Group annual report

Beginning of financial year	1 January 2021
End of financial year	31 December 2021
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LETTER FROM THE CHAIRMAN OF THE MANAGEMENT BOARD

Dear reader

For Viru Keemia Grupp, 2021 was a year of significant strategic choices. Navigating the challenges of the somewhat ambiguous developments related to the green transition in Europe and the continuing COVID-19 crisis, VKG launched several projects that will play a decisive role in the development of the company in this decade. The decisions to start a project for opening the Uus-Kiviõli mine and to initiate a process for the adoption of a designated spatial plan as the first step towards building a bioproducts production complex have set VKG's path as a major industrial enterprise in Estonia.

Our everyday operations continued to be affected by the coronavirus last year. Even though the vaccination level of our staff was over 90%, every fifth employee was away from work at the peak of infection and maintaining full-scale production was a real challenge. Nevertheless, we processed 4.53 million tonnes of oil shale and produced 618 thousand tonnes of shale oil products and 918 GWh of energy products for our customers in 2021. Our financial results reflect growing demand for shale oil with a low sulphur content in the marine fuel market and a surge in energy prices. Despite a steep rise in the carbon tax expense, we ended the year with a net profit of 49.8 million euros.

Making strategic decisions is hard because the predictability of the Estonian business environment is very low. The roadmap for moving towards Europe's net zero carbon emissions goal has not become any clearer. The Fit for 55 package presented by the European Commission has become outdated and lost credibility because it is based on pre-COVID data. Proposals concerning the emissions trading system failed to take into account that the prices of emission allowances, which have become attractive trading instruments for speculators, tripled within a year. If we add the lack of clear positions on the part of the Estonian government, we are likely to face a perfect storm in terms of regulations.

Viru Keemia Grupp is a firm advocate of the market economy and wishes to operate in sectors with natural demand and free competition. As a participant in the volatile oil market, we must continuously assess various risks and make decisions on the basis of imprecise and incomplete information. We realise that the green transition involves unprecedented state intervention in the economy, which will affect all companies. However, it is also clear that the technologies required to fully achieve the green transition are not yet available. Europe's own green energy production does not even come close to covering the needs of its industries and households and Europe cannot afford losing the competitiveness of its industries in the medium-long term.

In the light of the above, we decided to launch a project for opening the Uus-Kiviõli mine, which will ensure the supply of raw material for Viru Keemia Grupp at least until 2038. We began to build the above-ground infrastructure immediately but the bulk of the investments will be made in 2023–2025. As we value sustainable management, we will make maximum use of the existing Ojamaa production complex and the opening of a new mine will not significantly add to the environmental impact.

Maximum use of the existing industrial infrastructure in Ida-Viru county is also one of the key aspects of the new bioproducts production complex project initiated by Viru Keemia Grupp. The low level of value added to Estonian wood or export of wood without any value added, the industrial traditions and infrastructure existing in Ida-Viru county, high demand for bioproducts in global markets and the experience of Viru Keemia Grupp in creating and operating large industrial enterprises provide favourable conditions for the emergence of a new branch of economy. We believe that the production of bioproducts and the development of wood chemistry are extremely important for the entire Estonian economy as well as the development of Ida-Viru county. The support of local people and local authorities compels us to act promptly, thoroughly and with commitment.

In conclusion, VKG will continue operating as a producer of marine fuels and a responsible member of the business community. We are committed to development and constantly seek opportunities for putting the strengths of Ida-Viru county to the best possible use. We will also continue building a better business environment. Our initiative to draft Estonia's own Climate Act has evoked debate and made decision-makers think. Together, we can make Estonia better.

Ahti Asmann
Chairman of the Management Board of Viru Keemia Grupp

DIRECTORS' REPORT

Viru Keemia Grupp AS (VKG, the VKG group, the group), based at Kohtla-Järve, is the largest privately-held shale oil producer in Estonia that proudly carries on the tradition of adding value to Estonian oil shale, which began in 1924. VKG has been a privately held company since 1997 when state-owned limited liability company Kiviter was privatised.

We strive for openness, commitment to our activities and continuous development. We believe that every step and activity should create greater value for everyone – our people, partners and customers as well as the local community.

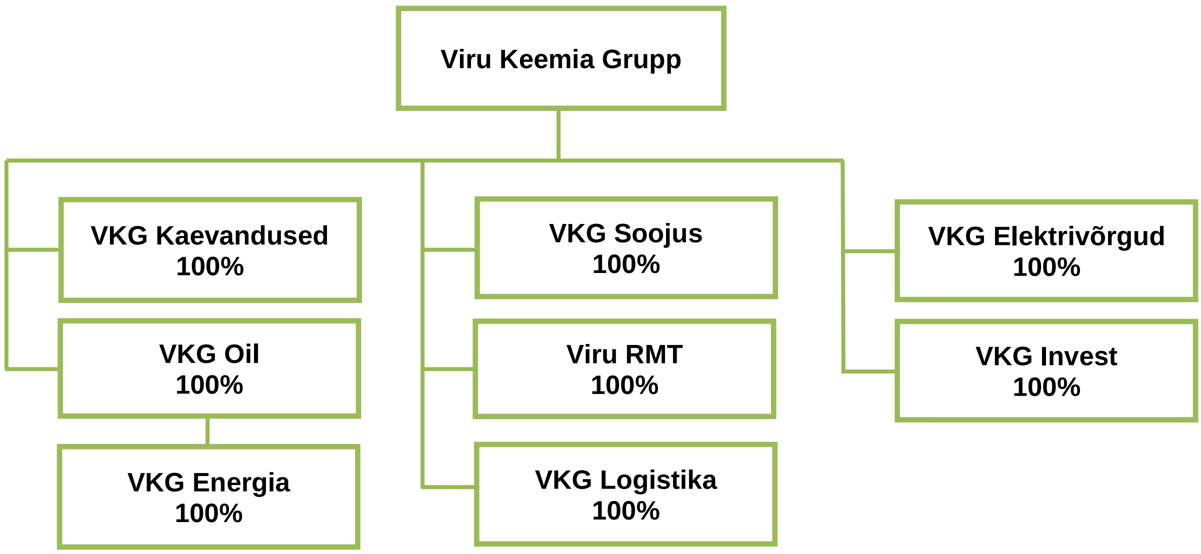
In order to add maximum value to oil shale, which is the key input to our core business – shale oil production, we are also involved in:

- oil shale mining;
- producing and selling fine chemicals made of oil shale;
- producing, distributing and selling heat and electricity;
- designing, building and repairing electrical installations and networks;
- producing, assembling, repairing and maintaining technological equipment.

For the VKG group, 2021 was a milestone year, marked by changes in business practices and the launch of new projects in completely new areas.

GROUP STRUCTURE

At 31 December 2021, the VKG group's legal structure was as follows:



The group's legal structure did not change in 2021 but the subsidiary VKG Diisel OÜ was renamed VKG Invest OÜ.

SIGNIFICANT EVENTS IN 2021

- **January** – Estonia's new government signed the coalition agreement according to which the country should exit from oil shale-based power generation by 2035 and from adding value to oil shale altogether by 2040. A later media release specified that the decision applied to the operations of the AS Eesti Energia group only.
- **February** – Due to an uncontrollable rise, the CO_2 emission allowance price almost tripled during the year. The carbon allowance price surged from around 33 €/t at the beginning of February to roughly 89 €/t at the beginning of December.
- **March** – A study was launched to determine an optimal buffer zone and time limit for the performance of blasting operations in the vicinity of the permanent habitat and courtship area of wood grouse at Kiikla. The Environmental Board approved a new monitoring methodology which is based on acoustic data.
- **April** – We organised a Safety Month along with webinars, discussions and competitions aimed at improving safety at work. At the end of the month, we held a constructive discussion on whether the injury rate of a production company could be reduced to zero.
- **May** – Responsible Business Forum Estonia once again recognised the VKG group's efforts in the field of corporate social responsibility with a bronze label.
- **June** – After four years, the implementation of the new business software MS D365 BC was successfully completed. We signed a cooperation agreement with the Jõhvi Programming School to contribute to IT education in Ida-Viru county.
- **July** – VKG announced the plan of building Estonia's own bioproducts production complex in Ida-Viru county to improve the outlook of the region. By using water from the oil shale mines and the existing industrial infrastructure, we can ensure the smallest possible environmental footprint for the project. On July 14, the European Commission unveiled a package of draft legislation called Fit for 55 which foresees increasing the EU's target for reducing greenhouse gas emissions by 2030 from the earlier 40% to 55%.
- **August** – The subsidiary VKG Diisel was renamed VKG Invest in connection with the group's plans to increase its involvement in investment projects outside its core business.
- **September** – We made a proposal to the parliamentary parties and the Office of the Prime Minister that a Climate Act be drafted for Estonia that would summarise the social contract required for meeting Estonia's climate goals.
- **October** – By October, 1,375 (85%) of the group's employees were fully vaccinated against the coronavirus and a further 42 employees had received the first dose.
- **November** – Tartu Circuit Court ruled in favour of VKG in the matter of unfair pricing of oil shale.
- **December** – VKG Invest made the first major real estate investment, buying the properties of Stockmann OY's department stores in the city centres of Tallinn and Riga.

IMPACTS OF THE EXTERNAL ENVIRONMENT

There are three areas where the group's financial performance is strongly influenced by the external environment:

- Shale oil, which is VKG's core product, competes with other fuels in the global commodity market where prices are volatile and not under the control of the group.
- The availability of the oil shale resource, which is VKG's main production input, depends on regulatory decisions.
- The regulatory environment has a significant impact on VKG's business through different global, EU and national environmental regulations.

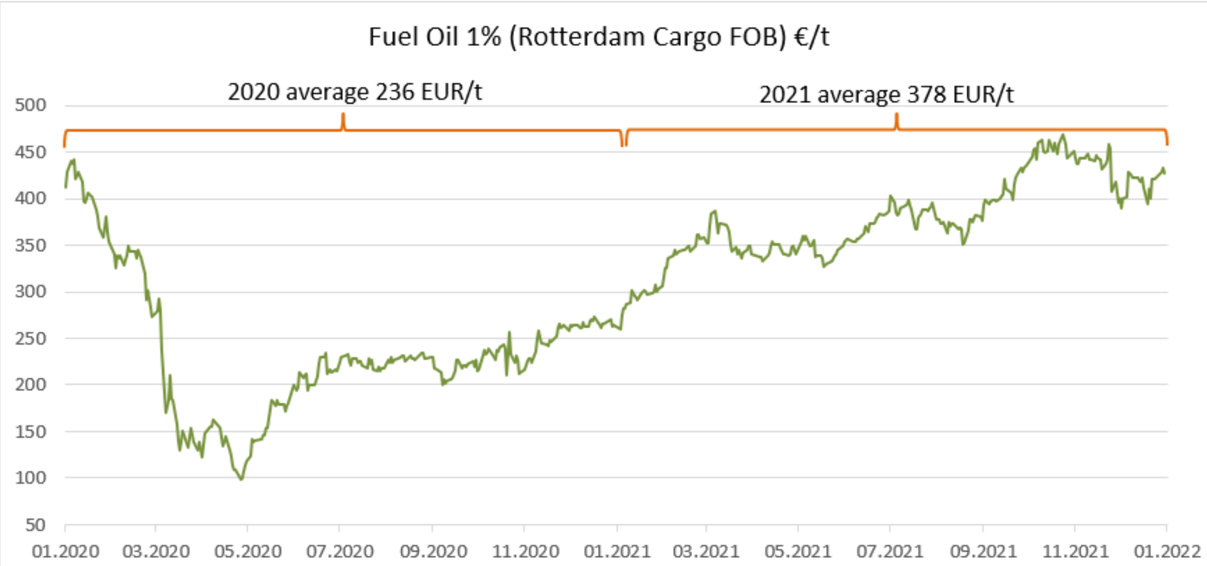
Economic environment

For the world economy, 2021 was a year of recovery from the shocks of COVID-19. The pandemic still affected our everyday life but overall economic activity showed strong improvement due to the rapid roll-out of vaccines and the central banks' accommodative monetary policy. The 2020 negative global growth of -3.3% is the lowest figure since the end of World War II, according to the World Bank. However, the 5.5% growth expected for 2021 reflects a swing to the other extreme: this would be the fastest global growth rate since 1972 and 1973, when growth was also driven by hikes in the prices of energy carriers.

Estonia's small and open economy rallied at an even faster pace in 2021. According to Statistics Estonia, Estonia's gross domestic product (GDP) grew by 8.3% (2020: -3.0%), which is the past 15 years' highest growth rate. As the average monthly gross salary grew by 6.9% (2020: 2.9%), which is close to recent years' average level, it was the first time in 10 years when GDP growth outpaced salary growth. While the salary increase is expected to accelerate in 2022, economic growth forecasts are cautious due to Russia's war against Ukraine.

The group's financial results are influenced the most by developments in the global oil market. Rapid recovery of economic activity revived demand for fuels, but as OPEC+ increased their oil supply cautiously and it takes time for the US shale oil producers to recover from the crisis, fuel prices mainly increased in 2021 against the backdrop of limited supply and growing demand. The price of Brent, which was 51 $/bbl at the beginning of the year, peaked at 86 $/bbl at the end of October. News of the spread of the new and particularly contagious Omicron strain brought the crude oil price back to around 70 $/bbl by the beginning of December, but due to a surge in the last week of the year Brent ended 2021 at 78 $/bbl. Its average price in 2021 was 71 $/bbl, which is 65% higher than in 2020.

The reference product for most oils produced and sold by VKG is fuel oil with 1% sulphur content. The fuel oil market is less liquid than that of Brent crude. Thus, the relationship between supply and demand may cause the prices of fuel oil and Brent crude to move differently. As oil market settlements are in US dollars and VKG incurs costs in euros, the dollar/euro exchange rate is another relevant factor. Accordingly, the group's performance is best reflected in the following price curve of fuel oil.



Source: OMJ

As shown in the above chart, the price of fuel oil with 1% sulphur content also soared in 2021, starting the year at 260 €/t and ending it at 420 €/t. The average price of fuel oil was 378 €/t in 2021, 60% higher than in 2020. Compared to Brent, the increase in the average price of fuel oil was slightly smaller, mainly due to a weaker dollar: the average euro-to-dollar exchange rate was 1.18 (2020: 1.14).

Availability of the oil shale resource

VKG estimates the availability of oil shale both in the short and long term, i.e. both current and future supply.

Current supply – Based on our oil production capacities, VKG's annual oil shale needs extend to 4.1 million tonnes of the geological resource (5.1 million tonnes of the extracted commodity) per year. The mining permits issued to VKG allow us to extract 2.77 million tonnes of the geological resource (3.5 million tonnes of commodity oil shale) per year at the Ojamaa mine and, if other market players do not extract all of their permitted volume, we may use the 'retrospective mining mechanism' and increase our oil shale extraction at Ojamaa to 3.5 million tonnes (4.35 million tonnes of commodity oil shale).

This means that in order to purchase the 750 thousand tonnes of commodity oil shale required to cover the shortfall (15% of VKG's total oil shale need) we must reach agreement with other market players.

We continued to work with Kiviõli Keemiatööstus in purchasing oil shale. Eesti Energia's oil shale concentrate purchase contract that was suspended in March 2020 due to the COVID-19 crisis was not reinstated during the year. Referring to an ongoing court dispute about an earlier unfairly priced oil shale supply contract, Eesti Energia did not wish to quote a new price before the final ruling. As a result, one of the three Kiviter plants was idle for the entire year due to the lack of oil shale.

Future supply – After reviewing VKG's mining volumes and the restrictions related to the Ojamaa mine, we concluded that the resource of the mine will probably be exhausted in 2028, which is two years sooner than we previously anticipated. This means that in order to ensure a sufficient supply of oil shale after the resource of the Ojamaa mine is exhausted, we have to start investing in the opening of the Uus-Kiviõli mine already in 2022. From an environmental point of view, the Uus-Kiviõli mine is the best possible solution because the area is in an excellent location for the oil plants, which are situated in Kohtla-Järve, and allows making maximum use of existing infrastructure. The oil shale enrichment plant near the Ojamaa mine has sufficient capacity to also process the oil shale extracted from the new mining area. Thus, there is no need for additional above-ground construction work and disturbance of nature. The Uus-Kiviõli mine should ensure the group's supply with oil shale until 2038.

Regulatory environment

The following regulatory developments in 2021 were relevant to VKG's competitiveness.

Regulatory changes resulting from the COVID-19 pandemic – The emergency situation declared by the government in 2020 in connection with the COVID-19 pandemic continued in 2021. Special measures set forth in the Emergency Act were applied during the period. Regardless of the roughly 90% vaccination level of our staff, the quarantine rules affected the continuity of our production processes through the long absences of infected employees. Moreover, an amendment to the Occupational Health and Safety Act which entered into force on 1 January 2021 required employers to pay sickness benefits to employees from the second to the fifth day in the period 1 January–30 April 2021. This caused additional expenses for the company. On the positive side, the period of application of section 8^2 of the Fiscal Marking of Liquid Fuel Act was extended by one year until 30 April 2023. This enables undertakings that hold an extraction permit to use specific-purpose diesel in mines and ash storage areas. Considering that marked diesel fuel is intended for industrial machinery that is not driven on public roads, VKG finds that the decision harmonises tax specifications across sectors and there are good grounds for the provision to apply indefinitely.

The European Green Deal – In December 2019, the European Commission (EC) adopted the European Green Deal (EGD), which aims to achieve carbon neutrality in the European Union by 2050 through political, economic and social measures. In December 2020, the representatives of member states agreed on a more ambitious intermediate EGD target for 2030 according to which greenhouse gas emissions should be reduced by 55% compared to the 1990 levels instead of the previously agreed 40%. The EC presented the package of measures and legal acts necessary for achieving the above target in July 2021. In this massive 12,000-page legislative proposal called Fit for 55, the provisions with the most significant effect on the operations of VKG are the following:

- **Changes in the emissions trading system (ETS)** – ETS, which continues to be the main tool for implementing Europe's green policy, is based on the taxation of the CO_2 emissions of selected economic sectors. Estonia's shale oil production is among the sectors that have to pay carbon tax to the EU treasury. As shale oil competes with other oil products in the global market, a carbon tax burden would render shale oil producers unable to compete with producers outside the EU that do not have to pay carbon tax. Therefore, shale oil production has been included among sectors at risk of carbon leakage and shale oil producers are allocated a certain amount of CO_2 emission allowances for free in order to maintain their competitiveness. The proportion of allowances received for free varies from year to year, depending on the production volume. In the past four years, emission allowances issued to VKG free of charge have covered 80% of our carbon emissions, on average.

This means that we have had to cover 20% of emissions with allowances purchased from the market. In view of the increase in the price of CO_2 emission allowances in 2021, VKG's annual carbon tax burden has risen from an earlier 8 million euros to 20 million euros and there is absolutely no clarity as to how fast it might grow in the future.
The steep increase in the price of CO_2 emission allowances was caused by the proposal made by the EC under the Fit for 55 package to reduce the overall amount of emission allowances allocated free of charge in 2021–2030 by 4.2% per year on average. A decrease in supply should increase the price of CO_2 emission allowances, which should reduce emissions, as companies would have to find solutions to reduce their carbon expenses or, if they are not able to do so, weaker ones would go out of business and, as a result, demand would decrease. The proposals caused the price of CO_2 emission allowances to surge, which attracted various speculators that discovered that carbon allowances may constitute a guaranteed-return investment opportunity. On the whole, the price of CO_2 emission allowances nearly tripled in 2021, rising from 32 €/t at the beginning of January to 89 €/t during the cold spell at the beginning of December. The hike was several times more rapid than any impact assessment or analyst could forecast at the beginning of the year. In theory, a rapid increase in the price of CO_2 emission allowances should have steeply reduced emissions, but in reality emissions grew across Europe in 2021 due to the revival of economic activity after the COVID-19 crisis.
It is clear that the current ETS does not fulfil its purpose, because emissions are growing despite the uptrend in the price of emission allowances. Furthermore, due to the unpredictability of the ETS companies lack clarity on how quickly the rise in the emission allowance price could render them insolvent and thus whether it is worth making any investments in reducing their footprint. Thirdly, the staggering increase in the carbon tax burden has been passed on to energy prices and thus to end consumers who are suffering, while speculators and politicians who distribute the collected money at their discretion are reaping the profits. As the current system has proven to be unpredictable and uncontrollable, VKG made a proposal to the government to replace the current complex ETS with a simple transparent and predictable carbon tax which would allow companies to assess the costs and benefits of various investments in reducing the CO_2 footprint and would not allow speculators to exploit green policy. The government understands the problems but admits it cannot take charge of the process which is being steered by the EC.

- **Higher CO_2 removal targets** – In addition to proposals for the reduction of emissions, a proposal was made to increase the net removal of greenhouse gases (GHG) in the EU's forestry and land use sectors (LULUCF) to at least 310 million tonnes of CO_2 equivalent by 2030. Estonia received the proposal to increase the net removal of GHG from the former 0.7 million tonnes to 2.5 million tonnes by 2030. Such a goal is clearly disproportionate for Estonia because the Estonian forestry sector would have to quickly contract by at least a third. The proposal affects VKG through the bioproducts production complex project which is in the planning phase. Although the production complex would allow capturing 0.46 million tonnes of CO_2 equivalent in bioproducts, making the investment would be impossible if a decision is made to abruptly reduce cutting volumes to achieve short-term goals by 2030, because there would not be enough raw material in the market to supply the production complex. Considering the overall wellbeing of Estonian people, VKG has made the government the proposal to reject the GHG net removal targets for 2030 that have been assigned to Estonia.

The Fit for 55 package also contains many other proposals that would have a direct or indirect effect on VKG's operations (such as the replacement of emission allowances allocated free of charge with a carbon border adjustment mechanism, more sustainable fuels in marine transport, etc.). The impact of those proposals on VKG is currently difficult to assess, but it is clear that those proposals may impair the competitiveness of the Estonian shale oil industry in the global fuel market.

BUSINESS REVIEW

The year 2021 was marked by continuing struggle with the threats of the COVID-19 pandemic and the looming impacts of the European Green Deal on the sustainability of the oil shale industry. Although production volumes declined somewhat due to unplanned production interruptions, the company's financial performance reflects the positive effects of economic recovery and market revival following the roll-out of vaccines.

The group's key performance indicators are summarised in the table below:

Key performance indicator	Unit	2019	2020	2021
Average price of Brent crude oil	$/bbl	64	43	71
Average price of fuel oil (1%)	€/t	348	236	378
Average price of CO_2 emission allowances	€/t	25	25	54
Oil shale output	'000 t	4,370	4,139	4,393
Oil shale processing volume	'000 t	5,021	4,746	4,530
Output of shale oil products	'000 t	659	629	618
Electricity production	GWh	474	446	409
Heat supply	GWh	451	436	509
Average number of employees	employee	1,751	1,657	1,632
Revenue	€'000	256,763	207,841	285,523
Operating profit	€'000	43,047	14,748	56,178
Net profit	€'000	36,677	10,081	49,787
Capital expenditures	€'000	30,179	14,226	23,922
Total assets	€'000	718,800	670,331	1,015,937
Equity	€'000	513,283	516,705	912,017
Equity ratio	%	71%	77%	90%
Net margin	%	14%	5%	17%

In 2021, the group's consolidated revenue grew by 37% year on year, driven mainly by the bounce-back of fuel prices in the world market after the crisis of 2020. The production of shale oil products and electricity decreased in 2021 (by 2% and 8%, respectively) due to the shorter working time of the Petroter oil plants. On the whole, the financial results for 2021 were satisfactory because the improvement in market conditions enabled the group to earn a net profit of 49.8 million euros.

The group's core business comprises three major processes which make up a process chain: oil shale mining, shale oil production, and heat, steam and electricity production. In addition, the group includes two companies that provide logistics and repair services and two infrastructure companies whose business is regulated by the competition authority. From 2021, entities involved in non-core business lines also include an investment company: VKG Invest.

Oil shale mining – VKG Kaevandused OÜ

The group's mining entity VKG Kaevandused restored the production of commodity oil shale to the pre-crisis level of 4.39 million tonnes in 2021 (2020: 4.14 million tonnes). The key factor was more efficient work arrangement, which helped increase production even though the workforce decreased by 10 and COVID-19 increased the number of sick leave days taken by staff by 20% compared with 2019. On the negative side, a review of the restrictions and extensions of the Ojamaa mine reflected that the extractable resource of the mine will be exhausted in 2028, which is two years sooner than previously anticipated. The first investments in opening a new mine in the neighbouring Uus-Kiviõli mining field were therefore made in 2021 already. The company's priority in the next few years is to ensure smooth and effective transition from the Ojamaa mine to the Uus-Kiviõli mine.

Shale oil production – VKG Oil AS

VKG Oil processed 4.53 million tonnes of oil shale in 2021, 4.6% less than a year earlier. Oil shale processing volumes decreased, mainly due to the shorter working time of the Petroter plants. On the positive side, the output of oil products per tonne of oil shale grew. As a result, shale oil production decreased by only 1.7% to 618 thousand tonnes. In 2022, production volumes are expected to decrease further as Petroter I, which has been operating for over 12 years, will undergo major reconstruction, set to last for almost six months, in the course of which the group's first experimental oil plant will be upgraded to the same standards as its newer plants: Petroter II and Petroter III. After renovation, the plant's output will increase by about 10% and environmental footprint will decrease.

Heat, steam and electricity production – VKG Energia OÜ

Oil shale gas released in the process of oil production which does not condense into oil is used for heat, steam and electricity production. Heat is supplied to the local district heating network, steam is sold to production companies operating in the area and electricity left over from self-consumption is sold to the distribution network operator VKG Elektrivõrgud. In addition, oil shale gas is used in the lime plant whose output we use in our own desulphurisation systems to clean flue gases. Such a production chain ensures that the use of oil shale energy is as efficient and environmentally friendly as possible.

VKG Energia supplied 509 GWh of heat in 2021, which is 17% more than in 2020. This can be explained by the fact that 2021 was unusually cold while 2020 was unusually warm. At the same time, electricity production decreased by 8% to 409 GWh due to both an increase in heat production and a decrease in oil shale processing. Electricity produced by VKG Energia accounted for 6.5% of all electricity produced and 4.5% of all electricity consumed in Estonia in 2021.

KEY FINANCIAL INDICATORS

Exports accounted for 63% of the group's total revenue in 2021 compared with 68% in 2020 and 79% in 2019.

Revenue contributions of major product groups and service lines:

Product group or service line	2019	2020	2021
Shale oils	84%	82%	81%
Sale and distribution of heat and electricity	14%	15%	16%
Other products and services	2%	3%	3%

Although the sales prices of shale oils increased significantly due to the surge in the prices of oil products, their revenue contribution in percentage terms remained comparable to previous periods because heat sales volumes and electricity sales prices increased as well.

The group's financial performance is described by the following ratios:

Ratio	2019	2020	2021
Net margin (net profit/revenue)	14.3%	4.8%	17.4%
Return on assets (ROA) (net profit/average total assets)	5.1%	1.5%	5.9%
Return on equity (ROE) (net profit/average equity)	7.2%	2.0%	7.0%

The group's financial position is described by the following ratios:

Ratio	2019	2020	2021
Debt ratio (liabilities/total assets)	0.29	0.23	0.10
Current ratio (current assets/current liabilities)	1.95	3.09	2.59

In the group's financial risk management, it is critically important to take account of the volatility of the oil market and the trends in the cost of conversion of products (product costs). To ensure the group's ability to continue as a going concern in a volatile market environment, we have to maintain higher liquidity buffers than ordinary companies to be able to survive sharp falls in market prices. As a producer of base products competing in the global commodity market, we must keep production costs under control at all times to ensure the competitiveness of our production operations even when the oil market is a slump.

DEVELOPMENT ACTIVITIES

VKG moved on with development projects in new areas of activity in 2021.

On 20 July, the group announced the plan to build a bioproducts production complex in Ida-Viru county. For that purpose, an application was submitted to the Lüganuse rural municipality to initiate a process for the adoption of a local designated spatial plan. The complex would be used to produce key components for environmentally friendly retail products and the production volume would extend to 500,000 tonnes per year. The planned product range includes pulp, dissolving pulp and tall oil. Global demand for products made of such environmentally sustainable materials is growing rapidly. The complex would use the most modern flexible Kraft technology that is currently the best available technology for producing pulp from both coniferous and non-coniferous wood.

VKG believes that wood which is being exported should be used locally to produce value-added products. Estonia has the wood resource, of which 80% is currently being exported to the Nordic countries in the form of pulpwood and wood chips. The country needs a modern bioproducts plant to add value to low-quality wood and Ida-Viru county is a good location for such a new production facility. A bioproducts production complex would also help diversify the economy of Estonia and Ida-Viru county and achieve environmental goals.

On 25 August 2021, the Lüganuse rural municipality initiated a process for the adoption of a local designated spatial plan for the construction of a bioproducts production complex and to date the terms of reference for the plan and a memorandum of intention to conduct a strategic environmental impact assessment have been prepared. The process, which is being led by the Lüganuse rural municipality, will take about three years. The complex will start operating in 2026–2027 at the earliest.

Last year VKG and Kiviõli Keemiatööstus launched a joint project for the conversion of plastic waste into oil and gas. The plan is to adjust the processes used in the shale oil plants so that they could be used for the processing of plastic waste. To date, the partners have completed a considerable amount of preparatory work, launched applied research and announced several international calls for tenders to find providers of testing and design services. The project is supported by the European Regional Development Fund via the Estonian Business and Innovation Agency. The planned experimental facility, which could start operating in five years at the earliest, would help solve the ever-increasing plastic waste challenge based on the circular economy concept.

The focus areas of development activities in 2022 include:

- Continuing the process for the adoption of a designated special spatial plan for the bioproducts production complex and initiating the preparation of a draft design
- Developing a plastic waste pyrolysis technology in partnership with Kiviõli Keemiatööstus
- Developing renewable energy projects
- Exploring new business opportunities.

INVESTMENT ACTIVITIES

In 2020, VKG reduced investments to 14 million euros due to the COVID-19 pandemic and the oil market crisis. In 2021, however, investments grew again, rising to 23.9 million euros, which were allocated as follows:

- **Investments in operational reliability and availability** totalled 16.4 million euros. The figure includes investments of 3.8 million euros in the replacement and renewal of obsolete mining machinery and equipment and 3.7 million euros in building underground mine roadways at VKG Kaevandused, investments of 4.7 million euros in major overhaul of oil plants at VKG Oil and investments of 2.4 million euros in total in various operational reliability projects at VKG Energia, VKG Soojus and VKG Elektrivõrgud.
- **Investments in development activities** amounted to 6.3 million euros, of which 3.7 million euros was spent on preparations for the reconstruction of Petroter I and 0.7 million euros was spent on other development projects at VKG Oil, 0.5 million euros was invested at VKG Energia and 0.7 million euros was spent on IT developments at Viru Keemia Grupp AS.

- **Investments in environmental protection and safety** totalled 0.8 million euros, most of which was spent on various environmental projects conducted at VKG Oil (0.4 million euros) and VKG Kaevandused (0.3 million euros).

The volume of investments planned for 2022 has been raised to 36 million euros, mainly due to the Petroter I reconstruction project that was launched in 2021.The amount earmarked for it in 2022 is 12 million euros. The remaining 24 million euros is made up of investments in operational reliability (18 million euros), development activities (5 million euros) and environmental protection and safety (1 million euros).

FINANCING

In June 2021, VKG decided to repay early the outstanding amount of the syndicated loan in order to be released from the restrictions and obligations imposed by the banks. This has made the group practically debt-free. The group's borrowings currently include only short- and long-term lease liabilities. The following table summarises the changes in borrowings:

Borrowings as at 31 December (€ million)	**2019**	**2020**	**2021**
Syndicated loan	117.3	96.0	0.0
Other borrowings	19.6	4.8	3.5
TOTAL	**136.9**	**100.8**	**3.5**

LEGAL DISPUTES

In November 2021, the Supreme Court ended the court dispute between Viru Keemia Grupp AS and AS Eesti Energia's subsidiary Enefit Power AS. The subject matter of the dispute was the unfairly high price at which Enefit Power AS was selling oil shale to Viru Keemia Grupp AS's subsidiary VKG Oil AS. The Supreme Court denied the appeal in cassation from Enefit Power AS and the ruling of Tartu Circuit Court of 21 May 2021, which partly granted the claim filed by VKG, entered into force. The case, which lasted for over six years, passed through courts of all three instances.

VKG is satisfied that the Circuit Court's and Supreme Court's interpretation of European competition law is similar to the understanding of VKG. The ruling provides VKG as well as Estonian companies in general with assurance that the Estonian court system is capable of making fair decisions in very complex competition matters.

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT

VKG has been applying a comprehensive corporate social responsibility and sustainable development policy for 13 years already. Our strategy includes both short-term and long-term sustainable development tasks for the period of change in the market of energy carriers and the interests of society. In strategic planning, we take into account the risks and opportunities related to climate change and the transition to low carbon energy, including the EU's Green Deal and the Fit for 55 package.

Our overall strategy is based on strict requirements for the environmental sustainability of our production operations, social responsibility, and safety at work. We have mapped our ESG (environmental, social and governance) objectives and have decided to focus on seven topics that we deal with on an ongoing basis. An integral part of our sustainability strategy is responsible use and rational enrichment of natural resources. We are aware that mineral resource extraction and production operations have an impact on the surrounding environment. We therefore always strive to do more than required by laws or regulations.

VKG's sustainable development priorities

Increasing the efficiency of the core business	Supporting external initiatives and participation in associations	Guiding principles
• Safety and security of production operations and the workplace • Minimising environmental impacts • Energy efficiency and conservation • Development of employee potential • Supporting regional development	• We share and support the principles of the UN Global Compact • Our sustainable development goals and activities are linked to the UN sustainable development goals • We take into account the Paris Climate Agreement and the EU Fit for 55 and 2050 climate neutrality goals • We are members of the following organisations: - Responsible Business Forum - Responsible Care - UN Global Compact - Global Reporting Initiative	• Openness and transparency • Honesty and integrity • Responsible behaviour • Compliance with internationals standards

Cooperation with stakeholders and supporting the region

VKG works closely with all stakeholder groups, maintaining dialogue to analyse the internal and external social environment, while taking into account the group's strategic objectives and the priorities of the stakeholder groups.

Cooperation with stakeholders is aimed at meeting the group's sustainable development goals and mapping the expectations and shared interests of all parties. We have identified a number of stakeholder groups whose interests are materially related to our activities and may have a significant impact on the achievement of our strategic goals. We consider it particularly important to include the local community in our development projects. The project launched for the development of the bioproducts production complex last year is a good example of inclusion. We have introduced the project at meetings organised with local people in various rural municipalities. Community involvement gives valuable input to the developer and creates opportunities for a mutual dialogue.

VKG is a good partner for local organisations promoting cultural, sports and education activities in the region. In 2021, we supported almost 30 initiatives and projects with 200,000 euros in total. Our main focus is on local youth. We have launched a series of initiatives designed to improve life and people's wellbeing in the region: Five-school Science Competition, Jõhvi Ballet Festival (in cooperation with Jõhvi Concert Hall), education projects such as STEM, and Miners' Day and Chemists' Day celebrations. Every year, we support either the paediatric or the maternity department of the Ida-Viru Central Hospital that usually uses the funds received to purchase medical equipment or to improve facilities for patients. Some projects are carried out in cooperation with local governments, particularly the City of Kohtla-Järve and the Lüganuse rural municipality. There are also initiatives where our contribution is non-financial – volunteering for tree-planting and donating time for projects in the City of Kohtla-Järve, the Kiikla Children's Home, local blood centres, etc.

Organisational culture

We have embedded the principles of responsible business into our organisational culture: the safety of people, the environment and assets, respect for human rights, equal opportunities and strong work ethics are among our priorities.

VKG's values – openness, commitment, development – are an integral part of our day-to-day business operations and reflect the interests of both the group and its employees. Values underpin decision-making, shape reputation and determine the principles of work.

The following organisational values and principles support our sustainable development:
- Safety of people, the environment and assets
- Mutual respect in the work environment
- Consideration and respect for colleagues
- Equal, clear and reasonable requirements for all business partners and compliance with high business ethics
- Responsible approach to assets
- Zero tolerance for corruption, conflicts of interest and use of inside information

Reporting

VKG has been preparing and disclosing reports on corporate social responsibility in accordance with the sustainability reporting principles of the Global Reporting Initiative (GRI Guidelines) since 2008. In preparing the report, we also share and apply the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting (IPIECA/ API, 2016). Our social responsibility and sustainable development reports are available in the Sustainable Development Report section of our website at https://www.vkg.ee/en/reporting. We are currently preparing a report that covers the results and progress of 2020 and 2021. The report will be published in the third quarter of 2022.

Anti-corruption measures

Fighting corruption has always been among our priorities. VKG's three main corruption risks and their mitigation measures are as follows:
- Giving a bribe in the interests of the group – VKG is a responsible and transparent company which has implemented a zero tolerance policy towards corruption and bribery.
- Accepting a bribe in selecting suppliers and business partners – VKG has put in place a procurement policy to prevent procurement rigging and ensure the selection of the best partner for the group. Compliance with the policy is monitored by the internal control unit which carries out regular checks.
- Conflicts of interest of key management personnel in representing the interests of the group – VKG has adopted a procedure for the submission of statements of economic interests which requires key management personnel to report their investments in, and relationships with, non-group entities. Members of the management board may not be involved in competition with VKG in any of the group's business lines unless they have obtained the prior written consent of the supervisory board.

The group has set up a confidential hotline (vihje@vkg.ee) which any employee or third party can use to report concerns about any aspect of the group's activity (corporate governance, business ethics, human rights, organisation of work, security, safety, product and service quality, etc.) or any matters of a corrupt nature.

ENVIRONMENTAL ACTIVITIES

In designing its environmental policy, VKG follows the principles of social responsibility and understands that sustainable development requires managing environmental impacts. The group has developed a comprehensive and systematic approach to environmental matters, which is in compliance with the environmental requirements of the EU and Estonian legislation as well as the best available techniques (BAT) reference documents. VKG's production units meet all applicable environmental requirements. Despite that we consistently look for ways to optimise our processes and reduce the footprint of our production operations. Our aim is to utilise the full potential of oil shale with the smallest possible footprint and consistent with the principles of circular economy.

Our environmental activities in 2021 were driven by the European Green Deal on which the Estonian government presented its general positions. VKG contributed to the forming of positions by giving input from the shale oil sector, which was partly taken into account in drafting the final document. We also participated in various EU initiatives, including the drafting of the Climate Law, the Carbon Border Adjustment Mechanism, the changes to the EU Emissions Trading System, etc.

Environmental focus areas in 2021:

- **Reducing odour emissions** – We are the largest shale oil producer in Estonia and our business affects both the surrounding environment and the local community. In planning our activities, we observe our action plan for the reduction of odour emissions. In 2021, we launched a project for the reconstruction of the Petroter I shale oil plant. The project includes the installation of a new flue gas utilisation boiler and an electrical filter, which will significantly reduce the impact of our production operations on the ambient air quality in the City of Kohtla-Järve and the surrounding area.
- **Greenhouse gases** – The rules of phase 4 of the EU emissions trading system entered into force in 2021. Due to an increase in production volumes in 2019 and 2020 and a change in methodology, we were able to provide proof for the allocation of an additional 316 thousand free emission allowance units.
- **Mineral extraction permits** – VKG Kaevandused filed an application for modifying the environmental permit of the Uus-Kiviõli mine. The company wishes to increase the maximum annual limit allowed by the permit from 2 million tonnes to 5 million tonnes of oil shale per year and to change the solution for the transport of the extracted mineral matter. The Environmental Board initiated an environmental impact assessment (EIA) in April. VKG Kaevandused started to prepare an EIA programme together with Enefit Power AS at the end of 2021.
  VKG Kaevandused submitted an application to the Environmental Board in order to extend the mining claim of the Ojamaa oil shale mine to the Aidu and Kohtla mining fields and the Ojamaa exploration field, which would increase the area of the mining claim by 279 hectares. If the application is approved, the active proved oil shale reserves related to the mining claim will increase by 10,091 thousand tonnes. In April 2021, the Environmental Board initiated an EIA with regard to the requested activities. VKG Kaevandused started to prepare an EIA programme at the end of 2021.
- **A study into the best available techniques (BAT) for shale oil production** – A study into the best available techniques for shale oil production in Estonia was launched in 2021 under the leadership of the Ministry of the Environment. VKG has participated in the working group preparing the study and provided input on the effectiveness of the technologies used by the group. The process will continue in 2022.

Oil shale industry's waste storage area – In autumn 2021, VKG started an experimental landscaping project at the oil shale industry's waste storage area, testing the option of using the stabilised wastewater sediments of a neighbouring enterprise to plant greenery on the slopes of the site.

Important environmental activities in 2022 include participating in shaping Estonia's positions on the Fit for 55 package, expanding the Ojamaa mine, carrying out the environmental impact assessment of the Uus-Kiviõli mining field, and participating in the working group of the study into the best available techniques (BAT) for the production of shale oil. Priorities include carrying out the strategic environmental assessments of the designated spatial plans for the oil shale industry's new waste storage area and the bioproducts production complex. We must also critically assess the effects of the proposals for the revision of the Industrial Emissions Directive on our environmental activities. Our development and environmental activities will remain focused on energy efficiency, recovery of waste, reduction of emissions to air and projects related to the climate neutrality policy.

EMPLOYEES

VKG with its 1,613 employees at the end of the reporting period is one of the largest employers in Ida-Viru county (at the end of 2020: 1,612 employees). Through suppliers, business partners and employees' family members, the group's performance has an indirect impact on the wellbeing of several thousand other people in the region. VKG acknowledges its responsibility for supporting the development of Ida-Viru county. We strive to provide our people with stability and a sense of security about the future. Due to the volatility of the oil market, however, it is not always possible to achieve this.

Information about the group's employees is summarised in the table below:

Group entity	Headcount at 31 December 2019	Headcount at 31 December 2020	Headcount at 31 December 2021
Viru Keemia Grupp AS	94	89	88
VKG Kaevandused OÜ	524	500	506
VKG Oil AS	677	626	626
VKG Energia OÜ	109	99	99
VKG Soojus AS	17	13	12
Viru RMT OÜ	172	125	129
VKG Logistika OÜ	124	123	118
VKG Elektrivõrgud OÜ	43	37	35
TOTAL	**1,760**	**1,612**	**1,613**

Our employees are qualified professionals who are loyal and committed to their job. Our employees' average length of service is 10 years and the longest-serving employee has been working for the company for 55 years. At the end of December 2021, our workforce comprised 1,246 men and 367 women. Due to a high share of jobs that require physical work and jobs where women cannot be employed, the proportion of men is considerably higher.

The average age of our employees is 45 years and almost 900 employees are in the 35–54 age group. In 2021, 186 new employees joined and 173 employees left VKG. The labour turnover rate was 10%, of which voluntary turnover was 6%.

The ethnic, gender, age and linguistic diversity of our employees sets high requirements in terms of equal treatment, inclusion and communication. Uniform rules of conduct, set out in the human resource policy, along with the company's values and code of ethics ensure honest and fair working relationships and employee loyalty. Expectations for staff conduct are set out in the form of rules and principles in a single document: Code of Ethics and Operating Principles.

Effective and motivated work is directly reflected in the company's financial results. In providing remuneration, we take into account the situation in the regional labour market, wages and salaries in different sectors, the employee's responsibilities, skills and qualifications, and other factors that may affect the bases of remuneration. The group has a transparent performance-based bonus system along with underlying principles. Balanced working conditions and a fair remuneration system help build a motivated and loyal workforce and create a strong work ethic.

Our people are highly skilled and qualified, well trained, experienced and eager to learn. In 2021**,** 14 employees of the group graduated from a higher education establishment, 11 of them from the TalTech Virumaa College. The group invests in the training of future employees and raising the qualifications of existing employees. In autumn 2021, we launched a project for new technological equipment operators for VKG Oil. After an extensive advertising campaign, we recruited a group of trainees that began to learn under a work placement study programme of the Ida-Viru Vocational Education Centre while working as technological equipment operators at VKG Oil. After completing the programme in 2023, the participants will be a valuable and well-qualified addition to our staff.

In 2021, we strengthened the focus on staff development activities. We approved our employee development priorities, training plans and action plans for the development of internal trainers and instructors to ensure a systemic internal transfer of professional competences and to provide needs-based and bespoke internal training. Staff development aimed at implementing new work methods and techniques, improving work arrangements and enhancing the management and leadership culture will remain among our priorities in 2022 as well. In cooperation with the Unemployment Insurance Fund and the Ida-Viru Vocational Education Centre, we will invest in an advertising campaign in 2022 to find a group of people interested in becoming chemical process operators at the Ida-Viru Vocational Education Centre to ensure the continuity of professional training in Ida-Viru county in a field that is not very popular but is important for VKG.

Through the TalTech Development Fund, we award scholarships to students engaged in professional higher education as well as undergraduate and graduate studies. In 2021, scholarships were granted to seven students specialising in electrical power engineering and mechatronics, georesources, environmental, energy and chemical technology, and thermal energy engineering at TalTech’s School of Engineering. We will continue to award scholarships through the Development Fund in 2022.

SUPERVISORY BOARD AND MANAGEMENT BOARD

The VKG group is managed by a five-member management board consisting of:

- Ahti Asmann (27 October 1973), chairman of the management board
- Meelis Eldermann (29 May 1957), vice-chairman of the management board and technical director
- Jaanis Sepp (3 February 1982), member of the management board and financial director
- Nikolai Petrovitš (27 February 1962), member of the management board and member of the management board of VKG Oil AS
- Margus Kottise (29 August 1968), member of the management board and member of the management board of VKG Kaevandused OÜ.

The parent company’s management board adopts all significant decisions required for the operation of the VKG group. The composition of the management board did not change during the year.

VKG’s supervisory board has five members – Toomas Tamme (chairman of the supervisory board), Priit Piilmann, Margus Kangro, Ants Laos and Elar Sarapuu. The composition of the supervisory board did not change during the year.

CONSOLIDATED FINANCIAL STATEMENTS
CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(In thousands of euros)	Note	31 December 2021	31 December 2020
Cash and cash equivalents	2	27,628	115,203
Derivative financial assets	3	0	167
Trade receivables	4	32,280	21,012
Other receivables	4, 28	58,761	267
Prepayments	4	290	253
Inventories	5	30,559	22,034
Assets held for sale	28	48,510	0
Total current assets		**198,028**	**158,936**
Long-term receivables		362	362
Property, plant and equipment	6	768,078	484,150
Intangible assets	7	48,572	25,986
Investment property		897	897
Total non-current assets		**817,909**	**511,395**
Total assets		**1,015,937**	**670,331**
Borrowings	8	1,779	23,375
Advances received		133	125
Trade payables		9,347	6,383
Taxes payable	23	10,207	5,285
Accrued expenses	9	7,313	7,099
Government grants	10	30,107	6,482
Provisions	11	17,106	37
Deferred income	12	594	393
Derivative financial liabilities	3	0	2,256
Total current liabilities		**76,586**	**51,435**
Borrowings	8	1,747	77,397
Government grants	10	3,793	4,346
Provisions	11	4,842	4,758
Deferred income	12	8,089	7,752
Other liabilities		3,921	4,732
Deferred tax liability	23	4,942	3,206
Total non-current liabilities		**27,334**	**102,191**
Total liabilities		**103,920**	**153,626**
Share capital	13	6,391	6,391
Reserves	14	462,127	134,063
Retained earnings		460,810	388,399
Equity attributable to owners of the parent		**929,328**	**528,853**
Own shares		**-17,311**	**-12,148**
Total equity		**912,017**	**516,705**
Total liabilities and equity		**1,015,937**	**670,331**

CONSOLIDATED INCOME STATEMENT

(In thousands of euros)	**Note**	**2021**	**2020**
Revenue	15	285,523	207,841
Cost of sales	16	-275,972	-216,077
Gross profit/loss		**9,551**	**-8,236**
Marketing and distribution expenses	17	-5,232	-5,548
Administrative expenses	18	-12,631	-11,179
Other income	19	66,106	40,942
Other expenses	20	-1,616	-1,232
Operating profit		**56,178**	**14,747**
Finance income	21	44	203
Finance costs	21	-1,903	-4,627
Profit before tax		**54,319**	**10,323**
Income tax expense	23	-4,532	-244
Profit for the year		**49,787**	**10,079**

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In thousands of euros)	Note	2021	2020
Profit for the year		**49,787**	**10,080**
Other comprehensive income			
Items of other comprehensive income that may be reclassified subsequently to profit or loss			
Cash flow hedges – effective portion of changes in fair value		-2,281	13,010
Cash flow hedges – reclassification to revenue		4,537	-11,668
Items of other comprehensive income that will not be reclassified to profit or loss			
Revaluation of items of property, plant and equipment	14	356,432	0
Total other comprehensive income		**358,688**	**1,342**
Total comprehensive income for the year		**408,475**	**11,421**

CONSOLIDATED STATEMENT OF CASH FLOWS

(In thousands of euros)	Note	2021	2020
Profit for the year		**49,787**	**10,080**
Adjustments for:			
Depreciation, amortisation and impairment losses		*71,964*	*74,769*
Revaluation of items of property, plant and equipment	*6*	*22,716*	*0*
Gain receivable on derivative instruments		*167*	*-53*
Recognition and adjustment of provisions	*11*	*17,086*	*94*
Accrued finance income and costs	*21*	*1,442*	*4,243*
Loss on disposal of non-current assets		*119*	*152*
Recognition and reversal of inventory write-downs	*5*	*0*	*579*
Recognition of deferred connection charges as income	*12*	*-341*	*-340*
Other adjustments	*23*	*3,231*	*244*
Total adjustments		**116,386**	**79,688**
Change in inventories		-8,775	13,556
Change in receivables and prepayments		-13,743	1,411
Change in payables and advances received		6,952	-15,072
Net cash from operating activities		**150,607**	**89,663**
Cash flows from investing activities			
Purchase and improvement of items of property, plant and equipment		-18,522	-13,922
Purchase of intangible assets	7	-677	-351
Purchase of other investments	28	-104,800	0
Proceeds from sale of non-current assets		17	174
Interest received		42	202
Proceeds from lease payments received	24	70	88
Connection charges received	12	728	553
Net cash used in investing activities		**-123,142**	**-13,256**
Cash flows from financing activities			
Repayments of loans received		-96,325	-34,420
Payments of lease principal	24	-2,552	-2,826
Interest paid on loans		-1,420	-4,762
Interest paid on lease liabilities	21	-74	-94
Dividend paid	13	-8,000	-8,000
Corporate income tax paid	23	-1,506	-1,695
Repurchase of own shares		-5,163	0
Net cash used in financing activities		**-115,040**	**-51,797**
Net cash flow		**-87,575**	**24,610**
Cash and cash equivalents at beginning of year	2	115,203	90,593
Decrease/increase in cash and cash equivalents		**-87,575**	**24,610**
Cash and cash equivalents at end of year	2	27,628	115,203

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(In thousands of euros)	Equity attributable to owners of the parent					Total equity attributable to owners of the parent	Repurchase of own shares	Total equity
	Share capital	Statutory capital reserve	Hedge reserve	Revaluation reserve	Retained earnings			
As at 31 December 2019	**6,391**	**639**	**-3,598**	**171,784**	**350,216**	**525,432**	**-12,148**	**513,284**
Profit for the year	0	0	0	0	10,079	10,079	0	10,079
Other comprehensive income	0	0	1,342	0	0	1,342	0	1,342
Total comprehensive income for the year	**0**	**0**	**1,342**	**0**	**10,079**	**11,421**	**0**	**11,421**
Changes in reserves (note 14)	0	0	0	-36,104	36,104	0	0	0
Dividend distribution (note 13)	0	0	0	0	-8,000	-8,000	0	**-8,000**
Other changes recognised directly in equity	0	0	0	0	0	0	0	**0**
As at 31 December 2020	**6,391**	**639**	**-2,256**	**135,680**	**388,399**	**528,853**	**-12,148**	**516,705**
Profit for the year	0	0	0	0	49,787	49,787	0	**49,787**
Other comprehensive income	0	0	2,256	356,432	0	358,688	0	**358,688**
Total comprehensive income for the year	**0**	**0**	**2,256**	**356,432**	**49,787**	**408,475**	**0**	**408,475**
Changes in reserves (note 14)	0	0	0	-30,624	30,624	0	0	**0**
Dividend distribution (note 13)	0	0	0	0	-8,000	-8,000	0	**-8,000**
Other changes recognised directly in equity	0	0	0	0	0	0	-5,163	**-5,163**
As at 31 December 2021	**6,391**	**639**	**0**	**461,488**	**460,810**	**929,328**	**-17,311**	**912,017**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

General information

Viru Keemia Grupp AS and its subsidiaries (collectively referred to as VKG or the group) form the largest chemical group in Estonia. The group’s core business is the production, distribution and marketing of oil shale-based chemicals. In addition, group entities are involved in domestic freight transport, production and supply heat and electricity, and production adhesives and resins.

The group had 1,659 employees in 2021 (on average), including 108 at the parent (2020: 1,625 employees, including 93 at the parent).

The address of the registered office of Viru Keemia Grupp AS is Järveküla tee 14, Kohtla-Järve, Estonia. The group operates mainly in Estonia. The shares in Viru Keemia Grupp AS are not listed on the stock exchange.

Note 1. Significant accounting policies

Basis of preparation

The consolidated financial statements of Viru Keemia Grupp AS have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union (IFRS EU).

The consolidated financial statements of VKG have been prepared on the historical cost basis unless described otherwise in these accounting policies.

The management board of Viru Keemia Grupp AS authorised these consolidated financial statements for issue on 21 June 2022. Under the Estonian Commercial Code, the annual report, which has been prepared by the management board and approved by the supervisory board, must also be approved by the general meeting. The consolidated financial statements are part of the annual report that needs to be approved by the shareholders and they serve as a basis for adopting the profit allocation resolution. Shareholders may decide not to approve the annual report, which has been prepared by the management board and approved by the supervisory board, and may demand that a new annual report be prepared.

These consolidated financial statements are presented in thousands of euros, unless indicated otherwise.

Changes in accounting policies and presentation of information

The consolidated financial statements have been prepared in accordance with the principles of consistency and comparability, which means that the same accounting and presentation policies have been consistently applied.

Accounting policies and presentation of information are changed only when this is required by new or revised International Financial Reporting Standards as adopted by the EU (IFRS EU) or their interpretations or when a new policy or presentation practice provides a more faithful representation of the group’s financial position, financial performance and cash flows.

When an accounting policy is changed, the comparative prior period information presented is adjusted as if the new accounting policy had always been applied. On changing accounting policies, the group takes into account the specific transitional provisions, if any, of IFRS EU.

When the presentation of information in the primary financial statements is changed, the comparative prior period figures presented are adjusted so that they would be in compliance with the changes made to the presentation of information in the reporting period. The effect of a change in an accounting estimate is recognised in the period of the change and any future periods affected.

Standards, interpretations and amendments to published standards not yet effective

The following new standards, interpretations and amendments were not yet effective for the annual reporting period ended 31 December 2021 and have therefore not been applied in preparing these consolidated financial statements. The group plans to adopt these pronouncements when they become effective.

Amendments to IFRS 3 *Business Combinations*

(Effective for annual periods beginning on or after 1 January 2022. Early application is permitted.)

The amendments to IFRS 3 update a reference in IFRS 3 to the 2018 Conceptual Framework for Financial Reporting instead of the 1989 Framework. At the same time, the amendments add a new paragraph to IFRS 3 to clarify that contingent assets do not qualify for recognition at the acquisition date.

The group does not expect the amendments to have a material impact on its financial statements when initially applied.

Amendments to IAS 1 Presentation of Financial Statements

(Effective for annual periods beginning on or after 1 January 2023; to be applied retrospectively. Early application is permitted.)

The amendments clarify that the classification of liabilities as current or non-current is based solely on the entity's right to defer settlement at the end of the reporting period. The right to defer settlement for at least 12 months from the reporting date need not be unconditional but must have substance. The classification is not affected by management's intentions or expectations about whether and when the entity will exercise its right. The amendments also clarify the situations that are considered settlement of a liability.

The group does not expect the amendments to have a material impact on its financial statements when initially applied.

Amendments to IAS 16 *Property, Plant and Equipment*

(Effective for annual periods beginning on or after 1 January 2022; to be applied retrospectively. Early application is permitted.)

The amendments to IAS 16 require that the proceeds from selling items produced while bringing an item of property, plant and equipment to the location and condition necessary for it to be capable of operating in the manner intended must be recognised, together with the cost of those items, in profit or loss and the entity must measure the cost of those items by applying the measurement requirements of IAS 2.

The amendments must be applied retrospectively, but only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. The cumulative effect of initially applying the amendments will be recognised as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of that earliest period presented (if necessary).

The group does not expect the amendments to have a material impact on its financial statements when initially applied.

Amendments to IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*

(Effective for annual periods beginning on or after 1 January 2022; to be applied retrospectively. Early application is permitted)

In determining costs of fulfilling a contract, the amendments require an entity to include all costs that relate directly to a contract. The amendments clarify that the cost of fulfilling a contract comprises both: the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling contracts.

An entity must apply those amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments (the date of initial application). The entity will not restate comparative information. Instead, the entity will recognise the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or other component of equity, as appropriate, at the date of initial application.

The group does not expect the amendments to have a material impact on its financial statements when initially applied, because in determining the costs of fulfilling a contract the group takes into account both incremental costs and other costs that relate directly to fulfilling contracts.

Other changes

Other new standards, amendments to standards and interpretations that are not yet effective are not expected to have a significant impact on the group's financial statements.

Functional and presentation currency

The group's presentation currency is the euro. The numerical information in the consolidated financial statements is presented in thousands of euros unless indicated otherwise.

Consolidation

The consolidated financial statements comprise the financial statements of Viru Keemia Grupp AS and its subsidiaries, combined line by line. The financial statements of subsidiaries are included in the consolidated financial statements from the date the group gains control to the date the group loses control. The parent company, which presents consolidated financial statements, consolidates all subsidiaries, both domestic and foreign.

A subsidiary is an entity controlled by the parent. The group controls an investee if it has exposure, or rights, to variable returns from its involvement with the investee and it has the ability to use its power over the investee to affect the amounts of those returns and there is a link between the power and the returns. On assessing the existence of control, the investor has to consider potential voting rights that are currently exercisable.

In preparing consolidated financial statements, the financial statements of the parent and its subsidiaries are combined line by line so that the consolidated financial statements present the group's financial information as that of a single economic entity.

Subsidiaries prepare their financial statements using the same accounting policies as the parent company. All intra-group transactions, balances and any unrealised profits and losses resulting from intra-group transactions are eliminated in full in preparing consolidated financial statements. Unrealised losses are not eliminated if they indicate impairment.

Non-controlling interests, which represent this portion of the profits or losses and net assets of subsidiaries that is not attributable to the parent company, are presented separately in the consolidated income statement and statement of financial position (within equity).

Acquisitions of subsidiaries are accounted for using the acquisition method.

Under the acquisition method, the cost of a business combination is allocated by recognising the assets, liabilities and contingent liabilities acquired at their fair values as at the acquisition date. Any excess of the cost of a business combination over the net fair value of the assets, liabilities and contingent liabilities acquired is recognised as goodwill. If the net fair value of the assets, liabilities and contingent liabilities acquired exceeds the cost of a business combination, the difference is recognised as income in the period in which it arises (as other income).

The assets and liabilities of foreign operations are translated using the exchange rates at the reporting date and the income and expenses of foreign operations are translated using the weighted average exchange rates for the period. Exchange differences are presented in the foreign currency translation reserve in equity.

Investments in subsidiaries and associates in the parent's financial statements

In the parent's separate statement of financial position (presented in note 31) investments in subsidiaries and associates are accounted for using the equity method whereby an investment is recognised initially at cost, being the fair value of the consideration given for it on acquisition. Thereafter the investment is adjusted for the change in the investor's share of the investee's equity and any impairment losses. An investment is assessed for impairment whenever an event or a change in circumstances indicates that the carrying amount of the investment may exceed its recoverable amount. If there is indication of possible impairment, the recoverable amount of the asset is estimated. When the estimated recoverable amount of an investment is smaller than its carrying amount, the investment is written down to its recoverable amount (the higher of fair value less costs to sell and value in use). An impairment loss is recognised in finance costs in the period in which it is identified.

Dividends distributed by subsidiaries are recognised as finance income in the period in which the parent company's right to receive payment is established.

Financial assets and liabilities

I. Financial assets – Recognition and initial measurement

Trade receivables are recognised at their origination. All other financial assets and liabilities are recognised when the group becomes party to the contractual provisions of the instrument.

At initial recognition, the group measures a financial asset or financial liability at its fair value plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability. Trade receivables that do not contain a significant financing component are measured at initial recognition at the transaction price.

II. Classification and subsequent measurement

After initial recognition, the group measures a financial asset at amortised cost, fair value through other comprehensive income, or fair value through profit or loss.

Financial assets are not reclassified subsequent to initial recognition unless the group changes its business model for managing financial assets in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in business model.

A financial asset is measured at amortised cost if both of the following conditions are met:

- the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The group classifies cash and cash equivalents, trade receivables, loans provided, and other receivables as financial assets measured at amortised cost.

A financial asset is measured at fair value through other comprehensive income if both of the following conditions are met and it has not been designated as a financial asset at fair value through profit or loss:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All financial assets that have not been classified as financial assets measured at amortised cost or at fair value through other comprehensive income as described above are measured at fair value through profit or loss.

At initial recognition, the group may designate a financial asset that meets the conditions for financial assets measured at amortised cost or fair value through other comprehensive income as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.

Financial assets – subsequent measurement and gains and losses

Amortised cost	Assets designated to this category are measured at amortised cost using the effective interest method. In determining amortised cost, impairment losses are deducted from the carrying amount. Interest income, foreign exchange gains and losses and impairment losses on the assets are recognised in profit or loss. A gain or loss arising on derecognition is recognised in profit or loss.
Financial assets measured at fair value through profit or loss	Assets designated to this category are measured at fair value. Gains and losses as well as interest and dividend income on the assets are recognised in profit or loss. For policies related to derivative financial instruments subject to hedge accounting requirements, see the section *Derivative financial instruments and hedge accounting*.

Financial liabilities – classification, subsequent measurement and gains and losses

Financial liabilities are classified as subsequently measured at amortised cost or fair value through profit or loss. A financial liability is classified as measured at fair value through profit or loss when it is held for trading, is a derivative, or designated as such upon initial recognition. Financial liabilities at fair value through profit or loss are measured at fair value and any gain or loss on them as well as any interest expense is recognised in profit or loss.

Other financial liabilities are measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses on them are recognised in profit or loss. Gains and losses arising on derecognition are recognised in profit or loss.

III. Derecognition

Financial assets

The group derecognises a financial asset when, and only when, its contractual rights to the cash flows from the financial asset expire or when the group transfers the financial asset and the transfer qualifies for derecognition. The group transfers the contractual rights to receive the cash flows of a financial asset in a transaction by which it transfers all the risks and rewards of ownership of the financial asset or by which it does not transfer the risks and rewards of ownership of the financial asset but loses (does not retain) control of the financial asset.

If the group transfers a financial asset recognised in its financial statements but retains all, or substantially all, the risks and rewards of ownership of the financial asset, the asset is not derecognised.

Financial liabilities

The group removes a financial liability from its statement of financial position when, and only when, it is extinguished. That is, when the obligation specified in the contract is discharged or cancelled or expires. A financial liability is derecognised when its terms are substantially modified so that its cash flows become significantly different from the originally agreed ones. In that case the group recognises a new financial liability based on the modified terms and measures it at fair value.

The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

Offsetting

A financial asset and a financial liability are offset and the net amount presented in the statement of financial position when, and only when, the group currently has a legally enforceable right to set off the recognised amounts and it intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

IV. Derivative financial instruments and hedge accounting

The group has entered into derivative contracts to hedge its exposure to changes in the sales prices of liquid fuel. On initial recognition a derivative financial instrument is measured at its fair value and thereafter it is remeasured to fair value.

At the inception of the hedging relationship, the group documents its risk management objective and strategy for undertaking the hedge. The group also documents the relationship between the hedging instrument and the hedged item, including whether changes in the cash flows attributable to the hedging instrument and the hedged item are expected to offset each other (whether the hedge meets the hedge effectiveness criteria).

If a derivative is designated and qualifies for recognition as a hedging instrument in a cash flow hedge, the effective portion of the change in its fair value is recognised in other comprehensive income and accumulated in the hedge reserve in equity. Any ineffective portion of the change in its fair value is recognised in profit or loss (in revenue).

The amounts recognised in the hedge reserve are reclassified from equity to profit or loss in the same period or periods during which the hedged item affects profit or loss (for example when the hedged sales transaction occurs).

Hedge accounting is discontinued prospectively when the forecast transaction is no longer expected to occur, the hedge no longer meets the criteria for hedge accounting, or the hedging instrument expires or is sold. When the forecast transaction is no longer expected to occur, the cumulative gain or loss recognised in the hedge reserve is reclassified to profit or loss.

V. Impairment of financial assets

The group recognises a loss allowance for expected credit losses on a financial asset measured at amortised cost.

The group measures the loss allowance for a financial asset at an amount equal to lifetime expected credit losses except for financial assets whose loss allowance is measured at an amount equal to 12-month expected credit losses such as:

- other receivables;
- cash and cash equivalents whose credit risk has not increased significantly since initial recognition.

The group accounts for expected credit losses on all trade receivables using the simplified approach provided in IFRS 9 that allows recognising the loss allowance at an amount equal to lifetime expected credit losses.

The group always recognises the loss allowance for trade receivables at an amount equal to lifetime expected credit losses. The expected credit losses on trade receivables are calculated using a provision matrix, which is based on the group's historical credit loss experience, adjusted for factors specific to the debtors, general economic conditions and, where appropriate, the time value of money.

Expected credit losses are a probability-weighted estimate of credit losses. A credit loss is a difference between the cash flows that are due to the group in accordance with the contract and the cash flows that the group expects to receive, discounted at the financial asset's effective interest rate.

At each reporting date, the group assesses whether a financial asset measured at amortised cost might be credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- significant financial difficulty of the debtor,
- a breach of contract (such as a default or past due event),
- the group, for reasons relating to the debtor's financial difficulty, has granted the debtor concessions in restructuring the amount due that it would otherwise not have considered,
- it is becoming probable that the debtor will encounter financial difficulty.

The carrying amount of a financial asset measured at amortised cost is reduced by the amount of its loss allowance.

Factoring

Factoring is sale of receivables. Depending on the type of contract, the buyer may have the option of selling the receivable back to the seller within a certain period (factoring with recourse) or there may be no such option and all risks related to the receivable will transfer to the buyer (factoring without recourse).

Factoring with recourse is accounted for as a financing transaction, i.e. as a loan secured with a receivable. The receivable is recognised in the statement of financial position until it is collected. Factoring without recourse is accounted for as the sale of a receivable.

Expenses from the sale of receivables are recognised as finance costs or expenses from the write-down of receivables, depending on whether the transaction was performed for cash flow management or mitigating the risk of bad debts.

Inventories

When inventories are recognised initially, they are measured at cost. The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

The cost of inventories is assigned using the weighted average cost formula. Production overheads are allocated to the costs of conversion of work in progress and finished goods based on the normal capacity of the production facilities.

Finished goods, semi-finished goods and work in progress are recognised at their cost of conversion. The cost of conversion includes direct and indirect costs of production incurred in bringing the inventories to their present location and condition.

Inventories are measured at the lower of cost and net realisable value. Materials and work in progress are written down when the estimated cost of the finished products in which they will be incorporated is expected to exceed the net realisable value of those products. Expenses from the write-down of inventories to net realisable value are recognised in the cost of sales.

Surpluses and shortages detected during inventory counts are recognised in other income and other expenses, respectively.

Investment property

Investment property is property (land or a building, or part of a building, or both) held (by the owner or by the lessee as a right-of-use asset) to earn rentals or for capital appreciation or both rather than for use in the production or supply of goods or services or for administrative purposes.

An investment property is measured initially at its cost. The cost of a purchased investment property comprises its purchase price and any expenditure directly attributable to its purchase. After initial recognition, investment property is measured at fair value, which is determined based on valuation reports issued by licensed real estate appraisers.

A gain or loss on a change in the fair value of investment property is recognised in profit or loss (in other income or other expenses) in the period in which it arises.

Property, plant and equipment

Initial recognition

Property, plant and equipment are tangible items, including spare parts of significant value and uninstalled equipment which belong to the group or are held under leases, which are used in the production or supply of goods or services, for rental to others, or for administrative purposes (including for security, safety and environmental reasons) and are expected to be used for more than one year.

The cost of an item of property, plant and equipment is recognised as an asset if it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably.

An item of property, plant and equipment is initially measured at its cost, being the amount of cash or cash equivalents paid or the fair value of other consideration given to acquire the asset at the time of its acquisition or construction.

The cost of an item of property, plant and equipment comprises:

a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;

b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, such as: labour costs arising directly from the construction or acquisition of the item, the costs of planning and designing the item, the costs of site preparation, initial delivery and handling costs, notary's fees, stamp duties, depreciation of other assets used in the production of the item, installation and assembly costs, the costs of materials consumed and tools used in constructing the item, and the costs of testing whether the item is functioning properly after deducting the net proceeds from selling any items produced while bringing the asset to the intended location and condition (e.g. during testing).

c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which the group incurred when the item was acquired or built.

If an item of property, plant and equipment consists of significant parts that have different useful lives, the parts are accounted for separately and assigned depreciation rates that correspond to their useful lives. The total cost of an asset is allocated to its parts based on their significance.

Assets under construction comprise expenditure incurred in connection with self-constructed assets. If an asset takes a substantial period of time to get ready for its intended use and is financed with a loan (or other debt instrument), borrowing costs that are directly attributable to the construction or production of the asset (including interest calculated using the effective interest method) are capitalised and recognised as part of the cost of that asset. Capitalisation of borrowing costs commences when the expenditures for the asset are incurred (i.e. the loan has been taken) and the group undertakes activities that are necessary to prepare the asset for its intended use. Capitalisation of borrowing costs ceases when the asset is substantially complete and the group has accepted the asset as ready for its intended use. The cost of a self-constructed asset is determined on the same basis as the cost of a purchased asset. An asset under construction is recognised as an item of property, plant and equipment on the basis of a certificate of acceptance, which outlines the useful life of the asset

Administration and other general overhead costs are not included in the cost of items of property, plant and equipment.

The cost of an item of property, plant and equipment acquired with a government grant is determined by applying the policies outlined in the section *Government grants*.

Depreciation

When an item of property, plant and equipment is recognised, it is assigned a useful life which serves as a basis for determining its depreciation rate. Exceptions include assets with an unlimited useful life (land, works of art that have permanent value, books, etc.), which are not depreciated. Depreciation of an asset begins when it is available for use (in the location and condition necessary for it to be capable of operating in the manner intended by management). Depreciation of an asset ceases when it is fully depreciated or derecognised. If a fully depreciated asset is still in use, it is carried in the statement of financial position at nil value until it is permanently withdrawn from use.

Items of property, plant and equipment are depreciated using the straight-line method. Depreciation is calculated once a month. In the month of recognition, depreciation commences on the day following the day of recognition. Depreciation is discontinued on the day following the day on which the asset is withdrawn from use. Depreciation of an asset does not cease when it becomes idle or is temporarily retired from active use.

Useful lives of property, plant and equipment are reviewed at least at each financial year-end. Asset classes are assigned the following annual depreciation rates and useful lives:

Land	0%	Not depreciated
Buildings	2–10%	10–50 years
Structures (civil engineering assets)	2–10%	10–50 years
Plant and equipment	7–34%	3–14 years
Vehicles	10–50%	2–10 years
Other items of property, plant and equipment	10–25%	4–10 years

Subsequent costs

Repair and maintenance costs and the costs of day-to-day servicing of an item of property, plant and equipment that are incurred to restore or maintain the item's originally assessed condition or useful life are recognised as an expense as incurred.

Parts of some items of property, plant and equipment require replacement after regular intervals. Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement. Under the recognition principle, the group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of a part that is replaced is derecognised in accordance with the derecognition policies.

When a major part of an item of property, plant and equipment is replaced, the cost of the new part is added to the carrying amount of the item when it meets the definition of property, plant and equipment and the recognition criteria. The replaced part is written off the statement of financial position even if it was previously not accounted for separately. If the original cost of the replaced part cannot be determined, the group estimates the cost and deducts from it estimated depreciation

Costs of building mine roadways (roadway construction costs)

On designing the accounting policy, management relied on analogy with IFRIC 20 *Stripping Costs in the Production Phase of a Surface Mine.* In the production phase of oil shale mining, the group builds mine roadways which provide better access to oil shale and can generally be used until the end of the useful life of the mine. The group differentiates between two types of benefit resulting from roadway construction:

- benefit resulting from improved access to oil shale; and
- benefit realised on the sale of oil shale.

To the extent that the benefit from roadway construction is realised in the form of inventory produced, the group accounts for roadway construction costs in accordance with the principles of IAS 2 *Inventories*. To the extent the benefit is improved access to the oil shale body, the group recognises roadway construction costs as a non-current asset (an item of property, plant and equipment) provided that the following conditions are met:

- it is probable that the future economic benefit, i.e. improved access to the oil shale body, associated with roadway construction will flow to the group;
- the group can identify the component of the oil shale body for which access has been improved; and
- the costs relating to the roadway construction activity associated with that component can be measured reliably.

A roadway construction activity asset is accounted for as an enhancement of existing property, plant and equipment. The cost of a roadway construction activity asset is measured by comparing the cost of inventory produced in the course of production operations including roadway construction with the cost of inventory produced in the course of ordinary production operations. Roadway construction costs which are recognised as a non-current asset are depreciated over the period during which the group expects to use the improved access to the oil shale body.

Subsequent measurement and use of the revaluation model

Subsequent to recognition, an item of property, plant and equipment is measured using the cost model or the revaluation model depending on the asset class to which the item belongs.

Under the revaluation model, after recognition as an asset an item of property, plant and equipment is carried at the revalued amount, being its fair value at the date of revaluation less any subsequent accumulated depreciation and any subsequent accumulated impairment losses. The model is applied to each class of property, plant and equipment in its entirety. The following asset classes are measured using the revaluation model:

- buildings;
- structures (civil engineering assets);
- vehicles (means of transport);
- plant and equipment.

The frequency of revaluations depends on changes in fair value. When the fair value of an asset differs materially from its carrying amount, a revaluation is required.

When changes in fair value are immaterial, it may be necessary to revalue the item only every three to five years.

Depending on circumstances, the group measures the fair value of its property, plant and equipment using one or several of the following three widely used valuation techniques:

- market approach – a valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable assets, liabilities or groups of assets and liabilities (e.g. a business);

- income approach – a valuation technique that converts the future cash flows of an asset, a liability or a group of assets and liabilities to a single discounted amount;
- cost approach – a valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset, adjusted where necessary for physical deterioration and functional and economic obsolescence.

The group selects the valuation technique that is the most appropriate under the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs. The objective of using a valuation technique on carrying out a revaluation of property, plant and equipment is to estimate the price at which an orderly transaction to sell the asset would take place between market participants at the measurement date under current market conditions.

Fair value measurements are categorised into three levels based on the inputs to valuation techniques that were used to measure fair value:

- Level 1 – quoted prices in active markets for identical assets or liabilities;
- Level 2 – inputs other than quoted prices included in Level 1 that are observable for the asset or liability directly or indirectly;
- Level 3 – unobservable inputs for the asset or liability.

When the inputs used to measure fair value are categorised within different levels of the fair value hierarchy, the fair value measurement is categorised in the same level as the lowest level input that is significant to the entire measurement. Due to limited availability of observable inputs, most of the group's fair value measurements carried out on the revaluation of property, plant and equipment are generally categorised to level 3.

As a rule, the fair value of buildings is measured by licensed real estate appraisers.

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is deducted from the cost of the asset.

If an asset's carrying amount is increased as a result of a revaluation, the increase is recognised in other comprehensive income and is accumulated in equity within the revaluation reserve. The increase is recognised in profit or loss to the extent that it reverses a revaluation decrease of the same asset previously recognised in profit or loss.

If an asset's carrying amount is decreased as a result of a revaluation, the decrease is recognised in profit or loss. The decrease is recognised in other comprehensive income to the extent of any credit balance existing in the revaluation reserve in respect of the asset. The decrease recognised in other comprehensive income reduces the amount accumulated in equity within the revaluation reserve.

The revaluation reserve is amortised to retained earnings during the useful life of the underlying asset.

When an item of property, plant and equipment is permanently withdrawn from use or disposed of, the revaluation reserve included in equity in respect of that item is transferred to retained earnings.

Changes in the revaluation reserve are described in note 14.

The following classes of property, plant and equipment are measured using the cost model:

- land;
- other items of property, plant and equipment;
- assets under construction.

Impairment

Whenever there is any indication that the carrying amount of an item of property, plant and equipment or an intangible asset may exceed its recoverable amount, an impairment test is performed and the asset is written down if necessary.

The recoverable amount of an asset or its cash-generating unit is the higher of its fair value less costs to sell and its value in use.

Value in use is determined by discounting the estimated future cash flows expected to be derived from the asset using a discount rate that reflects the current market assessments of the time value of money and the risks specific to the asset. For impairment testing, assets are grouped into the smallest identifiable group of assets that generates cash flows that are largely independent of the cash flows from other assets or groups of assets (cash-generating units). For impairment testing, the goodwill acquired in a business combination is allocated to those cash-generating units that are expected to benefit from the synergies of the combination.

An impairment loss is recognised when the carrying amount of an asset or its cash-generating unit exceeds its estimated recoverable amount. An impairment loss is recognised immediately in profit or loss. An impairment loss for a cash-generating unit (group of units) is recognised by first reducing the carrying amount of any goodwill allocated to the unit (group of units) and then by reducing the carrying amount of other assets of the unit (group of units) pro rata.

Impairment losses are recognised within the cost of sales, marketing and distribution expenses or administrative expenses.

If there is any indication that an impairment loss recognised in prior periods no longer exists or may have decreased, the carrying amount of the item of property, plant and equipment or intangible asset is adjusted (the former impairment loss is reversed). On reversing an impairment loss the increased carrying amount of an asset may not exceed the carrying amount that would have been determined (net of amortisation or depreciation) had no impairment loss been recognised for the asset in prior years. A reversal of an impairment loss is recognised in profit or loss by reducing expenses from impairment losses.

Derecognition

The carrying amount of an item of property, plant and equipment is derecognised when the item becomes permanently unfit for use, when it is sold or otherwise disposed of, when it is leased out under a finance lease, when its loss is detected during a physical inspection, or when no future economic benefits are expected from its use or disposal.

A loss arising on the derecognition of an item of property, plant and equipment is recognised in profit or loss within other expenses when the item is derecognised.

Intangible assets

Intangible assets are assets without physical substance that the group expects to use for more than one year.

An intangible asset that is acquired from a third party is initially recognised at cost, which comprises its purchase price and any directly attributable costs of acquisition. After initial recognition, an intangible asset is carried at cost less any accumulated amortisation and any impairment losses.

Subsequent accounting for an intangible asset depends on whether its useful life is finite or indefinite.

An intangible asset with a finite useful life is carried at cost less any accumulated amortisation and any impairment losses. Such assets are amortised using the straight-line method over their estimated useful lives. Exceptions include greenhouse gas emission allowances received free of charge whose recognition and measurement policies are described in the section *Greenhouse gas emission allowances*.

An intangible asset with a finite useful life is written down to its recoverable amount (the higher of its fair value less costs to sell and value in use) when the latter is less than its carrying amount. An asset is tested for impairment whenever there is any indication that its recoverable amount may have decreased below its carrying amount.

At the end of each reporting period the group assesses whether there is any indication that an impairment loss recognised in prior periods no longer exists or may have decreased. If any such indication exists, the group estimates the recoverable amount of the asset and, if necessary, reverses the previously recognised impairment loss. A reversal of an impairment loss is recognised in the period of reversal by reducing expenses from impairment losses.

Intangible assets with an indefinite useful life (including goodwill) are not amortised but are tested for impairment at the end of each reporting period.

Development expenditure is expenditure incurred in the application of research findings for the development of new products or services. Development expenditure is capitalised if the group can demonstrate the technical feasibility of completing the intangible asset so that it will be available for use or sale; the group intends to complete the intangible asset and use or sell it; the group is able to use or sell the intangible asset; it is possible to estimate the future economic benefits from the intangible asset; the group has adequate technical, financial and other resources to complete development and to use or sell the intangible asset; and the expenditure attributable to the intangible asset during its development can be measured reliably.

Expenditures incurred in connection with the establishment of a new economic entity, expenditures on research undertaken to gain new scientific or technical knowledge and expenditures incurred in connection with staff training activities are not capitalised.

Greenhouse gas emission allowances

The year 2021 was the first year of phase 4 of the EU Emissions Trading System (ETS), which lasts until 2030 and has been split into two five-year allocation periods. The changes that have taken place in the system result from Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community. The quantity of emission allowances allocated to Estonian installations under Article 10a (heating and industrial installations) of Directive 2003/87/EC for the period 2021–2025, set out by individual installations, is available on the website of the Estonian Environmental Board:

https://keskkonnaamet.ee/keskkonnakasutus-keskkonnatasu/ohk-ja-kliima/kasvuhoonegaasid

Under the third allocation plan approved by the European Commission, the group was allocated free CO_2 emission allowances of 4,944,940 tonnes, of which 1,292,415 tonnes was allocated for 2020.

Under the new allocation plan approved by the European Commission, the group was allocated free CO_2 emission allowances of 4,442,474 tonnes, of which 1,204,548 tonnes was allocated for 2021.

Greenhouse gas emission allowances are accounted for using the gross method.

Free emission allowances acquired through a government grant are recognised as both an intangible asset measured at the market value of the allowances as at the date of allocation and as a liability (deferred income from government grants) of the same amount.

Emission allowances not used at the end of the reporting period are measured in the statement of financial position at their acquisition cost. When emission allowances are written down to market value, the write-down expense is recognised in other expenses.

The asset is amortised to the cost of sales and the grant liability is recognised in other income on a monthly basis, by reference to the use of the allowances, based on the market price of the allowances as at the end of the month.

When actual emissions exceed allocated emission allowances, the obligation of purchasing additional allowances is recognised as a provision measured at the market value of the allowances as at the reporting date.

When emission allowances that have been received free of charge are sold, relevant income is recognised at sales price in other income.

When emission allowances are purchased, the carrying amount of relevant intangible assets is increased and when the allowances are taken into use the relevant amount of intangible assets is amortised to expenses and the provision for acquiring allowances is reduced.

Allocation, amortisation, write-down and reversal of the write-down of CO_2 emission allowances allocated free of charge and associated changes in the government grant liability constitute non-cash transactions that are not reported in the statement of cash flows.

Cash flows from the purchase and sale of CO_2 emission allowances are reported in cash flows from operating activities.

Business combinations and goodwill

As a rule, business combinations are accounted for using the acquisition method. Goodwill is the difference which may arise on the acquisition of a new economic entity between the purchase price and the fair value of the net assets acquired. Positive goodwill arising on a business combination is recognised as an intangible asset. Goodwill is tested for impairment at the end of each reporting period. When the recoverable amount of goodwill is less than its carrying amount, goodwill is written down to its recoverable amount. Impairment losses for goodwill are not reversed.

When a business combination gives rise to a gain from a bargain purchase (negative goodwill), the group reassesses the fair values of the net assets acquired and if the assessment still indicates the existence of a gain from a bargain purchase, the entire amount is recognised immediately in profit or loss (in other income).

Business combinations of entities under common control are accounted for using the modified acquisition method. The terms of such a business combination may differ from market terms and, as a result, the application of the regular acquisition method may distort the substance of the transaction. It is possible that the acquisition cost of an entity under common control does not reflect its actual value. Accordingly, goodwill and a gain from a bargain purchase do not have their generally accepted meaning. Under the modified acquisition method, the assets acquired and the liabilities and contingent liabilities assumed are not recognised at their fair values, determined based on the purchase price allocation. Instead, they are recognised in the acquirer's statement of financial position at their carrying amounts in the acquiree's statement of financial position and any difference between the cost and carrying amount of the net assets acquired is not recognised as goodwill or a gain on a bargain purchase but as a decrease or increase in the acquirer's equity.

Employee benefits

Employee benefits comprise wages, salaries and social security contributions, short-term compensated absences such as paid annual leave and similar temporary suspensions of the employment contract where the absences occur within 12 months after the end of the period in which the employees render the related service and the compensation for the absences is due to be settled within 12 months after the end of the period in which the employees rendered the related service. When an employee has rendered service to the group during the reporting period, the group recognises the amount of the employee benefits expected to be paid in exchange for that service as a liability (accrued expense) after deducting any amount already paid.

Provisions and contingent liabilities

The group makes provisions for liabilities of uncertain timing or amount. The amount and timing of provisions is determined on the basis of estimates made by management or relevant experts.

A provision is recognised when the group has a present legal or constructive obligation as a result of a past event, it is probable (over 50%) that an outflow of resources embodying economic benefits will be required to settle the obligation and the amount of the obligation can be estimated reliably.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. Where a provision is expected to be utilised within more than one year after the reporting date, the provision is reported at its discounted present value. The discount rate is based on the market interest rates for similar liabilities.

The group makes provisions for onerous contracts. An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. A provision is recognised in an amount equal to the loss expected to result from fulfilling the contract (i.e. estimated contract revenue less estimated contract fulfilment costs).

A contingent liability is a possible obligation whose realisation probability is less than 50% or whose amount cannot be measured reliably. Contingent liabilities are disclosed in the notes to the consolidated financial statements.

Leases

At inception of a contract, the group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control and use an identified asset for a period of time in exchange for consideration. In assessing whether a contract conveys the right to control and use an identified asset, the group applies the definition of a lease as set out in IFRS 16.

The group as a lessee

When entering into or modifying a contract that contains a lease component, the group allocates the consideration in the contract to each lease component on the basis of their stand-alone price.

The group recognises a right-of-use asset and a lease liability at the commencement date of the lease. The right-of-use asset is initially measured at cost, at an amount equal to the initial measurement of the lease liability. The amount of the initial measurement of the lease liability is adjusted for any advance lease payments, any direct costs incurred and any restoration costs to be incurred (in dismantling the asset and restoring the site or the asset). Any lease incentives received are deducted from this amount.

Right-of-use assets are depreciated on a straight-line basis from the commencement date of the lease to the expiry of the lease term unless the ownership of the underlying asset transfers to the group at the end of the lease term or the carrying amount of the right-of-use assets indicates that the group plans to exercise the purchase option. In that case, the underlying asset is depreciated over its entire estimated useful life, which is determined using the same approach that is used for similar items of property, plant and equipment that are owned. Right-of-use assets are also adjusted for impairment losses, if any. In addition, right-of-use assets are adjusted to reflect certain remeasurements of the lease liabilities.

The lease liability is initially measured at the present value of the lease payments not paid by the commencement date of the lease, using the interest rate implicit in the lease or, if that rate cannot be readily determined, the incremental borrowing rate. The group generally applies the incremental borrowing rate as the discount rate.

The incremental borrowing rate is determined by reference to different sources of financing. The inputs received are adjusted to reflect the terms of the lease and the type of underlying asset, to find the incremental borrowing rate appropriate for the asset.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments (including in-substance fixed payment);
- penalties for terminating the lease (if termination is reasonably certain);
- the exercise price of a purchase option (if the lessee is reasonably certain to exercise the option);
- amounts expected to be payable by the lessee under residual value guarantees;
- lease payments that depend on an index or rate.

The lease liability is measured at amortised cost. It is remeasured if there is a change in future lease payments reflecting a change in the index or rate used to determine the payments, if the amounts expected to be payable under a residual value guarantee are reassessed or if the group changes its assessment of whether it intends to exercise the option to purchase the underlying asset or the option to extend or terminate the lease. The lease liability is also remeasured to reflect changes in fixed payments (including in-substance fixed payments).

If the lease liability is remeasured due to the above reasons, a corresponding adjustment is made to the carrying amount of the right-of-use asset. The effect of the change in the lease liability is recognised in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The group has elected not to recognise right-of-use assets and lease liabilities for short-term leases and leases for which the underlying asset is of low value. The group recognises these lease payments as an expense on a straight-line basis over the lease term.

The group as a lessor

When entering into a contract that contains a lease component or modifying a lease, the group allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component.

For contracts under which the group is the lessor, the group determines at the commencement date whether the lease is an operating lease or a finance lease.

The group assesses in each case whether the lease transfers substantially all the risks and rewards incidental to ownership of the underlying asset. If yes, the lease is classified as a finance lease. If not, the lease is classified as an operating lease. As part of this assessment, the group also considers certain other indicators (e.g. whether the lease term is for the major part of the economic life of the underlying asset).

If the contract contains both lease and non-lease components, the group applies the accounting policies of IFRS 15 to allocate the consideration in the contract to the components.

The group applies the derecognition and impairment requirements of IFRS 9 to the lessor's net investment in the lease. The group reviews regularly estimated unguaranteed residual values used in computing the lessor's gross investment in the lease.

For operating leases, the group recognises lease payments as income in profit or loss on a straight-line basis over the lease term.

Revenue

Performance obligations and revenue accounting policies

Revenue is measured based on the consideration agreed in the contract signed with the customer. The group recognises revenue when (or as) it satisfies the performance obligation by transferring the goods or service to the customer.

The table below provides information about the nature and timing of performance obligations arising from contracts with customers and related revenue accounting policies.

Product/ service	Nature and timing of the satisfaction of the performance obligation	Revenue accounting policies
Sale of self-produced shale oil products	The group produces shale oil-based oil, coke and phenol products. Customers obtain control of the products when the goods have been transferred to them. Invoices are generated and revenue is recognised at that point. No discounts are granted on goods sold. Customers cannot return the products unless the group has sold goods whose parameters differ from the agreed ones.	Revenue from the sale of self-produced shale oil products is recognised at the point in time when the goods are transferred to the customer, i.e. at the point when the sales transaction with the customer is completed.
Sale of purchased shale oil products	Customers obtain control of shale oil products when the goods have been transferred to them. Invoices are generated and revenue is recognised at that point. No discounts are granted on goods sold and customers cannot return the products.	Revenue from the sale of shale oil products is recognised at the point in time when the goods are transferred to the customer, i.e. at the point when the sales transaction with the customer is completed.
Sale of electricity	The group sells electricity products (electrical, active and reactive energy). Customers obtain control of an electricity product when the good has been transferred to them. Customers are billed on a monthly basis. No discounts are granted and the products cannot be returned.	Revenue from the sale of electricity is recognised at the point in time when the good is transferred to the customer, i.e. at the point when the sales transaction with the customer is completed.
Sale of district heating and steam	The group sells heat energy. The carrier of heat energy is steam. Customers obtain control of the heat energy when the good has been transferred to them. Customers are billed on a monthly basis. No discounts are granted and the energy cannot be returned.	Revenue from the sale of steam is recognised at the point in time when the good is transferred to the customer, i.e. at the point when the sales transaction with the customer is completed.
Sale of district heating and hot water	The group sells heat energy. The carrier of heat energy is water. Customers obtain control of the heat energy when the good has been transferred to them. Customers are billed on a monthly basis. No discounts are granted and the good cannot be returned.	Revenue from the sale of heat energy is recognised at the point in time when the good is transferred to the customer, i.e. at the point when the sales transaction with the customer is completed.

Logistics services	The group provides two kinds of logistics services: rail and road transport. The services are short-term by nature and generally delivered within the same calendar month. Consideration received depends on the volume of services provided. Customers are billed on a monthly basis.	Revenue is recognised over the time during which the service is provided. The group has the right to receive consideration in the amount that corresponds directly to the value to the customer of the performance obligations satisfied by the group during the calendar month. Hence, as a practical expedient, the group recognises revenue in the amount for which it has the right to issue an invoice.
Construction of electricity and tele-communications networks	The group builds electricity and telecommunications networks for customers. As a rule, customers pay for work done at the delivery of each stage of work. Construction work is generally done on the customer's premises, based on the plans and designs provided by the customer. The duration of construction work depends on the complexity of the project.	Revenue is recognised over time. Progress towards complete satisfaction of a performance obligation is measured using the input methods. Input methods recognise revenue on the basis of the group's inputs to the satisfaction of a performance obligation (for example, resources consumed, labour hours expended, costs incurred) relative to the total expected inputs to the satisfaction of that performance obligation.
Transmission and distribution of natural gas	Customers obtain control of natural gas when the good has been transferred to them. Customers are billed on a monthly basis. No discounts are granted and the good cannot be returned.	Revenue from the transmission and distribution of natural gas is recognised at the point in time when the good is transferred to the customer, i.e. at the point when the sales transaction with the customer is completed.
Transmission and distribution of electricity	The group provides network services to customers in its service area. Customers simultaneously receive and consume the benefits provided by the provision of the service as the group provides the service. Customers are billed on a monthly basis.	Revenue is recognised over the time during which the service is provided. The group recognises revenue in the period in which the service is provided. Progress towards complete satisfaction of a performance obligation is measured using the output method (based on the volume of network services provided). Besides the volume of network services provided, inputs of the output method also include readings not reported, readings reported with a delay and incorrectly reported readings.
Connection to electricity and district heating networks	The group charges fees for connecting customers to the network (network charges), which are calculated based on the costs incurred to enable the connection. The group is required by law to ensure the existence of a connection point as long as the customer's point of consumption needs energy service. Accordingly, the activities required to create a connection are regarded as a part of a larger performance obligation satisfied over time, which cannot be distinguished (is not distinct) from the sale of network service that is provided over time.	Under IFRS 15, this portion of the performance obligation which encompasses the activities required for enabling the connection is regarded to be satisfied over the period in which the energy service is expected to be provided via the connection point. The length of the period depends on management's estimate.

Taxation of income

Deferred tax is recognised in respect of temporary differences between the carrying amounts and tax bases of assets and liabilities (the tax base is the amount attributed to an asset or liability for tax purposes).

Under Estonian laws, corporate profit for the year is not subject to income tax. The obligation to pay corporate income tax arises upon the distribution of profit and it is recognised as an expense (in profit or loss for the period) when the dividend is declared.

Because of the nature of the taxation system, companies registered in Estonia do not have deferred tax assets or liabilities, except for possible deferred tax items related to investments in subsidiaries, associates, joint ventures and branches.

The group's deferred tax liability arises in respect of investments in companies domiciled in countries where profit for the financial year is taxable. The group's deferred tax liability also arises in respect of investments in Estonian subsidiaries, associates, joint ventures and branches except to the extent that the group is able to control the timing of the reversal of the taxable temporary differences and it is probable that the differences will not reverse in the foreseeable future. Examples of the reversal of taxable temporary differences include the distribution of a dividend, disposal of an investment and other transactions.

As the group controls the dividend policy of its subsidiaries, it is able to control the timing of the reversal of the temporary differences related to relevant investments. If the parent has decided not to distribute a subsidiary's profit in the foreseeable future, it does not recognise a deferred tax liability. If the parent estimates that a dividend will be distributed in the foreseeable future, a deferred tax liability is recognised to the extent of the expected dividend distribution, provided that there are sufficient funds and equity at the reporting date from which profit can be distributed in the foreseeable future.

The group measures deferred tax liabilities using the tax rates that are expected to apply to the taxable temporary differences in the period in which the temporary differences are expected to reverse, based on the tax rates that have been enacted by the reporting date.

In Estonia, the corporate income tax rate is 20% (the amount of tax payable is calculated as 20/80 of the net distribution). From 2019, regular dividend distributions can be taxed at a lower, 14% tax rate (the amount of tax payable is calculated as 14/86 of the net distribution) The lower tax rate can be applied every calendar year to dividend and other profit distributions to an extent that does not exceed the past three years' average amount of dividend and other profit distributions and distributions of equity on which tax has been paid.

The maximum income tax liability that could arise on a dividend distribution is disclosed in note 29.

Foreign currency transactions

A transaction in a foreign currency is translated into euros using the exchange rate of the European Central Bank quoted at the date of the transaction. At the end of the reporting period, monetary assets and liabilities denominated in a foreign currency are translated into euros using the closing exchange rate. Non-monetary assets and liabilities denominated in a foreign currency that are measured in terms of historical cost are translated into euros using the exchange rate at the date of the transaction.

Exchange gains and losses arising on translation are recognised in profit or loss in the period in which they arise. Exchange gains and losses on translating items related to transactions with customers and suppliers are recognised in other income and expenses, respectively, and other exchange gains and losses are recognised in finance income and costs, respectively.

Government grants

The group accounts for government grants related to assets and government grants related to income using the gross method. Government grants related to income are recognised in accordance with the matching principle (by matching revenue with the costs incurred). A government grant is recognised when the group accepts and intends to comply with the conditions attaching to the grant, the amount of the grant can be measured reliably and there is reasonable assurance that the grant will be received. The amount received as a grant is recognised in profit or loss as income.

Assets acquired with government grants related to assets are recognised in the statement of financial position at cost, similarly to other items of property, plant and equipment. The grant received for acquiring an asset is presented in the statement of financial position as a liability, which is transferred to income on a systematic basis over the useful life of the asset.

An asset acquired with a non-monetary government grant is recognised in the statement of financial position at its fair value. The arising liability is taken to income over the remaining useful life of the asset.

Statement of cash flows

The statement of cash flows is prepared using the indirect method whereby the net cash flow from operating activities is determined by adjusting net profit or loss for the effects of gains and losses associated with investing or financing activities, transactions of a non-cash nature and changes during the period in current assets and current liabilities related to operating activities.

Cash flows from investing and financing activities are reported by disclosing gross cash receipts and gross cash payments. Non-cash transactions are excluded.

Cash and cash equivalents comprise cash on hand, current accounts and short-term (with a maturity of up to three months) highly liquid investments that are readily convertible to known amounts of cash and subject to an insignificant risk of changes in value such as term deposits with a maturity of up to three months and units in money market funds.

Statutory capital reserve

Under the Estonian Commercial Code and the articles of association of the parent company, every year the parent has to transfer at least 5% of its net profit to the capital reserve until the reserve amounts to 10% of share capital. The statutory capital reserve may not be distributed as dividends but it may be used to cover losses if losses cannot be covered with unrestricted equity. The capital reserve may also be used to increase share capital.

Events after the reporting period

The consolidated financial statements reflect all significant events affecting the valuation of assets and liabilities that became evident between the reporting date and the date on which the financial statements were authorised for issue but are related to the reporting or prior periods.

Subsequent events that are indicative of conditions that arose after the reporting date but which will have a significant effect on the results of the next financial year are disclosed in the notes to the consolidated financial statements.

Use of estimates and judgements

The preparation of consolidated financial statements in accordance with IFRS EU requires management to make accounting estimates and assumptions, and to exercise judgement in the selection and application of accounting policies.

Management’s estimates, assumptions and judgements are reviewed on an ongoing basis and are based on historical experience and various other factors including forecasts of future events that are believed to be reasonable under the circumstances. Although the estimates are based on management’s best knowledge and judgement, the actual outcome may differ from those estimates. Revisions to management’s estimates are recognised in the period in which the estimate is revised in profit or loss.

Estimates and judgements made in the selection and application of accounting policies which have the most significant effect on the consolidated financial statements:

Estimation of the net realisable value of inventories (note 5)

According to the group’s accounting policies, inventories are measured at the lower of cost and net realisable value. This means that management has to estimate the value of inventories whenever there is any indication that the value of inventories may have decreased below cost. In such cases inventories are written down to their net realisable value, being the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

In 2020, inventories were written down by 579 thousand euros as follows: finished goods by 366 thousand euros, work in progress by 194 thousand euros and other inventories by 19 thousand euros. In 2021, no inventories were written down.

Estimation of the useful lives of property, plant and equipment and intangible assets (notes 6 and 7)

An area where management has to make significant and complex judgements and estimates that have a significant effect on the consolidated financial statements is the estimation of the useful lives of items of property, plant and equipment and intangible assets. Management estimates the useful lives of buildings, structures (civil engineering assets), plant and equipment, assets under construction and investments made in connection with a mining licence, taking into account sales volumes, sales terms, historical experience, and future prospects.

The group's experience shows that sometimes the utilisation periods of assets somewhat exceed their estimated useful lives. The carrying amounts and depreciation and amortisation of the assets are disclosed in notes 6 and 7. If annual depreciation and amortisation rates changed by 10%, annual depreciation and amortisation expense would change by around 7,104 thousand euros (2020: 7,369 thousand euros).

Measurement of the fair value and the revaluation of property, plant and equipment (note 6)

For fair value measurement, the group allocates its property, plant and equipment to the following three business lines:

- oil shale processing (VKG Oil AS, VKG Kaevandused OÜ, VKG Energia OÜ);
- regulated business (VKG Soojus AS, VKG Elektrivõrgud OÜ); and
- other activities (VKG Logistika OÜ, Viru RMT OÜ, Viru Keemia Grupp AS)

In the reporting period, a revaluation was carried out as a result of which the carrying amount of the property, plant and equipment of VKG Kaevandused was reduced by 22,849 thousand euros and the carrying amount of the property, plant and equipment used in the production operations of VKG Oil was increased by 358,615 thousand euros. For further information, see note 6.

Uncertainties related to estimating the mine closure provision (note 11)

At the end of 2011 the group recognised a provision of 3,200 thousand euros for closing the Ojamaa mine in 2038 by applying an annual discount rate of 5%. The provision was recognised by estimating the activities required for closing the mine and the cost of such activities at the date of recognition of the provision. Since 2019, the annual discount rate has been 2%.

At 31 December 2021, the mine closure provision amounted to 4,818 thousand euros and according to management's estimates it will be used for closing the mine in the period 2027–2029.

The provision may require subsequent revision due to the following reasons:

- Regulatory changes may impose the obligation to do additional work that could not be foreseen on the recognition of the provision but which may be obligatory at the time the mine is closed.
- The cost of assets and labour required for closing the mine may change materially.

Capitalisation of roadway construction costs

The group recognises part of the costs of building mine roadways (roadway construction costs) as items of property, plant and equipment. For further information, see note 1, the section *Costs of building mine roadways* in the section *Property, plant and equipment*.

Note 2. Cash and cash equivalents

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Current accounts	27,628	74,540
Term deposits	0	40,663
Total cash and cash equivalents	**27,628**	**115,203**

Note 3. Derivative financial instruments

Receivables

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Derivative financial assets	0	167
Of which current derivative financial assets	*0*	*167*
Total derivative financial assets	**0**	**167**

Liabilities

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Derivative financial liabilities	0	2,256
Of which current derivative financial liabilities	*0*	*2,256*
Total derivative financial liabilities	**0**	**2,256**

	Valuation technique	**Level in fair value hierarchy**
Liquid fuel sales options[1]	Market approach: the fair values of the instruments are based on NYMEX quotations. Similar contracts are traded in active markets and the quotations reflect actual transactions with similar instruments. Underlying asset – Fuel Oil (1%)	2
Forward contracts for the purchase of electricity	The fair value of the transactions is determined by reference to forecasts of electricity sales prices on the Nord Pool power exchange.	2

[1] The group did not have any hedging instruments at the end of the reporting period. Liquid fuel sales contracts as at 31 December 2020 were entered into to hedge the group's exposure to variability in future cash flows. For further information, see note 27.

Note 4. Receivables

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Trade receivables	32,788	21,265
Loss allowance	-508	-253
Total trade receivables	**32,280**	**21,012**
Prepaid and recoverable taxes	157	140
Security deposits[1]	58,103	100
Miscellaneous receivables	501	27
Total other receivables	**58,761**	**267**
Prepayments	290	253
Total prepayments	**290**	**253**
Total receivables	**91,331**	**21,533**

Trade receivables are reported net of their loss allowance.
Movements in the loss allowance during the period:

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Opening balance	**-253**	**-262**
Recovery of items classified as doubtful[2]	44	60
Items classified as doubtful and recognised as an expense[2]	-307	-59
Items written off as uncollectible	8	8
Closing balance	**-508**	**-253**

[1] Including security deposits related to the Stockmann transaction of 56,290 euros. For further information, see note 28.

[2] The difference between the amounts reported in note 18 and this note results from amounts recognised in other income in connection with the recovery of items classified as doubtful or uncollectible in earlier periods.

Receivables have been measured and expected credit losses have been assessed in accordance with the requirements of IFRS 9. For further information about the measurement of receivables, see note 27.

Note 5. Inventories

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Finished goods	6,501	2,521
Raw materials and consumables	10,712	9,827
Work in progress	13,346	9,616
Goods purchased for sale	0	70
Total inventories	**30,559**	**22,034**

No inventories were written down in the reporting period (2020: inventories were written down by 579 thousand euros).

In 2021, the group wrote off unusable inventories of 1,182 thousand euros (2020: 10 thousand euros). Related expense was recognised in other expenses.

Note 6. Property, plant and equipment

(In thousands of euros)	Land	Buildings and structures	Plant and equipment	Other items	Assets under construction and pre-payments[1]	Total
Carrying amount at 31 December 2019	**2,905**	**258,371**	**275,077**	**751**	**7,559**	**544,663**
Additions[1]	0	1,117	2,308	10	9,897	13,331
Reclassification	0	-1,787	15,889	-30	-14,078	-7
Disposals	0	-67	-39	-1	-45	-152
Depreciation for the year[2]	0	-22,861	-50,594	-231	0	-73,686
Carrying amount at 31 December 2020	**2,905**	**234,773**	**242,641**	**499**	**3,333**	**484,151**
Additions[1]	440	1,356	4,646	87	14,845	21,374
Reclassification	0	4,483	6,696	275	-11,454	0
Disposals	-31	0	-68	-10	-10	-119
Revaluation	0	76,049	257,668	0	0	333,717
Depreciation for the year[2]	0	-21,665	-49,184	-196	0	-71,045
Carrying amount at 31 December 2021	**3,314**	**294,996**	**462,399**	**655**	**6,714**	**768,078**
As at 31 December 2019						
Cost	2,905	318,041	391,611	4,310	7,559	**724,426**
Accumulated depreciation	0	-59,670	-116,534	-3,559	0	**-179,763**
As at 31 December 2020						
Cost	2,905	318,409	398,092	2,819	3,333	**725,558**
Accumulated depreciation	0	-83,636	-155,451	-2,320	0	**-241,408**
As at 31 December 2021						
Cost	3,314	347,636	538,570	3,081	6,714	**899,315**
Accumulated depreciation	0	-52,640	-76,171	-2,426	0	**-131,237**

[1] **Assets under construction**

At the end of the reporting period, assets under construction amounted to 6,714 thousand euros (31 December 2020: 3,333 thousand euros).

The group's binding commitments for the acquisition of property, plant and equipment in subsequent periods totalled 13,223 thousand euros at 31 December 2021 (31 December 2020: 4,700 thousand euros).

All borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised as part of the cost of the asset under construction.

In the reporting and the prior period, the group did not capitalise any borrowing costs.

Other costs capitalised during the period consisted of labour costs of 1,747 thousand euros (2020: 1,524 thousand euros) and depreciation expense of 418 thousand euros (2020: 438 thousand euros).

Non-cash transactions

Additions to the group's property, plant and equipment and payments made on the purchase of property, plant and equipment which are reported in the statement of cash flows differ by 2,988 thousand euros, which is attributable to non-cash transactions. The change in payables related to operating activities in the statement of cash flows has been adjusted for non-cash transactions (including acquisitions through leases and reclassifications between asset classes). The change in payables in the statement of cash flows has also been adjusted for amounts payable to suppliers of items of property, plant and equipment as at the end of the reporting period. Payables to suppliers of items of property, plant and equipment totalled 962 thousand euros at 31 December 2021 (31 December 2020: 280 thousand euros).

Other information

[2] Notes 16–18 include depreciation expense, which has been allocated to different income statement line items. The total amount of depreciation and amortisation expense presented in those notes differs from depreciation for the year presented in note 6 by 418 thousand euros (2020: 440 thousand euros). The difference is attributable to the capitalisation of depreciation expense as part of the cost of items of property, plant and equipment and inventories, and the amortisation of intangible assets.

Fully depreciated items

The cost of fully depreciated items of property, plant and equipment that were still in use at 31 December 2021 was 22,390 thousand euros (31 December 2020: 20,100 thousand euros).

Changes in the fair values of items of property, plant and equipment categorised into level 3 of the fair value hierarchy

(In thousands of euros)

Business line	**Oil shale processing**				**Regulated business**				**Other activities**				**Total**
Asset subclass	**Buildings**	**Structures (civil engineering assets)**	**Vehicles**	**Other plant and equipment**	**Buildings**	**Structures (civil engineering assets)**	**Vehicles**	**Other plant and equipment**	**Buildings**	**Structures (civil engineering assets)**	**Vehicles**	**Other plant and equipment**	**Total**
Asset class	**Buildings and structures**		**Plant and equipment**		**Buildings and structures**		**Plant and equipment**		**Buildings and structures**		**Plant and equipment**		**Total**
Fair value at 31 December 2020	**57,876**	**121,499**	**830**	**214,474**	**5,490**	**37,122**	**90**	**20,971**	**3,834**	**8,951**	**4,046**	**2,231**	**477,414**
Gains and losses for the period													
Depreciation (in profit or loss)	-2,885	-12,516	-712	-45,839	-137	-1,753	-28	-1,584	-1,348	-3,025	-843	-179	-70,849
Revaluation	0	76,049	0	257,668	0	0	0	0	0	0	0	0	333,717
Recognised in profit or loss	*0*	-15,120	0	-7,596	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	-22,716
Recognised in other comprehensive income	*0*	91,169	0	265,264	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	356,433
Additions, disposals and other movements													
Additions	0	1,105	423	1,388	0	0	0	16	63	188	817	2,002	6,002
Reclassifications	0	3,859	0	6,151	513	111	0	542	0	0	0	3	11,179
Disposals	0	0	0	0	0	0	0	0	0	0	-68	0	-68
Fair value at 31 December 2021	**54,991**	**189,996**	**541**	**433,842**	**5,866**	**35,480**	**62**	**19,945**	**2,549**	**6,114**	**3,952**	**4,057**	**757,395**

Business line	Oil shale processing				Regulated business				Other activities				
Asset subclass	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Total
Asset class	**Buildings and structures**		**Plant and equipment**		**Buildings and structures**		**Plant and equipment**		**Buildings and structures**		**Plant and equipment**		**Total**
Fair value at 31 December 2019	**60,824**	**143,475**	**911**	**244,968**	**5,747**	**35,386**	**120**	**22,015**	**3,375**	**9,564**	**5,993**	**1,070**	**533,448**
Gains and losses for the period													
Depreciation (in profit or loss)	-3,733	-16,100	-225	-47,589	-282	-1,765	-34	-1,585	-371	-611	-934	-228	-73,457
Additions, disposals and other movements													
Additions	116	1,062	114	728	53	561	19	589	0	0	159	24	3,425
Reclassifications	685	-6,938	83	16,432	0	2,963	-13	62	830	-2	-594	1,371	14,879
Disposals	-16	0	-53	-65	-28	-23	-2	-110	0	0	-578	-6	-881
Fair value at 31 December 2020	**57,876**	**121,499**	**830**	**214,474**	**5,490**	**37,122**	**90**	**20,971**	**3,834**	**8,951**	**4,046**	**2,231**	**477,414**

Measurement of fair value

The group's management measured the fair values of the items of property, plant and equipment of all group entities involved in significant business lines as at the end of the reporting period and concluded that at most entities the carrying amounts of the assets did not differ significantly from their fair values and, accordingly, there was no need to carry out a revaluation of the assets in 2021. However, the tests of the fair values of the items of property plant and equipment of the mining entity VKG Kaevandused and the oil production entity VKG Oil reflected that the fair values of the assets significantly differed from their carrying amounts and a revaluation was required.

The value of the property, plant and equipment of VKG Kaevandused has decreased substantially due to various restrictions which have reduced the availability of oil shale extracted from the Ojamaa mine. Since this has shortened the estimated useful life of the Ojamaa mine by around 2 years, we had to make an exceptional revaluation and reduce the carrying amount of the property, plant and equipment related to the Ojamaa mine by 22,849 thousand euros. Out of the total decrease, 22,716 thousand euros was recognised in profit and 133 thousand euros was recognised in other comprehensive income.

The value of the property, plant and equipment of VKG Oil has increased significantly due to the improvement in the market situation and analysts' more positive outlook for the future development of global oil prices. As a result, we made a revaluation and increased the carrying amount of the entity's property, plant and equipment by 356,433 thousand euros. The increase was recognised in other comprehensive income.

The fair values of items of property, plant and equipment were measured using actual budgets prepared by the group's management and assuming that transactions between group entities are conducted on the same terms as transactions between independent parties. The fair values of the items of property, plant and equipment of entities involved in oil shale processing depend greatly on the projections of the curve of future global liquid fuel prices. Future sales prices of liquid fuels are projected based on the forecasts of reliable independent sources and management's estimates.

The following tables provide information about the valuation techniques applied in measuring the fair values of items of property, plant and equipment, the key unobservable inputs used and the inter-relationship between the key unobservable inputs and fair value measurement.

Determination of the fair values of the property, plant and equipment of entities involved in oil shale processing: VKG Oil AS, VKG Kaevandused OÜ, and VKG Energia OÜ as at 31 December 2021[1]

Valuation technique	Key unobservable inputs	Effects of changes in key unobservable inputs on fair value
Discounted cash flow method: the technique measures the present value of the expected future cash flows of the assets, taking into account possible developments in the global sales prices of liquid fuels, the probability of those developments, production modes optimal for the prices and other factors. The expected net cash flows thus derived are discounted by applying as the discount rate the expected risk-weighted rates of return which take into account the risk-free rate of return, the country risk of Estonia, the risk profiles of the sector and the company, and the expected debt to equity ratio in the sector.	1) The future cash flows of the mining entity VKG Kaevandused were calculated based on the budget for 2022 and the knowledge of the future prices of contracts in force at 31 December 2021. 2) The future cash flows of the oil production entity VKG Oil were also calculated based on the budget for 2022, but instead of the budgeted oil price management used four different future oil price scenarios which were assigned weights based on management's assessment of their probability. 3) Out of the future price scenarios, three were based on the Refinitiv monthly oil market poll as at 31 December 2021 and one was based on Brent forward prices at the date of the test. 4) The forecasts were prepared assuming that the Petroter I oil plant will be idle for 5 months in 2022 due to extensive reconstruction, which will increase its production capacity to the same level as that of other Petroter plants by 2023. It was assumed that out of the Kiviter plants, GGJ-4 and GGJ-5 will be operating at full capacity but 1000t GG will be idle due to the lack of oil shale. 5) The future cash flows of the energy production entity VKG Energia were calculated based on the budget for 2022. Besides contracts in force, the entity's cash flows are affected by the market prices of electricity and CO_2 emission allowances. Since most of the electricity produced by VKG Energia is consumed by group entities, the electricity price was estimated based on the best knowledge of future prices at the date the budget was made. The future price of CO_2 emission allowances was estimated based on the Refinitiv forecast as at 31 December 2021. 6) The quantities of CO_2 emission allowances allocated free of charge were estimated based on the Fit for 55 proposals in the light of which it was assumed that the quantities allocated for free will decrease by around 25% by 2030. The plans for free allocations in the period 2030–2040 are not yet known but management assumed conservatively that in 2040 allowances received free of charge will cover only a third of the emissions. 7) The discount rates applied were 7.95% (2020: 7.95%) for VKG Kaevandused, 7.95% (2020: 7.95%) for VKG Oil and 7.95% (2020: 7.5%) for VKG Energia. 8) The USD/EUR exchange rate applied was 1.15 (2020: 1.20).	The mining operations of VKG Kaevandused give rise to substantial fixed costs, which is why a decrease in production volumes has a strong impact on the fair value of the entity's property, plant and equipment. The fair value of the assets is also sensitive to the discount rate. A rise in the discount rate and a decrease in production volume would have a negative impact on fair value and would result in the recognition of additional impairment losses. The fair values of the property, plant and equipment of VKG Oil are the most sensitive to forecasts of the future price of Brent crude oil. The price of Brent crude is highly volatile. Thus, in 2018 the group began to curb the volatility of fair value with the multiple scenario approach whereby management assesses the probability of different scenarios and assigns them different, probability-based weights. The baseline scenario, which was assigned the highest, 40% probability, was based on the median outcome of the Refinitiv oil market poll conducted on 31 December 2021 according to which the next 5 years' average price expectation for Brent is 68 $/bbl. Another stability scenario, which was assigned a 30% probability, was based on the Brent crude oil forward curve at the time of the test according to which the average price of Brent crude will drop within 5 years from 76 to 66 $/bbl and will stay at that level. The more extreme negative and positive growth forecasts were also based on the Refinitiv oil market poll, being the most optimistic 10% and the most pessimistic 10% of the forecasts, respectively. According to the negative growth scenario, which was assigned a probability of 20%, in 2022 the average price of Brent crude will be 65 $/bbl but within the next four years it will drop to the level of 45 $/bbl and stay there. According to the positive growth scenario, which was considered to be the least likely and was assigned a probability of 10%, in 2022–2025 the average price of Brent crude will be at the level of 88 $/bbl and from 2026 it will rise to 91 $/bbl. The fair value of the assets is also affected by the price of CO_2 emission allowances, the discount rate applied, the EUR/USD exchange rate and the group's production volumes. An increase in the discount rate, the EUR/USD exchange rate and the price of CO_2 emission allowances and a decrease in the production volume would have a negative effect on fair value. The fair values of the property, plant and equipment of VKG Energia depend heavily on the price of CO_2 emission allowances and the decrease in the quantity of allowances allocated in the future. An increase in the price and a decrease in the quantity of allowances allocated would lower the fair value of property, plant and equipment. The fair values of the assets are also influenced by the electricity price, the discount rate applied and the heat sales volume. A higher discount rate and a smaller heat sales volume or a lower electricity price would have a negative effect on the fair value of property, plant and equipment.

[1] Should events in the next financial year differ significantly from the assumptions applied in measuring fair value, the assumptions may have to be changed and fair values adjusted.

Determination of the fair value of buildings, structures, vehicles (except wagons) and other plant and equipment (except assets used in the provision of electricity distribution service) of group companies engaged in other business activities as at 31 December 2021

Valuation technique	Key unobservable inputs	Effects of changes in key unobservable inputs on fair value
Depreciated replacement cost method: This method assumes that from the perspective of a market participant seller the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence. Obsolescence encompasses physical deterioration, functional (technological) obsolescence, and economic (external) obsolescence.	Since the assets are of a specialised nature, the group did not use uniform inputs to measure the fair values of all asset classes. The cost of a new asset of equal utility at the date of valuation. Each individual asset has its own specific cost. Adjustment based on the asset’s actual wear and tear, which is asset-specific, taking into account the time the asset has been in use and its remaining useful life.	The fair value of an asset would increase (decrease) if: - the cost of a new asset of equal utility increased (decreased); - adjustment for deterioration and obsolescence decreased (increased).

Determination of the fair value of vehicles (except assets used in the provision of electricity distribution service) of group companies engaged in other business activities as at 31 December 2021

Valuation technique	Key unobservable inputs	Effects of changes in key unobservable inputs on fair value
Market approach: This approach is based on prices and other relevant information derived from transactions conducted in the market with identical or similar assets or from information available on identical or similar assets that are for sale.	Ask prices for identical or similar assets taking into account that these differ from the actual transaction prices in the aftermarket by 25–35%.	The fair value of the assets would increase (decrease) if, in order to determine the aftermarket price, the ask prices were lowered by a smaller (larger) percentage.

Determination of the fair value of buildings, structures, vehicles and other plant and equipment used in the provision of electricity distribution service as at 31 December 2021

Valuation technique	**Key unobservable inputs**	**Effects of changes in key unobservable inputs on fair value**
Discounted cash flow method (income approach): This method determines the present value of the expected future cash flows of the assets by taking into account: revenue projections based on the rate of return on assets accepted by the competition authority, the expenditure required for the repair and maintenance of the assets, other expenditure required for the upkeep of the electricity network, and other cash inflows and outflows. The net cash flow thus derived is discounted by applying a discount rate that reflects the assumptions that market participants would apply when pricing the assets.	Net cash inflow has been projected based on the weighted average cost of capital (WACC) accepted by the competition authority. Net cash flow has been discounted by using as the discount rate the weighted average cost of capital (WACC) accepted by the competition authority.	The fair value of the assets would increase (decrease) if: - the rate of return accepted by the competition authority that was applied to project net cash inflow increased (decreased); - the discount rate applied decreased (increased).

If the group measured all of its property, plant and equipment using the cost model, the carrying amounts would be as follows:

(In thousands of euros)	**Land**	**Buildings and structures**	**Plant and equipment**	**Other items**	**Assets under construction and prepayments**	**Total**
As at 31 December 2020	2,905	149,860	191,879	498	3,333	**348,475**
As at 31 December 2021	3,314	155,324	180,754	2,819	3,333	**345,544**

Note 7. Intangible assets

(In thousands of euros)	**CO_2 emission allowances[1]**	**Mining licence[2]**	**Service concessions arrangements[3]**	**Other[4]**	**Total**
Carrying amount at 31 December 2019	**4,479**	**15,667**	**920**	**2,619**	**23,685**
Additions	34,939	0	0	369	35,308
Amortisation for the year	-31,906	-904	-32	-147	-32,989
Sales	0	0	0	-18	966
Carrying amount at 31 December 2020	**7,512**	**14,763**	**888**	**2,823**	**25,986**
Additions	77,791	22	0	675	78,488
Amortisation for the year	-54,564	-1,000	-32	-306	-55,902
Other adjustments	0	984	0	-984	0
Carrying amount at 31 December 2021	**30,739**	**14,769**	**856**	**2,208**	**48,572**

As at 31 December 2019

Cost	4,478	22,390	1,110	4,348	**32,326**
Accumulated amortisation and impairment losses	-	-6,723	-190	-1,730	**-8,643**

As at 31 December 2020

Cost	7,512	22,372	1,110	4,700	**35,694**
Accumulated amortisation and impairment losses		-7,609	-222	-1,877	**-9,708**

As at 31 December 2021

Cost	30,739	23,379	1,110	4,391	**59,619**
Accumulated amortisation and impairment losses	-	-8,610	-254	-2,183	**-11,047**

[1] Phase 4 of the EU emissions trading system began in 2021 and will last until 2030. Under the allocation plan approved by the European Commission, the group was allocated 4,945 thousand tonnes of free CO_2 emission allowances of which 1,204 thousand tonnes was received in 2021 (2020: 1,292 thousand tonnes) and recognised at the price of 64.58 euros per tonne.

On recognising CO_2 emission allowances received free of charge, the group also recognises a government grant liability that is amortised to income in proportion to the use and write-down of CO_2 emission allowances received free of charge (see note 10).

At the end of the year, the remaining balance of free CO_2 emission allowances allocated to the group under the national allocation plan was 574 thousand tonnes (31 December 2020: 348 thousand tonnes), which has been recognised in an amount of 30,704 thousand euros (31 December 2020: 7,476 thousand euros).

Management tested the group's CO_2 emission allowances for impairment at the end of the financial year and did not identify a need for a write-down.

[2] The group has acquired a licence for mining oil shale at the Sompa mine under an agreement on the exchange of mining licences. The cost of the licence was 17,910 thousand euros (licence registration no. KMIN-066, valid until 31 December 2024).

The licence allows mining a specific quantity of oil shale during the term of the licence. Amortisation of the licence began in July 2012 and will end in 2028. Amortisation is charged using the straight-line method.

The group has made an investment aimed at gaining opportunities to extract oil shale in the mining areas and exploration field of the oil shale mine. The subject matter of the agreement includes applications for licences to mine mineral resources in different mining areas of the oil shale mine, an application for an exploration licence and the documents required for processing the applications.

Management reassesses the amortisation rate annually and if mining occurs more quickly than expected, the amortisation rate is increased consistent with the extracted quantities.

[3] Service concession arrangements are long-term arrangements between a public sector entity and a private sector entity by which a private sector entity provides public services using a specific infrastructure asset.

[4] The cost includes capitalised labour costs of 452 thousand euros.

Note 8. Borrowings

(In thousands of euros)	**Current portion**	**Non-current portion**	**Total liability**	**Effective interest rate**	**Maturity date**
Use of credit card	1	0	**1**	0%	
Lease liabilities	*1,778*	*1,747*	**3,525**	1.45%–2.15%	2022–2025
Total borrowings at 31 December 2021	**1,779**	**1,747**	**3,526**		
Of which repayable:					
Not later than 1 year	*1,779*	*0*	*1,779*		
Later than 1 and not later than 5 years	*0*	*1,747*	*1,747*		

(In thousands of euros)	**Current portion**	**Non-current portion**	**Total liability**	**Effective interest rate**	**Maturity date**
Bank loans[1]	20,934	75,069	**96,003**		
Of which syndicated loan	*20,934*	*75,069*	***96,003***	6 month EURIBOR + 3%	2024
Lease liabilities	*2,441*	*2,328*	**4,769**	1.1%–2.15%	2022–2025
Total borrowings at 31 December 2020	**23,375**	**77,397**	**100,772**		
Of which repayable:					
Not later than 1 year	*23,375*	*0*	*23,375*		
Later than 1 and not later than 5 years	*0*	*77,397*	*77,397*		

Note 9. Accrued expenses

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Payables to employees	7,310	6,047
Interest payable	0	8
Payable for realised derivative financial instruments	0	1,041
Other accrued expenses	3	3
Total accrued expenses	**7,313**	**7,099**

Note 10. Government grants

(In thousands of euros)	**CO_2 emission allowances allocated**	**Grants related to assets**	**Total**
Carrying amount at 31 December 2020	**7,477**	**3,351**	***10,828***
Of which current portion	*6,327*	*155*	*6,482*
Of which non-current portion	*1,150*	*3,196*	*4,346*
Allocation of free CO_2 emission allowances	77,791	0	***77,791***
Amortisation (notes 7 and 17)	-54,564	*0*	***-54,564***
Depreciation of assets acquired with government grants (note 19)	-	-155	***-155***
Carrying amount at 31 December 2021	**30,705**	**3,195**	***33,900***
Of which current portion	*29,952*	*155*	*30,107*
Of which non-current portion	*753*	*3,040*	*3,793*

(In thousands of euros)	**CO_2 emission allowances allocated**	**Grants related to assets**	**Total**
Carrying amount at 31 December 2019	**4,478**	**3,492**	***7,970***
Of which current portion	*0*	*136*	*136*
Of which non-current portion	*4,478*	*3,356*	*7,834*
Return of CO_2 emission allowances sold	1,328	0	***1,328***
Allocation of free CO_2 emission allowances	33,577	0	***33,577***
Amortisation (notes 7 and 16)	-31,906	*0*	***-31,906***
Allocation of grants related to assets	-	32	***32***
Depreciation of assets acquired with government grants (note 19)	-	-173	***-173***
Carrying amount at 31 December 2020[1]	**7,477**	**3,351**	***10,828***
Of which current portion	*6,327*	*155*	*6,482*
Of which non-current portion	*1,150*	*3,196*	*4,346*

[1] At the reporting date, the balance of the government grant liability recognised on the recognition of CO_2 emission allowances allocated to the group free of charge under the national allocation plan amounted to 30,705 thousand euros (31 December 2020: 7,477 thousand euros).

The government grant liability is amortised to income in proportion to the use of the allocated free CO_2 emission allowances. Amortisation of CO_2 emission allowances allocated free of charge that are recognised as intangible assets is recognised in the cost of sales and income from government grants is recognised in other income in the same amount. Therefore, use of CO_2 emission allowances allocated to the group free of charge has no impact on profit or loss for the period.

[2] In accordance with an agreement on the replacement of pollution charges signed with the Ministry of the Environment, the obligation to pay pollution charges has been replaced with the obligation to finance environmental measures (construction of desulphurisation systems) that should reduce sulphur dioxide emissions from boilers 5 and 6 of the group’s Põhja combined heat and power plant by 15% per year.

The amounts received in support of acquisition of assets are recognised as liabilities in the statement of financial position and taken to income over the estimated useful lives of the assets acquired.

Note 11. Provisions

(In thousands of euros)	**Mine closure provision[1]**	**Provision for shortfall in CO_2 emission allowances**	**Other**	**Total**
As at 31 December 2020	**4,723**	**0**	**72**	**4,795**
Of which current	*0*	*0*	*37*	**37**
Of which non-current	*4,723*	*0*	*36*	**4,758**
Recognition	0	16,990	85	**17,075**
Use	0	0	-18	**-18**
Discounting	95	0	1	**96**
As at 31 December 2021	**4,818**	**16,990**	**140**	**21,948**
Of which current	*0*	*16,990*	*116*	*17,106*
Of which non-current	*4,818*	*0*	*24*	*4,842*

[1] The mine closure provision has been recognised for the closure of the Ojamaa mine in the period 2027–2029. The discount rate of the provision is 2% per year.

Note 12. Deferred income

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Deferred income:		
Current portion	594	393
Non-current portion	8,089	7,752
Total deferred income	**8,683**	**8,145**

The fees charged for connecting to the power and district heating networks are recognised as revenue over the periods in which the energy service is expected to be provided via the connection point. Connection charges received in the reporting period totalled 728 thousand euros (2020: 553 thousand euros). The amount recognised as revenue was 340 thousand euros (2020: 340 thousand euros).

Note 13. Share capital

(In thousands of euros) As at 31 December	2021	2020
Share capital	6,391	6,391

At the year-end, share capital consisted of 9,999,999 shares without par value (31 December 2020: 9,999,999 shares without par value). The rounded proportionate par value of one share is 0.64 euros.

Each share grants the holder one vote at general meetings of the company and the right to participate in the distribution of profits in proportion to the number of shares held.

On 30 December 2019, the shareholders of Viru Keemia Grupp AS passed a resolution according to which Viru Keemia Grupp AS was to repurchase up to 10% of its own shares within one year. The first purchase transaction by which Viru Keemia Grupp AS acquired 200,000 own (treasury) shares took place on the same day. The continuation of the share buyback programme depends on global market developments and the group's financial performance. In 2021, Viru Keemia Grupp AS acquired 84,999 own shares.

In the reporting period, the group distributed a dividend of 8,000 thousand euros (2020: 8,000 thousand euros).

The shares in Viru Keemia Grupp AS are not listed on a stock exchange.

Information on the group's retained earnings and contingent income tax liability is disclosed in note 29.

Owners of Viru Keemia Grupp AS shares at period-end

Owner	Ownership interest
Tristen Trade OÜ	37.80%
Alvekor OÜ	24.77%
Revellis Invest OÜ	18.97%
Sergos Invest OÜ	15.61%
Viru Keemia Grupp AS	2.85%
Total	**100%**

Note 14. Reserves

(In thousands of euros)		
As at 31 December	**2021**	**2020**
Revaluation reserve[1]	461,488	135,680
Statutory capital reserve[2]	639	639
Hedge reserve[3]	0	-2,256
Total reserves	**462,127**	**134,063**

[1] The group measures most items of property, plant and equipment using the revaluation model whereby, after initial recognition, assets are measured at their revalued amounts.

When assets are revalued, changes in their carrying amounts are recognised through other comprehensive income in the revaluation reserve. The revaluation reserve is reduced on the depreciation, write-down and disposal of revalued items of property, plant and equipment. Further information about the accounting policy is provided in note 1.

Further information about the revaluation of property, plant and equipment is disclosed in note 6.

In 2021, 30,626 thousand euros of the revaluation reserve was transferred to retained earnings (2020: 36,104 thousand euros).

The revaluation reserve may not be distributed as dividends.

Revaluation reserve at 31 December 2019	**171,784**
Transfer to retained earnings	-36,104
Revaluation reserve at 31 December 2020*	**135,680**
Transfer to retained earnings	-30,624
Revaluation of items of property, plant and equipment	356,432
Revaluation reserve at 31 December 2021*	**461,488**

[2] In accordance with the Estonian Commercial Code and the parent company's articles of association, every year the parent has to transfer at least 5% of its net profit to the capital reserve until the reserve amounts to 10% of share capital. The capital reserve may not be distributed as dividends but it may be used to cover losses if losses cannot be covered with unrestricted equity. The capital reserve may also be used to increase share capital.

[3] The hedge reserve comprises the cumulative change in the fair value of the hedging instruments relating to the effective portion of a cash flow hedge. The hedge reserve is reclassified to profit or loss (revenue) in the same period during which the sales transaction occurs and the hedged cash flows affect profit or loss.

Note 15. Revenue

(In thousands of euros)

Revenue by geographical area	2021	2020
European Union, excluding Estonia	47,927	69,805
Estonia	105,793	66,548
Other countries	131,803	71,488
Total revenue	**285,523**	**207,841**

Timing of revenue recognition		
Goods transferred to customers at a point in time		
Sale of self-produced shale oil	231,669	170,106
Sale of electricity	17,262	7,868
Sale of district heating and hot water	15,361	12,823
Sale of district heating and steam	4,629	3,740
Transmission and distribution of natural gas	0	132
Sale of other products and materials	3,271	747
Total revenue recognised at a point in time	**272,192**	**195,416**
Goods and services transferred to customers over time		
Logistics services	636	551
Construction of electricity and telecommunications networks	2,351	1,742
Transmission and distribution of electricity	7,985	7,559
Connection to electricity and district heating networks	481	464
Other services	1,878	2,109
Total revenue recognised over time	**13,331**	**12,425**
Total revenue from contracts with customers	**285,523**	**207,841**

Balances from contracts with customers

The following table contains assets and liabilities from contracts with customers:

	2021	2020
Contract assets	190	16
Contract liabilities	8,678	8,144
Total	**8,868**	**8,160**

The contract assets primarily relate to the group's rights to consideration for construction work completed but not billed by the reporting date. A contract asset is transferred to receivables when the group issues an invoice to the customer.

The contract liabilities relate to the consideration received for connecting customers to the electricity and district heating networks, which is recognised as revenue over the expected terms of the contracts with the customers. At 31 December 2021, the unsatisfied portion of performance obligations related to the connection charges amounted to 8,678 thousand euros (2020: 8,066 thousand euros). The group's management estimates that the transaction price allocated to the unsatisfied performance obligations related to the connection service will be transferred to revenue in the next 32 years.

In 2021, connection charges of 341 thousand euros (2020: 340 thousand euros) were transferred from contract liabilities to revenue.

Information about trade receivables is provided in note 4.

Note 16. Cost of sales

(In thousands of euros)	2021	2020
Depreciation, amortisation and impairment losses	-70,668	-73,090
Personnel expenses (note 22)	-41,012	-39,775
Raw materials, consumables and goods used	-56,918	-45,740
Services purchased	-14,126	-18,280
Pollution charges	-18,918	-15,868
Amortisation of CO_2 emission allowances (note 7)	-54,564	-31,906
Costs of recognising a provision for CO_2 emission allowances (note 11)	-16,990	0
Write-down of property, plant and equipment	-22,716	0
Inventory write-down (note 5)	0	-579
Change in inventories of finished goods and work in progress	19,975	9,359
Other costs	-35	-198
Total cost of sales	**-275,972**	**-216,077**

Note 17. Marketing and distribution expenses

(In thousands of euros)	2021	2020
Services purchased	-4,520	-4,676
Personnel expenses (note 22)	-612	-627
Depreciation and amortisation	-53	-51
Raw materials, consumables and goods used	-46	-188
Other expenses	-1	-6
Total marketing and distribution expenses	**-5,232**	**-5,548**

Note 18. Administrative expenses

(In thousands of euros)	2021	2020
Personnel expenses (note 22)	-6,947	-5,973
Services purchased	-3,743	-3,895
Depreciation and amortisation	-1,243	-1,190
Raw materials, consumables and goods used	-390	-108
Doubtful receivables (note 4)	-271	1
Other expenses	-37	-14
Total administrative expenses	**-12,631**	**-11,179**

Note 19. Other income

(In thousands of euros)	2021	2020
Allocation of CO_2 emission allowances free of charge (note 10)	54,565	31,906
Foreign exchange gain	610	1
Sale of waste metal	868	631
Government grants related to assets (note 10)	155	173
Late payment interest and penalties	32	34
Miscellaneous income[1]	9,876[1]	8,197[2]
Total other income	**66,106**	**40,942**

[1] Miscellaneous income includes income (compensation) of 7,267 thousand euros received based on the ruling of Tartu Circuit Court in civil matter no. 2-15-505.

[2] Includes the reversal of a provision for CO_2 emission allowances at VKG Energia of 7,937 thousand euros.

Note 20. Other expenses

(In thousands of euros)	2021	2020
Loss on disposal of non-current assets	-119	-48
Foreign exchange loss	0	-966
Late payment interest and penalties	-6	-15
Personnel expenses (note 22)	0	-16
Professional associations' membership fees	-45	-34
Write-off of inventories	-1,182	-10
Miscellaneous expenses	-264	-143
Total other expenses	**-1,616**	**-1,232**

Note 21. Finance income and costs

Finance income

(In thousands of euros)	2021	2020
Interest income	44	203
Total finance income	**44**	**203**

Finance costs

(In thousands of euros)	2021	2020
Interest expense on loans	-1,412	-4,352
Foreign exchange loss	0	-1
Unwinding of the discount on non-current provisions (note 11)	-96	-94
Other finance costs	-321	-86
Interest expense on lease liabilities	-74	-94
Total finance costs	**-1,903**	**-4,627**

Note 22. Personnel expenses

(In thousands of euros)	**2021**	**2020**
Employee remuneration	-36,532	-36,047
Of which remuneration of the management board	*-2,105*	*-1,480*
Of which remuneration of the supervisory board	*-113*	*-61*
Social security charges	-11,764	-11,658
Unemployment insurance contributions	-274	-272
Total personnel expenses	**-48,570**	**-47,977**

The group's average number of employees in 2021 was 1,659 (2020: 1,665), 108 of whom were employed by the parent, Viru Keemia Grupp AS (2020: 93).

During the period, there were 1,613 employees working under employment contracts, 14 members of the management board, 5 members of the supervisory board, and 27 people working under contracts for services (2020: 1,635 employees working under employment contracts, 12 members of the management board, 5 members of the supervisory board and 18 people working under contracts for services).

Personnel expenses are allocated to different income statement line items as set out in notes 6, 7, 16, 17, 18 and 20. The difference for 2021 of 2,199 thousand euros (2020: 1,587 thousand euros) results from the capitalisation of personnel expenses incurred in the production of self-constructed assets (notes 6 and 7).

Note 23. Taxes

(In thousands of euros)	**2021**		**2020**	
	Receivable	**Payable**	**Receivable**	**Payable**
Prepaid taxes (note 4)	146	0	32	0
Value added tax	0	474	108	0
Personal income tax	0	1,073	0	953
Social security tax	11	1,965	0	1,783
Corporate income tax	0	21	0	11
Unemployment insurance contributions	0	128	0	124
Mandatory funded pension contributions	0	44	0	78
Mining rights fees	0	3,613	0	422
Excise duties	0	352	0	156
Environmental charges	0	2,536	0	1,758
Deferred tax liability	0	4,942	0	3,206
Total	**157**	**15,148**	**140**	**8,491**

Income tax expense on dividends:

(In thousands of euros)	**2021**	**2020**
Income tax rate for dividends:		
20% (20/80 of net distribution)	-990	-1,125
14% (14/86 of net distribution)	-516	-570
Deferred tax liability	-1,735	1,451
Income tax on other distributions from equity	-1,291	0
Total income tax expense on dividends	**-4,532**	**-244**

Note 24. Leases

The group as a lessee

The group leases several assets, including items of production equipment and machinery, which previously were classified as operating leases.

The group has also entered into leases for which the underlying asset is of low value (the asset, when new, has a value of less than 5 thousand euros). The group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets. The group has also elected not to recognise right-of-use assets and lease liabilities for short-term leases (leases with a term of less than 12 months).

Right-of-use assets

(In thousands of euros)	**Land and buildings**	**Plant and equipment**	**Total**
Balance at 31 December 2019	**140**	**2,865**	**3,005**
Depreciation for the year	-44	-761	**-805**
Additions	59	1,499	**1,558**
Derecognition	0	-451	**-451**
Balance at 31 December 2020	**155**	**3,152**	**3,307**
Depreciation for the year	-49	-844	**-893**
Additions	0	1,457	**1,457**
Derecognition	-16	-752	**-768**
Balance at 31 December 2021	**90**	**3,013**	**3,103**

Amounts recognised in the income statement

(In thousands of euros)	**2021**	**2020**
All leases under the requirements of IFRS 16		
Interest expense on lease liabilities	67	-62
Expenses on short-term leases	390	-394
Expenses on leases of low-value assets	-724	-686
Total expenses	**-267**	**-1,142**

Amounts recognised in the statement of cash flows

(In thousands of euros)	**2021**	**2020**
Total cash outflows related to leases	**-2,761**	**-2,920**
Of which principal payments	*-2,687*	*-2,826*
Of which interest payments	*-74*	*-94*

The group as a lessor

Finance leases

The group has not leased out any assets to third parties under finance leases.

Operating leases

The group has leased out some items of plant and equipment under operating leases. The group has classified those leases as operating leases because the leases do not transfer substantially all the risks and rewards incidental to ownership of the underlying asset to the lessee.

Operating lease income for the period (In thousands of euros)	**2021**	**2020**
Leases of premises	39	23
Leases of equipment	15	40
Leases of other assets	15	26
Total	**69**	**89**

The table below provides a maturity analysis for lease payments receivable, showing the undiscounted lease payments due after the reporting date.

Operating lease payments receivable in subsequent periods under IFRS 16	**2021**	**2020**
(In thousands of euros)		
Not later than 1 year	67	191
Later than 1 year and not later than 5 years	226	154
Total	**293**	**345**

Note 25. Related party disclosures

For the purposes of these consolidated financial statements, parties are related if one controls the other or can exert significant influence on the other's operating decisions. Related parties include:
- owners of the parent company;
- other companies belonging to the same group; and
- members of the group's management and supervisory boards and shareholders with a significant ownership interest unless those persons cannot exert significant influence on the group's operating decisions.

In addition, related parties include close family members of the above persons and companies related to them.

(In thousands of euros)	**2021**	**2020**
Transactions with members of the management and supervisory boards and owners		
Purchase of services (remuneration provided under management board members' service contracts)	2,218	1,474
Purchase of services (remuneration provided to members of the supervisory board)	150	61
Transactions with companies and persons related to owners of the group		
Purchases of goods and services	33	46
Repayment of a loan received	0	13,400
Lease expenses (note 24)	144	130
Sales of goods and services	104	20
Interest expense (note 21)	0	1,015
Other related parties		
Purchases of services	408	200
Lease expenses	14	13
Receivables from related parties		
Companies related to owners of the group	2	1
Liabilities to related parties		
Liabilities to members of the management board, owners and parties related to owners	114	120

Note 26. Investments in subsidiaries

Subsidiary	Domicile	Core business	Ownership interest at 31 Dec 2021	Ownership interest at 31 Dec 2020
VKG Oil AS	Estonia	Production of oil shale chemicals	100%	100%
VKG Logistika OÜ	Estonia	Transport, maintenance and repair services	100%	100%
Viru RMT OÜ	Estonia	Production of metal structures	100%	100%
VKG Kaevandused OÜ	Estonia	Oil shale mining and processing	100%	100%
VKG Elektrivõrgud OÜ	Estonia	Electricity import, purchase, distribution and sale	100%	100%
VKG Soojus AS	Estonia	Production and sale of heat and electricity	100%	100%
VKG Invest OÜ[1]	Estonia	Development	100%	100%
VKG Energia OÜ	Estonia	Production and sale of heat and electricity	100%	100%

[1] Formerly VKG Diisel OÜ

Note 27. Financial risk management

A. Financial instruments by class and category

Class of financial instruments	Category of financial instruments	Note	Carrying amount	
			31 Dec 2021	31 Dec 2020
Cash and cash equivalents	Amortised cost	2	27,628	115,203
Derivative financial instruments	Fair value – hedging instrument	3	0	167
Trade receivables	Amortised cost	4	32,280	21,012
Other receivables	Amortised cost	4	58,761	267
Loan liabilities	Amortised cost	8	1	96,003
Lease liabilities	Amortised cost	8	3,525	4,769
Trade payables	Amortised cost		9,347	7,270
Other liabilities	Amortised cost	9	7,313	6,583
Payable for realised derivative financial instruments	Amortised cost	9	0	54
Derivative financial instruments (liabilities)	Fair value – hedging instrument	3	0	2,256

B. Fair value

All of the group's financial assets and financial liabilities are either recognised in the consolidated statement of financial position or disclosed as contingent items in the notes to the consolidated financial statements. The carrying amounts of all financial assets and financial liabilities recognised in the statement of financial position are reasonable approximations of their fair values and therefore their fair value has not been disclosed.

According to management's assessment, the fair values of the group's loan and finance lease liabilities are equal to their carrying amounts because according to management's assessment their contractual interest rates correspond to relevant market interest rates.

All financial assets and liabilities for which fair value has been disclosed have been categorised to level 2 in the fair value hierarchy.

The fair value of derivative financial instruments is disclosed in note 3. According to the fair value hierarchy and the valuation inputs used, the instruments have been categorised to level 2 in the fair value hierarchy.

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

C. Financial risk management

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The main source of the group's credit risk is trade receivables. Credit risk is an inherent part of any business activity.

The carrying amounts of financial assets and contract assets reflect the group's maximum credit risk exposure.

The allowance for expected credit losses (loss allowance) recognised for financial assets and contract assets as at the end of the reporting period was as follows:

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Allowance for expected credit losses on trade receivables and contract assets	-508	-253
Total	**-508**	**-253**

Trade receivables and contract assets

The group manages its credit risk by carefully monitoring the settlement behaviour and analysing the financial position of its business partners and involving third party guarantors where necessary. In the event of one-off transactions and new customers, goods and services are sold on a prepayment basis or against a guarantee or a letter of credit.

Past due receivables are dealt with on a daily basis. Customers with settlement delays are sent reminders and cautions. There are rules in place for instituting collection proceedings through the court of law. Conclusion of special agreements is at the discretion of the management board.

Credit risk of receivables and contract assets by geographical area at 31 December 2021

(In thousands of euros) **As at 31 December**	**2021**	**2020**
European Union, excluding Estonia	61	7 920
Estonia	16,241	8,096
Other countries	15,978	4,996
Total	**32,280**	**21,012**

The carrying amount of receivables due from the group's most important customer at 31 December 2021 was 8,664 thousand euros (2020: 7,840 thousand euros).

Trade receivables and contract assets:

The group accounts for expected credit losses on all trade receivables using the simplified approach provided in IFRS 9 that allows recognising the loss allowance at an amount equal to lifetime expected credit losses.

The group always recognises the loss allowance for trade receivables at an amount equal to lifetime expected credit losses. The expected credit losses on trade receivables are calculated using a provision matrix, which is based on the group's historical credit loss experience, adjusted for factors specific to the debtors, general economic conditions and, where appropriate, the time value of money.

Ageing of trade receivables	31 December 2021	31 December 2020
Trade receivables not past due	21,997	20,262
1-30 days past due	10,225	397
31-90 days past due	32	50
Over 91 days past due	26	303
Total trade receivables	**32,280**	**21,012**

Cash and cash equivalents

At 31 December 2021, the group's cash and cash equivalents totalled 27,628 thousand euros (2020: 115,203 thousand euros). Cash and cash equivalents are held at financial institutions whose ratings range from Aa2 to Ba1 according to Moody's.

The credit risk of cash and cash equivalents was estimated based on the 12-month expected credit loss model and the estimation reflects the short maturities of the risk positions. Based on the credit ratings of the financial institutions where the assets are held, the group believes that the credit risk of its cash and cash equivalents is low.

Maximum credit risk exposure arising from unsecured receivables

Credit risk As at 31 December	2021	2020
Cash and cash equivalents	27,628	115,203
Trade receivables	32,280	21,012
Other receivables	58,761	267
Maximum credit risk exposure	**118,669**	**136,482**

Interest rate risk

The group's interest-bearing liabilities totalled 3,526 thousand euros (2020: 100,772 thousand euros), accounting for 1% of total assets as at 31 December 2021 (31 December 2020: 15%). Since all loans have floating interest rates, they are exposed to interest rate risk. If 3 month EURIBOR rose to 1% on average in 2021, the effect on the group's profit before tax would be approximately 35 thousand euros. In view of the size of the risk exposure, management believes that the group's interest rate risk is insignificant.

Liquidity risk

Liquidity risk is the risk that the group will not have sufficient liquid funds to cover its expenses and investments. Liquidity risk is mitigated with various financial instruments such as loans, working capital management, creation of reserves, hedging transactions, etc. At the year-end, the group's current ratio (current assets/current liabilities) was 2.59 (31 December 2020: 3.11). The group's cash and cash equivalents as at the end of the reporting period totalled 27,628 thousand euros (31 December 2020: 115,203 thousand euros). Accordingly, management believes that the group's liquidity position is strong and the probability of the realisation of liquidity risk is remote.

The following liquidity analysis provides an overview of the group's short-term and long-term liabilities by their maturities. All amounts represent undiscounted cash flows from contractual payments. The interest rates of the loans included in the analysis range from 1.1% to 3%.

Liabilities by maturities at 31 December 2021

	Not later than 6 months	Later than 6 months but not later than 1 year	Later than 1 year but not later than 5 years	Total undiscounted amount	Carrying amount
Loan liabilities	1	0	0	**1**	**1**
Lease liabilities	1,107	693	1,765	**3,565**	**3,525**
Trade payables	9,348	0	0	**9,348**	**9,348**
Accrued expenses	7,313	0	0	**7,313**	**7,313**
Total	**17,769**	**693**	**1,765**	**20,227**	**20,187**

Liabilities by maturities at 31 December 2020

	Not later than 6 months	Later than 6 months but not later than 1 year	Later than 1 year but not later than 5 years	Total undiscounted amount	Carrying amount
Loan liabilities	11,931	11,779	81,337	**105,047**	**96,003**
Lease liabilities	1,224	1,247	2,352	**4,823**	**4,769**
Trade payables	6,383	0	0	**6,383**	**6,383**
Accrued expenses	6,058	0	0	**6,058**	**6,058**
Payable for realised derivative financial instruments	1,041	0	0	**1,041**	**1,041**
Derivative financial instruments (liabilities)	2,256	0	0	**2,256**	**2,256**
Total	**28,893**	**13,026**	**83 689**	**125,608**	**116,510**

Capital management

The primary objective of the group's capital management is to ensure an optimal capital (net debt and equity) structure, which would support the group's profitable operation and the interests of shareholders. Due to the volatility of the oil market, it is more financially efficient for oil producers to keep the level of their debt capital below the usual in the long-term perspective. VKG's target is to maintain the net debt to total capital ratio below 20%. By the end of 2021 the indicator was -3% (2020: -3%), which reflects the group's strong capitalisation.

As at 31 December	**2021**	**2020**
Interest-bearing borrowings (note 8)	3,526	100,772
Less: cash and cash equivalents (note 2)	27,628	115,203
Net debt	-24,102	-14,430
Equity	912,017	516,705
Total capital (net debt plus equity)	887,915	502,275
Net debt to capital ratio	**-3%**	**-3%**

Market risks

The risk of changes in the world market prices of oil and oil products is an inherent part of the group's business operations. Under the majority of shale oil sales contracts entered into by the group, the sales price of the product depends directly on the prices quoted for oil products on relevant commodity exchanges. Other shale oil prices (sales in the domestic market) are indirectly influenced by world market prices. The world market prices of oil also influence the group's expenses through the prices of fuels, oils and natural gas that are used in production. This impact, however, is marginal compared to the impact on revenue.

The group monitors the risk continuously and analyses the sensitivity of its forecast profit to changes in the world market prices of oil and oil products. A one-dollar change in the annual average price of Brent crude oil would influence VKG's profit by around two and a half million euros.

The group hedges the risk of changes in the world market prices of oil and oil products with derivative financial instruments and a liquidity buffer. Previously, when the group's liquidity was lower, the main instrument for hedging market risk was fixing sales prices through forward transactions. When market prices are lower, mainly simple swap transactions are used, whereby the future sales price is fixed at a specific level. When prices are higher, more complex zero cost collar transactions are preferred, which provide protection against the fall in the sales price below a certain level but also impose a cap for the sales price. Derivative transactions are concluded by the parent, Viru Keemia Grupp AS, which is responsible for managing and hedging the risk of changes in market prices, and they are recognised in the accounts of VKG Oil AS, whose results reflect the effects of fluctuations in market prices.

Out of oils sold by the group in 2021, 45 thousand tonnes, i.e. 8% of total oil sales for the period, was covered with derivative transactions (2020: 408 thousand tonnes, i.e. 64%). At the end of the reporting period, the group had no liquid fuel derivatives.

Currency risk

In 2021, 76% of the group's sales (2020: 69%) were denominated in US dollars. All of those transactions were related to the sale of oil. Since 99% of the group's expenses are incurred in euros, the weakening of the US dollar constitutes a high risk for the group.

The group's currency risk exposures (In thousands of euros):

Financial assets	**EUR**	**USD**	**Other**	**31 Dec 2021**
Cash and cash equivalents (note 2)	27,628	0	0	27,628
Trade receivables	13,089	19,191	0	32,280
Total	**40,717**	**19,191**	**0**	**59,908**

Financial liabilities	**EUR**	**USD**	**Other**	**31 Dec 2021**
Borrowings (note 8)	3,526	0	0	3,526
Of which non-current	*1,747*	*0*	*0*	*1,747*
Trade payables	9,276	53	18	9,347
Total	**12,802**	**53**	**18**	**12,873**
Net exposure	**27,915**	**19,138**	**-18**	**47,035**

Carbon risk

In connection with the EU climate policy, carbon risk has rapidly evolved into the most critical risk for the group's sustainability in recent years. While all previously described risks are related to market developments, which can be estimated and mitigated in one way or another, carbon risk arises from regulations that are driven by political agenda which is aimed at reducing greenhouse gas emissions in Europe but at the same time renders certain industries and businesses in the EU uncompetitive, forcing them to close down or relocate outside the EU.

Shale oil production is one of those activities whose competitiveness is directly undermined by the EU climate policy. The group's CO_2 emissions in 2021 decreased by 4% and totalled 1,338 thousand tonnes (2020: 1,391 thousand tonnes). The quantity of CO_2 emission allowances received for free, on the other hand, decreased by 7% to the level of 1,205 thousand tonnes (2020: 1,292 thousand tonnes). Thus, emission allowances received for free covered 90% of the group's emissions. If the remaining 134 thousand tonnes had been covered with allowances purchased from the market at an average price of 80 €/t, the expenditure would have amounted to 10.7 million euros. Since VKG has been able to save emission allowances allocated to it in earlier years due to lower emissions, there was no need to purchase emission allowances from the market in 2021.

Note 28. Assets held for sale

In December 2021, the group made its first major investment in the real estate sector, buying commercial premises in the city centres of Tallinn and Riga from Stockmann OY. The investment was made with the intention of reselling the properties and does not affect the group's core business. The group is planning to sell the properties in 2022.

Assets held for sale

(In thousands of euros)	**As at 31 December 2021**
Security deposits	56,290
Assets held for sale	48,510
Total assets	**104,800**

Amounts recognised in the statement of cash flows

(In thousands of euros)	**2021**
Purchase of other investments	-104,800
Total cash flows	**-104,800**

Note 29. Contingent liabilities

The group's retained earnings as at the end of the reporting period amounted to 460,810 thousand euros (31 December 2020: 388,428 thousand euros). The maximum income tax liability that could arise if all of the retained earnings as at the reporting date were distributed as dividends (without applying the lower tax rate) amounts to 92,162 thousand euros (31 December 2020: 77,680 thousand euros) and the amount that could be distributed as the net dividend is 368,648 thousand euros (31 December 2020: 310,719 thousand euros).

The maximum possible income tax liability has been calculated on the assumption that the net dividend and the income tax expense reported in the income statement for 2022 (without applying the lower tax rate) may not exceed total retained earnings as at the end of the reporting period and income tax already paid by the subsidiaries.

Note 30. Events after the reporting period

The following significant events have occurred between the end of the reporting period on 31 December 2021 and the date these financial statements are authorised for issue:

- On 24 February 2022, Russia launched a large-scale military assault on Ukraine. In response, the European Union, the USA, the UK and other countries have imposed a number of sanctions against Russia and Belarus. The group treats the situation caused by the military conflict, heightened geopolitical tensions and sanctions as well as its potential impacts as a non-adjusting event after the reporting period. The financial effects, if any, will be recognised in the group's financial statements for 2022. As the current situation is uncertain and volatile, it is not possible to make quantitative estimates of the potential impacts on the group.

  The group's management has analysed the group's exposure to Russia, Belarus and Ukraine, and has evaluated the potential risk scenarios that may affect the group's production operations and supply chains. Based on the current situation and the analyses carried out during the preparation of the financial statements, management estimates that the economic changes triggered by the war will not have any significant effect on the group's ability to continue as a going concern. The group does not have assets or significant contractual partners in the countries under sanctions.

- On 11 March 2022, the shareholders were paid a dividend of 8,000 thousand euros in total for 2021.

- On 16 February 2022, a decision was passed for the demerger (division) of Viru Keemia Grupp AS. Viru Keemia Grupp AS has decided to establish a new company through a demerger by spin-off (separation). The new company will be owned by VKG's shareholders. Upon the demerger, the assets held for sale (see note 28) and some rights and obligations will be transferred to the acquirer in accordance with the plan for the demerger.
- On 9 May 2022, a reduction of the share capital of Viru Keemia Grupp AS was registered in the Commercial Register. In January 2022, shareholders decided to reduce the company's share capital by cancelling 284,999 own shares without par value. After registration in the Commercial Register, the new amount of share capital is 6,209 thousand euros.

Note 31. Parent company's financial information

Disclosure of the primary financial statements of the group's parent company is required by the Estonian Accounting Act.

Parent company's statement of financial position

(In thousands of euros) **As at 31 December**	**2021**	**2020**
ASSETS		
Cash and cash equivalents	3,174	59,218
Trade receivables	935	596
Other receivables	74,052	24,857
Prepayments	83	54
Inventories	0	16
Assets held for sale	48,510	0
Total current assets	**126,754**	**84,741**
Investments in subsidiaries (note 26)	177,095	424,032
Other long-term receivables	28,553	108,409
Property, plant and equipment	643,621	12,549
Intangible assets	1,875	1,435
Investment property	897	897
Total non-current assets	**852,041**	**547,322**
Total assets	**978,795**	**632,063**
LIABILITIES		
Borrowings	48,079	21,057
Trade payables	1,690	392
Taxes payable	1,238	729
Accrued expenses	1,065	1,704
Derivative financial instruments (note 3)	0	2,256
Total current liabilities	**52,072**	**26,138**
Borrowings	68	75,178
Other liabilities	5,124	3,900
Total non-current liabilities	**5,192**	**79,078**
Total liabilities	**57,264**	**105,216**
EQUITY		
Share capital	6,391	6,391
Statutory capital reserve	639	639
Revaluation reserve	436,103	1,424
Revaluation reserves of subsidiaries accounted for under the equity method	2,426	117,066
Hedge reserve of a subsidiary	0	-2,256
Retained earnings	493,283	415,731
Equity attributable to owners of the parent	**938,842**	**538,995**
Own shares	**-17,311**	**-12,148**
Total equity	**921,531**	**526,847**
Total liabilities and equity	**978,795**	**632,063**

Parent company’s income statement

(In thousands of euros)	**2021**	**2020**
Revenue	29,210	9,612
Cost of sales	-13,766	-503
Gross profit	**15,444**	**9,110**
Administrative expenses	-8,860	-7,846
Other income	872	52
Other expenses	-212	-21
Operating profit	**7,244**	**1,295**
Share of profit/loss of subsidiaries accounted for under the equity method	43,778	-98
Finance income	3,399	5,601
Finance costs	-1,745	-4,449
Profit before tax	**52,676**	**2,349**
Income tax expense	-1,535	-244
Profit for the year	**51,141**	**2,104**

Parent company’s statement of comprehensive income

(In thousands of euros)	**2021**	**2020**
Profit for the year	**51,141**	**2,104**
Items of other comprehensive income that may be reclassified subsequently to profit or loss		
Cash flow hedges – effective portion of changes in fair value	2,256	1,342
Items of other comprehensive income that will not be reclassified to profit or loss		
Share of other comprehensive income of subsidiaries under the equity method – revaluation of property, plant and equipment	-133	0
Revaluation of property, plant and equipment	350,000	0
Total comprehensive income for the year	**403,264**	**3,447**

Parent company's statement of cash flows

(In thousands of euros)	**2021**	**2020**
Cash flows from operating activities		
Profit for the year	**51,141**	**2,104**
Adjustments for:		
Depreciation, amortisation and impairment losses	*14,401*	*887*
Gain/loss on sale and liquidation of non-current assets	*33*	*0*
Change in fair value of investment property	*74*	*0*
Accrued finance income and costs	*-1,976*	*-1,239*
Recognition of deferred connection charges as income	*-5*	*0*
Other adjustments	1,535	244
Total adjustments	**14,062**	**-108**
Share of profit/loss of subsidiaries accounted for under the equity method	-43,778	98
Change in receivables and prepayments	814	773
Change in inventories	16	66
Change in payables and advances received	-2,471	-1,725
Net cash from operating activities	**19,784**	**1,208**
Cash flows from investing activities		
Purchase of property, plant and equipment	-1,472	-242
Purchase of intangible assets	-658	-319
Purchase of other investments	-104,800	0
Proceeds from sale of investment property	12	6
Loans provided to subsidiaries	-2,700	-1,000
Repayments of loans provided to subsidiaries	88,190	46,473
Interest received, intra-group	3,588	5,114
Interest received, external	24	142
Dividends received	6,500	6,500
Lease payments received	57	630
Net cash used in/from investing activities	**-11,259**	**57,304**
Cash flows from financing activities		
Loans received from subsidiaries	48,000	0
Repayments of loans received	-96,325	-34,420
Use of credit card	1	0
Payments of lease principal	-124	-699
Interest paid on loans	-1,412	-4,762
Interest paid on lease liabilities	-11	-10
Dividend paid	-8,000	-8,000
Corporate income tax paid	-1,535	-244
Repurchase of own shares	-5,163	0
Net cash used in financing activities	**-64,569**	**-48,135**
Net cash flow	**-56,044**	**10,377**
Cash and cash equivalents at beginning of year	59,218	48,841
Decrease/increase in cash and cash equivalents	-56,044	10,377
Cash and cash equivalents at end of year	3,174	59,218

Parent company's statement of changes in equity

(In thousands of euros)	Share capital	Statutory capital reserve	Revaluation reserve	Hedge reserve of a subsidiary	Revaluation reserves of subsidiaries	Own shares	Retained earnings	Total
Balance as at 31 December 2019	**6,391**	**639**	**1,808**	**-3,598**	**151,081**	**-12,148**	**393,284**	**537,457**
Profit for the year	0	0	0	0	0	0	2,104	2,104
Other comprehensive income of subsidiaries	0	0	0	1,342	0	0	0	1,342
Total comprehensive income for the year	**0**	**0**	**0**	**1,342**	**0**	**0**	**2,104**	**3,446**
Changes in reserves	0	0	-384	0	-34,015	0	34,399	0
Dividend paid	0	0	0	0	0	0	-8,000	-8,000
Other changes in equity	0	0	0	0	0	0	-6,056	-6,056
Balance as at 31 December 2020	**6,391**	**639**	**1,424**	**-2,256**	**117,066**	**-12,148**	**415,731**	**526,847**
Profit for the year	0	0	0	0	0	0	51,141	51,141
Other comprehensive income of subsidiaries	0	0	350,000	2,256	-133	0		352,123
Total comprehensive income for the year	**0**	**0**	**350,000**	**2,256**	**-133**	**0**	**51,141**	**403,264**
Changes in reserves	0	0	-14,630	0	-22,327		36,957	0
Dividend paid	0	0		0	0	0	-8,000	-8,000
Other changes in equity	0	0	99,309	0	-92,180	-5,163	-2,546	-580
Balance as at 31 December 2021	**6,391**	**639**	**436,103**	**0**	**2,426**	**-17,311**	**493,283**	**921,531**

Further information about share capital and reserves is presented in notes 13 and 14.

Parent company’s adjusted unconsolidated equity at 31 December

(In thousands of euros) **As at 31 December**	**2021**	**2020**
Parent company’s unconsolidated equity	938,842	538,995
Less: carrying amount of investments in subsidiaries in parent company’s separate statement of financial position	177,095	424,032
Plus: value of investments in subsidiaries under the equity method	177,095	424,032
Equity attributable to owners of the parent	**938,842**	**538,995**
Own shares	-17,311	-12,148
Total equity	**921,531**	**526,847**

SIGNATURES TO ANNUAL REPORT 2021

The management board of Viru Keemia Grupp AS has prepared the directors' report and the consolidated financial statements for 2021.

Management board

Ahti Asmann	Chairman of the Management Board	....	21 June 2022
Meelis Eldermann	Vice-chairman of the Management Board	…………………	21 June 2022
Jaanis Sepp	Member of the Management Board	…………………	21 June 2022
Margus Kottise	Member of the Management Board	…………………	21 June 2022
Nikolai Petrovitš	Member of the Management Board	…………………..	21 June 2022

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Independent Auditors' Report

(Translation of the Estonian original)

To the Shareholders of VIRU KEEMIA GRUPP AS

Opinion

We have audited the consolidated financial statements of VIRU KEEMIA GRUPP AS and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2021, the consolidated income statement, the consolidated statements of comprehensive income, cash flows and changes in equity for the year then ended, and notes, comprising significant accounting policies and other explanatory information

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (Estonia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the Code of Ethics for Professional Accountants (Estonia) (including Independence Standards) and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises the information included in the directors' report, but does not include the consolidated financial statements and our auditors' report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. In addition, our responsibility is to state whether the information presented in the directors' report has been prepared in accordance with the applicable legal and regulatory requirements.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard and we state that the information presented in the directors' report is materially consistent with the consolidated financial statements and in accordance with the applicable legal and regulatory requirements.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

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

As part of an audit in accordance with International Standards on Auditing (Estonia), we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

Tallinn, 21 June 2022

signed

Indrek Alliksaar

Certified Public Accountant, Licence No 446

KPMG Baltics OÜ
Licence No 17

PROFIT ALLOCATION PROPOSAL

The management board proposes that the general meeting of Viru Keemia Grupp AS allocate retained earnings as follows:

Total retained earnings at 31 December 2021: 460,810 thousand euros

The management board proposes that the general meeting make the following allocations:

Dividend distribution: 8,000 thousand euros

Retained earnings after allocations: 452,810 thousand euros

Ahti Asmann	Chairman of the Management Board	....	21 June 2022
Meelis Eldermann	Vice-chairman of the Management Board	…………………	21 June 2022
Jaanis Sepp	Member of the Management Board	…………………	21 June 2022
Margus Kottise	Member of the Management Board	…………………	21 June 2022
Nikolai Petrovitš	Member of the Management Board	…………………..	21 June 2022

PARENT COMPANY'S REVENUE DISTRIBUTION BY EMTAK

(In thousands of euros)

Activity	EMTAK code	2021
Activities of head offices	70101	9,834
Renting and leasing out of other machinery, equipment and tangible assets not elsewhere classified	77399	18,730
Recovery of sorted materials	38321	646
Total		**29,210**

EMTAK – Estonian Classification of Economic Activities