

INTERIM REPORT Q2

2022

tvo

Teollisuuden Voima Oyj's Interim Report 1 January–30 June 2022

During the first half of 2022, Teollisuuden Voima's (TVO) electricity generation at the Olkiluoto 1 (OL1) and Olkiluoto 2 (OL2) plant units continued safely and reliably.

The annual outages at the OL1 and OL2 plant units started on 24 April and ended on 10 June 2022. A maintenance outage was carried out at the OL1 plant unit, and the OL2 plant unit underwent a refuelling outage.

The electricity production of the Olkiluoto 3 EPR plant unit (OL3) started on Saturday, 12 March 2022. According to information received from the Plant Supplier in June 2022, OL3's regular electricity production starts in December 2022 instead of the previously announced start in September. OL3 significantly improves Finland's electricity self-sufficiency and helps in achieving carbon neutrality goals.

The construction work at Posiva's encapsulation plant and final disposal facility has proceeded as planned.

The TVO Group took extensive measures to prevent the spread of coronavirus (COVID-19) infections. Despite of COVID-19 restrictions, work has been able to continue under special arrangements. Restrictions related to COVID-19 have mainly been lifted in the TVO Group.

Operating Environment

On 9 March 2022, the European Commission officially proposed the inclusion of nuclear energy in the EU Taxonomy. The European Parliament voted on the proposal in its plenary session in July (see chapter: *Events after the Period under Review*). The application of criteria will begin as of 1 January 2023.

The Commission's proposal on the inclusion of nuclear power in the Taxonomy is welcome. However, the lack of clarity in the taxonomy criteria makes the evaluation of the taxonomy eligibility of TVO's business activities challenging. Therefore, clarifying instructions are awaited from the Commission once the criteria have entered into effect.

The work on the Commission's Fit for 55 package, unveiled in July 2021, continues. The package contains the measures necessary for achieving the 55 percent greenhouse gas emissions reduction target for 2030. The package contains a revision of the EU Emissions Trading System and measures to kickstart the European hydrogen economy. These initiatives include the gas market package expected to cover nuclear-based hydrogen production. The Parliament and Member States are currently finalising their positions on the proposals contained in the package.

The TVO Group closely follows the situation in Ukraine and its impact on the Group's operations. The TVO Group condemns actions in violation of international agreements as well as Russia's attack on Ukraine. During the period under review, 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.

According to a survey published by Finnish Energy in May 2022, the support for nuclear power in Finland is at an all-time high. 60 percent of survey respondents have a positive attitude towards nuclear power, while 11 percent take a negative stance. The survey material was collected in April 2022. Support for nuclear power in Finland has been measured continually since 1983.

Financial Performance

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 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, regardless of whether they have used their share of the output or not. Because of this operating principle, key indicators based on financial performance will not be presented.

The consolidated turnover for the period under review 1 January–30 June 2022 was EUR 163.6 (1 January–30 June 2021: EUR 152.3) million.

The amount of electricity delivered to shareholders was 7,310.6 (6,589.0) GWh. The higher delivery volume of electricity compared to the previous year is due to shorter annual outages and the start of OL3's electricity production.

The consolidated profit/loss was EUR -58.2 (-18.6) 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 period under review (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 period in review, excluding the loan from the Finnish State Nuclear Waste Management Fund relent to shareholders, amounted to EUR 5,467.0 (31 December 2021: 5,206.0) million, of which EUR 929.3 (929.3) million were subordinated shareholder loans. TVO raised a total of EUR 600.0 (30 June 2021: 600.0) million in non-current liabilities and repaid non-current liabilities in the amount of EUR 263.2 (376.3) million.

TVO signed a new three-year revolving credit facility of EUR 1,000 million on 15 June 2022. 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.

TVO issued in March 2022 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.

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

TVO uses its right to borrow funds back from the Finnish State Nuclear Waste Management Fund within the framework of legal regulations. On 30 June 2022, the amount of the loan was EUR 651.3 (31 December 2021: 711.3) million and it has been relent to TVO's 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 5.1) 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.

Electricity Production

The electricity production of the Olkiluoto nuclear power plant units, OL1, OL2, and OL3, during the period under review was 7,335 (6,604) GWh. The total load factor of OL1 and OL2 was 88.5 (85.6) percent.

During the period under review, OL1 and OL2 operated safely and reliably. 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 3,175 (3,475) GWh and the load factor 82.3 (90.1) percent. OL2's net production was 3,651 (3,129) GWh and the load factor 94.6 (81.1) percent. OL3's net production was 509 GWh and the load factor 12.6 percent.

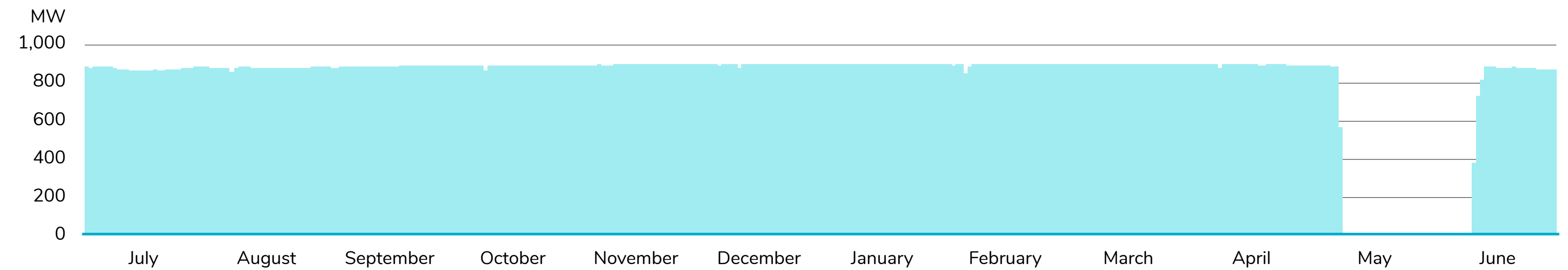
Significant Plant Events

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 in disclosed operational deficiencies. The deviations were administratively significant but did not have a direct effect on plant or radiation safety. The identified corrective measures are underway.

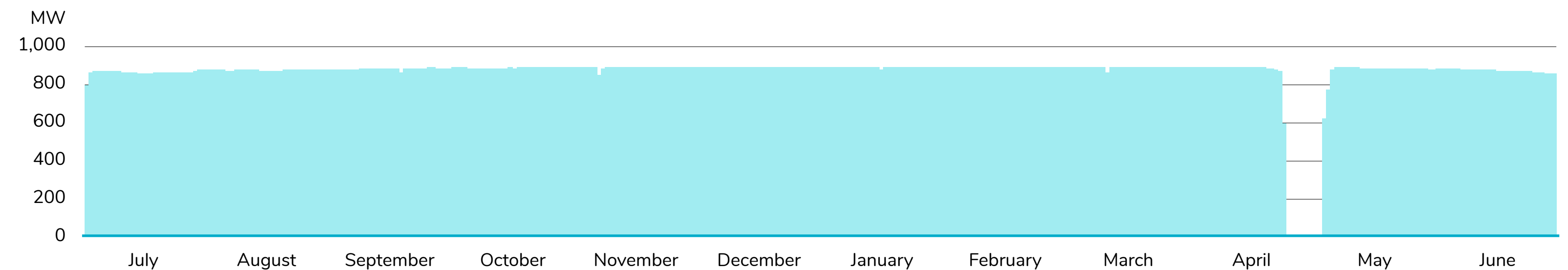
Olkiluoto 1

Average electrical power 1 July 2021–30 June 2022



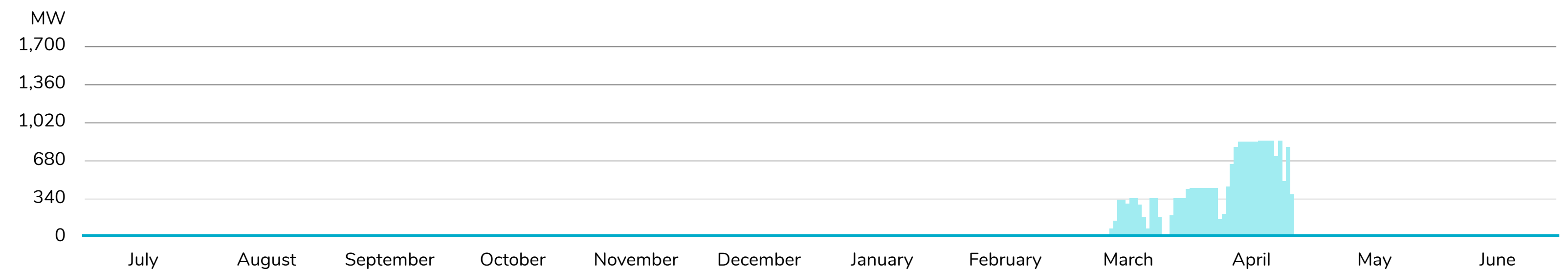
Olkiluoto 2

Average electrical power 1 July 2021–30 June 2022



Olkiluoto 3

Average electrical power 1 July 2021–30 June 2022



According to TVO's press release published on 27 June 2022, indications of damaged fuel have been detected at OL1. The plant unit was brought to a shutdown in order to remove the damaged fuel elements on Sunday, 10 July 2022. After the shutdown, the electricity generation at the plant unit is estimated to continue on 17 July 2022 (see chapter: *Events after the Period under Review*).

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 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, as well as replacement of impellers in feedwater pumps, installation of a new recirculation line, and a pressure test of the reactor containment.

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

In addition to TVO's own personnel, up to 1,300 employees of external contractors took part in the annual outages this year. Some 300 experts in special fields took part in the annual outages from abroad.

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 period under review, the fund, which was previously replenished 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 review period, TVO has recorded receivables from the Plant Supplier for the additional delay compensation accumulated by the end of the review period in accordance with the amended settlement agreement.

In December 2021, the Radiation and Nuclear Safety Authority (STUK) granted TVO permission for making the reactor critical and conducting low power tests, after which the startup of OL3's reactor took place. On 12 March 2022, the plant unit 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 turning 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 requires inspection and repair work. According to

investigations from the Plant Supplier, the repair work will last until the end of July. The plant unit's test production programme and electricity production can only be continued after the completion of this repair work. Furthermore, additional time has been reserved in the schedule for the plant unit's upcoming tests and their analyses based on previous experiences from the test production phase. According to information received from the Plant Supplier in June 2022, OL3's regular electricity production is to start in December 2022, instead of the previously announced start in September. The impact of regular electricity production being postponed is being assessed. The Plant Supplier is obliged to complete the plant unit in accordance with the Plant Contract and the Global Settlement Agreement.

OL3's power output during the test production phase is published on TVO's website at www.tvo.fi/ol3forecast. A market message is published in NordPool regarding any significant changes.

At the end of the reporting period, the Plant Supplier's workforce at OL3 was approximately 1,120 people. The occupational safety at OL3 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.

Nuclear Fuel

During the period under review, nuclear fuel purchases amounted to EUR 37.0 (36.7) million and the amount consumed to EUR 31.8 (27.9) million.

The nuclear fuel and uranium stock carrying value on 30 June 2022 was EUR 272.5 (31 December 2021: 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, TVO 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 1,286.8 (31 December 2021: 1,368.3) million, calculated according to the international IFRS accounting principles. TVO's share in the Finnish State Nuclear Waste Management Fund, EUR 991.6 (31 December 2021: 1,010.1) million, is presented under assets in accordance with the IFRIC 5 interpretation. The total cost estimate based on a new nuclear waste management technical plan and schedule has been updated in June 2022.

The cost estimate of nuclear waste management for financial provision, i.e., the nuclear waste management scheme for 2022–2024, as well as the preliminary nuclear waste management scheme for 2025–2028 were submitted to the Ministry of Economic Affairs and Employment (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 Finnish Nuclear Energy Act. In December 2021, the MEAE set TVO's liability for nuclear waste management at EUR 1,816.1 (1,450.6) million for the end of 2021 and TVO's funding target in the Finnish State Nuclear Waste Management Fund for 2022 at EUR 1,436.1 (1,450.6) million. In addition, the MEAE has decided that the liability for 2022 is EUR 1,791.9 million, of which EUR 1,409.0 million belongs to OL1/OL2 and EUR 382.9 million belongs to OL3.

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. The nuclear waste management fee for 2022 will be confirmed in March 2023.

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.

Work at Posiva's encapsulation plant site and final disposal facility at ONKALO has proceeded as planned. The construction stage of the encapsulation plant has been completed and the equipment installations have started.

In May 2021, the excavation of the five first deposition tunnels, accessed through the central tunnels, was started in ONKALO at a depth of approximately 430 metres. These excavations were completed in June 2022. The underground installations of civil and building technology are progressing on schedule.

The operating licence application for the final disposal facility was submitted to the Finnish Government in December 2021. Final disposal activities are to begin in the mid-2020s.

Acquisitions of Tangible and Intangible Assets and Shares

Investments during the period under review were EUR 150.3 (0.1) million. Investments of the parent company were EUR 160.4 (0.0) million, of which EUR 125.4 (-28.5) million were allocated to the OL3 project. The OL3 investment is decreased by the delay compensation and additional delay compensation in accordance with the settlement agreement. Additional delay compensation has been recorded as EUR 32.4 million for the period under review.

Hitachi Energy and TVO signed a turnkey contract in summer 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 together with Fingrid's system protection. The battery energy storage system will be deployed during summer 2022.

Pending Court Cases and Disputes

TVO and Wärtsilä Finland Oy (Wärtsilä) signed an agreement on the delivery of Emergency Diesel Generators and their auxiliary systems to the Olkiluoto nuclear power plant (the so-called EDG project) in 2013. In December 2018, Wärtsilä published a stock exchange release announcing a major provision it has made on two nuclear power plant projects to cover the cost exceedings and project delays, and that the allocation of responsibility for the additional costs and delays is in dispute. In April 2019, Wärtsilä announced in its notification addressed to TVO that EUR 65.0 million of the provision applies to TVO's EDG project. In October 2020, TVO initiated arbitration proceedings against Wärtsilä concerning the installation and commissioning schedule of the auxiliary diesel generators (EDG 1–8) in accordance with the EDG project's delivery agreement. The allocation of responsibility between the parties concerning the above-mentioned additional costs and delays are to be resolved in the same proceedings.

TVO received in July 2021 Wärtsilä's counterclaim in the pending arbitration proceedings. Wärtsilä's monetary claim of additional costs is approximately EUR 40 million. TVO submitted its response to Wärtsilä's claims to the court of arbitration in the beginning of November 2021. During the period under review, the proceedings, excluding the decision from the court of arbitration, have been concluded. TVO considers claims made by Wärtsilä to be without merit and demands for them to be overruled and for TVO's legal costs to be compensated.

TVO has not recorded any receivables or provisions on the basis of claims presented in the arbitration proceedings.

Personnel

The total number of personnel in the Group at the end of the period under review was 1,087 (31 December 2021: 984, 30 June 2021: 1,058). The number of permanent employees in the Group at the end of the period under review was 986 (31 December 2021: 965, 30 June 2021: 968).

Annual General Meeting

TVO's Annual General Meeting on 25 March 2022 approved the financial statements for 2021, discharged the members of the Board of Directors and the President and CEO from liability, and elected the members of the Board of Directors. All ten existing members are to continue in their positions.

At its organisation meeting, the Board elected **Tiina Tuomela** as Chair of the Board and **Ilkka Tykkyläinen** as Vice-Chair. The Board also chose from among its members the members and chairs of the Board Committees.

Auditing

The Interim Report is unaudited.

Risks and Uncertainty Factors in the Near Future

The major risks and uncertainty factors in TVO's operations have been presented in the 2021 Report of the Board of Directors.

The OL3 plant unit was connected to the national grid on 12 March 2022. According to information received from the Plant Supplier in June 2022, OL3's regular electricity production is to start in December 2022 instead of the previously announced start in September. As the OL3 project is still ongoing, no assurance can be given that further delays would not materialise prior to completion of the project. A failure by one or more of the Supplier consortium companies to meet their respective obligations according to the Plant Contract or the Global Settlement Agreement could further delay the start of regular electricity production and result in additional costs for TVO, which may subject it to new legal proceedings or new negotiations with the Supplier consortium companies which have joint and several liability.

The TVO Group has contingency plans for different scenarios resulting from the Ukrainian situation, e.g., in relation to potential supply difficulties and rising costs. The impact of the situation in Ukraine on the Group's operations is closely followed. Inflation, which has already risen due to the situation, has continued to rise, and the extensively higher prices and interests may increase TVO's production costs.

Restrictions implemented in the TVO Group in order to prevent the spread of COVID-19 have mainly been lifted. The Group is constantly assessing the situation, and its guidelines and practices also comply with the guidelines and decisions of the Finnish Institute for Health and Welfare (THL) and the Finnish Government.

Following the amendment to the Nuclear Energy Act, the Finnish State Nuclear Waste Management Fund has started investment activities as a result of which the Fund's investments are valued at market value, which in turn affects the amount of TVO's share in the Fund. This may lead to uncertainty specifically with regards to the amount of TVO's protected portion covered by securities as well as the nuclear waste management fee.

Assessment of Year-End Developments

In the current financial year, electricity production is expected to increase in accordance with OL3's test production programme. The prerequisites for nuclear power production in Olkiluoto are good. Nuclear fuel availability is guaranteed by long-term agreements.

OL3's test production phase will be continued with the aim of starting regular electricity production in December 2022. During the test production phase, the plant unit's power output will be gradually increased to 1,600 megawatts. TVO will carefully follow the fulfilment of the conditions according to the 2018 settlement agreement and the amendment agreements signed in June 2021, as well as the commissioning stages of OL3, so that they are carried out according to the Plant Supplier's schedule ensuring financial and technical resources. Since the Plant Supplier has not finished the OL3 project by the end of February 2022, as was stipulated in the amendment agreement of June 2021, the Plant Supplier is obligated to pay an additional delay compensation to TVO depending on the date of completion as of the beginning of March 2022 until the end of September 2022. The impact of regular electricity production being postponed to December 2022 is being assessed. The Plant Supplier is obligated to complete the plant unit in accordance with the Plant Contract and the Global Settlement Agreement.

Posiva continues the implementation of the final disposal plant project. The excavation work and technical acquisitions at the final disposal facility are progressing. Installation work as well as the qualification and production of equipment is taking place at the encapsulation plant.

Events after the Period under Review

In its plenary session on 6 July 2022, the European Parliament accepted nuclear power and natural gas to be included in the EU Taxonomy on sustainable finance in accordance with the European Commission's proposal. The inclusion of nuclear power in the EU Taxonomy means that it will be classified as an environmentally sustainable investment. The proposal is to enter into effect as of 1 January 2023.

On 10 July 2022, the OL1 plant unit was brought to a shutdown in order to remove damaged fuel elements. After the shutdown, the electricity generation at the plant unit is estimated to continue on 17 July 2022.

14 July 2022

Teollisuuden Voima Oyj
Board of Directors



Key Figures of TVO Group

TVO Group (IFRS) (M€)	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Turnover	164	152	299
Profit/loss for the period	-58	-19	-20
Investments ¹⁾	150	1	578
Equity	2,133	2,047	2,063
Subordinated shareholder loans (hybrid equity) (included in the former) ³⁾	929	929	929
Non-current and current interest-bearing liabilities (excluding loan from VYR) ²⁾	4,573	4,601	4,337
Loan from VYR ²⁾	651	711	711
Provision related to nuclear waste management	1,287	1,012	1,368
Balance sheet total	8,768	8,493	8,662
Equity ratio % ⁴⁾	31.2	30.2	31.3
Average number of personnel	1,039	1,016	1,004

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

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

³⁾ Subordinated loans

⁴⁾ Equity ratio % = $100 \times \frac{\text{equity}}{\text{balance sheet total} - \text{provision related to nuclear waste management} - \text{loan from the Finnish State Nuclear Waste Management Fund}}$

Key Figures of Teollisuuden Voima Oyj

Teollisuuden Voima Oyj (FAS) (M€)

The parent company's interim financial statement has been made in accordance with the Finnish Accounting Standards (FAS).

	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Turnover	162	151	294
Profit/loss before appropriations	-31	-1	-4
Fuel costs	32	28	61
Nuclear waste management costs	49	15	41
Capital expenditure (depreciation and financial income and expenses)	18	18	38
Investments ¹⁾	160	0	220
Equity	864	861	861
Appropriations	160	195	193
Non-current and current interest-bearing liabilities (excluding loan from VYR and shareholder loans) ²⁾	4,538	4,525	4,277
Loans from equity holders of the company ³⁾	929	929	929
Loan from VYR ²⁾	651	711	711
Balance sheet total	7,266	7,347	7,156
Equity ratio % ⁴⁾	29.5	29.9	30.8
Average number of personnel	1,037	1,014	1,002

¹⁾ Acquisitions of tangible and intangible assets and shares are based on gross investments.

²⁾ The Finnish State Nuclear Waste Management Fund (VYR).

³⁾ Subordinated loans.

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

Electricity delivered to equity holders of the company (GWh)	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Nuclear power	7,311	6,589	14,414
Total	7,311	6,589	14,414

Consolidated financial statement in brief and notes

Consolidated income statement

EUR 1,000	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Turnover	163,594	152,337	298,713
Work performed for own purposes	12,045	14,182	25,036
Other income	6,360	6,786	13,446
Materials and services	-89,134	-44,518	-90,840
Personnel expenses	-43,460	-43,605	-82,142
Depreciation and impairment charges	-22,868	-21,495	-43,996
Other expenses	-63,808	-62,902	-103,944
Operating profit/loss	-37,271	785	16,273
Finance income	2,352	6,162	4,681
Finance expenses	-23,426	-26,160	-41,887
Total finance income and expenses	-21,074	-19,998	-37,206
Share of the profit/loss of joint ventures	245	563	1,280
Profit/loss before income tax	-58,100	-18,650	-19,653
Income tax	-52	0	0
Profit/loss for the period	-58,152	-18,650	-19,653
Profit/loss for the period attributable to:			
Equity holders of the company	-58,152	-18,650	-19,653

Consolidated statement of comprehensive income

EUR 1,000	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Profit/loss for the period	-58,152	-18,650	-19,653
Other comprehensive items			
Items that may be reclassified to profit or loss in subsequent periods:			
Cash flow hedges	130,851	24,615	44,363
Total other comprehensive profit/loss items for the period	130,851	24,615	44,363
Total comprehensive profit/loss for the period	72,699	5,965	24,710
Total comprehensive profit/loss for the period attributable to:			
Equity holders of the company	72,699	5,965	24,710

Consolidated balance sheet

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Assets			
Non-current assets			
Property, plant and equipment	6,224,746	5,624,535	6,177,755
Intangible assets	2,369	2,506	2,543
Loans and other receivables	654,130	714,106	714,027
Investments in joint ventures	3,552	4,799	5,516
Investments in shares	1,935	1,934	1,935
Derivative financial instruments	146,710	31,938	33,966
Share in the Finnish State Nuclear Waste Management Fund	991,601	1,011,781	1,010,071
Total non-current assets	8,025,043	7,391,599	7,945,813
Current assets			
Inventories	281,437	282,935	274,489
Trade and other receivables	268,583	444,864	261,834
Derivative financial instruments	7,166	3,786	7,809
Cash and cash equivalents	185,968	370,272	172,318
Total current assets	743,154	1,101,857	716,450
Total assets	8,768,197	8,493,456	8,662,263
Equity and liabilities			
Capital and reserves attributable to equity holders of the company			
Share capital	600,365	600,365	600,365
Share premium reserve and statutory reserve	242,383	242,383	242,383
Fair value and other reserves	147,842	-2,757	16,991
Subordinated shareholder loans (hybrid equity)	929,300	929,300	929,300
Retained earnings	213,386	277,311	274,022
Total equity	2,133,276	2,046,602	2,063,061

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Liabilities			
Non-current liabilities			
Provision related to nuclear waste management	1,286,808	1,011,781	1,368,291
Loan from the Finnish State Nuclear Waste Management Fund	651,339	711,266	711,266
Bonds	3,131,167	2,995,271	2,811,264
Other financial liabilities	990,323	1,058,615	1,065,928
Derivative financial instruments	14,054	23,382	10,740
Total non-current liabilities	6,073,691	5,800,315	5,967,489
Current liabilities			
Current financial liabilities	436,332	522,926	445,619
Derivative financial instruments	1,091	459	3,268
Advance payments received	21,220	19,791	21,218
Trade payables	22,626	31,603	56,672
Other current liabilities	79,961	71,760	104,936
Total current liabilities	561,230	646,539	631,713
Total liabilities	6,634,921	6,446,854	6,599,202
Total equity and liabilities	8,768,197	8,493,456	8,662,263

Consolidated statement of changes in equity

1,000 EUR	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 period	0	0	0	0	-58,152	-58,152	-58,152
Other comprehensive profit/loss items:							
Cash flow hedges	0	0	130,851	0	0	130,851	130,851
Interest paid of subordinated shareholder loans (hybrid equity)	0	0	0	0	-2,484	-2,484	-2,484
Equity 30 Jun 2022	600,365	242,383	147,842	929,300	213,386	2,133,276	2,133,276

1,000 EUR	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 period	0	0	0	0	-18,650	-18,650	-18,650
Other comprehensive profit/loss items:							
Cash flow hedges	0	0	24,615	0	0	24,615	24,615
Interest paid of subordinated shareholder loans (hybrid equity)	0	0	0	0	-2,311	-2,311	-2,311
Equity 30 Jun 2021	600,365	242,383	-2,757	929,300	277,311	2,046,602	2,046,602

1,000 EUR	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	600,365	242,383	16,991	929,300	274,022	2,063,061	2,063,061

Consolidated statement of cash flows

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Operating activities			
Profit/loss for the period	-58,152	-18,650	-19,653
Adjustments:			
Taxes	52	0	0
Finance income and expenses	21,074	19,998	37,206
Depreciation and impairment charges	22,868	21,495	43,996
Share of the profit/loss of joint ventures	-245	-563	-1,280
Other non-cash flow income and expenses	1,109	-5,048	-25,629
Change in working capital:			
Increase (-) or decrease (+) in non-interest-bearing receivables	23,728	5,360	-17,739
Increase (-) or decrease (+) in inventories	-6,922	-8,720	-376
Increase (+) or decrease (-) in short-term non-interest-bearing liabilities	14,318	21,683	13,474
Interest paid and other finance expenses	-2,284	-2,300	-4,296
Dividends received	2,208	0	0
Interest received	4,219	3,890	3,977
Taxes paid	-52	0	0
Cash flow from operating activities	21,921	37,145	29,680
Investing activities			
Acquisition of property, plant and equipment	-265,691	-169,970	-315,370
OL3 project compensation	0	0	206,875
Acquisition of intangible assets	-165	-174	-263
Acquisition of shares	0	0	-1
Loan receivables granted	-15,910	0	-105
Repayments of loans granted	75,837	5,180	5,392
Cash flow from investing activities	-205,929	-164,964	-103,472

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Financing activities			
Withdrawals of long-term loans	600,000	600,000	800,000
Repayment of long-term loans	-323,092	-381,476	-571,683
Principal elements of lease payments	-1,231	-1,053	-2,117
Interest paid of subordinated shareholder loans (hybrid equity)	-2,196	-2,377	-4,673
Increase (+) or decrease (-) in current financial liabilities	52,637	308,424	61,630
Repayment of current financial liabilities	-128,460	-186,790	-198,410
Cash flow from financing activities	197,658	336,728	84,747
Change in cash and cash equivalents	13,650	208,909	10,955
Cash and cash equivalents at the beginning of period	172,318	161,363	161,363
Cash and cash equivalents at the end of period	185,968	370,272	172,318

Notes to the Interim Report

Accounting policies

The interim financial statements have been prepared in accordance with the IAS 34 Interim Financial Reporting Standard. The accounting policies adopted are consistent with those of the Group's annual financial statements for the year ended on 31 December 2021. Additionally, the changes according to the revised IAS/IFRS standards have been adopted. The COVID-19 pandemic has not materially affected the accounting policies nor reporting numbers. During the period under review, the Ukrainian situation has not had an immediate or direct effect the Group's operations or the production of electricity. However, cost increases are being prepared for in the TVO Group.

Management's critical accounting estimates and assumptions

The preparation of the Interim Report requires the management to make estimates and assumptions that affect the reported amounts of assets and liabilities, income and expenses. The actual results may differ from these estimates. Significant assumptions made by the management in applying the Group's accounting policies and crucial uncertainties were the same as the ones applied to the annual financial statements as for the year ended on 31 December 2021.

Olkiluoto 3 EPR

The electricity production of the Olkiluoto 3 EPR plant unit (OL3) started on Saturday, 12 March 2022. Regular electricity production starts in December 2022. Sales proceeds from the delivery of OL3's test production electricity and variable costs have been recorded in the income statement in accordance with the IAS 16 Standard. The profit/loss for the review period is affected by items classified as profit/loss related to the provision for OL3's nuclear waste liability.

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.

Additional delay compensation has been recorded as EUR 32.4 million for the period under review. For the review period, TVO has recognised current receivables EUR 225.5 million from the Plant Supplier. The additional delay compensation decreases the historical costs of property, plant and equipment in the balance sheet.

Comparability of the consolidated income statement and balance sheet

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 updated cost estimate decreased the book value of property, plant and equipment related to decommissioning.

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 plan 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 provision related to the nuclear waste management and increased the amount of 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. The negative profit impact of the updates and changes is mainly non-recurring. See note Assets and provisions related to nuclear waste management obligation.

Segment reporting

SEGMENT STRUCTURE IN TVO

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 TVO Group discloses the following information by segments: turnover, profit/loss for the period and assets, which the chief operation decision maker follows.

The chief operation decision maker follows reporting according to the Finnish Accounting Standards (FAS). Adjustments made under IFRS accounting policies are reported at Group level.

Turnover by segments

EUR 1,0000	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Nuclear power	163,594	152,337	298,713
Total	163,594	152,337	298,713

Profit/loss for the period by segments

EUR 1,0000	Q1-Q2 2022	Q1-Q2 2021	Q1-Q4 2021
Nuclear power	-31,306	-1,447	-3,573
Profit/loss before appropriations (FAS)	-31,306	-1,447	-3,573
The impact of the nuclear waste management obligation	-24,627	-17,409	-17,424
The impact of financial instruments	-723	-603	-514
Other IFRS adjustments	467	246	578
Share of the profit/loss of joint ventures	-1,963	563	1,280
Total (IFRS)	-58,152	-18,650	-19,653

Assets by segments

EUR 1,0000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Nuclear power	7,266,649	7,346,960	7,155,886
Total (FAS)	7,266,649	7,346,960	7,155,886
The impact of the nuclear waste management obligation	1,372,203	1,121,818	1,478,313
The impact of financial instruments	117,120	5,493	11,113
The impact of finance leases	47,075	48,828	47,953
Other IFRS adjustments	-37,391	-33,431	-35,506
Share of the profit/loss of joint ventures	2,541	3,788	4,504
Total (IFRS)	8,768,197	8,493,456	8,662,263

Property, plant and equipment

Changes in property, plant and equipment

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Opening net book amount	6,177,755	5,664,650	5,664,650
Increase	150,159	385	577,715
Decrease	-82,464	-19,211	-80,554
Depreciation and impairment charges	-22,669	-21,289	-43,588
Accumulated depreciation from deduction	1,965	0	59,532
Closing net book amount	6,224,746	5,624,535	6,177,755

Changes in intangible assets

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Opening net book amount	2,543	2,589	2,589
Increase	165	175	413
Decrease	-140	-52	-51
Depreciation and impairment charges	-199	-206	-408
Closing net book amount	2,369	2,506	2,543

The OL3 investment is decreased by the delay compensation and additional delay compensation in accordance with the settlement agreement. Additional delay compensation has been recorded as EUR 32.4 million for the period under review. 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.

Financial risk management

The objectives of financial risk management and finance policy are the same as those applied to the annual financial statement for the year ended 31 December 2021.

DERIVATIVE FINANCIAL INSTRUMENTS

Nominal values of the derivative financial instruments

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Interest rate swaps	2,394,117	1,874,117	1,944,117
Forward foreign exchange contracts and swaps ¹⁾	45,865	65,290	69,597
Cross-currency swaps	281,016	378,577	378,577
Total	2,720,998	2,317,984	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 ¹⁾

EUR 1,000	30 Jun 2022			30 Jun 2021			31 Dec 2021		
	Positive	Negative	Total	Positive	Negative	Total	Positive	Negative	Total
Interest rate swaps									
Cash flow hedges	136,592	-819	135,773	8,298	-18,915	-10,617	16,641	-10,842	5,799
Fair value hedges	280	-10,904	-10,624	7,720		7,720	5,252		5,252
Non-hedges					-4,747	-4,747		-3,065	-3,065
Forward foreign exchange contracts and swaps									
Cash flow hedges	12,025	-49	11,976	7,760	-72	7,688	11,111		11,111
Non-hedges	371	-180	191	931	-107	823	1,020	-95	925
Cross-currency swaps									
Non-hedges	4,608	-3,192	1,415	11,015		11,015	7,752	-7	7,745
Total	153,876	-15,145	138,731	35,724	-23,841	11,883	41,775	-14,008	27,767

¹⁾ Cross-currency swaps related to Private Placements included.

TVO Group debt structure by maturity

30 Jun 2022 EUR 1,000	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031–	Total
Loans from financial institutes	15,206	50,607	426,104	426,104	26,104	26,104	11,818		10,980		993,027
Public bonds	123,000	205,665	644,900	500,000	650,000	675,000	600,000		23,000	65,000	3,486,565
Loans from other sources	56,117										56,117
Lease liabilities	1,097	2,057	1,931	43,618	8						48,712
Commercial papers	1,998										1,998
Total	197,418	258,329	1,072,935	969,722	676,111	701,104	611,818		33,980	65,000	4,586,419

TVO Group credit commitment by maturity

30 Jun 2022 EUR 1,000	2022	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

The average interest rate on loans and derivatives on 30 June 2022 was 1.70 % (31 Dec 2021: 1.52 %).

On 30 June 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 totaling EUR 400 million (2021: EUR 400 million) and cash and cash equivalents amounting to EUR 186 million (2021: EUR 172 million).

Cash and cash equivalents consist of cash on hand, demand deposits and other current liquid investments. Fund units consist of fund unit investments that are valued at fair value.

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

EUR 1,000	30 Jun 2022		
	Level 1	Level 2	Level 3
Financial assets at fair value			
Derivative financial instruments at fair value through profit or loss		4,979	
Derivative financial instruments designated as cash flow hedges		148,617	
Derivative financial instruments designated as fair value hedges		280	
Investments in other shares ¹⁾			1,935
Total		153,876	1,935
Financial liabilities at fair value			
Derivative financial instruments at fair value through profit or loss		3,372	
Derivative financial instruments designated as cash flow hedges		868	
Derivative financial instruments designated as fair value hedges		10,904	
Total		15,145	

¹⁾ On 30 June 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.

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

EUR 1,000	31 Dec 2021		
	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	
Investments in other shares ¹⁾			1,935
Total		41,775	1,935
Financial liabilities at fair value			
Derivative financial instruments at fair value through profit or loss		3,166	
Derivative financial instruments designated as cash flow hedges		10,842	
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 fair value of the interest rate options is calculated using market quotes at the closing date and by using the Black and Scholes option valuation model. 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. The changes in fair value of interest rate options that do not qualify for hedge accounting are presented in the income statement.

Book values of financial assets and liabilities by categories

EUR 1,000	Financial liabilities measured at amortised cost	Book value	30 Jun 2022
			Fair value
Non-current liabilities			
Other financial liabilities ¹⁾	4,121,489	4,121,489	3,921,064
31 Dec 2021			
EUR 1,000	Financial liabilities measured at amortised cost	Book value	Fair value
Non-current liabilities			
Other financial liabilities ¹⁾	3,877,192	3,877,192	3,953,937

¹⁾ Bonds and EUR-fixed loans included

For other financial assets and liabilities than the ones presented in the table, the book value corresponds to their fair value.

Assets and provision related to nuclear waste management obligation

The balance sheet contains assets and liabilities concerning the nuclear waste management obligation

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
The carrying value of TVO's share in the Finnish State Nuclear Waste Management Fund (non-current assets)	991,601	1,011,781	1,010,071
Provision related to nuclear waste management (non-current liabilities)	1,286,808	1,011,781	1,368,291

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	30 Jun 2022	30 Jun 2021	31 Dec 2021
Liability for nuclear waste management according to the Nuclear Energy Act	1,816,100	1,450,600	1,816,100
Funding target obligation	1,436,100	1,450,600	1,436,100
TVO's share in the Finnish State Nuclear Waste Management Fund	1,471,750	1,450,600	1,450,600
Difference between the liability and TVO's share of the Fund	344,350	0	365,500

The costs of decommissioning the power plant and disposal of spent fuel are covered by the provision related to the nuclear waste management obligation. Cost estimates are updated annually and the technical plans and total cost estimates every third year.

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 is mainly non-recurring.

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. 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. According to the implementing provision of the law amendment, a 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. The nuclear waste management fee for 2022 will be confirmed in March 2023.

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. In December 2021, the Ministry of Economic Affairs and Employment (MEAE) set TVO's liability for nuclear waste management at EUR 1,816.1 (1,450.6) million for the end of 2021 and TVO's funding target in the Finnish State Nuclear Waste Management Fund for 2022 at EUR 1,436.1 (1,450.6) million. In addition, the MEAE has decided that the liability for 2022 is EUR 1,791.9 million, of which EUR 1,409.0 million belongs to OL1/OL2 and EUR 382.9 million belongs to OL3.

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 on 30 June 2022 is EUR 1,471.8 million. The carrying amount in the balance sheet is EUR 991.6 million. The difference is due to the fact that IFRIC 5 limits the carrying amount of TVO's interest 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 30 June 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 on 30 June 2022 is in turn lower than the provision according to IFRS, and therefore the above-mentioned adjustment is not recorded.

TVO has issued to the State the shareholders' guarantees as security to cover the unexpected events as determined in the Nuclear Energy Act. The guarantees are presented in the note Obligations and other commitments.

Obligations and other commitments

Pledged promissory notes and financial guarantees

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
Pledged promissory notes to the Finnish State Nuclear Waste Management Fund	651,339	711,266	711,266
Guarantees given by shareholders related to the nuclear waste management obligation	534,990	480,670	480,670

According to the Nuclear Energy Act Section 44, the company liable for nuclear waste management must assign securities to the state according to the terms stipulated by Section 45 before operations which produce waste are initiated, and otherwise at the end of each June.

Investment commitments

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

EUR 1,000	30 Jun 2022	30 Jun 2021	31 Dec 2021
OL1 and OL2	71,900	88,800	84,700
OL3	356,200	410,700	401,500
Total	428,100	499,500	486,200

Pending Court Cases and Disputes

Pending Court Cases and Disputes are to be found on page 6.

