Group annual report

Beginning of financial year	5 December 2022
End of financial year	31 December 2022
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LETTER FROM THE CHAIRMAN OF THE MANAGEMENT BOARD

Dear reader

For VKG, the year 2022 started with a new wave of COVID infections – on the worst days, a quarter of our people were on sick leave. Managing the pandemic was a top priority until 24 February 2022, when Russia launched a full-scale war against Ukraine. Against the backdrop of the resulting humanitarian catastrophe and human tragedy, COVID lost its importance and eventually disappeared from the spotlight. The war has put the world around us in a completely new context, testing our values and forcing us to adapt to changing conditions and circumstances.

2022 will go down in history as the year of war, although it could also be called the year of the energy crisis or the year when the risks associated with the policy of undermining the competitiveness of European industry materialised. The war exacerbated the weaknesses of an uncontrollable emissions trading system and of the mechanisms designed to ensure the operation of the electricity market, which emerged at the end of 2021 already. A tenfold increase in electricity prices, supply chain disruptions, surging commodity prices and soaring inflation have dealt a severe blow to the Estonian economy and recovery will take time.

A rapidly changing regulatory and economic environment is an everyday reality for VKG. Our strengths, including a strong financial position, swift decision-making processes, and continuous risk assessment and mitigation served us well in 2022. At the peak of the commodity and supply chain crisis, we were able to reconstruct the Petroter I plant and pursue all our originally planned activities without adjustment. Furthermore, we started building above-ground infrastructure for the Uus-Kiviõli mine so that our oil shale production operations could be seamlessly transferred from the Ojamaa mine, where the resource is going to be exhausted, to the Uus-Kiviõli mine in the period 2025–2028.

VKG operates in the commodity market. Therefore, a low cost price of the final product is critical for our competitiveness. To deliver the best results, our production units have to operate in a stable and coordinated manner, and we are working to achieve this. Following the reconstruction of Petroter I, we expect 2023 to be another year of record-high production volumes. Going forward, we will focus on preventing production interruptions. We believe that our extensive experience will allow us to strike the right balance to ensure the availability and operational reliability of our facilities.

In terms of future strategy, we expect that the green transition regulations will become more stringent at the EU level despite the energy crisis that the EU itself has created. Therefore, we will be extremely cautious about investing in the development of oil shale processing and are actively looking for new development opportunities alongside adding value to oil shale. Our bioproduct production and plastic waste pyrolysis projects are reaching the next phase in 2023. We are also analysing opportunities to develop a manufacturing business in Estonia, particularly in the industrial area of Ida-Viru county.

In a strategic initiative, we have undertaken to restructure the group in a way that will best enable us to finance both the opening of the Uus-Kiviõli mine and new development projects that have zero carbon footprint. The green transition has made it virtually impossible to raise debt capital in Estonia for adding value to fossil raw material. In addition, the Russia-Ukraine war has made Estonia a neighbour of an aggressor state, which has scared away potential investors. We have thus decided to set up a presence in Western Europe to be closer to our shale oil customers and expand the options to raise debt capital.

Our economic and social environment is rapidly evolving. At the time I am writing this letter, Estonia has a new government, the embargo on Russian oil has started affecting Estonia through higher freight rates and rail tariffs, the rate of inflation is at 20% and the economy has contracted by 4%. All this does not change VKG's plans because we are well prepared for change. We are expecting record-high production results and are working hard on our development projects to prove the feasibility of a large-scale and competitive manufacturing industry in Estonia.

Ahti Asmann
Chairman of the Management Board of Viru Keemia Grupp

DIRECTORS' REPORT

Viru Keemia Grupp AS (VKG, 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 the state-owned limited 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.

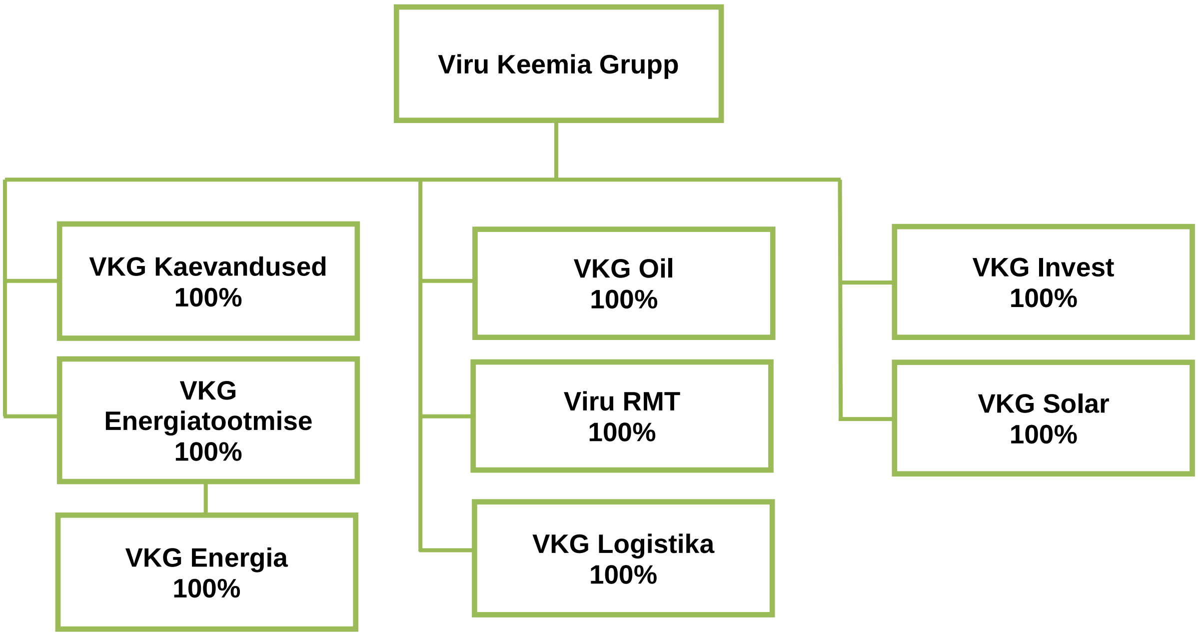
In order to add maximum value to oil shale, which is the key input to our core business – shale oil production, we are also involved in:

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

For the VKG group, the year 2022 was marked by restructuring and reorganisation, driven by developments in the economic environment.

GROUP STRUCTURE

The VKG group's legal structure as at 31 December 2022 was as follows:



Changes in group structure in 2022:

- On 30 June 2022, Viru Keemia Grupp AS demerged through a spin-off (division of the company by separation). As a result, a new company named Viru Keemia Grupp AS was created, which is involved in the operation of industrial assets and incorporates all production-related operations. The former Viru Keemia Grupp AS was renamed Kirde Varad AS. The core business of Kirde Varad AS is investing in and leasing out industrial real estate. In addition, Kirde Varad AS retained ownership of two regulated entities not directly involved in shale oil production: VKG Elektrivõrgud OÜ and VKG Soojus AS.

- On 20 September 2022, a new subsidiary, VKG Solar OÜ, was established to expand VKG's electricity production portfolio by developing renewable energy production capacities.
- On 6 December 2022, VKG Oil AS was demerged (division transaction) in order to streamline the group structure. As a result, VKG Energia, OÜ, previously a subsidiary of VKG Oil AS, became a subsidiary of VKG Energiatootmise OÜ. After the reporting period, on 27 March 2023,VKG Energia OÜ and VKG Energiatootmise OÜ merged so that Viru Keemia Grupp AS now has seven direct same-level subsidiaries, which are involved in different business lines.

SIGNIFICANT EVENTS IN 2022

- **August** – An amendment was made to the Uus-Kiviõli mining permit, which enables VKG, under certain conditions, to extract 5 million tonnes of oil shale from the new mine.
- **September** – VKG held an Environment Day, where researchers, business community representatives and politicians participated in discussions of sustainable forest management challenges in Estonia.
- **October** – The group completed an internal safety training programme, which was attended by 1,300 employees.
- **November** – The Petroter I shale oil plant was restarted after five-month reconstruction. Priit Piilmann, a founder and major shareholder of VKG passed away.
- **December** – VKG paid an exceptional Christmas bonus of 500 euros to all group employees to help them cope with high energy prices.

IMPACTS OF THE EXTERNAL ENVIRONMENT

As a producer of shale oil products, VKG operates in a sector where its performance is strongly influenced by developments in the external environment, particularly in the following three areas:

- **Economic environment** – VKG's core product, shale oil, competes with other fuels in the global commodity market, where the balance between supply and demand depends on the overall economic environment and the decisions of producers with significant market power.
- **Regulatory environment** – Certain political decisions, adopted mostly at the EU level but also in Estonia, act as headwinds that undermine VKG's competitiveness in the quest for a foothold in the global oil products market.
- **Availability of raw material** – The availability of oil shale, which is VKG's main production input, depends on decisions taken at the national level regarding the design and observance of the oil shale allocation system. In competing with a state-owned company, VKG must actively uphold its rights so that the decisions would not favour the state-owned company.

Economic environment

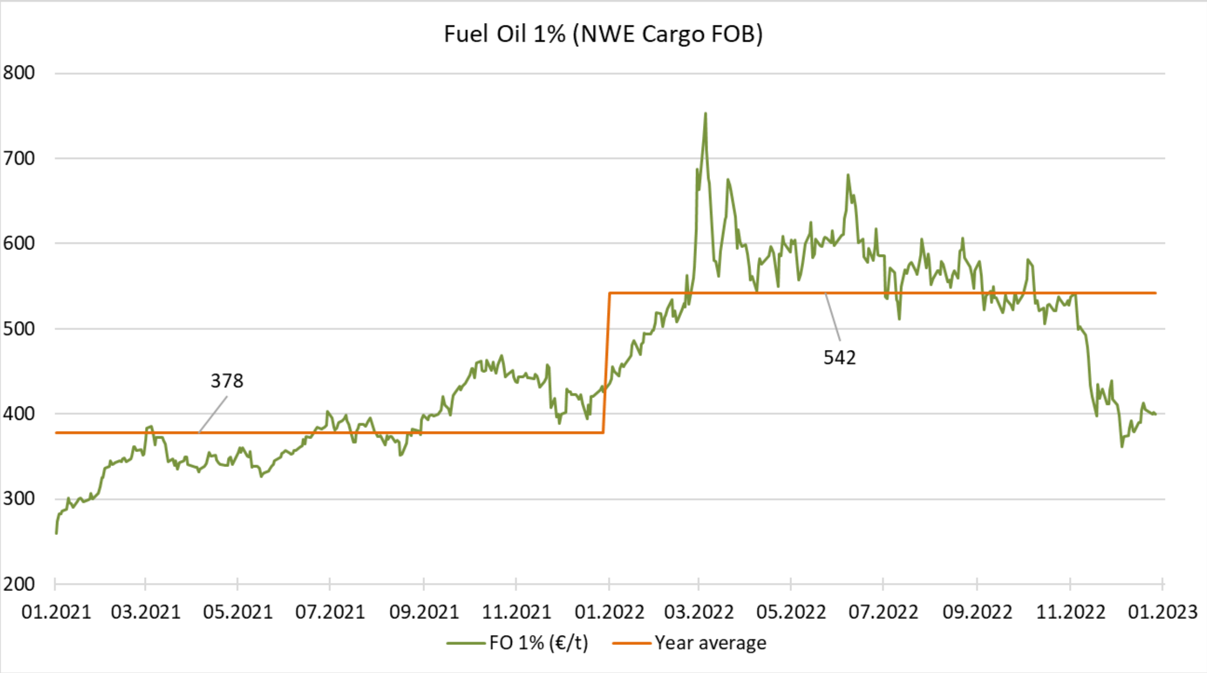
While early 2022 was still affected by the COVID-19 pandemic, that crisis was essentially over by the beginning of the second quarter. The roll-out of vaccines reduced the threat posed by the virus and restored free movement of people. This led to a rapid increase in economic activity and by the second half of the year the coronavirus crisis was already forgotten.

Before the pandemic had fully receded, however, a new crisis broke out. Putin's decision to launch Russia's invasion of Ukraine unleashed a full-scale war in Europe, which had been avoided for 77 years. Subsequent economic sanctions against Russia triggered a sharp rise in energy and commodity prices. This added momentum to the wave of inflation that had emerged on the lifting of the COVID-19 restrictions but was originally rooted in central banks' aggressive money printing in the hope of alleviating the coronavirus crisis. To contain the situation, central banks had no choice but to start raising interest rates. While at the beginning of March the US federal funds rate was close to zero, by the end of the year it had been raised to 4.33%. Even the European Central Bank raised its deposit facility rate into positive territory after a break of over 10 years. By the end of 2022, the rate was 2%, a level last seen in 2008. The tightening of monetary policy has cooled economic activity and slowed down economic growth. The World Bank has projected that in contrast to 2021 when global growth hit a 50-year high of 5.9%, in 2022 the growth rate was 2.9% and in 2023 it will decline to 1.7%.

Estonia's small and open economy reacts quickly and strongly to global economic developments. General price inflation, driven by a surge in the prices of energy carriers, accelerated from month to month. As a result, Estonia's consumer price index for 2022 increased by 19.4% compared with a year earlier. Against the backdrop, real GDP contracted by 1.3%, although a year earlier it had shown the past 15 year's highest growth rate of 8%.The price increase fuelled upward pressure on wages, which grew at their fastest pace since 2008, rising by 8.9% on average. As inflation greatly outstripped wage growth, people's real purchasing power declined in 2022. However, it was the first time in the last 12 years that the average wage in Estonia increased more slowly than the consumer price index.

The group's financial results are influenced the most by developments in the global oil market. The reopening of the economy following the retreat of the pandemic was accompanied by growth in demand, which continued in 2022 – in the first month and a half the price of Brent rose from 80 to 93 $/bbl. After the start of the war in Ukraine, Brent prices skyrocketed, soaring to 128 $/bbl by the beginning of March, which is only short of the 146 $/bbl seen at the peak of the oil bubble in 2008. In an extremely volatile market, oil prices fluctuated between 100 and 120 $/bbl until the end of August, but the stabilisation of the situation in Ukraine and the slowdown in economic activity due to interest rate hikes brought them back to the levels seen at the beginning of the year. The average oil price in 2022 was 99 $/bbl, which is 39% higher than in 2021.

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 chart, the price of fuel oil with 1% sulphur content also soared at the beginning of the war, reaching an all-time high of 753 €/t in March. The average fuel oil price in 2022 was 542 €/t, which is 43% higher than a year earlier. Compared to Brent, the increase in the average price of fuel oil in euros was even larger, as due to the war in Europe, the euro weakened against the dollar. At the end of the year, however, the euro recovered and this is the reason for the deeper fall in fuel oil prices at the end of the year, as shown on the graph.

Regulatory environment

The most important regulatory decisions affecting VKG's operations are policy initiatives at both the level of the EU and the national level, which seem to be aimed at reducing the global competitiveness of industrial companies operating in Europe and increasing redistribution. Significant regulatory developments in 2022 which are relevant to the operations of VKG were as follows:

The European Green Deal – In December 2019, the European Commission (EC) adopted the European Green Deal (EGD), which aims to achieve climate 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, setting a political guideline to reduce GHG intensity by 55% compared to the 1990 levels instead of the previously agreed 40%. The EC presented the package of measures and legislation necessary to achieve the target in July 2021. The provisions of the agreement that have the most significant effect on the operations of VKG are the following:

- **EU emissions trading system (ETS)** – The cornerstone of the EU's green policy is the taxation of carbon emissions through the emissions trading system. The most damaging aspect of this union-wide tax system is its openness to speculators, which has led to exponential growth of the tax rate. The CO_2 tax rate, which in March 2020 was 15 €/t, rose by 550% in less than two years, reaching nearly 100 €/t in February 2022. As the energy crisis triggered by the war put a question mark over Europe's green policy for a while, speculators rushed to liquidate their positions and the CO_2 tax rate plummeted to 58 €/t in early March. The reassurance given by Europe's leading politicians that the energy crisis was not caused by the nature of Europe's green policy but by the fact that it had not been implemented aggressively enough pushed the CO_2 price back to 80 €/t within a week. In August, when the prices of French and German electricity futures for the next year hovered at 1,000 €/MWh, the CO_2 charge approached again 100 €/t. In 2022, Estonian consumers and businesses contributed more than 540 million euros in CO_2 tax to the EU coffers through the unusually high price of electricity produced from oil shale. On the one hand, this has increased the amount of money redistributed for the implementation of some policies. On the other hand, it is undermining the competitiveness of European manufacturing companies and the wellbeing of people, because it is from their pockets that the money is taken to implement the green transition. VKG's CO_2-related costs for 2022 totalled 10 million euros. Even if the CO_2 tax rate did not increase any further, our CO_2-related costs would multiply in the coming years because the amount of allowances allocated free of charge will decrease. VKG could make certain investments to reduce its footprint, but since the level of the CO_2 tax rate is uncertain, a growing carbon tax burden could halt the activity despite the reduced footprint before the cost of the investments is recovered.
- **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 has received the proposal to capture 434 thousand tonnes of CO_2 in 2030. How this target will be achieved and how it will affect Estonia's forestry sector is currently unclear. The proposal affects VKG through the bioproduct production project which is in the planning phase. The production complex would allow capturing 460 thousand tonnes of CO_2 in bioproducts and help Estonia meet its LULUCF obligation in full. However, it will not be possible to make the investment 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 facility.

Negotiations between the European Parliament, the Council of the EU and the European Commission regarding the Fit for 55 package continued in 2022 but no final decisions were taken. Explicit decisions are expected in 2023. At this stage, it is difficult to assess how they will affect VKG but it is likely that they will undermine the competitiveness of the Estonian and the EU industrial entities in the global market.

Application of the solidarity contribution – Europe's energy crisis, instigated by political short-sightedness and triggered by Russia's aggression, boosted the profitability of energy producers operating in Europe. In order to stop companies from earning 'excess profits', the President of the European Commission came up with the tempting idea to introduce an additional tax called 'the solidarity contribution'. As the introduction of an EU-wide tax requires unanimous approval from the Council of the European Union, the implementation of the tax remained at the discretion of each member state. Several member states initiated a process to implement the tax, but the Estonian government did not consider it necessary, as the current oil shale resource fee already takes into account the developments in the oil market. Therefore, in 2022 oil shale miners operating in Estonia paid the treasury around 50 million euros in additional tax revenue compared to the average of the two preceding years.

Use of specific-purpose diesel – As a result of amendments to the Estonian Alcohol, Tobacco, Fuel and Electricity Excise Duty Act and the Fiscal Marking of Liquid Fuel Act, the oil shale mines' right to use specific-purpose diesel fuel at the EU minimum excise duty rate was extended until 30 April 2024. From 1 May 2024 onwards, oil shale mines will only be able to use diesel fuel taxed at the standard rate. VKG maintains its view that the possibility to use specific-purpose diesel fuel is justified, as the fuel is only used in the enclosed territory by special-purpose vehicles that never travel on public roads.

Availability of raw material

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 total oil production capacity, VKG's annual oil shale needs extend to 5.1 million tonnes of the extracted commodity per year. The mining permits issued to VKG allow us to extract 3.5 million tonnes of commodity oil shale from the Ojamaa mine per year. If other market players do not extract their entire permitted volume, we may use the 'retrospective mining mechanism' and increase our oil shale extraction at Ojamaa to 4.35 million tonnes. This means that in order to purchase the 750 thousand tonnes of commodity oil shale required to cover the shortfall (15% of our total oil shale needs), we have to reach agreement with other market players.

We continued purchasing oil shale from Kiviõli Keemiatööstus in 2022. However, we have not been able to restore the purchase contract with Estonia's largest oil shale miner Eesti Energia, which was suspended in 2020 due to the pandemic. Although a longstanding dispute over the unfairly high price of oil shale sold by Eesti Energia was resolved in 2021 in favour of VKG, the main obstacle to signing a purchase contract is a difference of opinions regarding a fair price of oil shale. Therefore, one of our three Kiviter oil plants remains on hold, awaiting the time when our own Uus-Kiviõli mine will be able to supply it with raw material.

Future supply – Based on VKG's mining volumes and an assessment of the resource available in the Ojamaa mine, we expect that the Ojamaa mine will be exhausted by 2028. To ensure the availability of raw material, VKG started activities for opening the Uus-Kiviõli mine already in 2019, because smooth transition from one mine to another requires careful planning and strict adherence to the plans in place. While we have reached agreement with our good neighbour Eesti Energia that VKG can use the extraction volumes allocated to Eesti Energia in Uus-Kiviõli until a new environmental impact assessment has been successfully completed, there is the risk that VKG's supply with raw material will interrupted if extraction volumes are not increased or when Eesti Energia decides to start mining in Uus-Kiviõli at the same time as VKG. We are working to mitigate the risk, as a private company cannot make an investment of 100 million euros without contractual certainty that it will be possible to extract a sufficient volume of oil shale from the new mine.

The Uus-Kiviõli mine should ensure the group's supply with oil shale until 2038. From an environmental point of view, the Uus-Kiviõli mine is the best possible solution because the area is not far from the oil plants, which are situated at Kohtla-Järve, and allows making maximum use of the existing infrastructure. The conveyor transport to be implemented in Uus-Kiviõli is the most environmentally friendly way of transporting oil shale. The proximity to the Kohtla-Järve production complex will yield energy savings. 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.

BUSINESS REVIEW

For VKG, the most significant developments in 2022 were changes in the group's structure and work arrangements as well as the reconstruction of the Petroter I oil plant. After the restructuring, all production operations were transferred to the new company established by way of demerger (division) and the table below reflects the key performance indicators of the group accordingly.

Key performance indicator	Unit	6 months 2022
Average price of Brent crude oil	$/bbl	93
Average price of fuel oil (1%)	€/t	512
Average price of CO_2 emission allowances	€/t	79
Oil shale output	'000 t	2,089
Oil shale processing volume	'000 t	2,049
Output of shale oil products	'000 t	283
Electricity production	GWh	185
Heat supply	GWh	213
Average number of employees	employee	1,575
Revenue	€'000	184,747
Operating profit	€'000	11,944
Net profit	€'000	4,059
Capital expenditures	€'000	6,463
Total assets	€'000	763,886
Equity	€'000	218,493
Equity ratio	%	29%
Net margin	%	2%

The new VKG no longer owns non-current assets related to the production of shale oil products but leases them from a related company, Kirde Varad AS, under a long-term lease. Due to the requirements of IFRS 16, VKG still reports long-term lease liabilities as non-current assets. In addition, at 31 December 2022, VKG still owned assets related to oil shale mining. Although market conditions continued to be favourable in the second half of 2022, it was not possible to exploit the assets in full as the Petroter I plant was idle for most of the second half of the year due to reconstruction.

The group's core business comprises three major processes which make up a process chain: oil shale mining, production of shale oil products, and energy production. In addition, the group includes two companies that provide logistics and repair services, mainly to other group entities.

Oil shale mining – VKG Kaevandused OÜ

VKG Kaevandused continued its usual operations in 2022, producing 4.25 million tonnes of commodity oil shale, which is 0.14 million tonnes (3%), less than a year earlier. The main reason for the decrease in output was the rapid spread of COVID-19 cases at the beginning of the year – at the peak of infection almost a third of the company's employees were on sick leave. The company's operations were also affected by the uptrend in input prices and stiffer competition for labour due to the expansion of Eesti Energia's mining operations. A new project and focus area was the opening of the Uus-Kiviõli mine, in which almost 2 million euros was invested in 2022. In the coming years, the intensity of the project and the size of related investments will increase significantly to ensure smooth and efficient transition from the Ojamaa mine to the Uus-Kiviõli mine.

Shale oil production – VKG Oil AS

In 2022, VKG Oil processed 4.27 million tonnes of oil shale, which is 5.8% less than in 2021. Oil shale processing volume decreased due to the reconstruction of the Petroter I plant but also due to some unexpected issues that lowered the facilities' high operational reliability. Although the output of oil products per tonne of oil shale continued to grow, the effect remained modest and the output of oil products dropped by 5.7% year on year to 583 thousand tonnes. Output is expected to increase significantly in 2023, mainly through the higher availability of Petroter I.

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 or the power exchange. 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.

In 2022, electricity production decreased by 11% to 364 GWh due to the decline in oil shale processing, which lowered the quantity of input energy. Electricity produced by VKG Energia accounted for 4.2% of all electricity produced and 3.8% of all electricity consumed in Estonia in 2022. The amount of heat supplied dropped by only 3.6% to 491 GWh, mainly due to the weather, which was warmer than a year earlier.

At the beginning of the year already, VKG Energia turned to the competition authority for the approval of a new heat sales tariff calculated on the basis of the previously agreed methodology. As the price of heat produced had risen by almost 40% due to an increase in input prices, the competition authority started looking for reasons to reject the new tariff. When the dispute had lasted for almost a year, VKG Energia had no choice but to accept the competition authority's changes to the agreed methodology, which meant that the new tariff approved at the end of 2022 covered only half of the cost increase. VKG's management board decided not to start a time-consuming litigation process against the competition authority for the time being. We hope to correct the shortcomings in the calculation of costs in the next tariff setting process.

KEY FINANCIAL INDICATORS

Exports accounted for 36% of the group's total revenue in 2022. Although most of the goods leave Estonia, the share of exports was low because one of the major buyers has a permanent establishment and a VAT number in Estonia, which is why relevant sales are reported as domestic.

Revenue contributions of major product groups and service lines:

Product group or service line	6 months 2022
Shale oils	82%
Sale and distribution of heat and electricity	15%
Other products and services	4%

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

Ratio	6 months 2022
Net margin (net profit / revenue)	2.2%
Return on assets (ROA) (net profit / average total assets)	0.5%
Return on equity (ROE) (net profit / average equity)	1.9%

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

Ratio	6 months 2022
Debt ratio (liabilities / total assets)	0.71
Current ratio (current assets / current liabilities)	1.27

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 (cost price) of products. 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 to ensure the competitiveness of our production operations even when the oil market is in a slump.

DEVELOPMENT ACTIVITIES

In 2022, VKG's development activities were focused on two projects:
- building a new bioproduct production complex (BPC) in Lüganuse rural municipality;
- plastic waste pyrolysis.

In the development of the BPC project, the main focus was on supporting the process for the adoption of a designated spatial plan initiated in Lüganuse rural municipality. In the first stage of the process, potential locations of the complex were analysed and two alternative sites were proposed. Based on research and analyses, the developer of the designated spatial plan, Hendrikson & KO, prepared the draft decision on the preselection of a location and the report on the first stage of the strategic environmental assessment (SEA). The designated spatial plan process is on track and the report on the first stage of the SEA is expected to be approved by the Lüganuse rural municipality government in the summer of 2023.

The availability of pulpwood, which is critical for the BPC project, may be significantly influenced by the forestry development plan (FDP). Therefore, we actively provided input to the drafters of the FDP to ensure that it reflects the need to add value to pulpwood and wood chips in Estonia instead of exporting wood to Scandinavia without any value added. The Estonian University of Life Sciences studied the availability of the wood resource for the BPC project in 2022 and concluded that the availability of the resource would be sufficient even if cutting volumes fell to 10 million cubic metres per year.

The development of the plastic waste pyrolysis project, which is supported by the Estonian Business and Innovation Agency through its applied research programme, started in 2022 in partnership with KKT Oil OÜ. In the development phase of the project, laboratory research was carried out at the Department of Energy Technology of Tallinn University of Technology (TalTech) and pilot plant tests were carried out in the laboratory of Enefit Outotec Technology OÜ in Frankfurt. In addition, the companies conducted an independent survey into the availability of plastic waste. In the course of the project, VKG determined that viable solutions for the pyrolysis of plastic waste already exist in the world and withdrew from the project which was originally aimed at the development of a new technology. KKT Oil continues working on the project according to the original plan.

Based on the initial project, VKG launched a new circular economy project focused on the recycling of plastic waste. We are planning to use an existing chemical recycling technology and to start building the recycling facility as soon as possible. Under the new approach, plastic waste, which will mainly be collected in Estonia, will be processed into pyrolysis oil, which can be sold to petrochemical companies for the production of new plastic. In this way, up to 75% of plastic waste could be recycled to make new plastics.

The development of the two large projects will continue in 2023. We expect that the location of the BPC will be approved by the Lüganuse rural municipality government and we can start the feasibility study. We expect that the plastic waste recycling project will reach the construction stage. In addition, VKG will continue to analyse additional business opportunities.

INVESTMENT ACTIVITIES AND FINANCING

The group's total capital investments in 2022 were 6.5 million euros. The figure includes investments by VKG Kaevandused of 5.5 million euros, which were mostly aimed at ensuring operational reliability. As the assets used in the production of oil products and energy no longer belong to the VKG group, related investments are not recognised in VKG's reporting.

Most investments made in 2022 were financed from the group's own funds, but some more liquid assets were also acquired with lease financing. An analysis of VKG's borrowings is disclosed in note 9.

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT

Recent developments in the global political and national regulatory environment have increased uncertainty, investment risks and the challenges related to energy security. The group's strategy is designed to be resilient under different scenarios. In strategic planning, we take into account the risks and opportunities related to climate change and the transition to low carbon energy, including the European Green Deal and the Fit for 55 package.

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 effective 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.

Having set the group's direction of development and initiated the necessary organisational changes, we have shifted our full focus on implementing our strategy as well as achieving the underlying objectives and sustainability. We put safety first in everything we do. All levels of management are making an effort to make the group's industrial and working environment safer, as we are committed to the goal that everyone should get home to their loved ones safely every day. Nothing is more important.

Cooperation with stakeholders

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

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 target groups whose interests are highly relevant to our activities and may have a significant impact on the achievement of our strategic goals. We consider it particularly important to involve and collaborate with the local community in carrying out our development projects.

Cooperation with stakeholders is underpinned by the principles of respecting the interests of all parties, constructive cooperation, transparency of information relating to the group's activities, regular interaction and honouring commitments.

Our main stakeholder groups include:

- shareholders;
- employees;
- customers;
- suppliers and partners;
- the state and local authorities;
- local communities;
- non-profit associations and civil society organisations;
- professional associations.

VKG is a good partner for local organisations promoting cultural, sports and education activities in the region. In 2022, we supported 25 initiatives and projects with 260,000 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: the Five-school Science Competition, the Jõhvi Ballet Festival (in cooperation with Jõhvi Concert Hall), supporting the Ida-Viru Central Hospital, education projects such as STEM, and Miners' Day and Chemists' Day celebrations. 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, the blood centre of the Ida-Viru Central Hospital, 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. The 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 workplace;
- consideration and respect for colleagues;
- equal and clear requirements for all business partners, compliance with high business ethics;
- responsible approach to assets;
- zero tolerance for corruption, conflicts of interest and use of inside information.

Reporting

VKG's comprehensive corporate social responsibility and sustainable development policy was adopted in 2009. Since then, the group has published reports on corporate social responsibility in accordance with the sustainability reporting principles of the Global Reporting Initiative (the GRI sustainability guidelines). In preparing the report, we also share and apply the Oil and Gas Industry Guidance on Voluntary Sustainability Reporting. VKG's sustainable development reports are public documents, which are available on the group's website in Estonian, English and Russian. The report on 2022 is under preparation and will be published in the third quarter of the current year.

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 efficiently utilise the full potential of oil shale with the smallest possible footprint and consistent with the principles of circular economy.

In 2022, VKG participated in the drafting of environmental legislation regulating its current and planned production operations. We provided input to the development of Estonia's positions on the Fit for 55 package, the report on the study into the best available techniques for shale oil production and the forestry development plan 2030. We also contributed to the amendment of the Industrial Emissions Directive, the European Pollutant Release and Transfer Register Regulation, and Estonia's Public Water Supply and Sewerage Act and Earth's Crust Act.

Environmental focus areas in 2022:

- **Reducing emissions to air** – The operations of VKG as the largest producer of shale oil products in Estonia affect the surrounding environment and the local community through emissions from the production processes. During the extensive reconstruction of the Petroter I shale oil plant in 2022, we installed a new flue gas utilisation boiler and an electrostatic precipitator, which significantly reduce the impact of VKG's production operations on the ambient air quality in the City of Kohtla-Järve and the surrounding area.
- **Reducing odour nuisances** – A thorough renewal and implementation of METEO procedures significantly reduced the intensity and duration of odour nuisances related to VKG's production processes.
- **Greenhouse gases** – In 2022, emission allowances allocated to VKG group's facilities free of charge decreased by about 35 thousand tonnes compared to 2021. This was attributable to a decline in production levels in 2020–2021 compared to the previous two-year reference period.
- **Mineral extraction permits** – At the request of VKG Kaevandused, the Environmental Board changed the maximum annual limit for oil shale extraction recorded on the environmental permit of the Uus-Kiviõli II oil shale mine from 2 million tonnes to 5 million tonnes. The new limit will remain in force until Enefit Power AS starts mining oil shale in their Uus-Kiviõli mining claim. In order to fix the maximum annual extraction limit at 5 million tonnes permanently, VKG Kaevandused is carrying out an environmental impact assessment (EIA) in partnership with Enefit Power AS. In 2022, the partners prepared the EIA programme, which was declared compliant with requirements by the Environmental Board, and started to draft the EIA report.
  The EIA programme prepared by VKG Kaevandused OÜ for the extension of the Ojamaa oil shale mining claim was also declared compliant with requirements by the Environmental Board in 2022. At the end of the year, the company submitted the EIA report to the Environmental Board for comments from relevant authorities.
- **Integrated permits for the oil industry** – In 2022, the integrated environmental permit of the Petroter plant of VKG Oil was changed, primarily to meet the monitoring and other requirements under the amended regulations of the Minister of the Environment. At the end of the year, the Environmental Board also issued a revised draft integrated permit for the Kiviter plant. The main changes included the removal of the decommissioned and hermetically sealed emission sources from the permit and updates due to the amended regulations of the Minister of the Environment.
- **Oil shale industry's waste storage area** – VKG completed an experimental project of using compost made from wastewater sediments for greening the slopes of the oil shale industry's waste storage area. The method proved to be more successful than that of using hydroseeding, and in the coming years the compost-based green area on the slopes of the waste storage area will be extended. In addition, a report on the first stage of the strategic environmental assessment of the municipal designated spatial plan for VKG's new industrial waste storage area was prepared in 2022 for submission for public display and discussion.

- **Bioproduct plant** – At the end of the year, the preparation of the draft decision on the preselection of a location for VKG's bioproduct production complex and the report on the first stage of the strategic environmental assessment had reached the final stage, with public display and discussions planned for 2023.

Important activities in 2023 include the addition of water and air related parts to the environmental permit for the Uus-Kiviõli II mine and the continuation of the EIA, the amendment of the environmental permit for the expansion of the Ojamaa mine, the amendment of the waste permit for the Ojamaa mine, participating in the working group for the BAT study and formulating conclusions regarding the production of shale oil, and providing input to the revision of the Industrial Emissions Directive. Other priorities include carrying out strategic environmental assessments of the designated spatial plans for the oil shale industry's waste storage area and the bioproduct production complex, and a preliminary assessment of EIA for the plastic waste recycling plant.

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

Viru Keemia Grupp is one of the largest employers in Ida-Viru county. In addition to our 1,560 employees, our performance has an impact on the wellbeing of several thousand people in the region who are associated with us by being our employees' family members and our partners' and suppliers' employees and their family members. We strive to provide our people with stability and a sense of security about the future but the volatility of the oil market and the inconsistency of public policy make it difficult to achieve.

Our employees are qualified professionals who are loyal and committed to their job. The average length of service of the VKG people is 10 years, but there are 144 employees with more than 25 years of service, including 26 who have been with us for more than 40 years. At the end of 2022, our workforce comprised 1,193 men and 367 women. The proportion of male workers is significantly higher due to the physical nature of the work which cannot be done by women. The average age of our employees is 45 years and almost 900 employees are in the 35–54 age group. In 2022, 206 new employees joined and 227 employees left VKG. The labour turnover rate was 12%, of which voluntary turnover was 9%. Turbulence in the energy market significantly changed the labour market situation in Ida-Viru county and increased the group's labour turnover, especially at VKG Kaevandused. Demographic changes, migration out of Ida-Viru county and other external factors have increased the shortage of skilled and qualified people in the region, which has lengthened the recruitment processes and put significant pressure on the cost of labour.

The number of employees in the VKG group and their distribution between the companies is as follows:

Group entity	Headcount as at 31 December 2022
Viru Keemia Grupp AS	87
VKG Kaevandused OÜ	512
VKG Oil AS	641
VKG Energia OÜ	96
Viru RMT OÜ	107
VKG Logistika OÜ	117
VKG Invest OÜ	0
VKG Solar OÜ	0
TOTAL VKG	**1,560**

The work done by effective, efficient and motivated staff is directly reflected in the group'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. We participated in the Estonian wages and salaries survey conducted by Fontes, the results of which confirmed that our wages and salaries are higher than the average wages and salaries paid in Ida-Viru county and that we are competitive in the labour market. VKG has a transparent performance pay system, which is based on clear principles. Balanced working conditions and a fair remuneration system help build a motivated and loyal workforce and to create a strong work ethic. Employee satisfaction and engagement was also increased by the exceptional Christmas bonus paid to all employees at the end of 2022 to help them cope with high energy prices.

The rules and principles for employee conduct which have to be observed and implemented in the workplace across the group are set out in the *Code of Ethics and Operating Principles*. The ethnic, gender, age and linguistic diversity of our employees sets high requirements for equal treatment, inclusion and communication. Uniform rules of conduct, set out in the human resource policy, along with the group's values and code of ethics ensure honest and fair working relationships and employee loyalty.

A number of projects are underway to improve the working environment, develop the staff and train future talent:

- The group invests in the training of future staff and raising the qualifications of existing employees. In autumn 2022, we continued the project launched in 2021 to attract new technological equipment operators for VKG Oil. After an extensive advertising campaign, we recruited 21 employees who began to study under the work placement programme of the Ida-Viru Vocational Education Centre while working as technological equipment operators at VKG Oil. After completing the programme in 2023 and 2024, the participants will be a valuable addition to our qualified staff.
- Staff development continued. We agreed our employee development priorities, training plans and action plans for ongoing development of internal trainers and instructors to ensure systematic internal knowledge sharing and transfer of professional competences and to provide needs-based internal training. Activities aimed at implementing new work methods and techniques, improving work arrangement, and enhancing the management and leadership culture remained among the priorities in 2022. The largest training and employee development project was a group-wide safety and awareness programme carried out in autumn 2022, which was attended by 1,461 employees in the course of 40 training days.
- The group purchased a learning management system which helps carry out training and development activities and manage training materials and data. Implementation of the system started at the end of 2022 and will continue in 2023.
- In 2022, 42 students participated in our traineeship programme. The largest number of trainees came from the Ida-Viru Vocational Education Centre.

- We continued to award scholarships to students engaged in professional higher education as well as undergraduate and graduate studies through the TalTech Development Fund. During the year, scholarships were granted to seven students specialising in electrical power engineering and mechatronics, georesources, environmental, energy and chemical technology, and thermal energy engineering at the TalTech School of Engineering. We will continue to award scholarships through the Development Fund in 2023.

After negotiations with the Chemists' Trade Union in autumn 2022, a new two-year collective agreement was signed, the terms and conditions of which extend to all group employees.

SUPERVISORY BOARD AND MANAGEMENT BOARD

The VKG group is managed by a five-member management board, which in the reporting period consisted 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 in the reporting period.

VKG's supervisory board has five members – Toomas Tamme (chairman of the supervisory board), Kristjan Piilmann, Margus Kangro, Ants Laos and Elar Sarapuu. Following the passing away of Priit Piilmann, a founder and major shareholder of Viru Keemia Grupp in November 2022, his son Kristjan Piilmann took his place on the group's supervisory board.

CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(In thousands of euros)	Note	31 December 2022	5 December 2022[1]
Cash and cash equivalents	2	65,746	93,053
Investments in financial assets	3	125,414	0
Trade receivables	4	49,291	47,090
Other receivables	4, 28	3,767	1,400
Prepayments	4	573	299
Emission allowances	5	54,679	102,887
Inventories	6	38,065	38,164
Total current assets		**337,535**	**282,893**
Long-term receivables		376	6,359
Property, plant and equipment	7	410,393	482,100
Intangible assets	8	15,523	16,181
Total non-current assets		**426,292**	**504,640**
Total assets		**763,827**	**787,533**
Borrowings	9	118,431	57,898
Advances received		245	48
Trade payables		10,467	8,739
Taxes payable	24	12,004	14,657
Accrued expenses	10	43,775	6,933
Government grants	11	54,696	102,896
Provisions	12	26,852	16,963
Deferred income	13	7	0
Total current liabilities		**266,478**	**208,134**
Borrowings	9	268,843	356,070
Government grants	11	18	36
Provisions	12	4,933	4,890
Deferred income	13	62	68
Other liabilities		3,900	3,900
Deferred tax liability	24	1,099	0
Total non-current liabilities		**278,855**	**364,964**
Total liabilities		**545,333**	**573,098**
Share capital	14	6,209	6,209
Reserves	15	1,268	678
Retained earnings		211,017	207,548
Equity attributable to owners of the parent		**218,494**	**214,435**
Total equity		**218,494**	**214,435**
Total liabilities and equity		**763,827**	**787,533**

[1] The opening balance is the date of VKG's legal demerger. See note 1 for additional information.

CONSOLIDATED INCOME STATEMENT

(In thousands of euros)	Note	5 December – 31 December 2022
Revenue	16	184,747
Cost of sales	17	-200,414
Gross loss		**-15,667**
Marketing and distribution expenses	18	-2,380
Administrative expenses	19	-7,371
Other income	20	42,495
Other expenses	21	-5,133
Operating profit		**11,944**
Finance income	22	393
Finance costs	22	-7,179
Profit before tax		**5,158**
Income tax expense	24	-1,099
Profit for the year		**4,059**

CONSOLIDATED STATEMENT OF CASH FLOWS

(In thousands of euros)	**Note**	**5 December – 31 December 2022**
Profit for the year		**4,059**
Adjustments for:		
Depreciation, amortisation and impairment losses		*66,141*
Change in fair value of financial instruments		*-13*
Recognition and adjustment of provisions	*12*	*9,959*
Accrued finance income and costs	*22*	*6,751*
Loss on disposal of non-current assets		*141*
Recognition and reversal of inventory write-downs	*6*	*3,134*
Recognition of deferred connection charges as income		*-2*
Other adjustments	*24*	*1,099*
Total adjustments		**87,208**
Change in inventories		-3,048
Change in receivables and prepayments		18,647
Change in payables and advances received		-8,354
Net cash from operating activities		**98,512**
Cash flows from investing activities		
Purchase and improvement of property, plant and equipment		-17,354
Purchase of intangible assets		-176
Purchase of investments in financial assets	3	-125,401
Proceeds from sale of non-current assets		731
Repayments of loans provided		6,793
Interest received		379
Net cash used in investing activities		**-135,028**
Cash flows from financing activities		
Loans received	9	31,100
Cash inflow through demerger		7,319
Cash inflow for depositing liquid funds		36,000
Payments of lease principal	25	-58,409
Interest paid on lease liabilities	25	-6,801
Net cash from financing activities		**9,209**
Net cash flow		**-27,307**
Cash and cash equivalents at beginning of year	2	93,053
Decrease in cash and cash equivalents		**-27,307**
Cash and cash equivalents at end of year	2	65,746

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	Total equity
	Share capital	**Statutory capital reserve**	**Revaluation reserve**	**Retained earnings**		
As at 5 December 2022	**6,209**	**0**	**678**	**207,548**	**214,435**	**214,435**
Profit for the year	0	0	0	4,059	4,059	**4,059**
Total comprehensive income for the year	**0**	**0**	**0**	**4,059**	**4,059**	**4,059**
Changes in reserves (note 15)	**0**	**621**	**-31**	**-590**	0	**0**
As at 31 December 2022	**6,209**	**621**	**646**	**211,017**	**218,494**	**218,494**

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 and distribution of oil shale-based chemicals. In addition, group entities are involved in domestic freight transport and the production of adhesives and resins.

The group had 1,595 employees in 2022 (on average), including 105 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

Viru Keemia Grupp AS (registration no. 16627014) was established in the demerger (division) of the former Viru Keemia Grupp AS (registration no. 10490531, the current business name Kirde Varad AS, the 'demerged company') on 5 December 2022. The demerger took place by spin-off (separation), with the demerged company transferring part of its assets (including the shares in the subsidiaries VKG Oil AS, VKG Kaevandused OÜ, VKG Invest OÜ, Viru RMT OÜ and VKG Logistika OÜ) and liabilities to Viru Keemia Grupp AS, the company established in the demerger.

According to the demerger plan, Viru Keemia Grupp AS obtained control of the assets and liabilities listed in the plan on 1 July 2022. These consolidated financial statements reflect the transactions made in the name and on behalf of Viru Keemia Grupp AS in the period 1 July to 31 December 2022, although the company started acting as a legal entity as from 5 December 2022.

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 the consolidated financial statements for issue on 15 June 2023. 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.

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

Changes in accounting policies and presentation of information

The group prepares its financial statements in accordance with the principles of consistency and comparability, which means that the same accounting and presentation policies are applied.

The accounting policies applied by the Viru Keemia Grupp AS which was founded in the demerger (division) of the former Viru Keemia Grupp AS (the current name Kirde Varad AS) on 5 December 2022 are identical with those applied by the former Viru Keemia Grupp AS in previous periods, except for the following difference. In these consolidated financial statements, the CO_2 emission allowances which have been obtained through free allocation or purchase are recognised in the statement of financial position as current assets within the line item 'Emission allowances' (see note 5). In earlier periods, they were recognised in the statement of financial position of the former Viru Keemia Grupp AS (the current business name Kirde Varad AS) as intangible assets.

Accounting policies and presentation of information are changed only when this is required by new or revised 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 2022 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 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 to IAS 1 aim to help entities provide accounting policy disclosures that are more useful by:

- requiring companies to disclose their material accounting policies rather than their significant accounting policies;
- clarifying that accounting policies related to immaterial transactions, other events or conditions are themselves immaterial and as such need not be disclosed; and
- clarifying that not all accounting policies that relate to material transactions, other events or conditions are themselves material to a company's financial statements.

The International Accounting Standards Board also amended IFRS Practice Statement 2 to include guidance and two additional examples on the application of materiality to accounting policy disclosures.

The amendments are consistent with the refined definition of 'material': 'Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements'.

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

Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors

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

The amendments introduce a new definition for accounting estimates, clarifying that they are monetary amounts in the financial statements that are subject to measurement uncertainty. The amendments also clarify the relationship between accounting policies and accounting estimates by specifying that a company develops an accounting estimate to achieve the objective set out by an accounting policy.

The amendments are not expected to have a material impact on the group as these amendments provide guidance in determining whether changes are to be treated as changes in estimates, changes in policies, or errors.

Amendments to IAS 12 Income Taxes

Effective for annual periods beginning on or after 1 January 2023. Early application is permitted.

The amendments clarify the accounting for deferred tax on transactions that involve recognising both an asset and a liability with a single tax treatment related to both. The amendments narrow the scope of the initial recognition exemption so that it does not apply to transactions that give rise to equal and offsetting temporary differences. As a result, companies will need to recognise a deferred tax asset and a deferred tax liability for temporary differences arising on initial recognition of a lease and a decommissioning provision.

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

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. All intragroup transactions, balances and any unrealised profits and losses resulting from intragroup 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 the consolidated 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 group's 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 enters into derivative contracts when it is necessary 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 an 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 consolidated 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 estimated depreciation from it.

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);
- other 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 15.

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.

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.

CO2 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 allocation plan approved by the European Commission, the group was allocated free CO_2 emission allowances of 4,442 thousand tonnes, of which 1,204 thousand tonnes was allocated for 2022 (2021: 1,205 thousand tonnes).

Emission allowances are accounted for using the gross method. Free emission allowances acquired through a government grant are recognised as both a current 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 assets are charged to the cost of sales and the government grant liability (deferred income from government grants) is transferred to other income on a monthly basis, based on the use of the allowances and the market price of the allowances 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.

Purchased CO_2 emission allowances are recognised as current assets. When the allowances are used, they are recognised as an expense and the provision for purchasing emission allowances is reduced.

Allocation, recognition as an expense, 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. 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, which comprises the amount of 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. The lease payments are discounted 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.
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.
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.

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 consolidated 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 consolidated 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 consolidated 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 consolidated 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 (legal 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 occurred 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 they 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, actual outcomes 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 6)

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 2022, the group performed an inventory-write down in which finished goods were written down by 3,134 thousand euros.

Estimation of the useful lives of property, plant and equipment and intangible assets (notes 7 and 8)

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.

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 7 and 8. If annual depreciation and amortisation rates changed by 10%, annual depreciation and amortisation expense would change by around 39 thousand euros.

Measurement of the fair value and revaluation of property, plant and equipment (note 7)

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

- oil shale processing (VKG Oil AS, VKG Kaevandused OÜ, VKG Energia OÜ);
- other activities (VKG Logistika OÜ, Viru RMT OÜ, Viru Keemia Grupp AS, VKG Solar OÜ, VKG Invest OÜ)

Uncertainties related to estimating the mine closure provision (note 12)

The provision for closing the Ojamaa mine in 2038 was originally recognised in the amount of 3,200 thousand euros. The provision has been recognised by applying an annual discount rate of 2%. The provision is recognised by estimating the activities required for closing the mine and the cost of such activities at the date of recognition of the provision.

At 31 December 2022, 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.

<u>*Capitalisation of roadway construction costs*</u>

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)	31 December 2022	5 December 2022
Current accounts	17,120	93,053
Term deposits	48,626	0
Total cash and cash equivalents	**65,746**	**93,053**

Note 3. Investments in financial assets

(In thousands of euros)	31 December 2022	5 December 2022
Financial assets	125,414	0
Incl. short-term financial assets[1]	*125,414*	*0*
Total financial assets	**125,414**	**0**

[1] Quoted interest-bearing instruments with interest rates in the range of 1.06–4.65% and maturities of up to one year.

Note 4. Receivables and prepayments

(In thousands of euros)	31 December 2022	5 December 2022
Trade receivables	49,305	47,114
Loss allowance	-14	-24
Total trade receivables	**49,291**	**47,090**
Prepaid and recoverable taxes (note 24)	971	320
Miscellaneous receivables	2,796	1,293
Total other receivables	**3,767**	**1,613**
Prepayments	573	299
Total prepayments	**573**	**299**
Total receivables and prepayments	**53,631**	**48,818**

Trade receivables are reported net of their loss allowance.

Movements in the loss allowance during the period:

(In thousands of euros)	2022	5 December 2022
Opening balance as at 5 December 2022	**-24**	**0**
Recovery of items classified as doubtful	-1	0
Items written off as uncollectible	-10	0
Closing balance	**-15**	-24

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 28.

Note 5. Emission allowances

(In thousands of euros)	**CO_2 emission allowance units**
As at 5 December 2022 (demerger)	**102,887**
Incl. free allocation	*102,887*
Allocation of free CO_2 emission allowances (note 11)	3,262
Recognised in expenses (note 17)	-51,471
As at 31 December 2022	**54,679**

Note 6. Inventories

(In thousands of euros)	**31 December 2022**	**5 December 2022**
Finished goods	7,325	19,513
Raw materials and consumables	14,021	12,664
Work in progress	16,719	5,907
Goods purchased for sale	0	80
Total inventories	**38,065**	**38,164**

Finished goods were written down by 3,134 thousand euros during the reporting period.

Note 7. 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**
As at 5 December 2022 (demerger)	**2,059**	**143,718**	**317,451**	**1,069**	**17,783**	**482,080**
Additions[1]	425	311	1,330	15	16,793	18,874
Reclassification	0	1,935	823	0	-2,758	0
Disposals	1	-515	-231	-12	-24,346	-25,103
Depreciation for the year[2]	-141	-18,467	-46,726	-124	0	-65,458
Carrying amount as at 31 December 2022	**2,344**	**126,982**	**272,647**	**948**	**7,472**	**410,393**
As at 31 December 2022						
Cost	2,667	171,842	391,378	2,403	7,472	**575,762**
Accumulated depreciation	-323	-44,860	-118,731	-1,455	0	**-165,369**

The opening balance recognised in the demerger includes right-of-use assets of 348,461 thousand euros resulting from previously signed leases.

[1]Assets under construction

At the end of the reporting period, assets under construction amounted to 7,472 thousand euros.

The group’s binding commitments for the acquisition of property, plant and equipment in subsequent periods totalled 5,755 thousand euros at 31 December 2022.

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. No borrowing costs were capitalised in the reporting period.

Other costs capitalised during the period consisted of labour costs of 887 thousand euros and depreciation expense of 152 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 1,494 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 related to operating activities 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 1,658 thousand euros at 31 December 2022.

Other information

[2] Notes 17–19 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 7 by 694 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 2022 was 11,314 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**				**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**	
Asset class	**Buildings and structures**		**Plant and equipment**		**Buildings and structures**		**Plant and equipment**		**Total**
Fair value as at 5 December 2022	**3,643**	**30,966**	**369**	**14,383**	**824**	**429**	**1,099**	**1,490**	**53,203**
Gains and losses for the period									
Depreciation (in profit or loss)	-281	-2,536	-84	-2,316	-29	-14	-185	-96	-5,541
Additions, disposals and other movements									
Additions	0	40	88	726	26	28	177	76	1,161
Reclassifications	0	1,935	9	769	0	0	-2	0	2,711
Disposals	0	0	0	1	0	-364	0	-77	-440
Fair value as at 31 December 2022	**3,362**	**30,405**	**382**	**13,563**	**821**	**79**	**1,089**	**1,393**	**51,094**

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 2022.

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.

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 2022	2,344	126,392	272,591	948	7,472	**409,747**

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 2022[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 2023 and the knowledge of the future prices of contracts in force at 31 December 2022. 2) The future cash flows of the oil and energy production entity VKG Oil were also calculated based on the budget for 2023, 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) The discount rate applied was 9.7% for VKG Kaevandused.	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.

[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 2022

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 of group companies engaged in other business activities as at 31 December 2022

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.

Note 8. Intangible assets

(In thousands of euros)	**Mining licence[1]**	**Other[2]**	**Total**
As at 5 December 2022 (demerger)	**14,135**	**2,046**	**16,181**
Additions	66	110	176
Amortisation for the year	-668	-166	-834
Carrying amount as at 31 December 2022	**13,533**	**1,990**	**15,523**
As at 31 December 2022			
Cost	23,449	3,045	**26,494**
Accumulated amortisation and impairment losses	-9,314	-999	**-10,313**
As at 5 December 2022			
Cost	23,516	3,155	**26,671**
Accumulated amortisation and impairment losses	-9,983	-1,165	**-11,148**

[1]The group holds a licence for mining oil shale at the Sompa mine under an agreement on the exchange of mining licences (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 the 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.

[2]The cost includes capitalised labour costs of 26 thousand euros.

Note 9. Borrowings

(In thousands of euros)	**Current portion**	**Non-current portion**	**Total liability**	**Effective interest rate**	**Maturity date**
Long-term loans	0	31,100	**31,100**	3.5%	2032
Lease liabilities	118,431	237,743	**356,174**	1.5–3.5%	2023-2028
Total borrowings as at 31 December 2022	**118,431**	**268,843**	**387,274**		
Of which repayable:					
Not later than 1 year	*118,431*	*0*	*118,431*		
Later than 1 and not later than 5 years	*0*	*268,843*	*268,843*		

(In thousands of euros)	Current portion	Non-current portion	Total liability	Effective interest rate	Maturity date
Lease liabilities	57,898	356,070	**413,968**	1.5–3.5%	2023-2028
Total borrowings as at 5 December 2022	**57,898**	**356,070**	**413,968**		
Of which repayable:					
Not later than 1 year	*57,898*	*0*	*57,898*		
Later than 1 and not later than 5 years	*0*	*356,070*	*356,070*		

Note 10. Accrued expenses

(In thousands of euros)	**31 December 2022**	**5 December 2022**
Payables to employees	7,406	6,831
Interest payable	328	0
Demand deposits	36,038	0
Other accrued expenses	3	101
Total accrued expenses	**43,775**	**6,932**

Note 11. Government grants

(In thousands of euros)	CO_2 emission allowances allocated	Grants related to assets	Total
As at 5 December 2022 (demerger)	**102,887**	**45**	***102,932***
Of which current portion	*102,887*	*9*	*102,896*
Of which non-current portion	*0*	*36*	*36*
Allocation of free CO_2 emission allowances	3,262	0	***3,262***
Recognised as revenue (notes 5 and 17)	-51,471	*0*	***-51,471***
Depreciation of assets acquired with government grants (note 20)	0	-9	***-9***
Carrying amount as at 31 December 2022	**54,678**	**36**	***54,714***
Of which current portion	*54,679*	*18*	*54,697*
Of which non-current portion	*0*	*18*	*18*

[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 26,828 thousand euros.

The government grant liability is amortised to income in proportion to the use of the allocated free CO_2 emission allowances. CO_2 emission allowances allocated free of charge, which are recognised as current assets, are recognised in the cost of sales and income from government grants is recognised in other income in the same amount. Therefore, the 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 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 12. Provisions

(In thousands of euros)	**Mine closure provision[1]**	**Provision for shortfall in CO_2 emission allowances**	**Other**	**Total**
As at 5 December 2022 (demerger)	**4,884**	**16,929**	**34**	**21,847**
Of which current	*0*	*16,929*	*34*	**16,963**
Of which non-current	*4,884*	*0*	*0*	**4,884**
Recognition	0	9,899	12	**9,910**
Use	0	0	-21	**-21**
Discounting	49	0	*0*	**49**
As at 31 December 2022	**4,933**	**26,828**	**24**	**31,785**
Of which current	*0*	*26,828*	*24*	*26,852*
Of which non-current	*4,933*	*0*	*0*	*4,933*

[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 13. Deferred income

(In thousands of euros)	**31 December 2022**	**5 December 2022**
Deferred income:		
Current portion	7	0
Non-current portion	62	68
Total deferred income	**69**	**68**

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. The charges recognised as revenue in the reporting period totalled 2 thousand euros.

Note 14. Share capital

(In thousands of euros)	**31 December 2022**
Share capital	6,209

At the year-end, share capital consisted of 9,715,000 shares without par value. The rounded proportionate par value of one share is 0.64 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	38.91%
Alvekor OÜ	25.49%
Revellis Invest OÜ	19.53%
Sergos Invest OÜ	16.07%
Total	**100%**

Note 15. Reserves

(In thousands of euros)	31 December 2022	5 December 2022
Revaluation reserve[1]	646	678
Statutory capital reserve[2]	621	0
Total reserves	**1,267**	**678**

[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.

In 2022, 32 thousand euros of the revaluation reserve was transferred to retained earnings.

The revaluation reserve may not be distributed as dividends.

Revaluation reserve as at 5 December 2022*	**678**
Transfer to retained earnings	-32
Revaluation reserve as at 31 December 2022*	**646**

[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.

Note 16. Revenue

(In thousands of euros)

Revenue by geographical area	2022
European Union, excluding Estonia	5,218
Estonia	118,655
Other countries	60,874
Total revenue	**184,747**

Timing of revenue recognition	
Goods transferred to customers at a point in time	
Sale of self-produced shale oil	150,837
Sale of electricity	21,001
Sale of district heating and steam	6,351
Sale of other products and materials	2,373
Total revenue recognised at a point in time	**180,561**

Goods and services transferred to customers over time	
Logistics services	337
Construction of electricity and telecommunications networks	1,290
Connection to electricity and district heating networks	2
Other services	2,557
Total revenue recognised over time	**4,186**
Total revenue from contracts with customers	**184,747**

Balances from contracts with customers

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

	2022
Contract assets	3
Contract liabilities	66
Total	**69**

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 2022, the unsatisfied portion of performance obligations related to the connection charges amounted to 70 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 2022, connection charges of 2 thousand euros were transferred from contract liabilities to revenue. Information about trade receivables is disclosed in note 4.

Note 17. Cost of sales

(In thousands of euros)	**2022**
Depreciation, amortisation and impairment losses	-65,791
Personnel expenses (note 23)	-22,493
Raw materials, consumables and goods used	-37,893
Services purchased	-6,102
Pollution charges	-15,241
Recognition of CO_2 emission allowances as an expense (note 5)	-41,572
Cost of recognising a provision for CO_2 emission allowances (note 12)	-9,899
Inventory write-down (note 6)	-3,134
Change in inventories of finished goods and work in progress	1,758
Other costs	-47
Total cost of sales	**-200,414**

Note 18. Marketing and distribution expenses

(In thousands of euros)	**2022**
Services purchased	-1,991
Personnel expenses (note 23)	-211
Depreciation and amortisation	-2
Raw materials, consumables and goods used	-24
Other expenses	-152
Total marketing and distribution expenses	**-2,380**

Note 19. Administrative expenses

(In thousands of euros)	**2022**
Personnel expenses (note 23)	-3,471
Services purchased	-2,600
Depreciation and amortisation	-347
Raw materials, consumables and goods used	-666
Other expenses	-287
Total administrative expenses	**-7,371**

Note 20. Other income

(In thousands of euros)	**2022**
Allocation of CO_2 emission allowances free of charge (note 11)	41,572
Government grants related to assets (note 11)	9
Late payment interest and penalties	16
Miscellaneous income	898
Total other income	**42,495**

Note 21. Other expenses

(In thousands of euros)	**2022**
Loss on disposal of non-current assets	-3,427
Foreign exchange loss	-1,575
Write-off of inventories	-63
Miscellaneous expenses	-68
Total other expenses	**-5,133**

Note 22. Finance income and costs

Finance income

(In thousands of euros)	**2022**
Interest income	380
Change in fair value of financial instruments	13
Total finance income	**393**

Finance costs

(In thousands of euros)	**2022**
Interest expense	-329
Unwinding of the discount on non-current provisions (note 12)	-49
Interest expense on lease liabilities	-6,802
Total finance costs	**-7,179**

Note 23. Personnel expenses

(In thousands of euros)	**2022**
Employee remuneration	-20,331
Of which remuneration of the management board	*-871*
Of which remuneration of the supervisory board	*-54*
Social security charges	-6,575
Unemployment insurance contributions	-158
Total personnel expenses	**-27,064**

The group's average number of employees in 2022 was 1,595, 105 of whom were employed by the parent, Viru Keemia Grupp AS.

During the period, there were 1,554 employees working under employment contracts, 13 members of the management board, 5 members of the supervisory board, and 23 people working under contracts for services.

Personnel expenses are allocated to different income statement line items as set out in notes 7, 8, 17, 18 and 19. The difference for 2022 of 887 thousand euros results from the capitalisation of personnel expenses incurred in the production of self-constructed assets (notes 7 and 8).

Note 24. Taxes

(In thousands of euros)	**2022**		**5 December 2022**	
	Receivable	**Payable**	**Receivable**	**Payable**
Value added tax (note 4)	971	782	320	0
Personal income tax	0	1,362	0	1,014
Social security tax	0	2,394	0	1,812
Corporate income tax	0	27	0	1
Unemployment insurance contributions	0	162	0	128
Funded pension contributions	0	42	0	31
Mining rights fees	0	4,338	0	8,786
Excise duties	0	498	0	119
Environmental charges	0	2,399	0	2,766
Deferred tax liability	0	1,099	0	0
Total	**971**	**13,103**	**320**	**14,657**

Income tax expense on dividends:

(In thousands of euros)	**2022**
Deferred tax expense	-1,099
Total income tax expense on dividends	**-1,099**

Note 25. Leases

The group as a lessee

The group leases various assets, including items of production equipment and machinery.

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**	**Other assets**	**Total**
As at 5 December 2022 (demerger)	**108,804**	**300,128**	**587**	**409,519**
Depreciation for the year	-15,749	-44,045	-84	**-59,878**
Additions	217	307	0	**524**
Derecognition	-151	-170	0	**-321**
Balance as at 31 December 2022	**93,121**	**256,220**	**503**	**349,844**

Amounts recognised in the income statement

(In thousands of euros)	**2022**
All leases under IFRS 16	
Interest expense on lease liabilities	-6,801
Expenses on short-term leases	-275
Expenses on leases of low-value assets	-563
Total expenses	**-7,639**

Amounts recognised in the statement of cash flows

(In thousands of euros)	**2022**
Total cash outflows related to leases	**-65,210**
Of which principal payments	-58,409
Of which interest payments	-6,801

The group as a lessor

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

Note 26. 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:

- 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)	**2022**
Transactions with members of the management and supervisory boards and owners	
Purchase of services (remuneration provided under management board members' service contracts)	871
Purchase of services (remuneration provided to members of the supervisory board)	54
Transactions with companies and persons related to owners of the group	
Purchases of goods and services	96
Lease expenses (note 25)	57,131
Sales of goods and services	46,133
Interest expense (note 22)	6,801
Interest income (note 22)	47
Other related parties	
Lease expenses	11
Receivables from related parties	
Companies related to owners of the group	21,784
Liabilities to related parties	
Lease liabilities to a company under the control of the owners of the group	353,313
Liabilities to members of the management board, owners and parties related to owners	47

Note 27. Investments in subsidiaries

Subsidiary	Domicile	Core business	Ownership interest as at 31 December 2022
VKG Oil AS	Estonia	Production of oil shale chemicals	100%
VKG Logistika OÜ	Estonia	Transport, maintenance and repair services	100%
Viru RMT OÜ	Estonia	Production of metal structures	100%
VKG Kaevandused OÜ	Estonia	Oil shale mining and processing	100%
VKG Soojus AS	Estonia	Production and sale of heat and electricity	100%
VKG Invest OÜ[1]	Estonia	Development	100%
VKG Energia OÜ	Estonia	Production and sale of heat and electricity	100%
VKG Solar OÜ	Estonia	Other electricity production (incl. from biomass)	100%
VKG Energiatootmise OÜ	Estonia	Other electricity production (incl. from biomass)	100%

Note 28. Main financial risks

A. Financial instruments by class and category (In thousands of euros)

Class of financial instruments	Category of financial instruments	Note	Carrying amount
Cash and cash equivalents	Amortised cost	2	65,746
Investments in financial assets	Amortised cost	3	125,414
Trade receivables	Amortised cost	4	49,291
Other receivables	Amortised cost	4	3,767
Loan liabilities	Amortised cost	9	31,100
Lease liabilities	Amortised cost	9	356,174
Trade payables	Amortised cost		10,468
Other liabilities	Amortised cost	10	43,775

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 estimates their contractual interest rates correspond to relevant market interest rates.

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. Credit risk is an inherent part of any business activity. Depending on the counterparties and the nature of the receivables, the group's credit risk can be divided into three categories as shown in the table below (information presented in thousands of euros):

Credit risk	31 December 2022
Cash and cash equivalents	65,746
Trade receivables	49,291
Other receivables	3,767
Investments in financial assets	125,414
Maximum credit risk exposure	**244,218**

Cash and cash equivalents – At 31 December 2022, the group's cash and cash equivalents totalled 67,746 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.

Trade receivables – 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)	**31 December 2022**	**5 December 2022**
Allowance for expected credit losses on trade receivables and contract assets	-14	-24
Total	**-14**	**-24**

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 as at 31 December 2022:

(In thousands of euros)	**31 December 2022**
European Union, excluding Estonia	66
Estonia	48,637
Other countries	588
Total	**49,291**

The carrying amount of receivables due from the group's most important customer at 31 December 2022 was 8,763 thousand euros.

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 (In thousands of euros)	**31 December 2022**
Trade receivables not past due	43,584
1-30 days past due	5,268
31-90 days past due	381
Over 91 days past due	58
Total trade receivables	**49,291**

Interest rate risk

The group's interest-bearing liabilities as at 31 December 2022 were 387,274 thousand euros and accounted for 51% of total assets. Most of the amount is made up of long-term lease liabilities accounted for in accordance with IFRS 16 which are not influenced by the movements in interest rates in the financial markets. Future liabilities have been calculated using an interest rate of 3.5%. Lease liabilities have floating interest rates of 1.5–3.5% and are exposed to interest rate risk, but their effect is negligible.

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 1.26. The group's cash and cash equivalents as at the end of the reporting period totalled 65,746 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 borrowings included in the analysis are in the range of 1.5–3.5%.

Liabilities by maturities as at 31 December 2022 (In thousands of euros)

	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	Later than 5 years	Total undiscounted amount	Carrying amount
Loan liabilities	0	1,089	4,354	35,454	**40,897**	**31,100**
Lease liabilities	64,588	64,381	245,970	433	**375,372**	**356,174**
Trade payables	10,468	0	0	0	**10,468**	**10,467**
Accrued expenses	43,775	0	0	0	**43,775**	**43,775**
Total	**118,831**	**65,470**	**250,324**	**35,887**	**470,512**	**441,516**

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. At the end of 2022, the net debt to capital ratio was 60%, which is moderately high.

(In thousands of euros)	**31 December 2022**
Interest-bearing borrowings (note 9)	387,274
Less: cash and cash equivalents (note 2)	65,746
Net debt	321,528
Equity	218,493
Total capital (net debt plus equity)	540,020
Net debt to capital ratio	**60%**

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 the 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 2.5–3 million euros.

Currency risk

In 2022, 71% of the group's sales 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 December 2022**
Cash and cash equivalents (note 2)	25,094	40,652	0	65,746
Trade receivables	34,291	14,999	0	49,290
Total	**59,385**	**55,651**	**0**	**115,036**

Financial liabilities	**EUR**	**USD**	**Other**	**31 December 2022**
Borrowings (note 9)	387,274	0	0	387,274
Of which non-current	*268,843*	*0*	*0*	*268,843*
Trade payables	10,449	16	3	10,468
Total	**397,723**	**16**	**3**	**397,742**
Net exposure	**-338,338**	**55,635**	**-3**	**-282,706**

Carbon risk

In connection with the EU climate policy, carbon risk is the most critical risk for the group's sustainability. 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 a 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.

The production of shale oil products is one of those activities whose competitiveness is directly undermined by the EU climate policy. The group's CO_2 emission in 2022 was 470 thousand tonnes, which was covered by emission allowances allocated free of charge. Covering the emissions with allowances purchased from the market at an average price of 80 €/t would have resulted in additional expenses of 18.3 million euros. The group recognised provisions of 9,899 thousand euros to cover the costs related to CO_2 emission.

Note 29. Contingent liabilities

The group's retained earnings as at the end of the reporting period amounted to 211,017 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 52,754 thousand euros and the amount that could be distributed as the net dividend is 158,263 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 2023 (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 2022 and the date these financial statements are authorised for issue:

- On 19 January 2023, TARS International GmbH became the shareholder of the group.
- On 25 January 2023, the shareholders were paid a dividend of 5,500 thousand euros in total for 2022.
- On 11 April 2023, a demerger agreement was signed between Viru Keemia Grupp AS and Kirde Varad AS. As a result of the demerger, Kirde Varad AS acquired the ownership interest in VKG Kaevandused and the rights and obligations in respect of TLA Invest. The demerger of Viru Keemia Grupp AS was registered in the Commercial Register on 6 June 2023.

  As at 31 December 2022, the assets of VKG Kaevandused OÜ amounted to 100,528 thousand euros and the liabilities amounted to 38,729 thousand euros. The transaction thus has a material effect on VKG’s consolidated financial position.

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)	**31 December 2022**	**5 December 2022**
ASSETS		
Cash and cash equivalents	1,738	18,264
Trade receivables	1,009	802
Other receivables	25,859	9,308
Prepayments	124	40
Total current assets	**28,730**	**28,414**
Investments in subsidiaries (note 27)	179,627	175,261
Other long-term receivables	16,514	16,421
Property, plant and equipment	643	455
Intangible assets	1,754	1,784
Total non-current assets	**198,538**	**193,921**
Total assets	**227,268**	**222,335**
LIABILITIES		
Borrowings	99	40
Trade payables	651	425
Taxes payable	336	0
Accrued expenses	790	633
Total current liabilities	**1,876**	**1,098**
Borrowings	236	91
Other liabilities	3,900	3,900
Total non-current liabilities	**4,136**	**3,991**
Total liabilities	**6,012**	**5,089**
EQUITY		
Share capital	6,209	6,209
Statutory capital reserve	621	0
Revaluation reserves of subsidiaries accounted for under the equity method	647	678
Retained earnings	213,779	210,358
Equity attributable to owners of the parent	**221,256**	**217,245**
Total equity	**221,256**	**217,245**
Total liabilities and equity	**227,268**	**222,335**

Parent company's income statement

(In thousands of euros)	**2022**
Revenue	5,507
Cost of sales	-296
Gross profit	**5,211**
Administrative expenses	-5,575
Other income	118
Other expenses	-880
Operating loss	**-1,126**
Share of profit of subsidiaries accounted for under the equity method	4,361
Finance income	778
Finance costs	-2
Profit before tax	**4,011**
Income tax expense	0
Profit for the year	**4,011**

Parent company's statement of cash flows

(In thousands of euros)	**2022**
Cash flows from operating activities	
Profit for the year	**4,011**
Adjustments for:	
Depreciation, amortisation and impairment losses	*191*
Accrued finance income and costs	*-775*
Total adjustments	**-584**
Share of profit of subsidiaries accounted for under the equity method	-4,361
Change in receivables and prepayments	-197
Change in payables and advances received	721
Net cash used in operating activities	**-410**
Cash flows from investing activities	
Purchase of property, plant and equipment	-16
Purchase of intangible assets	-92
Purchase of other investments	-11,094
Investments made in subsidiaries and associates	-3
Loans provided to subsidiaries	-6,500
Repayments of loans provided to subsidiaries	13,093
Interest received, intragroup	613
Interest received, external	61
Net cash used in investing activities	**-3,938**
Cash flows from financing activities	
Payments of lease principal	-41
Interest paid on lease liabilities	-2
Cash outflow through the demerger	-12,135
Net cash used in financing activities	**-12,178**
Net cash flow	**-16,526**
Cash and cash equivalents at beginning of year	18,264
Decrease in cash and cash equivalents	-16,526
Cash and cash equivalents at end of year	1,738

Parent company's statement of changes in equity

(In thousands of euros)	Share capital	Statutory capital reserve	Revaluation reserves of subsidiaries	Retained earnings	Total
As at 5 December 2022 (demerger)	**6,209**	**0**	**678**	**210,358**	**217,245**
Profit for the year	0	0	0	4,011	4,011
Total comprehensive income for the year	**0**	**0**	**0**	**4,011**	**4,011**
Changes in reserves	0	621	-31	-590	0
As at 31 December 2022	**6,209**	**621**	**647**	**213,779**	**221,256**

Further information about share capital and reserves is disclosed in notes 14 and 15.

Parent company's adjusted unconsolidated equity as at 31 December 2022

(In thousands of euros)	**31 December 2022**
Parent company's unconsolidated equity	221,256
Less: carrying amount of investments in subsidiaries in parent company's separate statement of financial position	179,627
Plus: value of investments in subsidiaries under the equity method	179,627
Equity attributable to owners of the parent	**221,256**
Total equity	**221,256**

SIGNATURES TO ANNUAL REPORT 2022

The management board of Viru Keemia Grupp AS has prepared the directors' report and the consolidated financial statements for 2022.

<u>Management board</u>

Ahti Asmann	Chairman of the Management Board	…………………	15 June 2023
Jaanis Sepp	Member of the Management Board	…………………	15 June 2023
Raivo Attikas	Member of the Management Board	…………………	15 June 2023
Margus Kottise	Member of the Management Board	…………………	15 June 2023
Nikolai Petrovitš	Member of the Management Board	…………………	15 June 2023

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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 2022, the consolidated income statement, the consolidated statement of cash flows and the consolidated statement of changes in equity for the year then ended, and notes, including a summary of significant accounting policies.

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 2022, 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 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, 19 June 2023

/signature/

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 as at 31 December 2022:	211,017 thousand euros

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

Dividend distribution:	5,500 thousand euros
Retained earnings after allocations:	205,517 thousand euros

Ahti Asmann	Chairman of the Management Board	....	15 June 2023
Jaanis Sepp	Member of the Management Board	....	15 June 2023
Raivo Attikas	Member of the Management Board	....	15 June 2023
Margus Kottise	Member of the Management Board	....	15 June 2023
Nikolai Petrovitš	Member of the Management Board	....	15 June 2023

PARENT COMPANY'S REVENUE DISTRIBUTION BY EMTAK

(In thousands of euros)

Activity	EMTAK	2022
Activities of head offices	70101	5,507
Total		**5,507**

EMTAK – the Estonian classification of economic activities