

ANNUAL REPORT

2013

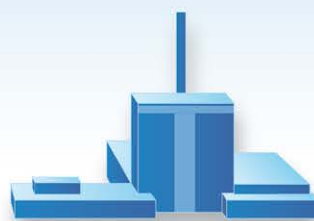
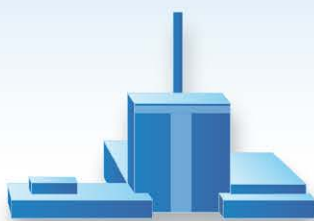






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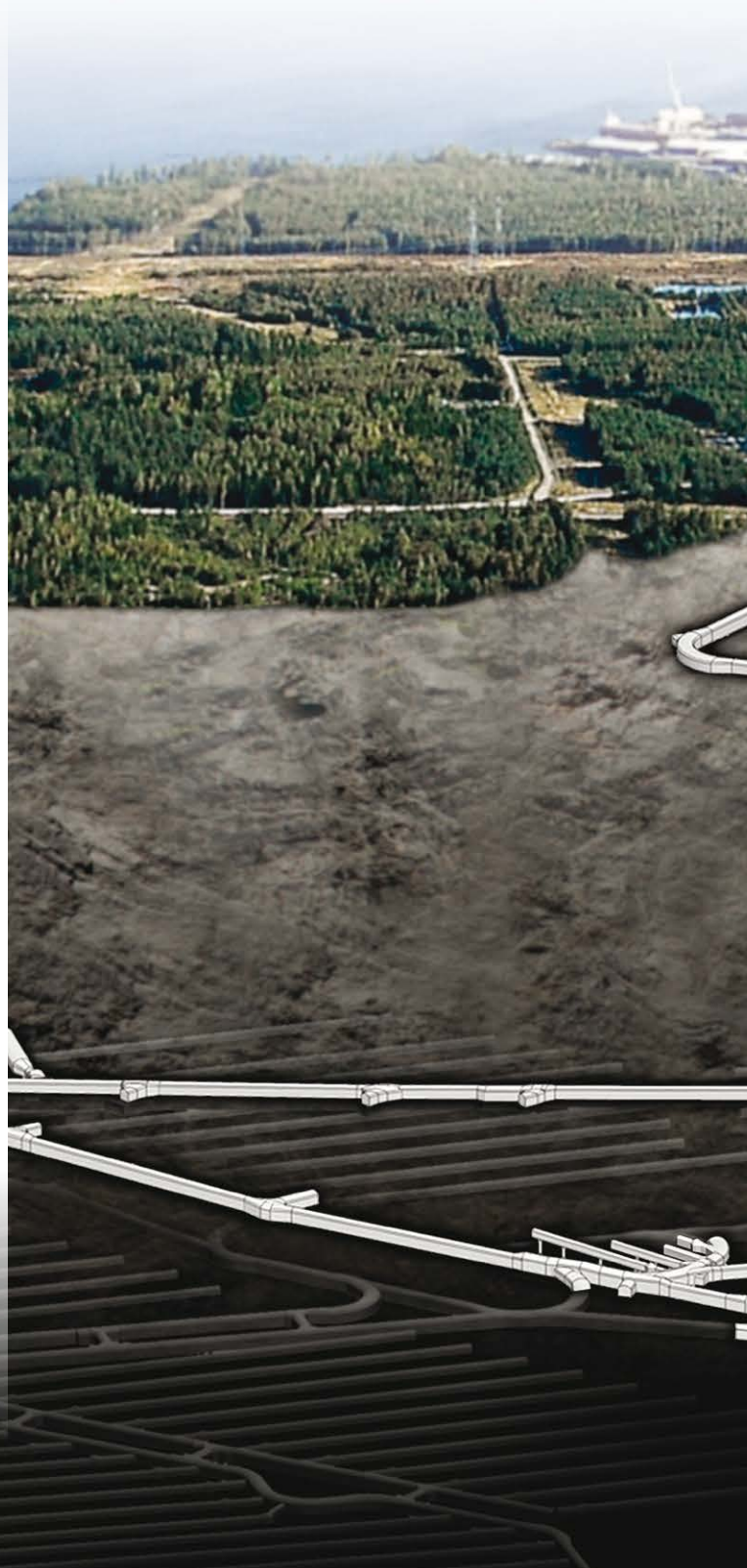


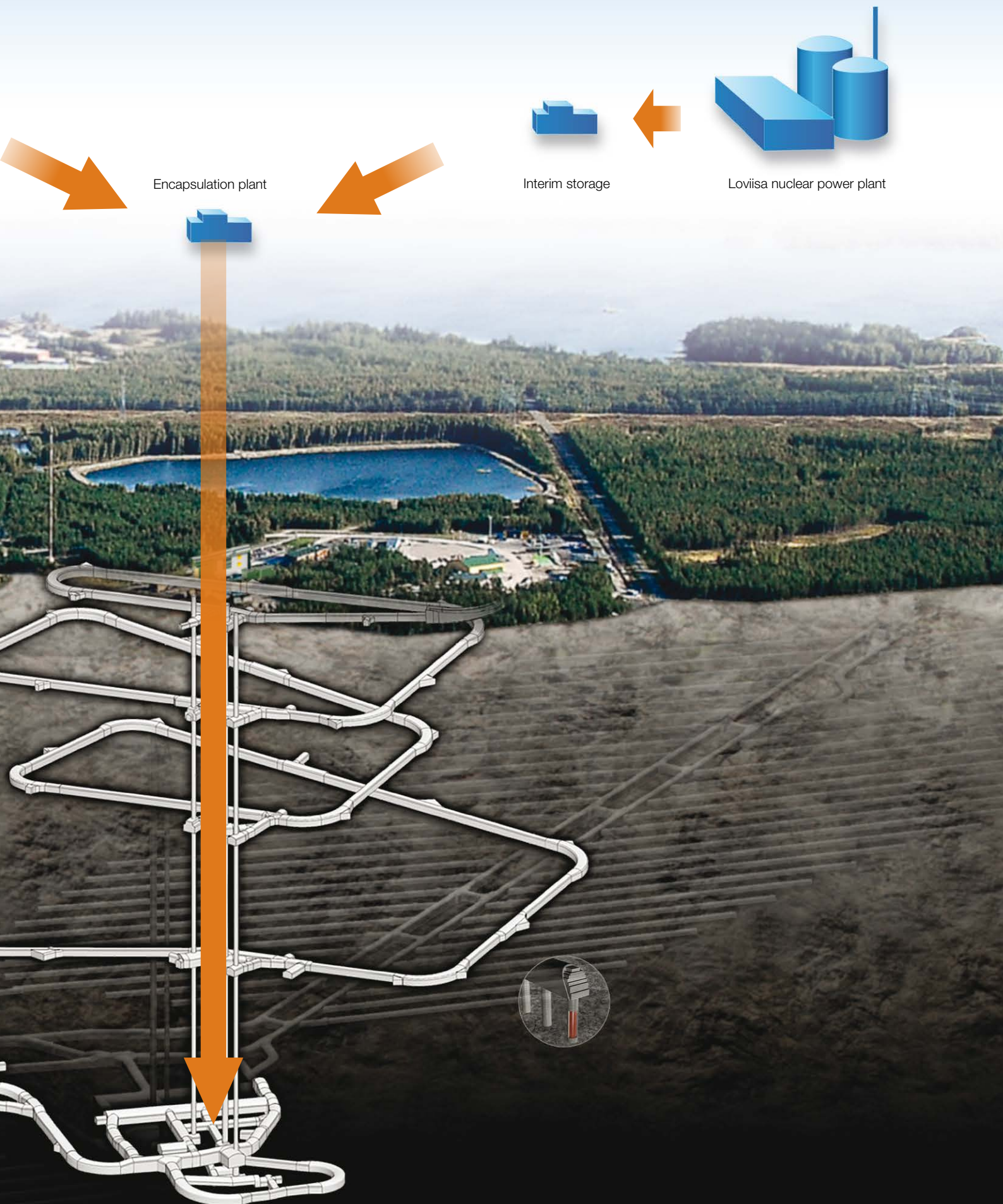
Olkiluoto nuclear power plant

Interim storage

Posiva and spent nuclear fuel

Posiva Oy, which was founded in 1995, is together with its owner companies Teollisuuden Voima Oyj and Fortum Power and Heat Oy responsible for the final disposal of spent nuclear fuel. At the end of 2013, the total amount of spent nuclear fuel in the interim storages of the Olkiluoto and Loviisa nuclear power plants was about 2000 tons. Spent nuclear fuel must be cooled in the interim storages for several decades to bring heat generation in the fuel down to the level required for final disposal. In practice, this means that final disposal cannot start until early 2020s. With this in mind, Posiva is preparing in Olkiluoto in the municipality of Eurajoki for the construction of the encapsulation plant and for the expansion of the existing ONKALO facility into a final disposal repository after the ongoing construction licence stage.





Year 2013 has been characterised by preparations for post-licence construction of final disposal repository and encapsulation plant



Year 2013 was the 18th year of operation for Posiva. The year was spent in research, develop, design, construction, training and recruitment activities in preparation for upcoming final disposal operation. The licensing process for the planned final disposal started in 2012, when Posiva submitted to the Ministry of Employment and the Economy (MEE) the construction licence application. We expect the construction licence to be granted at the start of 2015. Posiva's aim is that once the final disposal repository and the encapsulation plant are completed, the application for the operating licence can be submitted in 2020 to allow final disposal to start in 2022. The long licensing process has required decades of research, development and preparation activities of Posiva. The work started in early 1980s.

Our application was reviewed by MEE and the Radiation and Nuclear Safety Authority (STUK) during 2013. MEE has requested statements on the application from some 30 stakeholders closely associated with our project. We will provide in 2014 replies to the statements issued. At the conclusion of the statement period, MEE organised a public hearing in Helsinki regarding Posiva's application. However, the event did not attract much interest or attendance. STUK has announced that their safety assessment on our application will be completed in the autumn of 2014. At STUK's requests for further information, we have in 2013 supplemented the safety case included in the application with detailed reports. MEE will prepare the application dossier for the Government's review process, when all the requested statements have been received.

Posiva's Board of Directors approved in the summer the launching of a design project for the detailed design of the encapsulation plant and the final disposal repository. The project started with the preparation of a requirement specification. The detailed design of the facilities as well as their systems and components can start in 2014 on the basis of this requirement specification. The organisation also needed to be reinforced for the project. An extensive

recruitment campaign was launched in the autumn to find safety, quality, design and project expertise for our project.

Construction work and various demonstration tests have proceeded in ONKALO in accordance with the schedule. The bedrock leakage collection system with the associated piping, and collection and precipitation basins has been completed. The construction of the structure that contains emergency shelter, office and staff facilities at the final disposal depth was concluded and ventilation and electrical systems have been installed in the technical facilities. The durability testing of the floor structure in the ONKALO tunnels has been started. Suitability tests have been continued with encouraging results in the final disposal demonstration tunnels completed in 2013. Two new tunnels were finished during the year; they are designed for the testing of the building and performance of the massive plug, which will be used to seal the final disposal tunnel.

The deposition of the canister and the installation of the backfilling blocks into the final disposal repository will be carried out using machinery specifically designed for this purpose. Prototypes have been ordered of the machines; the canister transport and deposition machine as well as the bentonite buffer installation device have been produced so far. The prototype for the filling of the final disposal tunnels with bentonite clay blocks has been ordered and will be delivered in 2014. Finnish companies have proven competitive in the selection of manufacturers of machinery and equipment, and the contracts for the deliveries have, in fact, been awarded to companies based in the Satakunta area and South-West Finland.

Finland, Sweden and France have already decided how and where the final disposal of spent fuel will be implemented. In addition to them, about ten countries have initiated a project for the selection of a method and a location for final disposal. Since final disposal has not yet started even in the pioneering countries and the technology for final disposal is still under development, cooperation between nuclear

power countries and final disposal organisations is of utmost importance, particularly in view of Posiva being the first licensee in the world preparing for the start of final disposal. Posiva and the Swedish Nuclear Fuel and Waste Management Company SKB signed a Letter of Intent for the renewal of the cooperation agreement that was originally enforced already more than ten years ago. The continuation of cooperation is important to ensure long-term safety, as both companies will implement final disposal according to similar concepts. Posiva will chair the international cooperation work group of final disposal organisation EDRAM (International Association for Environmentally Safe Disposal of Radioactive Materials) for the next two years. The purpose of the group is to promote exchange of information and knowledge on final disposal between organisations and countries. Posiva is also an active participant in technology cooperation projects coordinated by EU, and acts as the coordinator in the DOPAS project, which focuses on the development of technology for the sealing of the final disposal tunnels.

Posiva believes that it is possible to obtain the construction licence at the start of 2015 and the construction of the encapsulation plant could start after that. In order to be ready for the start of construction, the current year 2014 will be a challenging one. We need to verify that we have adequate project plans and construction plans as well as plans for the engineering and installation of equipment and machinery in place and our implementation organisation has the required level of expertise and capacity to execute a safe and economical project that fulfils all quality criteria. The whole world is following how successfully we can carry out the project. Our success will create faith in other countries in the political acceptability of their own final disposal initiatives and on the implementation possibilities of the projects.

Reijo Sundell
President
Posiva Oy

The Board of Directors' Report for 2013

Main events

New organisation for Posiva

Posiva's organisation was reformed as of 1 February 2013. The nuclear facility construction project, which will start after the construction licence is granted, was taken into consideration in the new organisation. The Technical and Research Departments were united into Development Department, which is in charge of the overall management of the repository, the final disposal systems and the site characterisation investigations. The Construction Department was supplemented with the R&D Support Unit and renamed Project Department. It is responsible for design and construction developer activities as well as ONKALO R&D support activities, operation and maintenance. Financial management, project planning and IT management units were combined to form a new Corporate Support unit.

Repository project started

The implementation project of the above-ground encapsulation plant and the underground final disposal repository was started during the year under review. The project is in charge of the design, implementation and commissioning of all required structures, buildings, equipment and systems until such time that the plants and facilities, separate buildings and equipment can be handed over to the operational organisation. In addition to the encapsulation plant and the final disposal repository, the project encompasses also the plant for the production of the buffer and backfilling components needed in final disposal operation.



Posiva launched an extensive recruitment campaign

The most extensive recruitment campaign in the history of the Company was launched in the autumn as part of preparations for the construction of the repository. More than 20 vacancies for experts in construction, research and development related to final disposal and safety functions are to be filled in the campaign. During the financial year, the number of personnel was ca. 100, which means that the recruitment campaign will result in an increase of almost one fifth in staff numbers. The facilities of the ONKALO Project Office were expanded to accommodate the new employees.

Plug tunnels excavated in ONKALO

Two new demonstration tunnels were excavated in ONKALO for the plug test. Tunnel plug test "POPLU" is part of the European DOPAS project for the testing of methods used to seal the final disposal tunnel. Posiva will implement full-scale testing to obtain information on and experience in the building of the massive concrete plug designed by the Company. The purpose of the test is to demonstrate the pressure-resistance and leak-tightness of the cast concrete plug in as realistic final disposal conditions as possible.





Development

The most recent reports for the safety case dossier included in the construction licence application were submitted during 2013. The purpose of the safety case is to demonstrate the operation of the final disposal system, to provide justification for the scenarios analysed and to present the models that have been used, the input data for them as well as the associated assumptions and uncertainties. Background reports related to the final disposal site in Olkiluoto were also drawn up in support of the application.

Work for the finalising of the suitability classification of the final disposal bedrock has continued. A project related to the suitability classification of the final disposal bedrock was started by Posiva, the Swedish SKB and the Canadian NWMO; one of the objectives of the project is to obtain more information about the properties of fragile bedrock structures to use as input data in e.g. earthquake analyses. A tunnel seismic study was carried out in ONKALO to determine in detail the structure of the bedrock. The results of the study were utilised in the suitability classification of the new demonstration tunnels as well as in the detailed site modelling of the entire demonstration area.

The designs for the technical release barriers employed in the KBS-3 final disposal solution i.e. the canister, the bentonite buffer, tunnel backfilling and the seal, have been made more specific as more information has been gathered on e.g. material properties. Posiva joined a Finnish research programme implemented by a consortium of strategic top expertise and partly funded by the Finnish Funding Agency for Innovation (Tekes): "Breakthrough Steels and Applications". One of the objectives of the programme is to develop the material properties of the canister insert. The requirements specified for the performance and engineering of technical release barriers have been updated and harmonised with the equivalent requirements of the Swedish SKB.

Posiva coordinates the joint European DOPAS programme, which focuses on the testing of different plugging methods for the final disposal tunnel. Posiva's own POPLU project is part of the DOPAS programme. In 2013, the planning of the plug test proceeded to the implementation planning phase and a significant number of both development and engineering staff was engaged in the project.

The development project that concerned the method for the closure of the final disposal canister was completed during the year. At the conclusion of

the project, the results of Posiva's development efforts connected with the electron beam welding method were compiled in a single report and a corresponding report was drawn up of the friction stir welding method developed by the Swedish SKB. A review work group analysed the reports and submitted a proposal for the selection of the method. The selection will be confirmed during the first part of 2014.

The factory acceptance tests of the canister and bentonite buffer transport and installation machinery were completed. An above-ground testing facility has been built on the ONKALO site for further testing. The moisture protection possibly required during the installation of the bentonite buffer was developed and pretested in laboratory conditions. The design of the device for the installation of backfilling material in the final disposal tunnels was concluded and the manufacture of a prototype was started.

Investigations were started regarding the acquisition method of the canister. The possible Finnish manufacturing routes for the machining, assembly and inspection of the canister are primarily investigated. Cooperation was continued with the Swedish SKB on the development and testing of canister manufacturing and inspection methods for the cast iron insert and the outer copper canister.

The investigation related to the acquisition method of the bentonite buffer started with a study of the effect that the uni-axial and isostatic manufacturing technique employed for the bentonite buffer has on the properties of the buffer blocks. The investigation is carried out as a cooperation project between Posiva and SKB. A preliminary plan for the buffer production plant was also prepared for the needs of the investigation. Development work related to the manufacturing methods of the bentonite buffer and the backfilling blocks of the final disposal tunnels focused on the development of compression technology and a compression mould for the blocks. A small number of full-scale backfilling blocks was produced for testing purposes.

Construction and repository project

Towards the end of 2013, the sealing of ventilation and personnel shafts in ONKALO was concluded successfully between 290 – -453 m. The sealing of the rock is a necessary pre-condition that has to be fulfilled before the raise drilling of the shafts so as to avoid water leaks and ensure the long-term safety of



The quantity and quality of leakage from the bedrock to ONKALO is monitored on a regular basis.

the underground facilities. In order to guarantee the high standard of the sealing work, a more than two-year long project for the further development of the injection process was necessary; it could be carried out as part of the normal bedrock construction activities. The shaft injection process was based on, for example, the use of silica as a sealing material. Silica had been used previously in tunnel injection work, but not in long shaft injection holes. After the sealing process was completed, the raise boring of the shafts started at the end of the year.

New demonstration tunnels 3 and 4 for research and testing purposes were excavated in accordance with plans during 2013. The installation of building service systems continued on schedule in facilities that had already been excavated. The underground collection and precipitation basins for leakage water as well as concrete structures for emergency shelter, office and staff facilities were completed. An area for the testing of the floor structure of the ONKALO driveway was also completed and the leakage water collection system was replaced.

Above-ground construction activities continued on the ONKALO site with the excavation of phase two foundation trench for the hoist building. Preparations were also made on the site for the road works and site works required under the plant construction licence to ensure that worksite and traffic arrangements are in place for the future construction project, when the construction licence is granted. An extension with workplaces for more than 20 persons was added to the ONKALO office to allow for the increase in the number of personnel. Towards the end of the year, a facility designed for above-ground equipment tests was also acquired.

The repository project started in 2013 was the kick-off of implementation planning that aims at creating a state of readiness for an investment decision



Every year dozens of foreign media representatives acquaint themselves with Posiva's operation.



About one fifth of Posiva's personnel work in the Vuojoki Mansion.

and start of construction. The project has focused on the organisation of project activities and on ensuring the scope of system descriptions and requirement specifications. A campaign for the recruitment of personnel for the repository project was launched towards the end of 2013.

International cooperation

A significant part of Posiva's research and development activities is carried out in international cooperation projects. They are based on cooperation agreements entered into with foreign nuclear waste management organisations, or on EU's framework programmes. Posiva engages in close cooperation with the Swedish Nuclear Fuel and Waste Management Company SKB (Svensk Kärnbränslehantering AB). In 2013, the two companies signed a Letter of Intent for the continuation of cooperation at the conclusion of the current agreement period at the end of 2014. The nuclear waste projects implemented in EU's framework programmes have in recent years been more and more targeted at full-scale testing of final disposal technology in underground facilities and part of these tests are to be carried out in ONKALO.

Posiva has in 2008-2013 carried out in Greenland in cooperation with the Canadian NWMO and the Swedish SKB an extensive research project on glacial conditions. The project has provided, for the first time ever, direct measurement data on groundwater

conditions under the Ice Sheet, and thus significant support to the models used to estimate the performance of the final disposal system during future ice ages. The project is currently at the reporting phase.

Corporate social responsibility and communications

Posiva's final disposal project attracts interest both in Finland and abroad. Some 1800 visitors acquainted themselves with Posiva's operation in Olkiluoto during the year. They represented the media, decision-makers, experts in nuclear power industry, students and the public. More than half of the almost one hundred groups of visitors were foreign. With the people of the Satakunta area particularly in mind, Posiva and TVO organised together in July Olkiluoto Summer Wednesday happenings with guided bus tours of the Olkiluoto 3 and ONKALO construction sites. The total number of visitors who attended the Summer Wednesday happenings was 440.

Contacts with the municipality of Eurajoki were based, like in previous years, on a cooperation group with members from both organisations. Cooperation with the Eurajoki Upper Comprehensive School and

Senior Secondary School also continued along the lines of the previous years. For pupils of the Upper Comprehensive School, radiation and water events were organised together with TVO, while the students of the Senior Secondary School were invited to a career information event, where experts from Posiva told about their own educational background. Posiva also participated in cooperation with other municipalities near Olkiluoto.

Two media conferences were organised in Olkiluoto during the year to provide background information. The topics were related to the content and processing of the construction licence application, repository and encapsulation plant projects, construction work in ONKALO and full-scale tests.

Posiva's most important communications channel in Eurajoki and particularly in the neighbouring municipalities has been the Posiva Tutkii magazine (Posiva Investigates), of which four issues were published in 2013.

The visual appearance and content of Posiva's website was reformed during the financial year. The objective of the reform was to clarify the structure and content of the site and to reinforce Posiva's image as an employer as part of the ongoing campaign for the recruitment of new experts.



Posiva's stand in "Yrityspäivät" (networking and recruitment event) at Tampere University of Technology.



Environmental impact management

At Posiva, the management of environmental matters is based on the certified management system and the annual operating plan. The environmental aspects assessment of Posiva's operation was updated at the start of the year. The key environmental aspects are related to the construction of ONKALO and to waste management. Fuel oil is no longer used for heating, as district heating was adopted for the heating of inlet air to ONKALO. An analysis of potential incidents and accidents shows that the most significant environmental risks are associated with fires and oil leaks from work machinery.

The amount of rock excavated in the construction of ONKALO amounted in 2013 to less than 7,000 loose-m³. The amount of water used in the construction of the tunnel was ca. 5,000 m³. The average total leakage in ONKALO was ca. 35 l/min; this is a low figure considering the volume of the underground facilities. The water pumped from the tunnel (service water and leakage water) was drained through clarification and oil separation in an open ditch to the sea. The quality of the water was monitored in the same way as in previous years.

The operating plan describes the processes used to minimise the potential environmental impact of the operations of the Company. Actions implemented in 2013 included e.g. increased preparedness for oil spills and an investigation to find an environmentally friendly alternative for the so-called shank lubrication oil used in tunnel excavation.

Management system

Posiva's management system consists of manuals providing an overview of Posiva's activities, as well as of process descriptions, codes of practice and procedures, which supplement the manuals. The purpose of the management system is to ensure that Posiva's final disposal repository fulfils the safety criteria specified for it, and that Posiva's operations are in conformance with laws, safe, timely and cost-effective.

Posiva carried out a reform of the management system and organisation in February 2013. The management system, which was previously referred to as the integrated management system, was updated as a whole during the year to make it

consistent with STUK's new YVL Guides adopted on 1 December 2013.

The comprehensiveness and functionality of the management system was assessed twice in 2012 in a management review. Internal audits were carried out on the processes of the management system in accordance with the annual programme.

In October, DNV Certification Oy conducted on the occupational health and safety system the periodical audit required by the ISO 9001 quality certificate, the ISO 14001 environmental certificate and the OHSAS 18001 standard.

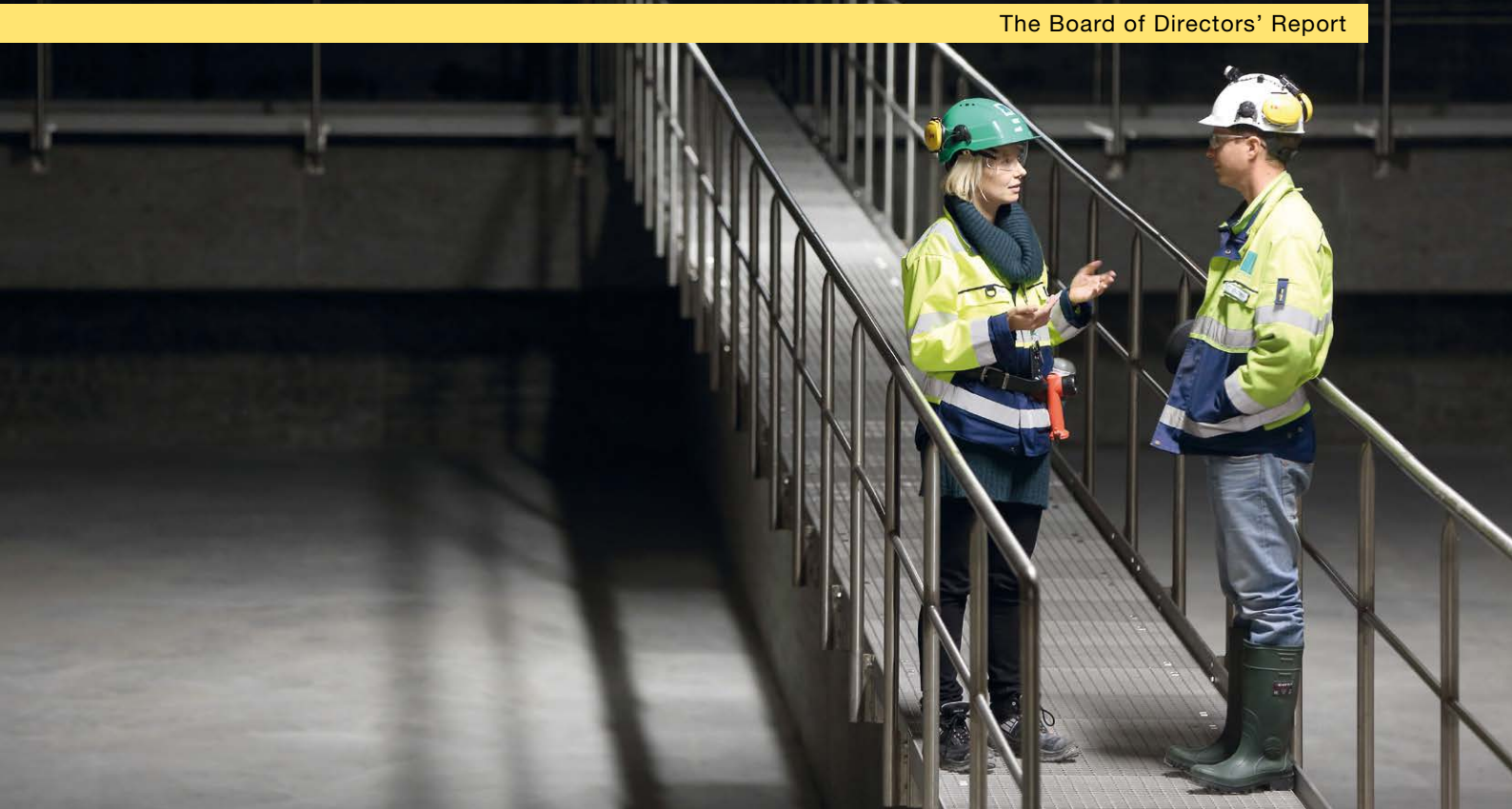
In May, Qualitas Fennica Oy conducted an independent assessment of Posiva's management system against the YVL Guides.

Supplier audits were carried out on the most significant suppliers in order to ensure that the services they provide for Posiva fulfil the criteria specified by the Company.

Safety and safety culture

The management of occupational health and safety matters is at Posiva implemented in compliance with the certified management system and the annual operating plan. Posiva was in the spring granted the "In the world's forefront of safety" level 1 classification by the Finnish Zero Accident Forum. In 2013, the focal area was the development of fire safety and rescue operations. Action related to e.g. introduction of proactive occupational safety indicators was also taken. A procedure and a tool were developed in this context for the reporting of safety observations.

The construction licence application dossier submitted towards the end of 2012 was supplemented as a result of plans becoming more specific and requirements presented by STUK. In terms of content, the supplementary information has particularly been related to the demonstration of the functionality and long-term safety of the concept. Clarifications regarding e.g. safety management and safety culture as well as transports of spent nuclear fuel were submitted as completely new documents related to the new YVL Guides adopted in December 2013. A large number of minor elaborations have been made in system descriptions that describe the technical solution for the encapsulation plant and the final disposal repository. Several meetings in various fields of technology have been held between STUK and Posiva with the aim of supporting regulatory control



The collection basin for groundwater leakage and the pumping station are located on the bottommost level of ONKALO at a depth of 455 metres.

and thereby also shortening the time required for the updating of the documents.

An extensive survey of safety culture was conducted during 2013 among Posiva's personnel and subcontractors involved in the construction of ONKALO. The survey was implemented in cooperation with VTT Technical Research Centre of Finland, and it was used as the basis for the determination of agreed development areas in safety culture; the execution of development efforts will start in 2014.

Occupational safety remained on an excellent level for Posiva employees. The situation was good also for subcontractors, although two occupational accidents were entered in the statistics after a long zero-accident period. Significant investments were made in occupational safety and in the development of safety culture in a broader context and the level of safety will be under close surveillance also in the future.

Risk management

For Posiva, factors that may endanger or delay the achievement of the objectives specified for final disposal are the most significant risks.

Risk management is organised in a holistic manner in compliance with the operational principles laid down by Posiva's owners and the criteria of good governance. Posiva's risk management supports the execution of the company's strategic plan and the associated project plan in the long term and the execution of the operating plan in the short term. Posiva's risk management is a systematic process where risks are identified and assessed, and measures for their management are planned, implemented and monitored methodically. Risk management is implemented at the strategic and operative level in line with the procedures included in the management system.

Posiva's Operations Team addressed strategic risks at the end of the year. The company's most significant risks are related to unpredictable changes in the costs of final disposal as well as to a considerable delay in the granting of the construction licence, and to international events that affect the progress of Posiva's project. In addition, there are risks associated with the expertise level of human resources and with the production and installation of critical components. There are also risks related to the safety of personnel and to corporate security. Posiva introduced new risk management software at the beginning of the year.

Administrative bodies

BOARD OF DIRECTORS

Teollisuuden Voima Oyj
Jarmo Tanhua, Chairman
Veijo Ryhänen
Fortum Power and Heat Oy
Pekka Leskelä
Sasu Valkamo

Ms. Ulla-Maija Moisio from Teollisuuden Voima Oyj has acted as the Secretary of the Board.

Posiva Oy's President Reijo Sundell and Executive Vice President Timo Äikäs have attended the Board meetings.

The Board of Directors convened seven times.

PRESIDENT

Reijo Sundell

OPERATIONS TEAM

Reijo Sundell, Chairman

Members

Jaana Isotalo, HR Manager (as of 1.12.2013)
Tiina Jalonen, Development Manager
Erkki Palonen, Project Manager
Vesa Ruuska, Safety Manager
Jani Virtanen, Corporate Support Manager

Timo Äikäs, Executive Vice President, has acted as the Secretary of the Operations Team

The Operations Team convened 19 times.

COMMITTEES APPOINTED BY THE BOARD

Project Committee (as of 30.8.2013)

Teollisuuden Voima Oyj
Sami Jakonen, Chairman
Juha Riihimäki
Fortum Power and Heat Oy
Eero Mattila
Kauko Silventoinen

Posiva Oy
Erkki Palonen
Lauri Piitari
Marko Arenius, Secretary

The Committee convened two times.

Financial Committee

Teollisuuden Voima Oyj
Klaus Luotonen, Chairman
Timo Palomäki
Veijo Ryhänen
Fortum Power and Heat Oy
Tiina Tuomela
Sami Hautakangas
Mikko Huopalahti

Posiva
Anja Smeeke (until the 01/2013 meeting)
Reijo Sundell
Jani Virtanen (as of the 02/2013 meeting)
Jussi Palmu, Secretary

The Committee convened seven times.

Technical Committee

Teollisuuden Voima Oyj
Mikko Kosonen, Chairman
Liisa Heikinheimo
Juha Riihimäki (until the 04/2013 meeting)
Pekka Viitanen (as of the 05/2013 meeting)

Fortum Power and Heat Oy
Harriet Kallio
Jukka Sorjonen
Jari Tuunanen

Posiva
Tiina Jalonen (as of the 04/2013 meeting)
Erkki Palonen (until the 03/2013 meeting)
Vesa Ruuska (as of the 04/2013 meeting)
Juhani Vira (until the 01/2013 meeting)
Timo Äikäs (until the 03/2013 meeting)
Kimmo Lehto, Secretary (until the 01/2013 meeting)
Petteri Vuorio, Secretary (as of the 02/2013 meeting)

The Committee convened five times.





Board of Directors from left: Reijo Sundell, Veijo Ryhänen, Jarmo Tanhua, Pekka Leskelä ja Sasu Valkamo.



Operations Team from left: Tiina Jalonen, Timo Äikäs, Jaana Isotalo, Jani Virtanen, Reijo Sundell, Erkki Palonen, Vesa Ruuska.



Gender distribution

Auditors

CPA Jouko Malinen, nominated by
PricewaterhouseCoopers Oy
CPA Robert Kajander, nominated by Deloitte &
Touche Oy

Shares of ownership

Posiva Oy is a joint venture of Teollisuuden Voima Oyj and Fortum Power and Heat Oy. Teollisuuden Voima Oyj owns 60 % and Fortum Power and Heat Oy 40 % of Posiva.

Personnel and organisation

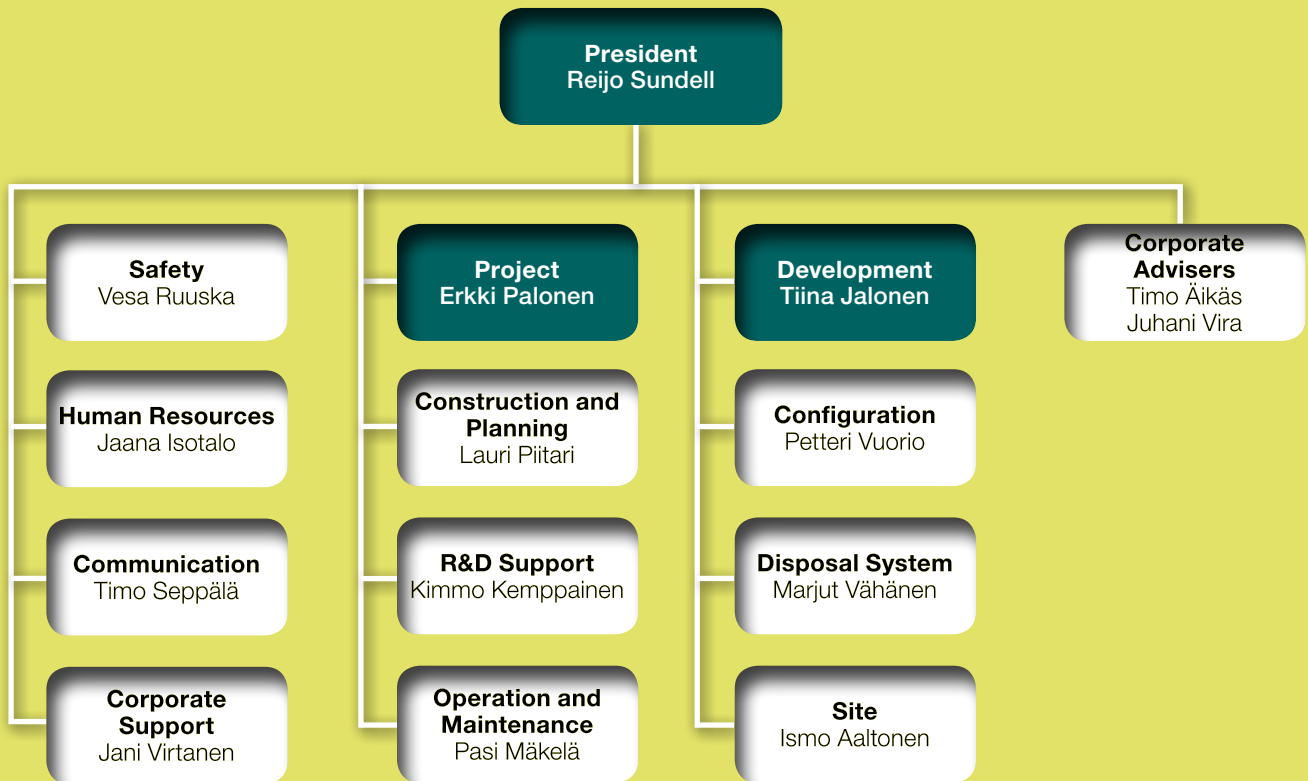
At the end of the year, Posiva employed 100 persons (101 in 2012). The figure includes both permanent and temporary employment contracts. During the year, Posiva employed an average of 105 (104) persons, some of them on a fixed-term contract and some as summer employees. During the year, the company recruited 5 (9) new permanent employees, mainly to different specialist positions related to nuclear waste management. Five (5) persons left the Company, one (2) of them due to retirement.

Towards the end of 2013, Posiva launched a recruitment campaign designed to reinforce the organisation for the future needs of the Company. The goal of the recruitment campaign is to increase the number of personnel at Posiva by about one fifth.

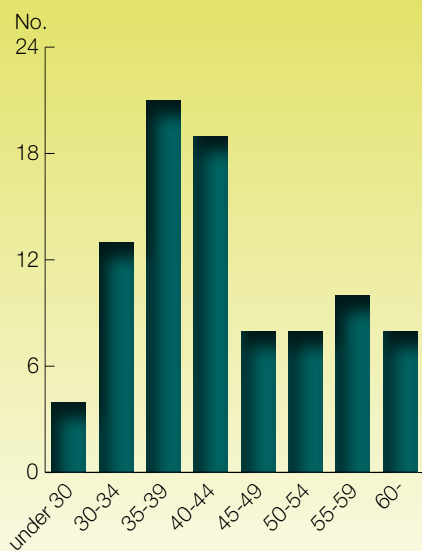
The average number of training days was five days per employee (9). To date, 1,668 persons have undergone Posiva's induction training for the ONKALO construction site. In addition to internal training and training arranged by TVO, several employees of Posiva also attended the national course on nuclear safety and the national course on nuclear waste management. The planning teams of both of these courses included representatives from Posiva. In the summer of 2013, Posiva took part in the "Responsible summer job" campaign, which is designed to promote the employment of young people in meaningful summer jobs, leading to good employment opportunities later in their life. Posiva was awarded an honourable mention in the campaign.

There were no changes in the collective agreements of the energy industry in 2013. The agreements are valid until 30 September 2014. Employment relationship issues were addressed in the meetings of specific personnel groups and matters pertaining to the entire staff in personnel meetings. The entire personnel of Posiva are included in a performance bonus scheme. Performance bonuses

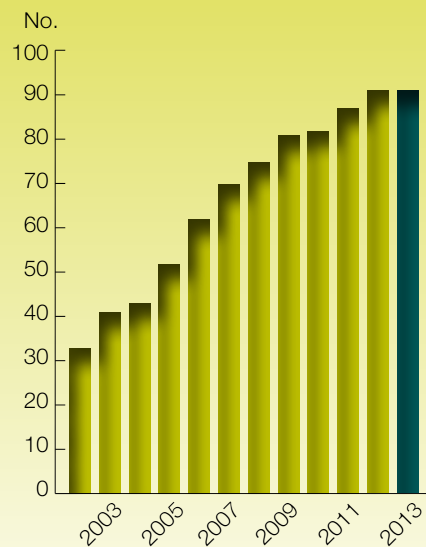
Posiva organisation 2013



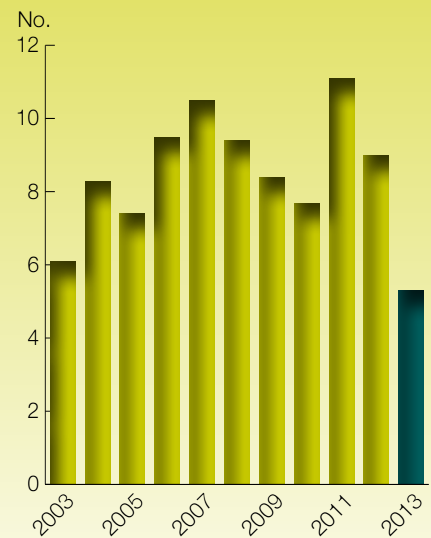
Age distribution at Posiva



Development of personnel numbers



Number of training days/person





Posiva has expanded the ONKALO Project Office to allow for the increase in personnel before the construction of the final disposal repository.

can be transferred directly to the personnel fund of the Group.

Office facilities

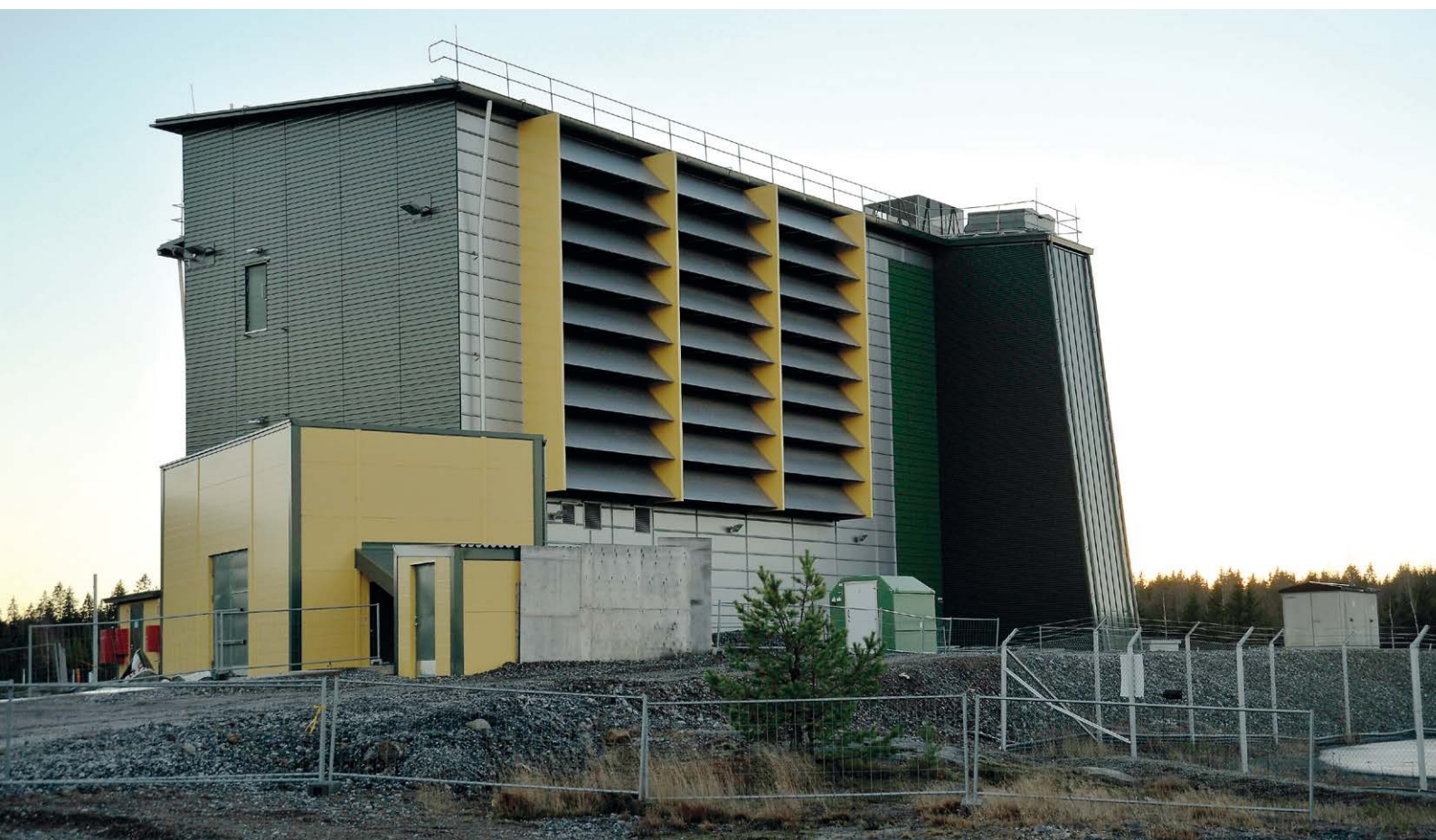
Posiva has office facilities on the Olkiluoto site and in the Vuojoki Mansion, which are both located in the municipality of Eurajoki. In Olkiluoto, Posiva has employees working both in the central office and in the office building on the ONKALO worksite, which was expanded by adding some 20 new workplaces.

Economy and finance

Posiva's main line of business is the management of spent nuclear fuel generated at the Olkiluoto and Loviisa power plants, as well as the research and development activities required to accomplish this task. The shareholders of Posiva bear the costs of the Company with the majority of the turnover derived

from revenue from the shareholders. The Company also executes orders to other owners and external customers on a small scale. The turnover of the Company totalled EUR 63.2 (67.3) million, with the main line of business accounting for EUR 63.2 (67.2) million.

Posiva attends to the nuclear waste management tasks stipulated in the Nuclear Energy Act on behalf of the power companies i.e. its owners. Consequently, the company charges the annual costs arising from this, including the acquisition costs of fixed assets. Since the nuclear waste management costs will not accrue income in the future for the companies with waste management obligations or for Posiva, Posiva's nuclear waste management costs have been deducted in full as annual costs, even where acquisition costs of fixed assets are concerned. The companies with waste management obligations make provisions for the cost of nuclear waste management by paying annual nuclear waste management fees to the State Nuclear Waste Management Fund.



In the winter, inlet air to ONKALO is heated in the ventilation building utilising waste heat from the Olkiluoto nuclear power plant units.

Scope of research and development activities

Posiva currently mainly engages in extensive research and development activities aimed at providing for preconditions of final disposal. In 2013, a total of ca. EUR 42.8 (51.9) million was spent on R&D, accounting for 67.7 % (77.1 %) of turnover. In addition to ONKALO, the research and development activities encompass investigations above ground, the development of the encapsulation technology and the design and engineering of the final disposal repository.

Key indicators

Due to the operating principle of the Company, the presentation of key financial indicators is not appropriate for understanding the business activities, financial status or financial result of Posiva. The financial statements show neither profit nor loss.

Events after the end of the financial period

There have been no relevant events with an impact on the development of business activities.

Estimate of probable future development

Company operations are in main parts estimated to continue during the current financial period unchanged from the previous year. The turnover is estimated to increase somewhat over the previous financial period.

Distribution of profits

The Company has no unrestricted equity and thus there are no dividends to be distributed.

Financial statements

INCOME STATEMENT

	Note	1.1.–31.12.2013	1.1.–31.12.2012
Turnover	1	63,220,304.80	67,307,058.67
Other income	2	614,666.86	462,850.28
Personnel expenses	3	-7,386,367.49	-7,249,183.69
Depreciation	4	-339,790.67	-349,837.33
Other expenses	5	-56,072,695.56	-60,130,039.03
Profit/loss from operations		36,117.94	40,848.90
Financial income and expenses	6	-32,503.04	-36,929.99
Profit/loss before appropriations and taxes		3,614.90	3,918.91
Income taxes	7	-3,614.90	-3,918.91
Profit/loss for the financial year		0.00	0.00

BALANCE SHEET

ASSETS	Note	31.12.2013		31.12.2012	
Non-current assets					
Intangible assets					
Intangible rights	8	10,963.36		13,125.44	
Other non-current expenditure	8	438,567.83	449,531.19	743,207.15	756,332.59
Tangible assets					
Buildings	8	78,153.39		81,409.79	
Machinery and equipment	8	90,039.91	168,193.30	119,772.78	201,182.57
Investments					
Other shares and holdings	8	208,771.50		208,771.50	
Other loan receivables	8	3,454,079.93	3,662,851.43	3,810,306.99	4,019,078.49
Total non-current assets			4,280,575.92		4,976,593.65
Current assets					
Current receivables					
Trade receivables	9	172,017.30		179,213.47	
Loan receivables	10	356,227.06		348,354.26	
Prepayments and accrued income	11	2,269,600.00		2,091,041.51	
Other receivables	12	634,042.48	3,431,886.84	70.00	2,618,679.24
Cash and cash equivalents	13		14,882,719.60		18,229,516.85
Total current assets			18,314,606.44		20,848,196.09
Total assets			22,595,182.36		25,824,789.74
EQUITY AND LIABILITIES					
Equity					
Share capital	14	1,682,000.00		1,682,000.00	
Retained earnings/loss		0.00		0.00	
Profit/loss for the financial year		0.00		0.00	
Total equity			1,682,000.00		1,682,000.00
Liabilities					
Non-current liabilities	16	5,426,107.81		5,838,037.08	
Current liabilities					
Advances received	17	2,438,765.53		4,699,465.67	
Trade payables	18	7,995,990.48		6,694,557.85	
Other current liabilities	19	780,992.55		1,449,497.72	
Accruals and deferred income	20	4,271,325.99	15,487,074.55	5,461,231.42	18,304,752.66
Total liabilities			15,487,074.55		18,304,752.66
Total equity and liabilities			22,595,182.36		25,824,789.74

CASH FLOW STATEMENT

1 000 €	2013	2012
Operating activities		
Operating profit/loss	36	41
Adjustments to operating profit/loss *	340	350
Change in working capital **	-3,630	-3,196
Interest received	94	145
Interest paid	-126	-183
Taxes paid	-4	-4
Cash flow from operating activities	-3,290	-2,847
Investing activities		
Acquisition of intangible and tangible assets	0	-7
Proceeds from sale of intangible and tangible assets	0	0
Withdrawals of loans granted	348	341
Cash flow from investing activities	348	334
Financing activities		
Withdrawals of long-term loans	221	221
Repayment of long-term loans	-626	-620
Cash flow from financing activities	-405	-399
Change in financial assets	-3,347	-2,912
Financial assets January 1	18,230	21,142
Financial assets December 31	14,883	18,230
* Adjustments to operating profit/loss		
Depreciation and write-downs	340	350
Total	340	350
** Change in working capital		
Increase (-) or decrease (+) in non-interest-bearing receivables	-805	-240
Increase (+) or decrease (-) in short-term non-interest-bearing liabilities	-2,825	-2,956
Total	-3,630	-3,196

NOTES TO FINANCIAL STATEMENTS 31/12/2013

GENERAL INFORMATION ABOUT THE COMPANY

Posiva Oy is a joint venture company owned by Teollisuuden Voima Oyj and Fortum Power and Heat Oy. Copies of the financial statements are available at www.posiva.fi and by post from Olkiluoto, 27160 Eurajoki, Finland.

ACCOUNTING PRINCIPLES

Measurement principles and methods and accrual principles and methods

Measurement of non-current assets

Intangible rights, other non-current expenditure as well as property, plant and equipment are capitalised at immediate acquisition cost less depreciation/amortisation according to plan. The depreciation/amortisation according to plan equals the maximum amounts allowed by the Finnish Business Tax Act.

The acquisition costs of property, plant and equipment acquired for nuclear waste management prescribed by the Nuclear Energy Act have been deducted in their totality as annual costs because nuclear waste management costs will not accrue income in the future for the companies with waste management obligations or for Posiva.

The depreciation/amortisation periods for other non-current assets are as follows:

Intangible rights	Straight-line depreciation over 10 years
Other long-term expenditure	Straight-line depreciation over 10 years
Computer software	Straight-line depreciation over 5 years
Machinery and equipment	Reducing balance depreciation at 25%

Research and development costs

The research and development costs have been recognised as annual costs during the year in which they were incurred.

NOTES TO THE INCOME STATEMENT

	2013	2012
1. Turnover		
Income, main line of business	63,157,955.72	67,249,377.51
Income, auxiliary line of business, shareholders	29,104.80	43,376.24
Income, auxiliary line of business, other companies	33,244.28	14,304.92
Total	63,220,304.80	67,307,058.67
2. Other income		
Rental income	114,193.75	127,411.36
Subsidies received	500,313.11	333,522.64
Other income	160.00	1,916.28
Total	614,666.86	462,850.28
3. Personnel		
Average number of personnel	105	104
Number of employees on 31.12.	100	101
Personnel expenses		
Wages and salaries	6,093,649.28	5,998,955.86
Pension expenses	1,011,496.47	972,347.24
Other compulsory personnel expenses	281,221.74	277,880.59
Total	7,386,367.49	7,249,183.69
4. Depreciation		
Depreciation plan		
Planned depreciation is the maximum depreciation under Finnish Business Tax Act.		
Planned depreciation		
Intangible rights	2,162.08	2,162.09
Other long-term expenditure	304,639.32	304,639.35
Buildings	3,256.40	3,392.07
Machinery and equipment	29,732.87	39,643.82
Total	339,790.67	349,837.33

NOTES TO THE INCOME STATEMENT

	2013	2012
5. Other expenses		
Rents	3,118,269.48	2,957,318.48
Infrastructure services	4,956,564.73	4,702,944.00
Research services	28,263,000.45	32,994,955.10
Research facility expenses	11,416,279.46	14,270,770.77
Other expenses	8,318,581.44	5,204,050.68
Total	56,072,695.56	60,130,039.03
Acquisition costs of fixed assets used for nuclear waste management are booked as annual expenses under Section 5:1 of the Accounting Law	13,207,829.45	15,061,527.97
Auditors' fees		
Audit fees	10,000.00	9,000.00
Total	10,000.00	9,000.00
6. Financial income and expenses		
Interest income and other financial income		
Interest income from long-term investments	93,985.74	101,684.56
Other interest and financial income	77.73	42,906.47
Total	94,063.47	144,591.03
Interest and other financial expenses		
To others	126,566.51	181,521.02
Total financial income (+) and expenses (-)	-32,503.04	-36,929.99
7. Income tax expense		
Taxes based on the taxable income of the financial year	3,497.47	3,926.76
Total	3,497.47	3,926.76

NOTES TO THE BALANCE SHEET

8. Non-current assets	Intangible rights	Other non-current expenditure	Intangible assets total
Intangible assets			
Acquisition cost 1.1.2012	50,095.72	3,260,179.14	3,310,274.86
Increase	0.00	0.00	0.00
Acquisition cost 31.12.2012	50,095.72	3,260,179.14	3,310,274.86
Accumulated planned depreciation 1.1.	36,970.28	2,516,971.99	2,553,942.27
Planned depreciation	2,162.08	304,639.32	306,801.40
Book value 31.12.2012	10,963.36	438,567.83	449,531.19
	Buildings	Machinery and equipment	Tangible assets total
Tangible assets			
Acquisition cost 1.1.2012	138,183.20	879,495.90	1,017,679.10
Increase	0.00	0.00	0.00
Decrease	0.00	0.00	0.00
Acquisition cost 31.12.2012	138,183.20	879,495.90	1,017,679.10
Accumulated planned depreciation 1.1.	56,773.41	759,723.12	816,496.53
Accumulated depreciation from deduction	0.00	0.00	0.00
Planned depreciation	3,256.40	29,732.87	32,989.27
Book value 31.12.2012	78,153.39	90,039.91	168,193.30

Investments	2013	2012
Other shares and holdings	208,771.50	208,771.50
Other loan receivables	3,454,079.93	3,810,306.99
Total	3,662,851.43	4,019,078.49

NOTES TO THE BALANCE SHEET

	2013	2012
9. Trade receivables		
Trade receivables from related party	0.00	6,628.96
Trade receivables	172,017.30	172,584.51
Total	172,017.30	179,213.47
10. Loan receivables		
Loan receivables	356,227.06	348,354.26
Total	356,227.06	348,354.26
11. Prepayments and accrued income		
Prepayments and accrued income from related party	17,900.00	63,424.00
Prepaid rent	2,211,700.00	1,990,530.00
Other deferred income	40,000.00	37,000.00
Other prepaid expenses	0.00	87.51
Total	2,269,600.00	2,091,041.51
12. Other prepaid expenses		
Other prepaid expenses	634,042.48	70.00
Total	634,042.48	70.00
13. Cash and cash equivalents		
Cash and equivalents	14,882,719.60	18,229,516.85
Total	14,882,719.60	18,229,516.85
14. Share capital		
Share capital 1.1.	1,682,000.00	1,682,000.00
Change in share capital	0.00	0.00
Share capital 31.12.	1,682,000.00	1,682,000.00
15. Debts fall due in more than five years	4,758,261.13	4,869,626.75

NOTES TO THE BALANCE SHEET

16. Non-current liabilities	2013	2012
Non-current liabilities from related party	5,426,107.81	5,838,037.08
Total	5,426,107.81	5,838,037.08
17. Advances received		
Advances received from related party	1,416,134.90	497,365.67
Other advances received	1,022,630.63	4,202,100.00
Total	2,438,765.53	4,699,465.67
18. Trade payables	7,995,990.48	6,694,557.85
19. Other liabilities		
Financial liabilities from related party	633,096.27	626,375.59
Tax liability	146,216.34	821,534.21
Other liabilities	1,679.94	1,587.92
Total	780,992.55	1,449,497.72
20. Accruals and deferred income		
Accrued interests	1,038.80	874.38
Accrued wages and salaries	1,897,259.28	1,906,808.71
Estimate of expenses not yet charged	2,373,027.91	3,553,548.33
Total	4,271,325.99	5,461,231.42
21. Commitments		
Contingent liabilities given on own behalf		
Customs liabilities	20,000.00	0.00
Other rent liabilities		
Rent liabilities falling due in less than a year	442,340.00	442,340.00
Rent liabilities falling due later	3,981,060.00	4,423,400.00
Total	4,423,400.00	4,865,740.00

Posiva has rented from Teollisuuden Voima Oyj a land area for the final disposal of spent nuclear fuel. The rental period is from July 1, 2003 to June 30, 2103. The rental agreement is subject to notice in case the land area is not suitable for the final disposal of spent nuclear fuel. The rent is checked every two years according to cost-of-living index. The rent was EUR 604,883.71 in 2013 (EUR 590,982.08 in 2012).

SIGNATURES TO THE ANNUAL REPORT AND FINANCIAL STATEMENTS

Helsinki 24. February 2014



Jarmo Tanhua, Chairman



Pekka Leskelä



Veijo Ryhänen



Sasu Valkama



Reijo Sundell, President

AUDITORS' REPORT

To Posiva Oy's Annual General Meeting

We have audited the accounts, the financial statements, the annual report and the management of Posiva Oy for the financial year 1 January – 31 December 2013. The financial statements include the balance sheet, income statement, funds statement and the notes to the financial statements.

The responsibilities of the Board of Directors and the President

The Board of Directors and the President are responsible for drawing up the financial statements and annual report as well as for giving correct and necessary information that is in accordance with Finnish regulations governing the preparation of financial statements. The Board of Directors is responsible for organising proper monitoring of accounting and financial management. The President is responsible for ensuring that accounts are in compliance with legislation and that financial management has been organised in a reliable manner.

The responsibilities of the Auditor

We are obligated to issue a statement on the financial statements and the annual report on the basis of our audit. The Auditing Act prescribes that we are obligated to observe the principles of professional ethics. We have performed the audit in compliance with the good auditing practice observed in Finland. Good auditing practice requires us to plan and perform the audit to obtain reasonable assurance as to whether the financial statements and the report by the Board of Directors are free from material misstatement and whether the members of the Board of Directors or the President are guilty of an act or omission that may result in liability for damages, or have violated the Finnish Limited Liability Companies Act or the Articles of Association.

An audit involves the performance of procedures to obtain audit evidence relating to the amounts and disclosures in the financial statements and the review by the Board of Directors as well as other information presented therein. The procedures selected depend on the auditor's judgment, including the assessment of risk of material misstatement due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements and the review by the Board of Directors. The auditor evaluates internal control in order to be able to design audit procedures that are appropriate in the circumstances, but not for the purpose of issuing a statement regarding the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made by the executive management, as well as evaluating the overall presentation of the financial statements and the review by the Board of Directors.

We believe that we have obtained a sufficient amount of appropriate audit evidence to provide a basis for our statement of opinion.

Statement of opinion

We therefore state that the financial statements and the annual report present true and sufficient information about the result of the Company's activities and its financial standing, as stipulated in the Finnish regulations governing the preparation of financial statements and the annual report. The annual report is consistent with the financial statements.

Other statements of opinion

We recommend that the financial statements be adopted. We recommend that the members of the Board of Directors as well as the President be discharged from liability for the financial year audited by us.

Helsinki, 24 March 2014

PricewaterhouseCoopers Oy
Authorised Public Accountants



Jouko Malinen
CPA

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Authorised Public Accountants



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