GHG emissions and improve climate change resilience of the Netherlands. With that said, Sustainalytics recognizes that the eligible activities can have associated negative externalities, such as biodiversity loss, community relations risks related to large infrastructure projects and the health and safety of employees working on that infrastructure.

As a sovereign, the programmes and projects financed are strictly regulated by government policies and procedures required in the Netherlands. Associated risks are mitigated by the following regulations:

- Land use change and biodiversity loss
 - According to the Dutch Environmental Impact Assessment Decree "Besluit milieueffectrapportage" an Environmental Impact Assessment (EIA) must be carried out prior to project development for certain activities, including offshore wind projects, the construction of new railways.¹⁰ Additionally, evaluations on the need for an EIA must be

⁶ 2030 Climate & Energy Framework available at: https://ec.europa.eu/clima/policies/strategies/2030_en

⁷ Dutch PM calls for more ambitious 2030 EU climate target, available at: <https://www.climatechangenews.com/2018/03/05/dutch-pm-calls-ambitious-2030-eu-climate-target/>

⁸ Coalition Agreement "Confidence in the future" available at: <https://www.kabinetformatie2017.nl/documenten/verslagen/2017/10/10/coalition-agreement-confidence-in-the-future>

⁹ Dutch State will issue a Green Bond available at: <https://english.dsta.nl/news/news/2018/10/31/dutch-state-will-issue-a-green-bond>

¹⁰ EIA Decree (2018) see Part C for list of activities that require a mandatory EIA.

conducted for coast line changes.¹¹ In an environmental performance review conducted by the OECD in 2015, the country has been recognized for its strong environmental protection policies.¹²

- Stakeholder engagement
 - The Dutch government has legislation requiring stakeholder consultation.¹³ Legislation provides legal rights to stakeholders to voice their opinion and/or challenge project development decisions that may have a direct impact on them. There are two phases for stakeholder participation (1) during the initial decision-making phases, before the decision has been made and (2) after a decision has been made, stakeholders can challenge in an administrative procedure “bestuursrecht”, which is then ultimately decided by the courts. Currently, legislation is under revision and a more integrated planning law called Omgevingswet, which is expected to be implemented in 2021.¹⁴ The Dutch government acknowledges that stakeholder participation is crucial for project success.¹⁵
- Worker health and safety issues
 - Dutch health and safety regulations require employers to develop health and safety policies that meet minimum requirements set by the government and provide a safe working place, identify and mitigate potential safety hazards, and provide proper training and education.¹⁶ The most relevant legislation for this Green Bond is the Working conditions law, or Arbeidsomstandighedenwet (Arbowet),¹⁷ which requires that an official inspector supervises and assesses compliance with the legislation. The law holds employers and employees collectively responsible for ensuring safe working conditions. Employers and employees create health and safety procedures that are then submitted to the government.

Sustainalytics is of the opinion that the policies and procedures described above are adequate for mitigating the environmental and social risks associated with the development of large-scale renewable energy, clean transportation and water infrastructure.

Section 3: Impact of Use of Proceeds

All four use of proceeds categories are recognized as impactful by the GBP. Sustainalytics has focused below on where the impact is specifically relevant in local context.

Relevance of Renewable Energy for the Energy Mix of the Netherlands

Between 1990 and 2017, energy consumption in the Netherlands has increased by almost 10%.¹⁸ In 2017, fossil fuels made up around 92% of total energy consumption, while the remaining 8% was produced from mostly nuclear and renewable energy sources.¹⁹ The Netherlands' climate objectives involve achieving 14% sustainable energy by 2020, 16% by 2023 and almost 100% by 2050, while also aiming to reduce its CO₂ emissions by 80-95% compared to 1990.²⁰ In order to reach its goals, the Netherlands launched its Energy Agenda up to 2050, which outlines the way towards a low-carbon energy supply for three decades by using

¹¹ State of the Netherlands Environmental Impact Assessment Decree available at: <https://www.infomil.nl/onderwerpen/integrale/mer/procedurehandleiding/wanneer-beoordeling/besluit-0/> ; <https://wetten.overheid.nl/BWBR0006788/2018-07-01>

¹² OECD Environmental Performance Review of the Netherlands available at: <http://www.oecd.org/environment/country-reviews/2958654.pdf>

¹³ There are several laws related to stakeholder participation, available at: Wet ruimtelijke ordening (<https://wetten.overheid.nl/BWBR0020449/2018-07-01#Hoofdstuk2>); Waterwet (<https://wetten.overheid.nl/BWBR0024779/2018-07-28#Hoofdstuk6>); Wet geluidshinder (<https://wetten.overheid.nl/BWBR0024779/2018-07-28#Hoofdstuk6>); Tracawet <https://wetten.overheid.nl/BWBR0006147/2017-05-01>).

¹⁴ Omgevingswet available at: <https://aandeslagmetdeomgevingswet.nl/omgevingswet/>

¹⁵ Stakeholder Participation for MNP available at:

https://www.pbl.nl/en/publications/2008/StakeholderParticipationGuidancefortheNetherlandsEnvironmentalAssessmentAgency_MainDocument

¹⁶ OSH Wiki – Netherlands available at: https://oshwiki.eu/wiki/OSH_system_at_national_level_-_Netherlands

¹⁷ Arbowet

¹⁸ Energy consumption hardly changed in 2017; published April 2018; <https://www.cbs.nl/en-gb/news/2018/16/energy-consumption-hardly-changed-in-2017>

¹⁹ Energy consumption hardly changed in 2017; published April 2018; <https://www.cbs.nl/en-gb/news/2018/16/energy-consumption-hardly-changed-in-2017>

²⁰ Central government encourages sustainable energy; Government of the Netherlands; accessed February 2019; <https://www.government.nl/topics/renewable-energy/central-government-encourages-sustainable-energy>

safe, reliable and affordable energy sources.²¹ Moreover, the Netherlands Enterprise Agency has also supported the production of national renewable energy through the Stimulation of Sustainable Energy Production (SDE and SDE+) programme, which provides compensation to producers that generate renewable energy.²² Across 2017 the use of renewable energy has significantly risen compared to 2016, increasing the solar energy production by 60% and wind generation by 30%.²³ The Dutch government announced the extension of the programme in 2020 through SDE++, with the aim of continuing support for a decarbonized energy sector.²⁴

Given the context, Sustainalytics considers that the Netherlands' subsidy programme for renewable energy production as a key element that will facilitate ongoing generation capacity, facilitating the country's transition towards a low-carbon economy, while supporting the achievement of climate-related goals.

Energy Efficiency in the context of the Netherlands' climate goals

Approximately 15% of the total CO₂ emissions in the Netherlands are produced from the electricity and gas utilized in homes and other buildings.²⁵ The Netherlands' goals in terms of climate change mitigation are to reach a reduction in GHG emissions of 49% by 2030 and of 95% by 2050.²⁶ In order to reach these targets, the Government of the Netherlands has launched several programmes aimed at increasing the national energy efficiency of buildings, such as the Energy Investment Allowance (EIA),²⁷ Energy Performance Incentive (STEP) and Energy-saving Fund (FEH),²⁸ which financially support building owners through incentives. The DSTA has confirmed to Sustainalytics that STEP will account for all energy efficiency expenditures financed by the inaugural green bond issuance.

Sustainalytics recognizes the importance of energy efficiency gains and their contribution towards energy efficiency goals. By using proceeds to support the implementation of an incentive scheme for increased energy efficiency in the rental sector, Sustainalytics believes that the DSTA Green Bond can contribute to energy efficiency improvements and a reduction of carbon emissions in the Dutch building stock.

Importance of Clean Transportation in Mitigating GHG Emissions

The transportation sector in the Netherlands contributes around 20% of the total GHG emissions of the country,²⁹ which increased by 9% in 2016 compared to 1990 levels.³⁰ Railways' share of the total GHG emissions from the transportation sector amounts to only 0.3%.³¹ Of note is the fact that 91% of passenger rail in the Netherlands is fully electrified, covering 96.3% of the total tonnes/km travelled.³² The Dutch State confirmed to Sustainalytics that the emissions intensity of its passenger rail lines was approximately 6gCO₂ per p-km, further highlighting the importance of maintaining the efficiency of the system and ensuring the appropriate frequency of trains to accommodate passenger travel. It is expected that the use of public railway

²¹ Central government encourages sustainable energy; Government of the Netherlands; accessed February 2019; <https://www.government.nl/topics/renewable-energy/central-government-encourages-sustainable-energy>

²² Stimulation of Sustainable Energy Production (SDE+); Netherlands Enterprise Agency; accessed February 2019; <https://english.rvo.nl/subsidies-programmes/sde>

²³ Netherlands – Energy; published October 2018; <https://www.export.gov/article?id=Netherlands-Energy>

²⁴ Broadening SDE+, the Government of the Netherlands, accessed March 2019; <https://www.rvo.nl/subsidies-regelingen/stimulerend-duurzame-energieproductie>

²⁵ Measures to reduce greenhouse gas emissions; Government of the Netherlands; accessed February 2019; <https://www.government.nl/topics/climate-change/national-measures>

²⁶ Dutch parliament to set target of 95 percent CO₂ reduction by 2050; published June 2018; <https://www.reuters.com/article/us-netherlands-climatechange-law/dutch-parliament-to-set-target-of-95-percent-co2-reduction-by-2050-idUSKBN1JN1X5>

²⁷ Energy Investment Allowance (EIA); Government of the Netherlands; accessed February 2019; <https://business.gov.nl/subsidy/energy-investment-allowance/>

²⁸ Energy Performance Incentive (STEP) and Energy-saving Fund (FEH) rented sector; Netherlands Enterprise Agency; accessed February 2019; <https://business.gov.nl/subsidy/energy-performance-incentive-energy-saving-fund-rented-sector/>

²⁹ CO₂ emissions from transport (% of total fuel combustion); The World Bank; accessed February 2019; <https://data.worldbank.org/indicator/EN.CO2.TRAN.ZS?locations=NL>

³⁰ Greenhouse Gas Emissions in the Netherlands 1990-2016. National Inventory Report 2018; National Institute for Public Health and the Environment; published 2018; <https://www.rivm.nl/bibliotheek/rapporten/2018-0006.pdf>

³¹ Greenhouse Gas Emissions in the Netherlands 1990-2016. National Inventory Report 2018; National Institute for Public Health and the Environment; published 2018; <https://www.rivm.nl/bibliotheek/rapporten/2018-0006.pdf>

³² According to information provided by the State of the Netherlands.

transport will grow by 1% per year.³³ The two main mobility policies set in place³⁴ are aimed at facilitating growth in the use of public transportation and tackling of congestion.³⁵ To facilitate progress on both tracks it is necessary to maintain the frequency of trains and quality of passenger experience. Moreover, in its programme called 'Together We Can Achieve a Carbon Neutral Rail Service', the rail sector committed to achieving a carbon neutral footprint by 2050³⁶ and to achieving an annual energy reduction of 2%. Additionally, the government also strives to promote site-specific renewable energy generation when building and managing stations.³⁷ Considering the above, Sustainalytics positively views the DSTA's investments in clean transportation, as they are expected to contribute to the continued operation of a passenger rail network that is 91% electrified with targets for carbon neutrality and increasing energy efficiency. Moreover, DSTA's clean transportation expenditures would also support the Netherlands in achieving its climate goals noted in the impact sections concerning renewable energy and energy efficiency.

Climate Change Prevention and Sustainable Water Management in the Netherlands

As a country that lies 60% below sea level, the Netherlands has been exposed to flood risk and the dangers of high waters for centuries. With increases in sea level rise, combined with possible changes in storm surges and increased river discharge, climate change poses a major threat for a low-lying delta region like the Netherlands. The Dutch government has acknowledged that flood protection is already inadequate in some areas today. In order to mitigate the increasing risk of flooding, the Netherlands is implementing its 2016 National Climate Adaptation Strategy (NAS). The strategy focuses on several climate change related topics, including the potential failure of critical infrastructure networks, such as dikes, barriers and pumps as a result of extreme weather events.³⁸ The Delta Programme was launched by the Dutch government with the goal of promoting flood risk management, and ensuring that the freshwater supply and spatial planning are climate-proof and water-resilient by 2050.³⁹ The programme document, which is publicly accessible,⁴⁰ outlines a detailed strategy for addressing flood risk and flood defence issues.

Given the regional context of the Netherlands, Sustainalytics is of the opinion that the expenditures of the Delta Programme will directly contribute to flood risk management and climate-resilient spatial planning. The investments will also have reinforcing, and complementary impacts related to the realization of related programmes noted above.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goals and targets:

Use of Proceeds Category	SDG	SDG target
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
Energy Efficiency	7. Affordable and Clean Energy	7.3 By 2030, double the global rate of improvement in energy efficiency
	11. Sustainable Cities and Communities	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
Clean Transportation	9. Industry, Innovation and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial

³³ Public transport; Ministry of Transport, Public Works and Water Management; accessed February 2019;

³⁴ The Netherlands' two primary mobility policies are Nota Mobiliteit (2004) 'Towards reliable and predictable accessibility' and Mobiliteitsaanpak (2008) 'Safely and smoothly from door to door', available at: https://www.wegenwiki.nl/Nota_Mobiliteit and https://assets.amsterdam.nl/publish/pages/865232/mobiliteitsaanpak_amsterdam_2030.pdf

³⁵ Public transport; Ministry of Transport, Public Works and Water Management; accessed February 2019;

³⁶ Transfer to 2040. Flexible and smart public transport; Ministry of Infrastructure and Water Management;

³⁷ Sustainable public transport; Government of the Netherlands; accessed February 2019; <https://www.government.nl/topics/mobility-public-transport-and-road-safety/public-transport/goals-of-public-transport/sustainable-public-transport>

³⁸ Climate Adapt. Netherlands; accessed February 2019; <https://climate-adapt.eea.europa.eu/countries-regions/countries/netherlands>

³⁹ What is the Delta Programme?; Delta Programme Commissioner; accessed February 2019; <https://english.deltacommissaris.nl/delta-programme/what-is-the-delta-programme>

⁴⁰ Delta Programme (2019) available at: <https://english.deltacommissaris.nl/binaries/delta-commissioner/documents/publications/2018/09/18/dp2019-en-printversie/DP2019+EN+printversie.pdf>

		processes, with all countries taking action in accordance with their respective capabilities
	11. Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
Climate Change Adaptation & Sustainable Water Management	13. Climate Action	13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries 13.2 Integrate climate change measures into national policies, strategies and planning

Conclusion

The State of the Netherlands Green Bond framework will contribute to important sustainability goals for renewable energy, energy efficiency, clean transportation, climate change adaptation and sustainable water management. The proceeds will be used to finance a range of budget expenditures, including those supporting wind and solar energy generation; subsidies for the improvement of residential buildings' energy profiles; new national and regional railway infrastructure and improvements to existing infrastructure and flood defenses.

The use of proceeds, project selection and evaluation, management of proceeds and reporting processes are all aligned with market practice. Additionally, the Dutch State will seek CBI verification for its first issuance and all future issuances under this framework, a step that will help to ensure that all future financing of budget expenditures through green bond proceeds are aligned with, at most, a 2-degree global warming scenario, in alignment with the Paris Agreement. Based on the above, Sustainalytics is of the opinion that the State of the Netherlands is well-positioned to issue green bonds and that the State of the Netherlands Green Bond Framework is credible, impactful and aligned with the GBP principles.

Appendices

Appendix 1: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	State of the Netherlands
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	The State of the Netherlands Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	18 March 2019
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarize the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

The eligible use of proceeds categories Renewable Energy, Energy Efficiency, Clean Transportation, Climate Change Adaptation & Sustainable Water Management – are recognized as impactful by the Green Bond Principles 2018. Sustainalytics views positively the inclusion of both climate change mitigation and adaptation measures in the Framework. Investments in renewable energy, energy efficiency and clean transportation will support the transition towards a low carbon economy, while climate change adaptation and water management expenditures will build the Netherlands' resilience to the physical impacts of climate change.

The State of the Netherlands intends to use the net proceeds of the bond to finance and refinance government expenditures made within the budget year preceding the issuance of the green bonds, the budget year of issuance and future budget years. Furthermore, a maximum of 50% of an issuance can be applied to expenses incurred during the previous budget year.

Sustainalytics highlights that all expenditures eligible under the framework must comply with the sector criteria of the Climate Bonds Standard. Furthermore, the State of the Netherlands has confirmed to Sustainalytics that it intends to have all bonds issued under the framework certified by the Climate Bonds Initiative (CBI). Sustainalytics views this as a robust practice that will facilitate alignment with a 2-degree global warming scenario, consistent with the commitments set out in the Paris Agreement.

For renewable energy, the eligible expenditures fall under Economic Affairs and Climate Policy, Article 4, "An Efficient Energy Supply and Limiting Climate Change," portion of the National Budget. The Dutch State has confirmed to Sustainalytics that, with regards to renewable energy, the first issuance under the State of the Netherlands Green Bond Framework will only include expenditures for offshore wind and solar in the form of subsidies to the operators of the renewable energy facilities under the Netherlands' SDE subsidy programme. In future issuances, other types of renewable energy expenditures might be pursued, but the Dutch State would ensure alignment with the CBI standard through certification prior to using green bond proceeds to finance these expenditures.

For energy efficiency, the main eligible central government budget code is included in article 4.1, "Energy Transition and Sustainability" for the built environment. While the Netherlands envisions possible future investments for both the commercial and residential building sector, the Dutch State has confirmed to Sustainalytics that the first issuance will focus on subsidies that are part of the Incentive Scheme for Energy Performance in the Rental Sector (STEP). STEP awards subsidies for refurbishments of rental housing, with the goal of improving buildings' Energy Index (EI)/Energy Performance Certificate (EPC) by at least two steps. 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. Sustainalytics views this approach as credible and highlights the accountability mechanism facilitated through on-site checks by qualified assessors to ensure energy performance objectives are achieved.

Expenditures under clean transportation relate to project management, maintenance, planning and construction of the Dutch rail network, ranging from noise reduction, safety improvements and passenger accessibility to building new stations, improving the frequency of trains, addressing railway bottlenecks and enhancing the overall convenience for railway passengers, as well as supporting sustainable infrastructure such as bicycle parking. Of note is the fact that 91% of passenger rail in the Netherlands is fully electrified, covering 96.3% of the total tonnes/km travelled. The Dutch State confirmed to Sustainalytics that the emissions intensity of its commuter rail lines was approximately 6gCO₂ per p-km, further highlighting the

importance of maintaining the efficiency of the system and ensuring the appropriate frequency of trains to accommodate passenger travel .

Expenditures under Climate Change Adaptation & Sustainable Water Management include measures financed by the Dutch Deltafund that improve and ensure the Dutch flood defense, water infrastructure, fresh water supply and quality as well as preparedness of the systems for climate change, such as freshwater reserves for droughts. Sustainalytics notes the Netherlands' high exposure to the physical impacts of climate change and the associated importance of financing investments in adaptation and water management . For more information on impact, see section 3.

Use of proceeds categories as per GBP:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input checked="" type="checkbox"/> Sustainable water and wastewater management | <input checked="" type="checkbox"/> Climate change adaptation |
| <input type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other (<i>please specify</i>): |

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section (if applicable):

The project evaluation and selection process for eligible expenditures is the responsibility of the inter-departmental Green Bond Working Group and takes place on an annual basis. While the State of the Netherlands prepares an initial list of projects, the Green Bond Working Group reviews the feasibility of including the expenditures, verifies if the expenditures comply with the criteria and definition of Eligible Green Expenditures of the Framework and approves the selected expenditures. The Green Bond Working Group is comprised of representatives from the Dutch State Treasury Agency (who is the Chair), Ministry of Finance, Ministry of Economic Affairs and Climate Policy and Ministry of Infrastructure and Water Management. Sustainalytics notes the broad representation of the Working Group, including stakeholders from relevant ministries, and considers this approach to be aligned with market practice.

Evaluation and selection

- | | |
|--|---|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input checked="" type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |

- ☒ Summary criteria for project evaluation and selection publicly available ☐ Other (*please specify*):

Information on Responsibilities and Accountability

- ☐ Evaluation / Selection criteria subject to external advice or verification ☒ In-house assessment
- ☐ Other (*please specify*):

3. MANAGEMENT OF PROCEEDS

Overall comment on section (*if applicable*):

The Dutch State will monitor the expenditure levels of Eligible Green Expenditures and will allocate the proceeds of issued green bonds to Eligible Green Expenditures on an annual basis. This approach is based on realized expenditure levels as reported in the National Financial Annual Report. The allocation of the use of proceeds will be reviewed and approved by the Green Bond Working Group on an annual basis until full allocation. The unallocated proceeds will be managed according to the treasury policy of the DSTA. Sustainalytics considers that this process is in line with market practice.

Tracking of proceeds:

- ☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other (*please specify*):

Additional disclosure:

- ☐ Allocations to future investments only ☒ Allocations to both existing and future investments
- ☐ Allocation to individual disbursements ☒ Allocation to a portfolio of disbursements
- ☐ Disclosure of portfolio balance of unallocated proceeds ☐ Other (*please specify*):

4. REPORTING

Overall comment on section (*if applicable*):

The Netherlands also commits to publishing an impact report addressing the positive environmental impact of Eligible Green Expenditures across the eligible categories of renewable energy, energy efficiency, clean transportation and climate change adaptation and water management.

Use of proceeds reporting:

- ☐ Project-by-project
 ☒ On a project portfolio basis
- ☐ Linkage to individual bond(s)
 ☐ Other (*please specify*):

Information reported:

- ☒ Allocated amounts
 ☒ Green Bond financed share of total investment
- ☐ Other (*please specify*):

Frequency:

- ☒ Annual
 ☐ Semi-annual
- ☐ Other (*please specify*):

Impact reporting:

- ☐ Project-by-project
 ☒ On a project portfolio basis
- ☐ Linkage to individual bond(s)
 ☐ Other (*please specify*):

Frequency:

- ☒ Annual
 ☐ Semi-annual
- ☐ Other (*please specify*):

Information reported (expected or ex-post):

- ☒ GHG Emissions / Savings
 ☒ Energy Savings
- ☐ Decrease in water use
 ☐ Other ESG indicators (*please specify*):
- Actual annual energy production (in MWh)
 - Annual passenger train KM
 - Availability of flood defenses (percentage)
 - Reduction of flood risk/frequency

Means of Disclosure

- ☒ Information published in financial report
 ☒ Information published in sustainability report
- ☐ Information published in ad hoc documents
 ☐ Other (*please specify*):
- ☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

http://www.rijksbegroting.nl/2019/voorbereiding/begroting.kst248548_15.html
<https://www.rvo.nl/subsidies-regelingen/stimuleringsregeling-energieprestatie-huursector-step/voorwaarden-step/particulieren>
<https://english.dsta.nl/news/news/2018/10/31/dutch-state-will-issue-a-green-bond>
<https://www.infomil.nl/onderwerpen/integrale/mer/procedurehandleiding/wanneer-beoordeling/besluit-0/> ; <https://wetten.overheid.nl/BWBR0006788/2018-07-01>
<https://wetten.overheid.nl/BWBR0020449/2018-07-01#Hoofdstuk2>
<https://wetten.overheid.nl/BWBR0024779/2018-07-28#Hoofdstuk6>
<https://wetten.overheid.nl/BWBR0006147/2017-05-01>
<https://aandeslagmetdeomgevingswet.nl/omgevingswet/>
https://www.pbl.nl/en/publications/2008/StakeholderParticipationGuidancefortheNetherlandsEnvironmentalAssessmentAgency_MainDocument
<https://www.government.nl/topics/renewable-energy/central-government-encourages-sustainable-energy>
<https://english.rvo.nl/subsidies-programmes/sde>
<https://www.rvo.nl/subsidies-regelingen/stimulerings-duurzame-energieproductie>
<https://www.government.nl/topics/climate-change/national-measures>
<https://business.gov.nl/subsidy/energy-investment-allowance/>
<https://business.gov.nl/subsidy/energy-performance-incentive-energy-saving-fund-rented-sector/>
<https://www.rivm.nl/bibliotheek/rapporten/2018-0006.pdf>
https://www.wegenwiki.nl/Nota_Mobiliteit
https://assets.amsterdam.nl/publish/pages/865232/mobiliteitsaanpak_amsterdam_2030.pdf
<https://www.government.nl/topics/mobility-public-transport-and-road-safety/public-transport/goals-of-public-transport/sustainable-public-transport>
<https://english.deltacommissaris.nl/delta-programme/what-is-the-delta-programme>
<https://english.deltacommissaris.nl/binaries/delta-commissioner/documents/publications/2018/09/18/dp2019-en-printversie/DP2019+EN+printversie.pdf>

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|---|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input checked="" type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

State of the Netherlands Green Bond

- i. **Second Party Opinion:** An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. **Verification:** An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. **Certification:** An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognized external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. **Green Bond Scoring/Rating:** An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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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 for its contribution to the growth of the Japanese Green Bond Market.

For more information, visit www.sustainalytics.com

Or contact us info@sustainalytics.com

