



## REPORT REVIEW

# TVO Green Bond and Notes Report

17 July 2025

### VERIFICATION PARAMETERS

#### Type(s) of reporting

- Allocation and Impact Report

#### Relevant standard(s)

- Harmonised Framework for Impact Reporting, ICMA, June 2024
- TVO's Green Bond and Notes Report (as of July 14, 2025)
- TVO's Green Bond Framework (as of June 21, 2023)
- Bond(s) identification:

#### Scope of verification

Issue date	ISIN / Type of Transaction	Maturity date	Amount raised (EUR)
Oct. 2024	Private	Oct. 2029	90 m
May 2024	XS2823931824	May 2031	600 m
Dec. 2023	Private	Dec. 2033	105 m
Dec. 2023	Private	Dec. 2035	85 m
Dec. 2023	Private	Dec. 2038	90 m

#### Lifecycle

- Post-issuance verification
- Second year of reporting on Green Bond and Notes<sup>1</sup>

#### Validity

- As long as no changes are undertaken by the Issuer to its Green Bond and Notes Report (as of July 14, 2025)

<sup>1</sup> The first Green Bond and Notes Report covered the instruments issued in 2023 only. This is the first year of reporting for the instruments issued in 2024.

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## SCOPE OF WORK

Teollisuuden Voima Oyj (“the Issuer” or “TVO”) commissioned ISS-Corporate to provide a Report Review on its Green Bond and Notes Report by assessing:

1. The alignment of TVO’s Green Bond and Notes Report (as of July 14, 2025) with the commitments set forth in TVO’s Green Bond Framework (as of June 21, 2023).<sup>2</sup>
2. TVO’s Green Bond and Notes Report, benchmarked against the ICMA Harmonised Framework for Impact Reporting.
3. The disclosure of proceeds allocation and soundness of reporting indicators — whether the impact metrics align with best market practices and are relevant to the green bond and notes issued.

## TVO OVERVIEW

Teollisuuden Voima Oyj produces electricity from nuclear power. It provides services to industrial and energy companies. The company was founded on January 23, 1969 and is headquartered in Eurajoki, Finland.

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<sup>2</sup> The Framework was assessed as aligned with the Green Bond Principles as of May 19, 2023.

## ASSESSMENT SUMMARY

REVIEW SECTION	SUMMARY	EVALUATION
<b>Part I</b>  <b>Alignment with the Issuer's commitments set forth in the Framework</b>	TVO's Green Bond and Notes Report meets the commitments set forth in its Green Bond Framework.	<b>Aligned</b>
<b>Part II</b>  <b>Alignment with the HFIR</b>	<p>The Green Bond and Notes Report is in line with ICMA's HFIR. The Issuer follows core principles and, where applicable, recommendations.</p> <p>The Issuer provides transparency on the level and frequency of expected reporting, in line with best practices. TVO has reported within the next fiscal year after issuance, illustrated the environmental impacts, provided transparency on ESG risk management and transparency on the currency used. Furthermore, TVO indicates the total signed amount and the amount of green bond proceeds, reports on the overall impact of the portfolio and also discloses the prorated share of the overall results. To facilitate comparison and benchmarking of project results, TVO reports on sector-specific core indicators for Renewable Energy. Where there is no single commonly used standard, the Issuer discloses its own methodologies.</p>	<b>Aligned</b>
<b>Part III</b>  <b>Disclosure of proceeds allocation and soundness of reporting indicators</b>	<p>The allocation of the bond's proceeds has been disclosed, with a detailed breakdown across different eligible projects as proposed in the Framework.<sup>3</sup></p> <p>TVO's Green Bond and Notes Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculation methodologies and granularity, reflecting best market practices.</p>	<b>Positive</b>

<sup>3</sup> The assessment is based on the information provided in the Issuer's report. The Issuer is responsible for the preparation of the report, including the application of methods and procedures designed to ensure that the subject matter is free from material misstatement.

**Limited  
Assurance  
conclusion**

Based on ISS-Corporate's limited assurance methodology,<sup>4</sup> Parts I, II, and the sampling check assessment results, nothing has come to ISS-Corporate's attention indicating that the information provided by TVO in its report does not present fairly, in all material respects, the allocation of the bond proceeds to eligible green projects as described in the Issuer's Bond Framework.

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<sup>4</sup> ISS-Corporate's limited assurance procedure is based on common market practices and voluntary guidelines such as ISAE 3000. It solely relies on the analysis of the information provided by the Issuer, which remains the responsibility of the Issuer, including data on the allocation of proceeds, project descriptions, sample portfolios and impacts of projects. The External Review was conducted through desk-based analysis and no on-site visits were conducted. However, limited assurance reviews have inherent limitations and may not be able to detect all instances of non-compliance in the matters being reviewed, including fraud, error or non-compliance. We prepared this External Review for the Issuer, and we do not assume any responsibility for any reliance on this report by any persons or users other than the party for whom it was prepared.

## REPORT REVIEW ASSESSMENT

### PART I: ALIGNMENT WITH COMMITMENTS SET FORTH IN THE GREEN BOND FRAMEWORK<sup>5</sup>

The following table evaluates the Green Bond and Notes Report against the commitments set forth in TVO's Framework, which are based on the core requirements of the Green Bond Principles and best market practices.

GBP	OPINION	ALIGNMENT WITH COMMITMENT
<b>Process for project evaluation and selection</b>	<p>TVO confirms to follow the process for project evaluation and selection described in TVO's Green Bond Framework. The Issuer <b>applied</b> the eligibility criteria set in the Framework to determine whether projects fit within the defined categories.</p> <p>ESG risks associated with the project categories are identified and managed appropriately, as defined in the Framework.</p>	✓
<b>Management of proceeds</b>	<p>TVO confirms to follow the management of proceeds described in TVO's Green Bond Framework.</p> <p>The proceeds collected are equal to the amount allocated to eligible projects, with no exceptions. The proceeds are tracked appropriately and attested in a formal internal process.</p>	✓
<b>Reporting</b>	<p>The report is in line with the initial commitments set in TVO's Green Bond Framework.</p> <p><i>Further analysis of this section is available in Part III.</i></p>	✓

<sup>5</sup> TVO's Green Bond Framework was assessed as aligned with the GBP (as of June 2021 with June 2022 Appendix) as of May 19, 2023.

## PART II: ASSESSMENT AGAINST THE HARMONISED FRAMEWORK FOR IMPACT REPORTING

Reporting is a core component of the Green Bond Principles, and transparency is of particular value in communicating the expected and/or achieved impact of projects in the form of annual reporting. Green bond issuers are required to report on both the use of green bond proceeds and the environmental impacts at least annually until full allocation or maturity of the bond. The HFIR has been chosen as the benchmark for this analysis as it represents the most widely adopted standard.

The table below evaluates TVO's Green Bond and Notes Report against the HFIR.

CORE PRINCIPLES		
HFIR	GREEN BOND AND NOTES REPORT	ASSESSMENT
Report on an annual basis	As reporting is a core component of the GBP, TVO reported within one year of issuance and thereafter within one year from the last report. The report will be available on TVO's <a href="#">website</a> .	✓
Formal internal process to allocate proceeds	All proceeds have only been allocated to a project that meets the Framework's eligibility criteria.	✓
Transparency on the currency	Allocated proceeds have been reported in a single currency (EUR).	✓
ESG risk management	The Issuer has a system to identify and manage ESG risks connected to the financed project. Negative effects of the project are reported.	✓
Illustrate the expected environmental impacts or outcomes	<p>The impact report illustrates the expected environmental impacts made possible by the project to which green bond proceeds have been allocated. It is based on ex-ante estimates (developed prior to project implementation) of expected annual results for a representative year once a project is completed and operating at normal capacity. The method of estimating the impacts is made transparent.</p> <p>More information can be found in Part III.</p>	✓

RECOMMENDATIONS		
HFIR	GREEN BOND AND NOTES REPORT	ASSESSMENT
Report at project or portfolio level	Reporting was conducted on a green bond portfolio basis, whereby proceeds from all of TVO's outstanding green bond and notes funded a project.	✓
Define and disclose period and process for including/removing projects in the report	The Issuer defines and discloses the period and currently only finances one project.	✓
Signed amount and amount of green bond proceeds allocated to eligible disbursements	<p>TVO indicates the total signed amount, and the amount of green bond proceeds allocated to eligible disbursements.</p> <p>Signed amount: EUR 5,241 million</p> <p>Allocated amount: EUR 970 million</p>	✓
Approach to impact reporting	The Issuer reports on the overall impact of the project and also discloses the prorated share of the overall results.	✓
Report on at least a limited number of sector-specific core indicators	<p>To facilitate comparison and benchmarking of project results, TVO reports on sector-specific core indicators for Renewable Energy.</p> <p>The core indicator adapted by TVO is:</p> <ul style="list-style-type: none"> <li>Annual GHG emissions avoided in tonnes of CO<sub>2</sub> equivalent</li> </ul>	✓
Disclose own methodologies, where there is no single commonly used standard	<p>Where there is no single commonly used standard, the Issuer discloses its own methodologies.</p> <p>For its impact indicator, the Issuer uses the European Environmental Agency's figures on GHG emission intensity.</p> <p>TVO has calculated Annual GHG emissions avoided in tonnes of CO<sub>2</sub>e by multiplying the</p>	✓



	share of the nuclear plant project financed by Green Notes (KWh) by the Greenhouse gas emission intensity of electricity generation figure.  More information can be found in Part III.	
Disclosure of the conversion approach	The Issuer does not convert units.	N/A
Projects with partial eligibility	All projects are 100% eligible for financing.	N/A
Use (and disclosure) of the attribution approach	The impact achieved by the financed project is attributed to one type of intervention only (e.g., only energy efficiency improvements in buildings).	N/A
Ex-post verification of specific projects	The Issuer does not sample ex-post verification of specific projects.	N/A
Report the estimated lifetime results and/or project's economic life (in years)	The Issuer does not report on the estimated lifetime results and/or project's economic life (in years).	-

## OPINION

*TVO follows the HFIR's core principles and some key recommendations. The Issuer provides transparency on the level and frequency of expected reporting, in line with best practices. TVO has reported within the next fiscal year after issuance, illustrated the environmental impacts, provided transparency on ESG risk management and transparency on the currency used. Furthermore, TVO indicates the total signed amount and the amount of green bond proceeds, reports on the overall impact of the portfolio and also discloses the prorated share of the overall results. To facilitate comparison and benchmarking of project results, TVO reports on a sector-specific core indicator for Renewable Energy. Where there is no single commonly used standard, the Issuer discloses its own methodologies.*

## PART III: DISCLOSURE OF PROCEEDS ALLOCATION AND SOUNDNESS OF THE IMPACT REPORTING INDICATORS

### Use of proceeds allocation

Use of proceeds allocation reporting contextualizes impacts by presenting the number of investments allocated to the respective use of proceeds project.

This is the second year of allocation reporting, and 100% of the allocation in 2024 matches the 100% allocation in 2023. The use of proceeds allocation reporting occurred within the regular annual cycle after the issuance.

### Proceeds allocated to eligible projects/assets

The allocation of proceeds is broken down at the project level. The Issuer has provided details about the project financed.

The allocation reporting section of TVO's Green Bond and Notes Report aligns with best market practices by providing information on:

- The nominal amount of outstanding Green Bonds
- The amount allocated per each EU Taxonomy activity
- Share of the project financed by the green bond and notes
- Relative share of new financing versus refinancing
- Descriptions of selected eligible green project financed
- Alignment of the eligible green project portfolio with the EU Taxonomy

## Output, outcome and impact reporting indicators


The table below presents an independent assessment of the Issuer's report and disclosure on the impact of projects/assets using indicators.

ELEMENT	ASSESSMENT
<b>Relevance</b>	<p>The impact indicator chosen by the Issuer for this bond is the following:</p> <ul style="list-style-type: none"> <li>▪ Annual GHG emissions avoided in tonnes of CO<sub>2</sub>e</li> </ul> <p>This indicator is quantitative and material to the use of proceeds category financed through this bond and is in line with the Suggested Impact Reporting metrics by the HFIR. This aligns with best market practices.</p>
<b>Data sourcing and methodologies of quantitative assessment</b>	<p>For its impact indicator, the Issuer uses the European Environmental Agency's figures on GHG emission intensity.</p> <p>TVO has calculated Annual GHG emissions avoided in tonnes of CO<sub>2</sub>e by multiplying the share of the nuclear plant project financed by Green Notes (KWh) by the Greenhouse gas emission intensity of electricity generation figure.</p>
<b>Baseline selection</b>	<p>The impact data is compared with a relevant baseline. The Issuer uses European Environmental Agency data on CO<sub>2</sub>e emissions from public electricity production. This aligns with the suggestion of the HFIR.</p>
<b>Scale and granularity</b>	<p>The impact data is presented at the project level.</p>

## High-level mapping of the impact indicators with the U.N. Sustainable Development Goals

Based on the project category refinanced by the bonds as disclosed in the Issuer's Green Bond and Notes Report, the impact indicator adopted by TVO for its Green Bond and Notes can be mapped to the following SDGs, according to ISS ESG's SDG Solutions Assessment, a

proprietary methodology designed to assess the impact of an Issuer's product or services on the U.N. SDGs.

IMPACT INDICATORS	SUSTAINABLE DEVELOPMENT GOALS
<b>Annual GHG emissions avoided in tonnes of CO<sub>2</sub>e<sup>6</sup></b>	

#### OPINION

*The allocation of the bond's proceeds has been disclosed, with details about the project financed as proposed in the Framework. The Green Bond and Notes Report has adopted an appropriate methodology to report the impact generated by providing comprehensive disclosure on data sourcing, calculation methodologies and granularity, reflecting best market practices. In addition, the impact indicators used align with best market practices using the HFIR's recommended metrics.*

<sup>6</sup> The 'nuclear power generation' category is assessed as obstruction to SDG 7 and SDG 15 according to ISS ESG's methodology applying to any nuclear power generation projects to date. The obstruction reflects uncertainties regarding the negative externalities of nuclear on water and biodiversity, in addition to its dependence on uranium which is a non-renewable resource of which mining is linked to many salient risks from an environmental and social perspective.

## DISCLAIMER

1. Validity of the External Review ("External Review"): Valid as long as no changes are undertaken by the Issuer to its Green Bond and Notes Report (as of July 14, 2025)
2. ISS Corporate Solutions, Inc. ("ISS-Corporate"), a wholly owned subsidiary of Institutional Shareholder Services Inc. ("ISS"), sells, prepares, and issues External Reviews, on the basis of ISS-Corporate's proprietary methodology. In doing so, ISS-Corporate adheres to standardized procedures designed to ensure consistent quality.
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## ANNEX 1: Methodology

### Review of the post-issuance reports

The ISS-Corporate Report Review provides an assessment of labeled transactions reporting against international standards using ISS-Corporate's proprietary [methodology](#).

### High-level mapping to the SDGs

The 17 Sustainable Development Goals (SDGs) were endorsed in September 2015 by the United Nations and provide a benchmark for key opportunities and challenges toward a more sustainable future. Using a proprietary methodology based on ICMA's Green, Social and Sustainability Bonds: A High-Level Mapping to the Sustainable Development Goals, the extent the Issuer's reporting and project categories contribute to related SDGs is identified.

## ANNEX 2: Quality management processes

### ISSUER'S RESPONSIBILITY

The Issuer's responsibility was to provide information and documentation on:

- Green Bond and Notes Report
- Green Bond Framework
- Proceeds allocation
- Reporting impact indicators
- Methodologies and assumptions for data gathering and calculation
- ESG risk management

### ISS-CORPORATE'S VERIFICATION PROCESS

Since 2014, ISS Group, which ISS-Corporate is part of, has built up a reputation as a highly reputed thought leader in the green and social bond market and has become one of the first CBI-approved verifiers.

This independent Report Review has been conducted by following ICMA's Guidelines for Green, Social, Sustainability and Sustainability-Linked Bonds External Reviews, and its methodology, considering, when relevant, the ISAE 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information.

The engagement with TVO took place in June and July 2025.

### ISS-CORPORATE'S BUSINESS PRACTICES

ISS-Corporate conducted this verification in strict compliance with the ISS Group Code of Ethics, which lays out detailed requirements in integrity, transparency, professional competence and due care, professional behavior and objectivity for the ISS business and team members. It is designed to ensure that the verification is conducted independently and without any conflicts of interest with other parts of the ISS Group.

## About this Report Review

Companies turn to ISS-Corporate for expertise in designing and managing governance, compensation, sustainability and cyber risk programs that align with company goals, reduce risk and manage the needs of a diverse shareholder base by delivering best-in-class data, tools and advisory services.

ISS-Corporate assesses the alignment of the Issuer's report with external principles (e.g., the Green/Social Bond Principles), assesses the alignment of the Issuer's report against the commitments in the respective Framework, and analyzes the disclosure of proceeds allocation, data source and calculation methodologies of the reporting indicators against best market practices. Following these guidelines, we draw up an independent Report Review so investors are as well-informed as possible about the proceeds allocation and the impact of the sustainable finance instrument(s).

Please visit ISS-Corporate's [website](#) to learn more about our services for bond issuers.

For information on Report Review services, please contact [SPOsales@iss-corporate.com](mailto:SPOsales@iss-corporate.com).

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