2023

REPORT OF THE BOARD OF DIRECTORS AND FINANCIAL STATEMENTS

tvo

Contents

TVO's Annual Report 2023

TVO's Annual Report includes the Annual and Sustainability Report, the Corporate Governance Statement, as well as the Report of the Board of Directors and Financial Statements. The reports are published as separate files on TVO's website: **www.tvo.fi/financialpublications**.

Report of the Board of Directors of Teollisuuden Voima Oyj

Main events in 2023

The role of low-carbon energy, such as renewable energy and nuclear power, is crucial in the mitigation of climate change. In 2023, the share of nuclear power was about 41 per cent of all the electricity produced in Finland. In 2023, Teollisuuden Voima Oyj's (TVO) Olkiluoto nuclear power plant produced approximately 31 per cent of the electricity consumed and produced in Finland, which significantly supports Finland's self-sufficiency in terms of electricity and helps to achieve the carbon neutrality targets. Over the course of the company's history, which spans more than 50 years, Olkiluoto has generated more than 580 terawatt hours (billion kilowatt hours) of climate-friendly electricity.

In 2023, TVO's electricity production amounted to 24.67 terawatt hours (TWh). The Olkiluoto 1 plant unit (OL1) generated 7.4 (6.9) TWh of electricity and had a load factor of 95.4 (89.1) per cent. The Olkiluoto 2 plant unit (OL2) generated 6.9 (7.5) TWh of electricity and had a load factor of 88.3 (96.8) per cent. The combined load factor for the OL1 and OL2 plant units was 91.9 (93.0) per cent. During 2023, the Olkiluoto 3 plant unit (OL3) generated 10.4 (1.9) TWh of electricity and had a load factor of 75.2 (16.9) per cent. The Group's turnover was EUR 876 (358) million.

A failed rotor was replaced at OL2 in August 2023, the replacement outage for which lasted 17 days.

Electricity generation at OL3 continued without interruption from the provisional takeover of the plant unit in April 2023 and the start of commercial operation in May 2023 until mid-November. In late November, production was interrupted on two occasions. The unplanned production interruptions were caused by turbine trips; one was due to an instrument defect in the protection system, while the other resulted from the fault ride-through test.

For the time being, the grid operator Fingrid Oyj has limited OL3's production to a maximum of 1,570 MW. Furthermore, output at all three Olkiluoto plant units has been reduced in situations where electricity generation has been high in the Nordic countries.

TVO started preparations for an environmental impact assessment (EIA) procedure concerning the possible service life extension and potential power uprating of OL1 and OL2. At the moment, the plant units are licensed until 2038.

The processing of Posiva's operating licence has progressed at the Radiation and Nuclear Safety Authority (STUK), and Posiva submitted responses to the requests for additional information. In September 2023, the Radiation and Nuclear Safety Authority reported that the safety assessment and statement on the operating licence application for the final disposal facility for spent nuclear fuel will not be completed in 2023. Work with the installation and commissioning of systems at the encapsulation plant progressed as planned. In the first actual deposition tunnel, investigations relating to verifying the suitability of the tunnel and defining the locations of the deposition holes for the final disposal of nuclear fuel were completed. The final disposal of spent nuclear fuel is to start at Olkiluoto in the mid-2020s.

At the end of the year, the total number of personnel in the Group was 1,045 (1,007). The number of personnel working for Posiva and its subsidiary Posiva Solutions Oy was 89 (90). A total of 69 (95) new staff members were recruited at the TVO Group during 2023.

Operating environment

The Finnish Government led by Petteri Orpo that took office in the summer of 2023 aims to increase nuclear power capacity in Finland. Orpo's government is promising to approve all applications for decisions-in-principle for nuclear power plants that meet the defined criteria. It also aims to renew the Nuclear Energy Act in order to allow projects to proceed more fluently and to improve Finland's competitiveness as an investment target. The work started by the Ministry of Economic Affairs and Employment (MEAE) that aims at a comprehensive reform of the Nuclear Energy Act continued during 2023.

The renewal of the EU's electricity market rules is in the trilogue negotiation stage. According to the compromise achieved between the Member States, governments will be allowed to use Contracts for Difference (CfD) towards new nuclear power investments as well as for the service life extension and power uprating of nuclear reactors. The European Parliament, however, would not allow the use of CfDs to support service life extension. A final decision on the matter is expected in early 2024.

The European Parliament has finalised its position on the Net-Zero Industry Act (NZIA) which aims at increasing the production capacity required for Europe's green transition. In the Parliament's position, fission and fusion technology were included in the list of technological solutions receiving support. The trilogue negotiations may begin once the Member States have finalised their own positions.

The European Commission has decided to establish an industry alliance around SMR technology (small modular reactor). Industry alliances bring together public and private actors, governments, researchers and civil society. Their aim is to help the EU achieve its key goals, such as those related to the mitigation of climate change.

The European Commission will publish a communiqué on the emission reduction targets for 2040 during the first quarter of 2024. The actual legislation regarding the target and the actions taken in order to achieve it will be issued during the term of the next Commission.

In Finnish Energy's "Energy Attitudes" survey, which is carried out each year, the overall support for nuclear power in November 2023 was 82%, with 54% of Finns wanting to increase the amount of nuclear power and 28% considering that the current amount is appropriate.

The United Nations' COP28 climate summit was held in Dubai in the United Arab Emirates at the end of 2023. The summit's resolution calls for discontinuing the use of fossil fuels and replacing them with zero-emission or low-emission energy sources. The resolution aims at global climate neutrality by 2050 and lists technologies, such as nuclear power, whose production must be accelerated. This is the first time that nuclear power has been formally mentioned as one solution for the climate crisis in a COP resolution.

22 countries, Finland included, declared within the context of the COP conference that they will be tripling the production of nuclear energy by 2050 in order to achieve climate neutrality. The Net Zero Nuclear Industry Pledge states that the IAEA plays a key role in its member states including nuclear power in their national energy plans and that it is important to agree on financing for new nuclear power.

TVO as a company

TVO is a non-listed public limited liability company owned by Finnish industrial and energy companies. According to TVO's Articles of Association, its line of business is the construction and procurement of power plants and power transmission equipment as well as the production, supply, and transmission of electricity primarily to its shareholders under the terms specified in the Articles of Association.

TVO operates on a cost-price principle (Mankala principle). The shareholders are charged incurred costs in the price of electricity and thus, in principle, the profit/loss for the fiscal period is zero, unless specific circumstances dictate otherwise. According to the Articles of Association, the shareholders pay variable costs based on the volumes of energy supplied and fixed costs in proportion to their ownership, regardless of whether they have used their share of the output or not. Because of this operating principle, key indicators based on financial performance will not be presented (see: **Cost-price principle** in the notes to the consolidated financial statements).

TVO is owned by five shareholders, some of which, like TVO, operate according to the Mankala principle. The electricity generated by TVO serves the needs of Finnish industrial and energy companies, some of which were owned by a total of 131 Finnish municipalities in 2023. TVO generates approximately one third of the electricity consumed in Finland.

All of TVO's operations are based on a strong safety culture and ensuring the safety of production. TVO's activity-based management system covers the production operations at the Olkiluoto nuclear power plant, maintenance and development of production capacity, construction of additional production capacity and the related steering and resourcing functions. The system meets the requirements of international standards related to quality management, the environment and health and safety, and it has been certified by DNV Business Assurance Finland Oy Ab.

The general part of the activity-based management system also acts as the licensee's quality management system that has been approved by STUK. The implementation, functionality and effectiveness of the activity-based management system is regularly tracked through internal audits and management reviews.

TVO's corporate governance system is described in a separate report. TVO's principles for sustainable business are described in the TVO Group's Code of Conduct (see: **Sustainability**).

The objectives of TVO's strategy include a strong safety brand, the efficient and reliable operation of production assets, competitive and predictable price of electricity and the responsible maximisation of shareholder value. The strategy aims to ensure the long-term operation of the plant units, achieving availability according to the set goals and achieving a competitive average generation cost for electricity produced by TVO. The safety culture is maintained at a high level and safety is systematically upheld and developed further at all stages of the nuclear power life cycle.

Financial performance

The Group's turnover in 2023 was EUR 876 (358) million. The higher turnover compared to the previous year is due to OL3's electricity production.

The amount of electricity delivered to shareholders was 24,634 GWh (16,316 GWh). The higher delivery volume compared to the previous year is due to OL3's electricity production.

The consolidated profit/loss was EUR 164 (-48) million. The profit/loss for the fiscal period was affected in particular by the costs charged from shareholders, which were higher than the incurred costs in order to strengthen TVO's financial position. Furthermore, the consolidated IFRS profit/loss is also affected by the treatment of interest on equity shareholder loans in accordance with the IAS32 standard, which states that interest paid is entered directly in retained earnings and not in profit/loss. TVO's profit/loss is EUR 0 (2) million.

Updated cost estimates based on a new technical plan and schedule for nuclear waste management and changes to the provision regarding the nuclear waste management obligation had an effect on the profit/loss for the previous fiscal period (see: **Nuclear waste management**).

Financing and liquidity

TVO's financial situation has developed as planned.

TVO's liabilities (non-current and current) at the end of the year, excluding the loan from the Finnish State Nuclear Waste Management Fund re-lent to shareholders, amounted to EUR 5,539 (5,727) million, of which EUR 929 (929) million were subordinated shareholder loans. TVO raised a total of EUR 1,174 (1,050) million in new non-current liabilities during 2023. No subordinated shareholder loans were raised during the period in review (no subordinated shareholder loans were raised). Repayments of non-current liabilities amounted to EUR 1,352 (458) million during the year.

TVO has a revolving credit facility of EUR 1,000 million, which was extended until 2026 during the period in review. The shareholder loan commitment of EUR 400 million, targeting the possible financing needs of the OL3 project, matured at the end of 2023, and the loan pursuant to the commitment was not raised.

In May 2023, TVO issued a bond of EUR 600 million and announced a tender offer for its bond maturing in May 2024, of which EUR 208 million was repurchased.

In late June 2023, TVO established a Green Bond Framework that is based on TVO's environmentally friendly electricity generation at its three nuclear power plant units at Olkiluoto and on responsible nuclear waste management. Danske Bank acted as an adviser on the establishment of the Green Bond Framework. ISS ESG, a service provider specialising in assessments for green funding, provided an independent assessment according to which the framework is aligned with the Green Bond Principles. ISS ESG further assessed that the framework is aligned with the EU taxonomy.

In August 2023, TVO took out Private Placement loans totalling SEK 2,300 million. At the same time, TVO bought back a total of SEK 900 million in SEK denominated loans maturing in February 2024.

In December 2023, TVO issued EUR 280 million in directed Green Notes (US Private Placement). The arrangement consists of three bullet tranches: 10 years (EUR 105 million), 12 years (EUR 85 million) and 15 years (EUR 90 million).

TVO uses its right to borrow funds back from the Finnish State Nuclear Waste Management Fund within the provisions of the Nuclear Energy Act. On 31 December 2023, the amount of the loan was EUR 728 (651) million, and it has been re-lent to the Company's shareholders. On 31 March 2023, the loan from the Finnish State Nuclear Waste Management Fund increased by EUR 77 million (31 March 2022: decreased by EUR 60 million).

In April 2023, S&P Global Ratings (S&P) upgraded its long-term credit rating from BB+ to BBB- and confirmed its stable outlook. Moody's Investors Service (Moody's) provided a long-term credit rating of Baa3 in May 2023 and estimated TVO's outlook as stable. TVO also has a long-term credit rating of BBB- from Fitch Ratings (Fitch) with a stable outlook. In March 2023, Japan Credit Rating Agency (JCR) affirmed its long-term credit rating for TVO at its previous level of A+ and changed the outlook from negative to stable.

The OL3 project's financing costs have been capitalised in the balance sheet up to 30 April 2023.

Share capital

TVO's share capital on 31 December 2023 was EUR 600 (600) million.

The Company has 1,360,000,000 (1,360,000,000) shares, of which 680,000,000 belong to the A series and 680,000,000 to the B series. The A series shares entitle to electricity generated at OL1 and OL2 and the B series shares to electricity generated at OL3.

Administrative principles

Because TVO is a non-listed public company applying the cost-price principle, it observes the Corporate Governance Code for listed companies where applicable. TVO is not obligated to observe the Corporate Governance Code nor, therefore, its Comply or Explain principle. According to Chapter 7, Section 7 of the Securities Markets Act (746/2012), the issuer of a security subject to public trading must provide a corporate governance statement in its annual report or in a separate report. TVO has provided a separate Corporate Governance Statement, which is published on the Company's website (**www.tvo.fi/financialpublications**) at the same time as this Report of the Board of Directors.

Administrative bodies

TVO's administrative bodies and their operations in 2023 have been described in a separate Corporate Governance Statement which can be found on the Company's website at **www.tvo.fi/financialpublications**.

Regulatory environment

The basic principle of nuclear energy legislation is that the use of nuclear energy must be in line with the overall good of society. The key regulations governing the use of nuclear energy, the monitoring of its use and nuclear safety are included in the Nuclear Energy Act and the Nuclear Energy Decree, as well as in subordinate regulations issued based on them, such as the Regulatory Guides on nuclear safety (YVL Guides) and regulations by STUK. In addition to these, regulations applied to the use of nuclear energy are included e.g. in the Radiation Act.

The work started by MEAE that aims at a comprehensive reform of the Nuclear Energy Act continued during 2023. The objective is that the production of nuclear energy will continue to be in line with the overall good of society, safe and financially profitable. The draft legislation is supposed to enter the consultation phase in the spring of 2025, followed by a government proposal to the Parliament in early 2026, after which the new Nuclear Energy Act would enter into force in 2028. TVO has participated in the preparatory work of different working groups.

During 2023, the updated YVL Guide B.8 was introduced at the OL3 plant unit. The final updated Guide (YVL E.6) will be introduced at the OL1, OL2 and OL3 plant units in the near future.

STUK's preparations for the reform of nuclear safety regulations and guidelines, initiated in 2021, have also continued during 2023. The aim is to lay down the foundation and direction for the reform of regulations and guidelines, including the new YVL Guides. TVO has participated in the preparatory work of STUK's working groups.

The Nuclear Liability Act concerns the liability the operator of a nuclear facility has in the event of nuclear damage; according to the Act, the liability of a facility's operator for nuclear damage occurring outside of Finland is EUR 1,200 million for nuclear facilities used in energy production. For nuclear damage in Finland, the operator's liability is unlimited. For nuclear facilities used for purposes other than energy production and for the transport of nuclear materials, the liability is EUR 80–250 million.

The use of nuclear energy is subject to a licence. Applications for a decision-in-principle, construction licence and operating licence, as well as a licence for the decommissioning of a nuclear facility, are made to the Finnish Government STUK is responsible for monitoring the safety of the use of nuclear energy, and it also supervises security and emergency arrangements and nuclear material safeguards.

Risk management, major risks and uncertainties

RISK MANAGEMENT

The objective of risk management is to support the implementation of TVO's strategy and business targets as well as to ensure that TVO's operational prerequisites are maintained. Risk management is carried out comprehensively in line with the strategic objectives set by the Board of Directors, Group-level policies and good governance.

Risk management is supervised by the Company's Board of Directors, which also verifies the TVO Group's risk management policy. The Board of Directors of each affiliate company supervises the risk management of the affiliate company and verifies that the company's risk management is in line with the TVO Group's risk management policy. The President and CEO, supported by the Management Group, is responsible for risk management in accordance with TVO's targets and strategy. A Risk Management Group operates under the Management Group and is in charge of ensuring adequate risk treatment in the Company and confirming the implementation of risk management measures.

Each organisation unit is responsible for the identification, analysis and treatment of risks connected to its operations, as well as for the follow-up of measures. Risk identification is carried out as part of TVO's strategic and operational planning and follow-up, and also as part of project management.

RISK MANAGEMENT PROCESS

TVO has a Group-wide risk management process, used to ensure that risks facing the Company's operations are systematically identified and each risk is treated according to its severity. The objective of the risk management process is to manage risks to an appropriate level set by the risk-bearing capacity. Risks can be managed by reducing, avoiding, sharing or moving them or by accepting the realisation of the risk. The acknowledged risks are gathered to company-level risk registers, where all the risks and their significance are displayed in accordance with each risk's consequence and likelihood. The Company's most significant risks are reported to the Management Group, Audit and Finance Committee and the Board of Directors in accordance with the annual management programme. Other risks are reported to the necessary parties according to the risk management process.

The comprehensive development of risk management is evaluated annually with a risk management level evaluation, the results of which are used to set the goals for the development of risk management. Risk management level evaluation is performed in accordance with a model based on risk management maturity levels.

In 2023, the role of risk management in the process of management and operational planning was reinforced further. Risk management is part of the Group's strategy, and it is continuously being developed in order to support meeting the Group's objectives at the approved risk level. In 2023, the role of risk management in operations was strengthened through new trainings and continuous communication. In terms of communication, the key themes were continuity management and risk-bearing capacity. Work was also continued in order to emphasise the importance of risk management within operating processes.

MAJOR RISKS AND UNCERTAINTIES

Risks related to safety and electricity production are reduced by keeping the plant units in good condition. Safe and stable production is ensured by efficient service life management of the plant units and high-quality planning and implementation of the annual outages.

Uranium, which is the fuel used for electricity production, is procured from global markets. Risks connected with nuclear fuel have been reduced by procuring the fuel from a variety of suppliers and by signing long-term contracts.

In the OL3 project, risk management was primarily a question of overseeing and guiding the work of the Plant Supplier according to the terms of the turnkey contract and the settlement agreement, as well as enhancing TVO's own preparedness. Following the start of regular electricity production at OL3 in April 2023, the focus of risk management shifted from finalising the commissioning and starting operation to managing the warranty period.

Insurance has been taken out in order to prepare for indemnity and property risks. The aim is to manage insurance in a manner where their scope, coverage and cost are at an appropriate level. TVO is a member of European mutual associations for nuclear insurance. Statutory liability is in force for nuclear liability.

No major risks or uncertainties can be foreseen as regards electricity production at OL1 and OL2. The risks and uncertainties related to OL3's electricity production are explained in more detail under "Profit-yielding capacity of OL3" below.

Financial risk management and fuel price risks are discussed in the Notes to the consolidated financial statements, Note 27: **Financial risk management**.

RISKS RELATED TO OL3

Management of warranty period

Regular electricity production, which started after the conclusion of the test operation programme in April 2023, and commercial operation, which started in May 2023, transferred the responsibility for OL3 to TVO. The Plant Supplier retains the responsibilities according to the Plant Contract for warranty periods and for the unfinished work, which has been agreed to be done later at the Plant Supplier's expense.

During 2023, several risk management measures have been taken in relation to the warranty period of OL3 which improve the process flow during the warranty period and ensure that the prerequisites for the warranty period under the Plant Contract are met. TVO is closely monitoring compliance with the conditions set in the Settlement Agreement signed in March 2018 and supplemented in June 2021 and the progress of the OL3 warranty period and ascertaining that actions are taken in accordance with the Plant Supplier's schedule while ensuring financial and technical resources.

Profit-yielding capacity of OL3

Even though there have been few interruptions to electricity generation at OL3 following the conclusion of the test operation programme, there are uncertainties related to the availability of OL3 during the first operating cycle due to any possible unexpected events. These uncertainties are managed by means of systematic maintenance and monitoring of the plant unit. If OL3 fails to achieve the planned load factor or operating cost structure, the Finnish national grid limits its power level or costs incurred by TVO due to grid load limitation make it not profitable to operate at full power, there is a risk of production costs exceeding the target. This risk has been examined with the help of various scenarios affecting OL3's profit-yielding capacity. The risk has also been examined from the point of view of the adequacy of Fingrid Oyj's grid load limitation and the resulting costs to TVO.

TVO is implementing several risk management measures in order to secure OL3's profit-yielding capacity. Examples of these include careful preparation for the first annual outage, securing spare parts that affect availability and utilising experience from the sister plants at Flamanville and Taishan in preparation for OL3's annual outage.

MAJOR PLANT MODIFICATIONS AND THEIR IMPLEMENTATION

Increases in production costs and degradation of profitability may result from the failed implementation of a plant modification. In significant, large-scale plant modification projects, it is important to establish and assign responsibility for the requirements related to nuclear safety and meeting them between the project parties in advance in order to avoid unexpected costs during the project.

In a risk review, cost increases in projects are seen to be due either to shortcomings in preparation and requirement specification, significant unforeseen technical problems, challenges in the execution of the licensing process or deficiencies in project leadership and management.

As risk management measures, TVO has in 2023 continued to prioritise projects and measures that are most vital in view of the schedule and costs in order to secure adequate resourcing for them. TVO is also continuing to secure the preparedness and interests of project suppliers while considering the uncertainties of the geopolitical situation.

THE ORGANISATION'S CAPABILITIES

An organisation's competence and ability to function as a licensee may be degraded as a result of dysfunctional management, unsuccessful reaction to changes in the operating environment or a negative atmosphere in the work community. In addition to an increase in immediate costs, this may also lead to an increased likelihood of other risks being realised.

In order to maintain its capability to function as a licensee, TVO prepared for the operating phase of OL3 and future retirements by recruiting 64 new persons in 2023 and by maintaining comprehensive supplier networks. TVO's sick leave percentage was 2.8 and the outgoing turnover rate was 3.9 per cent. To support supervisors' leadership skills at TVO and Posiva, separate training focused on safety leadership has been organised.

Furthermore, results from a competence survey implemented earlier will be utilised in personnel planning. TVO has taken measures to develop the work community culture and to reinforce the safety culture. TVO conducts a personnel survey every one and a half years, and the next survey is to be conducted in autumn 2024.

FINANCIAL AND LIQUIDITY RISKS

The financing risks to TVO's business include liquidity, market and credit risks. Risks related to financing are reduced by diversifying sources of financing and by means of long-term credit commitments and liquid funds. The financial position has been strengthened by issuing a new long-term bond as well as Private Placement credit notes. Market risks have been reduced with the use of interest rate and currency derivatives. According to the Company's financing policy, the loans denominated in foreign currencies will be hedged to the euro until the maturity date by using derivatives.

Financing costs are impacted by the changes in TVO's credit rating and outlook as well as market changes to interest rates and corporate loan margins. There is a risk of a rise in financing costs from their current level. This risk has been analysed through various scenarios based on the changes in the average interest rate and margin of TVO's loan portfolio. If the risk is realised, the consequences include an increased cost of financing and thus an increase in production costs.

TVO's financial situation has developed as planned, with the Company utilising diverse financing sources in various ways. In addition to the international capital market, the Company also acquires long-term financing from banks and other financial institutions. Credit ratings play a major role in capital market financing.

Financing is used to secure TVO's liquidity under all circumstances. For this purpose, the Company maintains significant liquidity buffers in the form of various revolving credit facilities and liquid assets. It is TVO's basic principle to acquire about three quarters of its investment financing from the financial market and one quarter from its shareholders. TVO aims to maintain long-term financial arrangements, and financing is arranged for the Company, not for separate projects.

The trust of shareholders, banks and investors in TVO's operations has remained strong also in 2023. This is reflected, among other things, in the significant long-term financing arrangements implemented during the year, such as the issue of a new public bond and the Private Placement credit notes.

INCREASE IN THE COST OF FINAL DISPOSAL OF SPENT NUCLEAR FUEL

If Posiva's spent nuclear fuel final disposal project (EKA) is not implemented according to plan, project costs rise or the completion of the project is delayed, the cost estimate of final disposal will rise, which in turn will influence the amount of the existing nuclear waste management liability for spent fuel.

In September 2023, the Radiation and Nuclear Safety Authority reported that the safety assessment and statement on the operating licence application for the disposal facility for spent nuclear fuel will be postponed until 2024. This will delay the processing of the operating licence application by the Government which may, in turn, delay the starting of final disposal for spent nuclear fuel.

As risk management measures in 2023, industrialisation measures related to final disposal were continued, contracts for the production components needed in final disposal were signed and the organisation of the production stage was planned.

RISKS RELATED TO SOCIAL RESPONSIBILITY AND PERSONNEL MATTERS, THE RESPECT OF HUMAN RIGHTS AND THE PREVENTION OF CORRUPTION AND BRIBERY

Risks related to social responsibility and personnel matters, the respect of human rights and the prevention of corruption and bribery are a part of the assessment of sustainability risks. In relation to the aforementioned matters, no significant risks were detected during 2023. The possible risks detected in these areas are addressed according to the Company's ordinary risk management process.

Continuous risk management in these matters is executed according to the TVO Group's Code of Conduct. The internal auditor supervises, for their part, the implementation of the Code of Conduct in the Company's operations. The TVO Group has a whistleblower channel in place, through which incidents perceived to be against the Code of Conduct can be reported even completely anonymously. For projects and investments, the possible risks are evaluated where necessary. In addition, these matters are evaluated according to a separate process during supplier evaluations. TVO's principles for ethical business and its results are described in more detail in the chapter **Sustainability**.

Pending court cases and disputes

TVO is party to an arbitration procedure related to the condenser replacement at OL1 and OL2 that was carried out in 2017 and 2018. The counterparty to the arbitration is Balcke-Dürr GmbH. TVO considers the claims presented by the counterparty in the arbitration to be unfounded and demands that they be rejected and that TVO's legal expenses be compensated for.

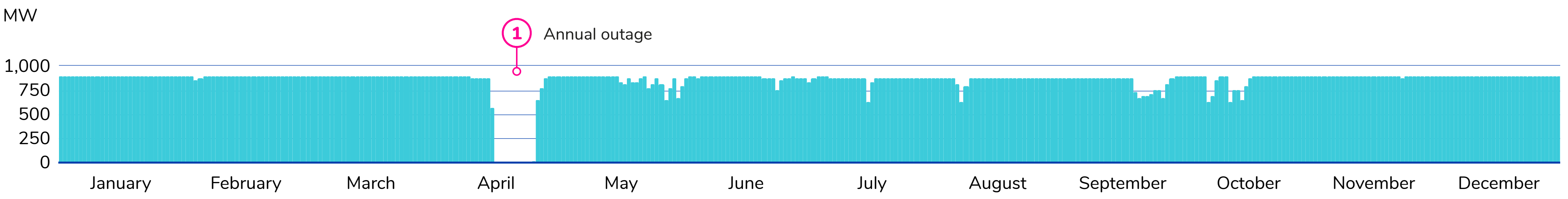
At the end of the fiscal year 2023, TVO had no other pending court cases or disputes.

Electricity production

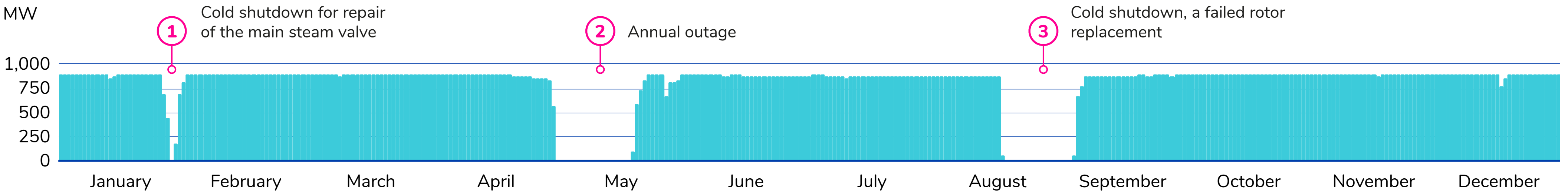
In 2023, the total electricity production for OL1, OL2 and OL3 amounted to 24,671 (16,351) gigawatt hours.

The plant units operated safely. Regular electricity production for OL3 started, and TVO confirmed the provisional

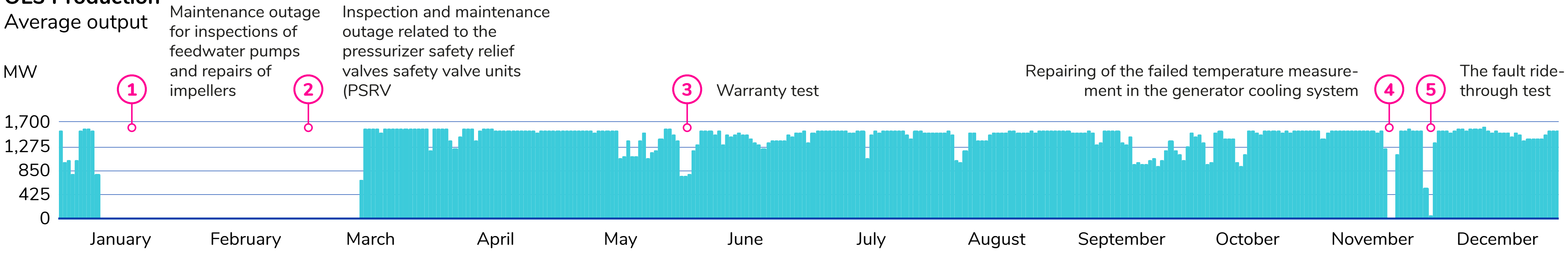
OL1 Production
Average output



OL2 Production
Average output



OL3 Production
Average output



takeover of the plant unit for the warranty period in April 2023. The net production for OL1 was 7,428 (6,932) GWh and the load factor was 95.4 (89.1) per cent. The net production for OL2 was 6,871 (7,532) GWh and the load factor was 88.3 (96.8) per cent. The total load factor for OL1 and OL2 was 91.9 (93.0) per cent.

The net production for OL3 was 10,372 (1,887) GWh and the load factor was 75.2 (16.9) per cent. The net power output and load factor of OL3 will be defined after a full year of electricity production.

SIGNIFICANT PLANT EVENTS AT OL1 AND OL2
In August 2023, the authority supervising the environmental permit issued a comment and investigation request regarding a malfunction at OL1's and OL2's debris handling building. Solid material is extracted from the cooling water at the debris handling building. TVO has carried out modifications at the building which were completed in June 2023. The actions aiming at improving the debris handling building will continue in 2024, and debris is handled using temporary arrangements in the meantime.

An unplanned reactor scram occurred at OL2 in connection with plant unit ramp-up following the annual outage in May 2023; it was caused by a leak observed in the condenser. The plant's safety functions operated as planned during the situation. The event did not affect nuclear safety.

A leak was observed in OL2's water cooled generator in August 2023, at which time electricity generation was stopped at the plant unit. The production outage lasted for 17 days. The failed rotor was replaced and OL2 was resynchronised with the national grid in September 2023. The event did not affect nuclear safety.

No plant events that were classified as level 1 or higher on the International Nuclear Event Scale (INES scale) occurred at OL1 and OL2 in 2023.

Annual outages

The Olkiluoto nuclear power plant is continuously kept in good condition in terms of production and functionality through alternating refuelling and service outages at the plant units.

The 2023 annual outages for the OL1 and OL2 plant units started on 16 April with a refuelling outage for the OL1 plant unit. In addition to the refuelling, various annual preventive maintenance tasks, inspections and a modernisation of the turbine hall crane as well as repairs and tests were performed at OL1. OL1 resumed electricity production on 26 April 2023.

OL2 underwent a service outage that started on 1 May and ended on 19 May. In addition to the refuelling, major tasks during the service outage included turbine I&C renovation, replacement of the containment's electrical penetrations, modification of the reactor water level measurement and the replacement of the off-gas venting system emergency fans.

The annual outages for 2023 were successfully implemented in adherence to administrative plans and procedures and pursuant to the Technical Specifications (TechSpecs). No lost time occupational accidents occurred during the annual outages.

In addition to TVO's in-house personnel, approximately 790 subcontractor employees participated in the annual outage work. Approximately 170 specialists arrived from abroad for the annual outages.

Olkiluoto 3

OL3 was procured as a fixed-price turnkey project from a consortium (Plant Supplier) formed by Areva GmbH, Areva NP SAS and Siemens AG. As stipulated in the Plant Contract, the consortium companies have joint and several liability for the contractual obligations. Test operation for OL3 concluded in April 2023, when regular electricity production at the plant unit started.

TVO confirmed the provisional takeover of the plant unit for the warranty period by submitting the Provisional Takeover Certificate to the Plant Supplier in April 2023. The final takeover of the plant unit will take place after the conclusion of the two-year warranty period. Even after this, the Plant Supplier's liabilities under the warranty will remain in force up to a maximum of eight (8) years to a certain extent.

Commercial operation for OL3 started in May 2023; among other things, this meant that the capitalisation of project costs was stopped and amortisation was started. The charging of shareholders for the variable and fixed fees for the commercial operation of OL3 was also started on 1 May 2023. The shareholders' right to electricity generated by OL3 and their liability for the annual costs incurred from electricity generation are determined in accordance with TVO's Articles of Association.

A Global Settlement Agreement (GSA) was signed in March 2018 and amended in June 2021 concerning the completion of the OL3 project and related disputes. During 2023, the fund established in accordance with the GSA and funded by the Areva companies has been used to cover costs incurred to the Areva companies for the completion of the OL3 project in accordance with the GSA.

The final payment of approximately EUR 193 million in delay compensation agreed upon in 2018 was set off against the final payment installment of the Areva companies under the Plant Contract in May 2023. Long-term receivables include the additional delay compensation of EUR 56.7 million to TVO, agreed upon in 2021, which will become due during the final takeover of OL3 in April 2025 at the earliest.

Total investment in OL3 was approximately EUR 5.8 billion. EUR 250.0 million was transferred from the OL3 investment to operating-time fuel (current assets) when the OL3 plant unit entered commercial operation.

All realised costs of the OL3 project that can be recognised in the cost of the asset, including financing costs, have been entered as property, plant and equipment in the Group balance sheet up to 30 April 2023. The capitalisation of costs was discontinued at the start of OL3's commercial operation, which affects the comparability of the Group's income statement and balance sheet.

In the income statement, the most significant changes can be seen under turnover, materials and services, depreciation and impairment charges, other expenses and finance income and expenses. In the balance sheet, the most significant changes can be seen under property, plant and equipment, inventories and trade and other receivables as well as deferred income.

SIGNIFICANT EVENTS AT OL3
During 2020–2023, several signal failures were observed in safety-classified temperature measurements at OL3, which resulted in more extensive inspections being performed. In February 2023, it

was observed that some of the QDC connectors for temperature measurements were missing either one or both of the required seals. Shortcomings in seals were observed in 29 of the 108 QDC connectors that were inspected. Since the event involved shortcomings in instructions and the occurrence of the defect at several locations, the event was estimated to be at level 1 on the INES scale. According to the INES definition, this was an exceptional event with an impact on safety. An extended inspection programme for measurement instruments significant for safety has been drawn up as a result of this event, and it will be completed in its entirety by June 2024.

A warranty test measuring different power levels was started at OL3 in May 2023. During the warranty test, measurements were performed at power levels of 100 per cent, 90 per cent and 50 per cent. The measurements for the test were successfully performed at different power levels, and they were concluded in June 2023. The analysis of the results calculated on the basis of these measurements has been completed as regards the plant's net electrical power and average net electricity generation efficiency. During the autumn, additional investigations and certain technical measures were performed at the plant, and a new test at the 100% power level was performed in December 2023.

At OL3, a deviation occurred from the minimum staffing of the main control room operating shift in June 2023 when a substitute was not obtained on time for the night shift. The deviation from the instructed minimum staffing lasted slightly less than two hours until a substitute arrived on site. The minimum staffing for the main control room is instructed in the Technical Specifications (TechSpecs). Immediately after the event occurred, TVO initiated actions in order to prevent similar events. The shortcomings in ways of working that were revealed during the event are analysed in more detail in a separate root cause analysis. The event did not directly affect nuclear safety. According to the INES scale, the severity of the event was classified as 1. Even though the basic rating for the event was 0, TVO decided to uprate the class by one due to factors involving safety culture. TVO submitted an operational event report concerning the matter to STUK for approval in August 2023.

Electricity production at OL3 was interrupted for slightly more than two days in November 2023 due to a defect observed at the turbine island. During the fault situation, the plant operated as planned. The cause of the defect was revealed to be a failed temperature measurement in the generator cooling system.

In November 2023, electricity production at OL3 was interrupted for slightly more than 24 hours as a result of the fault ride-through test. The fault ride-through test implemented in collaboration with the grid operator Fingrid involved causing an intentional grid fault, due to which the plant unit's protection functions started and production was automatically interrupted. The aim of the test was for the grid fault to not interrupt electricity production at OL3.

Nuclear fuel

In 2023, nuclear fuel purchases amounted to EUR 70 (61) million and the amount consumed to EUR 111 (70) million.

The nuclear fuel and uranium stock carrying value on 31 December 2023 was EUR 476 (262) million. Approximately EUR 250 million was transferred from the OL3 investment to the value of the nuclear fuel and uranium stock when OL3 entered commercial operation.

Nuclear waste management

Under the Finnish Nuclear Energy Act, the Company is responsible for the measures related to nuclear waste management and the related costs.

The liabilities in the consolidated financial statement show a provision related to nuclear waste management liability of EUR 1,289 (1,294) million, calculated according to the international IFRS accounting principles. TVO's share in the Finnish State Nuclear Waste Management Fund, EUR 1,035 (1,000) million, is presented under assets in accordance with the IFRIC 5 interpretation. The total cost estimate based on a new nuclear waste management technical plan and schedule has been updated in June 2022.

In order to cover the future costs of nuclear waste management, the Company makes contributions to the Finnish State Nuclear Waste Management Fund in accordance with the Finnish Nuclear Energy Act. In December 2023, the MEAE set TVO's liability for nuclear waste management at EUR 1,918 (1,840) million for the end of 2023 and the Company's funding target in the Finnish State Nuclear Waste Management Fund for 2024 at EUR 1,525 (1,458) million.

In March 2023, the Finnish State Nuclear Waste Management Fund confirmed TVO's nuclear waste management fee for 2022 at EUR 39 million, which TVO paid on 31 March 2023. In order to supplement the statutory protected portion, TVO provided the Nuclear Waste Management Fund with a cash security of approximately EUR 44 million. The nuclear waste management fee for 2023 will be confirmed in March 2024.

In 2023, the investment activities of the Finnish State Nuclear Waste Management Fund were positive; this means that a part of the investment profits from 2023 will be allocated in order to cover the legal protected portion, and the part of the profits exceeding that portion will reduce TVO's nuclear waste management fee for 2023. In this case, the cash security for the protected portion that was submitted to the Fund in 2023 will be returned to TVO in March 2024.

In June 2023, the MEAE issued a preliminary decision on the final disposal of low and intermediate level radioactive waste generated in connection with or as a result of the operation of Posiva Oy's encapsulation plant and disposal facility. According to the decision, waste may be placed in TVO's disposal facility for low and intermediate level waste at Olkiluoto (VLJ repository). This does not require an amendment of the terms of the operating licence according to Section 25 of the Nuclear Energy Act.

In September 2023, STUK issued its decision on the periodic safety assessment of the VLJ repository. The decision stated that the level of safety in the VLJ repository is good in terms of both operational safety and long-term safety. Furthermore, STUK stated that TVO has the necessary practices and resources in place for continuing the operation of the VLJ repository.

Approximately 8,600 (8,400) m^3 of low and intermediate level operating waste has been generated during the operation of OL1 and OL2. The waste will be placed in the repository for low and intermediate level waste (VLJ repository) at Olkiluoto.

Correspondingly, 1,695 (1,661) tonnes of spent nuclear fuel has been generated by the end of the year, of which 34 (32) tonnes in 2023. The spent nuclear fuel is stored in the fuel pools of the plant units and in the interim storage for spent nuclear fuel at Olkiluoto.

FINAL DISPOSAL OF SPENT NUCLEAR FUEL
Posiva Oy is responsible for the final disposal of spent nuclear fuel generated at the nuclear power plants of its owners, TVO at Olkiluoto and Fortum Power and Heat Oy (Fortum) in Loviisa.

Posiva's final disposal project has advanced to the building phase of the encapsulation plant and the underground disposal facility designed for the final disposal of spent nuclear fuel. The currently ongoing EKA project entails the implementation of the encapsulation plant as a whole, the first deposition tunnels and other additional facilities required for the disposal facility, the installation of the systems needed for the start of final disposal, the operating licence process, and setting up the supply chains necessary for production operations.

The processing of Posiva's operating licence progressed at STUK, and Posiva is submitting responses to the requests for additional information. In September 2023, STUK reported that the safety assessment and statement on the operating licence application for the disposal facility for spent nuclear fuel will not be completed in 2023. Work with the installation and commissioning of systems at the encapsulation plant progressed as planned. In 2023, a personnel lift was commissioned between the lifting equipment building and the underground facilities.

In the first actual deposition tunnel, investigations relating to verifying the suitability of the tunnel and defining the locations of the deposition holes for the final disposal of nuclear fuel have been completed.

Due to delays in the delivery of certain systems, the start of the joint functional test (practicing final disposal using non-irradiated dummy fuel elements), was postponed until late 2024. The joint functional test was previously scheduled for late 2023.

Posiva's owners submitted the annual report for nuclear waste management in 2022 to the Ministry of Economic Affairs and Employment at the end of March 2023.

Research and development activities

A key target of TVO's research and development (R&D) activities is to ensure the viability of the current business functions and to create new business opportunities. The key focus areas include nuclear power plant operation and service life management, the processing and final disposal of nuclear waste and spent nuclear fuel and creating new business opportunities for the TVO Group.

The total R&D expenses were EUR 14 (10) million, of which most were used for R&D related to nuclear waste management.

TVO is a significant contributor to the financing of Finnish public research programmes on nuclear power plant safety and nuclear waste management. In 2023, TVO's contribution to the financing of these research programmes by the Finnish State Nuclear Waste Management Fund amounted to a total of EUR 6 (5) million.

Acquisitions of tangible and intangible assets and shares

Investments in 2023 amounted to EUR 461 (312) million.

The parent company's investments amounted to EUR 449 (339) million. EUR 370 (276) million was allocated to the OL3 project. EUR 79 (63) million was allocated to OL1, OL2, the operating period of OL3 (during 2023) and the general infrastructure of the area.

Hitachi Energy and TVO signed a turnkey contract in the summer of 2021 about delivering one of Europe's largest battery energy storage systems to Olkiluoto. The 90-megawatt system will support the entire energy network in a potential production disturbance of the OL3 plant unit, thus minimising the effect of power fluctuations on the grid as part of Fingrid's grid load limitation. The battery energy storage system is in the commissioning stage and its final acceptance was postponed to 2024.

Carbon credits worth EUR 0.1 (0.1) million have been relinquished to the Energy Authority. In 2023, carbon credits worth EUR 0.1 (0.1) million were acquired. The carbon credits acquired covered the Company's carbon credit requirements for the financial period.

Sustainability

Sustainability is one of TVO's values. The TVO Group has identified its material impacts on the environment, people and the economy through a materiality analysis updated during 2022. They include:

1. Safe, climate-friendly and stable electricity production
2. Responsible final disposal of spent fuel and exporting competence
3. Transparent and ethical business
4. Responsibility in the supply chains and partnerships
5. Creation of added economic value
6. The development and support of employees' competence
7. Fair and healthy work community
8. Biodiversity and sustainable land use
9. Minimising releases into the air, water and soil
10. Circular economy; energy and material efficiency.

The TVO Group and its entire personnel are committed to a high-standard safety culture (see chapter: **Safety**).

The Group-level policies, approved by the Management Group, outline key objectives related to responsible operations. Group-level policies include:

- Nuclear safety and quality policy
- Sustainability policy
- Production policy
- Corporate safety and security policy.

The principles of sustainable business are described in the TVO Group's Code of Conduct, which is approved by the Company's Board of Directors and applies to the entire personnel as well as all partners and subcontractors. The Code of Conduct includes separate parts for the Group personnel as well as partners and subcontractors. The TVO Group's Code of Conduct complies with the OECD Guidelines for Multinational Enterprises. TVO considers any non-compliance with its Code of Conduct unacceptable. The Code of Conduct is published on TVO's website at **www.tvo.fi/code-of-conduct**.

Through its actions, the TVO Group is committed to advancing the following sustainable development goals set by the United Nations:

TVO reports on its corporate responsibility in accordance with the Global Reporting Initiative (GRI) standards. TVO's Annual and Sustainability Report 2023 is published on the Company's website at **www.tvo.fi/financialpublications**. The information in the sustainability report has been subjected to a limited audit by an external party. The information in the Environmental Report, which is published separately, is verified by an external party.

TVO is preparing for reporting pursuant to the CSRD standard from 2024 onwards. According to the double materiality analysis, the sustainability topics material for TVO are defined and the impacts, risks and opportunities related to them are identified.

SUSTAINABILITY OBJECTIVES AND RESULTS

The objectives for sustainability are based on continuous improvement of operations. The objectives are used to monitor the implementation of the most significant sustainability aspects. The broader sustainability objectives for the TVO Group are broken down in the Sustainability Roadmap for 2030 that is available as part of TVO's Annual and Sustainability Report.

	Objective 2023	Actual 2023
Reputation index	>75	84
Personnel survey, points/ category	A+	A
Reports suspecting violations of the Company's Code of Conduct	0	3
Sick leaves, %	Less than 3%	2.8%
Occupational accident frequency	3.5	3.9
Collective radiation dose, manmSv	648.5	597.7
Environmental damage, pcs	0	0
Unplanned energy unavailability (OL1 and OL2), %	<0.4	2.9
Unplanned automatic scrams/ trips (OL1 and OL2), pcs	0	1

Reputation index: The TVO Group stakeholder survey, average of respondent groups 0–100; under 50=Weak, 50–62=Moderate, 62–70=Good, over 70=Excellent. The survey is conducted and the results are reported every two years. The next survey will be conducted in 2025.

Personnel survey: The personnel survey was conducted in the beginning of 2023. The survey is conducted every 18 months. The evaluation scale from highest to lowest result is AAA–C, where A is satisfactory.

Occupational accident frequency: per million working hours. The indicator is Group-level, including Posiva and TVO's and Posiva's subcontractors.

Collective radiation dose: World Association of Nuclear Operators (WANO) indicator. Reference point: other WANO members' NPPs. Goal: the best quarter.

Environmental incidents: in class considerable/severe.

Unplanned energy unavailability factor: % of total production.

TVO has an ESG risk assessment implemented by Sustainanalytics. In the assessment, TVO has a risk level of 20.5, which is at the lower end of Sustainanalytics' Medium Risk category (20–30, Medium ESG risk).

NUCLEAR PROFESSIONALISM

The development of management principles and working policies in a nuclear power plant has been carried out by defining nuclear professionalism, that is, expectations for working at a nuclear facility, and taking action in order to reinforce these expectations. The expectations for a nuclear professional are part of TVO's activity-based management system.

Nuclear professionalism and leadership are systematically developed at the TVO Group. The Nuclear Professionalism Group is tasked with developing nuclear professionalism and thinking of ways in which human factors could be considered in the everyday work even better. The group's long-term plan takes into account the areas for improvement and leverages the entire organisation to work towards them. In 2023, for example, the organisation had extensive discussions on safety culture based on World Nuclear Association of Nuclear Operator's (WANO) educational narrative concerning safety culture. Nuclear professionalism is also developed in connection with regular plant walkdowns.

Development of leadership is also performed systematically. Annually, areas for improvement are identified on the basis of international peer reviews, self-assessments and the needs of the organisation. Development in 2023 was related to the leadership of cross-organisational processes and harmonising practices across the three plant units.

RESULTS OF ETHICAL BUSINESS

TVO does not tolerate any kind of corruption, bribery or extortion. The TVO Group's Code of Conduct approved by the Board of Directors requires to refrain from transactions and retreat from situations that could cause a conflict between the interests of the Company and the individual. The Company maintains a register on the engagements of specified individuals. TVO also has specific instructions regarding hospitality practices, related party transactions and the processing of insider information as well as compliance principles and procedure accepted by the Board of Directors. Detailed instructions are available regarding the approval procedure of TVO's commitments (procurement agreements, orders, invoices, etc.).

TVO respects the human rights of all people affected by the Company's operations and expects the same from all companies acting in its supply and subcontracting chains. TVO aims to guarantee good, safe working conditions for everyone. In accordance with its Code of Conduct, TVO will not tolerate discrimination or harassment based on age, gender, ethnic background, religion, life philosophy, opinion or other personal characteristic. TVO observes an equality and equal opportunity plan.

All personnel, partner and subcontractor activities at Olkiluoto are supervised by TVO. TVO only purchases products and services from evaluated and approved suppliers. All products and services acquired must meet the requirements for safety, quality and the environment as well as the principles of sustainable business described in the Code of Conduct. TVO's supplier evaluation also includes active monitoring and evaluations at fixed intervals. Supplier evaluations are used to ensure that suppliers pay appropriate attention to environmental issues, the well-being of personnel and quality management. During 2023, 140 suppliers were reviewed by using various methods.

The TVO Group has in place a whistleblowing channel for reporting any Code of Conduct violations and suspicions of the misuse of insider information, which can also be used anonymously. All reports of possible Code of Conduct violations are processed by TVO's Internal Audit in a manner that guarantees under all conditions the rights and privacy of the person making the report and the person suspected of a possible Code of Conduct violation or misuse of insider information.

During 2023, Internal Audit investigated three reports of possible violations of the TVO Group's Code of Conduct. These reports have been investigated and the necessary actions have been taken. The reports are included in Internal Audit's reports to the Audit and Finance Committee and the Board of Directors.

Reports of potential violations of the Code of Conduct

	Number of reports (pcs)	Reports resulting in actions (pcs)
Reports related to the Code of Conduct (corruption, bribery, extortion)	0	0
Reports related to the Code of Conduct (conflict of interest)	0	0
Reports related to the Code of Conduct (inappropriate behaviour)	2	2
Others (matters not in the scope of the Code of Conduct)	1	1

SAFETY

Plant and nuclear safety

The safe operation of the Olkiluoto nuclear power plant relies on competent and responsible personnel, high-quality plant technology, the principle of continuous improvement and independent internal and external supervision. TVO's activity-based management system meets the requirements of the ISO 9001 standard. In order to ensure safe operations, TVO systematically assesses the level of its safety and safety culture, and all of TVO's employees are committed to a strong safety culture.

TVO regularly assesses the state of overall safety in terms of production, nuclear safety, security and service life management as well as leadership, the organisation and personnel. The overall level of safety is good.

The state of the safety culture is regularly assessed according to the IAEA's procedure. TVO's safety culture is estimated to be at a level where the strategic importance of safety has been recognised and proactive practices are employed. TVO aims to reach the highest possible level of safety culture. TVO has continued to employ various measures to maintain and develop the safety culture.

TVO regularly assesses and develops the operation of its plant units with the help of internationally used safety indicators. The results for the safety indicators collective radiation dose, unplanned energy unavailability and unplanned, automatic scrams/trips are described in the table "Sustainability objectives and results" (see: Sustainability).

The Olkiluoto nuclear power plant units, OL1, OL2 and OL3, operated safely throughout the year. TVO classifies events affecting nuclear safety in accordance with the INES scale. In 2023, 10 events rated as INES level 0 (no nuclear or radiation safety significance) and two events rated as INES level 1 (anomaly, exceptional incident with safety effects) took place at the Olkiluoto plant. TVO analyses and investigates all events that may have affected nuclear safety and defines the corrective actions for their causes. TVO publishes news on any significant events of public interest on its website.

Occupational safety

The occupational health and safety operations are guided by an ISO 45001 certified occupational health and safety system (OHS system). The system also covers TVO's share of the OL3 construction phase.

In 2023, the TVO Group's vital industrial safety principles were confirmed. They are as follows:

1. Safety is your responsibility
2. Identify hazards and manage risks
3. Take care of your wellbeing
4. Safe movement and transportation
5. Wear required personal protective equipment.

The TVO Group's goal for accident frequency in 2023 was 3.5 (accidents per one million work-hours). The goal was not achieved for accident frequency, as the accident frequency at Olkiluoto in 2023 was 3.8. The accident frequency considers TVO's personnel, Posiva's personnel and all subcontractors working at Olkiluoto, with the exception of the OL3 worksite until May 2023, which was reported by the Areva–Siemens plant supplier consortium. No lost time occupational accidents occurred during the annual outages.

The key figures for industrial safety in 2023 are reported in more detail in the Annual and Sustainability Report.

THE ENVIRONMENT

TVO is committed to observing the principles of sustainable development, and environmental responsibility is a part of the Company's management system. TVO's and Posiva's certified environmental management systems meet the requirements of the international ISO 14001 standard and the energy efficiency system. Their goal is continuous improvement and raising the level of environmental protection.

TVO recognises the environmental and energy aspects of its operations and works to minimise their negative impacts at all stages of the electricity production chain. Environmental risks have also been identified and assessed, and no risks with a significant impact on operations were detected. Through risk management, the Company aims to foresee possible divergent situations and to mitigate their negative consequences on the environment. TVO constantly monitors the environmental impacts of its operations.

The most significant environmental impacts of the Olkiluoto nuclear power plant are the production of climate-friendly electricity and the local warming of the sea water near the plant. The cooling water temperature remained within the limits required by the environmental permit.

As in previous years, the environmental load caused by the Olkiluoto nuclear power plant was minor in 2023. The environmental authorities are informed of all significant environmental nonconformances and events. In 2023, these included:

- clarification of operational disturbances in the OL1 and OL2 screening recovery plant, and of the completion of modifications,

- abnormal conditions occurring in the operation of the wastewater treatment plant in the spring of 2023 and
- the higher than planned consumption of hydrazine at OL3 and the one-off discharge into sea in December 2023.

The impacts on water systems of the debris handling bypasses have been monitored according to a plan approved by the authority, and the results will be reported during spring 2024. Radioactive releases into the air and water were clearly below the annual regulatory limits.

Operations were developed in accordance with the requirements of the environmental permits and the environmental management system. According to the principle of continuous improvement, goals are set for operations in the Environment and Energy Efficiency Programme that is regularly monitored in the Environment Group consisting of experts from various fields. TVO is also part of an energy efficiency agreement. During the agreement period 2017–2025, the savings target is 150 GWh. This target was already achieved in 2019, so an additional savings target of 500 MWh was set for 2022–2023.

The Olkiluoto water management project for securing the supply of raw water and building a transfer sewer for wastewater was completed during 2023. Going forward, municipal wastewater from Olkiluoto will be routed via the transfer sewer to the Rauma wastewater treatment plant for processing. The processing of wastewater in a larger unit allows for its more efficient purification and reduces the load caused on the water systems. Expansion work for the regional heating network continued.

On 10 October 2023, the Regional State Administrative Agency for Southern Finland granted an environmental permit for the construction of a near-surface final disposal facility for very low-level waste.

TVO started preparations for an environmental impact assessment (EIA) procedure concerning the possible service life extension and power uprating of the OL1 and OL2 plant units.

Environmental matters for 2023, key figures related to the environment and the results from the Environment and Energy Efficiency Programme will be reported in more detail in the Environmental Report that is published separately. The information is verified by an external party.

GROUP PERSONNEL AND TRAINING

Personnel

The TVO Group's Code of Conduct and policies lay down the principles of personnel policy. The objective of the TVO Group is to provide a fair and healthy work community that promotes equality and does not condone any form of discrimination.

At the end of the year, the total number of personnel in the Group was 1,045 (1,007) and the average during the year was 1,057 (1,031) persons. At the end of the year, the total number of personnel at TVO was 1,043 (1,005) and the average during the year was 1,055 (1,029) persons. At the end of the year, the total number of permanent personnel at TVO was 1,009 (984).

TVO recruited 64 (87) new employees. During the year, 39 (66) permanent employees left TVO, including 7 (16) who retired. TVO's sick leave percentage was 2.8 (3.8).

The collective labour agreements for various personnel groups in the energy industry are in force in accordance with agreements between the central organisations until early 2025. 100 per cent of TVO's personnel (senior management excluded) are working under collective labour agreements.

The Group carries out a personnel survey approximately every 18 months. The results of the survey, performed by Eezy Spirit Oy, were received in February 2023. The response rate was 94 per cent, and the People Power index representing the overall result was 69.4 (2021: 68.7). The result clearly improved from the previous survey, even though the rating remained in category A (satisfactory). The next personnel survey will be conducted in late 2024.

Personnel performance, workload and coping at work are monitored through navigation discussions arranged three times a year. Personnel admission and exit interviews are held at all levels of the Group. Supervisors are instructed in the general and professional induction training of new employees before new recruits begin their work. Summaries are drawn of both admission interviews of new employees and exit interviews of personnel leaving the Group, and the results are utilised in developing operations.

The Group's management and operational culture is developed with the help of the Better Workplace Programme. The goals of the programme include improving the efficiency of operations and securing good preconditions for operations by developing matters related to the work of each individual, the immediate work community and the entire Group. The progress of the programme is monitored on a regular basis, and the effectiveness is measured with, e.g., regular personnel surveys. In 2023, the goals of the programme have included increasing transparency in decision-making by, among other things, describing the key decision-making forums; the involvement of personnel in the strategy process has also been continued. Other goals have included communicating on the Group's various development projects and brainstorming common rules and meeting practices in the new flexible working model.

The focus of occupational health care has continued to be on preventative occupational health care, which supports the employees' health and ability to work and function, as well as their maintenance and development.

The matters concerning personnel in 2023 and the key figures that describe them are reported in more detail in the Annual and Sustainability Report.

Personnel training

An annual training programme is implemented in the TVO Group as a tool for personnel development and the planning of training. The annual training programme includes trainings organised by the Group which are planned to be implemented during the next calendar year. The annual training programme is drawn up to correspond with the strategic focus areas and goals for operations determined by the Group's management.

As in previous years, basic training, supplementary training and continuing training for the Group's personnel were arranged according to the annual training programme. The personnel received a total of 10,511 (11,680) days of training, equalling on average 9.9 (11.6) days per TVO employee (incl. TVONS).

Persons managing tasks that directly or indirectly impact the safety of a nuclear facility are required to have a sufficient understanding of nuclear safety requirements and nuclear power technology and the qualifications for handling independent and responsible tasks within their task area.

In 2023, operators of OL1, OL2 and OL3 participated in operations training days and advanced simulator courses in the spring and autumn as required by their refresher training programme.

The Nuclear Professional Leader (NPL) training programme launched in 2021 for the further development of supervisor skills was continued. The aim of the training programme is to prepare supervisors for their tasks within the nuclear industry in more comprehensive ways than before.

Cooperation with educational institutions was deepened with several actors. The goal is to create even closer ties between the Company and students and to offer students diverse thesis opportunities and trainee positions.

The TVO Group participated in the implementation of a national nuclear safety and waste management training course (YJK) together with other major actors in the industry. The Group also implemented the Nordic Nuclear Trainee programme together with Swedish nuclear power plants and Fortum's nuclear power plants in Loviisa. The purpose of the training is to raise the students' interest towards the nuclear industry as an employer and to help them see the opportunities nuclear power can offer in the future.

The matters concerning competence management in 2023 and the key figures that describe them are reported in more detail in the Annual and Sustainability Report.

EU TAXONOMY REPORTING

The EU Taxonomy Regulation (EU) 2020/852 and its delegated acts formulate a robust and science-based framework for companies and investors that provides environmental criteria for determining which economic activities can be classified as environmentally sustainable in the EU. The aim is to make it easier and more uniform to identify sustainable investment targets and direct investments to these targets. The regulation defines six environmental objectives for which activities are defined:

- climate change mitigation;
- climate change adaptation;
- the sustainable use and protection of water and marine resources;
- the transition to a circular economy;
- pollution prevention and control;
- the protection and restoration of biodiversity and ecosystems.

To qualify as environmentally sustainable, companies need to ensure that their economic activities substantially contribute to one of the environmental objectives while simultaneously not doing significant harm to any of the other (technical screening criteria). To be aligned, companies also need to run their operations in according to a set of minimum social safeguards aimed to ensure companies follow the most important human rights related principles.

Nuclear energy in the EU Taxonomy

The technical screening criteria are available for all six objectives: climate change mitigation and climate change adaptation are defined in the climate delegated act (EU) 2021/2139, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and the protection and restoration of biodiversity and ecosystems are defined in the delegated act (EU) 2023/2486. The climate delegated act was amended (EU) 2022/1214 by including technical screening criteria for certain activities related to nuclear energy production and energy production from natural gas. Nuclear energy and activities related to nuclear energy are low-carbon activities that can substantially contribute to climate change mitigation. Nuclear energy generation has near to zero greenhouse gas emissions in the energy generation phase[1]. In the EU Taxonomy, nuclear energy related economic activities are qualified as so-called transitional activities. Nuclear energy facilitates the deployment of renewable energy sources and does not hamper the development of low carbon alternatives.

Reporting requirements

For reports published on data for the financial year 2023, the reporting requirements are governed by the non-financial reporting directive (EU) 2014/95 (NFRD) and the reporting requirements set in the corporate sustainability reporting directive (EU) 2022/2464 (CSRD) will apply for companies for financial years starting 01.01.2024 and onwards. Companies required to publish non-financial information also need to disclose information on how and to what extent their activities associate with economic activities that qualify as environmentally sustainable. TVO is in the scope of the NFRD for the financial year 2023 and CSRD from the financial year 2024, with main activities related to the production of nuclear energy. TVO is therefore required to publish information on KPIs related to their eligible and aligned activities.

[1] **The Complementary Climate Delegated Act (2022/1214/EU)** and the **Final Report of the Technical Expert Group on Sustainable Finance from March 2020**

Nuclear and fossil gas related activities as required by the Disclosures Delegated Act Article 8 (6–8)[2]

Row	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	NO
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	YES
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	YES
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	NO
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	NO
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	NO

2) The consolidated Disclosures Delegated Act (2021/2179/EU) Article 8

TVO's EU Taxonomy disclosure was prepared in accordance with the EU Taxonomy Regulation (2020/852/EU), taking into account the technical screening criteria in the consolidated Climate Delegated Act of 1 January 2024 (Commission Delegated Regulation (EU) 2021/2139) and the disclosure requirements in the consolidated Disclosures Delegated Act of 1 January 2024 (Commission Delegated Regulation (EU) 2021/2178). The Environmental Delegated Act (EU) 2023/2486 with the technical screening criteria for the remaining environmental objectives was also reviewed to assess eligibility, but none of the activities defined under those objectives were found relevant for TVO's operations.

Accounting policy, reporting scope and calculation methods

The TVO Group reports the proportion of the Taxonomy-eligible, non-eligible and Taxonomy-aligned economic activities in relation to the following key performance indicators (KPI): the turnover KPI, the capital expenditure KPI and the operating expenditure KPI. The KPI information is presented in tabular forms using the mandatory templates.

The EU Taxonomy KPIs are calculated from data retrieved from TVO's financial system and is based on the same data and accounting principles as the TVO Group's consolidated financial statements for the financial year ending 31 December 2023 (see details in Notes to the Consolidated Financial Statements). The Consolidated Financial Statements of the TVO Group have been prepared in accordance with International Financial Reporting Standards (IFRS) which have been approved in the European Union. The financial statements have been prepared in accordance with the IAS and International Financial Reporting Standards and SIC and IFRIC interpretations effective on 31 December 2023. In the Finnish Accounting Act and regulations issued by virtue of it, "IFRS" refers to the standards and interpretations which have been endorsed by the EU in accordance with the procedure defined in the EU Regulation (EY) No. 1606/2002. TVO has calculated the KPIs using the financial information in the Group Consolidated Financial Statements 2023 and ensured that no double accounting has occurred. The KPI definitions are based on the Group interpretation of definitions set out in the Disclosures Delegated Act.

The turnover KPI is based on the TVO Group's turnover in the Consolidated Financial Statements. The taxonomy-aligned turnover consists of the sales of electricity to shareholders. Non-taxonomy-aligned turnover is defined as the turnover of TVO's subsidiary TVO Nuclear Services Oy's turnover.

The CapEx KPI is based on additions made to property, plant and equipment, intangible assets and right-of-use assets. More detailed information on capital expenditure can be found in Note 13: Property, plant and equipment and Note 14: Intangible assets.

The OpEx KPI is based on direct non-capitalised costs which are necessary to ensure the continued and effective functioning of property, plant and equipment. These expenses include costs related to research and development, repairs and maintenance and nuclear waste management, as well as all other costs which are related to day-to-day servicing and maintenance of property, plant and equipment and which are necessary to ensure continued and effective activities by the Company or outsourced to a third party. The OpEx numerator includes maintenance costs and nuclear waste management costs.

Green Bond Framework

TVO established a Green Bond Framework in summer 2023 to integrate sustainability into its future financing activities. The first issuance under the Green Bond Framework was done in December 2023 when TVO issued a green private placement of EUR 280 million of Green Notes. The funds obtained from the issue have been 100% allocated to EU Taxonomy activity 4.27 and used 100% refinancing OL3 EPR Nuclear Power Plant construction Capital Expenditure. Allocation of the funds comply with the Green Bond Framework of TVO, based on environmentally friendly electricity production at the TVO's three nuclear power plant units in Olkiluoto, as well as on the responsible arrangement of nuclear waste management.

Taxonomy eligibility

The TVO Group examined its business operations associated with the Olkiluoto nuclear power plant units, OL1, OL2 and OL3, for Taxonomy eligibility. The relevant and taxonomy-eligible economic activities identified are:

- The electricity production in OL1, OL2 and OL3.
- The construction and modifications to the OL3 project, including investments.
- Nuclear plant modification projects at OL1 and OL2, including investments.

The TVO Group identified its economic activities that correspond to the economic activities in the consolidated Climate Delegated Act (Commission Delegated Regulation (EU) 2021/2139). The assessment was done by comparing the operations and activities to the descriptions of the economic activities listed in the Annex I and Annex II in the Climate Delegated Act, Environmental Delegated Act EU) 2023/2486 and to the related NACE codes. All of the TVO Group's nuclear-related operations fall under the climate change mitigation objective.

The TVO Group's most relevant Taxonomy-eligible activities are the construction, modifications, and electricity production at OL3 and the electricity production and plant modification projects at OL1 and OL2. The operations at OL3 fall under Taxonomy activity 4.27: Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best-available technologies, while operations at OL1 and OL2 fall under Taxonomy activity 4.28: Electricity generation from nuclear energy in existing installations. All activities are transitional, as defined in the Taxonomy regulation Article 10 (2)[3].

[3)] Taxonomy regulation (EU) 2020/852

Taxonomy alignment

The TVO Group assessed how the activities at OL1, OL2 and OL3 comply with the relevant technical screening criteria for contributing substantially to the climate change mitigation objective and avoiding harm to the other environmental objectives (DNSH). The screening criteria for nuclear and gas activities include a considerable amount of legal compliance both at the operational and national level, and operational compliance with certain guidelines and standards.

Operational compliance was determined by checking that all relevant documentation was available and included the required information. Member State compliance was checked in dialogue with the Ministry of Economic Affairs and Employment. The assessment procedure and results of compliance with the substantial contribution criteria are presented in Table 2 and of compliance with the DNSH criteria in Table 3.

Based on the alignment assessments and KPI allocation, 99.6% of the TVO Group's consolidated turnover is taxonomy-aligned and 100% of the taxonomy-relevant CapEx and OpEx is taxonomy-aligned. The operations at OL1 and OL2 constitute 40.3% percent of the aligned turnover, 15.0% percent of aligned CapEx and 70.1% percent of the aligned OpEx. Operations at OL3 constitute 59.3% percent of turnover, 85.0% percent of the CapEx and 29.9% of the aligned OpEx reflecting the ongoing operational development of OL3. Commercial electricity production started at OL3 and affected to turnover, Capex and OpEx KPI's. During the OL3 project, all realised costs of the OL3 project, including financing costs, that can be recognised in the cost of the asset have been entered as property, plant and equipment in the Group's balance sheet. The capitalisation of costs was discontinued at the start of OL3's commercial operation, which affects the comparability of the Group's income statement and balance sheet.

KPIs for climate change mitigation

In the table below, are the proportions of aligned and non-eligible activities of the TVO Group's turnover, OpEx and CapEx, covering the financial year ending 31 December 2023. Detailed information on the KPIs are specified in chapter Key performance indicators. The OpEx numerator includes maintenance costs and nuclear waste management costs. All activities are related to the climate change mitigation objective, and there is no eligible but not aligned activities recorded within the activities 4.27 and 4.28. All applicable CapEx and OpEx for calculations are taxonomy-aligned, for turnover the non-eligible proportion is 0.4 percent.

	Total EUR 1,000	Taxonomy-aligned %	Non-taxonomy-eligible %
Turnover	EUR 876,204	99,6%	0,4%
Operating expenditure	EUR 177,234	100%	0,0%
Capital expenditure	EUR 460,614	100%	0,0%

Minimum safeguards

Regarding the minimum safeguards, TVO is committed to respecting internationally recognised human rights and principles and rights at work, in particular the International Bill of Human Rights and the UN Guiding Principles on Business and Human Rights, in addition to the OECD Guidelines for Multinational Enterprises and the fundamental ILO Principles and Rights at Work. TVO ensures its compliance with the minimum social safeguards as required in Article 18 of the Taxonomy Regulation through company policies and compliance with national labour legislation. TVO's principles for ethical business and its results are described in more detail in the chapter Sustainability.

Description of how alignment with substantial contribution criteria was ensured. The assessment description is common for both activities as the requirements are almost identical.

	Taxonomy activity	Description	Relevant KPIs: Turnover	Relevant KPIs: CapEx	Relevant KPIs: OpEx	Alignment assessment
4.27	Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best-available technologies	Construction and safe operation of new nuclear installations for which the construction permit has been issued by 2045 by Member States' competent authorities, in accordance with applicable national law, to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production (new nuclear installations), as well as their safety upgrades. TVO recognises the activity relates to operations at Olkiluoto 3.	✓	✓	✓	Legal compliance on national level was checked in dialogue with the Finnish Ministry of Economic Affairs and Employment. Legal compliance on operational level was determined by checking that all relevant documentation was available and included the required information. Radioactive waste management and disposal: Final disposal of TVO's spent nuclear fuel is managed by Posiva Oy. Information on radioactive waste management and disposal can be found in the chapter: Nuclear waste management. Lifecycle GHG emissions were calculated for all plants collectively with a GWP-total without downstream infra 9.1 g CO_2e/kW (with downstream infra 13.8 g CO_2e/kWh), which is well below the 100 g CO_2e/kWh limit ensuring alignment. The CO_2e/kWh figures are affected by lower KWh due to OL3 test phase and are estimated to decrease in future years.
4.28	Electricity generation from nuclear energy in existing installations	Modification of existing nuclear installations for the purposes of extension, authorised by Member States' competent authorities by 2040 in accordance with applicable national law, of the service time of safe operation of nuclear installations that produce electricity or heat from nuclear energy ('nuclear power plants'). TVO recognises that the activity relates to operations at Olkiluoto 1 and Olkiluoto 2.	✓	✓	✓	

Compliance assessment of Do-No-Significant-Harm criteria (DNSH criteria are identical for activities 4.27 and 4.28 and compliance descriptions are provided together).

Environmental Goal	DNSH-criteria assessment
Climate change adaptation	TVO has conducted a screening and risk assessment to identify physical climate risks according to requirements defined in Appendix A to the climate delegated act. Climate risks are managed as part of the risk management process described in the chapter **Risk management, major risks and uncertainties**. The assessment identified a low risk of sea level rise. Finnish legislation requires that the design of nuclear facilities take into consideration extreme high and low sea water levels and other meteorological variables. The relevant legislation, the Nuclear Energy Act and the Radiation and Nuclear Safety Authority in Finland (STUK) regulatory guides, also ensure compliance with Article 6(b), Article 8b(1), point (a), and Article 8c(a) of Directive 2009/71/Euratom ensuring nuclear safety when exposed to, among others, extreme natural hazards of which sea level rise has been identified.
Sustainable use and protection of water and marine resources	Environmental impacts of TVO's activities on water quality and temperature are monitored as required by the environmental permit, is part of the environmental management system (EMAS, ISO 14001) and ensures compliance with relevant regulations and guidelines constituting the criteria. TVO also monitors other aspects of environmental impacts of operations related to water use and impact. Details on how TVO manages environmental impacts can be found in the Annual and Sustainability Report.
Transition to a circular economy	TVO has plans in place to manage radioactive and non-radioactive waste as part of waste management procedures and the environmental management system (EMAS, ISO 14001). Environmental impact assessments (EIA) are in place for all the aligned activities. Details on how TVO manages environmental impacts can be found in the Annual and Sustainability Report. TVO also monitors other aspects of environmental impacts of operations, such as efficient use of raw materials and waste management and ensure compliance with Commission reporting requirements. TVO contributes to the National financing schemes for decommissioning activities and management of spent fuel and radioactive waste.
Pollution prevention and control	Radioactive discharges to air, water bodies and ground comply with operational license conditions and TVO monitors emissions to air, water and soil through the Alara program. Posiva Oy is constructing a final disposal facility for spent nuclear fuel in Olkiluoto, which is to start operation in the mid-2020s. TVO has adequate capacity for interim storage before the start of final disposal. Requirements regarding the use of substances are governed through compliance with relevant chemical legislation and effects are monitored.
Protection and restoration of biodiversity and ecosystems	Environmental Impact Assessments for all sites are in place and address impacts on biodiversity. All environmental impacts are monitored through the environmental management system (EMAS, ISO 14001).

Key performance indicators

Key performance indicatorsTVO's Taxonomy-aligned turnover 2023

Financial year 2023		2023		Substantial contribution criteria						DNSH criteria									
Economic Activities	Code(s)	Turnover	Pro-portion of Turnover 2023	Climate change mitigation	Climate change adaptation	Water	Circular economy	Pollution	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Circular economy	Pollution	Biodiversity	Minimum safeguards	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) turnover 2022	Category enabling activity	Category transitional activity
		EUR 1,000	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best-available technologies	CCM 4.27 CCA 4.27	519,393	59.3%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	2%		T
Electricity generation from nuclear energy in existing installations	CCM 4.28 CCA 4.28	353,476	40.3%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	97%		T
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		872,868	99.6%	99.6%	0.0%	0.0%	0.0%	0.0%	0.0%	Y	Y	Y	Y	Y	Y	Y	99%		
Of which enabling		0	0.0%	0.0%	0.0%	0.0%	0.0 %	0.0%	0.0%	Y	Y	Y	Y	Y	Y	Y	0%		
Of which transitional		872,868	99.6%	99.6%						Y	Y	Y	Y	Y	Y	Y	99%		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not-Taxonomy-aligned activities) (A.2)		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								0%		
A. Turnover of Taxonomy-eligible activities (A.1 + A.2)		872,868	99.6	99.6%	0.0%	0.0%	0.0%	0.0%	0.0%								99%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
Turnover of Taxonomy-non-eligible activities		3,336	0.4%																
TOTAL		**876,204**	**100.0%**																

TVO's Taxonomy-aligned CapEx 2023

Financial year 2023		2023		Substantial contribution criteria						DNSH criteria									
Economic Activities	Code(s)	CapEx	Proportion of CapEx 2023	Climate change mitigation	Climate change adaptation	Water	Circular economy	Pollution	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Circular economy	Pollution	Biodiversity	Minimum safeguards	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) CapEx 2022	Category enabling activity	Category transitional activity
		EUR 1,000	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best-available technologies	CCM 4.27 CCA 4.27	391,557	85.0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	78%		T
Electricity generation from nuclear energy in existing installations	CCM 4.28 CCA 4.28	69,058	15.0%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	22%		T
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		460,614	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Y	Y	Y	Y	Y	Y	Y	100%		
Of which enabling		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Y	Y	Y	Y	Y	Y	Y	0%		
Of which transitional		460,614	100.0%	100.0%						Y	Y	Y	Y	Y	Y	Y	100%		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not-Taxonomy-aligned activities) (A.2)		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								0%		
CapEx of Taxonomy-eligible activities (A.1 + A.2)		460,614	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%								100%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
CapEx of Taxonomy-non-eligible activities		0	0.0%																
TOTAL		**460,614**	**100.0%**																

TVO's Taxonomy-aligned OpEx in 2023

Financial year 2023	2023			Substantial contribution criteria						DNSH criteria									
Economic Activities	Code(s)	OpEx	Pro-portion of OpEx 2023	Climate change mitigation	Climate change adaptation	Water	Circular economy	Pollution	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Circular economy	Pollution	Biodiversity	Minimum safeguards	Proportion of Taxonomy-aligned (A.1) or -eligible (A.2) OpEx 2022	Category enabling activity	Category transitional activity
		EUR 1,000	%	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y; N; N/EL	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES																			
A.1 Environmentally sustainable activities (Taxonomy-aligned)																			
Construction and safe operation of new nuclear power plants, for the generation of electricity or heat, including for hydrogen production, using best-available technologies	CCM 4.27 CCA 4.27	52,970	29.9%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0%		T
Electricity generation from nuclear energy in existing installations	CCM 4.28 CCA 4.28	124,263	70.1%	Y	N	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	100%		T
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		177,234	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Y	Y	Y	Y	Y	Y	Y	100%		
Of which enabling		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	Y	Y	Y	Y	Y	Y	Y	0%		
Of which transitional		177,234	100.0%	100.0%						Y	Y	Y	Y	Y	Y	Y	100%		T
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																			
				EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL	EL; N/EL										
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not-Taxonomy-aligned activities) (A.2)		0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								0%		
OpEx of Taxonomy-eligible activities (A.1 + A.2)		177,234	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%								100%		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																			
OpEx of Taxonomy-non-eligible activities		0	0.0%																
TOTAL		**177,234**	**100.0%**																

The amount and proportion of taxonomy-aligned turnover (a), CapEx (b) and OpEx (c) in the respective denominators of the KPIs. All activities are related to Climate change mitigation.

Turnover - Taxonomy-aligned economic activities in the denominator (EUR 1,000)

		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	519,393	59.3%	519,393	59.3%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	353,476	40.3%	353,476	40.3%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
8.	**Total applicable KPI**	**876,204**	**100.0%**	**876,204**	**100.0%**	**0.0**	**0.0%**

CapEx - Taxonomy-aligned economic activities in the denominator (EUR 1,000)

		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	391,557	85.0%	391,557	85.0%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	69,058	15.0%	69,058	15.0%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
8.	**Total applicable KPI**	**460,614**	**100.0%**	**460,614**	**100.0%**	**0**	**0.0%**

OpEx - Taxonomy-aligned economic activities in the denominator (EUR 1,000)		**Amount and proportion**					
		CCM + CCA		**Climate change mitigation (CCM)**		**Climate change adaptation (CCA)**	
Row	**Economic activities**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	52,970	29.9%	52,970	29.9%	0	0.0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	124,263	70.1%	124,263	70.1%	0	0.0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
8.	**Total applicable KPI**	**177,234**	**100.0%**	**177,234**	**100.0%**	**0**	**0.0%**

The amount and proportion of taxonomy-aligned turnover (a), CapEx (b) and OpEx (c) in the respective numerators of the KPIs.

Turnover - Taxonomy-aligned economic activities in the numerator (EUR 1,000)		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	519,393	59.5%	519,393	59.5%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	353,476	40.5%	353,476	40.5%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	**872,868**	**100, %**	**872,868**	**100, %**	**0**	**0%**

CapEx - Taxonomy-aligned economic activities in the numerator (EUR 1,000)		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	391,557	85.0%	391,557	85.0%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	69,058	15.0%	69,058	15.0%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	**460,614**	**100, %**	**460,614**	**100.0%**	**0**	**0%**

OpEx - Taxonomy-aligned economic activities in the numerator (EUR 1,000)		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
2.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	52,970	29.9%	52,970	29.9%	0	0%
3.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	124,263	70.1%	124,263	70.1%	0	0%
4.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
5.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
6.	Amount and proportion of taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
7.	Amount and proportion of other taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the numerator of the applicable KPI	0	0.0%	0	0.0%	0	0%
8.	**Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI**	**177,234**	**100, %**	**177,234**	**100.0%**	**0**	**0%**

The amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activities.

Row	Turnover - Taxonomy-eligible but not taxonomy-aligned economic activities (EUR 1,000)	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**0**	**0.0%**	**0**	**0.0%**	**0**	**0.0%**

Row	CapEx - Taxonomy-eligible but not taxonomy-aligned economic activities (EUR 1,000)	Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**0**	**0.0%**	**0**	**0.0%**	**0**	**0.0%**

OpEx - Taxonomy-eligible but not taxonomy-aligned economic activities (EUR 1,000)		Amount and proportion					
		CCM + CCA		Climate change mitigation (CCM)		Climate change adaptation (CCA)	
Row	Economic activities	Amount	%	Amount	%	Amount	%
1.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
2.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
3.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
4.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
5.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
6.	Amount and proportion of taxonomy-eligible but not taxonomy-aligned economic activity referred to in Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
7.	Amount and proportion of other taxonomy-eligible but not taxonomy-aligned economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%	0	0.0%	0	0.0%
8.	**Total amount and proportion of taxonomy eligible but not taxonomy-aligned economic activities in the denominator of the applicable KPI**	**0**	**0.0%**	**0**	**0.0%**	**0**	**0.0%**

Taxonomy non-eligible economic activities.

a) Turnover - Taxonomy non-eligible economic activities (EUR 1.000)

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	3,336	0.4%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	**3,336**	**0.4%**

b) CapEx - Taxonomy non-eligible economic activities (EUR 1.000)

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	**0**	**0.0%**

c) OpEx - Taxonomy non-eligible economic activities (EUR 1.000)

Row	Economic activities	Amount	Percentage
1.	Amount and proportion of economic activity referred to in row 1 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.26 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
2.	Amount and proportion of economic activity referred to in row 2 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.27 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
3.	Amount and proportion of economic activity referred to in row 3 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.28 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
4.	Amount and proportion of economic activity referred to in row 4 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.29 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
5.	Amount and proportion of economic activity referred to in row 5 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.30 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
6.	Amount and proportion of economic activity referred to in row 6 of Template 1 that is taxonomy-non-eligible in accordance with Section 4.31 of Annexes I and II to Delegated Regulation 2021/2139 in the denominator of the applicable KPI	0	0.0%
7.	Amount and proportion of other taxonomy-non-eligible economic activities not referred to in rows 1 to 6 above in the denominator of the applicable KPI	0	0.0%
8.	**Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI**	**0**	**0.0%**

Subsidiaries and joint ventures

TVO Nuclear Services Oy (TVONS) is a wholy-owned subsidiary of TVO. TVONS provides its customers with services and expertise related to high-level nuclear safety, cost-effective operations and nuclear waste management and building new nuclear power plants. The specialised expertise and networks of TVO's personnel are at the disposal of TVONS' customers.

Posiva Oy, jointly owned by TVO and Fortum, is responsible for the research and execution of the final disposal of spent nuclear fuel from its shareholders' Olkiluoto and Loviisa nuclear power plants. Posiva Solutions Oy (PSOY) is a wholly-owned subsidiary of Posiva. As stated in its Articles of Association, PSOY provides nuclear waste management consultancy services as well as related planning and research and development activities.

Significant events after the end of the year

An environmental impact assessment programme (EIA programme) concerning the possible service life extension and power uprating of the OL1 and OL2 was submitted to the Ministry of Economic Affairs and Employment (MEAE), which acts as the coordinating authority, on 5 January 2024.

The Energy Agency has issued a decision on the protection of the grid connected to the full power production of OL3 on January 12, 2024. The decision states that grid protection is a specific protection system of the transmission system operator and under the responsibility of the national grid company Fingrid Oyj. In its decision, the Energy Agency considers Fingrid to have unjustifiably transferred its obligations related to the grid protection system to TVO. In the decision, the Energy Authority requires Fingrid to submit to the Energy Authority for confirmation a presentation of the principles based on which the costs of the protection system will be covered. So far, TVO has covered the majority of the costs.

Prospects for the future

During the starting fiscal period, electricity generation is anticipated to continue steadily across all three plant units. Nuclear fuel availability is guaranteed by long-term agreements.

OL3 is preparing for its first annual outage, which will begin on 2 March and is planned to end on 8 April 2024. Preparations are also made for a service outage at OL1 and a refuelling outage at OL2.

TVO is closely monitoring the fulfillment of the conditions of the Settlement Agreement signed with OL3's Plant Supplier. This agreement signed in March 2018 and amended in June 2021 contains conditions which continue until the end of the warranty periods.

Posiva will resume the implementation of the EKA project, the final disposal facility system, in 2024.

Proposals to the Annual General Meeting

Teollisuuden Voima Oyj's distributable equity as of 31 December, 2023 amounted to EUR 20,938,560.00. The Board of Directors proposes to the Annual General Meeting that no dividend shall be paid.

Key figures of TVO Group

TVO Group (IFRS) (M€)	2023	2022	2021	2020	2019
Turnover	876	358	299	275	254
Profit/loss for the financial year	164	-48	-20	0	87
Research expenses	14	10	12	12	15
Depreciation	179	47	44	45	45
Investments [1]	461	312	578	56	369
Equity	2,252	2,218	2,063	2,043	1,819
Subordinated shareholder loans (hybrid equity) (included in the former) [3] [5]	929	929	929	929	679
Non-current and current interest-bearing liabilities (excluding loan from VYR) [2]	4,676	4,831	4,337	4,281	4,370
Loan from VYR [2]	728	651	711	716	591
Provision related to nuclear waste management	1,289	1,294	1,368	1,030	1,041
Balance sheet total	9,229	9,171	8,662	8,181	7,942
Equity ratio, % [4]	31.2	30.7	31.3	31.7	28.8
Average number of personnel	1,057	1,031	1,004	984	943

[1] Acquisitions of property, plant and equipment, intangible assets and shares are based on gross investments.

[2] The Finnish State Nuclear Waste Management Fund (VYR)

[3] Subordinated loans

[3] Equity ratio % = 100 × $\frac{\text{equity + loans from equity holders of the company}}{\text{balance sheet total - provision related to nuclear waste management - loan from the Finnish State Nuclear Waste Management Fund}}$

[5] During the accounting period 2012, the terms of the loans of the equity holders of the Company have been changed and the loans are included in equity according to IFRS standards.

Consolidated adjusted profit/loss for the financial year (M€)	2023	2022	2021	2020	2019
Profit/loss for the financial year (IFRS)	164	-48	-20	0	87
The impact of the nuclear waste management obligation [1] (profit -/loss +)	-13	36	17	6	-80
Other IFRS adjustments	-33	0	0	0	-1
The impact of joint ventures	0	2	-1	3	-1
Profit/loss before appropriations	118	-10	-4	9	5
Adjusted profit/loss for the financial year	118	-10	-4	9	5

[1] Includes profit/loss effects from nuclear waste management according to IFRS standard.

(M€)	2023	2022	2021	2020	2019
TVO's share in the Finnish State Nuclear Waste Management Fund (VYR)	1,458	1,436	1,451	1,479	1,514
TVO's funding target obligation to the Finnish State Nuclear Waste Management Fund	1,525	1,458	1,436	1,451	1,471
The carrying value of TVO's share in the Finnish State Nuclear Waste Management Fund (non-current assets)	1,035	1,000	1,010	1,030	1,041

See note 24 **Assets and provisions related to the nuclear waste management obligation**.

Key figures of parent company (FAS)

Teollisuuden Voima Oyj (FAS) (M€) Parent company's financial statement has been prepared in accordance with the Finnish Accounting Standards (FAS).	**2023**	**2022**	**2021**	**2020**	**2019**
Turnover	873	353	294	271	251
Profit/loss before appropriations	118	-10	-4	8	5
Fuel costs	111	70	61	64	65
Nuclear waste management costs	106	100	41	28	-5
Capital expenditure (depreciation and financial income and expenses)	266	37	38	34	39
Investments [1]	449	339	220	52	278
Equity	864	864	861	861	857
Appropriations	299	181	193	197	193
Non-current and current interest-bearing liabilities (excluding loan from VYR and loans from equity holders of the company) [2]	4,610	4,798	4,277	4,180	4,282
Loans from equity holders of the company [3]	929	929	929	929	679
Loan from VYR [2]	728	651	711	716	591
Balance sheet total	7,714	7,602	7,156	6,995	6,724
Equity ratio, % [4]	30,0	28,4	30,8	31,7	28,2
Average number of personnel	1,055	1,029	1,002	983	942

[1] Acquisitions of property, plant and equipment, intangible assets and shares are based on gross investments.

[2] The Finnish State Nuclear Waste Management Fund (VYR)

[3] Subordinated loans

[4] Equity ratio % = 100 x $\frac{\text{equity + appropriations + loans from equity holders of the company}}{\text{balance sheet total - loan from the Finnish State Nuclear Waste Management Fund}}$

Electricity delivered to equity holders of the company (GWh)	**2023**	**2022**	**2021**	**2020**	**2019**
Olkiluoto 1	7,417	6,918	7,393	7,299	7,531
Olkiluoto 2	6,855	7,522	7,021	7,264	7,198
Olkiluoto 3	10,361	1,876	0	0	0
Total Olkiluoto	24,633	16,316	14,414	14,563	14,729
Meri-Pori	0	0	0	82	182
Total	**24,633**	**16,316**	**14,414**	**14,645**	**14,911**

Capacity factors, %	**2023**	**2022**	**2021**	**2020**	**2019**
Olkiluoto 1	95.4	89.1	95.1	93.7	96.9
Olkiluoto 2	88.3	96.8	90.4	93.3	92.7
Olkiluoto 3	75.2	17	-	-	-
Total capacity factor	**86.3**	**67.6**	**92.8**	**93.5**	**94.8**

TVO share of the electricity used in Finland, %	**2023**	**2022**	**2021**	**2020**	**2019**
	30.8	19.9	16.8	18.1	17.3

TVO Group

Consolidated income statement

EUR 1,000	Note	1 Jan-31 Dec 2023	1 Jan-31 Dec 2022
Turnover	3,4	**876,204**	**358,208**
Work performed for own purpose	5	7,143	21,310
Other income	6	11,904	13,068
Materials and services	7	-222,211	-137,884
Personnel expenses	8	-84,430	-80,316
Depreciation and impairment charges	4,9	-178,674	-46,992
Other expenses	10	-160,119	-100,625
Operating profit/loss		**249,817**	**26,769**
Finance income	11	76,445	6,295
Finance expenses	11	-162,423	-81,480
Total finance income and expenses		-85,978	-75,185
Share of the profit/loss of joint ventures		173	590
Profit/loss before income tax		**164,012**	**-47,826**
Income taxes	12	-13	-52
Profit/loss for the financial year		**163,999**	**-47,878**
Profit/loss for the financial year attributable to:			
Equity holders of the company		163,999	-47,878

Consolidated statement of comprehensive income

EUR 1,000	Note	1 Jan-31 Dec 2023	1 Jan-31 Dec 2022
Profit/loss for the financial year		163,999	-47,878
Other comprehensive items			
Items that may be reclassified to profit or loss in subsequent periods:			
Cash flow hedges	11	-89,928	211,736
Total other comprehensive profit/loss items		-89,928	211,736
Total comprehensive profit/loss for the financial year		**74,071**	**163,858**
Total comprehensive profit/loss for the financial year attributable to:			
Equity holders of the company		74,071	163,858

Consolidated balance sheet

EUR 1,000	Note	31 Dec 2023	31 Dec 2022
Assets			
Non-current assets			
Property, plant and equipment	13	6,357,069	6,363,783
Intangible assets	14	2,515	2,476
Loans and other receivables	17	784,734	710,962
Investments in joint ventures	15	4,070	3,897
Investments in shares	18	1,692	1,935
Derivative financial instruments	20	169,076	225,183
Share in the Finnish State Nuclear Waste Management Fund	24	1,035,276	999,662
Total non-current assets		**8,354,432**	**8,307,898**
Current assets			
Inventories	19	486,932	272,378
Trade and other receivables	3,17	95,973	233,078
Derivative financial instruments	20	3,555	4,463
Cash and cash equivalents		287,684	353,203
Total current assets		**874,144**	**863,122**
Total assets		**9,228,576**	**9,171,020**
Equity and liabilities			
Capital and reserves attributable to equity holders of the company			
Share capital	21	600,365	600,365
Share premium reserve and statutory reserve	21	242,383	242,383
Fair value and other reserves	21	138,799	228,727
Subordinated shareholder loans (hybrid equity)	21	929,300	929,300
Retained earnings	21	341,113	216,742
Total equity		**2,251,960**	**2,217,517**

EUR 1,000	Note	31 Dec 2023	31 Dec 2022
Liabilities			
Non-current liabilities			
Provision related to nuclear waste management	24	1,289,352	1,294,345
Loan from the Finnish State Nuclear Waste Management Fund	22	727,500	651,339
Bonds	22	3,458,390	3,254,801
Other financial liabilities	22	819,905	1,276,463
Derivative financial instruments	20,22	19,859	40,040
Total non-current liabilities		**6,315,006**	**6,516,988**
Current liabilities			
Current financial liabilities	22	371,387	258,669
Derivative financial instruments	20,22	6,708	544
Advance payments received	3,23	68,063	23,064
Trade payables	23	22,793	16,821
Other current liabilities	23	192,659	137,417
Total current liabilities		**661,610**	**436,515**
Total liabilities		**6,976,616**	**6,953,503**
Total equity and liabilities		**9,228,576**	**9,171,020**

Consolidated statement of changes in total equity

EUR 1,000	Note	Share capital	Share premium reserve and statutory reserve	Fair value and other reserves	Subordinated shareholder loans (hybrid equity)	Retained earnings	Attributable to equity holders of the company	Total equity
Equity 1 Jan 2023		**600,365**	**242,383**	**228,727**	**929,300**	**216,742**	**2,217,517**	**2,217,517**
Profit/loss for the financial year		0	0	0	0	163,999	163,999	163,999
Other comprehensive profit/loss items:								
Cash flow hedges		0	0	-89,928	0	0	-89,928	-89,928
Interest paid of subordinated shareholder loans (hybrid equity)		0	0	0	0	-39,628	-39,628	-39,628
Equity 31 Dec 2023	21	**600,365**	**242,383**	**138,799**	**929,300**	**341,113**	**2,251,960**	**2,251,960**

EUR 1,000	Note	Share capital	Share premium reserve and statutory reserve	Fair value and other reserves	Subordinated shareholder loans (hybrid equity)	Retained earnings	Attributable to equity holders of the company	Total equity
Equity 1 Jan 2022		**600,365**	**242,383**	**16,991**	**929,300**	**274,022**	**2,063,061**	**2,063,061**
Profit/loss for the financial year		0	0	0	0	-47,878	-47,878	-47,878
Other comprehensive profit/loss items:								
Cash flow hedges		0	0	211,736	0	0	211,736	211,736
Interest paid of subordinated shareholder loans (hybrid equity)		0	0	0	0	-9,402	-9,402	-9,402
Equity 31 Dec 2022	21	**600,365**	**242,383**	**228,727**	**929,300**	**216,742**	**2,217,517**	**2,217,517**

Consolidated cash flow statement

EUR 1,000	Note	2023	2022
Operating activities			
Profit/loss for the financial year		163,999	-47,878
Adjustments:			
Taxes		13	52
Finance income and expenses		85,978	75,185
Depreciation and impairment charges		178,674	46,992
Share of the profit/loss of joint ventures		-173	-590
Other non-cash flow income and expenses [1)]		-42,303	-46,163
Sales profit/loss of property, plant and equipment and shares		24	0
Changes in working capital:			
Increase (-) or decrease (+) in non-interest-bearing receivables		-34,838	28,281
Increase (-) or decrease (+) in inventories		35,319	2,137
Increase (+) or decrease (-) in short-term non-interest-bearing liabilities		93,986	31,875
Interest paid and other finance expenses		-63,464	-4,253
Dividend received		0	2,209
Interest received		17,041	6,277
Taxes paid		-13	-52
Cash flow from operating activities		**434,243**	**94,072**
Investing activities			
Acquisition of property, plant and equipment		-273,515	-425,468
Acquisition of intangible assets		-541	-372
Proceeds from sale of shares		220	0
Loan receivables granted		-73,772	-15,831
Repayments of loans granted		0	75,837
Cash flow from investing activities		**-347,608**	**-365,834**

EUR 1,000	Note	2023	2022
Financing activities			
Withdrawals of long-term loans		1,250,408	1,050,000
Repayment of long-term loans		-1,352,230	-517,415
Principal elements of lease payments		-3,799	-2,409
Interest paid of subordinated shareholder loans (hybrid equity)		-36,393	-6,079
Increase (+) or decrease (-) in current financial liabilities		89,020	62,740
Repayment of current financial liabilities		-99,160	-134,190
Cash flow from financing activities		**-152,154**	**452,647**
Change in cash and cash equivalents		**-65,519**	**180,885**
Cash and cash equivalents 1 Jan		353,203	172,318
Cash and cash equivalents 31 Dec	18	**287,684**	**353,203**

[1)] Other non-cash flow income and expenses consists of nuclear waste management obligation.

Notes to the consolidated financial statements

1 General information on the Group

Teollisuuden Voima Oyj together with its subsidiary forms the TVO Group. The ultimate parent of the Group is Teollisuuden Voima Oyj, domiciled in Helsinki.

TVO owns and operates three nuclear power plant units (OL1, OL2 and OL3) in Olkiluoto, in the municipality of Eurajoki. In addition, TVO has a share in a gas turbine plant.

Copies of the consolidated financial statements are available at **www.tvo.fi**.

These consolidated financial statements were authorised for issue by the Board of Directors of TVO in its meeting on 26 February 2024. Under the Finnish Limited Liability Companies Act, the Shareholders' meeting may modify or reject the financial statements.

The Financial Statements are also published in accordance with the European Single Electronic Format (ESEF) reporting requirement. The ESEF report is available at **www.tvo.fi**.

OLKILUOTO 3 EPR EFFECTS ON THE ACCOUNTING POLICIES AND COMPARABILITY OF THE CONSOLIDATED INCOME STATEMENT AND BALANCE SHEET
The electricity production of the Olkiluoto 3 EPR plant unit (OL3) started on March 2022. Sales proceeds from the delivery of OL3's test production electricity and variable costs have been recorded in the income statement in accordance with the IAS 16 Standard. The test production phase for Olkiluoto 3 was completed and regular electricity production started on April 2023. TVO decided to submit on April 2023 to the OL3 plant supplier the Provisional Takeover Certificate. In addition TVO confirmed that the commercial operation of the plant started on May 2023.

Commercial operation transferred responsibility for the OL3 plant unit to TVO. Starting the commercial operation means as well that in accordance with the IAS 16 Property, Plant and Equipment Standard, the capitalisation of OL3 project costs was ended and the recognition of depreciation was commenced because the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. The total IFRS acquisition cost of the OL3 project was approximately EUR 5.7 billion. EUR 250.0 million was transferred from the OL3 investment to operating-time fuel (current assets) when the OL3 plant unit entered commercial operation. The shareholders' right to electricity generated by OL3 and their liability for the annual costs incurred from electricity generation are determined in accordance with TVO's Articles of Association. The charging of the variable and fixed fees for the commercial operation of OL3 was started on 1 May 2023. According to TVO's Articles of Association, the fixed costs must be paid monthly in advance, and no later than the 24th day of the preceding month.

During the OL3 project, all realised costs of the OL3 project, including financing costs, that can be recognised in the cost of the asset have been entered as property, plant and equipment in the Group's balance sheet. The capitalisation of costs was discontinued at the start of OL3's commercial operation, which affects the comparability of the Group's income statement and balance sheet.
In the income statement, the most significant changes can be seen under turnover, materials and services, depreciation and impairment charges, other expenses and finance income and expenses. In the balance sheet, the most significant changes can be seen under property, plant and equipment, inventories, trade and other receivables and advance payments received.

The final payment of approximately EUR 193 million in delay compensation agreed upon in 2018 was set off against the final payment installment of the Areva companies under the Plant Contract in May 2023. Long-term receivables include the additional delay compensation of EUR 56.7 million to TVO, agreed upon in 2021, will become due during the final takeover of OL3 in April 2025 at the earliest.

COST-PRICE PRINCIPLE
TVO is a public limited liability company owned by Finnish industrial and energy companies. Under its Articles of Association, TVO supplies electricity to its shareholders at cost-price (so-called Mankala principle), which means that it delivers the electricity it has produced or procured to its shareholders in proportion to their shareholdings in each series. Each of the shareholders of each series bears their share of the variable and fixed annual costs as specified in detail in the Articles of Association.

In accordance with TVO's Articles of Association, each shareholder of each series is responsible for the following variable annual costs of the Company allocated to the series in proportion to the electricity it has consumed generated or transferred by the Company:

1. Acquisition, transport, transportation insurance, storage and handling costs of fuel;
2. Taxes depending on the power production, and
3. Other costs incurred to the company directly depending on the power volume used by the respective shareholder.

In accordance with TVO's Articles of Association, each shareholder of each series, irrespective of whether or not it has used its share of electricity, is responsible for the following fixed annual costs of the Company in proportion to the number of shares in a particular series it holds:

4. Normal operating, maintenance and administrative costs;
5. Other taxes than those depending on the power production;
6. Insurance costs;
7. Installments and interest payments on the loans of the Company falling due annually in accordance with the loan agreements of the Company as well as other expenses resulting from the financing of the Company or the arranging thereof;
8. Depreciations;
9. Costs set out in the Nuclear Energy Act incurred by the Company's nuclear waste management (concerning the nuclear power plants), and
10. Other costs independent of power production related to the Company's normal busi-ness and included in the budget or approved by the Board of Directors.

In accordance with TVO's Articles of Association, each shareholder's share of the liability for the annual costs will always be limited to the amount corresponding to the proportion of its shareholding to all shares belonging to the same series, and another shareholder's failure will not increase the shareholder's liability based on shareholding. Only the Company will have the sole right to call upon the responsibility of the shareholders defined in the Articles of Association. The shareholders shall not be liable for costs other than the costs of the Company mentioned above, unless otherwise agreed.

A prerequisite to the shareholder's right to receive electricity is that it has paid its share of costs on time. If a shareholder neglects to observe its payment obligation, the Company will have the right to immediately cut off the distribution of electricity to the shareholder and to sell the shareholder's portion of electricity to a party submitting the best offer, primarily to another shareholder of the Company.

The cost-price principle is described in detail in the Articles of Association.

2 Accounting policies

BASIS OF PREPARATION

The financial statements of the TVO Group have been prepared in accordance with International Financial Reporting Standards (IFRS) which have been approved in the European Union. These financial statements have been prepared in accordance with the IAS and International Financial Reporting Standards and SIC and IFRIC interpretations effective on 31 December 2023. In the Finnish Accounting Act and regulations issued by virtue of it, "IFRS" refers to the standards and interpretations which have been endorsed by the EU in accordance with the procedure defined in the EU Regulation (EY) No. 1606/2002.

The consolidated financial statements have been prepared under the historical cost convention, except for investments in shares and derivative financial instruments, which are recognised at fair value.

The consolidated financial statements are presented in euros, which is the functional and presentation currency of the Group's parent company.

The consolidated financial statements have been prepared according to the same accounting policies as in 2022. The Group has adopted the following amendments to exist-ing standards as of 1 January 2023:

» IFRS 17 Insurance Contracts: Replace IFRS 4 Insurance Contracts and requires a current measurement model
» IAS 1 (amendment) Presentation of Financial Statements: Require to disclose material accounting policy information
» IAS 8 (amendment) Accounting Policies, Changes in Accounting Estimates and Er-rors: Disclosure of Accounting policies and Definition of Accounting Estimates
» IAS 12 (amendment) Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The following new standards and amendments to existing standards issued already will be adopted by the Group in 2024 or later:

» IAS 1 (amendment) Presentation of Financial Statements: Classification of Liabilities as Current or Non-current
» IFRS 16 (amendment) Leases: Lease Liability in a Sale and Leaseback

Based on initial assessment, Group estimates that these changes have no material impact on the consolidated financial statements, unless separately above mentioned.

COMPANIES INCLUDED IN THE CONSOLIDATED FINANCIAL STATEMENTS

Subsidiaries

The consolidated financial statements include Teollisuuden Voima Oyj (TVO) and its subsidiary TVO Nuclear Services Oy. Subsidiaries are companies in which the Group has control at the end of the financial period. Control exists if the Group holds more than a half of the voting rights or otherwise has control. Subsidiaries acquired are consolidated from the date on which control is transferred to the Group, and subsidiaries sold are no longer consolidated from the date that control ceases.

The purchase method of accounting is used to consolidate subsidiaries into the Group. The purchase price is determined as the aggregate of the acquisition date fair values of the assets given as consideration and liabilities incurred or assumed. Costs directly attributable to the acquisition are recognised in profit or loss.

In the consolidation, intercompany share ownership, intercompany transactions, receivables, liabilities, unrealised gains and internal distributions of profits are eliminated. Unrealised losses are not eliminated, if the losses are due to impairment of the asset being transferred. To ensure consistency, subsidiaries' accounting policies have, in all material respects, been changed to conform to the accounting policies adopted by the Group.

Joint ventures

The Group applies IFRS 11 to all joint arrangements. Under IFRS 11, investments in joint arrangements are classified as either joint operations or joint ventures, depending on the contractual rights and obligations of each investor.

TVO's joint venture is Posiva Oy, the main activities of which (A series) consist of the final disposal of nuclear fuel of nuclear power plants. Both ventures are liable for its main activities in proportion to their own usage. Posiva Solutions Oy is a wholly-owned subsidiary of Posiva Oy (B series). Posiva Solutions Oy focuses on the sales of the know-how Posiva has accumulated from its design, research and development activities in the final disposal of spent nuclear fuel, as well as on associated consulting services. The Posiva Group is accounted for by the equity method of accounting.

Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the Group's share of losses in a joint venture equals or exceeds its interests in the joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint ventures.

Unrealised gains on transactions between the Group and its joint venture are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of the joint ventures have been changed where necessary to ensure consistency with the policies adopted by the Group.

SEGMENT REPORTING

The Board of Directors is the chief operating decision maker in TVO, and is in charge of the allocation of resources to the operating segments and for the assessment of their results. The Board also decides on the corporate strategy, significant investments, the organisational structure, as well as financing and insurance policies. The operating plan and the budget are also approved by the Board of Directors which also monitors their implementation and delivers the elements required to secure the operation of systems and procedures that are critical to nuclear safety and safety culture.

TVO owns and operates three nuclear power plant units (OL1, OL2, and OL3). The electricity production of the Olkiluoto 3 EPR plant unit (OL3) started on March 2022. The test production phase for Olkiluoto 3 was completed and regular electricity production started on April 2023. TVO decided to submit on April 2023 to the OL3 plant supplier the Provisional Takeover Certificate. In addition TVO confirmed that the commercial operation of the plant started on May 2023.

TVO's shares are divided into A and B series. Shareholders with series A shares are entitled to the electricity produced at the OL1 and OL2 nuclear power plant units. Shareholders with series B shares are entitled to the electricity produced at the OL3 nuclear power plant unit. Pursuant to the Articles of Association, the purpose of all of the TVO Group's business operations is to construct and acquire power plants and power transmission equipment, and to generate, transfer and transmit electricity primarily to the shareholders of the Company on the terms and conditions set out in the Articles of Association. Based on the series of shares, TVO identifies two operating segments; "OL1/OL2 (series A shares)" and "OL3 (series B shares)" which are reported on to the Board of Directors on a regular basis. Operating segments "OL1/OL2 (series A shares)" and "OL3 (series B shares)" are aggregated into one operating segment "Nuclear power" based on the aggregation criteria presented in the standard (IFRS 8:12).

The operating segments have similar economic characteristics as they share the same cost structure and TVO as a whole operates according to the cost-price principle (Mankala principle). The shareholders are charged incurred costs in the price of electricity, and thus in principle the profit/loss for the period under review is zero, unless specific circumstances dictate otherwise. The shareholders pay variable costs based on the volumes of energy supplied, and fixed costs in proportion to their ownership, irrespective of whether or not they have used their share of the power output. Due to the operating principle, key figures based on the financial result are not presented.

Furthermore, the operating segments are similar in terms of all of the following characteristics: the nature of the products and services, the nature of the production processes, the type or class of customer for the products and services, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Both operating segments use nuclear power to generate electricity in Olkiluoto in the Municipality of Eurajoki. Through TVO's direct owners, the electricity produced by TVO is provided to the Finnish industry as well as energy companies.

The customers of the operating segments consist of the shareholders of the Company. The shareholders of both share series are essentially the same. The ownership proportions of the shareholders are essentially the same for both share series and electricity is sold to the shareholders in proportion to their ownership of each share series. The charging principle of electricity is the same to all the shareholders of the share series. The regulatory environment of the operating segments is consistent. The premise of the Nuclear Energy Act (990/1987) is that the use of nuclear energy shall be in line with the overall good of the society as well as safe and it shall not cause any harm to people, the environment, or property. The licensee has several obligations in respect of the use of nuclear energy; for example, the licensee is responsible for the safety of the use of nuclear energy and for the waste generated by the operations as well as for all the costs of nuclear waste management. The operating segments also share the same financing and personnel. Electricity production is the one business area of TVO and from the point of view of the shareholders, nuclear energy is considered as a whole.

Based on the criteria presented above, the operating segments are aggregated into one operating segment and the Group has one reportable segment: "Nuclear power". This segment also covers TVO Nuclear Services Oy (TVONS), a subsidiary of the Group, which engages in operations related to nuclear power.

REVENUE RECOGNITION PRINCIPLES

TVO operates on a cost-price principle. Revenue is recognised based on the consideration received when electricity is delivered or services are rendered. Revenue is presented net of indirect sales taxes. Revenue is recognised as follows:

Sales of electricity and other revenue

Revenue on sales of electricity is divided into variable and fixed charge. Revenue on sales of electricity concerning variable charge is recognised based on delivery. The recognised income for shareholders is based on the quantities delivered. The variable charge is invoiced and recognised in turnover monthly. These variable costs are paid retrospectively on the 24th of the next month. The fixed costs, or liabilities based on customer contracts, are invoiced one month in advance and recognised as advance payments received. The fixed charge is entered as income in the right month. According to TVO's Articles of Association, the fixed costs must be paid monthly in advance, and no later than the 24th day of the preceding month.

The revenue from services is recognised on an accrual basis in the accounting period when the services are rendered to the customer and when the control of the service transfers to a customer.

Revenue from long-term consulting services projects that spread over several accounting periods is recognised based on the proportion of costs incurred from work performed up to the balance sheet date and the estimated total expenses of the project. If it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.

Other income

Revenue from activities outside the ordinary course of business is reported as other income. This includes joint ventures' revenue from services, rental income and non-recurring items, such as gains from sales of property, plant and equipment. Rental income is recognised on a straight line basis over the rental period and gains from sales of property, plant and equipment when the significant risks and rewards of ownership, interests and control have been transferred to the buyer.

GOVERNMENT GRANTS

Grants are recognised at their fair value, when the Group meets all the conditions attached to them, and where there is a reasonable assurance that the grant will be received. Government grants relating to costs are deferred on the balance sheet and recognised in the income statement over the period in which their relevant costs are recorded. Government grants relating to the purchase of property, plant and equipment are deducted from the acquisition cost of the asset.

RESEARCH AND DEVELOPMENT COSTS

Research and development costs (except R&D costs related to nuclear waste management) of the Group are recognised as an expense as incurred and included in other expenses in the income statement.

Development costs are capitalised if it is assured that they will generate future income, in which case they are capitalised as intangible assets and amortised over the period of the income streams. Currently, the Group does not have any development costs that would qualify for capitalisation.

Research costs that relate to nuclear waste management are discussed in the paragraph Assets and provisions related to nuclear waste management obligations.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment of the Group are stated on the consolidated balance sheet at historical cost less grants received, accumulated depreciation and impairment charges, and compensation, if any. Historical cost includes expenditure that is directly attributable to the acquisition of an item.

In the historical costs of power plant projects and other significant investments (completion time more than a year), the financing costs incurred during the construction period will be included.

The historical costs of nuclear power plants include furthermore the estimated costs of dismantling and removing an item and restoring the site on which it is located. The amount recognised relating to decommissioning will be depreciated over the estimated operating time of the nuclear power plant. (More information is included in paragraph **Assets and provisions related to nuclear waste management obligations**.)

Land and water areas are not depreciated.

Other property, plant and equipment are depreciated using the straight-line method over their estimated useful lives.

Straight-line depreciation is based on the following estimated useful lives:

- » OL1, OL2 and OL3 nuclear power plant units:
  - – Basic investment OL1 and OL2 — 61 years
  - – Plant investment OL3 — 10–60 years
  - – Investments made according to the modernisation programme — 16–35 years
  - – Automation investments associated with the modernisation — 15 years
  - – Additional investments — 10 years
- » Buildings and structures — 10–40 years
- » TVO's share in the Olkiluoto gas turbine power plant — 30 years
- » Decomissioning of the nuclear power plant units:
  - – OL1 and OL2 — 61 years
  - – OL3 — 60 years.

During the OL3 project, all realised costs of the OL3 project, including financing costs, that can be recognised in the cost of the asset have been entered as property, plant and equipment in the Group's balance sheet. The depreciation periods according to the plan of the OL3 plant unit are based on financial useful times for buildings, main components, process systems, electrical, mechanical and automation engineering, pipelines and other machinery and equipment. The depreciation period is 10 years for information systems, batteries, spare parts and control rods, among others. The 20-year depreciation period is for turbines, main generator, simulator and transformers, among others. The depreciation period is 30 years, for example, lightframe buildings, steam generators, condenser, control rod drive, reactor pressure vessel internals, cables, valves and pumps. The depreciation period is 60 years for buildings under the plant contract, the reactor pressure vessel and the primary circuit piping. Overhead costs, as well as interest costs during construction, are distributed for each commodity in terms of economic value or acquisition cost.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate to reflect the changes in expectations of economic benefits.

Costs of renewal of an item or a part of an item of property, plant and equipment are capitalised if the part is accounted for as a separate item. Otherwise, the subsequent expenditure is included in the carrying amount only when it is probable that future economic benefits associated with the expenditure will flow to the Group.

Annual repair and maintenance costs are recognised in profit or loss, when they occur. Investments connected with the modernisation and maintenance of the power plant units are capitalised.

INTANGIBLE ASSETS

Intangible assets are shown at historical cost less grants received, accumulated amortisation, and impairment losses if applicable. Historical cost includes costs directly attributable to the acquisition of the particular asset.

Other long-term expenditure included in intangible assets are amortised on a straight-line basis over their estimated useful lives. These include computer software and certain payments made for the use of assets.

The amortisation periods of the intangible assets are as follows:

- Computer software 10 years
- Other intangible assets 10 years.

The amortisation period of an intangible asset is changed where necessary, if the estimated useful life changes from that previously estimated.

Furthermore, intangible assets include carbon dioxide (CO_2) emission rights. Emission rights are recognised at historical cost, and are presented under emission rights. The current liability for returning emission rights is recognised at the carrying value of possessed emission rights. If there is a shortfall, a current liability is recognised to cover the acquisition of the missing emission rights. This current liability is valued at the current market value of the emission rights at the balance sheet date. The cost of the emission rights is recognised in the income statement under costs of materials and services. The gains from the sales of emission rights are refunded to the equity holders of the company.

IMPAIRMENT OF PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

The Group assesses at each balance sheet date whether there are indications that the carrying amount of an asset may not be recoverable. If such indications exist, the recoverable amount of the asset in question will be measured. For the purposes of assessing impairment, assets are examined at the level of cash-generating units, that is, at the lowest level that is mainly independent of other units and for which there are separately identifiable cash flows and largely independent from those of corresponding units.

The recoverable amount is the higher of an asset's fair value less costs to sell or value in use. The value in use is determined by reference to discounted future cash flows expected to be generated by the asset. The discount rate used is pre-tax and reflects the time value of money and asset specific risks.

Impairment loss is recognised when the carrying amount of the asset is greater than its recoverable amount. Impairment loss is charged directly to the income statement. If a cash-generating unit is subject to an impairment loss, it is allocated first to decrease the goodwill and subsequently, to decrease the other assets of the unit. At recognition of the impairment loss, the useful life of the reamortised assets is reassessed. Impairment loss of other assets than goodwill is reversed in the case that a change has occurred in the estimates used in measuring the recoverable amount of the asset. The increased carrying amount must not, however, exceed the carrying amount that would have been determined had no impairment loss been recognised in prior years.

INVENTORIES

Inventories are measured at acquisition cost. The acquisition cost comprises raw materials, direct labor, and other direct costs. The carrying amount of inventories is not reduced to a value that is less than its acquisition cost, as TVO operates at cost-price, so the net realisable value of inventories always covers their acquisition cost. The cost of supplies is determined by using the rolling weighted average cost formula. The use of nuclear fuel is recognised according to calculated consumption.

LEASES

Leases are contracts that convey the right to control the use of an identified asset for a period of time in exchange for consideration. Leases are recognised as right-of-use assets and lease liability. Right-of-use assets are recognised on the commencement date and measured at acquisition cost, which includes the amount of the initial measurement of lease liability, any lease payments made before the commencement date less any lease incentives received and any initial direct costs. Lease liabilities are regonised on the commencement date, and are measured at present value of remaining payments that will be paid during the term of lease. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the interest rate of additional credit, i.e. the average interest rate on the Group's loans and derivatives, is used. Right-of-use assets are generally depreciated according to IAS 16 Property, Plant and Equipment. Lease payments are apportioned during the lease term between the finance charge and the reduction of the outstanding liability to produce a constant periodic rate of interest on the remaining balance of the liability.

Lease payments associated with short-term leases and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT equipment.

Lease payments received are recognised as income on a straight-line basis over the lease term and presented in the income statement under other income.

FINANCIAL ASSETS

In the Group, financial assets are divided into the following categories in accordance with the IFRS 9 standard: assets measured at fair value through profit or loss, at fair value through other comprehensive income items, and at amortised cost. According to the standard, the classification is based on the business goal of the financial assets and contractual cash flows, and they are classified during their original acquisition.

Transaction expenses are included in the original book value of the financial liabilities, except in the case of items measured at fair value through profit or loss. All purchases and sales of financial assets are recognised at fair value on their trade date.

Financial assets are derecognised once the Group has lost its contractual right to the cash flows or transferred a significant portion of the risks and revenue out of the Group.

Recognised at fair value through profit or loss

Derivative financial instruments that do not meet the criteria for hedge accounting of the IFRS 9 standard are recognised at fair value through profit or loss. Profit and loss resulting from changes in fair value are recognised in the income statement in the financial period during which they have arisen. However, if expenses or income resulting from derivative financial instruments were caused by the construction of the OL3 power plant, they were activated as part of the acquisition cost of the asset.

Amortised cost

Amortised cost includes non-current loan and other receivables, as well as current trade and other receivables. If an item is due in over 12 months, it is recognised as a non-current asset. After initial recognition, all loan and other receivables are measured at amortised cost using the effective interest method. Trade receivables are recognised on the balance sheet at their transaction price, which corresponds to their fair value.

Fair value through other comprehensive income items
Share investments are included in the "Non-current asset investments in shares" class and recognised at fair value through other comprehensive income items. Changes in fair value are entered in other comprehensive income items and presented in the equity fair value reserve.

Cash and cash equivalents
Cash and cash equivalents comprise cash balances, call deposits and other short-term, liquid investments. Items classified as cash and cash equivalents have a maturity of no more than three months from the date of acquisition.

Impairment of financial assets
According to the impairment model, the impairment of financial assets must be determined using a model based on expected credit losses. From the Group's perspective, the impairment model applies to trade receivables and recognition of their credit losses.

According to the IFRS 9 standard, the Group applies a simplified provision matrix for recognising the credit risks in trade receivables, on the basis of which a deductible item is recognised for all trade receivables based on the expected credit losses over the entire period of validity. Impairment is recorded if there is evidence of the debtor's insolvency, bankruptcy or liquidation.

The Group's annual credit losses have been very minor, and the expected credit losses according to the new model are not to have a significant impact. The impairment model has no impact on financial assets measured at fair value, since expected credit losses are already taken into account in the fair value in accordance with the IFRS 9 standard. As regards financial instruments measured at amortised cost, the Group performs active monitoring and recognises impairment in profit or loss in accordance with the criteria.

No credit loss provisions based on expected credit losses are recorded for financial assets recognised at fair value through profit or loss, and no credit loss provisions are recognised for other equity investments recognised at fair value through other comprehensive income items.

FINANCIAL LIABILITIES
The Group's financial liabilities are divided into the following categories in accordance with the IFRS 9 standard: assets measured at fair value through profit or loss and at amortised cost.

Financial liabilities are recognised at fair value including transaction expenses. After initial recognition, bonds and financial institution loans are measured at amortised cost using the effective interest method. Financial liabilities are included in non-current and current liabilities, and may be either interest-bearing or non-interest-bearing. An item is recognised in current liabilities if it is due within 12 months of the closing date.

DERIVATIVE FINANCIAL INSTRUMENTS AND HEDGE ACCOUNTING
The Group uses derivative financial instruments to hedge against the currency risk of fuel acquisitions and currency and interest rate risk of loans. Derivative financial instruments are recognised on the balance sheet at fair value on the day on which the Group becomes a party to the derivative financial instruments contract, and are thereafter always measured at fair value on the closing date.

Items covered by hedge accounting in accordance with the IFRS 9 standard include instruments used for hedging against the currency risk of the Group's uranium supply contracts (forward exchange contracts, currency swaps) and some of the interest rate swaps used for hedging against the fluctuation of interest cash flows in the Group's loan agreements.

The beginning of the hedging and regularly during protection, the Group shall document the financial relationship between the hedging instruments and the hedged items, and whether changes in the cash flows of the hedging instruments are expected to reverse the changes in the cash flows of the hedged items. In addition, the objectives of risk management and the strategies according to which hedging measures are taken are documented. Derivative financial instruments included in hedge accounting are divided into non-current and current assets and liabilities based on the maturity of the hedged instrument. The Group applies both cash flow and fair value hedge accounting.

With the adoption of the IFRS 9 standard, the assessment of hedge effectiveness is based on future orientation. The ineffectiveness of the Group's hedging relationships is expected to continue being very minor.

The IFRS 9 standard defines three hedge effectiveness requirements for the application of hedge accounting. The first requirement requires a financial relationship between the hedged item and hedging instrument. It must be expectable that the changes in the value of the hedging instrument and hedged item are opposite due to the instrument or risk used as the shared basis. Secondly, the standard requires that changes in value due to the financial relationship are not dominated by the impact of credit risk. Thirdly, the hedging rate of the hedging relationship must equal the hedging rate resulting from the amount of the hedged item that the organisation actually hedges and the amount of the hedging instrument that the organisation actually uses for hedging that amount of the hedged item. The IFRS 9 standard requires the same hedging rate that is actually used in risk management.

Cash flow hedging
The effective portion of the changes in fair value of the derivative instruments that have been specified as cash flow hedges and meet the criteria for cash flow hedging are entered in other comprehensive income items and presented in the equity fair value reserve. Profit or loss relating to the ineffective portion is recognised in the income statement, If the profit or loss related to the ineffective portion was due to construction of the OL3 power plant, they were capitalised as part of the acquisition cost of the asset.

Changes in fair value accumulated in equity are recognised in the balance sheet for the financial period in which the hedged item affects the profit or loss.

In hedging against the currency risk of fuel acquisitions, the hedging instrument's profits and losses are moved from equity to amend the cost of the inventory item in question. In the hedging of fuel acquisitions, profit or loss recognised in inventories is recognised according to the inventory recognition principles to adjust fuel acquisitions in "Materials and services".

When the interest rate risk hedging of loans no longer meets the requirements for applying hedge accounting, or when a hedging instrument acquired for hedging falls due or is sold, the profit or loss accumulated in equity at the time in question is recognised in profit or loss during the validity of the hedged item in question. When the forecast transaction is no longer expected to take place, the profit or loss accumulated in equity is recognised in the income statement.

When the currency risk hedging of fuel acquisitions no longer meets the requirements for applying hedge accounting, or when a hedging instrument acquired for hedging falls due or is sold, the profit or loss accumulated in equity at the time in question is recognised in inventories at the same time as the purchase of inventories. When the forecast transaction is no longer expected to take place, the profit or loss accumulated in equity is recognised in the income statement.

Fair value hedging

The Group applies fair value hedge accounting in the interest rate risk hedging of publicly quoted fixed-rate liabilities. Changes in the fair value of derivative instruments that meet the criteria for fair value hedge accounting, as well as the change in fair value caused by the interest rate risk of the related hedged items, are recognised in profit or loss in the financial items in the income statement. The balance sheet values of loans and fair values of hedging instruments directed at loans are included in interest-bearing liabilities and assets. If the criteria for hedge accounting are no longer met, the adjustments made to the hedged loan are released into the income statement using the effective interest method for the remaining maturity of the loan.

Derivatives outside hedge accounting

Changes in the fair value of , interest rate swaps, and forward exchange contracts left outside hedge accounting are presented in financial income and expenses, If changes in the fair value of derivatives outside of hedge accounting were due to construction of the OL3 power plant, they were capitalised as part of the acquisition cost of the asset.

BORROWING COSTS

Borrowing costs are recognised in profit or loss in the period when they have incurred, except when they relate to the construction of a power plant or any other significant investment, of which the completion time exceeds one year. In that case, borrowing costs are capitalised as part of the cost of the asset.

FOREIGN CURRENCY ITEMS

Transactions and financial items denominated in a foreign currency are recognised at the rates on the day when they occur. Receivables and liabilities denominated in a foreign currency are measured in the financial statements at the ECB's official exchange rate on the closing date. Exchange gains and losses from operating activities are included in the corresponding items above operating profit or loss. Exchange differences arising from financial items are recognised in finance income and expenses.

EQUITY

Share capital

TVO has in its possession two series of shares, A and B. The A series entitles the shareholder to the electricity generated by the OL1 and OL2 nuclear power plant units. The B series entitles the shareholder to the electricity that is be generated by the OL3 nuclear power plant unit.

Payments received from shares in connection with founding the Company and in the form of increases in share capital are recognised under share capital, statutory reserve, and share premium reserve.

Subordinated shareholder loans (hybrid equity)

Subordinated shareholder loans (hybrid equity) are treated as equity. Subordinated shareholder loans (hybrid equity) are initially recognised at fair value, including related transaction costs. There is no maturity date for the subordinated shareholder loans (hybrid equity), but the borrower is entitled to repay the loan in one or several installments. The Board of Directors of the borrower has the right to decide not to pay interest during any current interest period. Unpaid interest does not accumulate to the following interest periods.

The interest of the subordinated shareholder loans (hybrid equity) are recognised in liabilities when the obligation to pay interest is incurred. Interest expenses are recognised on an accrual basis in the retained earnings and are not recognised in profit or loss.

EARNINGS PER SHARE

The Group does not report earnings per share, as the parent company is operating at cost-price. The shares of TVO are not traded on a public market.

PROVISIONS

The Group recognises a provision for environmental restorations, asset retirement obligations, as well as legal and other claims, when the Group has a legal or constructive obligation, and it is likely that an outflow of resources will be required to settle the obligation and the amount of the obligation can be reliably estimated. The provision is measured at the present value of the expenditure expected to be required to settle the obligation. The discount rate used in the measurement of provisions is the estimated average risk premium of companies with TVO's rating in relation to risk-free interest rate plus the ECP's inflation target. The increase in the provision due to the passage of time is recognised as interest expense.

The most significant provision is that for the nuclear waste management obligation under the Nuclear Energy Act. The provision covers all future expenditures arising from nuclear waste management, including the decommissioning of nuclear power plants, the disposal of spent fuel, and a risk marginal.

Assets and provisions related to the nuclear waste management obligation

The parent company's nuclear waste management obligation which is based on the Nuclear Energy Act is covered by payments made to the Finnish State Nuclear Waste Management Fund. The obligation covers all the future expenditures for nuclear waste management, including the decommissioning of nuclear power plants, the disposal of spent fuel, and a risk marginal. The amount of payments is determined by assuming that the decommissioning would start at the beginning of the year following the assessment year. The research relating to the disposal, as well as the actual disposal of TVO's spent fuel, are carried out by Posiva Oy, which charges from TVO the costs arising from these activities, including the acquisition cost of property, plant and equipment.

In the consolidated financial statements, TVO's share of the Finnish State Nuclear Waste Management Fund is shown as non-current assets. It is accounted for in accordance with IFRIC 5 Rights to Interests Arising from Decommissioning, Restoration and Environmental Rehabilitation Funds. It is stated that the fund assets are measured at the lowest of the fair value or the value of the related liabilities, since TVO does not have control or joint control over the Finnish State Nuclear Waste Management Fund. An adjustment is only recorded if the legal share in the Fund is higher than the provision according to IFRS.

On 31 December 2023 the OL1/OL2 plant units' share in the Fund is higher than the provision according to IFRS, due to which an adjustment is recorded for the OL1/OL2 plant units' nuclear waste management IFRS calculation. The OL3 plant unit's share in the Fund is in turn lower than the provision according to IFRS, and therefore an adjustment is not recorded (see note 24 **Assets and provisions related to the nuclear waste management obligation**).

TVO's share in the Finnish State Nuclear Waste Management Fund is higher than the corresponding asset recognised in the balance sheet. The nuclear waste management obligation is covered by TVO's share in the Fund, as required by the Nuclear Energy Act. The obligation for nuclear waste management is not discounted. The amount of the annual payment to the Finnish State Nuclear Waste Management Fund is based on the change on the nuclear waste management obligation and funding obligation target, the share of the profit or loss of the Fund, and the changes resulting from actions taken.

According to the Nuclear Energy Act Section 52 c, which entered into force on May 2021, a three percent protected portion shall be added to the Fund target of the calendar year for a party with a nuclear waste management obligation. The protected portion shall primarily be covered by the surplus as defined in the Nuclear Energy Act Section 42 and the Fund's profit as defined in the Nuclear Energy Act Section 51. If the Fund's investment activities are unprofitable, the party with a nuclear waste management obligation must supplement the shares in the Fund by paying more nuclear waste management fee for the part that the loss surpasses the protected portion. If the Fund's investment activities are profitable, the Fund reimburses the party with a nuclear waste management obligation in the nuclear waste management fee for the part that the profit surpasses the protected portion.

In addition, a party with a nuclear waste management obligation shall supply the Finnish State Nuclear Waste Management Fund with collateral security fulfilling the conditions provided in Section 45, so that on the last day of March, the total amount of the collateral security corresponds with the protected portion for the part that is not covered by the transferred surplus and profit. Accordingly, the collateral security previously supplied by the party with a nuclear waste management obligation, which is not needed to cover the protected portion anymore, shall be returned to the party with a nuclear waste management obligation at the latest on the first business day of April in the same calendar year.

The nuclear waste management obligation is shown as a provision under non-current liabilities. The fair value of the nuclear waste management provision has been determined by discounting the future cash flows which are based on plans about future activity and the estimated expenditure relating to it, taking into account actions already taken.

The present initial value of the provision for the decommissioning of a nuclear power plant (at the time of commissioning the nuclear power plant) has been capitalised as property, plant and equipment and will be adjusted later for possible changes in the plan. The amount recognised relating to decommissioning will be depreciated over the estimated operating time of the nuclear power plant.

The provision for spent fuel covers the future disposal costs of fuel used by the end of each accounting period. The costs for the disposal are expensed during the operating time of the plant, based on fuel usage. The impact of any changes to the plan will be recognised immediately in the income statement based on fuel used by the end of each accounting period.

The timing factor is taken into account by recognising the interest expense related to discounting the nuclear waste management provision. The interest accruing on TVO's share in the Finnish State Nuclear Waste Management Fund is presented as finance income.

TAXES

The Group does not recognise deferred taxes, because TVO operates at cost-price. According to this principle, TVO will not pay taxes on its operations, and therefore there is no taxable income. The tax recognised by the Group consists of tax relating to non-deductible expenses. It also includes any taxes for previous financial years.

EMPLOYEE BENEFITS

The pension benefits for Group personnel have been arranged with external pension insurance companies. The insurance policies relating to earnings-based pensions, as well as some voluntary pension insurance policies, have been accounted for as defined contribution plans.

Payments made to defined contribution plans as to pensions are recognised on an accrual basis in the income statement.

CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of financial statements requires estimates and assumptions concerning the future. Estimates and assumptions have an effect on the reported amounts of assets and liabilities, and expenses and income during the accounting period. The actual results may differ from these estimates.

The provision for future obligations for the decommissioning of the nuclear power plant and for the disposal of spent fuel

Estimates and assumptions have been used when estimating the assets, liabilities, expenses, and income related to the future decommissioning of the nuclear power plant and the disposal of spent fuel. These are based on long-term cash-flow forecasts of estimated future costs.

The main assumptions relate to technical plans, time factor, cost estimates, and the discount rate. The technical plans are approved by State authorities. Any changes in the assumed discount rate would change the provision. If the discount rate used were lowered, the provision would increase.

Any future increase in the provision would be offset by the recognition of an equal increase in TVO's share in the assets of the Finnish State Nuclear Waste Management Fund. According to IFRS, the carrying amount of the assets is limited to the value of the provision, as TVO does not have control in the Finnish State Nuclear Waste Management Fund (see note 24 **Assets and provisions related to nuclear waste management obligation**).

Olkiluoto 3 EPR

The electricity production of the Olkiluoto 3 EPR plant unit (OL3) started on March 2022. Sales proceeds from the delivery of OL3's test production electricity and variable costs have been recorded in the income statement in accordance with the IAS 16 Standard. The test production phase for Olkiluoto 3 was completed and regular electricity production started on April 2023. TVO decided to submit on April 2023 to the OL3 plant supplier the Provisional Takeover Certificate. In addition, TVO confirmed that the commercial operation of the plant started on May 2023.

The total IFRS acquisition cost of the OL3 project was approximately EUR 5.7 billion. All realized costs of the OL3 project that can be recognized in the cost of the asset were entered as property, plant and equipment in the Group's balance sheet. During the OL3 plant investment, TVO's management has considered that all expenses included in the acquisition cost, including financing expenses, were directly due to the acquisition of the commodity in question. Since the OL3 nuclear power plant unit was ordered under a fixed price turnkey contract, no acquisition cost can be directly determined for individual assets that belong to the plant delivery.

Capitalisation at book value for capital assets is ended when the asset is at a location and in a condition where it can operate according to the manner originally intended by the management. According to the estimate of TVO's management, at the start of commercial operation, the plant was able to operate in the manner originally intended by the management. Test operation had ended and the plant had been received from the plant supplier.

TVO's management has assessed the basis for allocating the acquisition cost for the OL3 plant unit under different capital assets, allocating general costs and financing expenses under different capital assets and the estimated financial useful lives of assets. The planned amortisation times for the OL3 plant investment are based on the estimated financial useful lives of the buildings, main components, process systems, electrical, mechanical and I&C technology, piping and other machines and equipment.

TVO will carefully follow the fulfillment of the conditions according to the 2018 settlement agreement and the amendment agreements signed in June 2021. The Plant Supplier is obligated to complete the plant unit in accordance with the Plant Contract and Settlement Agreement. After the takeover of OL3, the guarantee period in accordance with the Plant Contract began. The final takeover of the plant unit will take place after the conclusion of the two-year warranty period. Even after this, the plant supplier's liabilities under the warranty will remain in force up to a maximum of eight (8) years to a certain extent.

Impairment testing

Impairment testing of non-current assets is performed when there are indications that the carrying amount of an asset may not be recoverable. In testing, future discounted cash flows which can be recovered by use of the asset and its possible sale are used as an indicator.

TVO operates on a cost-price principle. According to the company documents, the shareholders are obliged to pay all the expenses of the Company in electricity prices, including amortisation of property, plant and equipment. When assessing by means of recoverable amounts possible impairment of assets and subsequent need for recognition of impairment loss, the recoverable amounts always correspond, with some exceptions, to the carrying amount of the asset and thus, as a rule, no need for recognition of impairment loss arises.

3 Turnover

Assets and liabilities related to contracts with customer

EUR 1,000	31 Dec 2023	31 Dec 2022
Trade receivables	18,624	9,428
Advance payments received	64,928	23,033

Revenue recognised in relation to contract liabilities

EUR 1,000	2023	2022
Revenue recognised that was included in the contract liability balance at the beginning of the period	23,033	21,182
Total	**23,033**	**21,182**

The fixed costs, or liabilities based on customer contracts, are invoiced one month in advance and recognised as advance payments received.

4 Segment reporting

SEGMENT STRUCTURE IN THE TVO GROUP

The Group has one reportable segment; nuclear power. The electricity of the nuclear power segment is produced at three nuclear power plant units, Olkiluoto 1 (OL1), Olkiluoto 2 (OL2) and Olkiluoto 3 (OL3). The subsidiary of TVO, TVO Nuclear Services Oy (TVONS), the operation of which is related to nuclear power, is also included in the nuclear power segment.

The OL3 commercial operation started on 1 May 2023. Along with this, the capitalisation of OL3 project costs was ended and the recognition of depreciation was commenced.

Segment calculation principles

The Board of Directors monitors reporting in accordance both with the Finnish Accounting Standards (FAS) and International Financial Reporting Standards (IFRS). TVO Group discloses in the note Segment reporting; turnover, depreciation and impairment charges, finance income and expenses, profit/loss for the year and assets.

The segment reporting TVO Group discloses is based on the internal reporting the chief operating decision maker follows. The same accounting policies is used in the segment reporting and TVO Group's financial statements. Adjustments made under IFRS accounting policies are reported at Group level.

Turnover by segments

EUR 1,000	2023	2022
Nuclear power	876,204	358,208
Total	**876,204**	**358,208**

Depreciation and impairment charges by segments

EUR 1,000	2023	2022
Nuclear power	-169,356	-40,690
Depreciation and impairment charges (FAS)	-169,356	-40,690
The impact of the nuclear waste management obligation	-9,773	-5,493
Other IFRS adjustments	455	-809
Total (IFRS)	**-178,674**	**-46,992**

Finance income and expenses by segments

EUR 1,000	2023	2022
Nuclear power	-96,168	3,822
Finance income and expenses (FAS)	-96,168	3,822
The impact of the nuclear waste management obligation	-19,532	-77,197
The impact of financial instruments	-240	-503
The impact of joint ventures	0	-2,209
The impact of subordinated shareholder loans (hybrid equity)	29,291	24
Other IFRS adjustments	671	878
Total (IFRS)	**-85,978**	**-75,185**

Profit/loss for the financial year by segments

EUR 1,000	2023	2022
Nuclear power	118,216	-9,909
Profit/loss before appropriations (FAS)	118,216	-9,909
The impact of the nuclear waste management obligation	12,998	-36,528
The impact of financial instruments	-240	-503
The impact of finance leases	-203	87
The impact of subordinated shareholder loans (hybrid equity)	29,291	24
Other IFRS adjustments	3,764	570
The impact of joint ventures	173	-1,619
Total (IFRS)	**163,999**	**-47,878**

Assets by segments

EUR 1,000	2023	2022
Nuclear power	7,713,972	7,601,716
Total (FAS)	7,713,972	7,601,716
The impact of the nuclear waste management obligation	1,375,844	1,367,840
The impact of financial instruments	155,782	194,825
The impact of finance leases	43,892	46,072
The impact of subordinated shareholder loans (hybrid equity)	-60,863	-50,526
Other IFRS adjustments	-3,110	8,207
The impact of joint ventures	3,059	2,886
Total (IFRS)	**9,228,576**	**9,171,020**

Trade receivables by segments

EUR 1,000	2023	2022
Nuclear power	18,949	9,975
Total (FAS)	18,949	9,975
Total (IFRS)	**18,949**	**9,975**

GROUP-WIDE DISCLOSURES

Turnover shared to production of electricity and services

EUR 1,000	2023	2022
Production of electricity	872,868	353,479
Services	3,336	4,729
Total	**876,204**	**358,208**

Trade receivables shared to production of electricity and services

EUR 1,000	2023	2022
Production of electricity	18,784	9,780
Services	165	195
Total	**18,949**	**9,975**

INFORMATION ABOUT GEOGRAPHICAL AREAS

Teollisuuden Voima Oyj is company owned by Finnish industrial and power companies. TVO delivers electricity to its shareholders at cost-price (so-called Mankala principle), i.e. delivers the electricity produced to its shareholders in proportion to their shareholdings in each series.

The Group assets are located in Finland except part of inventories of nuclear fuel acquisition.

5 Work performed for own purpose

EUR 1,000	2023	2022
Personnel expenses related to OL3	7,143	21,310
Total	**7,143**	**21,310**

6 Other income

EUR 1,000	2023	2022
Rental income	1,108	1,144
Sales of services	10,092	10,564
Other income	704	1,360
Total	**11,904**	**13,068**

7 Materials and services

EUR 1,000	2023	2022
Nuclear fuel	70,015	60,845
Materials and supplies	7,613	6,084
CO_2 emission rights	100	110
Nuclear waste management services [1)]	63,674	54,239
Increase (-) or decrease (+) in inventories	40,472	6,948
External services	40,337	9,658
Total	**222,211**	**137,884**

[1)] See Note 24 **Assets and provision related to nuclear waste management obligation**.

8 Personnel expenses

Employee benefit costs

EUR 1,000	2023	2022
Wages and salaries	70,935	67,398
Pension expenses - defined contribution plans	11,052	10,668
Other compulsory personnel expenses	2,443	2,250
Total	**84,430**	**80,316**

Wages, salaries and other compensation for key management are presented in Note 26 **Related party**.

EMPLOYEE BONUS SYSTEM

The Nomination and Remuneration Committee under the Board of Directors approves TVO's commitment and remuneration systems. All permanent and long-term temporary employees are included in the employee bonus system. Some of the personnel have deposited their bonuses in the Teollisuuden Voima Personnel Fund.

Average number of personnel during financial year

	2023	2022
Office personnel	859	836
Manual workers	198	195
Total	**1,057**	**1,031**

Number of personnel on 31 December

	2023	2022
Office personnel	856	818
Manual workers	189	189
Total	**1,045**	**1,007**

9 Depreciation and impairment charges

EUR 1,000	2023	2022
Intangible assets		
ICT software	449	372
Other intangible assets	38	38
Total	**487**	**410**
Property, plant and equipment		
Buildings and construction	18,477	4,891
Machinery and equipment	148,548	35,787
Other property, plant and equipment	1,389	410
Decommissioning	9,773	5,494
Total	**178,187**	**46,582**
Total	**178,674**	**46,992**

10 Other expenses

EUR 1,000	2023	2022
Maintenance services	29,244	21,365
Regional maintenance and service	12,197	9,651
Research services	3,490	2,338
Other external services	54,159	26,265
Real estate tax	14,483	6,489
Rents	1,186	1,457
ICT expenses	7,425	6,207
Personnel related expenses	4,948	4,220
Corporate communication expenses	969	867
Other expenses	32,018	21,766
Total	**160,119**	**100,625**

Auditors’ fees and non-audit related services

PricewaterhouseCoopers Oy (EUR 1,000)	2023	2022
Auditing	199	238
Tax services	12	13
Other services	51	65
Total	**262**	**316**

11 Finance income and expenses

Items included in the income statement

EUR 1,000	2023	2022
Interest income from loans and other receivables		
Nuclear waste management loan receivables from equity holders of the company	24,560	3,377
Other	13,629	2,665
Hedge accounted derivatives		
Ineffective portion of the change in fair value in fair value hedge relationship	90	1
Non-hedge accounted derivatives		
Change in fair value	118	252
Interest income from assets related to nuclear waste management	38,047	0
Finance income, total	**76,445**	**6,295**
Interest expenses and other finance expenses		
To the Finnish State Nuclear Waste Management Fund	24,560	3,377
To others	106,384	148
Hedge accounted derivatives [1)]		
Ineffective portion of the change in fair value in fair value hedge relationship	407	1
Realised derivative expenses, net	-26,548	0
Non-hedge accounted derivatives		
Change in fair value	41	757
Interest expenses of provision related to nuclear waste management	57,579	77,197
Finance expenses, total	**162,423**	**81,480**
Total	**-85,978**	**-75,185**

[1)] In hedge accounting the change in fair value adjustment of the loan was EUR -26.5 (32.1) million and the change of the fair value in hedging instruments was EUR 26.1 (-31.7) million. The ineffective portion is recognized EUR 0.4 thousand in profit or loss and the change in fair value resulting from ineffectiveness is activated in the balance sheet until 30 April 2023.

Other comprehensive items

Other comprehensive items related to derivative financial instruments:

EUR 1,000	2023	2022
Cash flow hedges		
Changes in the fair value of which the following items have transferred	123,827	207,593
Transfers to the consolidated income statement	29,376	-18
Transfers to inventories	2,474	3,144
Transfers to the nuclear power plant under construction	2,049	-7,269
Transferred items, total	**33,899**	**-4,143**
Cash flow hedges, total	**89,928**	**211,736**
Total other comprehensive items	**89,928**	**211,736**

12 Income tax expense

EUR 1,000	2023	2022
Taxes based on the taxable income of the financial year	13	52
Total	**13**	**52**

TVO operates at cost-price (so called Mankala principle, see Note 1 **General information on the Group**), so TVO does not pay income tax during its operations. Taxes for the financial year consist of non-deductible expenses in taxation.

13 Property, plant and equipment

2023 EUR 1,000	Land and water areas	Buildings and construction	Machinery and equipment	Other property, plant and equipment	Construction in progress and advance payments	Decommissioning	Total
Acquisition cost 1 Jan	12,075	301,129	1,418,997	55,190	5,427,099	515,420	7,729,910
Increase	0	1,021	31,477	1,280	406,493	19,830	460,101
Decrease	0	-2,628	-7,899	0	-260,416	-28,147	-299,090
Transfer between categories	0	1,181,997	4,223,964	74,785	-5,480,810	0	-64
Acquisition cost 31 Dec	12,075	1,481,519	5,666,539	131,255	92,366	507,103	7,890,857
Accumulated depreciation and impairment charges according to plan 1 Jan	0	233,059	980,897	49,780	0	102,391	1,366,127
Accumulated depreciation from deduction	0	-2,628	-7,898	0	0	0	-10,526
Depreciation for the period	0	18,477	148,548	1,389	0	9,773	178,187
Accumulated depreciation and impairment charges according to plan 31 Dec	0	248,908	1,121,547	51,169	0	112,164	1,533,788
Book value 31 Dec 2023	**12,075**	**1,232,611**	**4,544,992**	**80,086**	**92,366**	**394,939**	**6,357,069**
Book value 1 Jan 2023	12,075	68,070	438,100	5,410	5,427,099	413,029	6,363,783

2022 EUR 1,000	Land and water areas	Buildings and construction	Machinery and equipment	Other property, plant and equipment	Construction in progress and advance payments	Decommissioning	Total
Acquisition cost 1 Jan	12,054	294,375	1,372,954	54,322	5,198,735	574,838	7,507,278
Increase	21	3,934	20,206	880	286,317	0	311,358
Decrease	0	-1,623	-8,344	-12	-19,329	-59,418	-88,726
Transfer between categories	0	4,443	34,181	0	-38,624	0	0
Acquisition cost 31 Dec	12,075	301,129	1,418,997	55,190	5,427,099	515,420	7,729,910
Accumulated depreciation and impairment charges according to plan 1 Jan	0	229,791	953,454	49,382	0	96,897	1,329,524
Accumulated depreciation from deduction	0	-1,623	-8,344	-12	0	0	-9,979
Depreciation for the period	0	4,891	35,787	410	0	5,494	46,582
Accumulated depreciation and impairment charges according to plan 31 Dec	0	233,059	980,897	49,780	0	102,391	1,366,127
Book value 31 Dec 2022	**12,075**	**68,070**	**438,100**	**5,410**	**5,427,099**	**413,029**	**6,363,783**
Book value 1 Jan 2022	12,054	64,584	419,500	4,940	5,198,735	477,941	6,177,754

The OL3 commercial operation started on 1 May 2023. Along with this, in accordance with the IAS 16 Property, Plant and Equipment Standard, the capitalisation of OL3 project costs was ended and the recognition of depreciation was commenced. In addition, approximately EUR 250 million was transferred from the OL3 investment to the value of the nuclear fuel and uranium stock, along with the OL3 commercial operation.

LEASES

Amounts recognised in the balance sheet

The balance sheet shows the following amounts relating to leases:

Right-of-use assets

EUR 1,000	Construction in progress	Buildings and construction	Machinery and equipment
Book value 1 Jan 2023	70,228	2,311	170
Increase	474	294	457
Transfer between categories	-70,702	0	70,702
Depreciation for the period	0	-586	-2,498
Book value 31 Dec 2023	**0**	**2,019**	**68,831**

EUR 1,000	Construction in progress	Buildings and construction	Machinery and equipment
Book value 1 Jan 2022 *)	70,228	273	212
Increase	0	2,436	128
Depreciation for the period	0	-398	-170
Book value 31 Dec 2022	**70,228**	**2,311**	**170**

*) An adjustment of EUR -2.5 million has been made to the 1 Jan 2022 book value of Construction in progress in Right-of-use assets.

The assets accumulated as costs for construction in progress acquired through lease agreements was completed for Machinery and equipment during the year 2023.

Lease liabilities

EUR 1,000	2023	2022
Current	2,753	2,467
Non-current	44,647	47,099
Total	**47,400**	**49,566**

Amounts recognised in the statement of profit or loss

The statement of profit or loss shows the following amounts relating to leases:

Depreciation charge of right-of-use assets

EUR 1,000	2023	2022
Buildings and construction	586	398
Machinery and equipment	2,498	170
Total	**3,084**	**568**
Interest expense (included in finance expenses)	397	-70
Expenses relating to short-term leases (included in other expenses)	40	40
Expenses relating to leases of low-value assets that are not shown above as short-term leases (included in other expenses)	742	697

The total cash outflow for leases in 2023 was EUR 4,979 (3,075) thousand.

The Group's leasing activities and how these are accounted for

The Group leases a spare part of the nuclear power plant, offices, vehicles and equipments. These rental contracts are made for periods of under a year to five years. Part of the contracts of buildings and constructions are valid until further notice. The holding period of these leases are based on the management's judgement. The property of machinery and equipment can be redeemed at the earliest in 2025.

The lease payments are discounted using the interest rate implicit in the lease, if the rate can readily be determined. If that rate cannot be readily determined, the incremental borrowing rate or average interest rate on the Group's loans and derivatives is used. For the average interest rate on loans and derivatives on 31 December, see note 27. Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT equipment.

14 Intangible assets

2023 EUR 1,000	CO_2 emission rights	Computer software	Other intangible assets	Advance payments	Total
Acquisition cost 1 Jan	129	22,150	3,843	352	26,474
Increase	100	661	-248	64	577
Decrease	-115	-275	275	0	-115
Transfer between categories	0	0	312	-248	64
Acquisition cost 31 Dec	114	22,536	4,182	168	27,000
Accumulated depreciation and impairment charges according to plan 1 Jan	0	20,569	3,429	0	23,998
Accumulated depreciation from deduction	0	-275	275	0	0
Depreciation for the period	0	449	38	0	487
Accumulated depreciation and impairment charges according to plan 31 Dec	0	20,743	3,742	0	24,485
Book value 31 Dec 2023	**114**	**1,793**	**440**	**168**	**2,515**
Book value 1 Jan 2023	129	1,581	414	352	2,476

2022 EUR 1,000	CO_2 emission rights	Computer software	Other intangible assets	Advance payments	Total
Acquisition cost 1 Jan	159	21,853	4,117	276	26,405
Increase	110	297	0	76	483
Decrease	-140	0	-274	0	-414
Transfer between categories	0	0	0	0	0
Acquisition cost 31 Dec	129	22,150	3,843	352	26,474
Accumulated depreciation and impairment charges according to plan **1** Jan	0	20,197	3,666	0	23,863
Accumulated depreciation from deduction	0	0	-275	0	-275
Depreciation for the period	0	372	38	0	410
Accumulated depreciation and impairment charges according to plan 31 Dec	0	20,569	3,429	0	23,998
Book value 31 Dec 2022	**129**	**1,581**	**414**	**352**	**2,476**
Book value 1 Jan 2022	159	1,656	451	276	2,542

CAPITALISED BORROWING COSTS INCLUDED IN PROPERTY, PLANT AND EQUIPMENT, AND INTANGIBLE ASSETS

The OL3 commercial operation started on 1 May 2023. Along with this, in accordance with the IAS 16 Property, Plant and Equipment Standard, the capitalisation of OL3 project costs was ended and the recognition of depreciation was commenced. Until the OL3 commercioal operation, the borrowing costs of the power plant (OL3) have been capitalised and the realised financial income and expenses have been divided by committed capital. The average share of capitalised borrowing costs in Jan-Apr 2023 was 100.00% (99.75 % in 2022). For the average interest rate on loans and derivatives on 31 December, see **note 27**.

Capitalised interest costs during construction

2023 **EUR 1,000**	**Other intangible assets**	**Buildings and construction**	**Machinery and equipment**	**Other property, plant and equipment**	**Advance payments**	**Total**
Acquisition cost 1 Jan	1,167	27,122	95,394	2,402	1,702,465	1,828,550
Increase	0	0	0	0	31,129	31,129
Decrease	0	0	0	0	-111	-111
Transfer between categories	0	386,125	1,328,445	18,913	-1,733,483	0
Acquisition cost 31 Dec	1,167	413,247	1,423,839	21,315	0	1,859,568
Accumulated depreciation and impairment charges according to plan 1 Jan	948	22,019	77,443	1,950	0	102,360
Depreciation for the period	12	4,618	38,129	252	0	43,011
Accumulated depreciation and impairment charges according to plan 31 Dec	960	26,637	115,572	2,202	0	145,371
Book value 31 Dec 2023	**207**	**386,610**	**1,308,267**	**19,113**	**0**	**1,714,197**
Book value 1 Jan 2023	219	5,103	17,951	452	1,702,465	1,726,190

2022 **EUR 1,000**	**Other intangible assets**	**Buildings and construction**	**Machinery and equipment**	**Other property, plant and equipment**	**Advance payments**	**Total**
Acquisition cost 1 Jan *)	1,167	27,122	95,394	2,402	1,612,836	1,738,921
Increase	0	0	0	0	97,471	97,471
Decrease	0	0	0	0	-7,842	-7,842
Acquisition cost 31 Dec	1,167	27,122	95,394	2,402	1,702,465	1,828,550
Accumulated depreciation and impairment charges according to plan 1 Jan	936	21,735	76,446	1,925	0	101,042
Depreciation for the period	12	284	997	25	0	1,318
Accumulated depreciation and impairment charges according to plan 31 Dec	948	22,019	77,443	1,950	0	102,360
Book value 31 Dec 2022	**219**	**5,103**	**17,951**	**452**	**1,702,465**	**1,726,190**
Book value 1 Jan 2022	231	5,387	18,948	477	1,612,836	1,637,879

*) The 1 Jan 2022 acquisition cost of Advance payments has been adjusted by EUR -23.3 million.

15 Investments in joint ventures

EUR 1,000	2023	2022
Posiva Group	4,070	3,897
31 Dec	**4,070**	**3,897**

Nature of investment in joint ventures

Name of entity	Place of incorporation	Group share, %	Measurement method
Posiva Oy - A series	Eurajoki	60	Equity
Posiva Oy - B series	Eurajoki	74	Equity

TVO has a 60 percent shareholding in Posiva Oy. Posiva is responsible for the research and implementation of final disposal of spent nuclear fuel of its shareholders TVO and Fortum Power and Heat Oy (FPH).

TVO governs Posiva Oy jointly with FPH, based on the Articles of Association and Shareholders Agreement. TVO is liable for approximately 74 percent of Posiva's expenses. The duty of Posiva is to carry out all tasks related to the final disposal of spent nuclear fuel of its shareholder's nuclear power plants in Finland in order to fulfill their nuclear waste management obligation as specified in the Nuclear Energy Act. The company's operations also include research and construction related to the final disposal solution. Management of spent fuel is carried out according to the detailed plan examined by the Finnish Radiation and Nuclear Safety Authority and approved by The Ministry of Economic Affairs and Employment.

Posiva Solutions Oy, a wholly-owned subsidiary of Posiva Oy, was founded on 20 May 2016. Posiva Solutions Oy focuses on the sales of the know-how Posiva has accumulated from its design, research and development activities in the final disposal of spent nuclear fuel, as well as on associated consulting services.

SUMMARISED FINANCIAL INFORMATION (FAS) FOR THE POSIVA GROUP

Posiva Oy and Posiva Solutions Oy are private companies and there is no quoted market prices available for their shares.

In the consolidated financial statements, the Posiva Group is accounted for according to the equity method of accounting.

Summarised balance sheet (EUR 1,000)	Posiva Group 2023	Posiva Group 2022
Current		
Cash and cash equivalents	13,938	22,234
Other current assets (excluding cash)	13,891	5,021
Total current assets	27,829	27,255
Financial liabilities (excluding trade payables)	0	0
Other current liabilities (including trade payables)	-22,070	-21,972
Total current liabilities	**-22,070**	**-21,972**
Non-current		
Assets	79	4,301
Financial liabilities	0	-3,981
Total non-current liabilities	0	-3,981
Net assets	**5,838**	**5,603**

Summarised statement of comprehensive income	2023	2022
Turnover	118,223	119,024
Depreciation and impairment charges	-20	-18
Interest income	78	14
Interest expense	-192	-114
Pre-tax profit from continuing operations	**296**	**1,005**
Income tax expense	-61	-204
Post-tax profit from continuing operations	**235**	**801**

Reconciliation of summarised financial information	2023	2022
Operating net assets 1 Jan	**5,603**	**7,802**
Profit/loss for the period	235	801
Dividend distribution	0	-3,000
Closing net assets	**5,838**	**5,603**
Interest in joint venture	4,070	3,897
Carrying value	**4,070**	**3,897**

16 Book values of financial assets and liabilities by categories

2023 EUR 1,000	Fair value through profit or loss	At fair value through other comprehensive income items	Amortised cost	Book value total	Fair value total	Note
Non-current assets						
Loans and other receivables			784,734	784,734	784,734	17
Share investments		1,692		1,692	1,692	18
Derivative financial instruments, no hedge accounting	13,404			13,404	13,404	20
Derivative financial instruments, fair value hedge accounting	14,372			14,372	14,372	20
Derivative financial instruments, cash flow hedge accounting		141,300		141,300	141,300	20
Current assets						
Trade and other receivables			95,973	95,973	95,973	17
Derivative financial instruments, no hedge accounting	201			201	201	20
Derivative financial instruments, cash flow hedge accounting		3,354		3,354	3,354	20
Cash and cash equivalents			287,684	287,684	287,684	
Total by category	**27,977**	**146,346**	**1,168,391**	**1,342,714**	**1,342,714**	
Non-current liabilities						
Loan from the Finnish State Nuclear Waste Management Fund			727,500	727,500	727,500	22
Other financial liabilities			4,278,295	4,278,295	4,197,754	22
Derivative financial instruments, no hedge accounting	36			36	36	20
Derivative financial instruments, fair value hedge accounting	14,217			14,217	14,217	20
Derivative financial instruments, cash flow hedge accounting		5,607		5,607	5,607	20
Current liabilities						
Current financial liabilities			371,387	371,387	371,387	22
Trade payables			22,793	22,793	22,793	23
Other current liabilities			192,659	192,659	192,659	23
Derivative financial instruments, no hedge accounting	6,459			6,459	6,459	20
Derivative financial instruments, cash flow hedge accounting		248		248	248	20
Total by category	**20,712**	**5,855**	**5,592,634**	**5,619,201**	**5,538,659**	

2022 EUR 1,000	Fair value through profit or loss	At fair value through other comprehensive income items	Amortised cost	Book value total	Fair value total	Note
Non-current assets						
Loans and other receivables			710,962	710,962	710,962	17
Share investments		1,935		1,935	1,935	18
Derivative financial instruments, no hedge accounting	388			388	388	20
Derivative financial instruments, cash flow hedge accounting		224,795		224,795	224,795	20
Current assets						
Trade and other receivables			233,078	233,078	233,078	17
Derivative financial instruments, no hedge accounting	195			195	195	20
Derivative financial instruments, cash flow hedge accounting		4,268		4,268	4,268	20
Cash and cash equivalents			353,203	353,203	353,203	
Total by category	**583**	**230,998**	**1,297,242**	**1,528,823**	**1,528,823**	
Non-current liabilities						
Loan from the Finnish State Nuclear Waste Management Fund			651,339	651,339	651,339	22
Other financial liabilities			4,531,264	4,531,264	4,275,708	22
Derivative financial instruments, no hedge accounting	13,637			13,637	13,637	20
Derivative financial instruments, fair value hedge accounting	26,403			26,403	26,403	20
Current liabilities						
Current financial liabilities			258,669	258,669	258,669	22
Trade payables			16,821	16,821	16,821	23
Other current liabilities			137,417	137,417	137,417	23
Derivative financial instruments, no hedge accounting	95			95	95	20
Derivative financial instruments, cash flow hedge accounting		447		447	447	20
Derivative financial instruments, fair value hedge accounting	2			2	2	20
Total by category	**40,137**	**447**	**5,595,510**	**5,636,094**	**5,380,538**	

Fair values of long-term loans, have been estimated as follows:

Listed bonds are traded on an active market and their fair values are based on the quoted market value as of 31 December (Level 1). The fair value of fixed rate and market-based floating rate loans is estimated using the expected future payments discounted at market interest rates (Level 2).

The carrying amounts of current financial assets and liabilities approximate their fair value, as the impact of discounting is not significant.

According to IFRS 9, all derivatives are classified as at fair value through profit or loss. In the table, derivatives subject to cash flow hedge accounting are presented according to the method of recognition, i.e. at fair value through other comprehensive income.

Disclosure of fair value measurements by the level of fair value measurement hierarchy

2023 EUR 1,000	Level 1	Level 2	Level 3
Financial assets at fair value			
Derivative financial instruments at fair value through profit or loss		13,605	
Derivative financial instruments designated as cash flow hedges		144,654	
Derivative financial instruments designated as fair value hedges		14,372	
Share investments			1,692
Total		**172,631**	**1,692**
Financial liabilities at fair value			
Derivative financial instruments at fair value through profit or loss		6,495	
Derivative financial instruments designated as cash flow hedges		5,855	
Derivative financial instruments designated as fair value hedges		14,217	
Total		**26,567**	

2022 EUR 1,000	Level 1	Level 2	Level 3
Financial assets at fair value			
Derivative financial instruments at fair value through profit or loss		583	
Derivative financial instruments designated as cash flow hedges		229,063	
Share investments			1,935
Total		**229,646**	**1,935**
Financial liabilities at fair value			
Derivative financial instruments at fair value through profit or loss		13,732	
Derivative financial instruments designated as cash flow hedges		447	
Derivative financial instruments designated as fair value hedges		26,404	
Total		**40,584**	

FAIR VALUE ESTIMATION

The derivative financial instruments are initially recognized at fair value on the date a derivative contract is entered into and are subsequently measured at fair value. The fair values are determined using a variety of methods and financial valuation techniques, and assumptions are based on market quotations at the balance sheet date (Level 2). The fair value of the interest rate swaps is the present value of the estimated future cash flows. The forward contracts are measured using the market quotes at the closing date. The changes in fair value of the interest rate swaps and forward contracts are recognized in equity or profit or loss, depending on whether they qualify for cash flow hedges or not.

On 31 December 2023, TVO has unquoted shares worth EUR 1,692 (1,935) thousand. Direct market prices are not available for unquoted shares and therefore their fair value is determined using methods based on management judgement.

Offsetting financial assets and liabilities

2023 EUR 1,000	Gross amounts	Related amounts not set off	Net amount
Derivative financial assets	172,631	-26,567	146,064
Derivative financial liabilities	-26,567	26,567	0

2022 EUR 1,000	Gross amounts	Related amounts not set off	Net amount
Derivative financial assets	229,646	-40,584	189,062
Derivative financial liabilities	-40,584	40,584	0

For the financial derivative assets and liabilities subject to enforceable master netting arrangements or similar arrangements above, each agreement between the Group and the counterparty allows for net settlement of the relevant financial derivative assets and liabilities when both elect to settle on a net basis. In the absence of such an election, financial assets and liabilities will be settled on a gross basis, however, each party to the master netting agreement or similar agreement will have the option to settle all such amounts on a net basis in the event of default of the other party. Per the terms of each agreement, an event of default includes failure by a party to make payment when due.

17 Loans and other receivables

Loans and other receivables (non-current assets)

EUR 1,000	2023	2022
Nuclear waste management loan receivables	727,500	651,339
Loan receivables	504	2,893
Other receivables	56,730	56,730
Total	**784,734**	**710,962**

Other receivables constitute mainly of the OL3 additional delay compensation of EUR 56,700 (56,700) thousand. The compensation will become due during the final takeover of OL3 in April 2025 at the earliest. The loan receivables in 2022 constitute mainly of the loan receivables from Posiva Oy (EUR 2,389 thousand).

According to section 52 of the Nuclear Energy Act, TVO, in exchange for collateral payments, is entitled to receive fixed-term loans from the Finnish State Nuclear Waste Management Fund, the amount which cannot be larger than 60 percent of the latest confirmed TVO's share in the Finnish State Nuclear Waste Management Fund. The nuclear waste management loan receivables formed by the amount loaned from the Finnish State Nuclear Waste Management Fund, has been further loaned (with the same terms and conditions) to the equity holders of the company and to Fortum Oyj. The loan from the Finnish State Nuclear Waste Management Fund is unsecured between Teollisuuden Voima Oyj and the shareholders. The commercial terms of the loan is 12 month Euribor + 0.5 marginal.

Nuclear waste management loan receivables are allocated as follows

EUR 1,000	2023	2022
EPV Energia Oy	57,324	56,467
Fortum Oyj	232,341	228,962
Oy Mankala Ab	71,798	0
Kemira Oyj	16,037	15,910
Pohjolan Voima Oyj	350,000	350,000
Total	**727,500**	**651,339**

Trade and other receivables (current assets)

EUR 1,000	2023	2022
Trade receivables	18,949	9,975
Prepayments and accrued income	31,589	16,045
Other receivables	45,435	207,058
Total	**95,973**	**233,078**

The maximum credit loss risk of trade and other receivables corresponds to their book value. On 31 December 2023, the Group had EUR 3 (167) thousand overdue receivables of which EUR 0 (0) thousand was overdue more than six months. The overdue receivables are not expected to cause the Group credit losses or impairments.

Material items under prepayments and accrued income

EUR 1,000	2023	2022
Accrued interest costs	38,768	20,538
Accrued insurance costs	1,919	2,511
Collateral received	0	4,690
Arrangement fee for loans	-14,207	-17,159
Other prepaid expenses and accrual income	5,109	5,465
Total	**31,589**	**16,045**

18 Investments in shares

EUR 1,000	2023	2022
Share investments	1,692	1,935
Total	**1,692**	**1,935**

19 Inventories

EUR 1,000	2023	2022
Raw uranium and natural uranium		
Replacement cost	564,859	159,407
Book value	183,183	92,740
Difference	**381,676**	**66,667**
Raw uranium and natural uranium	183,183	92,740
Nuclear fuel	293,197	169,684
Materials and supplies	10,552	9,954
Total	**486,932**	**272,378**

20 Derivative financial instruments

Nominal values of the derivative financial instruments

2023	Maturity structure					
EUR 1,000	< 1 year	1–3 years	3–5 years	5–7 years	> 7 years	Total
Interest rate swaps		400,000	620,000	850,000	405,000	2,275,000
Forward foreign exchange contracts and swaps [1]	22,205	34,457	3,447			60,109
Cross-currency swaps	137,091			194,246		331,337
Total	**159,296**	**434,457**	**623,447**	**1,044,246**	**405,000**	**2,666,446**

2022	Maturity structure					
EUR 1,000	< 1 year	1–3 years	3–5 years	5–7 years	> 7 years	Total
Interest rate swaps	265,000	400,000	540,000	340,000	640,000	2,185,000
Forward foreign exchange contracts and swaps [1]	14,593	24,381	3,424	1,729		44,127
Cross-currency swaps		224,873				224,873
Total	**279,593**	**649,254**	**543,424**	**341,729**	**640,000**	**2,454,000**

[1] Forward contracts are mainly used for hedging fuel purchases against currency risk. The opposite forward contracts, which have been acquired to adjust these hedging amounts are netted in the table with each other, whereby the nominal describes the protected position.

Fair values of the derivative financial instruments

2023 EUR 1,000	Positive	Negative	Total
Interest rate swaps			
Cash flow hedges	137,958	-5,263	132,695
Fair value hedges	14,372	-14,217	155
Forward foreign exchange contracts and swaps			
Cash flow hedges	6,696	-592	6,104
Non-hedges	569	-82	487
Cross-currency swaps			
Non-hedges	13,036	-6,413	6,623
Total	**172,631**	**-26,567**	**146,064**

2022 EUR 1,000	Positive	Negative	Total
Interest rate swaps			
Cash flow hedges	217,561		217,561
Fair value hedges		-26,404	-26,404
Forward foreign exchange contracts and swaps			
Cash flow hedges	11,503	-431	11,072
Non-hedges	582	-173	409
Cross-currency swaps			
Non-hedges		-13,576	-13,576
Total	**229,646**	**-40,584**	**189,061**

THE EFFECT OF HEDGE ACCOUNTING IN FINANCIAL POSITION AND RESULT

The interest rate hedging in fair value hedge accounting

EUR 1,000	2023	2022
The book value of the derivative financial instruments, receivables	-317	-26,404
Nominal value	705,000	450,000
Due date	02/2025–12/2033	01/2023–03/2027
The book value of the hedged item, liabilities	705,129	476,585
The degree of hedging	1:1	1:1
The change of the basic value in valid hedging instruments since 1.1.	26,087	-31,657
The effectiveness of the hedge used to determine the change of value for the hedged item	-26,526	32,002
The weighted average interest rate during the year	3.88%	2.91%

In fair value hedge accounting, the accumulated amount of the fair value adjustment of the loan is EUR 0.1 (26.6) million.

The interest rate hedging in cash flow hedge accounting

EUR 1,000	2023	2022
The book value of the derivative financial instruments, liabilities	132,695	217,561
Nominal value	1,570,000	1,735,000
Due date	01/2025–09/2032	01/2023–09/2032
The degree of hedging	1:1	1:1
The change of the basic value in valid hedging instruments since 1.1.	-84,865	211,762
The effectiveness of the hedge used to determine the change of value for the hedged item	84,865	-211,931
The weighted average interest rate during the year	2.62%	3.18%

The currency hedging in cash flow hedge accounting

EUR 1,000	2023	2022
The book value of the derivative financial instruments, receivables	6,696	11,503
The book value of the derivative financial instruments, liabilities	-592	-431
Nominal value	60,109	44,127
Due date	01/2024–01/2028	01/2023–01/2028
The degree of hedging	1:1	1:1
The change of the spot value in valid hedging instruments since 1.1.	-5,638	3,092
The effectiveness of the hedge used to determine the change of value for the hedged item	5,638	-3,092
The weighted average of protected rate (inc. forward points) during the year (USD)	1.25	1.40
The weighted average of protected rate (inc. forward points) during the year (SEK)	0.00	10.41

21 Equity

SHARE CAPITAL

The registered share capital of the Company according to the Articles of Association was EUR 600,365 thousand on 31 December 2023. TVO does not have a maximum or minimum limit for the share capital. The number of the shares on 31 December 2023 was 1,360,000,000. The shares are divided into the two series of shares as follows: A series 680,000,000 and B series 680,000,000. The shares have no nominal price as is stipulated in the Finnish Limited Liability Companies Act.

According to the Articles of Association, TVO delivers electricity to its shareholders at cost-price, i.e. it delivers the electricity produced or procured to its shareholders in proportion to their shareholding in each series. Each of the shareholders of each series is liable for the variable and fixed annual costs that are specified in detail in the Articles of Association. The Company prepares annually a balance sheet divided into series of shares. The balance sheet, which will be presented to the Shareholders' Meeting, specifies the assets, liabilities and equity of the different series of shares.

Share number reconciliations

EUR 1,000	Number of shares	Share capital	Share premium reserve and statutory reserve
31 Dec 2022	1,360,000,000	600,365	242,383
31 Dec 2023	**1,360,000,000**	**600,365**	**242,383**

On 31 December 2023, the Company has two registered share series: A and B.

Share number

	31 Dec 2023	31 Dec 2022
A series	680,000,000	680,000,000
B series	680,000,000	680,000,000
Total	**1,360,000,000**	**1,360,000,000**

SHARE PREMIUM RESERVE

The share premium reserve contains the share premiums of the share issues, EUR 232,435 thousand.

STATUTORY RESERVE

The statutory reserve consists of EUR 9,948 thousand paid by Imatran Voima Oy, the predecessor of Fortum Power and Heat Oy, in 1979 when it became an equity holder in the company.

FAIR VALUE AND OTHER RESERVES

Profits and losses incurred by fair value changes of available-for-sale investments and derivatives used as cash flow hedges are entered in this reserve. The fair changes of derivatives are transferred to the profit/loss statement, when the cash flows they have been hedging have been realized.

SUBORDINATED SHAREHOLDER LOANS (HYBRID EQUITY)

The carrying value of the interest-bearing subordinated shareholder loans in the balance sheet 31 December 2023 was EUR 929,300 thousand. There is no maturity date for the subordinated shareholder loans (hybrid equity), but the borrower is entitled to repay the loan in one or several installments. The Board of Directors of the borrower has the right to decide not to pay interest during any current interest period. Unpaid interest does not accumulate to the following interest periods.

Subordinated shareholder loans (hybrid equity) are unsecured and in a weaker preference position than promissory notes. Holders of subordinated shareholder loans have no shareholder rights, nor does the bond dilute the ownership of the Company's shareholders.

RETAINED EARNINGS

This item contains the earnings from previous financial periods and the profit/loss of the financial year. The interests of the subordinated shareholder loans (hybrid equity) is recorded to Retained earnings.

22 Interest-bearing liabilities

EUR 1,000	2023	2022
Non-current interest-bearing liabilities		
Loan from the Finnish State Nuclear Waste Management Fund	727,500	651,339
Bonds	3,458,390	3,254,801
Loans from financial institutions	488,048	1,212,014
Loans from others	287,210	17,350
Lease liabilities	44,647	47,099
Derivative financial instruments	19,859	40,040
Total	**5,025,654**	**5,222,643**
Current interest-bearing liabilities		
Current portion of long-term bonds	342,530	205,595
Current portion of loans from financial institutions	26,104	50,608
Current portion of lease liabilities	2,753	2,467
Derivative financial instruments	6,708	544
Total	**378,095**	**259,214**
Total	**5,403,749**	**5,481,857**

TVO has on 31 December 2023 issued EUR-denominated Private Placement loans amounting to EUR 613.0 million and loans denominated in SEK, amounting to EUR 331.3 million. Foreign currency floating rate and fixed rate loans are translated into EUR at the official exchange rate of the ECB on the balance sheet date. The Private Placements have been swapped by using cross-currency swaps. In 2023, the effect of foreign exchange hedges was positive amounting to EUR 20.2 million and correspondingly, the effect of foreign currency denominated loans was negative amounting to EUR 20.2 million.

23 Trade payables and other current liabilities

EUR 1,000	2023	2022
Advances received	68,063	23,064
Trade payables	22,793	16,821
Accruals and deferred income and other liabilities	192,659	137,417
Total	**283,515**	**177,302**

Accruals and deferred income and other liabilities are allocated as follows

EUR 1,000	2023	2022
Finnish State Nuclear Waste Management Fund	53,660	40,227
Accrued interests	55,953	50,316
Accrued personnel expenses	24,126	22,778
Accruals related to CO_2 emission rights	114	129
Others	58,806	23,967
Total	**192,659**	**137,417**

24 Assets and provision related to nuclear waste management obligation

SHARE IN THE FINNISH STATE NUCLEAR WASTE MANAGEMENT FUND
Under the Nuclear Energy Act in Finland, TVO has a legal obligation to fully fund the legal liability for nuclear waste including the decommissioning of the power plant through the Finnish State Nuclear Waste Management Fund (=nuclear waste management obligation).

TVO contributes funds to the Finnish State Nuclear Waste Management Fund to cover future obligations based on the legal liability calculated according to the Nuclear Energy Act. The carrying value of the fund in TVO's balance sheet is calculated according to the interpretation in IFRIC 5 "Rights to Interests arising from Decommissioning, Restoration and Environmental Rehabilitation Funds".

PROVISION RELATED TO THE NUCLEAR WASTE MANAGEMENT OBLIGATION
The provision is related to future obligations for decommissioning of the power plant, management of spent fuel and operating waste. The fair value of the provision is calculated according to IAS 37 based on discounted future cash flows which are based on estimated future expenses. The cost estimate is based on a nuclear waste management plan covering the management of spent nuclear fuel and operating waste and decommissioning of the nuclear power plant. The new total cost estimate based on a new nuclear waste management technical plan and schedule is updated every third year. The next update is in 2025. The technical plans, timing and cost estimates are approved by governmental authorities.

The total cost estimate based on a new nuclear waste management technical plan and schedule was updated in June 2022. The present initial value of the provision for the decommissioning of a nuclear power plant (at the time of commissioning the nuclear power plant) has been capitalised as property, plant and equipment and will be adjusted later for possible changes in the plan. The costs for spent fuel disposal are expensed based on fuel usage during the operating time of the plant. The impact of any changes to the plans and schedules will be recognised immediately in the income statement based on fuel used by the end of each accounting period.

At the end of the year, the balance sheet contains the following assets and liabilities concerning the nuclear waste management obligation

EUR 1,000	2023	2022
The carrying value of TVO's share in the Finnish State Nuclear Waste Management Fund (non-current assets)	1,035,276	999,662
Provision related to nuclear waste management (non-current liabilities)		
Beginning of the year	1,294,345	1,368,291
Increase/decrease in provision	21,327	-37,388
Used provision	-83,900	-84,307
Changes due to discounting	57,580	47,749
End of the year	1,289,352	1,294,345
The discount rate %	4.0	4.0

TVO's legal liability as stated in the Nuclear Energy Act and the Company's share in the Finnish State Nuclear Waste Management Fund

EUR 1,000	2023	2022
Liability for nuclear waste management according to the Nuclear Energy Act	1,918,200	1,839,600
TVO's funding target obligation 2024 (2023) to the Finnish State Nuclear Waste Management Fund	1,525,100	1,457,900
TVO's share in the Finnish State Nuclear Waste Management Fund 31.12.2023 (31.12.2022)	1,457,900	1,436,100
Difference between the liability and TVO's share of the fund 31.12.2023 (31.12.2022)	460,300	403,500

The OL3 plant unit's nuclear waste liability calculation according to IAS 37 started and a provision was recorded in the balance when the plant unit was made critical on 21 December 2021. The OL1/OL2 plant units' and the OL3 plant unit's liabilities and shares in the Fund are calculated and recorded separately, as the corresponding total cost estimates are prepared separately for the plant units. The legal liability calculated according to the Nuclear Energy Act in Finland and decided by the supervising authority (Ministry of Economic Affairs and Employment) is EUR 1,918.2 (1,839.6) million on 31 December 2023 (31 December 2022), of which EUR 1,493.2 (1,437.8) million belongs to OL1/OL2 and EUR 425.0 (401.8) million belongs to OL3. The carrying value of the liability in the balance sheet calculated according to IAS 37 is EUR 1,289.4 (1,294.3) million on 31 December 2023. The main reason for the difference between the carrying value of the provision and the legal liability is the fact that the legal liability is not discounted to net present value. Since the future cash flow is spread over 100 years, the difference between non-discounted legal liability and the discounted provisions are remarkable. The change in the discount rate has an effect on the provision. The provision increases, when the discount rate used is lowered.

According to Section 40 Clause 1 of the Nuclear Energy Act, the Fund target for each calendar year shall be equal to the liability of the previous calendar year. In order to balance the effects of nuclear waste management costs on several operating years of the nuclear plant, the Fund target is however lower than the liability, while the preconditions stipulated in Section 40 are fulfilled. Time-based periodisation (40 years) is used to calculate the OL3 plant unit's Fund target, according to Section 40 Clause 2 of the Nuclear Energy Act and the Government Decree (991/2017) Section 5.

TVO's share in the Finnish State Nuclear Waste Management Fund is EUR 1,457.9 (1,436.1) million on 31 December 2023. The carrying value of the TVO's share in the Fund in the balance sheet is EUR 1,035.3 (999.7) million. The difference is due to the fact that IFRIC 5 limits the carrying amount of TVO's share in the Finnish State Nuclear Waste Management Fund to the amount of the related liability since TVO does not have control over the Finnish State Nuclear Waste Management Fund. As long as the Fund is overfunded from an IFRS perspective, the effects to operating profit from this adjustment will be positive if the provision increases more than the Fund, and negative if the actual value of the Fund increases more than the provision. On 31 December 2023 the OL1/OL2 plant units' share in the Fund is higher than the provision according to IFRS, due to which above-mentioned adjustment is recorded for the OL1/OL2 plant units' nuclear waste management IFRS calculation. The OL3 plant unit's share in the Fund is in turn lower than the provision according to IFRS, and therefore above-mentioned adjustment is not recorded.

The difference between the funding target and the share in the Finnish State Nuclear Waste Management Fund at the end of each year is due to the funding target being completed by paying the nuclear waste management fee only during the first quarter of the following year. In order to supplement the statutory protected portion, TVO provided the Nuclear Waste Management Fund with a cash security of approximately EUR 44 million. In 2022, the Nuclear Waste Management Fund started investment activities in accordance with new legislation. In 2023, the investment activities of the Finnish State Nuclear Waste Management Fund were positive; this means that a part of the investment profits from 2023 will be allocated in order to cover the legal protected portion, and the part of the profits exceeding that portion will reduce TVO's nuclear waste management fee for 2023. In this case, the cash security for the protected portion that was submitted to the Fund in 2023 will be returned to TVO in March 2024. The nuclear waste management fee for 2023 will be confirmed in March 2024.

TVO has issued to the State the shareholders' absolute guarantees as security for the unfunded legal liability. The security also covers unexpected events as determined in the Nuclear Energy Act. The guarantees are included in the nuclear waste management obligations, see note 25 **Obligations and other commitments**.

Finnish participants in the State Nuclear Waste Management Fund are allowed to borrow from the Fund according to defined rules. TVO utilises the right to borrow funds back and has pledged the receivables from the shareholders as security for the loans. Maturity of the nuclear waste management loans is three years. The loans are included in the interest-bearing liabilities, see note 22 **Interest-bearing liabilities**.

25 Obligations and other commitments

Pledged promissory notes and financial guarantees

EUR 1,000	2023	2022
Pledged promissory notes to the Finnish State Nuclear Waste Management Fund	727,500	651,339
Guarantees given by shareholders related to the nuclear waste management obligation	557,740	534,990

As a result of the amendment to the Nuclear Energy Act which entered into force in May 2021, a company liable for nuclear waste management or its shareholder is entitled to borrow back a maximum of 60 percent of its share in the Nuclear Waste Management Fund as of 2022. Before the amendment to the Nuclear Energy Act the company under the nuclear waste management obligation was entitled to borrow an amount equal to 75 percent of its share in the Finnish State Nuclear Waste Management Fund. TVO has lent the funds borrowed from the fund to its shareholders and has pledged the receivables from the shareholders as collateral for the loan.

The absolute guarantees given by the equity holders of the Company are given to cover the unfunded portion of the nuclear waste management obligation and unexpected events as determined in the Nuclear Energy Act. According to Section 44 of the Nuclear Energy Act, a party with a waste management obligation shall supply the State with collateral security fulfilling the conditions provided in Section 45 before commencing waste-generating operations and otherwise always by the end of June so that the total of collateral equals the difference between the liabilities for the calendar year and the Fund target. At the start of the OL3 plant unit's operations, the Ministry of Economic Affairs and Employment has approved TVO's equity holders' absolute guarantees as collateral security supplied to the State.

Commitments

Contingent liabilities given on own behalf

EUR 1,000	2023	2022
Bank guarantees	550	550

Investment commitments

Agreement-based commitments regarding the acquisition of property, plant and equipment:

EUR 1,000	2023	2022
Investment commitments	117,500	455,400
Total	**117,500**	**455,400**

PENDING COURT CASES AND DISPUTES

TVO is party to an arbitration procedure related to the condenser replacement at OL1 and OL2 that was carried out in 2017 and 2018. The counterparty to the arbitration is Balcke-Dürr GmbH. TVO considers the claims presented by the counterparty in the arbitration to be unfounded and demands that they be rejected and that TVO's legal expenses be compensated for.

At the end of the fiscal year 2023, TVO had no other pending court cases or disputes.

CO_2 EMISSION RIGHTS

TVO's CO_2 emissions are generated by the releases of the reserve boilers and the emergency diesel generators. In principle TVO has, on 31 December, emission rights at least the same amount as the actual annual emissions are. If the actual emissions exceed the amount of the emission rights that TVO possesses, TVO has booked the expense for exceeding emission rights at the market value on 31 December.

	2023 t CO_2	2023 EUR 1,000	2022 t CO_2	2022 EUR 1,000
Total annual emissions from production facilities	1,528		1,449	
Possessed emission rights	1,615		1,604	
Emission rights bought [1)]	1,450	100	1,300	110

[1)] The purchases of the emission rights are included in materials and services. The emission rights that TVO possesses on 31 December are included in intangible assets on the balance sheet.

26 Related party

The Group's related parties include parent company Teollisuuden Voima Oyj and its subsidiary and joint ventures. The related parties also include the Board of Directors and the Executive Management including the President and CEO.

Group's parent company and subsidiaries

Company	Home country	Ownership, %	Share in voting rights, %
Teollisuuden Voima Oyj	Finland		
TVO Nuclear Services Oy	Finland	100	100

Transactions with related parties are as follows

2023 EUR 1,000	Sales	Purchases	Receivables	Liabilities
Posiva Group	10,834	82,050	3,582	6,694

2022 EUR 1,000	Sales	Purchases	Receivables	Liabilities
Posiva Group	11,324	82,337	6,212	3,031

TEOLLISUUDEN VOIMA OYJ'S SHAREHOLDERS

Related parties according to the IAS 24 standard are also two of TVO's biggest shareholders, Pohjolan Voima Oyj (PVO) and Fortum Power and Heat Oy (FPH), which have significant authority, as well as PVO's biggest owner UPM-Kymmene Oyj (UPM) and FPH's owner Fortum Oyj.

Transactions with related parties are as follows

2023 EUR 1,000	Sales	Purchases	Receivables	Liabilities
PVO, Fortum Oyj, Fortum Power and Heat Oy	737,598	7,944	614,542	854,106

2022 EUR 1,000	Sales	Purchases	Receivables	Liabilities
PVO, Fortum Oyj, Fortum Power and Heat Oy	294,875	32,268	589,844	808,792

Senior management's employee benefits

The senior management of TVO comprises of the Board of Directors and the Executive Management, including the President and the CEO. The Group has no business transactions with senior management.

The employee benefits of the Executive Management and CEO

EUR 1,000	2023	2022
Salary and other short-term employee benefits of the CEO	348	352
Salary and other short-term employee benefits of the Executive Management other than the CEO	1,706	1,670
Statutory pension contributions of the Executive Management other than the CEO	280	274
Supplementary pensions of the Executive Management other than the CEO	175	151
Total	**2,509**	**2,447**

Compensation to the Board of Directors

EUR 1,000	2023	2022
Board of Directors on 31 December 2023		
Tiina Tuomela	41	49
Ilkka Tykkyläinen	49	46
Hannu Jokinen	37	36
Esa Kaikkonen	32	35
Tapio Korpeinen	40	40
Petra Lundström	37	31
Timo Rajala, from 1 Jan 2023	36	0
Anders Renvall	32	31
Rami Vuola	37	36
Former Board members		
Juha-Pekka Weckström, until 31 Dec 2022	1	36
Total	**342**	**340**

27 Financial risk management

Financing and financial risks are centrally managed by the finance operations of the TVO Group in accordance with the Finance Policy approved by the Board of Directors. Compliance with the Finance Policy is monitored by the Board of Directors and the Company's management. The SVP, Treasury is responsible for financing operations. The TVO Group is exposed to a variety of financial risks: liquidity, market and credit risk. These do not include the receivables and obligations between the Company and its owners, as the Company operates at cost-price (see note 1 **General information on the Group**).

The TVO Group's guiding financial principles are to ensure access to adequate liquidity reserves and, secondly, to reduce volatility in cash flows deriving form short and medium-term fluctuations in the financial markets.

In accordance with the Finance Policy of the Company, derivative instruments are entered into only with hedging purposes and they should qualify for hedge accounting under IFRS.

LIQUIDITY RISK

Liquidity and refinancing risk is defined as the amount by which earnings and cash flows are affected as a result of the Company not being able to secure sufficient financing. In addition to sufficient liquid assets and committed credit lines, the TVO Group aims to diminish the refinancing risk by spreading the maturity dates of its loans and different financing sources as much as possible.

In accordance with the Finance Policy of the TVO Group, the maturities and refinancing of long-term loans are planned so that no more than 25 percent of the outstanding loans mature during the next rolling 12-month period. The loans borrowed from the Finnish State Nuclear Waste Management Fund, which have been lent further to the shareholders, form an exception.

The TVO Group issues commercial papers under the Commercial Paper Program for short-term funding purposes. There shall always exist committed credit lines with a minimum duration of 12 months for an amount corresponding to the funding needs of the Company for the following 12 months.

In addition to long-term committed credit lines, the Company shall maintain liquid assets at an amount stated in the Finance Policy. In accordance with the Finance Policy, bank deposits, certificates of deposits, commercial papers, municipal papers, and treasury notes as well as money market funds are accepted as investments, and they are mostly for the short-term purposes with maximum duration of 12 months.

Undiscounted cash flows of financial liabilities

2023 EUR 1,000	2024	2025	2026	2027	2028–	Total
Loans from financial institutions [1]	28,474	426,104	26,104	26,104	19,028	525,814
Financing costs [2]	17,251	15,577	1,878	1,153	429	36,288
Loan from the Finnish State Nuclear Waste Management Fund [3]					727,500	727,500
Financing costs	24,560	31,604	31,518	25,378	24,764	137,824
Bonds [4]	348,943	500,000	650,000	675,000	1,632,247	3,806,190
Financing costs	97,860	95,085	84,511	77,144	168,801	523,401
Loans from others [4]					280,000	280,000
Financing costs	14,083	14,083	14,083	14,083	116,346	172,678
Lease liabilities	2,771	44,133	516	503	11	47,934
Shareholder loans	47,461					47,461
Other liabilities	105,839					105,839
Interest rate derivatives	51,317	43,971	43,432	36,839	84,217	259,776
Total	**738,559**	**1,170,557**	**852,042**	**856,204**	**3,053,343**	**6,670,705**
Forward foreign exchange contracts	297	199	209	0	0	705

[1] Repayments in 2024 are included in current liabilities in the balance sheet.

[2] In addition to interest costs, financing costs include commitment fees.

[3] The loan is renewed yearly and connected interest payments are calculated for five years.

[4] The placements in foreign currency have been swapped into EUR-floating or fixed cash flow using cross-currency swaps.

Undiscounted cash flows of financial liabilities

2022 EUR 1,000	2023	2024	2025	2026	2027–	Total
Loans from financial institutions [1]	50,608	426,104	626,104	126,104	55,272	1,284,191
Financing costs [2]	39,342	36,354	24,490	2,001	3,464	105,650
Loan from the Finnish State Nuclear Waste Management Fund [3]					651,339	651,339
Financing costs	3,377	25,318	24,761	23,474	22,705	99,634
Bonds [4]	205,665	644,900	500,000	650,000	1,513,000	3,513,565
Financing costs	71,881	65,186	54,345	43,755	90,012	325,180
Loans from others [4]						
Financing costs						
Lease liabilities	2,432	2,314	44,009	406	406	49,566
Shareholder loans	29,200					29,200
Other liabilities	63,695					63,695
Interest rate derivatives	29,455	32,780	26,900	26,895	68,969	184,998
Total	**495,654**	**1,232,956**	**1,300,607**	**872,634**	**2,405,168**	**6,307,019**
Forward foreign exchange contracts	543	31	30	1	0	604

[1] Repayments in 2023 are included in current liabilities in the balance sheet.

[2] In addition to interest costs financing costs include commitment fees.

[3] The loan is renewed yearly and connected interest payments are calculated for five years.

[4] The placements in foreign currency have been swapped into EUR-floating or fixed cash flow using cross-currency swaps.

MARKET RISK

Currency risk

TVO Group is exposed to currency risk mainly in connection with its fuel purchases. The currency of purchases of raw uranium and enrichment is frequently USD. Hedging of a currency denominated purchase is commenced when an agreement is entered into and the forecasted currency risk becomes highly probable. Both short-term and long-term loans are withdrawn mainly in euros. The loans denominated in other currencies than euros are hedged latest at the withdrawal date.

Currency swaps, forward contracts, and options can be used to hedge the currency exposure.

Interest rate risk

Interest-bearing liabilities expose the Company to interest rate risk. The objective of the Company's interest rate risk management is to maintain the interest costs at as low level as possible and to diminish the volatility of interest costs. In accordance with the Finance Policy, the duration of the loan portfolio of the Company can vary between 36 and 48 months. At the closing date the duration was 43 months.

The average interest rate duration is managed with fixed interest rate loans, interest rate swaps, forward rate agreements as well as with interest rate caps and floors.

The average interest rate on loans and derivatives on 31 December 2023 was 2.62 % (2.09 %).

Borrowings issued at variable rates expose the TVO Group to cash flow interest rate risk. Borrowings issued at fixed rates expose the TVO Group to fair value interest rate risk. The TVO Group shall apply hedge accounting as far as practical. Based on the various scenarios, the TVO Group manages its cash flow interest rate risk by using floating-to-fixed interest rate swaps. Such interest rate swaps have the economic effect of converting borrowings from floating rates to fixed rates. The TVO Group also enters into fixed-to-floating interest rate swaps to hedge the fair value interest rate risk.

Expected cash flows from financial instruments under cash flow hedge accounting

2023 EUR 1,000	2024	2025	2026	2027	2028–	Total
Interest rate swaps						
Cash flows	41,157	37,902	38,464	37,553	84,217	239,293

2022 EUR 1,000	2023	2024	2025	2026	2027–	Total
Interest rate swaps						
Cash flows	25,216	26,802	24,081	24,294	70,865	171,258

Sensitivity to market risks

Sensitivity to market risks arising from financial instruments as required by IFRS 7.

EUR 1,000	2023 Income statement	2023 Equity	2022 Income statement	2022 Equity
+ 10% change in EUR/USD exchange rates		-6,011		-4,217
+ 10% change in EUR/SEK exchange rates		0		-196
- 10% change in EUR/USD exchange rates		6,011		4,217
- 10% change in EUR/SEK exchange rates		0		196
1% upward parallel shift in interest rates	-4,260	63,462	-10,993	58,179
1% downward parallel shift in interest rates	4,260	-76,134	10,993	-69,796

Assumptions:

The change in EUR/USD and EUR/SEK exchange rates are assumed to be +/- 10 per cent.

The currency position includes the forward foreign exchange contracts which are designated as cash flow hedges and recognized in equity and the forward foreign exchange contracts not qualified as cash flow hedges, affecting the income statement.

The variation in interest rates is assumed to be 1 percentage point parallel shift in the interest rate curve. The calculation takes into account the derivatives in the cash flow hedging calculation.

The interest rate risk position includes the floating rate loan receivables, interest-bearing borrowing, the interest rate derivatives and cash equivalents.

The income statement is affected by the interest-bearing loan receivables, floating rate borrowings and the interest rate derivatives, excluding those interest rate derivatives that are designated as and qualifying for cash hedges, which are recognised in equity. The gain or loss is recognised in profit or loss, except when they relate to the construction of OL3 and are capitalised in the balance sheet until 30 April 2023.

BONDS

Euro Medium Term Note Programme EUR 5,000,000,000

EUR 1,000 Currency	2023 Nominal amount	2023 Carrying amount	2022 Nominal amount	2022 Carrying amount	Interest rate %	Maturity date
EUR	20,000	19,998	20,000	19,991	2.80	8.5.2024
EUR	191,848	191,704	400,000	398,851	2.00	8.5.2024
EUR	500,000	495,096	500,000	490,943	2.13	4.2.2025
EUR	650,000	648,211	650,000	647,394	1.13	9.3.2026
EUR	600,000	586,737	600,000	577,393	2.63	31.3.2027
EUR	75,000	74,769	75,000	74,710	3.60	14.12.2027
EUR	600,000	597,585	600,000	597,047	1.38	23.6.2028
EUR	23,000	22,943	23,000	22,934	3.50	3.5.2030
EUR	600,000	607,041			4.75	1.6.2030
EUR	45,000	44,897	45,000	44,884	3.90	31.3.2032
EUR	150,000	149,674	150,000	149,636	4.19	13.9.2032
EUR	20,000	19,862	20,000	19,846	3.88	8.11.2032
EUR			205,665	205,577	2.63	13.1.2023
SEK	135,000	12,171	850,000	76,390	2.38	15.2.2024
SEK	315,000	28,389	500,000	44,957	Stibor 3M + 1.78	15.2.2024
SEK	500,000	45,061	500,000	44,957	Stibor 3M + 1.42	29.10.2024
SEK	500,000	45,061	500,000	44,957	1.56	29.10.2024
SEK	1,000,000	90,123			Stibor 3M + 5.81	23.1.2029
SEK	1,300,000	117,160			5.20	23.1.2029
Total		**3,796,482**		**3,460,466**		

TVO Group debt structure by maturity

31 December 2023 EUR 1,000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033–	Total
Loans from financial institutions	26,104	426,104	26,104	26,104	11,818		7,210				523,444
Bonds	348,943	500,000	650,000	675,000	600,000	194,247	623,000		215,000	280,000	4,086,190
Loans from others											
Lease liabilities	2,771	44,133	516	503	11						47,934
Commercial papers											
Total	**377,818**	**970,237**	**676,620**	**701,607**	**611,829**	**194,247**	**630,210**		**215,000**	**280,000**	**4,657,568**

TVO Group credit commitment by maturity

31 December 2023 EUR 1,000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033–	Total
Syndicated revolving credit facility			1,000,000								1,000,000
Bilateral revolving credit facility											
Bilateral bank loan											
Total			**1,000,000**								**1,000,000**

On 31 December 2023, the Group had undrawn credit facilities amounting to EUR 1,000 (1,000) million and cash and cash equivalents amounting to EUR 288 (353) million. The OL3 project's EUR 400 million commitment, aimed at possible financing needs, was due at the end of 2023 (EUR 400 million).

CREDIT RISK

Credit risk arises from the potential failure of a counterparty to meet its contractual payment obligations. Commercial trade receivables as well as receivables from financial institutions relating to investments, deposits and derivative transactions expose the Company to credit risk. In addition to money market funds, financial institutions that meet the credit rating requirements of the Group´s Financial Policy are accepted as counterparties. Furthermore, the TVO Group has in place a master agreement (ISDA) with all derivative contract counterparties.

The loan of the Finnish State Nuclear Waste Management Fund has been loan under the same loan terms to the company's shareholders, however so, that Fortum Power and Heat Oy´s share is loaned to Fortum Oyj. The loans do not have separate collateral. The nuclear waste management receivables and loans are valued at amortised cost. The management has evaluated the on-lending agreements the creditworthiness of the parties to be sufficient for these loans, and thus the expected credit losses of the loan receivables are immaterial and do not include a significant credit risk.

FUEL PRICE RISK

The fuel used for electricity production by the Group is uranium.

The TVO Group purchases the uranium fuel from the global markets. The purchasing process consists of four stages: purchase of uranium concentrate, conversion, enrichment and fuel fabrication. Purchasing Policy is used to guarantee the availability of fuel and to minimise price risk. This includes storage strategy and diversified long-term purchasing agreements with different suppliers.

The TVO Group has not used commodity derivatives to hedge fuel price risk.

CAPITAL RISK MANAGEMENT

The TVO Group's objective is to secure sufficient equity and equity-like funding that guarantees diversified funding sources.

The equity ratio of the Company varies along investment cycles. The Group aims to have a minimum equity ratio (IFRS) of 25 percent in the long-term. When calculating the equity ratio, the loan from the Finnish State Nuclear Waste Management Fund (lent further to the shareholders) and the provision related to nuclear waste management obligation are excluded. Additionally, subordinated loans or equivalent loans from the shareholders are regarded as equity.

According to the terms of some loan agreements, the Company is committed to maintain the consolidated equity ratio of TVO Group (IFRS) equal to or greater than 25 percent. There are no other key ratio-related covenants in the loan agreements.

The equity ratio monitored by the TVO Group's management

EUR 1,000	2023	2022
Equity ratio, % (IFRS, Group) [1]	31.2	30.7
Equity ratio, % (Parent company) [2]	30.0	28.4

[1] Equity ratio % = 100 x $\frac{\text{equity + loans from equity holders of the company}}{\text{balance sheet total - provision related to nuclear waste management - loan from the Finnish State Nuclear Waste Management Fund}}$

[2] Equity ratio % = 100 x $\frac{\text{equity + appropriations + loans from equity holders of the company}}{\text{balance sheet total - loan from the Finnish State Nuclear Waste Management Fund}}$

Net debt reconciliation

EUR 1,000	2023	2022
Cash and cash equivalents	287,684	353,203
Liabilities	5,329,782	5,391,707
Leases	47,401	49,566
Net debt	**5,089,499**	**5,088,070**

	Liabilities from financing activities			Other assets	
EUR 1,000	Liabilities	Leases	Sub-total	Cash and cash equivalents	Total
Net debt 1 Jan 2022	**-4,984,667**	**-49,410**	**-5,034,077**	**172,318**	**-4,861,759**
Cash flows	-461,135	2,409	-458,726	180,885	-277,841
Acquisitions - leases		-2,565	-2,565		-2,565
Other non-cash flow expenses	54,095		54,095		54,095
Net debt 31 Dec 2022	**-5,391,707**	**-49,566**	**-5,441,273**	**353,203**	**-5,088,070**
Cash flows	111,962	3,799	115,761	-65,519	50,242
Acquisitions - leases		-1,634	-1,634		-1,634
Other non-cash flow expenses	-50,037		-50,037		-50,037
Net debt 31 Dec 2023	**-5,329,782**	**-47,401**	**-5,377,183**	**287,684**	**-5,089,499**

[1] Other changes include non-cash movements, including fair value changes of derivative financial instruments and arrangement fee for loans, which will be presented as operating cash flows in the statement of cash flow when paid.

28 Events after the balance sheet date

An environmental impact assessment programme (EIA programme) concerning the possible service life extension and power uprating of the OL1 and OL2 was submitted to the Ministry of Economic Affairs and Employment (MEAE), which acts as the coordinating authority, on 5 January 2024.

The Energy Agency has issued a decision on the protection of the grid connected to the full power production of OL3 on January 12, 2024. The decision states that grid protection is a specific protection system of the transmission system operator and under the responsibility of the national grid company Fingrid Oyj. In its decision, the Energy Agency considers Fingrid to have unjustifiably transferred its obligations related to the grid protection system to TVO. In the decision, the Energy Authority requires Fingrid to submit to the Energy Authority for confirmation a presentation of the principles based on which the costs of the protection system will be covered. So far, TVO has covered the majority of the expenses.

Teollisuuden Voima Oyj

Income statement

EUR 1,000	Note	1 Jan-31 Dec 2023	1 Jan-31 Dec 2022
Turnover	2	**872,868**	**353,479**
Work performed for own purpose	3	7,143	21,310
Other income	4	14,685	17,047
Materials and services	5	-264,408	-183,929
Personnel expenses	6	-84,256	-80,139
Depreciation and impairment charges	7	-169,356	-40,690
Other expenses	8	-162,515	-101,203
Operating profit/loss		**214,161**	**-14,125**
Financial income and expenses	9	-96,168	3,823
Profit/loss before appropriations and taxes		**117,993**	**-10,302**
Appropriations	10	-117,993	12,511
Profit/loss for the financial year		**0**	**2,209**

Balance sheet

EUR 1,000	Note		31 Dec 2023		31 Dec 2022
Assets					
Non-current assets					
Intangible assets	11		2,515		2,476
Tangible assets	11		6,036,939		6,007,324
Investments					
Holdings in group companies	12	8		8	
Holdings in joint ventures	12	1,011		1,011	
Other shares	12	3,976		4,219	
Other receivables	12	784,735	789,730	710,964	716,202
Total non-current assets			**6,829,184**		**6,726,002**
Current assets					
Inventories	13		486,932		272,283
Current receivables	14		110,594		250,876
Cash and cash equivalents			287,017		352,359
Total current assets			**884,543**		**875,518**
Total assets			**7,713,727**		**7,601,520**

EUR 1,000	Note	31 Dec 2023	31 Dec 2022
Equity and liabilities			
Equity			
Share capital	15	600,365	600,365
Share premium reserve	15	232,435	232,435
Statutory reserve	15	9,948	9,948
Retained earnings (loss)	15,16	20,939	18,730
Profit (loss) for the financial year	15,16	0	2,209
Total equity		**863,687**	**863,687**
Appropriations		**299,423**	**181,207**
Liabilities			
Non-current liabilities	17,18	4,234,587	4,541,483
Shareholders' loans	17	929,300	929,300
Loan from the Finnish State Nuclear Waste Management Fund	17	727,500	651,339
Current liabilities	19	659,230	434,504
Total liabilities		**6,550,617**	**6,556,626**
Total equity and liabilities		**7,713,727**	**7,601,520**

Cash flow statement

EUR 1,000	2023	2022
Operating activities		
Operating profit/loss	214,161	-14,125
Adjustments to operating profit /loss [1]	169,380	40,690
Changes in working capital [2]	94,675	61,608
Interest paid and other financial expenses	-94,142	-4,337
Dividend received	0	2,209
Interest received	17,040	6,277
Cash flow from operating activities	**401,114**	**92,322**
Investing activities		
Acquisition of non-current assets	-281,135	-433,656
Proceeds from sale of shares	220	0
Loan receivables granted	-73,772	-15,831
Repayments of loans granted	0	75,837
Cash flow from investing activities	**-354,687**	**-373,650**
Financing activities		
Withdrawals of long-term loans	1,250,408	1,050,000
Repayment of long-term loans	-1,352,229	-517,415
Increase (+) or decrease (-) in short-term interest-bearing liabilities	89,020	62,740
Repayment of short-term interest-bearing liabilities	-99,160	-134,190
Group contribution received	192	418
Cash flow from financing activities	**-111,769**	**461,553**

EUR 1,000	2023	2022
Change in cash and cash equivalents	**-65,342**	**180,225**
Cash and cash equivalents 1 Jan	352,359	172,134
Cash and cash equivalents 31 Dec	**287,017**	**352,359**
[1] Adjustments to operating profit/loss		
Depreciation and write-downs	169,356	40,690
Gain (-) or loss (+) from divestment of non-current assets	24	0
Total	**169,380**	**40,690**
[2] Changes in working capital		
Increase (-) or decrease (+) in inventories	35,319	2,137
Increase (-) or decrease (+) in non-interest-bearing receivables	-34,582	27,535
Increase (+) or decrease (-) in short-term non-interest-bearing liabilities	93,938	31,936
Total	**94,675**	**61,608**

Notes to the parent company's financial statements

1 Accounting principles

VALUATION PRINCIPLES

Non-current assets and their depreciation

Non-current assets have been capitalised in the direct acquisition cost less grants received, accu-mulated depreciation and impairment charges, and compensation, if any. Depreciation according to plan is calcu-lated on a straight-line basis according to the estimated useful economic lives.

The depreciation periods are as follows:

- OL1, OL2 and OL3 nuclear power plant units:
  - Basic investment OL1 and OL2 — 61 years
  - Plant investment OL3 — 10–60 years
  - Investments made according to the modernisation programme — 16–35 years
  - Automation investments associated with the modernisation — 15 years
  - Additional investments — 10 years
- Buildings and structures — 10–40 years
- TVO's share in the Olkiluoto gas turbine power plant — 30 years.

Valuation of inventories

Materials and supplies have been valued at direct acquisition cost, nuclear fuel according to calculated fuel consumption, and supply stocks at average acquisition cost. If the replacement value of inventories on 31 December is lower than the original acquisition cost, the difference will not be entered in the books as an expense because the Company operates at cost-price.

CO_2 emission rights

Carbon dioxide (CO_2) emission rights are included in the intangible assets. Emission rights are recognised at historical cost. The current liability for returning emission rights is recognised at the carrying value of possessed emission rights. If there is a shortfall, a current liability is recognised to cover the acqui-sition of the missing emission rights. This current liability is valued at the current market value of the emission rights at the balance sheet date. The cost of the emission rights is recognised in the in-come statement under costs of materials and services. The gains from the sales of emission rights are refunded to the equity holders of the Company.

Research and development costs

Research and development costs associated with production activity are entered as annual costs for the year in which they were incurred.

Items denominated in foreign currency

Transactions in foreign currency have been entered at the relevant exchange rate or at the transaction rate for purchase and sale of foreign currency. On the balance sheet date, exchange rate differences on foreign currency accounts have been entered in the income statement under financial income and expenses.

Money market instruments

Money market instruments comprise shares in short-term money market funds and certificate of deposits. They are valued in the balance sheet at their original acquisition cost and are included in financing activi-ties in the cash flow statements.

Derivative financial instruments

The Company applies hedge accounting. Derivative financial instruments have not been entered on the balance sheet. Their nominal values and fair values are presented in the Notes to the Financial Statements.

Interest rate duration of floating rate loans has been managed with interest rate swaps. Interest costs of these instruments have been entered on accrual basis and shown in net amount under financial income and expenses.

Payments of foreign currency denominated inven-tory acquisitions have been hedged with currency de-rivatives. The realised exchange rate differences of derivative financial instruments have been entered to adjust the acquisition cost of inventories. Cross currency swaps have been used to hedge foreign currency denominated long-term loans.

ITEMS RELATED TO NUCLEAR WASTE MANAGEMENT LIABILITY

The nuclear waste management obligation is provided for in the Nuclear Energy Act. The obligation covers all future costs from nuclear waste handling, including the decommissioning of nuclear power plant units, costs for final disposal of spent nuclear fuel, and the risk margin, decommissioning being assumed to start at the end of the year in question.

The Ministry of Economic Affairs and Employment annually confirms at the end of the calendar year the liability for nuclear waste management for the current year and the target reserve for the next year.

The company liable for nuclear waste management shall pay its contribution to the Finnish State Nuclear Waste Management Fund, so that the company's share in the Fund on 31 March is equal to the company funding obligation target confirmed for the calendar year in question.

According to the Nuclear Energy Act Section 52 c, which entered into force on 1 May 2021, a three percent protected portion shall be added to the Fund target of the calendar year for a party with a nuclear waste management obligation. The protected portion shall primarily be covered by the surplus as defined in the Nuclear Energy Act Section 42 and the Fund's profit as defined in the Nuclear Energy Act Section

51. If the Fund's investment activities are unprofitable, the party with a nuclear waste management obligation must supplement the shares in the Fund by paying more nuclear waste management fee for the part that the loss surpasses the protected portion. If the Fund's investment activities are profitable, the Fund reimburses the party with a nuclear waste management obligation in the nuclear waste management fee for the part that the profit surpasses the protected portion.

In addition, a party with a nuclear waste management obligation shall supply the Finnish State Nuclear Waste Management Fund with collateral security fulfilling the conditions provided in Section 45, so that on the last day of March, the total amount of the collateral security corresponds with the protected portion for the part that is not covered by the transferred surplus and profit. Accordingly, the collateral security previously supplied by the party with a nuclear waste management obligation, which is not needed to cover the protected portion anymore, shall be returned to the party with a nuclear waste management obligation at the latest on the first business day of April in the same calendar year.

The annual contribution to the Finnish State Nuclear Waste Management Fund and costs from nuclear waste management and services are entered as annual expenses. The nuclear waste management fee is based on the Company's proposal. If the nuclear waste management fee set by the Finnish State Nuclear Waste Management Fund differs from the amount proposed by the Company, the difference is entered in the accounts for the following financial year.

The nuclear waste management liability and TVO's funding target obligation to the Finnish State Nuclear Waste Management Fund are presented in the Notes to the Financial Statements.

The Company must supply the Ministry with guarantees to cover for the difference between the legal nuclear waste management liability and the Company´s share in the Finnish State Nuclear Waste Management Fund, as well as for unforeseen expenses in nuclear waste management. Guarantees are presented in the Notes to the Financial Statements.

The amendment to the Nuclear Energy Act concerning the investment activities of the Finnish State Nuclear Waste Management Fund entered into force on 1 January 2022. With the amendment, the amount of relending available to a party with a nuclear waste management obligation was limited to 60 percent, and the investment activities were expanded to also include other asset classes than Finnish government bonds. TVO uses the right to borrow funds back, and lends them further to its shareholders.

2 Turnover

EUR 1,000	2023	2022
Olkiluoto 1 and Olkiluoto 2	370,163	346,820
Olkiluoto 3	502,705	6,659
Total	**872,868**	**353,479**
Electricity delivered to equity holders of the company (GWh)		
Olkiluoto 1	7,417	6,918
Olkiluoto 2	6,855	7,522
Olkiluoto 3	10,361	1,876
Total	**24,634**	**16,316**

3 Work performed for own purpose

EUR 1,000	2023	2022
Personnel expenses related to OL3	7,143	21,310

4 Other income

EUR 1,000	2023	2022
Rental income	1,108	1,144
Sales of services	12,873	14,543
Other income	704	1,360
Total	**14,685**	**17,047**

5 Materials and services

EUR 1,000	2023	2022
Purchases, accrual basis		
Nuclear fuel	70,015	60,845
Materials and supplies	7,613	6,084
Increase (-) or decrease (+) in inventories	40,472	6,948
Total	**118,100**	**73,877**
CO_2 emission rights	100	110
Nuclear waste management		
Contribution to the Finnish State Nuclear Waste Management Fund [1]	27,746	40,849
Nuclear waste management services	78,232	59,554
Total	**105,978**	**100,403**
External services	40,230	9,539
Total	**264,408**	**183,929**
Consumption		
Nuclear fuel	111,464	69,672
Materials and supplies	6,636	4,205
Total	**118,100**	**73,877**

[1] Based on TVO's proposal. If the contribution confirmed by the Finnish State Nuclear Waste Management Fund for the year differs from the proposal, the difference will be booked in the following financial year.

6 Notes concerning personnel and members of administrative bodies

Average number of personnel during financial year

	2023	2022
Office personnel	857	834
Manual workers	198	195
Total	**1,055**	**1,029**

Number of personnel on 31 December

	2023	2022
Office personnel	854	816
Manual workers	189	189
Total	**1,043**	**1,005**

Personnel expenses

EUR 1,000	2023	2022
Wages and salaries	70,787	67,247
Pension expenses	11,030	10,645
Other compulsory personnel expenses	2,439	2,247
Total	**84,256**	**80,139**

Key management compensations are presented in Note 26 **Related party** in the TVO Group consolidated financial statements.

7 Depreciation and impairment charges

EUR 1,000	2023	2022
Depreciation according to plan		
Other capitalised long-term expenses	487	410
Buildings and construction	18,218	4,493
Machinery and equipment	149,241	35,377
Other tangible assets	1,410	410
Total	**169,356**	**40,690**

8 Other expenses

EUR 1,000	2023	2022
Maintenance services	29,244	21,365
Regional maintenance and services	12,197	9,651
Research services	3,490	2,338
Other external services	54,160	26,283
Real estate tax	14,483	6,489
Rents	3,621	2,043
ICT expenses	7,425	6,206
Personnel related expenses	4,943	4,216
Corporate communication expenses	967	862
Other expenses	31,985	21,750
Total	**162,515**	**101,203**

Auditors’ fees and non audit-related services

PricewaterhouseCoopers Oy (EUR 1,000)	2023	2022
Auditing	191	231
Tax services	12	13
Other services	51	65
Total	**254**	**309**

9 Financial income and expenses

EUR 1,000	2023	2022
Dividend Income		
From joint ventures	0	2,209
Total	**0**	**2,209**
Interest income on long-term investments		
From joint ventures	97	13
From others	24,560	3,377
Total	**24,657**	**3,390**
Other interest and financial income		
From others	13,532	2,652
Total	**13,532**	**2,652**
Interest income on long-term investments and other interest and financial income, total	**38,189**	**8,251**
Interest expenses and other financial expenses		
To the Finnish State Nuclear Waste Management Fund	24,560	3,377
To others	151,307	103,628
Capitalised interest costs	-41,510	-102,577
Total	**134,357**	**4,428**
Total financial income (+) and expenses (-)	**-96,168**	**3,823**
Financial income and expenses include exchange rate gains (+) and losses (-) (net)	9,475	505

10 Appropriations

EUR 1,000	2023	2022
Group contribution	223	393
The difference between depreciation according to plan and tax depreciation, increase (-) or decrease (+)	-118,216	12,118
Total	**-117,993**	**12,511**

11 Non-current assets

EUR 1,000	Formation expenses	Intangible rights	Other capitalised long-term expenses	Advance payments	Total
Intangible assets					
Acquisition cost 1 Jan 2023	54,011	129	26,656	352	81,148
Increase	0	100	413	64	577
Decrease	0	-115	0	0	-115
Transfer between categories	0	0	312	-248	64
Acquisition cost 31 Dec 2023	54,011	114	27,381	168	81,674
Accumulated depreciation according to plan 1 Jan	54,011	0	24,661	0	78,672
Accumulated depreciation from deduction	0	0	0	0	0
Depreciation according to plan	0	0	487	0	487
Book value 31 Dec 2023	**0**	**114**	**2,233**	**168**	**2,515**
Accumulated depreciation difference 1 Jan	0	0	1,298	0	1,298
Change in depreciation difference	0	0	-102	0	-102
Accumulated depreciation difference 31 Dec	0	0	1,196	0	1,196
Undepreciated acquisition cost in taxation 31 Dec 2023	0	114	1,037	168	1,319

EUR 1,000	Land and water areas	Building and construction	Machinery and equipment	Other tangible assets	Construction in progress and avance payments	Total
Tangible assets						
Acquisition cost 1 Jan 2023	12,075	295,655	1,412,923	54,524	5,492,841	7,268,018
Increase	0	727	29,792	1,280	416,719	448,518
Decrease	0	-2,628	-7,898	0	-249,968	-260,494
Transfer between categories	0	1,211,213	4,280,635	76,474	-5,568,386	-64
Acquisition cost 31 Dec 2023	12,075	1,504,967	5,715,452	132,278	91,206	7,455,978
Accumulated depreciation according to plan 1 Jan	0	232,181	979,400	49,115	0	1,260,696
Accumulated depreciation from deduction	0	-2,628	-7,898	0	0	-10,526
Depreciation according to plan	0	18,218	149,241	1,410	0	168,869
Book value 31 Dec 2023	**12,075**	**1,257,196**	**4,594,709**	**81,753**	**91,206**	**6,036,939**
Accumulated depreciation difference 1 Jan	0	208	177,461	2,240	0	179,909
Change in depreciation difference	0	28,801	86,743	2,774	0	118,318
Accumulated depreciation difference 31 Dec	0	29,009	264,204	5,014	0	298,227
Undepreciated acquisition cost in taxation 31 Dec 2023	12,075	1,228,187	4,330,505	76,739	91,206	5,738,712
Share of machinery and equipment from book value 31 Dec 2023			4,042,226			
Share of machinery and equipment from book value 31 Dec 2022			413,503			

Capitalised borrowing costs included in non-current assets

EUR 1,000	Formation expenses	Other capitalised long-term expenses	Buildings and contruction	Machinery and equipment	Other tangible assets	Construction in progress	Total
Interest during construction period							
Acquisition cost 1 Jan 2023 *)	11,046	1,167	27,122	95,394	2,402	1,768,295	1,905,426
Increase	0	0	0	0	0	41,344	41,344
Transfer between categories	0	0	403,395	1,386,333	19,911	-1,809,639	0
Acquisition cost 31 Dec 2023	11,046	1,167	430,517	1,481,727	22,313	0	1,946,770
Accumulated depreciation according to plan 1 Jan	11,046	948	22,018	77,444	1,950	0	113,406
Depreciation according to plan	0	12	4,811	36,475	264	0	41,562
Book value 31 Dec 2023	**0**	**207**	**403,688**	**1,367,808**	**20,099**	**0**	**1,791,802**
Accumulated depreciation difference 1 Jan	0	219	5,104	17,950	452	0	23,725
Change in depreciation difference	0	-12	35,529	72,343	1,727	0	109,587
Accumulated depreciation difference 31 Dec	0	207	40,632	90,293	2,179	0	133,311
Undepreciated acquisition cost in taxation 31 Dec 2023	0	0	363,055	1,277,515	17,920	0	1,658,490

*) An adjustment of -23.2 million euros has been made to the 1 Jan 2023 acquisition cost of Construction in progress.

12 Investments

EUR 1,000	Holdings in group companies	Holdings in joint ventures	Other stocks and shares	Loan receivables, joint ventures	Loan receivables, others	Long-term receivables	Total
Acquisition cost 1 Jan 2023	8	1,011	4,219	2,390	651,844	56,730	716,202
Increase	0	0	0	0	76,161	0	76,161
Decrease	0	0	-243	-2,390	0	0	-2,633
Acquisition cost 31 Dec 2023	8	1,011	3,976	0	728,005	56,730	789,730
Book value 31 Dec 2023	**8**	**1,011**	**3,976**	**0**	**728,005**	**56,730**	**789,730**
Loan from the Finnish State Nuclear Waste Management Fund lent further to the equity holders of the company					**727,500**		**727,500**

Group companies	Group share, %
TVO Nuclear Services Oy, Eurajoki	100

Joint ventures	Holding of the parent company, %
Posiva Oy, Eurajoki, A series	60
Posiva Oy, Eurajoki, B series	74

13 Inventories

EUR 1,000	2023	2022
Raw uranium and natural uranium		
Replacement cost	564,859	159,407
Book value	183,183	92,740
Difference	**381,676**	**66,667**
Raw uranium and natural uranium	183,183	92,740
Nuclear fuel	293,197	169,684
Supplies	10,552	9,859
Total	**486,932**	**272,283**

14 Current receivables

EUR 1,000	2023	2022
Receivables from group companies		
Prepayments and accrued income	927	1,487
Total	**927**	**1,487**
Receivables from joint ventures		
Interest receivables	0	2
Prepayments and accrued income	3,580	3,816
Total	**3,580**	**3,818**
Receivables from others		
Trade receivables	18,784	9,780
Other receivables	45,433	207,059
Total	**64,217**	**216,839**
Prepayments and accrued income		
Accrued interest costs	38,768	20,535
Accrued insurance costs	1,919	2,511
Collateral received	0	4,690
Other prepayments and accrued income	1,183	996
Total	**41,870**	**28,732**
Total	**110,594**	**250,876**

15 Equity

EUR 1,000	2023	2022
Share capital 1 Jan	600,365	600,365
Share capital 31 Dec	600,365	600,365
Share premium reserve 1 Jan	232,435	232,435
Share premium reserve 31 Dec	232,435	232,435
Statutory reserve 1 Jan	9,948	9,948
Statutory reserve 31 Dec	9,948	9,948
Retained earnings/loss 1 Jan	20,939	18,730
Retained earnings/loss 31 Dec	20,939	18,730
Profit/loss for the financial year	0	2,209
Total	**863,687**	**863,687**

16 Distributable equity

EUR 1,000	2023	2022
Retained earnings	20,939	18,730
Profit/loss for the financial year	0	2,209
Total	**20,939**	**20,939**

17 Non-current liabilities

EUR 1,000	2023	2022
Bonds	3,457,247	3,307,900
Loans from financial institutions	490,130	1,216,233
US Private Placements loans	280,000	0
Other loans	7,210	17,350
Total	**4,234,587**	**4,541,483**
Shareholders' loans [1]	929,300	929,300
Loan from the Finnish State Nuclear Waste Management Fund [2]	727,500	651,339
Total	**5,891,387**	**6,122,122**

[1] Subordinated loans

[2] Lent further to the shareholders.

BONDS

Euro Medium Term Note Programme EUR 5,000,000,000

Currency	Capital 2023	EUR 1,000 2023	Capital 2022	EUR 1,000 2022	Maturity date
EUR			205,665	205,665	13.1.2023
EUR	20,000	20,000	20,000	20,000	8.5.2024
EUR	191,848	191,848	400,000	400,000	8.5.2024
EUR	500,000	500,000	500,000	500,000	4.2.2025
EUR	650,000	650,000	650,000	650,000	9.3.2026
EUR	600,000	600,000	600,000	600,000	31.3.2027
EUR	75,000	75,000	75,000	75,000	14.12.2027
EUR	600,000	600,000	600,000	600,000	23.6.2028
EUR	23,000	23,000	23,000	23,000	3.5.2030
EUR	600,000	600,000			1.6.2030
EUR	45,000	45,000	45,000	45,000	31.3.2032
EUR	150,000	150,000	150,000	150,000	13.9.2032
EUR	20,000	20,000	20,000	20,000	8.11.2032
EUR	315,000	30,732	500,000	48,781	15.2.2024
EUR	135,000	13,171	850,000	82,927	15.2.2024
SEK	500,000	46,624	500,000	46,624	29.10.2024
SEK	500,000	46,568	500,000	46,568	29.10.2024
SEK	1,000,000	84,459			23.1.2029
SEK	1,300,000	109,788			23.1.2029
Total		**3,806,190**		**3,513,565**	
Current portion of long-term bonds		348,943		205,665	
Total		**3,457,247**		**3,307,900**	

OTHER LOANS

US Private Placements

Currency	Capital 2023	EUR 1,000 2023	Capital 2022	EUR 1,000 2022	Maturity date
EUR	105,000	105,000			15.12.2033
EUR	85,000	85,000			15.12.2035
EUR	90,000	90,000			15.12.2038
Total	**280,000**	**280,000**			
Collateral received	7,210	7,210	17,350	17,350	30.11.2030
Total	**287,210**	**287,210**	**17,350**		

18 Debts due in more than five years

EUR 1,000	2023	2022
Debts maturing in more than five years	1,569,457	1,217,168

19 Current liabilities

EUR 1,000	2023	2022
Liabilities from group companies		
Accruals	0	1
Total	**0**	**1**
Liabilities from joint ventures		
Accruals	6,694	3,031
Total	**6,694**	**3,031**
Liabilities from others		
Advances received	68,063	23,064
Trade payables	22,779	17,819
Total	**90,842**	**40,883**
Interest-bearing liabilities		
Bonds	348,943	205,665
Loans from financial institutions	26,104	50,608
Total	**375,047**	**256,273**
Accruals and deferred income		
Finnish State Nuclear Waste Management Fund	29,100	40,227
Accrued interests	74,346	50,316
Accrued personnel expenses	24,093	22,742
Accruals related to CO_2 emission rights	114	129
Other accruals and deferred income and other liabilities	58,994	20,902
Total	**186,647**	**134,316**
Total	**659,230**	**434,504**

20 Commitments

Leasing liabilities

EUR 1,000	2023	2022
Leasing liabilities falling due in less than a year	3,899	2,814
Leasing liabilities falling due later	44,515	47,462
Total	**48,414**	**50,276**

TVO has the right to redeem the lease object for EUR 42.7 million in 2025.

Contingent liabilities given on own behalf

EUR 1,000	2023	2022
Bank guarantees	550	550

Nuclear waste management

EUR 1,000	2023	2022
Liability for nuclear waste management according to the Nuclear Energy Act [1]	1,918,200	1,839,600
TVO's funding target obligation 2024 (2023) to the Finnish State Nuclear Waste Management Fund	1,525,100	1,457,900
Collateral for nuclear waste management liabilities	557,740	534,990
Pledged promissory notes to the Finnish State Nuclear Waste Management Fund	727,500	651,339

[1] Based on the nuclear waste management programme and proposal for the liability made by the Company and which is to be confirmed by the Ministry of Employment and the Economy at the end of the year.

PENDING COURT CASES AND DISPUTES

See note 25 **Obligations and other commitments** in the consolidated financial statements.

21 Derivative financial instruments

EUR 1,000	2023	2022
Interest rate derivatives		
Interest rate swaps (nominal value)	2,275,000	2,185,000
Fair value	132,378	191,156
Forward foreign exchange contracts		
Forward foreign exchange contracts (nominal value)	60,109	44,127
Fair value	6,590	11,482
Cross-currency swaps		
Cross-currency swaps (nominal value)	331,337	224,873
Fair value	6,623	13,576

Risk management principles, principles for the recognition of derivatives as well as details of derivatives are described in the Notes to the IFRS consolidated financial statements. Hedging relationships are effective i.e. the hedged risk and hedging instrument will perfectly match with each other. In documents regarding these hedging relationships, the hedged risks and hedging instruments are extensively described and the effectiveness between them is demonstrated.

22 Series of shares

Share capital and series of shares

	Number 2023	Number 2022	EUR 1,000 2023	EUR 1,000 2022
A-series - OL1 and OL2				
1 Jan	680,000,000	680,000,000	115,600	115,600
Change	0	0	0	0
31 Dec	680,000,000	680,000,000	115,600	115,600
B-series - OL3				
1 Jan	680,000,000	680,000,000	484,765	484,765
Change	0	0	0	0
31 Dec	680,000,000	680,000,000	484,765	484,765
Total	**1,360,000,000**	**1,360,000,000**	**600,365**	**600,365**

According to the Articles of Association, TVO delivers electricity to its shareholders on the so-called Mankala principle, i.e. it delivers the electricity produced or procured to its shareholders in proportion to their shareholding in each series. Each of the shareholders of each series is liable for the variable and fixed annual costs that are specified in detail in the Articles of Association. The Company prepares annually a balance sheet divided into series of shares. The balance sheet, which will be presented to the Shareholders' Meeting, specifies the assets, liabilities and equity of the different series of shares.

23 CO_2 emission rights

TVO's CO_2 emissions are generated by the releases of the reserve boilers and the emergency diesel generators. In principle TVO has, on December 31, emission rights at least the same amount as the actual annual emissions are. If the actual emissions exceed the amount of the emission rights that company possesses, the company has booked the expense for exceeding emission rights at the market value on December 31.

	2023 t CO_2	2023 EUR 1,000	2022 t CO_2	2022 EUR 1,000
Total annual emissions from production facilities	1,528		1,449	
Possessed emission rights	1,615		1,604	
Emission rights bought [1)]	1,450	100	1,300	110

[1)] The purchases of the emission rights are included in materials and services. The emission rights that company possesses on 31 December are included in intangible rights on the balance sheet and emission right reductions.

Proposals to the Annual General Meeting

Teollisuuden Voima Oyj's distributable equity as of 31 December, 2023 amounted to EUR 20,938,560.00. The Board of Directors proposes to the Annual General Meeting that no dividend shall be paid.

Signatures for the report of the board of directors and financial statements

Helsinki, February 26, 2024

Ilkka Tykkyläinen

Petra Lundström

Kaarlo Höysniemi

Hannu Jokinen

Esa Kaikkonen

Tapio Korpeinen

Timo Rajala

Anders Renvall

Tiina Tuomela

Rami Vuola

Jarmo Tanhua
CEO

The auditor's note

Our auditor's report has been issued today.

Helsinki, February 26, 2024

PricewaterhouseCoopers Oy
Authorised Public Accountants

Niina Vilske
Authorised Public Accountant

Auditor's Report (Translation of the Finnish Original)

To the Annual General Meeting of Teollisuuden Voima Oyj

Report on the Audit of the Financial Statements

OPINION

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position and financial performance and cash flows in accordance with IFRS Accounting Standards as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of the financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report to the Audit Committee.

What we have audited

We have audited the financial statements of Teollisuuden Voima Oyj (business identity code 0196656-0) for the year ended 31 December 2023. The financial statements comprise:

- the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, which include material accounting policy information and other explanatory information
- the parent company's balance sheet, income statement, cash flow statement and notes.

BASIS FOR OPINION

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, the non-audit services that we have provided to the parent company and to the group companies are in accordance with the applicable law and regulations in Finland and we have not provided non-audit services that are prohibited under Article 5(1) of Regulation (EU) No 537/2014. The non-audit services that we have provided are disclosed in note 10 to the Financial Statements.

OUR AUDIT APPROACH

Overview

- Overall group materiality is € 25 million

- We audited the consolidated financial statements and the financial statements of the parent company Teollisuuden Voima Oyj.

- Completion of Olkiluoto 3 EPR plant unit
- Assets and provisions related to the nuclear waste management obligation

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements on the financial statements as a whole.

Overall group materiality	€ 25 million (2022: € 25 million)
How we determined it	0.3 % of balance sheet total
Rationale for the materiality benchmark applied	We chose balance sheet total as the benchmark because the company’s operations are very capital intensive and because, in our view, this is the benchmark against which the performance of the Group is commonly measured by users.

How we tailored our group audit scope

We tailored the scope of our audit, taking into account the structure of the group, the accounting processes and controls, and the industry in which the group operates.

Group audit scope: We audited the consolidated financial statements and the financial statements of the parent company Teollisuuden Voima Oyj.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key audit matter	How our audit addressed the key audit matter
COMPLETION OF OLKILUOTO 3 EPR PLANT UNIT	
Accounting policies and notes 1, 9, 13 and 14 in the consolidated financial statements. Notes 7 and 11 in the financial statements of the parent company. The test production phase of Olkiluoto 3 ERP plant unit (OL3 plant unit) was concluded on 16 April 2023 and the commercial operation started on 1 May 2023. The capitalisation of OL3 plant unit project costs ended and depreciation began on 1 May 2023. OL3 plant unit has been procured under a turnkey contract. Total capitalised costs of OL3 plant unit, including the borrowing costs, was approximately € 5,7 billion in the consolidated financial statements. Acquisition costs have been allocated to appropriate items in Property, plant and equipment and depreciation periods have been defined based on estimated useful lives of the assets. General costs and borrowing costs capitalised during the construction phase have been allocated to items in Property, plant and equipment in proportion to either the economic value or the acquisition cost. Our audit of the consolidated financial statements and the financial statements of the parent company focused especially on this item due to the significant amount on the balance sheet and also due to the management judgment related to allocating acquisition cost and defining useful lives of the assets.	We reviewed the management's procedures, records and other documentation related to the progress monitoring of the OL3 project. We also tested the internal controls relating to approval, monitoring and reporting of expenses capitalised on the OL3 project. We tested purchase invoices and company's own expenses relating to the OL3 plant unit to ascertain the costs capitalised as the investment meet the recognition criteria. During our audit we reviewed that the borrowing costs capitalised on the OL3 plant unit were capitalised in accordance with the accounting principles applied, and the capitalisation was performed consistently under the same principles as in previous financial statements. We tested the principles of how the acquisition costs have been allocated to items in Property, plant and equipment with different estimated useful lives. In addition we tested how the general costs and borrowing costs have been allocated to each item in Property, plant and equipment. We assessed the timing when depreciation of the asset began. We tested how the management assessed the useful lives of assets and the accounting for the depreciations of the financial year. We assessed the adequacy of the information presented in the financial statements.

Key audit matter	How our audit addressed the key audit matter
ASSETS AND PROVISIONS RELATED TO THE NUCLEAR WASTE MANAGEMENT OBLIGATION	
Accounting policies and notes 1, 13 and 24 in the consolidated financial statements. Provision related to nuclear waste management obligation € 1,3 billion is presented in Non-current liabilities and Share in The Finnish State Nuclear Waste Management Fund € 1,0 billion in Non-current assets of the consolidated financial statements. The fair value of the nuclear waste management provision has been determined by discounting the future cash flows, which are based on the plans of future activities and the estimated expenditure relating to it, taking into account actions already taken. The fair value of the share in The Finnish State Nuclear Waste Management Fund is valued at the lower of fair value or the value of the provision. Our audit of the consolidated financial statements focused especially on the nuclear waste management obligation related items on the balance sheet and the income statement due to the significant amounts and the high level of management judgement used in the calculations such as technical plans, time factor, cost estimates and discount rate.	We assessed the company’s accounting policies for compliance with International Financial Reporting Standards. We reviewed the cash flow forecasts and related documentation. We tested the estimates and assumptions used and whether the cash flow forecasts are prepared consistently based on the best available information at the time. We tested the mathematical accuracy of the calculations and whether the calculations are technically prepared in line with the same principles from one accounting period to another and consistently for all the plant units. We assessed whether the discount rate and inflation rate used in the calculations are appropriately determined. We also assessed the adequacy of the disclosures presented in the accounting policies and notes of the consolidated financial statements.

There are no significant risks of material misstatement referred to in Article 10(2c) of Regulation (EU) No 537/2014 with respect to the consolidated financial statements or the parent company financial statements.

RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND THE MANAGING DIRECTOR FOR THE FINANCIAL STATEMENTS

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with IFRS Accounting Standards as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or to cease operations, or there is no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

» Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

» Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.

» Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

» Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.

» Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

» Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

APPOINTMENT

Teollisuuden Voima Oyj became a public interest entity in June 2009. We have been the auditors of Teollisuuden Voima Oyj all that time it has been a public interest entity.

OTHER INFORMATION

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion

- the information in the report of the Board of Directors is consistent with the information in the financial statements
- the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact. We have nothing to report in this regard.

OTHER STATEMENTS

We support that the financial statements of the parent company and the consolidated financial statements should be adopted. The proposal by the Board of Directors regarding the result of the accounting period is in compliance with the Companies Act. We support that the members of the Board of Directors and the Managing Director of the parent company should be discharged from liability for the period audited by us.

Helsinki 26 February 2024

PricewaterhouseCoopers Oy
Authorised Public Accountants

Niina Vilske
Authorised Public Accountant (KHT)

Financial information in 2024

In 2024, Teollisuuden Voima Oyj will publish the interim reports as follows:

INTERIM REPORT FOR JANUARY-MARCH 2024
on April 19, 2024

INTERIM REPORT FOR JANUARY-JUNE 2024
on July 16, 2024

INTERIM REPORT FOR JANUARY-SEPTEMBER 2024
on October 18, 2024

ESEF-report

Basic company information

Name of reporting entity or other means of identification	Teollisuuden Voima Oyj
Domicile of entity	Finland
Legal form of entity	Public Limited Company
Country of incorporation	Finland
Address of entity's registered office	Töölönkatu 4, 00100 Helsinki
Principal place of business	Olkiluoto, 27160 EURAJOKI
Description of nature of entity's operations and principal activities	Production of electricity with nuclear power
Name of parent entity	Teollisuuden Voima Oyj
Name of ultimate parent of group	Teollisuuden Voima Oyj