# 2022

# REPORT OF THE BOARD OF DIRECTORS AND FINANCIAL STATEMENTS

tvo

# Contents



## TVO's Annual Report 2022

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 2022

The role of low-carbon energy, such as renewable energy and nuclear power, is crucial in the mitigation of climate change. In 2022, the share of nuclear power was approximately 35 percent of all electricity produced in Finland. During its over 50-year history, Teollisuuden Voima Oyj (TVO) has produced more than 550 terawatt hours (billion kilowatt hours) of climate-friendly electricity in total.

The electricity generation at TVO's Olkiluoto nuclear power plant totalled 16.35 terawatt hours in 2022, which accounted for about one-fifth of all electricity consumed and about 24 percent of all electricity produced in Finland. The combined load factor of the Olkiluoto 1 (OL1) and Olkiluoto 2 (OL2) plant units was 93.0 percent. The Olkiluoto 3 (OL3) plant unit's load factor during test production was 16.9 percent. The consolidated turnover was EUR 358.2 (298.7) million.

A significant amount of climate-friendly electricity for Finland was produced at the Olkiluoto nuclear power plant during all of 2022. The OL1 plant unit produced 6.9 (7.4) TWh of electricity, and its load factor was 89.1 (95.1) percent. The OL2 plant unit reached a record production result, as electricity production rose to 7.5 (7.0) TWh, and the load factor was 96.8 (90.4) percent. The OL3 plant unit was connected to the national grid on 12 March 2022 and reached its full power level for the first time on 30 September 2022. During the test production in 2022, OL3 produced 1.9 TWh of electricity.

The OL1 plant unit underwent a maintenance outage of 33 days, which was longer than usual, and therefore had an impact on the amount of electricity production. A refuelling outage lasting nine days took place at the OL2 plant unit. The annual outages were carried out successfully together with a broad network of partners. Both plant units have been modernised throughout their history, and annual investments amounting to tens of millions of euros continue to this day. An I&C modernisation project is currently ongoing, through which a significant part of the plant units' reactor and operating I&C will be updated. In addition to TVO's own personnel, approximately 490 external resources participated in the refuelling outage and approximately 830 external resources worked in the maintenance outage. Around 190 specialists arrived from abroad for the annual outages.

During 2022, the OL3 plant unit's test production gradually proceeded to tests at full reactor capacity. OL3's regular electricity production starts in March 2023.

Substantial construction work advanced at Posiva's ONKALO site during 2022. The excavation of the first five actual deposition tunnels was completed in June. Civil works at the encapsulation plant were completed at the end of May. Thereafter, work has continued with different equipment and system installations. The final disposal of spent nuclear fuel is to start in Olkiluoto in the mid-2020s.

At the end of the year, the total number of personnel in the Group was 1,007 (984). The number of personnel working for Posiva and its subsidiary Posiva Solutions Oy was 90 (93). A total of 95 (71) new staff members were recruited at the TVO Group during 2022.

## Operating environment

During 2022, nuclear power was included in the EU's Sustainable Finance Taxonomy. The European Commission's proposal included technical screening criteria for existing nuclear power plants as well as new nuclear power plants. The application of the taxonomy criteria enters into force on 1 January 2023.

The Commission published its so-called REPowerEU plan after Russia's attack on Ukraine. The plan aimed at cutting the use of Russian natural gas by two thirds by the end of 2022, as well as discontinuing imports completely by 2027. As a result of the attack, the prices of different energy sources rose. The EU Member States accepted several emergency measures, such as a revenue cap on so-called infra-marginal electricity production methods (including nuclear power). The energy crisis is also leading to changes in the EU's electricity market rules – the Commission's aim is to accept a legislation proposal in the first quarter of 2023.

The TVO Group closely follows the situation in Ukraine and its impact on the Group's operations. The TVO Group condemns Russia's attack on Ukraine. During the accounting period, the Ukrainian situation has not had an immediate or direct effect on the Group's operations or the production of electricity. However, cost increases are being prepared for in the TVO Group. Market interest rates have strongly increased due to rising inflation and the actions of central banks.

The processing of the Commission's Fit for 55 package, unveiled in July 2021, is nearing an end. The objective of the package is to update the instruments of the EU's energy and climate policies, so that they correspond with the goal to cut the EU's greenhouse gas emissions by 55 percent compared to the 1990 level by 2030. As part of the REPowerEU plan, the Commission published updates to proposals in the package, including an increase to the goal of industrial use of renewable hydrogen. Several Member States and industrial representatives have suggested that the goal could also be reached by using hydrogen produced with low-emission electricity, including nuclear power.

In spring 2022, the International Energy Agency (IEA) published its report ”Nuclear Energy and Secure Energy Transitions”, in which it examines the role of nuclear power as a solution to climate and energy crises. The report repeated the estimate in the IEA's “Net Zero 2050” report, in which nuclear energy capacity needs to almost double from 400 $GW_e$ to 800 $GW_e$ by 2050 in order to achieve carbon neutrality.

The harmonisation of the nuclear industry has progressed during the year. The International Atomic Energy Agency (IAEA) started its Nuclear Harmonization and Standardization Initiative during the year, which aims at accelerating the safe and widescale deployment of advanced reactor types, especially small modular reactors (SMR). Also, the EU and European industry operators are preparing an SMR partnership programme.

The construction of nuclear power is speeding up in Europe. For example, France declared in February 2022 that it will build six new large reactors as of 2028, with an option to build eight more by 2050. In October 2022, the new government in Sweden decided in its government programme to request Vattenfall to analyse additional construction of nuclear power.

In an energy attitude survey published by Finnish Energy twice a year, the total support for nuclear power was 83 percent in December 2022, as 65 percent of Finns want to increase nuclear power and 18 percent think that the current amount is suitable. The support for nuclear power has risen in all citizen groups regardless of gender, municipality, age, or political views.

Finland is preparing for the parliamentary election in spring 2023 and the work of the new government. Presumably, the nuclear industry regulation reform started by the current government will be carried out during the next term of office.

## 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, the Company operates in the fields of power plant and transmission system construction and acquisition as well as in the generation, relay, and transfer of electricity primarily to the Company's shareholders in accordance with the terms set 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 accounting 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 made any use of their share of the output or not. Due to the Company's operating principle, key indicators based on financial performance will not be presented (see chapter: **The cost-price principle** in the Notes to the consolidated financial statements).

TVO is owned by five shareholders, some of which, like TVO, operate based on the Mankala principle. Electricity generated by TVO serves the needs of numerous Finnish industry and energy companies, some of which were owned by 131 Finnish municipalities in 2022. TVO generates about 20 percent of all electricity consumed in Finland.

TVO's operations are founded on a strong safety culture and securing the safety of production. TVO's activity-based management system covers production activities at the Olkiluoto nuclear power plant, maintaining and developing production capacity, additional construction of production capacity, and functions required to control and resource these activities. The system meets the requirements of international quality control, environmental, occupational health and occupational safety standards, and 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 control system approved by the Radiation and Nuclear Safety Authority in Finland (STUK). The implementation, functionality, and efficiency of the activity-based management system is regularly monitored with internal audits and management reviews.

TVO's corporate governance system is described in a separate report. TVO's principles of responsible operating practices are described in the TVO Group's Code of Conduct (see chapter: **Responsibility**).

The objectives of TVO's strategy include a strong safety brand, the competitive and predictable price of electricity, and therefore satisfied customers. The goal is to maintain a competitive average electricity production cost and to ensure that the operability of the plant units meets the Company's goals. Safety culture is maintained at a high level, and safety is systematically upheld and developed at all stages of the nuclear power lifecycle.

## Financial performance

The Group's consolidated turnover for 2022 was EUR 358.2 (298.7) million.

The amount of electricity delivered to the shareholders was 16,316 (14,414) GWh. The higher delivery volume of electricity compared to the previous year is due to the OL3 plant unit's test production.

The consolidated profit/loss was EUR -47.9 (-19.7) million. Updated cost estimates based on a new nuclear waste management technical plan and schedule and the changes of the provision regarding the nuclear waste management obligation had an effect on the profit/loss of the accounting period (see chapter: **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 relent to shareholders, totalled EUR 5,727.1 (5,206.0) million, of which EUR 929.3 (929.3) million were subordinated shareholder loans. During 2022, TVO raised a total of EUR 1,050.0 (800.0) million in non-current liabilities, of which none were subordinated shareholder loans (no subordinated shareholder loans). Repayments during the year amounted to EUR 457.5 (566.5) million.

In March 2022, TVO issued a EUR 600 million five-year bond with an annual coupon of 2.625 percent. The bond was issued under the Company's EMTN programme. TVO also announced that it has made an invitation to holders of its outstanding EUR 311.77 million Notes due in January 2023 to tender their Notes for purchase by TVO for cash. The tender offer results were announced on 31 March 2022. The aggregate principal amount validly offered for purchase by the noteholders was EUR 106.1 million. TVO accepted all valid instructions pursuant to the tender offer.

In June 2022, TVO signed a new three-year revolving credit facility of EUR 1,000 million. The facility includes two one-year extension options. The facility refinances TVO's existing revolving credit facility signed in February 2016 and will be used for general corporate purposes.

In September 2022, TVO agreed on a new 10-year EUR 150 million Private Placement.

A one-year extension was made to TVO's shareholder loan commitment of EUR 400 million agreed upon in December 2020, when TVO's shareholders signed the extension in November 2022. The extended shareholder loan commitment is valid until the end of 2023.

At the end of the year, TVO agreed on new bilateral bank loans totalling EUR 300 million.

In March 2022, Fitch Ratings (Fitch) affirmed its long-term credit rating BBB- for TVO and changed the outlook from negative to stable. In March 2022, S&P Global Ratings (S&P) upgraded TVO's long-term credit rating from BB to BB+ and affirmed its positive outlook. According to both credit rating agencies, the changes to the credit ratings are mainly due to the start of the OL3 plant unit's electricity production in March 2022. Japan Credit Rating Agency (JCR) kept its existing A+ rating (Negative Outlook).

TVO uses its right to borrow funds back from the Finnish State Nuclear Waste Management Fund within the framework of legal regulations. On 31 December 2022, the amount of the loan was EUR 651.3 (711.3) million, and it has been relent to the Company's A series shareholders. On 31 March 2022, the loan from the Finnish State Nuclear Waste Management Fund decreased by EUR 59.9 (31 March 2021: decreased by EUR 5.1) million.

The OL3 project's share of financing costs has been capitalised in the balance sheet.

## Share capital

TVO's share capital on 31 December 2022 was EUR 600.4 (600.4) 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 the 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 Section 7 of the 7th Chapter of the Securities Market Act (746/2012), the issuer of a security subject to public trading must provide a Corporate Governance Statement in its Annual Report or separately. 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 2022 have been described in a separate Corporate Governance Statement to be found on the Company's website **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 by them, such as 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.

Work on the comprehensive reform of the Nuclear Energy Act, initiated by the Ministry of Economic Affairs and Employment (MEAE), has continued during 2022. The objective is that the production of nuclear energy is in line with the overall good of society, safe, and financially profitable even in the future. The legislation draft is supposed to enter the consultation phase during 2024, followed by a government proposal to the Parliament at the end of the next electoral term, 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 2022, five updated YVL Guides have been introduced at the OL1, OL2, and OL3 plant units. The last updated guide (YVL E.6) will be introduced during 2023.

STUK's preparations for the reform of nuclear safety regulations and guidelines, initiated in 2021, have also continued during 2022. 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 power plant has in the event of a nuclear incident. Amendments to the Nuclear Liability Act entered into force with a Government Decree as of the beginning of 2022. In the amendments, the liability of a plant operator (as defined in the Nuclear Liability Act) for a nuclear incident outside of Finland was increased to EUR 1,200 million for nuclear plants used in energy production. For nuclear incidents in Finland, the plant operator's liability remains unlimited, as it already has been since 2012, when the Nuclear Liability Act was temporarily amended as concerns this liability.
For nuclear plants used for purposes other than energy production and for the transport of nuclear substances, the liability is EUR 80–250 million.

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.

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

## Risk management, major risks and uncertainties

### RISK MANAGEMENT

The objective of risk management is to support the realisation of TVO's strategy and business objectives, and to ensure that TVO's operational preconditions are maintained. Risk management is carried out comprehensively according to 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 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, with the help of the Management Group, is in charge of risk management in accordance with TVO's objectives 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 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 appetite. Risks can be managed by reducing, avoiding, sharing, moving, or 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 pre-set evaluation form. The results from the evaluation are used to set the goals for the development of risk management. Risk management evaluation is performed with a model based on risk maturity levels.

In 2022, TVO's management and operational planning process continued to increase the level and effectiveness of risk management. Risk management is a part of the Group's strategy and, as such, it is continuously being developed to help meet the Group's objectives within the Company's risk appetite. During 2022, the role of risk management was strengthened in operations through continuous communication and collaboration, as well as emphasising the importance of risk management in project management procedures. The risk management process has also been updated during the year to better support the Group's needs. In 2022, a new chapter on risk appetite was added to the risk management policy.

### MAJOR RISKS AND UNCERTAINTIES

Risks related to safety and electricity production are reduced by keeping the plant units in good condition. Safe and reliable production is ensured by efficient lifecycle 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 making long-term contracts.

In the OL3 project, risk management has primarily been 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 preparedness. The focus of risk management has shifted to finalising the commissioning and moving to the operation phase.

Indemnity and property risks are covered with insurances. The aim of insurance management is to keep the scope, cover, and cost of insurance at a reasonable level. TVO is a member of European mutual associations for nuclear insurance. Statutory liability insurance is in force for nuclear liability.

There are no major risks or uncertainties in view concerning electricity production at the OL1 and OL2 plant units.

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

### RISKS RELATED TO OL3 PLANT UNIT

**Schedule and planned completion**

TVO's major risks are related to the schedule of the OL3 project, the consortium company Areva's sufficient financial capacity to fulfil its obligations until the end of the guarantee period, and the profit-yielding capacity of the plant unit. Under the plant contract, electricity production was scheduled to start at the end of April 2009. The completion of the project, however, has been delayed. OL3's regular electricity production will commence in March 2023.

The risk related to the planned completion refers to a situation in which commercial use cannot be started as planned, which leads to additional costs.

During 2022, several risk management measures related to the OL3 project have been executed to improve TVO's readiness to commission the plant unit as well as to operate three nuclear power plant units. TVO closely monitors the compliance of the conditions set in the settlement agreement in March 2018 and the amendments to the agreement in June 2021 and ascertains that the commissioning of OL3 is executed according to the schedule provided by the Plant Supplier and that financial and technical resources are secured.

**Profit-yielding capacity of OL3**

If OL3 fails to reach the projected output level, load factor, or operating cost structure, or if the output level is restricted by Finland's main grid or it is not profitable to operate at full power due to costs arising to TVO from the system protection, there is a risk that the production cost will rise in comparison to the objective. This risk has been analysed with the help of various scenarios influencing OL3's profit-yielding capacity. The risk has also been analysed as regards the sufficiency of Fingrid Oyj's system protection and the related costs resulting to TVO.

TVO implements several risk management measures to ensure the profit-yielding capacity of OL3. Examples of risk management measures include the utilisation of the experiences from the Flamanville and Taishan sister plants during the nuclear commissioning of OL3.

**MAJOR PLANT MODIFICATIONS AND THEIR IMPLEMENTATION**

Increase of production costs and deterioration of profitability may be consequences of the failed implementation of plant modifications. In major large-scale plant modification projects, it is important to establish and assign responsibility for requirements related to nuclear safety and to ensure that the project parties meet these requirements in advance to avoid unexpected costs during the project.

In risk assessment, increased project costs are viewed to arise either from inadequate preparation and requirement specifications, major unpredicted technical issues, challenges in the execution of the licensing process, or deficiencies in project management and control.

As risk management measures, TVO has in 2022 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. Furthermore, TVO aims to ensure that project suppliers have the readiness and interests to complete the projects they are involved in, especially considering the effects of the war in Ukraine.

**ORGANISATION'S CAPABILITIES**

An organisation's competence and ability to function as a licensee may be compromised by dysfunctional management, failed reaction to changes in the operational environment, or a negative atmosphere of the work community. In addition to the rise of 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 has prepared for the operation phase of OL3 and for future retirements by recruiting 87 new staff members in 2022 and by maintaining a comprehensive supplier chain. TVO's sick leave percentage was 3.8 and the outgoing turnover rate was 6.7 percent. To support supervisors' leadership skills at TVO and Posiva, separate training focused on safety leadership has been organised.

Furthermore, TVO has also executed a competence survey, the results of which are used for personnel planning. OL3 trainings have continued during 2022. TVO has undertaken measures to further develop its work community culture and to strengthen its safety culture. TVO conducts a personnel survey approximately every 18 months, and the next survey is to be conducted in the beginning of 2023.

**FINANCIAL AND LIQUIDITY RISKS**

The financing risks of TVO's business include liquidity, market, and credit risks. By diversifying sources of finance, and with long-term credit commitments and liquid funds, financing risks are reduced. The financial position has been strengthened by reorganising bilateral bank loans and issuing a new bond. TVO has reduced market risks by making 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 outlooks 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 financing situation has developed as planned as the Company utilises a variety of financing sources in diverse 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.

Solid trust of shareholders, banks, and investors in TVO's operations has remained strong also in 2022. This is reflected, among other things, in the significant reorganisations of bank financing, the issuing of a new bond, and the extension of the shareholder loan commitment during the year.

**INCREASE IN THE COST OF FINAL DISPOSAL OF SPENT NUCLEAR FUEL**

If Posiva's 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 of spent fuel.

As risk management measures in 2022, the cost estimate was specified, the industrialisation measures related to final disposal were designed and commenced, and contracts for the production components needed in final disposal were signed.

**RISKS RELATED TO SOCIAL AND PERSONNEL MATTERS, RESPECT OF HUMAN RIGHTS AND RISKS RELATED TO CORRUPTION AND BRIBERY**

Risks related to social and personnel matters and the respect of human rights, as well as risks related to corruption and bribery constitute one area of the Company's sustainability risk assessment. No significant risks affecting the Company's operations have been detected in the aforementioned matters during 2022. 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 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 also completely anonymously. The possible risks are evaluated in projects and investments where necessary. Furthermore, the matters are evaluated when reviewing suppliers in accordance with a separate supplier review procedure. TVO's principles and results of ethical business are described in more detail in the chapter on **Responsibility**.

## Pending court cases and disputes

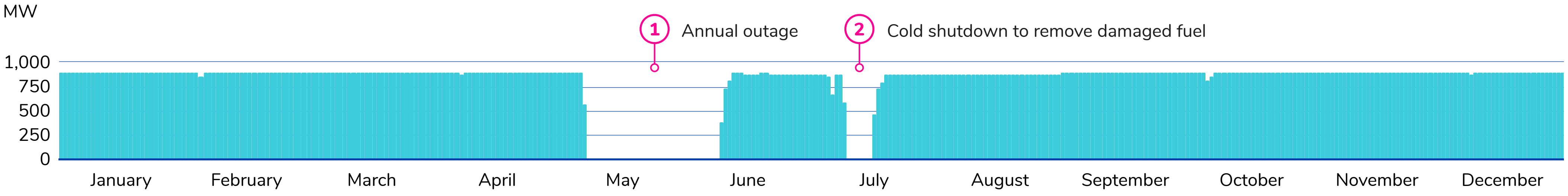
In August 2022, the arbitral tribunal resolved all the claims presented to each other by TVO and Wärtsilä Finland Oy concerning the delivery schedules, additional costs, and delay liquidated damages of the diesel generators at the Olkiluoto nuclear power plant. Therefore, at the end of the accounting period 2022, TVO has no pending court cases or disputes.

## Electricity production

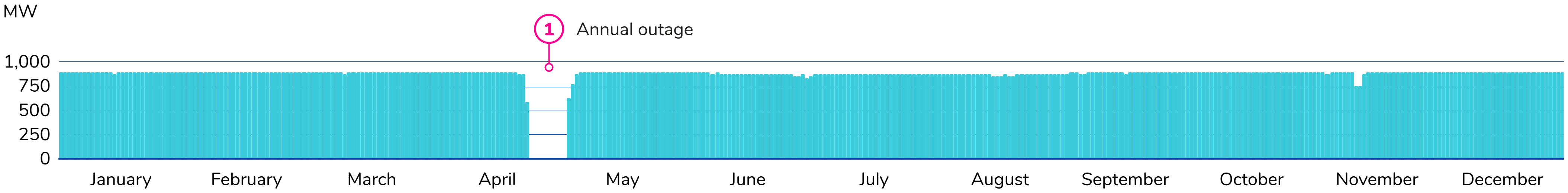
The electricity production of OL1, OL2, and OL3 in 2022 was 16,351 (14,438) GWh, and the total load factor of OL1 and OL2 was 93.0 (92.8) percent.

The plant units operated safely. OL3 was connected to the national grid for the first time in March 2022, and the plant unit's test production phase is currently ongoing. OL1's net production was 6,932 (7,404) GWh and load factor 89.1 (95.1) percent. OL2's net production was 7,532 (7,033) GWh and load factor 96.8 (90.4) percent. A record production result was reached at OL2. OL3's net production was 1,887 GWh and load factor 16.9 percent.

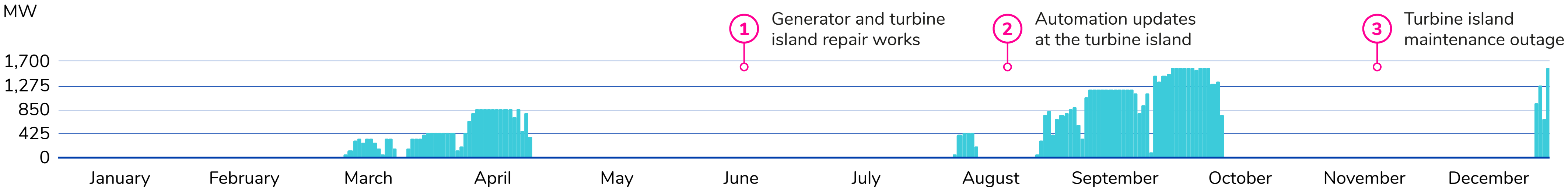
**OL1 Production**
Average output




**OL2 Production**
Average output




**OL3 Production**
Average output



OL3's power output during the test production phase is published on TVO's website at **www.tvo.fi/ol3forecast**. An Urgent Market Message is published in Nord Pool regarding any significant changes.

**SIGNIFICANT PLANT EVENTS AT OL1 AND OL2**

As a result of the transfer of spent fuel on 22 October 2021 and the return of the empty transfer cask to the OL1 plant unit on 8 November 2021, radioactive particles ended up on the transfer cask's transport equipment, in the transport corridor of the spent fuel storage non-radioactive controlled area, and two particles on the transport route in the plant yard area. A report on the deviation from the Technical Specifications was completed in spring 2022. The incident did not result in radiation doses to people, and radiation safety was not endangered. However, the incident was a deviation from the Technical Specifications.

Deficiencies were observed at TVO in relation to required fire safety inspection rounds in February 2022. Based on the related incident investigation, deficiencies associated with safety culture were identified in the fire brigade's activities. These included e.g. neglect of inspection rounds, related registrations into information systems, as well as non-interference into disclosed operational deficiencies. The deviations were administratively significant but did not have a direct effect on plant or radiation safety. Identified corrective measures have been carried out during 2022.

Indications of damaged fuel were detected at the OL1 plant unit at the end of June 2022. As a result, the power level of the plant unit had to be reduced in July first to 65 percent for one day to locate the damaged fuel element, and thereafter an approximately week-long maintenance was started to remove the damaged fuel element and replace it with a new one.

## Annual outages

The refuelling and maintenance outages carried out at the plant units on alternating years are designed to ensure that a good level of operability and production is maintained at the Olkiluoto nuclear power plant at all times.

The annual outages in 2022 of the OL1 and OL2 plant units started on 24 April with the refuelling outage at the OL2 plant unit. In addition to refuelling, various annual preventive maintenance activities, inspections, repairs, and tests were carried out at OL2. The plant unit continued electricity production on 3 May.

A maintenance outage was carried out at the OL1 plant unit, which started on 8 May and ended on 10 June. In addition to refuelling, the most significant tasks of the maintenance outage included the replacement of pumps and valves in the shutdown cooling system, inspection of the reactor pressure vessel's bottom, renewal of electrical bushing assemblies in the containment, maintenance activities in the service water channel and concreting one of the service water channels, replacement of impellers in feedwater pumps, installation of a new recirculation line, and a pressure test of the reactor containment.

The annual outages were carried out successfully despite special arrangements due to COVID-19. The aim of the extensive special arrangements and measures was to prevent the spread of potential COVID-19 infections in Olkiluoto, ensure the health and safety of the persons involved in the annual outages, as well as guarantee a safe and high-quality annual outage.

Two accidents at work resulting in absence occurred during the annual outages.

In addition to TVO's own personnel, approximately 490 external resources participated in the refuelling outage and approximately 830 external resources worked in the maintenance outage. Around 190 specialists arrived from abroad for the annual outages.

## Olkiluoto 3 EPR

OL3, currently under the test production phase, 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.

In March 2018, TVO signed a comprehensive Global Settlement Agreement (GSA) concerning the completion of the OL3 project and related disputes with the Plant Supplier consortium companies Areva NP, Areva GmbH, and Siemens AG as well as with the Areva Group parent company Areva SA, a company wholly owned by the French State. The GSA was amended with agreements signed in June 2021.
In the GSA, the Supplier consortium companies committed to ensuring that the funds dedicated to the completion of the OL3 project will be adequate and will cover all applicable guarantee periods, including setting up a trust mechanism funded by Areva companies to secure the financing of the costs for completing the OL3 project. During the accounting period, the fund, which was previously replenished by Areva in July 2021, has been used to cover costs incurred to the Areva companies for the completion of the OL3 project in accordance with the GSA. During the accounting period, TVO has recorded receivables from the Plant Supplier for the additional delay compensation accumulated by the end of the accounting period in accordance with the amended settlement agreement.

TVO's right to terminate the Plant Contract in accordance with the GSA was postponed until 31 March 2023. In addition, the payment of approximately EUR 193 million of the delay compensation agreed upon in the GSA of 2018 was postponed until the completion of OL3, up to 31 March 2023 at the latest.

According to the Plant Supplier's latest project schedule, TVO's current cost estimate, and the effects of the GSA, TVO estimates that its total investment in the OL3 project will be approximately EUR 5.8 billion.

At the end of the reporting period, the Plant Supplier's workforce at OL3 was approximately 900 people. The occupational safety at the site remained at a good level.

All realised costs of the OL3 project that can be recognised in the cost of the asset have been entered as property, plant, and equipment in the Group balance sheet.

**SIGNIFICANT EVENTS AT OL3**

On 12 March 2022, OL3 was connected to the national grid and electricity production started. The electricity power level was gradually increased to approximately 850 megawatts, until the production tests were interrupted on 26 April 2022 due to the boron pumps unexpectedly switching on. Simultaneously, a leak in the generator's cooling system was observed. Foreign material detached from the steam guide plates was found in the turbine's steam reheater in May 2022, which required repair work. The work was completed on 8 August 2022. TVO communicated on 11 August 2022 that a turbine automation update of approximately two weeks would be carried out. The test production continued on 28 August 2022 with tests at a 60 percent power level.

On 6 September 2022, STUK granted permission to increase OL3's power level to over 60 percent and from thereon to 100 percent. According to STUK, the production tests and investigations conducted so far showed that OL3 has worked safely, and that increasing the plant unit's power level can be continued. Tests at an 80 percent power level were started on 9 September 2022. Tests at full power, approximately 1,600 megawatts, were started on 30 September 2022. Test production was interrupted on 18 October 2022 due to damage detected in the internals of the feedwater pumps at the turbine island. Test production was continued on 27 December 2022 after investigations into the damage were mainly completed.

According to information received from the Plant Supplier in December 2022, OL3's regular electricity production is to start in March 2023. The Plant Supplier is obliged to complete the plant unit in accordance with the Plant Contract and settlement agreements.

## Nuclear fuel

In 2022, nuclear fuel purchases amounted to EUR 60.8 (61.8) million and the amount consumed to EUR 69.7 (61.4) million.

The nuclear fuel and uranium stock carrying value on 31 December 2022 was EUR 262.4 (265.9) million. Once the OL3 plant unit proceeds to commercial operation, approximately EUR 250 million will be transferred from the OL3 investment to the value of the nuclear fuel and uranium stock.

## 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 1,294.3 (1,368.3) million, calculated according to the international IFRS accounting principles. TVO's share in the Finnish State Nuclear Waste Management Fund, EUR 999.7 (1,010.1) million, is presented under assets, calculated according to 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.

The cost estimate of nuclear waste management for financial provision, i.e. the nuclear waste management scheme for 2022–2024, the preliminary nuclear waste management scheme for 2025–2026, as well as total costs for 2027–2028 were submitted to the MEAE at the end of June. The amount of the nuclear waste management fee to be collected from a company liable for nuclear waste management is based on the nuclear waste management scheme.

In order to cover the future costs of nuclear waste management, TVO makes contributions to the Finnish State Nuclear Waste Management Fund in accordance with the Nuclear Energy Act. In December 2022, the MEAE set TVO's liability for nuclear waste management at EUR 1,839.6 (1,816.1) million for the end of 2022 and the Company's funding target for 2023 at EUR 1,457.9 (1,436.1) million.

In March 2021, the Finnish State Nuclear Waste Management Fund confirmed TVO's nuclear waste management fee refund for 2020 at EUR 28.7 million, which the Fund reimbursed to TVO on 31 March 2021. As for 2021, no surplus was reimbursed to TVO from the Nuclear Waste Management Fund after the amendment to the Nuclear Energy Act (269/2021), although the fund target for nuclear waste management in 2022 was lower than the share in the Fund in 2021. The refund for 2021, EUR 14.5 million, was used to cover the protected portion in accordance with the Nuclear Energy Act Section 52 c. In accordance with the implementing provision of the law amendment, the profitable result of the Finnish State Nuclear Waste Management Fund for 2021 was not used to refund TVO's nuclear waste management fee, but it was also used to cover the protected portion. In order to supplement the legal protected portion, TVO provided the Nuclear Waste Management Fund with a separate cash security of EUR 7.4 million in addition to the surplus and profit. In 2022, the Nuclear Waste Management Fund started investment activities in accordance with new legislation. The Nuclear Waste Management Fund made a loss, which raised TVO's nuclear waste management fee for 2022, as well as required the Company to provide additional securities to cover the legal protected portion. The nuclear waste management fee for 2022 will be confirmed in March 2023.

A total of approximately 8,400 (8,165) $m^3$ of low and medium level radioactive waste has accumulated from the OL1 and OL2 plant units during their operation. The waste is disposed of in the final repository for low and medium level waste (VLJ repository) in Olkiluoto.

The total amount of spent nuclear fuel by the end of the year was 1,661 (1,630) tonnes, of which 32 (33) tonnes accumulated in 2022. The spent fuel is stored in the fuel pools of the plant units and in an interim storage facility (the KPA storage facility) at Olkiluoto.

**FINAL DISPOSAL OF SPENT NUCLEAR FUEL**
Posiva Oy is responsible for the final disposal of spent nuclear fuel generated at the power plants of its owners, TVO in 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 final disposal repository 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 additional excavations required for the final disposal repository, the installation of the systems needed for the start of final disposal, the operating license process, and setting up the supply chains necessary for production operations.

The final disposal facility's operating licence application was submitted to the Finnish Government in December 2021, and its processing has advanced according to plan. In 2022, the construction of the nuclear facilities proceeded to the installation and commissioning phase, and operations at the encapsulation plant are in accordance with its practices. The most significant events in 2022 included the completion of the encapsulation plant's construction work ready for installations, as well as the completion of the excavations of the first five deposition tunnels in June at a depth of 430 metres. The underground installations of civil and building technology also progressed well and on schedule.

The manufacture of the encapsulation plant's central systems is under way. In 2022, installations included the handling cell's drying station and the canister's welding station. A disposal hole drilling rig has been taken into use at the final disposal repository. Due to delivery delays of some systems, the trial run of final disposal (practising final disposal with non-radiating fuel element copies) planned for the end of 2023 was postponed by six months.

The preparation of supply chains for the canister and bentonite components needed in production activities progressed. The equipment installations of the production factory for the deposition tunnel filling were completed, and more supplier options were sought for the canister components. The operators of the encapsulation plant and the final disposal repository were also recruited during 2022.

Posiva's owners submitted the annual report on nuclear waste management for 2021 to the MEAE at the end of March 2022. In June 2022, the nuclear waste management scheme for 2022–2026 was submitted to the MEAE, which contains an estimate of nuclear waste management costs for financial provision.

## Research and development

The main objective of TVO's research and development (R&D) activities is to ensure the viability of the existing business functions and to create new business opportunities for the TVO Group. The TVO Group's R&D activities were reorganised during 2022. The objective of the reorganisation is to create a clear process and basic principles for R&D activities, so that they more clearly serve the needs emerging from within the Group.

The main subject areas of R&D activities include the operation and lifecycle management of nuclear power plants, the processing and final disposal of nuclear waste and spent nuclear fuel, and the creation of new business opportunities for the TVO Group.

R&D costs were EUR 10.3 (11.5) million, most of which were used for R&D activities related to nuclear waste management.

TVO is a significant financier of Finnish public sector research programmes for reactor safety and nuclear waste management. In 2022, TVO's contribution to the Finnish State Nuclear Waste Management Fund, which finances such programmes, amounted to EUR 5.4 (5.1) million.

## Acquisitions of tangible and intangible assets and shares

Investments in 2022 were EUR 311.8 (578.1) million. In 2021, the current value of the provision related to the OL3 plant unit's decommissioning, a total of EUR 367.9 million, was recorded as an investment in the balance sheet.

Investments of the parent company were EUR 339.0 (219.6) million, of which EUR 276.0 (163.6) million were allocated to the OL3 project, and EUR 63.0 (56.0) million were allocated to the OL1 and OL2 plant units and the general infrastructure of the area. The OL3 investment is decreased by the delay compensation and additional delay compensation in accordance with the GSA. Additional delay compensation has been recorded as EUR 56.7 million for the accounting period.

Hitachi Energy and TVO have signed a contract in 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 system protection. The battery energy storage system is in the deployment stage and its final handover was postponed to 2023.

Carbon dioxide emission allowances have been relinquished to the Energy Authority worth EUR 0.1 (0.1) million. In 2022, emission allowances were acquired worth EUR 0.1 (0.2) million. The Company's need for carbon dioxide emission allowances for the accounting period was covered by acquired emission allowances.

## Responsibility

Responsibility 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. The material impacts 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 support and development of employees' competence
7. Healthy and equal 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 (nuclear safety, radiation protection, nuclear material safeguards, and quality)
- Corporate social responsibility policy (environment and energy efficiency, procurement, personnel, occupational safety, and communications)
- Production policy (plant operation and maintenance as well as increasing the production capacity)
- Corporate safety policy (safety of production and activities as well as the safety of people and facilities, rescue and emergency activities, and data security).

The principles of responsible business operations 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's personnel as well as partners and subcontractors. The TVO Group's Code of Conduct complies with OECD's 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**.

The TVO Group is committed to promoting the following of the United Nations Sustainable Development Goals in its operations:


TVO reports on its corporate responsibility in accordance with the Global Reporting Initiative (GRI) Standards. TVO's Annual and Sustainability Report is published on the Company's webpage **www.tvo.fi/financialpublications**. TVO's sustainability reporting 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.

## RESPONSIBILITY OBJECTIVES AND RESULTS

The responsibility objectives are based on the principle of continuous improvement. The objectives enable the Company to monitor the realisation of material responsibility issues. The TVO Group's broader sustainability objectives are reported in the Sustainability Roadmap 2030 as part of TVO's Annual and Sustainability Report.

| | Objective 2022 | Actual 2022 |
|---|---|---|
| Reputation index | > 75 | 82 |
| Personnel survey, points/category | 69.8/A+ | 68.7/A |
| Reports suspecting violations of the Company's Code of Conduct | - | 6 |
| Sick leaves, % | - | 3.8 |
| Occupational accident frequency | 1.6 | 4.8 |
| Collective radiation dose, manmSv | 992 | 789 |
| Number of environmental incidents, pcs | 0 | 0 |
| Unplanned energy unavailability factor, % | < 0.6 | 1.0 |
| Number of unplanned automatic scrams, 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 2023.

**Personnel survey:** The personnel survey was conducted at the end of 2021. 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 conducted by Sustainalytics. TVO's risk level is 23.0 in the assessment, which is at the lower end of Sustainalytics' 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 through defining nuclear professionalism, in other words expectations for working in a nuclear power plant and implementing procedures to confirm expectations. The expectations for a nuclear professional are a part of TVO's activity-based management system.

During 2022, measures aimed at developing nuclear professionalism were continued. A training programme for safety management (Nuclear Professional Leader) that was started in 2021, was expanded with in-depth sections in 2022. In addition, supervisors' field work was strengthened with coaching discussions that particularly aimed at reinforcing the consideration of human and organisational factors in the conversations that take place in the field. In terms of continuous improvement, safety management was developed further by clarifying supervisor level roles and describing the essential cross-organisational processes in more detail. The Nuclear Professionalism Group is tasked with developing nuclear professionalism and thinking of ways in which human factors could be taken into consideration even better in everyday life.

## RESULTS OF ETHICAL BUSINESS

TVO does not tolerate any kind of corruption or bribery. The Code of Conduct requires employees 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's objective is to guarantee good working conditions for all employees. In accordance with its Code of Conduct, TVO does not condone any kind of discrimination or harassment on the grounds of age, gender, ethnic origin, religion, beliefs, opinions, or other personal characteristics. TVO observes an equality plan.

All personnel, partner, and subcontractor activities in Olkiluoto are supervised by TVO. TVO only trades with evaluated and approved suppliers. All products and services acquired must meet the requirements of TVO's safety, quality, and environmental standards as well as the principles of responsible business described in the Code of Conduct. TVO's supplier review process also includes active monitoring and periodical reviewing of suppliers. Through supplier reviews, the Company ensures that suppliers follow good practices related to environmental, personnel, and quality management issues. During 2022, 111 suppliers were reviewed by using various methods.

TVO has a procedure for reporting suspected violations of the Code of Conduct and abuses of insider information. The report can also be filed anonymously. TVO's internal audit processes all concerns regarding possible violations against the Code of Conduct or abuses of insider information in such a manner that the rights and the privacy of both the person raising the concern and the alleged violator are protected under all circumstances.

The internal audit investigated six notifications of possible violations against the TVO Group's Code of Conduct in 2022 and implemented necessary actions. The notifications are included in internal audit reports to the Audit and and Finance Committee and the Board of Directors.

| | Number of notifications | Number of notifications resulted in actions |
|---|---|---|
| **Notifications related to the Code of Conduct** (including notifications related to corruption, bribery, extortion, conflicts of interest, and inappropriate behaviour) | 6 | 6 |
| **Others** (not related to the Code of Conduct) | 0 | 0 |

## SAFETY AND OCCUPATIONAL SAFETY

### Safety

The safe use 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 operation, TVO systematically assesses the level of safety and safety culture, and all TVO employees are committed to a high-quality safety culture.

TVO regularly assesses the state of its overall safety from the viewpoints of production, nuclear safety, safety and service life management, leadership, organisation, and personnel. The overall level of safety is good.

The state of the safety culture is regularly assessed according to the International Atomic Energy Agency (IAEA) procedure. TVO's safety culture is estimated to be at a level at which the strategic importance of safety has been recognised and preventative practices are observed. TVO aims at reaching the highest possible level of safety culture. TVO has continued to employ various measures to maintain and develop the Company's safety culture.

The Company regularly assesses and develops the operations of its plant units with the help of internationally used safety indicators. Of the safety indicators, collective radiation dose, unplanned energy unavailability factor, and unplanned automatic scrams realisation are described in the table "Responsibility objectives and results" (see chapter: **Responsibility**).

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 international INES scale (0–7). In 2022, the Olkiluoto nuclear power plant had 17 issues classified as level 0 (No safety significance) and two issues classified as level 1 (Anomaly, exceptional incident with safety effects). TVO investigates all events with possible impacts on nuclear safety and defines corrective measures for their causes. TVO publishes information on every significant event with public interest in the News section of the Company's website.

### Occupational safety

Occupational health and safety activities are guided by an ISO 45001 certified occupational health and safety system (OHS system), which also includes construction operations at the OL3 site in the areas where TVO is responsible.

The mission of the OHS organisation is to support, monitor, and develop occupational safety activities. The Group has responsible contractors working in Olkiluoto, who follow the Group's expectations and adhere to common principles. The most important safety objectives for 2022 were clarifying the OHS responsibilities of the line organisation, supporting supervisors in their work, strengthening contractor cooperation, and developing the processes for identifying hazards and managing risks so that they include psychosocial risk factors. During 2022, a foundation and steps for progress were created for the long-term development of occupational safety with an occupational safety development programme.

The TVO Group's goal for accident frequency in 2022 was 1.6 (accidents per million work hours). Two occupational accidents resulting in absence occurred during the annual outages. The goal for accident frequency was not achieved since the accident frequency in Olkiluoto was 4.8 in 2022. TVO personnel, Posiva personnel, and all contractors working in Olkiluoto are included in the accident frequency calculation, excluding the OL3 site, which is reported by the plant supplier consortium Areva–Siemens.

Key occupational safety figures for 2022 are reported in further 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's system is also Eco-Management and Audit Scheme (EMAS) registered.

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. Risks related to the environment have also been recognised, and no significant risks influencing operations were detected in risk analysis. 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 Company's operations met the requirements set in legislation, environmental permits, and the environmental management system in 2022. 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. During the reporting period, the electricity production of the Olkiluoto nuclear power plant was 16.35 TWh. The amount of cooling water increased in 2022 due to the commissioning of OL3, but the temperature of cooling water remained within the limits required by the environmental permit.

As in previous years, the environmental load caused by the Olkiluoto nuclear power plant was minimal in 2022. A report was provided to the environmental authority regarding malfunctions at the debris handling building for the OL1 and OL2 plant units.

Modifications will be implemented at the debris handling building during spring 2023. Radioactive emissions into the air and water were clearly below annual regulatory limits.

Low levels of tritium were observed in water and air samples taken from the VLJ repository in May 2022. The tritium amounts detected in the repository were low and estimated to be comparable to the amount of background radiation in nature.

Operations were developed in accordance with the regulations of environmental permits and the environmental management system. In accordance with the principle of continuous improvement, the Environment and Energy Efficiency Programme sets goals for the Company's operations. The programme is regularly monitored by a team of environmental experts from various organisational units. TVO is also part of an energy efficiency agreement. The Company's total energy savings target for the agreement period 2017–2025 is 150 GWh. The target was already reached in 2019. Therefore, an additional target of 500 MWh was set for 2022–2023.

In 2022, the Olkiluoto water management security project for securing the supply of raw water and building a transfer sewer for wastewater progressed according to plan. At the end of the year, extension work of the district heating network was started.

Environmental issues from 2022, key figures related to the environment, as well as the results of the Environment and Energy Efficiency Programme are reported in further detail in the Environmental Report published separately. The information has been verified by an external party.

## GROUP PERSONNEL AND TRAINING

### Personnel

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

At the year-end, the total number of personnel in the Group was 1,007 (984), and the average during the year was 1,031 (1,004). The year-end total number of personnel in TVO was 1,005 (982), and the average during the year was 1,029 (1,002). The year-end total for TVO's permanent personnel was 984 (963).

TVO recruited 87 (70) employees in 2022. During the year, 66 (61) permanent employees left the Company, including 16 (5) who retired. TVO's sick leave percentage was 3.8 (2.4).

M.Sc. (Tech.), D.Sc. (Tech.) **Veli-Pekka Nurmi** started as TVO's new Senior Vice President for Safety and Security Services on 1 January 2022. M.Sc. (Tech.) **Mikko Lampinen** was appointed as TVO's Senior Vice President for Engineering as of 1 October 2022. Simultaneously, the previous Senior Vice President for Engineering, M.Sc. (Tech.) **Sami Jakonen**, was appointed as a Corporate Advisor with responsibility for the Company's separate technical projects.

The collective agreements for different groups of personnel in the energy industry are in force in accordance with the so-called framework agreement of labour confederations until the beginning of 2023. 100 percent of TVO employees are working under collective agreement.

The TVO Group continued preparations for possible COVID-19 infections during the year, and the spread of the virus was prevented through several measures on the Olkiluoto island. The effectiveness of the measures was deemed successful, since COVID-19 transmission chains were avoided in Olkiluoto. The restrictions were lifted during the summer, and national and regional instructions are followed in the COVID-19 guidelines.

A personnel survey is carried out in the Group approximately every 18 months. The results of the personnel survey, conducted by Eezy Spirit Oy, were received in November 2021. The response rate was 85 percent, and the People Power Index, which represents the overall result, was 68.7 (2020: 66.0). The result clearly increased from the previous survey, although the rating remained in category A (satisfactory). The next personnel survey will be conducted in the beginning of 2023.

Personnel performance, workload, and coping are monitored in navigation discussions held 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 efficiency of operations and securing good preconditions for operations by developing issues 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 2022, one of the themes of the programme has been working together, which has included building the Group's guidelines for a new model of working, increasing collaboration between the different organisational units, and involving the personnel in the strategy process. Another theme has been smooth everyday work, which included examining the key decision-making forums, considering the modification of meeting practices and meeting culture, as well as the use of new digital tools as part of a new way of working.

The focus of occupational health care has continued to be on preventative occupational health care, which supports the employee's health, work and functioning abilities, as well as their maintenance and development.

The human resource issues and indicators for 2022 can be found in more detail in the Annual and Sustainability Report.

### Training

An annual training programme is implemented in the TVO Group as a tool for personnel development and the planning of trainings. 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.

The basic, continuing, and further training of the TVO Group employees was implemented according to the annual training programme as in previous years. The personnel were trained for a total of 11,680 (10,608) days, on average 11.6 (10.8) days per each TVO employee (including TVONS).

In 2022, OL1, OL2, and OL3 operators attended operational training days and advanced simulator courses in the spring and in the autumn according to their training programme. OL3 operators worked in shifts in the combined operating organisation of the Plant Supplier and TVO, carrying out system operation and monitoring tasks.

The Nuclear Professional Leader training programme, initiated in 2021 to develop supervisor skills, was continued. The aim of the 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.

TVO participated in the implementation of a national nuclear safety and waste management training course together with other major operators in the industry. Together with Swedish and Fortum's Loviisa nuclear power plants, TVO also participated in the Nordic Nuclear Trainee Programme. 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.

Key issues and indicators for 2022 related to competence management 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, or will be, 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 according to a set of minimum safeguards aimed to ensure companies follow the most important human rights related principles.

### Nuclear energy in the EU Taxonomy

The technical screening criteria are currently available for two objectives: climate change mitigation and climate change adaptation, defined in the delegated act (EU) 2021/2139. The original delegated act was amended by (EU) 2022/1214 by including technical screening criteria for certain activities related to nuclear energy production.

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. 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

Companies required to publish non-financial information under the non-financial reporting directive (NFRD) EU (2014/95) 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 (and Corporate Sustainability Reporting Directive (EU) 2022/2464, CSRD, from 2024) with main activities related to the production of nuclear energy. TVO is therefore required to publish information on KPIs related to its eligible and aligned activities.

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

| 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 |

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 2023 (Commission Delegated Regulation (EU) 2021/2139) and the disclosure requirements in the consolidated Disclosures Delegated Act of 1 January 2023 (Commission Delegated Regulation (EU) 2021/2178).

### 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 2022 (see details in Notes to the consolidated financial statements).

The consolidated financial statements of the TVO Group are prepared in accordance with the International Financial Reporting Standards (IFRS) and SIC and IFRIC Interpretations. TVO has calculated the KPIs using the financial information in the Group Consolidated Financial Statements 2022 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.

### 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 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 taxonomy-eligible activities are the construction, modifications, and energy 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).

### 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. 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.

Relating to the management of Do no significant harm (DNSH) criteria, environmental impacts of TVO's activities on water quality and temperature are monitored and are well below allowed thresholds. TVO also monitors other aspects of environmental impacts of operations, such as efficient use of raw materials, emissions to air, water and soil, and waste management. Details on how TVO manages environmental impacts can be found in the Environmental Report or the Annual and Sustainability Report. TVO has identified and assessed material physical risks to activities at OL1, OL2, and OL3 under two SSP (Shared Socioeconomical Pathways) scenarios, SSP 2–4.5 and 3–7.0. Climate risk management is described further in TVO's Annual and Sustainability Report.

An important aspect of compliance with the screening criteria is radioactive waste management and disposal, including availability of approved nuclear waste facilities that can manage low-level waste already now and high-level radioactive waste latest by 2050. 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.

For nuclear energy activities, there is a requirement that the lifecycle greenhouse gas (GHG) emissions from the energy production facilities are below 100 $gCO_2/kWh$. TVO assessed that the lifecycle GHG emissions from operations at all three plant units fall well below this threshold. In a transitional phase, TVO used existing lifecycle assessments (LCA) on nuclear power plants for estimating its lifecycle GHG emissions level. The lifecycle GHG emissions at OL1 and OL2 were estimated to be 4–5 $gCO_2/kWh$ based on an existing LCA analysis of the sister units operated by Vattenfall (Forsmark 1 and 2 plant units where emissions are 4.1 $gCO_2/kWh$). The lifecycle GHG emissions at OL3 was estimated to be 4–4.5 $gCO_2/kWh$. This estimate is based on two sources. First, a lifecycle GHG emissions analysis carried out for EDF's existing nuclear fleet, where the result of the LCA is 4 $gCO_2/kWh$. The second source is a study by the European Commission's Joint Research Centre that estimated lifecycle GHG emissions for a future European Pressurised-water Reactor, using the centrifuge enrichment process, to be at 4.25 $gCO_2$-eq/kWh. The JRC report on the alignment of nuclear energy with respect to the DNSH principle, stated that the lifecycle GHG emissions from nuclear electricity generation are comfortably within the 100 $gCO_2$-eq/kWh emissions intensity threshold.

TVO will verify the alignment by assessing its own lifecycle GHG emissions level during 2023, and will use the result in the next EU Taxonomy disclosures covering the financial year 2023.

Based on these assumptions, 98.7 percent of the TVO Group's consolidated turnover is taxonomy-aligned and 100 percent of the taxonomy-relevant CapEx and OpEx is taxonomy-aligned. The operations at OL1 and OL2 constitute 96.8 percent of the aligned turnover, 23.4 percent of aligned CapEx, and all aligned OpEx. Operations at OL3 constitute 1.9 percent of turnover and 76.6 percent of the CapEx, reflecting the ongoing operational development of OL3.

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 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.

### 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 2022. Detailed information on the KPIs are specified in chapter **Key performance indicators**.

| | Total EUR 1,000 | Taxonomy-aligned % | Non-taxonomy-eligible % |
|---|---|---|---|
| Turnover | 358,208 | 99% | 1% |
| Operating expenditure | 122,928 | 100% | 0% |
| Capital expenditure | 311,840 | 100% | 0% |

The OpEx numerator includes maintenance costs, waste management costs, and Posiva waste management.

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 1 percent.

### 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 safeguards as required in Article 18 of the Taxonomy Regulation through the Group-level policies and compliance with national labour legislation.

## Key performance indicators

### Taxonomy-aligned economic activities for the turnover KPI (denominator)

| | | 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% |
| 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 | 6,658,979 | 2% | 6,658,979 | 2% | 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 | 346,790,909 | 97% | 346,790,909 | 97% | 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% |
| 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% |
| 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% |
| 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% |
| 8. | Total applicable KPI | 358,208,243 | 99% | 358,208,243 | 99% | 0 | 0% |

### Taxonomy-aligned economic activities for the CapEx KPI (denominator)

| | | 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% |
| 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 | 244,342,727 | 78% | 244,342,727 | 78% | 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 | 67,497,510 | 22% | 67,497,510 | 22% | 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% |
| 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% |
| 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% |
| 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% |
| 8. | Total applicable KPI | 311,840,237 | 100% | 311,840,237 | 100% | 0 | 0% |

## Taxonomy-aligned economic activities for the OpEx KPI (denominator)

| | | 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% |
| 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 | 0 | 0% | 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 | 122,927,947 | 100% | 122,927,947 | 100% | 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% |
| 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% |
| 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% |
| 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% |
| 8. | Total applicable KPI | 122,927,947 | 100% | 122,927,947 | 100% | 0 | 0% |

## Taxonomy-aligned economic activities for the turnover KPI (numerator)

| | | 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% |
| 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 | 6,658,979 | 2% | 6,658,979 | 2% | 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 | 346,790,909 | 98% | 346,790,909 | 98% | 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% |
| 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% |
| 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% |
| 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% |
| 8. | Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI | 353,449,887 | 100% | 353,449,887 | 100% | 0 | 0% |

## Taxonomy-aligned economic activities for the CapEx KPI (numerator)

| | | 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% |
| 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 | 244,342,727 | 78% | 244,342,727 | 78% | 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 | 67,497,510 | 22% | 67,497,510 | 22% | 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% |
| 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% |
| 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% |
| 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% |
| 8. | Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI | 311,840,237 | 100% | 311,840,237 | 0% | 0 | 0% |

## Taxonomy-aligned economic activities for the OpEx KPI (numerator)

| | | 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% |
| 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 | 0 | 0% | 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 numerator of the applicable KPI | 122,927,947 | 100% | 122,927,947 | 100% | 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% |
| 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% |
| 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% |
| 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% |
| 8. | Total amount and proportion of taxonomy-aligned economic activities in the numerator of the applicable KPI | 122,927,947 | 100% | 122,927,947 | 100% | 0 | 0% |

## Taxonomy-eligible but not taxonomy-aligned economic activities

| Row | Economic activities | Proportion (the information is to be presented in monetary amounts and as percentages) | | | | | |
|---|---|---|---|---|---|---|---|
| | | (CCM+CCA) | | Climate change mitigation | | Climate change adaptation | |
| | | 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% |
| 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% |
| 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% |
| 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% |
| 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% |
| 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% |
| 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% |
| 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% |

## Taxonomy non-eligible economic activities

| 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% |
| 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% |
| 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% |
| 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% |
| 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% |
| 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% |
| 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 | 4,758,356 | 1% |
| 8. | Total amount and proportion of taxonomy-non-eligible economic activities in the denominator of the applicable KPI | 4,758,356 | 1% |

## Subsidiaries and joint ventures

TVO Nuclear Services Oy (TVONS) is a wholly-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 personnel are at TVONS customers' disposal.

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.

## Major events after the end of the year

After tests at full reactor capacity, the OL3 plant unit's production was interrupted according to plan in January 2023 in order to replace the impellers of the feedwater pumps. Thereafter, before the start of regular electricity production, an approximately month-long production phase will still follow in the test production, where OL3 will produce electricity at mostly full power 24/7. Regular electricity production starts in March 2023.

## Prospects for the future

Electricity production is expected to increase as OL3 starts regular electricity production. The prerequisites for nuclear power production in Olkiluoto are good. Nuclear fuel availability is guaranteed by long-term agreements.

Preparations are currently ongoing for the start of OL3's regular electricity production in March 2023, as well as the provisional takeover of the plant unit in accordance with the Plant Contract. TVO will carefully follow the fulfilment of the conditions according to the 2018 GSA and the amendment agreements signed in June 2021, which continue until the end of the guarantee periods.

Posiva will continue the implementation of the EKA project in 2023, which encompasses the entirety of the final disposal facilities.

## Proposals to the Annual General Meeting

Teollisuuden Voima Oyj's distributable equity as of 31 December 2022 amounted to EUR 20,938,560.00, of which the profit for the accounting period was EUR 2,208,600.00. The Board of Directors proposes to the Annual General Meeting that the profit for the accounting period is transferred to the profit/loss account of previous accounting periods and that no dividend shall be paid.

## Key figures of TVO Group

| TVO Group (IFRS) (M€) | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Turnover | 358 | 299 | 275 | 254 | 350 |
| Profit/loss for the financial year | -48 | -20 | 0 | 87 | -18 |
| Research expenses | 10 | 12 | 12 | 15 | 16 |
| Investments | 312 | 578 | 56 | 369 | 181 |
| Equity | 2,218 | 2,063 | 2,043 | 1,819 | 1,745 |
| Subordinated shareholder loans (hybrid equity) (included in the former) [2] [4] | 929 | 929 | 929 | 679 | 679 |
| Non-current and current interest-bearing liabilities (excluding loan from VYR) [1] | 4,831 | 4,337 | 4,281 | 4,370 | 4,141 |
| Loan from VYR | 651 | 711 | 716 | 591 | 666 |
| Provision related to nuclear waste management | 1,294 | 1,368 | 1,030 | 1,041 | 952 |
| Balance sheet total | 9,171 | 8,662 | 8,181 | 7,942 | 7,662 |
| Equity ratio, % [3] | 30.7 | 31.3 | 31.7 | 28.8 | 28.9 |
| Average number of personnel | 1,031 | 1,004 | 984 | 943 | 872 |

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

[2] Subordinated loans

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

[4] 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€) | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Profit/loss for the financial year (IFRS) | -48 | -20 | 0 | 87 | -18 |
| The impact of the nuclear waste management obligation [1] (profit -/loss +) | 36 | 17 | 6 | -80 | 22 |
| Other IFRS adjustments | 0 | 0 | 0 | -1 | -1 |
| The impact of joint ventures | 2 | -1 | 3 | -1 | -1 |
| Profit/loss before appropriations | -10 | -4 | 9 | 5 | 2 |
| Adjusted profit/loss for the financial year | -10 | -4 | 9 | 5 | 2 |

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

| (M€) | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| TVO's share in the Finnish State Nuclear Waste Management Fund (VYR) | 1,436 | 1,451 | 1,479 | 1,514 | 1,480 |
| TVO's funding target obligation to the Finnish State Nuclear Waste Management Fund | 1,458 | 1,436 | 1,451 | 1,471 | 1,506 |
| The carrying value of TVO's share in the Finnish State Nuclear Waste Management Fund (non-current assets) | 1,000 | 1,010 | 1,030 | 1,041 | 952 |

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

## Key figures of parent company (FAS)

| **Teollisuuden Voima Oyj (FAS) (M€)**<br>Parent company's financial statement has been prepared in accordance with the Finnish Accounting Standards (FAS). | **2022** | **2021** | **2020** | **2019** | **2018** |
|---|---|---|---|---|---|
| Turnover | 353 | 294 | 271 | 251 | 346 |
| Profit/loss before appropriations | -10 | -4 | 8 | 5 | 1 |
| Fuel costs | 70 | 61 | 64 | 65 | 72 |
| Nuclear waste management costs | 100 | 41 | 28 | -5 | 58 |
| Capital expenditure (depreciation and financial income and expenses) | 37 | 38 | 34 | 39 | 53 |
| Investments | 339 | 220 | 52 | 278 | 177 |
| Equity | 864 | 861 | 861 | 857 | 857 |
| Appropriations | 181 | 193 | 197 | 193 | 187 |
| Non-current and current interest-bearing liabilities (excluding loan from VYR and loans from equity holders of the company) [1] [2] | 4,798 | 4,277 | 4,180 | 4,282 | 4,070 |
| Loans from equity holders of the company [2] | 929 | 929 | 929 | 679 | 679 |
| Loan from VYR | 651 | 711 | 716 | 591 | 666 |
| Balance sheet total | 7,602 | 7,156 | 6,995 | 6,724 | 6,619 |
| Equity ratio, % [3] | 28.4 | 30.8 | 31.7 | 28.2 | 29.0 |
| Average number of personnel | 1,029 | 1,002 | 983 | 942 | 871 |

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

[2] Subordinated loans

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

| **Electricity delivered to equity holders of the company (GWh)** | **2022** | **2021** | **2020** | **2019** | **2018** |
|---|---|---|---|---|---|
| Olkiluoto 1 | 6,918 | 7,393 | 7,299 | 7,531 | 6,742 |
| Olkiluoto 2 | 7,522 | 7,021 | 7,264 | 7,198 | 7,321 |
| Olkiluoto 3 | 1,876 | 0 | 0 | 0 | 0 |
| Total Olkiluoto | 16 316 | 14,414 | 14,563 | 14,729 | 14,063 |
| Meri-Pori | 0 | 0 | 82 | 182 | 660 |
| **Total** | **16,316** | **14,414** | **14,645** | **14,911** | **14,723** |

| **Capacity factors, %** | **2022** | **2021** | **2020** | **2019** | **2018** |
|---|---|---|---|---|---|
| Olkiluoto 1 | 89.1 | 95.1 | 93.7 | 96.9 | 87.8 |
| Olkiluoto 2 | 96.8 | 90.4 | 93.3 | 92.7 | 94.3 |
| Olkiluoto 3 | 16.9 | - | - | - | - |
| **Total capacity factor** | **67.6** | **92.8** | **93.5** | **94.8** | **91.1** |

| **TVO share of the electricity used in Finland, %** | **2022** | **2021** | **2020** | **2019** | **2018** |
|---|---|---|---|---|---|
| | 19.9 | 16.8 | 18.1 | 17.3 | 16.9 |

# TVO Group

## Consolidated income statement

| EUR 1,000 | Note | 1 Jan-31 Dec 2022 | 1 Jan-31 Dec 2021 |
|---|---|---|---|
| **Turnover** | 3,4 | **358,208** | **298,713** |
| Work performed for own purpose | 5 | 21,310 | 25,036 |
| Other income | 6 | 13,068 | 13,446 |
| Materials and services | 7 | -137,884 | -90,840 |
| Personnel expenses | 8 | -80,316 | -82,142 |
| Depreciation and impairment charges | 4,9 | -46,992 | -43,996 |
| Other expenses | 10 | -100,625 | -103,944 |
| **Operating profit/loss** | | **26,769** | **16,273** |
| | | | |
| Finance income | 11 | 6,295 | 4,681 |
| Finance expenses | 11 | -81,480 | -41,887 |
| Total finance income and expenses | | -75,185 | -37,206 |
| | | | |
| Share of the profit/loss of joint ventures | | 590 | 1,280 |
| | | | |
| **Profit/loss before income tax** | | **-47,826** | **-19,653** |
| Income taxes | 12 | -52 | 0 |
| **Profit/loss for the financial year** | | **-47,878** | **-19,653** |
| | | | |
| **Profit/loss for the financial year attributable to:** | | | |
| Equity holders of the company | | -47,878 | -19,653 |

## Consolidated statement of comprehensive income

| EUR 1,000 | Note | 1 Jan-31 Dec 2022 | 1 Jan-31 Dec 2021 |
|---|---|---|---|
| Profit/loss for the financial year | | -47,878 | -19,653 |
| Other comprehensive items | | | |
| Items that may be reclassified to profit or loss in subsequent periods: | | | |
| Cash flow hedges | 11 | 211,736 | 44,363 |
| Total other comprehensive profit/loss items | | 211,736 | 44,363 |
| **Total comprehensive profit/loss for the financial year** | | **163,858** | **24,710** |
| | | | |
| **Total comprehensive profit/loss for the financial year attributable to:** | | | |
| Equity holders of the company | | 163,858 | 24,710 |

## Consolidated balance sheet

| EUR 1,000 | Note | 31 Dec 2022 | 31 Dec 2021 |
|---|---|---|---|
| **Assets** | | | |
| **Non-current assets** | | | |
| Property, plant and equipment | 13 | 6,363,783 | 6,177,755 |
| Intangible assets | 14 | 2,476 | 2,543 |
| Loans and other receivables | 17 | 710,962 | 714,027 |
| Investments in joint ventures | 15 | 3,897 | 5,516 |
| Investments in shares | 18 | 1,935 | 1,935 |
| Derivative financial instruments | 20 | 225,183 | 33,966 |
| Share in the Finnish State Nuclear Waste Management Fund | 24 | 999,662 | 1,010,071 |
| **Total non-current assets** | | **8,307,898** | **7,945,813** |
| | | | |
| **Current assets** | | | |
| Inventories | 19 | 272,378 | 274,489 |
| Trade and other receivables | 3,17 | 233,078 | 261,834 |
| Derivative financial instruments | 20 | 4,463 | 7,809 |
| Cash and cash equivalents | | 353,203 | 172,318 |
| **Total current assets** | | **863,122** | **716,450** |
| | | | |
| **Total assets** | | **9,171,020** | **8,662,263** |
| | | | |
| **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 | 228,727 | 16,991 |
| Subordinated shareholder loans (hybrid equity) | 21 | 929,300 | 929,300 |
| Retained earnings | 21 | 216,742 | 274,022 |
| **Total equity** | | **2,217,517** | **2,063,061** |

| EUR 1,000 | Note | 31 Dec 2022 | 31 Dec 2021 |
|---|---|---|---|
| **Liabilities** | | | |
| **Non-current liabilities** | | | |
| Provision related to nuclear waste management | 24 | 1,294,345 | 1,368,291 |
| Loan from the Finnish State Nuclear Waste Management Fund | 22 | 651,339 | 711,266 |
| Bonds | 22 | 3,254,801 | 2,811,264 |
| Other financial liabilities | 22 | 1,276,463 | 1,065,928 |
| Derivative financial instruments | 20,22 | 40,040 | 10,740 |
| **Total non-current liabilities** | | **6,516,988** | **5,967,489** |
| | | | |
| **Current liabilities** | | | |
| Current financial liabilities | 22 | 258,669 | 445,619 |
| Derivative financial instruments | 20,22 | 544 | 3,268 |
| Advance payments received | 3,23 | 23,064 | 21,218 |
| Trade payables | 23 | 16,821 | 56,672 |
| Other current liabilities | 23 | 137,417 | 104,936 |
| **Total current liabilities** | | **436,515** | **631,713** |
| | | | |
| **Total liabilities** | | **6,953,503** | **6,599,202** |
| | | | |
| **Total equity and liabilities** | | **9,171,020** | **8,662,263** |

## 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 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** |

| 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 2021** | | **600,365** | **242,383** | **-27,372** | **929,300** | **298,272** | **2,042,948** | **2,042,948** |
| Profit/loss for the financial year | | 0 | 0 | 0 | 0 | -19,653 | -19,653 | -19,653 |
| Other comprehensive profit/loss items: | | | | | | | | |
| Cash flow hedges | | 0 | 0 | 44,363 | 0 | 0 | 44,363 | 44,363 |
| Interest paid of subordinated shareholder loans (hybrid equity) | | 0 | 0 | 0 | 0 | -4,597 | -4,597 | -4,597 |
| **Equity 31 Dec 2021** | 21 | **600,365** | **242,383** | **16,991** | **929,300** | **274,022** | **2,063,061** | **2,063,061** |

## Consolidated cash flow statement

| EUR 1,000 | Note | 2022 | 2021 |
|---|---|---|---|
| **Operating activities** | | | |
| Profit/loss for the financial year | | -47,878 | -19,653 |
| Adjustments: | | | |
| Taxes | | 52 | 0 |
| Finance income and expenses | | 75,185 | 37,206 |
| Depreciation and impairment charges | | 46,992 | 43,996 |
| Share of the profit/loss of joint ventures | | -590 | -1,280 |
| Other non-cash flow income and expenses [1)] | | -46,163 | -25,629 |
| Changes in working capital: | | | |
| Increase (-) or decrease (+) in non-interest-bearing receivables | | 28,281 | -17,739 |
| Increase (-) or decrease (+) in inventories | | 2,137 | -376 |
| Increase (+) or decrease (-) in short-term non-interest-bearing liabilities | | 31,875 | 13,474 |
| Interest paid and other finance expenses | | -4,253 | -4,296 |
| Dividend received | | 2,209 | 0 |
| Interest received | | 6,277 | 3,977 |
| Taxes paid | | -52 | 0 |
| **Cash flow from operating activities** | | **94,072** | **29,680** |
| | | | |
| **Investing activities** | | | |
| Acquisition of property, plant and equipment | | -425,468 | -315,370 |
| OL3 project compensation | | 0 | 206,875 |
| Acquisition of intangible assets | | -372 | -263 |
| Acquisition of shares | | 0 | -1 |
| Loan receivables granted | | -15,831 | -105 |
| Repayments of loans granted | | 75,837 | 5,392 |
| **Cash flow from investing activities** | | **-365,834** | **-103,472** |

| EUR 1,000 | Note | 2022 | 2021 |
|---|---|---|---|
| **Financing activities** | | | |
| Withdrawals of long-term loans | | 1,050,000 | 800,000 |
| Repayment of long-term loans | | -517,415 | -571,683 |
| Principal elements of lease payments | | -2,409 | -2,117 |
| Interest paid of subordinated shareholder loans (hybrid equity) | | -6,079 | -4,673 |
| Increase (+) or decrease (-) in current financial liabilities | | 62,740 | 61,630 |
| Repayment of current financial liabilities | | -134,190 | -198,410 |
| **Cash flow from financing activities** | | **452,647** | **84,747** |
| | | | |
| **Change in cash and cash equivalents** | | **180,885** | **10,955** |
| Cash and cash equivalents 1 Jan | | 172,318 | 161,363 |
| **Cash and cash equivalents 31 Dec** | 18 | **353,203** | **172,318** |

[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. OL3 is currently under the test production phase. 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 15 February 2023. 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**.

**EFFECTS OF STARTING THE OL3 PLANT UNIT'S ELECTRICITY PRODUCTION ON THE FINANCIAL STATEMENTS**

On 12 March 2022, OL3 was connected to the national grid and electricity production started. According to information received from the Plant Supplier in December 2022, OL3's regular electricity production is to start in March 2023. TVO's sales proceeds from the delivery of OL3's test production electricity and variable costs are recorded in the income statement. Electricity from the test production phase has been delivered to shareholders in proportion to their shareholdings and invoiced monthly based on the amount of electricity delivered to shareholders. In accordance with TVO's Articles of Association, the invoiced variable costs consists of fuel costs and electricity transmission costs.

**THE EFFECT OF THE OPERATING ENVIRONMENT ON THE FINANCIAL STATEMENTS**

The TVO Group continued preparations for possible COVID-19 infections during the year, and the spread of the virus was prevented through several measures on the Olkiluoto island. The effectiveness of the measures was deemed successful, since COVID-19 transmission chains were avoided in Olkiluoto. The restrictions were lifted during the summer, and national and regional instructions are followed in the COVID-19 guidelines. The COVID-19 pandemic has not materially affected accounting policies nor reporting numbers.

During the accounting period, the Ukrainian situation has not had an immediate or direct effect on the Group's operations or the production of electricity. However, cost increases are being prepared for in the TVO Group. Market interest rates have strongly increased due to rising inflation and the actions of central banks.

**TVO'S 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 (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 business 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**

These consolidated financial statements of the TVO Group have been prepared in accordance with International Financial Reporting Standards (IFRS). These financial statements have been prepared in accordance with the IAS and IFRS standards and SIC and IFRIC interpretations effective on 31 December 2022. 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 2021. The Group has adopted the following amendments to existing standards as of 1 January 2022:

- IAS 16 (amendment) Property, Plant and Equipment The standard amendment prohibits a company from deducting from the cost of property, plant and equipment amounts received from selling items produced while the company is preparing the asset for its intended use. With the amendment, profits will not be deducted from testing costs which form a part of the asset's acquisition cost as before. Instead, a company will recognise such sales proceeds in the income statement.

  TVO's sales proceeds from the delivery of OL3's test production electricity and variable costs are recorded in the income statement. Electricity from the test production phase has been delivered to shareholders in proportion to their shareholdings and invoiced monthly based on the amount of electricity delivered to shareholders. In accordance with TVO's Articles of Association, the invoiced variable costs consist of fuel costs and electricity transmission costs.
- IFRS 3 (amendment) Business Combinations: Reference to the conceptual framework
- IAS 37 (amendment) Provisions, Contingent Liabilities and Contingent Assets: Onerous contracts, cost of fulfilling a contract
- Annual Improvements 2018-2020: IFRS 9 Financial Instruments, IFRS 16 Leases and IAS 41 Agriculture

The following amendments to existing standards issued already will be adopted by the Group in 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 Errors: 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 [1]: Classification of Liabilities as Current or Non-current
- IFRS 16 (amendment) Leases [1]: Lease Liability in a Sale and Leaseback

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

[1] The standard, interpretation or amendment to published standard or interpretation is still subject to endorsement by the European Union. Effective date will be 1 January 2024.

**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 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 OL3 nuclear power plant unit is at the test production phase. 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 price 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 is 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 (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 and OL2 nuclear power plant units:
  - Basic investment — 61 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.

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.

The OL3 plant unit is under the test production phase, and all realised costs that meet recognition criteria are shown as incomplete plant investment. See Note 13 **Property, plant and Equipment.**

## 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 what was 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 assets other 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 recognised on the commencement date, and are measured at the present value of the 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 are caused by the construction of the OL3 power plant, they are 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 the 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.

At the commencement of hedging and regularly thereafter, 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 the 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, except if they are caused by the construction of the OL3 power plant, in which case the finance charges are capitalised as part of the acquisition cost. 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 options, interest rate swaps, and forward exchange contracts left outside hedge accounting are presented in financial income and expenses, to the extent that they are not activated as part of the acquisition cost caused by the construction of the OL3 power plant.

## 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 will 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 margin.

### 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 margin. 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 2022 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**).

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.

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 in 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 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.

**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 the nuclear waste management obligation**). The provision related to nuclear waste management obligation of the OL3 plant unit was recorded in the balance sheet for the first time when the unit was made critical on 21 December 2021.

**Olkiluoto 3 EPR**

OL3 is a nuclear power plant unit currently under the test production phase, which was procured as a fixed-price turnkey project.

In March 2018, TVO signed a comprehensive Global Settlement Agreement (GSA) concerning the completion of the OL3 project and related disputes with the Plant Supplier consortium companies Areva NP, Areva GmbH, and Siemens AG as well as with the Areva Group parent company Areva SA, a company wholly owned by the French State. The GSA was amended with agreements signed in June 2021.
In the GSA, the Supplier consortium companies committed to ensuring that the funds dedicated to the completion of the OL3 project will be adequate and will cover all applicable guarantee periods, including setting up a trust mechanism funded by Areva companies to secure the financing of the costs for completing the OL3 project. During the accounting period, the fund, which was previously replenished by Areva in July 2021, has been used to cover costs incurred to the Areva companies for the completion of the OL3 project in accordance with

the GSA. During the accounting period, TVO has recorded receivables from the Plant Supplier for the additional delay compensation accumulated by the end of the accounting period in accordance with the amended settlement agreement.

TVO's right to terminate the Plant Contract in accordance with the GSA was postponed until 31 March 2023. In addition, the payment of approximately EUR 193 million of the delay compensation agreed in the GSA of 2018 was postponed until the completion of OL3, up to 31 March 2023 at the latest.

According to the Plant Supplier's latest project schedule, TVO's current cost estimate, and the effects of the GSA, TVO estimates that its total investment in the OL3 project will be approximately EUR 5.8 billion.

All payments related to the settlement compensations have been recorded in the consolidated balance sheet as property, plant and equipment. At the end of the accounting period the delay compensation agreed in the GSA of 2018 from the Plant Supplier were EUR 193.1 million in the current receivables and EUR 56.7 million in the non-current receivables.

The Radiation and Nuclear Safety Authority granted a fuel loading permit for OL3 in March 2021, and the fuel loading was completed in April 2021. The completion of fuel loading meant that the OL3 plant unit is a nuclear power plant in use. The first criticality of the OL3 plant unit was achieved on 21 December 2021.

All the realised costs of the OL3 project that meet recognition criteria have been booked as acquisition costs of property, plant and equipment on the Group balance sheet. TVO's management has estimated that there are no known technical or other issues that would prevent the completion of the OL3 project from the test production phase to regular electricity production. The recognition criteria of the acquisition costs of the OL3 project are realised because all the necessary actions will be completed to prepare the asset for its intended use.

**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 2022 | 31 Dec 2021 |
|---|---|---|
| Trade receivables | 9,428 | 8,854 |
| Advance payments received | 23,033 | 21,182 |

### Revenue recognised in relation to contract liabilities

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Revenue recognised that was included in the contract liability balance at the beginning of the period | 21,182 | 19,758 |
| **Total** | **21,182** | **19,758** |

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). Olkiluoto 3 (OL3) is currently under the test production phase. 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.

**Segment calculation principles**
The Board of Directors monitors reporting in accordance both with the Finnish Accounting Standards (FAS) and IFRS-standards. 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 are used in the segment reporting and TVO Group's financial statements. Adjustments made under IFRS accounting policies are reported at the Group level.

### Turnover by segments

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear power | 358,208 | 298,713 |
| **Total** | **358,208** | **298,713** |

### Depreciation and impairment charges by segments

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear power | -40,690 | -37,650 |
| Depreciation and impairment charges (FAS) | -40,690 | -37,650 |
| The impact of the nuclear waste management obligation | -5,493 | -5,791 |
| Other IFRS adjustments | -809 | -555 |
| **Total (IFRS)** | **-46,992** | **-43,996** |

## Finance income and expenses by segments

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear power | 3,822 | -11 |
| Finance income and expenses (FAS) | 3,822 | -11 |
| The impact of the nuclear waste management obligation | -77,197 | -37,262 |
| The impact of financial instruments | -503 | -514 |
| The impact of joint ventures | -2,209 | 0 |
| Other IFRS adjustments | 902 | 581 |
| **Total (IFRS)** | **-75,185** | **-37,206** |

## Profit/loss for the financial year by segments

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear power | -9,909 | -3,573 |
| Profit/loss before appropriations (FAS) | -9,909 | -3,573 |
| The impact of the nuclear waste management obligation | -36,528 | -17,424 |
| The impact of financial instruments | -503 | -514 |
| Other IFRS adjustments | 681 | 578 |
| The impact of joint ventures | -1,619 | 1,280 |
| **Total (IFRS)** | **-47,878** | **-19,653** |

## Assets by segments

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear power | 7,601,716 | 7,155,886 |
| Total (FAS) | 7,601,716 | 7,155,886 |
| The impact of the nuclear waste management obligation | 1,367,840 | 1,478,313 |
| The impact of financial instruments | 194,825 | 11,113 |
| The impact of finance leases | 46,072 | 47,953 |
| Other IFRS adjustments | -42,319 | -35,506 |
| The impact of joint ventures | 2,886 | 4,504 |
| **Total (IFRS)** | **9,171,020** | **8,662,263** |

## Trade receivables by segments

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear power | 9,975 | 10,183 |
| Total (FAS) | 9,975 | 10,183 |
| **Total (IFRS)** | **9,975** | **10,183** |

### GROUP-WIDE DISCLOSURES

## Turnover shared to production of electricity and services

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Production of electricity | 353,479 | 293,781 |
| Services | 4,729 | 4,932 |
| **Total** | **358,208** | **298,713** |

## Trade receivables shared to production of electricity and services

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Production of electricity | 9,780 | 9,301 |
| Services | 195 | 882 |
| **Total** | **9,975** | **10,183** |

### 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 | 2022 | 2021 |
|---|---|---|
| Personnel expenses related to OL3 | 21,310 | 25,036 |
| **Total** | **21,310** | **25,036** |

## 6 Other income

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Rental income | 1,144 | 1,101 |
| Sales of services | 10,564 | 11,144 |
| Other income | 1,360 | 1,201 |
| **Total** | **13,068** | **13,446** |

## 7 Materials and services

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Nuclear fuel | 60,845 | 61,757 |
| Materials and supplies | 6,084 | 5,011 |
| $CO_2$ emission rights | 110 | 151 |
| Nuclear waste management services [1)] | 54,239 | 15,018 |
| Increase (-) or decrease (+) in inventories | 6,948 | -964 |
| External services | 9,658 | 9,867 |
| **Total** | **137,884** | **90,840** |

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

## 8 Personnel expenses

### Employee benefit costs

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Wages and salaries | 67,398 | 69,052 |
| Pension expenses - defined contribution plans | 10,668 | 10,616 |
| Other compulsory personnel expenses | 2,250 | 2,474 |
| **Total** | **80,316** | **82,142** |

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

| | 2022 | 2021 |
|---|---|---|
| Office personnel | 836 | 811 |
| Manual workers | 195 | 193 |
| **Total** | **1,031** | **1,004** |

### Number of personnel on 31 December

| | 2022 | 2021 |
|---|---|---|
| Office personnel | 818 | 793 |
| Manual workers | 189 | 191 |
| **Total** | **1,007** | **984** |

## 9 Depreciation and impairment charges

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Intangible assets | | |
| ICT software | 372 | 370 |
| Other intangible assets | 38 | 38 |
| **Total** | **410** | **408** |
| | | |
| Property, plant and equipment | | |
| Buildings and construction | 4,891 | 3,786 |
| Machinery and equipment | 35,787 | 33,359 |
| Other property, plant and equipment | 410 | 652 |
| Decommissioning | 5,494 | 5,791 |
| **Total** | **46,582** | **43,588** |
| | | |
| **Total** | **46,992** | **43,996** |

## 10 Other expenses

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Maintenance services | 21,365 | 24,297 |
| Regional maintenance and service | 9,651 | 10,428 |
| Research services | 2,338 | 2,416 |
| Other external services | 26,265 | 30,602 |
| Real estate tax | 6,489 | 6,034 |
| Rents | 1,457 | 1,397 |
| ICT expenses | 6,207 | 6,079 |
| Personnel related expenses | 4,220 | 4,005 |
| Corporate communication expenses | 867 | 837 |
| Other expenses | 21,766 | 17,849 |
| **Total** | **100,625** | **103,944** |

## Auditors' fees and non-audit related services

| PricewaterhouseCoopers Oy (EUR 1,000) | 2022 | 2021 |
|---|---|---|
| Auditing | 238 | 267 |
| Tax services | 13 | 28 |
| Other services | 65 | 70 |
| **Total** | **316** | **365** |

# 11 Finance income and expenses

## Items included in the income statement

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Interest income from loans and other receivables | | |
| Nuclear waste management loan receivables from equity holders of the company | 3,377 | 3,612 |
| Other | 2,665 | 494 |
| Hedge accounted derivatives | | |
| Ineffective portion of the change in fair value in fair value hedge relationship | 1 | 0 |
| Non-hedge accounted derivatives | | |
| Change in fair value | 252 | 127 |
| Interest income from assets related to nuclear waste management | 0 | 448 |
| **Finance income, total** | **6,295** | **4,681** |
| | | |
| Interest expenses and other finance expenses | | |
| To the Finnish State Nuclear Waste Management Fund | 3,377 | 3,612 |
| To others | 148 | -76 |
| Hedge accounted derivatives [1)] | | |
| Ineffective portion of the change in fair value in fair value hedge relationship | 1 | 0 |
| Non-hedge accounted derivatives | | |
| Change in fair value | 757 | 641 |
| Interest expenses of provision related to nuclear waste management | 77,197 | 37,710 |
| **Finance expenses, total** | **81,480** | **41,887** |
| | | |
| **Total** | **-75,185** | **-37,206** |

[1)] In hedge accounting the change in fair value adjustment of the loan was EUR 32.1 (5.6) million and the change of the fair value in hedging instruments was EUR -31.7 (-5.5) million. The ineffective portion is recognised as EUR 0 thousand in profit or loss and the change in fair value resulting from ineffectiveness is activated in the balance sheet.

## Other comprehensive items

Other comprehensive items related to derivative financial instruments:

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Cash flow hedges | | |
| Changes in the fair value of which the following items have transferred | 207,593 | 35,329 |
| Transfers to the consolidated income statement | -18 | 0 |
| Transfers to inventories | 3,144 | 498 |
| Transfers to the nuclear power plant under construction | -7,269 | -9,533 |
| **Transferred items, total** | **-4,143** | **-9,034** |
| **Cash flow hedges, total** | **211,736** | **44,363** |
| | | |
| **Total other comprehensive items** | **211,736** | **44,363** |

# 12 Income tax expense

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Taxes based on the taxable income of the financial year | 52 | 0 |
| **Total** | **52** | **0** |

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

| 2022<br>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 |

| 2021<br>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 | 277,891 | 1,393,115 | 54,172 | 5,054,334 | 218,551 | 7,010,117 |
| Increase | 0 | 949 | 23,760 | 150 | 184,937 | 367,919 | 577,715 |
| Decrease | 0 | -33 | -59,532 | 0 | -9,357 | -11,632 | -80,554 |
| Transfer between categories | 0 | 15,568 | 15,611 | 0 | -31,179 | 0 | 0 |
| Acquisition cost 31 Dec | 12,054 | 294,375 | 1,372,954 | 54,322 | 5,198,735 | 574,838 | 7,507,278 |
| | | | | | | | |
| Accumulated depreciation and impairment charges according to plan 1 Jan | 0 | 226,005 | 979,627 | 48,730 | 0 | 91,106 | 1,345,467 |
| Accumulated depreciation from deduction | 0 | 0 | -59,532 | 0 | 0 | 0 | -59,532 |
| Depreciation for the period | 0 | 3,786 | 33,359 | 652 | 0 | 5,791 | 43,588 |
| Accumulated depreciation and impairment charges according to plan 31 Dec | 0 | 229,791 | 953,454 | 49,382 | 0 | 96,897 | 1,329,523 |
| | | | | | | | |
| **Book value 31 Dec 2021** | **12,054** | **64,584** | **419,500** | **4,940** | **5,198,735** | **477,941** | **6,177,755** |
| Book value 1 Jan 2021 | 12,054 | 51,886 | 413,488 | 5,442 | 5,054,334 | 127,445 | 5,664,650 |

The costs for the plant unit currently under the test production phase (OL3) constituted EUR 5.4 billion of the advance payments in 2022 (EUR 5.1 billion in 2021).
Once the OL3 plant unit proceeds to commercial operation, approximately EUR 250 million will be transferred from the OL3 investment to the value of the nuclear fuel and uranium stock.

## 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 2022 | 72,741 | 273 | 212 |
| Increase | 0 | 2,436 | 128 |
| Depreciation for the period | 0 | -398 | -170 |
| **Book value 31 Dec 2022** | **72,741** | **2,311** | **170** |

| EUR 1,000 | Construction in progress | Buildings and construction | Machinery and equipment |
|---|---|---|---|
| Book value 1 Jan 2021 | 72,741 | 517 | 310 |
| Increase | 0 | 162 | 84 |
| Decrease | 0 | -197 | 0 |
| Depreciation for the period | 0 | -209 | -182 |
| **Book value 31 Dec 2021** | **72,741** | **273** | **212** |

Part of the assets acquired through lease agreements is accumulated as costs for construction in progress so there is no accumulated depreciation.

### Lease liabilities

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Current | 2,467 | 2,060 |
| Non-current | 47,099 | 47,350 |
| **Total** | **49,566** | **49,410** |

### 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 | 2022 | 2021 |
|---|---|---|
| Buildings and construction | 398 | 209 |
| Machinery and equipment | 170 | 182 |
| **Total** | **568** | **391** |
| | | |
| Interest expense (included in finance expenses) | -70 | 179 |
| Expenses relating to short-term leases (included in other expenses) | 40 | 6 |
| Expenses relating to leases of low-value assets that are not shown above as short-term leases (included in other expenses) | 697 | 704 |

The total cash outflow for leases in 2022 was EUR 3,075 (3,006) 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 construction in progress 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

| **2022**<br>**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 |

| **2021**<br>**EUR 1,000** | **$CO_2$ emission rights** | **Computer software** | **Other intangible assets** | **Advance payments** | **Total** |
|---|---|---|---|---|---|
| Acquisition cost 1 Jan | 59 | 21,597 | 4,117 | 270 | 26,044 |
| Increase | 151 | 256 | -63 | 69 | 413 |
| Decrease | -51 | 0 | 0 | 0 | -51 |
| Transfer between categories | 0 | 0 | 63 | -63 | 0 |
| Acquisition cost 31 Dec | 159 | 21,853 | 4,117 | 276 | 26,406 |
| | | | | | |
| Accumulated depreciation and impairment charges according to plan **1** Jan | 0 | 19,827 | 3,628 | 0 | 23,455 |
| Accumulated depreciation from deduction | 0 | 0 | 0 | 0 | 0 |
| Depreciation for the period | 0 | 370 | 38 | 0 | 408 |
| Accumulated depreciation and impairment charges according to plan 31 Dec | 0 | 20,197 | 3,666 | 0 | 23,863 |
| | | | | | |
| **Book value 31 Dec 2021** | **159** | **1,656** | **451** | **276** | **2,543** |
| Book value 1 Jan 2021 | 59 | 1,770 | 489 | 270 | 2,588 |

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

The borrowing costs of the power plant under the test production phase (OL3) have been capitalised. Realised financial income and expenses have been divided by committed capital. The average share of capitalised borrowing costs in 2022 was 99.75 % (100.00 % in 2021). For the average interest rate on loans and derivatives on 31 December, see **Note 27**.

## Capitalised interest costs during construction

| **2022**<br>**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 | 1,636,089 | 1,762,174 |
| 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 | 1,725,718 | 1,851,803 |
| | | | | | | |
| 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** | **1,725,718** | **1,749,443** |
| Book value 1 Jan 2022 | 231 | 5,387 | 18,948 | 477 | 1,636,089 | 1,661,132 |

| **2021**<br>**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 | 1,548,448 | 1,674,533 |
| Increase | 0 | 0 | 0 | 0 | 90,049 | 90,049 |
| Decrease | 0 | 0 | 0 | 0 | -2,408 | -2,408 |
| Acquisition cost 31 Dec | 1,167 | 27,122 | 95,394 | 2,402 | 1,636,089 | 1,762,174 |
| | | | | | | |
| Accumulated depreciation and impairment charges according to plan 1 Jan | 923 | 21,452 | 75,449 | 1,900 | 0 | 99,724 |
| Depreciation for the period | 13 | 283 | 997 | 25 | 0 | 1,318 |
| Accumulated depreciation and impairment charges according to plan 31 Dec | 936 | 21,735 | 76,446 | 1,925 | 0 | 101,042 |
| | | | | | | |
| **Book value 31 Dec 2021** | **231** | **5,387** | **18,948** | **477** | **1,636,089** | **1,661,132** |
| Book value 1 Jan 2021 | 244 | 5,670 | 19,945 | 502 | 1,548,448 | 1,574,809 |

## 15 Investments in joint ventures

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Posiva Group | 3,897 | 5,516 |
| **31 Dec** | **3,897** | **5,516** |

## 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 fulfil 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 are 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 2022 | Posiva Group 2021 |
|---|---|---|
| **Current** | | |
| Cash and cash equivalents | 22,234 | 28,383 |
| Other current assets (excluding cash) | 5,021 | 7,599 |
| Total current assets | 27,255 | 35,982 |
| Financial liabilities (excluding trade payables) | 0 | -334 |
| Other current liabilities (including trade payables) | -21,972 | -24,203 |
| Total current liabilities | -21,972 | -24,537 |
| **Non-current** | | |
| Assets | 4,301 | 117 |
| Financial liabilities | -3,981 | -3,760 |
| Total non-current liabilities | -3,981 | -3,760 |
| **Net assets** | **5,603** | **7,802** |

| Summarised statement of comprehensive income | 2022 | 2021 |
|---|---|---|
| Turnover | 119,024 | 130,124 |
| Depreciation and impairment charges | -18 | -25 |
| Interest income | 14 | 21 |
| Interest expense | -114 | -105 |
| **Pre-tax profit from continuing operations** | **1,005** | **2,176** |
| Income tax expense | -204 | -438 |
| **Post-tax profit from continuing operations** | **801** | **1,738** |

| Reconciliation of summarised financial information | 2022 | 2021 |
|---|---|---|
| **Operating net assets 1 Jan** | **7,802** | **6,064** |
| Profit/loss for the period | 801 | 1,738 |
| Dividend distribution | -3,000 | 0 |
| **Closing net assets** | **5,603** | **7,802** |
| Interest in joint venture | 3,897 | 5,516 |
| **Carrying value** | **3,897** | **5,516** |

## 16 Book values of financial assets and liabilities by categories

| 2022<br>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** | |

| 2021<br>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 | | | 714,027 | 714,027 | 714,027 | 17 |
| Share investments | | 1,935 | | 1,935 | 1,935 | 18 |
| Derivative financial instruments, no hedge accounting | 4,639 | | | 4,639 | 4,639 | 20 |
| Derivative financial instruments, cash flow hedge accounting | | 24,778 | | 24,778 | 24,778 | 20 |
| Derivative financial instruments, fair value hedge accounting | 4,549 | | | 4,549 | 4,549 | 20 |
| **Current assets** | | | | | | |
| Trade and other receivables | | | 261,834 | 261,834 | 261,834 | 17 |
| Derivative financial instruments, no hedge accounting | 4,132 | | | 4,132 | 4,132 | 20 |
| Derivative financial instruments, cash flow hedge accounting | | 2,974 | | 2,974 | 2,974 | 20 |
| Derivative financial instruments, fair value hedge accounting | 703 | | | 703 | 703 | 20 |
| Cash and cash equivalents | | | 172,318 | 172,318 | 172,318 | |
| **Total by category** | **14,023** | **29,687** | **1,148,179** | **1,191,889** | **1,191,889** | |
| **Non-current liabilities** | | | | | | |
| Loan from the Finnish State Nuclear Waste Management Fund | | | 711,266 | 711,266 | 711,266 | 22 |
| Other financial liabilities | | | 3,877,192 | 3,877,192 | 3,953,937 | 22 |
| Derivative financial instruments, no hedge accounting | 3,161 | | | 3,161 | 3,161 | 20 |
| Derivative financial instruments, cash flow hedge accounting | | 7,580 | | 7,580 | 7,580 | 20 |
| **Current liabilities** | | | | | | |
| Current financial liabilities | | | 445,619 | 445,619 | 445,619 | 22 |
| Trade payables | | | 56,672 | 56,672 | 56,672 | 23 |
| Other current liabilities | | | 104,936 | 104,936 | 104,936 | 23 |
| Derivative financial instruments, no hedge accounting | 18 | | | 18 | 18 | 20 |
| Derivative financial instruments, cash flow hedge accounting | | 3,250 | | 3,250 | 3,250 | 20 |
| **Total by category** | **3,179** | **10,829** | **5,195,685** | **5,209,693** | **5,286,439** | |

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

| 2022<br>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** | |

| 2021<br>EUR 1,000 | Level 1 | Level 2 | Level 3 |
|---|---|---|---|
| **Financial assets at fair value** | | | |
| Derivative financial instruments at fair value through profit or loss | | 8,771 | |
| Derivative financial instruments designated as cash flow hedges | | 27,752 | |
| Derivative financial instruments designated as fair value hedges | | 5,252 | |
| Share investments | | | 1,935 |
| **Total** | | **41,775** | **1,935** |
| | | | |
| **Financial liabilities at fair value** | | | |
| Derivative financial instruments at fair value through profit or loss | | 3,179 | |
| Derivative financial instruments designated as cash flow hedges | | 10,829 | |
| **Total** | | **14,008** | |

### FAIR VALUE ESTIMATION

The derivative financial instruments are initially recognised 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 recognised in equity or profit or loss, depending on whether they qualify for cash flow hedges or not.

On 31 December 2022, TVO has unquoted shares worth EUR 1,935 (2021: 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

| 2022<br>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 |

| 2021<br>EUR 1,000 | Gross amounts | Related amounts not set off | Net amount |
|---|---|---|---|
| Derivative financial assets | 41,775 | -9,977 | 31,798 |
| Derivative financial liabilities | -14,008 | 9,977 | -4,031 |

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 | 2022 | 2021 |
|---|---|---|
| Nuclear waste management loan receivables | 651,339 | 711,266 |
| Loan receivables | 2,893 | 2,761 |
| Other receivables | 56,730 | 0 |
| **Total** | **710,962** | **714,027** |

The loan receivables constitute mainly the loan receivables of Posiva Oy EUR 2,389 (2,256) thousand. Other receivables constitute mainly of the OL3 delay project compensation EUR 56,700 (0) 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 margin.

### Nuclear waste management loan receivables are allocated as follows:

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| EPV Energia Oy | 56,467 | 71,296 |
| Fortum Oyj | 228,962 | 289,209 |
| Oy Mankala Ab | 0 | 761 |
| Kemira Oyj | 15,910 | 0 |
| Pohjolan Voima Oyj | 350,000 | 350,000 |
| **Total** | **651,339** | **711,266** |

### Trade and other receivables (current assets)

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Trade receivables | 9,975 | 10,183 |
| Loan receivables | 0 | 212 |
| Prepayments and accrued income | 16,045 | 46,894 |
| Other receivables | 207,058 | 204,545 |
| **Total** | **233,078** | **261,834** |

During the accounting period, TVO has, according to the GSA, recorded receivables for the additional compensation from the Plant Supplier by the end of the accounting period. In connection with the agreement entering into force in July 2021, the Plant Supplier paid EUR 206.9 million of the EUR 400.0 million delay compensation as agreed in the GSA 2018. All payments related to compensation according to the settlement have been recorded in the consolidated balance sheet as property, plant and equipment. At the end of the accounting period the delay compensation from the Plant Supplier were EUR 193.1 million in the current receivables and EUR 56.7 million in the non-current receivables. The prepayments and accrued income included in the year 2021 an estimate of EUR 24.2 million for the surplus of the Finnish State Nuclear Waste Management Fund, which, after the amendment to the Nuclear Energy Act (269/2021), has been used to cover the protected portion in accordance with Section 52 c of the Nuclear Energy Act.

The maximum credit loss risk of trade and other receivables corresponds to their book value. On 31 December 2022, the Group had EUR 167 (814) 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 | 2022 | 2021 |
|---|---|---|
| Accrued interest costs | 20,538 | 20,069 |
| Accrued insurance costs | 2,511 | 2,265 |
| Collateral received | 4,690 | 2,160 |
| Arrangement fee for loans | -17,159 | -16,456 |
| Other prepaid expenses | 5,465 | 38,856 |
| **Total** | **16,045** | **46,894** |

# 18 Investments in shares

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Share investments | 1,935 | 1,935 |
| **Total** | **1,935** | **1,935** |

# 19 Inventories

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Raw uranium and natural uranium | | |
| Replacement cost | 159,407 | 133,705 |
| Book value | 92,740 | 99,268 |
| **Difference** | **66,667** | **34,437** |
| | | |
| Raw uranium and natural uranium | 92,740 | 99,268 |
| Nuclear fuel | 169,684 | 166,681 |
| Materials and supplies | 9,954 | 8,540 |
| **Total** | **272,378** | **274,489** |

# 20 Derivative financial instruments

## Nominal values of the derivative financial instruments

| 2022<br>EUR 1,000 | Maturity structure<br>< 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** |

| 2021<br>EUR 1,000 | Maturity structure<br>< 1 year | 1–3 years | 3–5 years | 5–7 years | > 7 years | Total |
|---|---|---|---|---|---|---|
| Interest rate swaps | 359,117 | 265,000 | 400,000 | 220,000 | 700,000 | 1,944,117 |
| Forward foreign exchange contracts and swaps [1] | 27,594 | 24,598 | 13,958 | 3,447 | | 69,597 |
| Cross-currency swaps | | 153,678 | 224,900 | | | 378,577 |
| **Total** | **386,711** | **443,276** | **638,857** | **223,447** | **700,000** | **2,392,291** |

[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

| 2022<br>EUR 1,000 | Positive | Negative | Total |
|---|---|---|---|
| Interest rate swaps | | | |
| Cash flow hedges | 217,561 | | 217,561 |
| Fair value hedges | | -26,404 | -26,404 |
| Non-hedges | | | |
| 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** |

| 2021<br>EUR 1,000 | Positive | Negative | Total |
|---|---|---|---|
| Interest rate swaps | | | |
| Cash flow hedges | 16,641 | -10,842 | 5,799 |
| Fair value hedges | 5,252 | | 5,252 |
| Non-hedges | | -3,065 | -3,065 |
| Forward foreign exchange contracts and swaps | | | |
| Cash flow hedges | 11,111 | | 11,111 |
| Non-hedges | 1,020 | -95 | 925 |
| Cross-currency swaps | | | |
| Non-hedges | 7,752 | -7 | 7,745 |
| **Total** | **41,775** | **-14,008** | **27,767** |

### THE EFFECT OF HEDGE ACCOUNTING IN FINANCIAL POSITION AND RESULT

## The interest rate hedging in fair value hedge accounting

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| The book value of the derivative financial instruments, receivables | -26,404 | 5,252 |
| Nominal value | 450,000 | 273,000 |
| Due date | 01/2023 - 03/2027 | 12/2022 - 02/2025 |
| The book value of the hedged item, liabilities | 476,585 | 273,000 |
| The degree of hedging | 1:1 | 1:1 |
| The change of the basic value in valid hedging instruments since 1.1. | -31,657 | -5,457 |
| The effectiveness of the hedge used to determine the change of value for the hedged item | 32,002 | 5,621 |
| The weighted average interest rate during the year | 2.91% | 1.51% |

In fair value hedge accounting, the accumulated amount of the fair value adjustment of the loan is EUR 26.6 (5.4) million.

## The interest rate hedging in cash flow hedge accounting

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| The book value of the derivative financial instruments, liabilities | 217,561 | 5,799 |
| Nominal value | 1,735,000 | 1,521,117 |
| Due date | 01/2023 - 09/2032 | 09/2022 - 02/2031 |
| The degree of hedging | 1:1 | 1:1 |
| The change of the basic value in valid hedging instruments since 1.1. | 211,762 | 39,448 |
| The effectiveness of the hedge used to determine the change of value for the hedged item | -211,931 | -39,448 |
| The weighted average interest rate during the year | 3.18% | 1.21% |

## The currency hedging in cash flow hedge accounting

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| The book value of the derivative financial instruments, receivables | 11,503 | 11,111 |
| The book value of the derivative financial instruments, liabilities | -431 | 0 |
| Nominal value | 44,127 | 69,597 |
| Due date | 01/2023 - 01/2028 | 01/2022 - 01/2028 |
| The degree of hedging | 1:1 | 1:1 |
| The change of the spot value in valid hedging instruments since 1.1. | 3,092 | 5,516 |
| The effectiveness of the hedge used to determine the change of value for the hedged item | -3,092 | -5,516 |
| The weighted average of protected rate (inc. forward points) during the year (USD) | 1.40 | 1.39 |
| The weighted average of protected rate (inc. forward points) during the year (SEK) | 10.41 | 10.20 |
| The weighted average of protected rate (inc. forward points) during the year (GBP) | 0.00 | 0.87 |

## 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 2022. TVO does not have a maximum or minimum limit for the share capital. The number of the shares on 31 December 2022 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 2021 | 1,360,000,000 | 600,365 | 242,383 |
| 31 Dec 2022 | 1,360,000,000 | 600,365 | 242,383 |

On 31 December 2022, the company has two registered share series: A and B.

### Share number

| | 31 Dec 2022 | 31 Dec 2021 |
|---|---|---|
| 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 realised.

**SUBORDINATED SHAREHOLDER LOANS (HYBRID EQUITY)**

The carrying value of the interest-bearing subordinated shareholder loans in the balance sheet 31 December 2022 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 | 2022 | 2021 |
|---|---|---|
| Non-current interest-bearing liabilities | | |
| Loan from the Finnish State Nuclear Waste Management Fund | 651,339 | 711,266 |
| Bonds | 3,254,801 | 2,811,264 |
| Loans from financial institutions | 1,212,014 | 962,461 |
| Loans from others | 17,350 | 56,117 |
| Lease liabilities | 47,099 | 47,350 |
| Derivative financial instruments | 40,040 | 10,740 |
| **Total** | **5,222,643** | **4,599,198** |
| | | |
| Current interest-bearing liabilities | | |
| Current portion of long-term bonds | 205,595 | 306,675 |
| Current portion of loans from financial institutions | 50,608 | 44,698 |
| Current portion of loans from others | 0 | 3,386 |
| Current portion of lease liabilities | 2,467 | 2,060 |
| Other interest-bearing liabilities | 0 | 88,800 |
| Derivative financial instruments | 544 | 3,268 |
| **Total** | **259,214** | **448,887** |
| | | |
| **Total** | **5,481,857** | **5,048,085** |

TVO has on 31 December 2022 issued EUR-denominated Private Placement loans amounting to EUR 333.0 million and loans denominated in SEK, amounting to EUR 224.9 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 2022, the effect of foreign exchange hedges was negative amounting to EUR 21.3 million and correspondingly, the effect of foreign currency denominated loans was positive amounting to EUR 21.3 million.

## 23 Trade payables and other current liabilities

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Advances received | 23,064 | 21,218 |
| Trade payables | 16,821 | 56,672 |
| Accruals and deferred income and other liabilities | 137,417 | 104,936 |
| **Total** | **177,302** | **182,826** |

### Accruals and deferred income and other liabilities are allocated as follows:

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Finnish State Nuclear Waste Management Fund | 40,227 | 13,312 |
| Accrued interests | 50,316 | 40,481 |
| Accrued personnel expenses | 22,778 | 23,830 |
| Accruals related to $CO_2$ emission rights | 129 | 159 |
| Others | 23,967 | 27,154 |
| **Total** | **137,417** | **104,936** |

## 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 the 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 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.

The updated cost estimate decreased the book value of property, plant and equipment related to decommissioning by EUR 71.8 million and also decreased the provision related to nuclear waste management by EUR 81.5 million compared with the value at the end of the previous year. The biggest changes due to the updated cost estimate in the income statement of the TVO Group are the increased expenses of EUR 15.7 million in materials and services. The overall effect on profit for the period is negative because the amount of the share in the Finnish State Nuclear Waste Management Fund and the provision related to nuclear waste management are equal and the difference is entered as an adjustment to materials and services, as the Nuclear Waste Management Fund is overfunded from an IFRS perspective. The negative profit impact of the updates and changes was mainly non-recurring.

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

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| The carrying value of TVO's share in the Finnish State Nuclear Waste Management Fund (non-current assets) | 999,662 | 1,010,071 |
| | | |
| Provision related to nuclear waste management (non-current liabilities) | | |
| Beginning of the year | 1,368,291 | 1,029,522 |
| Increase/decrease in provision | -37,388 | 366,354 |
| Used provision | -84,307 | -65,295 |
| Changes due to discounting | 47,749 | 37,710 |
| End of the year | 1,294,345 | 1,368,291 |
| | | |
| 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 | 2022 | 2021 |
|---|---|---|
| Liability for nuclear waste management according to the Nuclear Energy Act | 1,839,600 | 1,816,100 |
| TVO's funding target obligation 2023 (2022) to the Finnish State Nuclear Waste Management Fund | 1,457,900 | 1,436,100 |
| TVO's share in the Finnish State Nuclear Waste Management Fund 31.12.2022 (31.12.2021) | 1,436,100 | 1,450,600 |
| Difference between the liability and TVO's share of the fund 31.12.2022 (31.12.2021) | 403,500 | 365,500 |

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 1,839.6 (1,816.1) million on 31 December 2022 (31 December 2021), of which EUR 1,437.8 (1,426.4) million belongs to OL1/OL2 and EUR 401.8 (389.7) million belongs to OL3. The carrying value of the liability in the balance sheet calculated according to IAS 37 is EUR 1,294.3 (1,368.3) million on 31 December 2022. 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 is 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 1,436.1 (1,450.6) million on 31 December 2022. The carrying value of the TVO's share in the Fund in the balance sheet is EUR 999.7 (1 010.1) 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 2022 the OL1/OL2 plant units' share in the Fund is higher than the provision according to IFRS, due to which the 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 the 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. The surplus will not be refunded from the Nuclear Waste Management Fund to TVO in respect of 2021 after the amendment to the Nuclear Energy Act (269/2021), even though the funding target of TVO is lower in 2022 than the share in the Fund in 2021. The refund for 2021, EUR 14.5 million, was used to cover the protected portion in accordance with the Nuclear Energy Act Section 52 c. In accordance with the implementing provision of the law amendment, the profitable result of the Finnish State Nuclear Waste Management Fund for 2021 was not used to refund TVO's nuclear waste management fee, but it was also used to cover the protected portion. In order to supplement the legal protected portion, TVO provided the Nuclear Waste Management Fund with a separate cash security of EUR 7.4 million in addition to the surplus and profit. In 2022, the Nuclear Waste Management Fund started investment activities in accordance with new legislation. The Nuclear Waste Management Fund made a loss, which raised TVO's nuclear waste management fee for 2022, as well as required the Company to provide additional securities to cover the legal protected portion. The nuclear waste management fee for 2022 will be confirmed in March 2023.

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. The loans are renewed annually. 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 | 2022 | 2021 |
|---|---|---|
| Pledged promissory notes to the Finnish State Nuclear Waste Management Fund | 651,339 | 711,266 |
| Guarantees given by shareholders related to the nuclear waste management obligation | 534,990 | 480,670 |

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 | 2022 | 2021 |
|---|---|---|
| Bank guarantees | 550 | 550 |

### Investment commitments

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

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| OL1 and OL2 | 101,100 | 84,700 |
| OL3 | 354,300 | 401,500 |
| **Total** | **455,400** | **486,200** |

**PENDING COURT CASES AND DISPUTES**

In August 2022, the arbitral tribunal resolved all the claims presented to each other by TVO and Wärtsilä Finland Oy concerning the delivery schedules, additional costs, and delay liquidated damages of the diesel generators at the Olkiluoto nuclear power plant. Therefore, at the end of the accounting period 2022, TVO has no 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.

| | 2022 | | 2021 | |
|---|---|---|---|---|
| | t $CO_2$ | EUR 1,000 | t $CO_2$ | EUR 1,000 |
| Total annual emissions from production facilities | 1,449 | | 2,435 | |
| Possessed emission rights | 1,604 | | 2,740 | |
| Emission rights bought [1] | 1,300 | 110 | 2,500 | 151 |

[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

| 2022<br>EUR 1,000 | Sales | Purchases | Receivables | Liabilities |
|---|---|---|---|---|
| Posiva Group | 11,324 | 82,337 | 6,212 | 3,031 |

| 2021<br>EUR 1,000 | Sales | Purchases | Receivables | Liabilities |
|---|---|---|---|---|
| Posiva Group | 11,835 | 87,865 | 5,144 | 1,018 |

**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

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

| 2021<br>EUR 1,000 | Sales | Purchases | Receivables | Liabilities |
|---|---|---|---|---|
| PVO, Fortum Oyj, Fortum Power and Heat Oy | 245,011 | 27,421 | 649,847 | 824,403 |

### Senior management's employee benefits

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

### The employee benefits of the Executive Management and CEO

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Salary and other short-term employee benefits of the CEO | 352 | 356 |
| Salary and other short-term employee benefits of the Executive Management other than the CEO | 1,670 | 1,673 |
| Statutory pension contributions of the Executive Management other than the CEO | 274 | 261 |
| Supplementary pensions of the Executive Management other than the CEO | 151 | 144 |
| **Total** | **2,447** | **2,434** |

### Compensation to the Board of Directors

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Board of Directors on 31 December 2022 | | |
| Tiina Tuomela | 49 | 48 |
| Ilkka Tykkyläinen | 46 | 51 |
| Hannu Jokinen, from 31 March 2021 | 36 | 29 |
| Esa Kaikkonen | 35 | 39 |
| Tapio Korpeinen | 40 | 42 |
| Petra Lundström, from 31 March 2021 | 31 | 23 |
| Anders Renvall | 31 | 32 |
| Rami Vuola | 36 | 39 |
| Juha-Pekka Weckström | 36 | 38 |
| Former Board members | | |
| Risto Andsten, until 31 March 2021 | 0 | 9 |
| Markus Rauramo, until 31 March 2021 | 0 | 10 |
| **Total** | **340** | **360** |

## 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 short-term purposes with a maximum duration of 12 months.

## Undiscounted cash flows of financial liabilities

| 2022<br>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 |
| Commercial papers | | | | | | |
| Other liabilities | 63,695 | | | | | 63,695 |
| Interest rate derivatives | 29,455 | 32,780 | 26,900 | 26,895 | 68,969 | 184,998 |
| **Total** | **466,454** | **1,232,956** | **1,300,607** | **872,634** | **2,405,168** | **6,277,819** |
| | | | | | | |
| 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.

The cash flows from shareholder loans consist of interest payments, which for 2023 are an estimated EUR 29.2 million.

## Undiscounted cash flows of financial liabilities

| 2021<br>EUR 1,000 | 2022 | 2023 | 2024 | 2025 | 2026– | Total |
|---|---|---|---|---|---|---|
| Loans from financial institutions [1] | 48,258 | 50,608 | 426,104 | 426,104 | 64,026 | 1,015,100 |
| Financing costs [2] | 7,313 | 4,344 | 4,038 | 488 | 775 | 16,958 |
| Loan from the Finnish State Nuclear Waste Management Fund [3] | | | | | 711,266 | 711,266 |
| Financing costs | 3,612 | 3,556 | 3,556 | 3,556 | 3,841 | 18,122 |
| Bonds [4] | 250,561 | 311,777 | 644,900 | 500,000 | 1,413,000 | 3,120,238 |
| Financing costs | 55,975 | 52,545 | 43,046 | 32,223 | 59,198 | 242,987 |
| Loans from others [4] | | 56,117 | | | | 56,117 |
| Financing costs | 577 | | | | | 577 |
| Lease liabilities | 2,060 | 1,948 | 1,848 | 43,552 | 1 | 49,410 |
| Commercial papers | 85,240 | | | | | 85,240 |
| Other liabilities | 107,815 | | | | | 107,815 |
| Interest rate derivatives | 11,211 | 8,234 | 7,618 | 8,089 | 22,536 | 57,687 |
| **Total** | **572,623** | **489,128** | **1,131,111** | **1,014,012** | **2,274,642** | **5,481,516** |
| | | | | | | |
| Forward foreign exchange contracts | 72 | 14 | 2 | 1 | 0 | 89 |

[1] Repayments in 2022 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 a 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 42 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 2022 was 2.09 % (2021: 1.52 %).

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

| 2022<br>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 |

| 2021<br>EUR 1,000 | 2022 | 2023 | 2024 | 2025 | 2026– | Total |
|---|---|---|---|---|---|---|
| Interest rate swaps | | | | | | |
| Cash flows | -9,604 | -6,610 | -6,002 | -5,810 | -22,536 | -50,561 |

## Sensitivity to market risks

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

| EUR 1,000 | 2022<br>Income statement | 2022<br>Equity | 2021<br>Income statement | 2021<br>Equity |
|---|---|---|---|---|
| + 10% change in EUR/USD exchange rates | | -4,217 | | -6,664 |
| + 10% change in EUR/SEK exchange rates | | -196 | | -215 |
| + 10% change in EUR/GBP exchange rates | | 0 | | -81 |
| - 10% change in EUR/USD exchange rates | | 4,217 | | 6,664 |
| - 10% change in EUR/SEK exchange rates | | 196 | | 215 |
| - 10% change in EUR/GBP exchange rates | | 0 | | 81 |
| 1% upward parallel shift in interest rates | -10,993 | 58,179 | -12,144 | 72,288 |
| 1% downward parallel shift in interest rates | 10,993 | -69,796 | 12,144 | -67,934 |

**Assumptions:**

The change in EUR/USD, EUR/SEK and EUR/GBP exchange rates are assumed to be +/- 10 percent.

The currency position includes the forward foreign exchange contracts which are designated as cash flow hedges and recognised 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 a 1 percentage point parallel shift in the interest rate curve. The calculation takes into account the derivatives in the cash flow hedging calculation. The comparison figure for 2021 is presented according to the same calculation method.

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.

## BONDS

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

| EUR 1,000<br>Currency | 2022<br>Nominal amount | 2022<br>Carrying amount | 2021<br>Nominal amount | 2021<br>Carrying amount | Interest rate % | Maturity date |
|---|---|---|---|---|---|---|
| EUR | | | 30,000 | 29,999 | 3.88 | 9.5.2022 |
| EUR | | | 100,000 | 99,989 | Euribor 6M + 1.58 | 12.9.2022 |
| EUR | | | 23,000 | 23,000 | 4.08 | 1.12.2022 |
| EUR | 20,000 | 19,991 | 20,000 | 19,984 | 2.80 | 8.5.2024 |
| EUR | 75,000 | 74,710 | 75,000 | 74,652 | 3.60 | 14.12.2027 |
| EUR | 23,000 | 22,934 | 23,000 | 23,741 | 3.50 | 3.5.2030 |
| EUR | 45,000 | 44,884 | 45,000 | 44,872 | 3.90 | 31.3.2032 |
| EUR | 20,000 | 19,846 | 20,000 | 19,830 | 3.88 | 8.11.2032 |
| EUR | 500,000 | 490,943 | 500,000 | 502,397 | 2.13 | 4.2.2025 |
| EUR | 205,665 | 205,577 | 311,777 | 311,695 | 2.63 | 13.1.2023 |
| EUR | 400,000 | 398,851 | 400,000 | 398,001 | 2.00 | 8.5.2024 |
| EUR | 650,000 | 647,394 | 650,000 | 646,577 | 1.13 | 9.3.2026 |
| EUR | 600,000 | 597,047 | 600,000 | 596,508 | 1.38 | 23.6.2028 |
| EUR | 600,000 | 577,393 | | | 2.63 | 31.3.2027 |
| EUR | 150,000 | 149,636 | | | 4.19 | 13.9.2032 |
| SEK | | | 1,000,000 | 97,555 | Stibor 3M + 1.17 | 15.2.2022 |
| SEK | 500,000 | 44,957 | 500,000 | 48,779 | Stibor 3M + 1.78 | 15.2.2024 |
| SEK | 850,000 | 76,390 | 850,000 | 82,805 | 2.38 | 15.2.2024 |
| SEK | 500,000 | 44,957 | 500,000 | 48,779 | Stibor 3M + 1.42 | 29.10.2024 |
| SEK | 500,000 | 44,957 | 500,000 | 48,779 | 1.56 | 29.10.2024 |
| **Total** | | **3,460,466** | | **3,117,942** | | |

### TVO Group debt structure by maturity

| 31 December 2022<br>EUR 1,000 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031– | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Loans from financial institutions | 50,608 | 426,104 | 626,104 | 126,104 | 26,104 | 11,818 | 17,350 | | | 1,284,192 |
| Bonds | 205,665 | 644,900 | 500,000 | 650,000 | 675,000 | 600,000 | 23,000 | | 215,000 | 3,513,565 |
| Loans from others | | | | | | | | | | |
| Lease liabilities | 2,432 | 2,314 | 44,009 | 406 | 406 | | | | | 49,566 |
| Commercial papers | | | | | | | | | | |
| **Total** | **258,705** | **1,073,318** | **1,170,113** | **776,510** | **701,510** | **611,818** | **40,350** | | **215,000** | **4,847,323** |

### TVO Group credit commitment by maturity

| 31 December 2022<br>EUR 1,000 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031– | 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 2022, the Group had undrawn credit facilities amounting to EUR 1,000 million (2021: EUR 1,000 million). In addition, the Group had subordinated shareholder loan (hybrid equity) commitments totalling EUR 400 million (2021: EUR 400 million) and cash and cash equivalents amounting to EUR 353 million (2021: EUR 172 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 further loaned with 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 and 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 | 2022 | 2021 |
|---|---|---|
| Equity ratio, % (IFRS, Group) [1] | 30.7 | 31.3 |
| Equity ratio, % (Parent company) [2] | 28.4 | 30.8 |

[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 | 2022 | 2021 |
|---|---|---|
| Cash and cash equivalents | 353,203 | 172,318 |
| Liabilities | 5,391,707 | 4,984,667 |
| Leases | 49,566 | 49,410 |
| **Net debt** | **5,088,070** | **4,861,759** |

| | Liabilities from financing activities | | | Other assets | |
|---|---|---|---|---|---|
| EUR 1,000 | Liabilities | Leases | Sub-total | Cash and cash equivalents | Total |
| **Net debt 1 Jan 2021** | **-4,904,449** | **-51,477** | **-4,955,926** | **161,363** | **-4,794,563** |
| Cash flows | -91,537 | 2,117 | -89,420 | 10,955 | -78,465 |
| Acquisitions - leases | 0 | -251 | -251 | 0 | -251 |
| Other non-cash flow expenses | 11,319 | 201 | 11,520 | 0 | 11,520 |
| **Net debt 31 Dec 2021** | **-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 | 0 | -2,565 | -2,565 | 0 | -2,565 |
| Other non-cash flow expenses | 54,095 | 0 | 54,095 | 0 | 54,095 |
| **Net debt 31 Dec 2022** | **-5,391,707** | **-49,566** | **-5,441,273** | **353,203** | **-5,088,070** |

The loan from the Finnish State Nuclear Waste Management Fund has been added in the table. The figures of the year of comparison 2021 have also been changed to be similar to the new presentation model.

[1] Other changes include non-cash movements, including fair value changes of derivative financial instruments and the 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

After tests at full reactor capacity, the OL3 plant unit's production was interrupted according to plan in January 2023 in order to replace the impellers of the feedwater pumps. Thereafter, before the start of regular electricity production, an approximately month-long production phase will still follow in the test production, where OL3 will produce electricity at mostly full power 24/7. Regular electricity production starts in March 2023.

# Teollisuuden Voima Oyj

## Income statement

| EUR 1,000 | Note | 1 Jan-31 Dec 2022 | 1 Jan-31 Dec 2021 |
|---|---|---|---|
| **Turnover** | 2 | **353,479** | **293,781** |
| Work performed for own purpose | 3 | 21,310 | 25,036 |
| Other income | 4 | 17,047 | 16,434 |
| Materials and services | 5 | -183,929 | -115,198 |
| Personnel expenses | 6 | -80,139 | -81,961 |
| Depreciation and impairment charges | 7 | -40,690 | -37,650 |
| Other expenses | 8 | -101,203 | -104,509 |
| **Operating profit/loss** | | **-14,125** | **-4,067** |
| | | | |
| Financial income and expenses | 9 | 3,823 | -8 |
| | | | |
| **Profit/loss before appropriations and taxes** | | **-10,302** | **-4,075** |
| Appropriations | 10 | 12,511 | 4,075 |
| **Profit/loss for the financial year** | | **2,209** | **0** |

## Balance sheet

| EUR 1,000 | Note | 31 Dec 2022 | | 31 Dec 2021 | |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| **Non-current assets** | | | | | |
| Intangible assets | 11 | | 2,476 | | 2,543 |
| Tangible assets | 11 | | 6,007,324 | | 5,709,057 |
| Investments | | | | | |
| Holdings in group companies | 12 | 8 | | 8 | |
| Holdings in joint ventures | 12 | 1,011 | | 1,011 | |
| Other shares | 12 | 4,219 | | 4,219 | |
| Other receivables | 12 | 710,964 | 716,202 | 714,028 | 719,266 |
| **Total non-current assets** | | | **6,726,002** | | **6,430,866** |
| | | | | | |
| **Current assets** | | | | | |
| Inventories | 13 | | 272,283 | | 274,421 |
| Current receivables | 14 | | 250,876 | | 278,208 |
| Cash and cash equivalents | | | 352,359 | | 172,134 |
| **Total current assets** | | | **875,518** | | **724,763** |
| | | | | | |
| **Total assets** | | | **7,601,520** | | **7,155,629** |

| EUR 1,000 | Note | 31 Dec 2022 | 31 Dec 2021 |
|---|---|---|---|
| **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 | 18,730 | 18,730 |
| Profit (loss) for the financial year | 15,16 | 2,209 | 0 |
| **Total equity** | | **863,687** | **861,478** |
| | | | |
| **Appropriations** | | **181,207** | **193,326** |
| | | | |
| **Liabilities** | | | |
| Non-current liabilities | 17,18 | 4,541,483 | 3,836,518 |
| Shareholders' loans | 17 | 929,300 | 929,300 |
| Loan from the Finnish State Nuclear Waste Management Fund | 17 | 651,339 | 711,266 |
| Current liabilities | 19 | 434,504 | 623,741 |
| **Total liabilities** | | **6,556,626** | **6,100,825** |
| | | | |
| **Total equity and liabilities** | | **7,601,520** | **7,155,629** |

## Cash flow statement

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| **Operating activities** | | |
| Operating profit/loss | -14,125 | -4,067 |
| Adjustments to operating profit /loss [1)] | 40,690 | 37,650 |
| Changes in working capital [2)] | 61,608 | -4,257 |
| Interest paid and other financial expenses | -4,337 | -4,114 |
| Dividend received | 2,209 | 0 |
| Interest received | 6,277 | 3,977 |
| **Cash flow from operating activities** | **92,322** | **29,189** |
| | | |
| **Investing activities** | | |
| Acquisition of shares | 0 | -1 |
| Acquisition of non-current assets | -433,656 | -322,051 |
| OL3 project compensation | 0 | 206,875 |
| Loan receivables granted | -15,831 | -105 |
| Repayments of loans granted | 75,837 | 5,392 |
| **Cash flow from investing activities** | **-373,650** | **-109,889** |
| | | |
| **Financing activities** | | |
| Withdrawals of long-term loans | 1,050,000 | 800,000 |
| Repayment of long-term loans | -517,415 | -571,683 |
| Increase (+) or decrease (-) in short-term interest-bearing liabilities | 62,740 | 61,630 |
| Repayment of short-term interest-bearing liabilities | -134,190 | -198,410 |
| Group contribution received | 418 | 343 |
| **Cash flow from financing activities** | **461,553** | **91,880** |

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| **Change in cash and cash equivalents** | **180,225** | **11,180** |
| Cash and cash equivalents 1 Jan | 172,134 | 160,954 |
| **Cash and cash equivalents 31 Dec** | **352,359** | **172,134** |
| | | |
| [1)] Adjustments to operating profit/loss | | |
| Depreciation and write-downs | 40,690 | 37,650 |
| **Total** | **40,690** | **37,650** |
| | | |
| [2)] Changes in working capital | | |
| Increase (-) or decrease (+) in inventories | 2,137 | -376 |
| Increase (-) or decrease (+) in non-interest-bearing receivables | 27,535 | -17,617 |
| Increase (+) or decrease (-) in short-term non-interest-bearing liabilities | 31,936 | 13,736 |
| **Total** | **61,608** | **-4,257** |

# 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, accumulated depreciation and impairment charges, and compensation, if any. Depreciation according to plan is calculated on a straight-line basis according to the estimated useful economic lives.

The depreciation periods are as follows:

» OL1 and OL2 nuclear power plant units:
- Basic investment 61 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 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.

**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 activities 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 an accrual basis and shown in net amount under financial income and expenses.

Payments of foreign currency denominated inventory acquisitions have been hedged with currency derivatives. 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 the 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 | 2022 | 2021 |
|---|---|---|
| Olkiluoto 1 and Olkiluoto 2 | 346,820 | 293,781 |
| Olkiluoto 3 | 6,659 | 0 |
| **Total** | **353,479** | **293,781** |
| | | |
| **Electricity delivered to equity holders of the company (GWh)** | | |
| Olkiluoto 1 | 6,918 | 7,393 |
| Olkiluoto 2 | 7,522 | 7,021 |
| Olkiluoto 3 | 1,876 | 0 |
| **Total** | **16,316** | **14,414** |

## 3 Work performed for own purpose

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Personnel expenses related to OL3 | 21,310 | 25,036 |

## 4 Other income

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Rental income | 1,144 | 1,101 |
| Sales of services | 14,543 | 14,132 |
| Other income | 1,360 | 1,201 |
| **Total** | **17,047** | **16,434** |

## 5 Materials and services

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Purchases, accrual basis | | |
| Nuclear fuel | 60,845 | 61,757 |
| Materials and supplies | 6,084 | 5,011 |
| Increase (-) or decrease (+) in inventories | 6,948 | -964 |
| **Total** | **73,877** | **65,804** |
| | | |
| $CO_2$ emission rights | 110 | 151 |
| | | |
| Nuclear waste management | | |
| Contribution to the Finnish State Nuclear Waste Management Fund [1] | 40,849 | -24,648 |
| Nuclear waste management services | 59,554 | 65,295 |
| **Total** | **100,403** | **40,647** |
| | | |
| External services | 9,539 | 8,596 |
| **Total** | **183,929** | **115,198** |
| | | |
| Consumption | | |
| Nuclear fuel | 69,672 | 61,387 |
| Materials and supplies | 4,205 | 4,417 |
| **Total** | **73,877** | **65,804** |

[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

| | 2022 | 2021 |
|---|---|---|
| Office personnel | 834 | 809 |
| Manual workers | 195 | 193 |
| **Total** | **1,029** | **1,002** |

### Number of employees 31 Dec

| | 2022 | 2021 |
|---|---|---|
| Office personnel | 816 | 791 |
| Manual workers | 189 | 191 |
| **Total** | **1,005** | **982** |

### Personnel expenses

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Wages and salaries | 67,247 | 68,898 |
| Pension expenses | 10,645 | 10,592 |
| Other compulsory personnel expenses | 2,247 | 2,471 |
| **Total** | **80,139** | **81,961** |

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 | 2022 | 2021 |
|---|---|---|
| Depreciation according to plan | | |
| Other capitalised long-term expenses | 410 | 408 |
| Buildings and construction | 4,493 | 3,577 |
| Machinery and equipment | 35,377 | 33,013 |
| Other tangible assets | 410 | 652 |
| **Total** | **40,690** | **37,650** |

## 8 Other expenses

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Maintenance services | 21,365 | 24,297 |
| Regional maintenance and services | 9,651 | 10,428 |
| Research services | 2,338 | 2,416 |
| Other external services | 26,283 | 30,638 |
| Real estate tax | 6,489 | 6,034 |
| Rents | 2,043 | 1,948 |
| ICT expenses | 6,206 | 6,078 |
| Personnel related expenses | 4,216 | 4,001 |
| Corporate communication expenses | 862 | 836 |
| Other expenses | 21,750 | 17,833 |
| **Total** | **101,203** | **104,509** |

## Auditors' fees and non audit-related services

| PricewaterhouseCoopers Oy (EUR 1,000) | 2022 | 2021 |
|---|---|---|
| Auditing | 231 | 260 |
| Tax services | 13 | 28 |
| Other services | 65 | 70 |
| **Total** | **309** | **358** |

## 9 Financial income and expenses

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| **Dividend Income** | | |
| From joint ventures | 2 209 | 0 |
| **Total** | **2 209** | **0** |
| | | |
| **Interest income on long-term investments** | | |
| From joint ventures | 13 | 11 |
| From others | 3,377 | 3,612 |
| **Total** | **3,390** | **3,623** |
| | | |
| **Other interest and financial income** | | |
| From others | 2,652 | 483 |
| **Total** | **2,652** | **483** |
| | | |
| **Interest income on long-term investments and other interest and financial income, total** | **8,251** | **4,106** |
| | | |
| **Interest expenses and other financial expenses** | | |
| To the Finnish State Nuclear Waste Management Fund | 3,377 | 3,612 |
| To others | 103,628 | 96,321 |
| Capitalised interest costs | -102,577 | -95,819 |
| **Total** | **4,428** | **4,114** |
| | | |
| **Total financial income (+) and expenses (-)** | **3,823** | **-8** |
| | | |
| Financial income and expenses include exchange rate gains (+) and losses (-) (net) | 505 | 439 |

## 10 Appropriations

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Group contribution | 393 | 503 |
| The difference between depreciation according to plan and tax depreciation, increase (-) or decrease (+) | 12,118 | 3,572 |
| **Total** | **12,511** | **4,075** |

## 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 2022 | 54,011 | 159 | 26,635 | 276 | 81,081 |
| Increase | 0 | 110 | 296 | 76 | 482 |
| Decrease | 0 | -140 | -275 | 0 | -415 |
| Transfer between categories | 0 | 0 | 0 | 0 | 0 |
| Acquisition cost 31 Dec 2022 | 54,011 | 129 | 26,656 | 352 | 81,148 |
| Accumulated depreciation according to plan 1 Jan | 54,011 | 0 | 24,526 | 0 | 78,537 |
| Accumulated depreciation from deduction | 0 | 0 | -275 | 0 | -275 |
| Depreciation according to plan | 0 | 0 | 410 | 0 | 410 |
| **Book value 31 Dec 2022** | **0** | **129** | **1,995** | **352** | **2,476** |
| Accumulated depreciation difference 1 Jan | 0 | 0 | 1,432 | 0 | 1,432 |
| Change in depreciation difference | 0 | 0 | -134 | 0 | -134 |
| Accumulated depreciation difference 31 Dec | 0 | 0 | 1,298 | 0 | 1,298 |
| Undepreciated acquisition cost in taxation 31 Dec 2022 | 0 | 129 | 697 | 352 | 1,178 |

| 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 2022 | 12,054 | 291,337 | 1,368,065 | 53,656 | 5,214,339 | 6,939,451 |
| Increase | 21 | 1,498 | 19,021 | 880 | 317,126 | 338,546 |
| Decrease | 0 | -1,623 | -8,344 | -12 | 0 | -9,979 |
| Transfer between categories | 0 | 4,443 | 34,181 | 0 | -38,624 | 0 |
| Acquisition cost 31 Dec 2022 | 12,075 | 295,655 | 1,412,923 | 54,524 | 5,492,841 | 7,268,018 |
| Accumulated depreciation according to plan 1 Jan | 0 | 229,311 | 952,366 | 48,716 | 0 | 1,230,393 |
| Accumulated depreciation from deduction | 0 | -1,623 | -8,344 | -12 | 0 | -9,979 |
| Depreciation according to plan | 0 | 4,493 | 35,377 | 410 | 0 | 40,280 |
| **Book value 31 Dec 2022** | **12,075** | **63,474** | **433,524** | **5,410** | **5,492,841** | **6,007,324** |
| Accumulated depreciation difference 1 Jan | 0 | -1,752 | 191,336 | 2,310 | 0 | 191,894 |
| Change in depreciation difference | 0 | 1,961 | -13,875 | -70 | 0 | -11,984 |
| Accumulated depreciation difference 31 Dec | 0 | 208 | 177,461 | 2,240 | 0 | 179,909 |
| Undepreciated acquisition cost in taxation 31 Dec 2022 | 12,075 | 63,265 | 256,063 | 3,170 | 5,492,841 | 5,827,414 |
| | | | | | | |
| Share of machinery and equipment from book value 31 Dec 2022 | | | 413,503 | | | |
| Share of machinery and equipment from book value 31 Dec 2021 | | | 398,574 | | | |

## 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 2022 | 11,046 | 1,167 | 27,122 | 95,394 | 2,402 | 1,689,021 | 1,826,152 |
| Increase | 0 | 0 | 0 | 0 | 0 | 102,489 | 102,489 |
| Acquisition cost 31 Dec 2022 | 11,046 | 1,167 | 27,122 | 95,394 | 2,402 | 1,791,510 | 1,928,641 |
| Accumulated depreciation according to plan 1 Jan | 11,046 | 936 | 21,735 | 76,446 | 1,925 | 0 | 112,088 |
| Depreciation according to plan | 0 | 12 | 284 | 997 | 25 | 0 | 1,318 |
| **Book value 31 Dec 2022** | **0** | **219** | **5,103** | **17,951** | **452** | **1,791,510** | **1,815,235** |
| Accumulated depreciation difference 1 Jan | 0 | 231 | 5,387 | 18,948 | 477 | 0 | 25,043 |
| Change in depreciation difference | 0 | -12 | -284 | -997 | -25 | 0 | -1,318 |
| Accumulated depreciation difference 31 Dec | 0 | 219 | 5,103 | 17,951 | 452 | 0 | 23,725 |
| Undepreciated acquisition cost in taxation 31 Dec 2022 | 0 | 0 | 0 | 0 | 0 | 1,791,510 | 1,791,510 |

## 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 2022 | 8 | 1,011 | 4,219 | 2,257 | 711,771 | 0 | 719,266 |
| Increase | 0 | 0 | 0 | 133 | 15,910 | 56,730 | 72,773 |
| Decrease | 0 | 0 | 0 | 0 | -75,837 | 0 | -75,837 |
| Acquisition cost 31 Dec 2022 | 8 | 1,011 | 4,219 | 2,390 | 651,844 | 56,730 | 716,202 |
| **Book value 31 Dec 2022** | **8** | **1,011** | **4,219** | **2,390** | **651,844** | **56,730** | **716,202** |
| | | | | | | | |
| **Loan from the Finnish State Nuclear Waste Management Fund lent further to the equity holders of the company** | | | | | **651,339** | | **651,339** |

| 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 | 2022 | 2021 |
|---|---|---|
| **Raw uranium and natural uranium** | | |
| Replacement cost | 159,407 | 133,705 |
| Book value | 92,740 | 99,268 |
| **Difference** | **66,667** | **34,437** |
| | | |
| Raw uranium and natural uranium | 92,740 | 99,268 |
| Nuclear fuel | 169,684 | 166,681 |
| Supplies | 9,859 | 8,472 |
| **Total** | **272,283** | **274,421** |

## 14 Current receivables

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| **Receivables from group companies** | | |
| Accrued income | 1,487 | 1,245 |
| **Total** | **1,487** | **1,245** |
| | | |
| **Receivables from joint ventures** | | |
| Interest receivables | 2 | 0 |
| Loan receivables | 0 | 212 |
| Prepayments and accrued income | 3,816 | 2,669 |
| **Total** | **3,818** | **2,881** |
| | | |
| **Receivables from others** | | |
| Trade receivables | 9,780 | 9,301 |
| Other receivables [1] | 207,059 | 204,545 |
| **Total** | **216,839** | **213,846** |
| | | |
| **Prepayments and accrued income [1]** | | |
| Accrued interest costs | 20,535 | 20,069 |
| Accrued insurance costs | 2,511 | 2,265 |
| Collateral received | 4,690 | 2,160 |
| Other prepaid expenses | 996 | 35,742 |
| **Total** | **28,732** | **60,236** |
| | | |
| **Total** | **250,876** | **278,208** |

[1] The presentation has been corrected compared to the 2021 financial statements.
EUR 193.1 million have been transferred to the other receivables from prepayments and accrued income.

## 15 Equity

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| 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 | 18,730 | 14,460 |
| Change | 0 | 4,270 |
| Retained earnings/loss 31 Dec | 18,730 | 18,730 |
| | | |
| Profit/loss for the financial year | 2,209 | 0 |
| | | |
| **Total** | **863,687** | **861,478** |

## 16 Distributable equity

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Retained earnings | 18,730 | 18,730 |
| Profit/loss for the financial year | 2,209 | 0 |
| Total | 20,939 | 18,730 |

## 17 Non-current liabilities

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Bonds | 3,307,900 | 2,813,560 |
| Loans from financial institutions | 1,216,233 | 966,841 |
| Other loans | 17,350 | 56,117 |
| | 4,541,483 | 3,836,518 |
| Shareholders' loans [1] | 929,300 | 929,300 |
| Loan from the Finnish State Nuclear Waste Management Fund [2] | 651,339 | 711,266 |
| **Total** | **6,122,122** | **5,477,084** |

[1] Subordinated loans

[2] Lent further to the shareholders.

### BONDS

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

| Currency | Capital 2022 | EUR 1,000 2022 | Capital 2021 | EUR 1,000 2021 | Maturity date |
|---|---|---|---|---|---|
| EUR | | | 30,000 | 30,000 | 9.5.2022 [1] |
| EUR | | | 100,000 | 100,000 | 12.9.2022 [1] |
| EUR | | | 23,000 | 23,000 | 1.12.2022 [1] |
| EUR | 75,000 | 75,000 | 75,000 | 75,000 | 14.12.2027 |
| EUR | 20,000 | 20,000 | 20,000 | 20,000 | 8.11.2032 |
| EUR | 23,000 | 23,000 | 23,000 | 23,000 | 3.5.2030 |
| EUR | 20,000 | 20,000 | 20,000 | 20,000 | 8.5.2024 |
| EUR | 45,000 | 45,000 | 45,000 | 45,000 | 31.3.2032 |
| EUR | 500,000 | 500,000 | 500,000 | 500,000 | 4.2.2025 |
| EUR | 205,665 | 205,665 | 311,777 | 311,777 | 13.1.2023 [1] |
| EUR | 400,000 | 400,000 | 400,000 | 400,000 | 8.5.2024 |
| EUR | 650,000 | 650,000 | 650,000 | 650,000 | 9.3.2026 |
| EUR | 600,000 | 600,000 | 600,000 | 600,000 | 23.6.2028 |
| EUR | 600,000 | 600,000 | | | 31.3.2027 |
| EUR | 150,000 | 150,000 | | | 13.9.2032 |
| SEK | | | 1,000,000 | 97,561 | 15.2.2022 [1] |
| SEK | 500,000 | 48,781 | 500,000 | 48,781 | 15.2.2024 |
| SEK | 850,000 | 82,927 | 850,000 | 82,927 | 15.2.2024 |
| SEK | 500,000 | 46,624 | 500,000 | 46,623 | 29.10.2024 |
| SEK | 500,000 | 46,568 | 500,000 | 46,568 | 29.10.2024 |
| **Total** | | **3,513,565** | | **3,120,237** | |
| Current portion of long-term bonds [1] | | 205,665 | | 306,678 | |
| **Total** | | **3,307,900** | | **2,813,559** | |

## OTHER LOANS

### US Private Placements

| Currency | Capital 2022 | EUR 1,000 2022 | Capital 2021 | EUR 1,000 2021 | Maturity date |
|---|---|---|---|---|---|
| GBP | 0 | 0 | 0 | 0 | |
| **Total** | **0** | **0** | **0** | **0** | |
| Current portion of other loans [1] | 0 | 0 | 0 | 56,117 | 15.11.2022 [1] |
| Total | 0 | 0 | 0 | 56,117 | |
| Collateral received | 17,350 | 17,350 | 0 | 0 | 30.11.2030 |
| **Total** | **17,350** | **17,350** | **0** | **56,117** | |

## 18 Debts due in more than five years

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Debts due in more than 5 years | 1,217,168 | 1,250,922 |

## 19 Current liabilities

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| **Liabilities from group companies** | | |
| Accruals | 1 | 1 |
| **Total** | **1** | **1** |
| | | |
| **Liabilities from joint ventures** | | |
| Accruals | 3,031 | 1,018 |
| **Total** | **3,031** | **1,018** |
| | | |
| **Liabilities from others** | | |
| Advances received | 23,064 | 21,218 |
| Trade payables | 17,819 | 56,671 |
| **Total** | **40,883** | **77,889** |
| | | |
| **Interest-bearing liabilities** | | |
| Bonds | 205,665 | 306,678 |
| Loans from financial institutions | 50,608 | 48,258 |
| Commercial paper program | 0 | 85,240 |
| **Total** | **256,273** | **440,176** |
| | | |
| **Accruals and deferred income** | | |
| Finnish State Nuclear Waste Management Fund | 40,227 | 13,312 |
| Accrued interests | 50,316 | 40,481 |
| Accrued personnel expenses | 22,742 | 23,792 |
| Accruals related to $CO_2$ emission rights | 129 | 159 |
| Other accruals and deferred income | 20,902 | 26,913 |
| **Total** | **134,316** | **104,657** |
| | | |
| **Total** | **434,504** | **623,741** |

## 20 Commitments

### Leasing liabilities

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Leasing liabilities falling due in less than a year | 2,814 | 2,466 |
| Leasing liabilities falling due later | 47,462 | 47,557 |
| **Total** | **50,276** | **50,023** |

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 | 2022 | 2021 |
|---|---|---|
| Bank guarantees | 550 | 550 |

### Nuclear waste management

| EUR 1,000 | 2022 | 2021 |
|---|---|---|
| Liability for nuclear waste management according to the Nuclear Energy Act [1] | 1,839,600 | 1,816,100 |
| TVO's funding target obligation 2023 (2022) to the Finnish State Nuclear Waste Management Fund | 1,457,900 | 1,436,100 |
| Collateral for nuclear waste management contingencies | 534,990 | 480,670 |
| Nuclear waste management loan receivables pledged to the Finnish State Nuclear Waste Management Fund | 651,339 | 711,266 |

[1] Based on the nuclear waste management programme and the proposal for the liability made by the Company, 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 | 2022 | 2021 |
|---|---|---|
| **Interest rate derivatives** | | |
| Interest rate swaps (nominal value) | 2,185,000 | 1,944,117 |
| Fair value | 191,156 | 7,987 |
| | | |
| **Forward foreign exchange contracts** | | |
| Forward foreign exchange contracts (nominal value) | 44,127 | 69,597 |
| Fair value | 11,482 | 12,035 |
| | | |
| **Cross-currency swaps** | | |
| Cross-currency swaps (nominal value) | 224,873 | 378,577 |
| Fair value | 13,576 | 7,745 |

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 2022 | Number 2021 | EUR 1,000 2022 | EUR 1,000 2021 |
|---|---|---|---|---|
| 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 the Company possesses, the Company has booked the expense for exceeding emission rights at the market value on December 31.

| | 2022 | | 2021 | |
|---|---|---|---|---|
| | t $CO_2$ | EUR 1,000 | t $CO_2$ | EUR 1,000 |
| Total annual emissions from production facilities | 1,449 | | 2,435 | |
| Possessed emission rights | 1,604 | | 2,740 | |
| Emission rights bought [1)] | 1,300 | 110 | 2,500 | 151 |

[1)] The purchases of the emission rights are included in materials and services. The emission rights that the 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 2022 amounted to EUR 20,938,560.00, of which the profit/loss for the accounting period was EUR 2,208,600.00. The Board of Directors proposes to the Annual General Meeting that the profit/loss for the accounting period is transferred to the profit/loss account of previous accounting periods and that no dividend shall be paid.

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

Helsinki, February 15, 2023

**Tiina Tuomela**

**Ilkka Tykkyläinen**

**Hannu Jokinen**

**Esa Kaikkonen**

**Tapio Korpeinen**

**Petra Lundström**

**Seppo Parvi**

**Timo Rajala**

**Anders Renvall**

**Rami Vuola**

**Jarmo Tanhua**
CEO

## The auditor's note

Our auditor's report has been issued today.

Helsinki, February 15, 2023

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 International Financial Reporting Standards (IFRS) 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 2022. 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, including a summary of significant accounting policies
- the parent company’s balance sheet, income statement, statement of cash flows 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.

- Olkiluoto 3 EPR plant unit in the test production phase
- 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 (2021: € 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 |
| --- | --- |
| **OLKILUOTO 3 EPR PLANT UNIT IN THE TEST PRODUCTION PHASE**<br><br>*Accounting policies and notes 1, 13 and 14 in the consolidated financial statements. Note 11 in the financial statements of the parent company.*<br><br>Olkiluoto 3 EPR is a plant unit in the test production phase (OL3 project), which has been ordered under a turnkey contract. Delivery of the plant has been significantly delayed from the original schedule. The test production phase continued and electricity production started in 2022, but the plant investment is still incomplete.<br><br>During the OL3 project, € 5,4 billion have been capitalised on Property, plant and equipment under Construction in progress and Advance payments of the consolidated and the parent company's balance sheet.<br><br>According to the Articles of Association, each shareholder of the series of shares bears their share of the variable and fixed annual costs as specified in detail in the Articles of Association.<br><br>Our audit of the consolidated financial statements and the financial statements of the parent company focused especially on this item due to the significant carrying amounts on the balance sheet and as the delivery of the plant has been considerably delayed from the original schedule. In addition, a significant amount of borrowing costs has been capitalised on this item. | 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.<br><br>We tested purchase invoices and company's own expenses relating to the OL3 project to ascertain the costs capitalised on the incomplete plant investment meet the recognition criteria.<br><br>During our audit we reviewed that the borrowing costs capitalised on the OL3 project were capitalised in accordance with the accounting principles applied, and the capitalisation was performed consistently under the same principles as in previous financial statements.<br><br>In our audit of the amount capitalised on the balance sheet, we considered the provisions regarding shareholder responsibilities incorporated in the Articles of Association.<br><br>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.*<br><br>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.<br><br>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.<br><br>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.<br><br>We reviewed the cash flow forecasts and related documentation, and interviewed the preparers of the calculations to assess the basis for the estimates and assumptions used, and whether the cash flow forecasts are prepared consistently based on the best available information at the time.<br><br>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.<br><br>We assessed whether the discount rate and inflation rate used in the calculations are appropriately determined.<br><br>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 International Financial Reporting Standards (IFRS) 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 and the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors and Annual Report prior to the date of this auditor's report.

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 identified above 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 on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this 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 15 February 2023

**PricewaterhouseCoopers Oy**
Authorised Public Accountants

**Niina Vilske**
Authorised Public Accountant (KHT)

# Financial information in 2023

## In 2023, Teollisuuden Voima Oyj will publish the interim reports as follows:

**INTERIM REPORT FOR JANUARY-MARCH 2023**
on April 20, 2023

**INTERIM REPORT FOR JANUARY-JUNE 2023**
on July 17, 2023

**INTERIM REPORT FOR JANUARY-SEPTEMBER 2023**
on October 20, 2023

# 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 |