



Group annual report

(Translation of the Estonian original)

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End of financial year	31 December 2020
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LETTER FROM THE CHAIRMAN OF THE MANAGEMENT BOARD

Dear reader

For Viru Keemia Grupp, 2020 was a year of risk management. The coronavirus pandemic, which drastically reduced global demand for petroleum products and led to a free fall in the oil market, left its mark on the operations of every business. Changes in both the economy and society tested our cost competitiveness and risk management practices as well as the quality of decisions made in difficult circumstances.

Estonian capital-based Viru Keemia Grupp proved its competitiveness as a producer of marine fuel in the global oil products market despite the exceptionally difficult environment. We ended 2020 with a net profit of 10.1 million euros, having mostly operated at normal capacity in adding value to oil shale.

The usual work routines could be maintained because the risk management system functioned well and we were able to respond quickly to changing circumstances. The crisis forced us to put a number of planned activities on hold and to focus only on ensuring the continuity of the production processes. We employed all available means to protect our people, reduce close contacts and prevent the spread of the virus. We discontinued raw materials purchases and used previously accumulated inventories. We temporarily reduced the volumes of investments and maintenance work without significantly increasing operational risks. Unlike many other businesses, we were not a burden but a contributor to society.

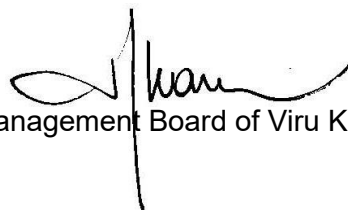
The year 2020 was controversial for VKG. Despite a temporary decline in oil prices, demand for our low-sulphur shale oil remained strong. Demand for phenol products surged to historical highs and interest in our coke also grew among Western European operators. On the downside, Estonian politicians took an aggressively negative stance on companies adding value to oil shale. In a situation where many industries continue to ask for state support, where countries are forced to increase their debt burden to stimulate the economy and save companies, the Estonian state has publicly abandoned an industry that can operate independently and deliver high value-added export revenue even amidst the most difficult crisis.

Unsubstantiated national decisions made without an impact analysis, unprecedented state intervention in the economy since the adoption of the Green Deal and growth in the number of those depending on government assistance are a new reality that we must take into account when planning our operations in Estonia. The Estonian government's unduly critical position on oil shale has significantly shortened the acceptable payback period of development projects aimed at adding value to oil shale, forcing us to freeze our investment plans until the future Green Deal regulation becomes clearer. We will continue to seek business projects in areas where there is natural demand and free competition and profitability does not depend on political decisions.

The global marine fuel market has currently no carbon-neutral alternative and we will continue to meet customer demand for shale oil. Going forward, our goals and plans will be driven by market demand, customer expectations and technological developments. Our high efficiency, strong financial position and operational commitment to our core values provide a strong basis for facing and adapting to market changes.

Ahti Asmann

Chairman of the Management Board of Viru Keemia Grupp



DIRECTORS' REPORT

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

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

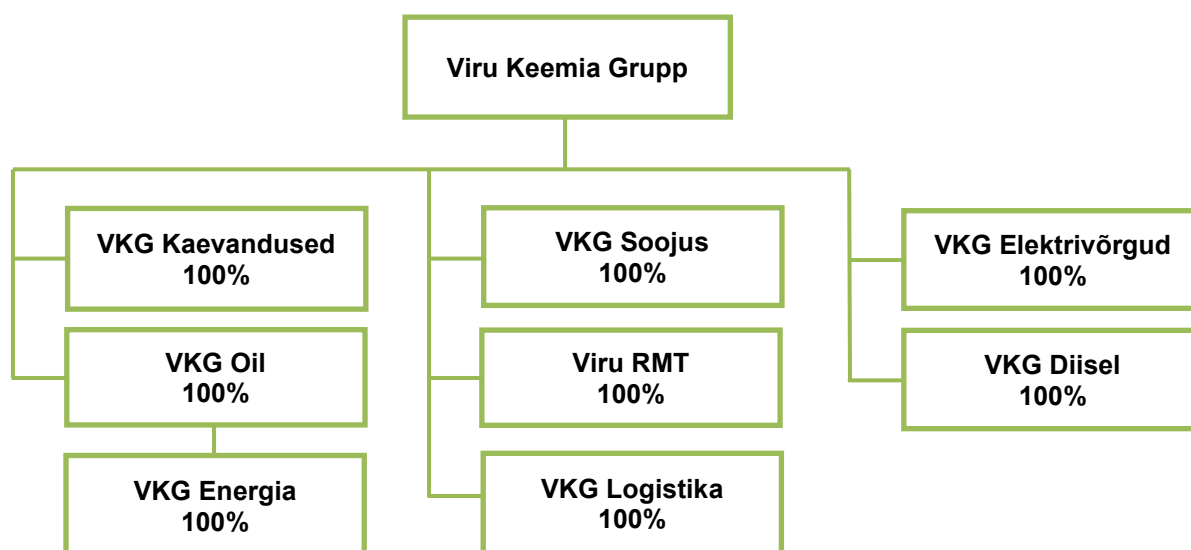
In order to add maximum value to oil shale, which is the key input to our core business – shale oil production, we are also involved in:

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

VKG's most important accomplishment in 2020 was ending the year with a profit despite the COVID-19 pandemic and a sharp decline in the demand of oil products.

GROUP STRUCTURE

At 31 December 2020, the VKG group's legal structure was as follows:



The group's legal structure did not change in 2020.

KEY EVENTS IN 2020

- **January** – The IMO regulation took effect, setting the maximum sulphur content of marine fuels at 0.5%.
- **February** – We arranged a daylong safety event Vision Zero – Safety First for our contractors to draw attention to the need for accident prevention and improve dialogue on occupational safety.
- **March** – The rapid spread of COVID-19 led to the declaration of a state of emergency in Estonia and the preparation of a crisis plan in the group. Disagreements between Saudi Arabia and Russia over limiting crude oil production triggered a free fall in oil prices, causing us to suspend the operation of our Kiviter oil plant, which uses expensive purchased raw material.
- **April** – The group's subsidiary VKG Energia with its controllable thermal power plant was Estonia's largest thermal power supplier, producing 41 GWh of electricity, which accounted for 15.5% of Estonia's total output for the month.
- **May** – Responsible Business Forum Estonia recognised the VKG group's efforts in the field of corporate social responsibility with a bronze label.
- **June** – In the framework of the implementation of new enterprise resource planning software MS D365 BC, the first module, payroll and HR, was launched.
- **July** – After a nearly five-year registration process, VKG gained the right to sell its unique oil shale chemical Honeyol™ on the US market. The product is used, for example, in the tyre and leather industries.
- **August** – The first case of COVID-19 was detected among the group's production staff. To prevent risks, mining volume was reduced to 60% for ten working days.
- **September** – VKG employees participated in the World Cleanup Day, helping to clean the town of Kohtla-Järve and planting trees.
- **October** – Viru Keemia Grupp AS and its subsidiary VKG Oil AS ranked 2nd and 3rd, respectively, among industrial and energy companies in the Competitiveness Ranking 2020 released by the Estonian Chamber of Commerce and Industry.
- **November** – In the framework of the implementation of MS D365 BC software, the second and main part, including the finance, inventory, purchasing and production modules and interfaces, was launched.
- **December** – The Estonian Chemical Industry Association presented a study conducted by KPMG according to which the Estonian shale oil industry could create more than 8 billion euros worth of national wealth until the year 2040.

IMPACTS OF THE EXTERNAL ENVIRONMENT

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

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

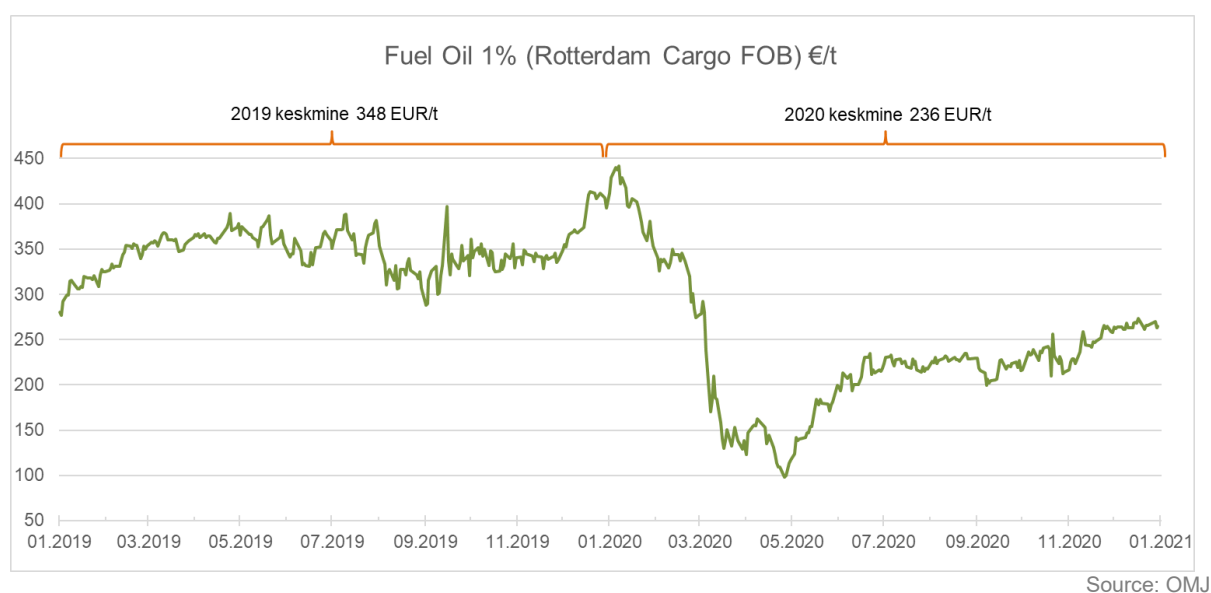
Economic environment

Due to the COVID-19 pandemic, the global economy shrank in 2020 to an extent not seen since the end of World War II. Although in January 2020 the World Bank projected for the year global growth of 2.5%, it is now estimated that the actual result was a decline of 4.3%. Following the sharp fall, 2021 is expected to bring the decade's fastest growth of 4.0%. Still, global economic output is expected to remain more than 5% below its pre-pandemic trend.

Economic output also shrank in Estonia in 2020, but somewhat less than in the rest of the world. According to Statistics Estonia, Estonia's gross domestic product contracted by 2.9%. Despite the economic downturn, Estonia's average gross monthly wage continued to rise. Although at 2.9% the wage increase in 2020 was the decade's smallest (2019: 7.4%), the difference between the wage and economic growth rates was the decade's largest, extending to 5.8%. Since labour productivity per employed person did not change, it may be concluded that in Estonia companies absorbed the crisis. Estonia's largest commercial banks expect that in 2021 the economy will grow by around 3%.

The VKG group's financial results are particularly sensitive to developments in the global oil market where negative history was made in 2020. Although the year started promisingly, the COVID-19 outbreak from China triggered a fall in oil prices already in January. The price war between Saudi Arabia and Russia fuelled the fire and on 21 April Brent crude, a leading global price benchmark for crude oils, closed at 19.33 \$/bbl while the WTI Crude Oil futures plunged into negative territory for the first time in history. With the support of the United States, OPEC and Russia soon reached new agreements, which helped stabilise Brent crude at 43 \$/bbl by early June. The news of vaccines, which arrived in November, gave new impetus for growth but the average price of Brent crude still remained at 64 \$/bbl in 2020, which is 33% lower than in 2019 and a dollar lower than during the crisis of 2016.

The oils produced by VKG are mainly sold by reference to the price of 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.



The graph shows that the price of fuel oil with 1% sulphur content fell sharply in early 2020, losing almost 80% of the peak value in January within less than 4 months. There were no major changes in the demand for fuel oil and the average US dollar exchange rate compared to a year earlier. Therefore, similarly to Brent, the average price of fuel oil, measured in euros, was a third lower in 2020. However, unlike Brent, the average price of fuel oil with 1% sulphur content was almost 20% higher in 2020 than during the previous oil crisis in 2016. This is largely attributable to the IMO 2020 regulations, which are discussed in more detail in the regulatory environment section.

Availability of the oil shale resource

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

Current supply – Based on our oil production capacities, VKG's annual oil shale needs extend to 4.1 million tonnes of the geological resource (5.1 million tonnes of the extracted commodity) per year. The mining permits granted to VKG allow us to extract 2.77 million tonnes of the geological resource per year at the Ojamaa mine (3.5 million tonnes of commodity oil shale) and, if other market players do not extract all of their permitted volume, we may use the 'retrospective mining mechanism' and increase our oil shale extraction volume at Ojamaa to 3.5 million tonnes (4.35 million tonnes of commodity oil shale). This means that in order to purchase the 750 thousand tonnes (15%) of commodity oil shale required to cover the shortfall, VKG must reach agreement with other market players.

VKG is currently collaborating with Kiviõli Keemiatööstus in oil shale purchasing. Although the oil shale needs of Eesti Energia, which holds a dominant position in oil shale extraction in Estonia, have decreased by almost 60% in the last two years, its reluctance to price oil shale on a cost basis means that it is currently impossible to reach mutually beneficial agreements. Eesti Energia's current oil shale pricing model is unknown and unclear for VKG. This is also the reason why we have not reinstated the oil shale concentrate purchase contract, which was suspended when the COVID-19 crisis hit.

VKG continues to hold the view that Eesti Energia, as a company dominating the market, should grant other market players access to the state-owned natural resource through cost-based pricing. At present, Eesti Energia has no interest in it and, regrettably, the competition authority has not established any conditions that would support fair competition in the area. The situation may change depending on the outcome of a pending legal dispute over the fair pricing of oil shale. Until then, we do not consider it practicable to restore oil shale purchases from Eesti Energia.

Future supply – Considering our extraction volumes and the restrictions and expansions of the Ojamaa mine, we estimate that the existing mine will cover VKG's resource needs roughly until the end of 2030. Taking into account the agreement reached with Eesti Energia in 2019 on sharing the Uus-Kiviõli mining area, most of VKG's oil shale needs are covered at least until 2040. From an environmental point of view, granting VKG the Uus-Kiviõli mining permit was the best possible solution because the area is in an excellent location for the group's oil plants, which are situated in Kohtla-Järve, and allows making maximum use of the existing infrastructure. The oil shale dressing plant at the Ojamaa mine has sufficient capacity to also process the oil shale extracted from the new mining area and so there is no need for additional above-ground construction work and disturbance of nature.

Regulatory environment

The following regulatory developments in 2020 were relevant to VKG's competitiveness:

Regulatory changes resulting from the COVID-19 pandemic – Due to the COVID-19 pandemic and related public health risks, the Estonian government declared a state of emergency in Estonia on 12 March 2020, which lasted until 18 May 2020. During the period, the government applied special measures under the Emergency Act. The rules established during the state of emergency did not directly restrict the group's production process and day-to-day production operations but the group implemented all required safety measures, which helped avoid major outbreaks of COVID-19 among VKG employees until late August.

The government initiated several changes to legislation designed to support companies affected by the COVID-19 crisis. Two of them had a direct bearing on VKG's operations:

- The Environmental Charges Act was supplemented with section 683 by which the charge rates for oil shale fly and bottom ash were temporarily reduced from 2.98 euros per tonne to 1.31 euros per tonne for the year 2020. The following years' waste charge rates for the oil shale industry will be determined in 2021 based on a study commissioned by the ministry of the environment.
- The Fiscal Marking of Liquid Fuel Act was supplemented with section 82 by which companies holding a mining permit can use specific-purpose diesel fuel in mines and ash storage areas from 1 July 2020 to 30 April 2022. Considering that marked diesel fuel is meant for industrial machinery that does not drive on public roads, it was a change long promoted by VKG to harmonise tax incentives across sectors.

The European Green Deal – In December 2019, the European Commission (EC) adopted the European Green Deal (EGD), which aims to achieve carbon neutrality in the European Union by 2050 through political, economic and social measures. In December 2020, the member states agreed on a more ambitious intermediate EGD target for 2030 according to which greenhouse gas emissions should be reduced by 55% compared to the 1990 levels instead of the previously agreed 40%. The EC will present a package of measures and legislation necessary for achieving the target in June 2021.

In any case, the policy significantly undermines the competitiveness of the Estonian shale oil industry in the global fuel market. While the rest of Europe is struggling to meet the 55% target by 2030, the closure of oil shale-fuelled power plants has radically lowered the CO₂ emissions of the Estonian ETS sector (companies covered by the EU Emissions Trading System): in 2020 the emissions were already 64% lower than in 1990 and 65% lower than in 2013. If the Estonian state has consciously decided not to protect its national interests in the European Union, then in light of the surge in CO₂ emission allowance prices to 44 euros per tonne in recent months and the cutbacks in allowances allocated free of charge from 2026 onward, it is likely that the Estonian shale oil industry will have to close by 2030 because the carbon tax burden has rendered it uncompetitive.

If that were to happen, the emissions of the Estonian ETS sector would decrease by 83% by 2030 compared to the 55% target even if other participants in the Estonian ETS sector did not reduce their emissions at all. In Europe Estonian politicians would certainly be applauded for such an exceptional result but in North Eastern Estonia thousands of jobs would be lost and the state would lose billions of euros in revenue. However, the saddest factor is the fact that sacrificing the Estonian shale oil industry would not reduce global emissions because goods will still need to be transported and vessels will still need fuel that will be produced in regions where there is no such carbon tax burden.

IMO 2020 – The requirement established by the International Maritime Organization (IMO) that lowered the maximum sulphur content of marine fuel from the former 3.5% to 0.5% took effect in 2020. Previously, VKG's shale oil was mainly used as an additive to improve the properties of heavy fuels. Therefore, there was a risk that the banning of heavy fuels might significantly reduce the demand for shale oil. In fact, demand for VKG's products grew because the average sulphur content of shale oil is 0.7%, which is very close to the new standard and facilitates blending it with cleaner but more expensive fuels to obtain an optimal finished product. Overall, the impact of the IMO 2020 regulation on VKG has been more positive than expected, as it has increased the price of both fuel oil with 1% sulphur content relative to Brent crude and the price of shale oil relative to fuel oil with 1% sulphur content.

BUSINESS REVIEW

The year 2020 was marked by the COVID-19 pandemic, the resulting oil market crisis and the looming impacts of the European Green Deal on the shale oil industry. On the production side, we had to reduce volumes somewhat, but at the same time we were also able to reduce the workforce and investments.

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

Key performance indicator	Unit	2018	2019*	2020
Average price of Brent crude oil	\$/bbl	72	64	43
Average price of 1% fuel oil	€/t	340	348	236
Average price of CO ₂ emission allowances	€/t	16	25	25
Oil shale output	'000 t	4,354	4,370	4,139
Oil shale processing volume	'000 t	4,758	5,021	4,746
Output of shale oil products	'000 t	623	659	629
Electricity production	GWh	466	474	446
Heat supply	GWh	453	451	436
Average number of employees	employee	1,767	1,751	1,657
Revenue	€'000	208,924	256,763	207,841
Operating profit	€'000	34,370	43,047	14,748
Net profit	€'000	26,909	36,677	10,081
Capital expenditures	€'000	27,181	30,179	14,226
Total assets	€'000	722,348	718,800	670,331
Equity	€'000	510,805	513,283	516,705
Equity ratio	%	71%	71%	77%
Net margin	%	13%	14%	5%

* Adjusted due to a change in the interpretation of IAS 12.

The group's revenue for 2020 declined by 19% year on year. The decline was attributable to a decrease in output (shale oil products: -5%, electricity production: -6%) as well as a fall in the world market prices of petroleum products (average price of fuel oil: -32%). Revenue decreased less than market prices because we were able to generate additional gains of 11.7 million euros through forward transactions. Despite unfavourable market conditions, the group ended the year with a net profit of 10.1 million euros.

The group's core business comprises three major processes which make up a process chain: oil shale mining, shale oil production, and heat, steam and electricity production. The group also includes two companies that provide logistics and repair services and two infrastructure companies whose business is regulated by the competition authority.

Oil shale mining – VKG Kaevandused OÜ

VKG Kaevandused reduced the output of commodity oil shale to 4.14 million tonnes in 2020 (2019: 4.37 million tonnes). Because of the crisis, the goal was to cut costs and increase the use of previously accumulated inventories. Workforce was reduced by 24 people and oil shale inventories were reduced by 350 thousand tonnes. In connection with market recovery, the company is planning to increase the production of commodity oil shale at the Ojamaa mine to the maximum permitted level of 4.35 million tonnes in 2021.

Shale oil production – VKG Oil AS

VKG Oil processed 4.75 million tonnes of oil shale in 2020, 5.5% less than a year earlier. The volume of oil shale processing decreased due to the suspension of production at the Kiviter 1,000t plant, which operates on purchased raw material. Total output of shale oil products declined at the same time by 4.5%, dropping to 629 thousand tonnes, as product yield per tonne of oil shale grew slightly. Coke production fell the most (-36%) because both demand and price decreased. The market for phenol products and fine chemicals, on the other hand, was surprisingly strong and the output of relevant products grew by 55%. Production volumes are likely to remain at the same level in 2021 because we have not been able to agree the oil shale price with the supplier in order to restart the idle Kiviter plant.

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 most of the electricity is consumed by group entities. In addition, we use oil shale gas in the lime plant whose output is used in our own desulphurisation systems to clean flue gases. Such a production chain ensures that the use of oil shale energy is as efficient and environmentally friendly as possible.

VKG Energia supplied 436 GWh of heat in 2020, which is 3% less than in 2019. The decline is attributable to unusually warm weather which lowered demand. Electricity production dropped by 6% to 446 GWh due to a decrease in shale oil production. Electricity produced by VKG Energia accounted for 10% of all electricity produced and 6% of all electricity consumed in Estonia in 2020. VKG continues to be the second-largest electricity producer in Estonia.

KEY FINANCIAL INDICATORS

Exports accounted for 68% of the group's total revenue in 2020 compared with 79% in 2019 and 73% in 2018.

Revenue contributions of major product groups and service lines

Product group or service line	2018	2019	2020
Shale oils	79%	84%	82%
Sale and distribution of heat and electricity	17%	14%	15%
Other products and services	4%	2%	3%

Shale oil prices declined in 2020 because the prices of petroleum products dropped. This caused a slight decrease in the revenue contribution of shale oils and a decrease in exports.

The group's key financial ratios

Ratio	2018	2019*	2020
Net margin (net profit/revenue)	12.9%	14.3%	4.8%
Return on assets (ROA) (net profit/average total assets)	4.2%	5.1%	1.5%
Return on equity (ROE) (net profit/average equity)	6.6%	7.2%	2.0%
Debt ratio (liabilities/total assets)	0.29	0.28	0.23
Current ratio (current assets/current liabilities)	0.63	1.95	3.09

* Adjusted due to a change in the interpretation of IAS 12.

The current ratio was low in 2018 because the maturity date of the group's loan agreements was 31 December 2019 and at 31 December 2018 they were fully classified as current liabilities. After the signature of a new agreement in 2019, the long-term portion of the loan was classified as a long-term liability.

DEVELOPMENT ACTIVITIES

Development activities of the period were affected by the setting of the EU's climate neutrality goal and the announcement of the Green Deal by the European Commission. The Green Deal does not have an immediate impact on VKG's current production operations but it has a direct effect on development projects aimed at adding value to oil shale.

We continued the development of a shale oil pre-refining plant in partnership with Eesti Energia in 2020. The plan was to increase the value of all shale oil produced in Estonia by turning it into a low-sulphur marine fuel and/or raw material suitable for refineries. The expected processing capacity of the plant was 1.6 million tonnes of shale oil per year. VKG's share of it would have been 0.7 million tonnes per year. In the first stage of the project, pilot tests were carried out and a preliminary design of the plant was prepared. The enactment of the IMO 2020 requirements for marine fuels last year increased the market price of shale oil, making the production of our current products more profitable but also significantly reducing the profitability of the pre-refining plant. Accordingly, it was decided that the project in its current form should be discontinued. We will use the partnership to carry on studying the possibilities of hydrotreating oil shale gasoline.

With a view to reducing the CO₂ emissions of the current facilities, we continued to analyse the possibilities of using semi-coke gas to produce more valuable products. This included research into extracting the maximum amount of gasoline from the gas through compressing and cooling, and obtaining more valuable chemicals from the remaining gas through synthesis. A new use for semi-coke gas, which differs from the current use for energy production, would make it possible to capture the carbon in the gas into a useful product. Due to the capital intensity of possible industrial solutions and considerable uncertainty regarding future regulations of the oil shale industry, these development activities have also been suspended for now.

In the light of the European Green Deal, VKG has also studied the possibilities of capturing CO₂ emissions inside the chimney and storing them (a CCS project: carbon capture and storage) or using CO₂ for the production of other products (a CCU project: carbon capture and utilisation). At current emission allowance prices, the use of those solutions is not yet reasonable and there are currently no feasible options for large-scale carbon storage.

In the area of renewable energy, VKG has been developing a solar power plant project in Ahtme and has participated with the project in renewable energy auctions.

Development activities of 2021 will mainly be focused on:

- Reducing the environmental footprint of the group's existing production operations by using and adding value to the by-products of shale oil production, including continuing the activities aimed at increasing the recovery of oil shale ash.
- Participating in planned renewable energy reverse auctions with own renewable energy projects.
- Developing new business lines – VKG is analysing options to seize the opportunities offered by the circular economy.

INVESTMENT

The group reviewed its investment strategies at the end of 2019 in connection with the adoption of the European Green Deal and decided to reduce investments to 20 million euros in 2020 (2019: 30.2 million euros). The COVID-19 pandemic-related crisis in the oil market forced us to cut planned investments by a further 6 million euros to 14.2 million euros, which was spent as follows:

- **Investments in operational reliability** totalled 11.6 million euros, accounting for the largest share of capital expenditures. The figure includes investments of 3.1 million euros in the replacement and renewal of obsolete mining machinery and 3.6 million euros in building underground mine roadways at VKG Kaevandused and investments of 2 million euros in oil plant repairs at VKG Oil.
- **Investments in development** amounted to 6 million euros. The largest investments were made in electricity network connections for new customers at VKG Elektrivõrgud (0.4 million euros), in the projects of VKG Energia (0.4 million euros) and the projects of VKG Oil (0.2 million euros).
- **Investments in protecting the environment and ensuring safety** totalled 0.9 million euros, most of which was spent on various environmental projects conducted at VKG Oil (0.6 million euros) and VKG Energia (0.2 million euros).

In 2021, we are planning to invest 29 million euros, which includes the investments postponed in 2020 and funding for preparations for a major one-off investment in the renovation of Petroter I in 2022 because the plant has been in operation for more than 10 years.

FINANCING

VKG repaid the banks loan principal of 21 million euros in 2020 and the outstanding year-end loan balance decreased to 96.3 million euros. In addition, the group repaid other borrowings of 13.4 million euros. As a result, the ratio of borrowings to total assets dropped to 28%. Out of the investments made in 2020, 91% was financed with the group's own cash flow and 9% with new leases. The following table summarises the changes in borrowings:

Borrowings as at 31 December (€ million)	2018	2019	2020
Syndicated loan	126.3	117.3	96.0
EBRD loan	13.3	0.0	0.0
Other borrowings	18.3	19.6	4.8
TOTAL	157.9	136.9	100.8

LEGAL DISPUTES

At the reporting date, the VKG group was involved in a civil lawsuit with Enefit Kaevandused AS related to an oil shale supply contract signed in 2013. In the dispute, VKG Oil AS is claiming compensation for price discrimination and Enefit Kaevandused AS is claiming compensation for loss of revenue due to early termination of the contract. At the request of Enefit Kaevandused AS, the court has declared the proceedings closed to the public and further substantive information may not be disclosed.

There have been the following developments in the matter:

- On 15 January 2020, Tartu Circuit Court delivered its judgment by which it granted the claim filed by VKG against Enefit Kaevandused AS in part and dismissed the claim filed by Enefit Kaevandused AS in full.
- On 14 February 2020, Enefit Kaevandused AS filed an appeal in cassation to the Supreme Court.
- On 13 November 2020, the Supreme Court upheld the appeal filed by Enefit Kaevandused AS and referred the civil case back to Tartu Circuit Court.
- At the reporting date, proceedings in the case were pending before Tartu Circuit Court.

After the reporting period, on 21 May 2021, Tartu Circuit Court delivered a new judgment in the civil case by which it again granted the claim filed by VKG against Enefit Kaevandused AS in part and dismissed the claim filed by Enefit Kaevandused AS in full. The judgement can be appealed to the Supreme Court within 30 days. Therefore, at the date this report is authorised for issue, the case cannot yet be considered closed.

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT

The global challenges to sustainable development and the sustainable development goals outlined by the UN highlight the importance of sustainability and encourage companies to review their current business models. It is clear that a company's sustainability and competitiveness increasingly depend on its ability to respond to global environmental, social and governance trends (ESG objectives).

VKG's sustainable development priorities

Increasing the efficiency of core business	Supporting external initiatives and membership of associations	Guiding principles
<ul style="list-style-type: none"> • Production security and safety of the workplace • Minimisation of environmental impacts • Energy efficiency and conservation • Development of employee potential • Support of regional development 	<ul style="list-style-type: none"> • We share the principles of the UN Global Compact • Our sustainable development goals and activities are linked to the UN sustainable development goals • We take into account the Paris Climate Agreement and the EU 2050 climate neutrality goals • We are members of the following organisations: <ul style="list-style-type: none"> - Responsible Business Forum - Responsible Care - UN Global Compact - Global Reporting Initiative 	<ul style="list-style-type: none"> • Openness and transparency • Honesty and integrity • Responsible behaviour • Compliance with international standards

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.

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

The following organisational values and principles support our sustainable development:

- Safety of people, the environment and assets
- A work environment based on mutual respect
- Consideration and respect for colleagues
- Equal, clear and reasonable requirements for all business partners and compliance with high business ethics
- Responsible approach to assets
- Zero tolerance for corruption, conflicts of interest and use of inside information

Cooperation with stakeholders

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

Cooperation with stakeholders is aimed at achieving the sustainable development goals and mapping the expectations and common interests of all parties. We have identified a number of stakeholder groups whose interests are materially related to our activities and may have a significant impact on the achievement of our strategic goals.

Main stakeholder groups	Principles of cooperation	Main mechanisms for cooperation
<ul style="list-style-type: none"> • local community • employees • the state and local governments • shareholders • customers • suppliers and business partners • NGOs, civil society organisations • professional associations 	<ul style="list-style-type: none"> • respect for stakeholder interests • constructive collaboration • transparency of information concerning the group's activities • regular cooperation • honouring of agreements 	<ul style="list-style-type: none"> • business contacts, contracts, agreements and arrangements • business meetings and presentations • the group's communication system • public hearings • joint working groups • inviting and studying the opinions of employees and customers • membership of social and professional associations • conferences and round tables • reporting

Supporting the local community – principles and projects

Our priority is to support Ida-Viru county and the activities of its organisations and people. We take a great interest in the development of the region by maintaining strong relations with the local authorities (particularly the town of Kohtla-Järve and the Lüganuse rural municipality) as well as people.

Viru Keemia Grupp supports non-profit associations and / or organisations that operate in Estonia and whose area of interest is primarily Ida-Viru county. VKG supports sports, culture and education initiatives and contributes to the improvement of local life through the volunteer work of its employees (communal events at Kiikla children's home, cooperation with the blood bank, etc.). We are also interested in participating in long-term community projects (including in partnership with other organisations), which are aimed at developing and improving the local environment.

The group has launched a series of initiatives designed to improve life in the region: Five-school Science Competition, Jõhvi Ballet Festival (in cooperation with Jõhvi Concert Hall), educational projects such as STEM, and Miners' Day and Chemists' Day celebrations. Instead of making business gifts, we alternately make an annual donation to the children's ward and the maternity ward of Ida-Viru Central Hospital. As a rule, the donations are used either to purchase medical equipment or improve hospital facilities.

Further information about the group's activities in this area can be found in the *Social responsibility and sustainable development report 2019* (prepared in accordance with the global sustainability reporting standard GRI G3). The 2020 report will be released in the third quarter.

Anti-corruption measures

Fighting corruption has always been among the VKG group's 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 a zero tolerance policy towards corruption and bribery.
- **Accepting a bribe in selecting suppliers and business partners** – The group 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** – The group 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 its 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) or 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 issues, which is in compliance with the environmental requirements of the EU and Estonian legislation as well as the best available techniques (BAT) reference documents. Although all our production entities meet all applicable environmental requirements, VKG continues to seek new opportunities for optimising processes and reducing its production footprint. VKG's objective is to add maximum value to oil shale by fully utilising the potential of the resource, and thus minimising the environmental impact per unit of processed oil shale.

Our environmental activities in 2020 were driven by the European Green Deal on which the Estonian government also presented its positions. VKG contributed to the forming of positions by giving input from the shale oil sector, which was taken into account in part in drafting the final document. We also participated to various EU initiatives, including the drafting of the Climate Law, the Carbon Border Adjustment Mechanism, planned changes to the EU Emissions Trading System, etc.

In reducing the group's environmental footprint, our main focus areas in 2020 were as follows:

- **Reducing odour emissions** – We are the largest shale oil producer in Estonia and thus our business affects both the surrounding environment and the local community. We make every effort to minimise the environmental impacts of our production operations. A programme launched in 2018 to reduce odour emissions continued in 2020 with carrying out the last measurements of odour emission levels to evaluate the outcomes of measures applied and conducting a stocktaking of sources of odour emissions.
- **Greenhouse gases** – We continued developing a methodology for measuring the carbon footprint. Work on the methodology helps seek opportunities to reduce the environmental footprint of shale oil production. We also carried out a chiller project, which included installing five chiller systems at VKG Oil: three on the semi-coke pipeline and two on the distillation equipment. As a result, VKG Energia's annual CO₂ emissions decreased by almost 12,000 tonnes. The European Commission approved the application of VKG Oil's Petroter plant for the allocation of additional free emission allowances. The application was filed because a change made to the production process improved the installation's production efficiency by more than 15%.
- **Mining waste** – Applying the principles of circular economy is a priority which ensures the most efficient use of resources. All the waste rock generated at the Ojamaa mine was recycled (none was stored). Nearly 1.75 million tonnes of waste rock was reused in 2020.
- **Elimination of residual pollution** – A project for the liquidation of residual pollution on premises of the former Kohtla-Nõmme tyre plant was launched. In the framework of the project, around 14,000 m³ of heavily polluted soil and 100 m³ of oil residues were removed from the premises. VKG contributed by depositing hazardous waste in compliance with applicable environmental requirements in its storage area.

Investments in environmental projects and operational reliability and efficiency totalled 4 million euros in 2020, including 0.9 million euros invested directly in reducing environmental impacts.

The most important activities in 2021 include participating in the formulation of Estonia's position on the climate agreement framework, expanding the Ojamaa mine, carrying out an environmental impact assessment in the Uus-Kiviõli mining area, and participating in a working group tasked with identifying the best possible technology for shale oil production. The priority in the day-to-day environmental work is to renew the integrated environmental permits of the group's three largest production units. Our future development and environmental activities will continue to be focused on efficiency, reuse of waste, reduction of emissions to air and projects related to the climate neutrality policy.

EMPLOYEES

VKG with its 1,612 employees is one of the largest employers in Ida-Viru county (2019: 1,760 employees). Through suppliers and employees' family members, the group's performance has an indirect impact on the wellbeing of several thousand other people in the region. VKG acknowledges its responsibility in supporting the development of Ida-Viru county. We strive to provide our people with stability and a sense of security about the future. Due to the volatility of the oil market, however, it is not always possible to achieve this.

Our employees are qualified and innovative professionals who are loyal and committed to their job. Our employees' average length of service is 10 years and the longest-serving employee has been with us for 54 years. At the end of December 2020, our workforce comprised 1,237 men and 375 women. Due to the physically demanding nature of the work, the share of male employees is larger.

We continue to implement the policies of the personnel strategy that was adopted in 2018. All our employees contribute, with managers taking the leading role. The ethnic, gender, age and linguistic diversity of our employees sets high requirements in terms of equal treatment, inclusion and communication. Uniform rules of conduct, which are described in the personnel strategy, ensure honest and fair treatment.

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

Our people are highly qualified and trained, experienced and eager to learn. In 2020, 11 employees of the group graduated from the Viru College of Tallinn University of Technology.

Together we can implement more innovative ideas, make our plants smarter and create a more environmentally friendly environment for the people of Ida-Viru county, which is the basis for the group's sustainable business.

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

Group entity	Headcount at 31 December 2018	Headcount at 31 December 2019	Headcount at 31 December 2020
Viru Keemia Grupp AS	94	94	89
VKG Kaevandused OÜ	536	524	500
VKG Oil AS	678	677	626
VKG Energia OÜ	115	109	99
VKG Soojus AS	19	17	13
Viru RMT OÜ	169	172	125
VKG Logistika OÜ	108	124	123
VKG Elektrivõrgud OÜ	42	43	37
TOTAL	1,761	1,760	1,612

SUPERVISORY BOARD AND MANAGEMENT BOARD

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

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

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

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

CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(In euros)	Note	31 December 2020	31 December 2019 adjusted	1 January 2019 adjusted
Cash and cash equivalents	2	115,202,928	90,593,497	50,251,926
Derivative financial assets	3	167,228	0	8,913,918
Trade receivables	4	21,012,150	21,557,522	14,318,750
Other receivables	4	267,197	1,350,790	1,715,114
Prepayments	4	253,487	161,357	144,947
Inventories	5	22,033,760	36,156,116	33,646,862
Total current assets		158,936,750	149,819,282	108,991,517
Long-term receivables		362,286	362,286	0
Derivative financial assets		0	0	1,047,596
Property, plant and equipment	6	484,149,535	544,663,272	587,082,747
Intangible assets	7	25,985,776	23,684,119	25,004,701
Investment property		896,820	270,691	221,556
Total non-current assets		511,394,417	568,980,368	613,356,600
Total assets		670,331,167	718,799,650	722,348,117
Borrowings	8	23,375,327	37,129,882	141,422,248
Advances received		124,560	3,094,321	112,394
Trade payables		6,383,047	7,620,887	13,240,086
Taxes payable	23	5,285,314	8,224,212	7,534,628
Accrued expenses	9	7,099,030	8,561,598	6,945,682
Government grants	10	6,481,905	136,537	1,919,202
Provisions	11	36,761	7,943,052	981,158
Deferred income	12	393,018	330,746	313,747
Derivative financial liabilities	3	2,256,226	3,598,392	0
Total current liabilities		51,435,188	76,639,627	172,469,145
Borrowings	8	77,397,136	99,353,965	16,512,392
Government grants	10	4,345,771	7,834,291	6,625,606
Provisions	11	4,758,426	4,673,801	4,590,622
Deferred income	12	7,750,627	7,615,377	7,455,001
Other liabilities		4,732,430	4,742,736	3,890,054
Deferred tax liability	23	3,206,395	4,656,975	5,598,835
Total non-current liabilities		102,190,785	128,877,145	44,672,510
Total liabilities		153,625,973	205,516,772	217,141,655
Share capital	13	6,391,164	6,391,164	6,391,164
Reserves	14	134,063,134	168,824,577	220,207,463
Retained earnings		388,398,896	350,215,137	278,607,835
Equity attributable to owners of the parent		528,853,194	525,430,878	505,206,462
Own shares		-12,148,000	-12,148,000	0
Total equity		516,705,194	513,282,878	505,206,462
Total liabilities and equity		670,331,167	718,799,650	722,348,117

CONSOLIDATED INCOME STATEMENT

(In euros)	Note	2020	2019 adjusted
Revenue	15	207,841,486	256,762,706
Cost of sales	16	-216,077,420	-215,742,664
Gross loss/profit		-8,235,934	41,020,042
Marketing and distribution expenses	17	-5,547,986	-5,304,386
Administrative expenses	18	-11,178,550	-11,123,050
Other income	19	40,942,329	20,594,831
Other expenses	20	-1,231,619	-2,140,173
Operating profit		14,748,240	43,047,264
Finance income	21	203,029	192,770
Finance costs	21	-4,626,934	-6,269,538
Profit before income tax		10,324,335	36,970,496
Income tax expense	23	-244,186	-293,065
Profit for the year		10,080,149	36,677,431

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(In euros)	Note	2020	2019 adjusted
Profit for the year		10,080,149	36,677,431
Other comprehensive income			
<u>Items of other comprehensive income that may be reclassified subsequently to profit or loss</u>			
Cash flow hedges – effective portion of changes in fair value		13,010,182	-18,912,147
Cash flow hedges – reclassification to revenue		-11,668,015	5,352,240
Total other comprehensive income/expense		1,342,167	-13,559,907
Total comprehensive income for the year		11,422,316	23,117,524

CONSOLIDATED STATEMENT OF CASH FLOWS

(In euros)		2020	2019 adjusted
Profit for the year		10,080,149	36,677,431
Adjustments for:			
Depreciation, amortisation and impairment losses		74,769,336	73,843,939
Gain receivable on derivative instruments		-53,212	0
Recognition and adjustment of provisions	11	93,921	9,008,452
Accrued finance income and costs	21	4,242,859	5,076,823
Loss on disposal of non-current assets		151,729	266,558
Recognition and reversal of inventory write-downs	5	579,309	889,676
Recognition of deferred connection charges as income	12	-340,152	-324,846
Other adjustments	23	244,186	293,065
Total adjustments		79,687,976	89,053,667
Change in receivables and prepayments		1,411,403	-6,911,194
Change in inventories		13,555,796	-3,529,656
Change in payables and advances received		-15,073,236	4,383,247
Net cash from operating activities		89,662,088	119,673,495
Cash flows from investing activities			
Purchase and improvement of property, plant and equipment	6	-13,776,563	-28,316,086
Purchase of intangible assets	7	-350,518	-1,634,673
Purchase and improvement of investment property		0	-49,135
Proceeds from sale of non-current assets		174,083	102,522
Initial lease payments	24	-145,831	-88,210
Loans provided		0	-362,286
Interest received		202,480	117,050
Proceeds from lease payments received	24	88,305	63,929
Connection charges received	12	552,825	816,196
Net cash used in investing activities		-13,255,219	-29,350,693
Cash flows from financing activities			
Loans received		0	4,001,148
Repayments of loans received		-34,420,277	-26,275,396
Payments of lease principal	24	-2,826,010	-2,278,074
Interest paid on loans		-4,762,423	-8,736,002
Interest paid on lease liabilities	21	-93,962	-109,982
Dividend paid	13	-8,000,000	-3,200,000
Corporate income tax paid	23	-1,694,766	-1,234,925
Repurchase of own shares		0	-12,148,000
Net cash used in financing activities		-51,797,438	-49,981,231
Net cash flow		24,609,431	40,341,571
Cash and cash equivalents at beginning of year	2	90,593,497	50,251,926
Increase in cash and cash equivalents		24,609,431	40,341,571
Cash and cash equivalents at end of year	2	115,202,928	90,593,497

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(In euros)	Equity attributable to owners of the parent					Total equity attributable to owners of the parent	Own shares	Total equity
	Share capital	Statutory capital reserve	Hedge reserve	Revaluation reserve	Retained earnings			
Balance at 31 December 2018	6,391,164	639,116	9,961,514	209,606,833	284,206,670	510,805,297	0	510,805,297
Deferred tax adjustment	0	0	0	0	-5,598,835	-5,598,835	0	-5,598,835
Adjusted balance at 1 January 2019¹	6,391,164	639,116	9,961,514	209,606,833	278,607,835	505,206,462		505,206,462
Profit for the year	0	0	0	0	36,677,431	36,677,431	0	36,677,431
Other comprehensive expense	0	0	-13,559,907	0	0	-13,559,907	0	-13,559,907
Total comprehensive income for the year	0	0	-13,559,907	0	36,677,431	23,117,524	0	23,117,524
Changes in reserves (note 14)	0	0	0	-37,822,979	38,129,871	306,892	0	306,892
Dividend distribution (note 13)	0	0	0	0	-3,200,000	-3,200,000	0	-3,200,000
Other changes recognised directly in equity	0	0	0	0	0	0	-12,148,000	-12,148,000
Balance at 31 December 2019	6,391,164	639,116	-3,598,393	171,783,854	350,215,137	525,430,878	-12,148,000	513,282,878
Profit for the year	0	0	0	0	10,080,149	10,080,149	0	10,080,149
Other comprehensive income	0	0	1,342,167	0	0	1,342,167	0	1,342,167
Total comprehensive income for the year	0	0	1,342,167	0	10,080,149	11,422,316	0	11,422,316
Changes in reserves (note 14)	0	0	0	-36,103,610	36,103,610	0	0	0
Dividend distribution (note 13)	0	0	0	0	-8,000,000	-8,000,000	0	-8,000,000
Balance at 31 December 2020	6,391,164	639,116	-2,256,226	135,680,244	388,398,896	528,853,194	-12,148,000	516,705,194

¹ Recognition of deferred tax liabilities was retrospectively adjusted in 2020. Further information about deferred tax liabilities is provided in note 1.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

General information

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

The group employed, on average, 1,625 people in 2020 of whom 93 were employed at the parent. The corresponding figures for 2019 were 1,792 and 111.

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

Note 1. Significant accounting policies

Basis of preparation

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

The consolidated financial statements of Viru Keemia Grupp AS (hereafter also referred to as the 'parent') and its subsidiaries (together referred to as the 'group') have been prepared on the historical cost basis unless described otherwise in these accounting policies.

The management board of Viru Keemia Grupp AS authorised these consolidated financial statements for issue on 31 May 2021. Under the Estonian Commercial Code, the annual report, which has been prepared by the management board and approved by the supervisory board, must also be approved by the general meeting. The consolidated financial statements are part of the annual report that needs to be approved by the shareholders and they serve as a basis for adopting the profit allocation resolution. Shareholders may decide not to approve the annual report, which has been prepared by the management board and approved by the supervisory board, and may demand that a new annual report be prepared.

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

Changes in accounting policies and presentation of information

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

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

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

When 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.

Changes in accounting policies

The group has applied IAS 12 *Income Taxes* for the first time retrospectively from 1 January 2019. The effects of the application of IAS 12 on the group's financial statements as at 1 January 2019 is described below.

Deferred tax

Consistent with the decision of the IFRS Interpretations Committee, a change was made to the accounting for deferred tax on investments in subsidiaries domiciled in countries (e.g. Estonia and Latvia) where the traditional profit-based tax regime has been replaced by a distribution-based tax regime and corporate income tax is not payable when profit is earned but when it is distributed. In accordance with IAS 12.52A and 57A, in distribution-based tax regimes no current or deferred tax liability is recognised in respect of undistributed profits until a liability to pay dividends is recognised. In line with Estonian market practice, this accounting policy was consistently applied to the group's undistributed profits, regardless of whether they were retained in the parent or the subsidiaries.

In June 2020, IFRS Interpretation Committee (IFRIC) made a decision where it concluded that the principles set out in IAS 12.52A and 57A apply to the parent company only and not to the subsidiaries. Instead, income tax in respect of any undistributed profits in subsidiaries has to be recognised in line with the principles described in IAS 12.39-40. According to those principles, a deferred tax liability is to be recognised in respect of such undistributed profits, unless it is probable that they will not be distributed to the parent in the foreseeable future.

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.

Effect of the adjustment on the consolidated financial statements (FS)

(In euros)	Original balance in FS 2019	Change	Adjusted balance in FS 2020
Effect on consolidated statement of financial position as at 1 January 2019			
Deferred tax liability	0	5,598,835	5,598,835
Retained earnings	284,206,670	-5,598,835	278,607,835
Effect on consolidated statement of financial position as at 31 December 2019			
Deferred tax liability	0	4,656,975	4,656,975
Retained earnings	354,872,112	-4,656,975	350,215,137
Effect on consolidated income statement for 2019			
Income tax expense	-1,234,925	941,860	-293,065
Total effect on consolidated income statement	-1,234,925	941,860	-293,065

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 2020 and have therefore not been applied in preparing these consolidated financial statements. The group plans to adopt these pronouncements when they become effective.

Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 – Interest Rate Benchmark Reform (IBOR) (Phase two)

Effective for annual periods beginning on or after 1 January 2021; to be applied prospectively. Early application is permitted.

The amendments address issues that might affect financial reporting as a result of the interest rate benchmark reform, including the effects of changes to contractual cash flows or hedging relationships arising from the replacement of an interest rate benchmark with an alternative benchmark rate. The amendments provide practical relief from certain requirements in IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 relating to:

- changes in the basis for determining the contractual cash flows of financial assets, financial liabilities and lease liabilities; and
- hedge accounting.

Change in the basis for determining cash flows:

The amendments will require the group to account for a change in the basis for determining the contractual cash flows of a financial asset or financial liability that is required by interest rate benchmark reform by updating the effective interest rate of the financial asset or financial liability.

Hedge accounting:

The amendments provide exceptions to the hedge accounting requirements in the following areas:

- Allow amendment of the designation of a hedging relationship to reflect changes that are required by the reform. This amendment will not result in a discontinuation of the hedge or designation of a new hedging relationship.
- When a hedged item in a cash flow hedge is amended to reflect the changes that are required by the reform, the amount accumulated in the cash flow hedge reserve will be deemed to be based on the alternative benchmark rate on which the hedged future cash flows are determined.
- When a group of items is designated as a hedged item and an item in the group is amended to reflect the changes that are required by the reform, the hedged items are allocated to sub-groups based on the benchmark rates being hedged.
- If an entity reasonably expects that an alternative benchmark rate will be separately identifiable within a period of 24 months, it can designate the rate as a non-contractually specified risk component if it is not separately identifiable at the designation date.

Disclosure

The amendments will require the group to disclose additional information to enable users to understand the effect of interest rate benchmark reform on the group's financial instruments, including information about the group's exposure to risks arising from interest rate benchmark reform and related risk management activities.

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

Amendments to IAS 1 Presentation of Financial Statements

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

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

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

Amendments to IFRS 10 and IAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The European Commission has decided to defer the endorsement indefinitely.

The amendments clarify that in a transaction involving an associate or joint venture, the extent of gain or loss recognition depends on whether the assets sold or contributed constitute a business, such that:

- a full gain or loss is recognised when a transaction between an investor and its associate or joint venture involves the transfer of an asset or assets which constitute a business (whether it is housed in a subsidiary or not), while

- a partial gain or loss is recognised when a transaction between an investor and its associate or joint venture involves assets that do not constitute a business (even if these assets are housed in a subsidiary).

The group does not expect the amendments to have a material impact on its financial statements when initially applied. However, the quantitative impact of the adoption of the amendments can only be assessed in the year of their initial application as this will depend on the transfers of assets or businesses to the associate or joint venture that take place during that reporting period.

Functional and presentation currency

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

Consolidation

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

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

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

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

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

Acquisitions of subsidiaries are accounted for using the acquisition method.

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

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

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

In the parent's separate statement of financial position (presented in note 30) investments in subsidiaries and associates are accounted for using the equity method whereby an investment is recognised initially at cost, which is 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 <i>Derivative financial instruments and hedge accounting</i> .

Financial liabilities – classification, subsequent measurement and gains and losses

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

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

III. Derecognition

Financial assets

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

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

Financial liabilities

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

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

Offsetting

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

IV. Derivative financial instruments and hedge accounting

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

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

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

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

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

V. Impairment of financial assets

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

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

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

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

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

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

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

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

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

Factoring

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

Factoring with recourse is accounted for as a financing transaction, i.e. as a loan secured with a receivable. The receivable is recognised in the statement of financial position until it is collected. Factoring without recourse is accounted for as the sale of a receivable. Expenses from the sale of receivables are recognised as finance costs or expenses from the write-down of receivables, depending on whether the transaction was performed for cash flow management or mitigating the risk of bad debts.

Inventories

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

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

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

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

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

Investment property

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

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

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

Property, plant and equipment

Initial recognition

Property, plant and equipment are tangible items, including among other items 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 which 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, which is the amount of cash or cash equivalents paid or the fair value of other consideration given to acquire the asset at the time of its acquisition or construction.

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

- a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates;
- b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, such as: labour costs arising directly from the construction or acquisition of the item, the costs of planning and designing the item, the costs of site preparation, initial delivery and handling costs, notary's fees, stamp duties, depreciation of other assets used in the production of the item, installation and assembly costs, the costs of materials consumed and tools used in constructing the item, and the costs of testing whether the item is functioning properly after deducting the net proceeds from selling any items produced while bringing the asset to the intended location and condition (e.g. during testing);
- c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which the group incurred when the item was acquired or built.

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

Assets under construction comprise expenditure incurred in connection with self-constructed assets. If an asset takes a substantial period of time to get ready for its intended use and is financed with a loan (or other debt instrument), borrowing costs that are directly attributable to the construction or production of the asset (including interest calculated using the effective interest method) are capitalised and recognised as part of the cost of that asset.

Capitalisation of borrowing costs commences when the expenditures for the asset are incurred (i.e. the loan has been taken) and the group undertakes activities that are necessary to prepare the asset for its intended use. Capitalisation of borrowing costs ceases when the asset is substantially complete and the group has accepted the asset as ready for its intended use. The cost of a self-constructed asset is determined on the same basis as the cost of a purchased asset. An asset under construction is recognised as an item of property, plant and equipment on the basis of a certificate of acceptance, which outlines the useful life of the asset.

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

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

Depreciation

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

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

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

Land	0%	Not depreciated
Buildings	3-10%	10-33 years
Structures (civil engineering assets)	3-10%	10-33 years
Plant and equipment	7-34%	3-14 years
Vehicles	10-50%	2-10 years
Other items of property, plant and equipment	10-25%	4-10 years

Subsequent costs

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

Parts of some items of property, plant and equipment require replacement after regular intervals. Items of property, plant and equipment may also be acquired to make a less frequently recurring replacement.

Under the recognition principle, the group recognises in the carrying amount of an item of property, plant and equipment the cost of replacing part of such an item when that cost is incurred if the recognition criteria are met. The carrying amount of a part that is replaced is derecognised in accordance with the derecognition policies.

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

Costs of building mine roadways (roadway construction costs)

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

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

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

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

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

Subsequent measurement and use of the revaluation model

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

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

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

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

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

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

- market approach – a valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable assets, liabilities or groups of assets and liabilities (e.g. a business);
- income approach – a valuation technique that converts the future cash flows of an asset, a liability or a group of assets and liabilities to a single discounted amount;
- cost approach – a valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset, adjusted where necessary for physical deterioration and functional and economic obsolescence.

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

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

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

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

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

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

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

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

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

When an item of property, plant and equipment is permanently withdrawn from use or disposed of, the revaluation reserve included in equity in respect of that item is transferred to retained earnings. Changes in the revaluation reserve are described in note 14.

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

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

Impairment

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

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

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

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

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

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

Derecognition

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

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

Intangible assets

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

An intangible asset that is acquired from a third party is initially recognised at cost, which comprises its purchase price and any directly attributable costs of acquisition.

After initial recognition, an intangible asset is carried at cost less any accumulated amortisation and any impairment losses.

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

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

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

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

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

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

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

Greenhouse gas emission allowances

The year 2013 was the first year of phase III in the EU CO₂ emission trading scheme that lasted until 2020. The changes that have taken place in the scheme 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 scheme of the Community. The final quantities of Estonia's emission allowance units allocated free of charge under Article 10a (heating and industrial undertakings) of Directive 2003/87/EC for the period 2013-2020, presented in terms of installations, are available at: http://www.envir.ee/sites/default/files/nimslistee_l6plik_avalik.pdf

Under the new national allocation plan approved by the European Commission the group was allocated free CO₂ emission allowances of 4,944,940 tonnes, of which 1,292,415 tonnes was allocated for 2020 (2019: 1,046,675 tonnes).

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

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

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

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

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

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

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

Allocation, amortisation, write-down and reversal of the write-down of CO₂ 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 CO₂ emission allowances are reported in cash flows from operating activities.

Business combinations and goodwill

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

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

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

Employee benefits

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

Provisions and contingent liabilities

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

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

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

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

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

Leases

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

The group as a lessee

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

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

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

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

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

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

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

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

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

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

The group as a lessor

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

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

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

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

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

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

Revenue

Performance obligations and revenue accounting policies

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

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

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

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

Taxation of income

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

Under Estonian laws, corporate profit for the year is not subject to income tax. The obligation to pay corporate income tax arises upon the distribution of profit and it is recognised as an expense (in profit or loss for the period) when the dividend is declared. Because of the nature of the taxation system, companies registered in Estonia do not have deferred tax assets or liabilities, except for possible deferred tax items related to investments in subsidiaries, associates, joint ventures and branches.

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

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

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

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

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

Foreign currency transactions

A transaction in a foreign currency is translated to 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 to 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 to euros using the exchange rate at the date of the transaction.

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

Government grants

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

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

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

Statement of cash flows

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

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

Statutory capital reserve

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

Events after the reporting period

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

Subsequent events that are indicative of conditions that arose after the reporting date but which will have a significant effect on the result 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 conformity with IFRS EU requires management to make accounting estimates and assumptions, and to exercise judgement on the selection and application of accounting policies.

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

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

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

At the end of the reporting period, the group wrote inventories down by 579 thousand euros (2019: 890 thousand euros) as follows: finished goods by 366 thousand euros (2019: 724 thousand euros), work in progress by 194 thousand euros (2019: 157 thousand euros) and other inventories by 19 thousand euros (2019: 9 thousand euros).

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

An area where management has to make significant and complex judgements and estimates that have a significant effect on the 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 and conditions, historical experience, and future prospects.

The group's experience shows that sometimes the utilisation periods of assets somewhat exceed their estimated useful lives. The carrying amounts and depreciation and amortisation of the assets are presented in notes 6 and 7. If annual depreciation and amortisation rates changed by 10%, annual depreciation and amortisation expense would change by around 7.3 million euros (2019: 7.3 million euros).

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

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

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

No revaluations of property, plant and equipment were carried out in the reporting period or the comparative period. For further information, see note 6.

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

At the end of 2011 the group recognised a provision of 3,200,000 euros for closing the Ojamaa mine in 2038 by applying an annual discount rate of 5%. The provision was recognised by estimating the activities required for closing the mine and the cost of such activities at the date of recognition of the provision. From 2019, the annual discount rate is 2%.

At 31 December 2020, the mine closure provision amounted to 4,722,746 euros and according to management's estimates it will be used for closing the mine in the period 2025-2032.

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

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

Capitalisation of roadway construction costs

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

Note 2. Cash and cash equivalents

(In euros)		
As at 31 December	2020	2019
Current accounts	74,539,928	66,593,220
Term deposits	40,663,000	24,000,000
Cash on hand	0	277
Total cash and cash equivalents	115,202,928	90,593,497

The cash held in the accounts with Luminor Bank, OP Bank, Swedbank and SEB has been pledged as collateral for the loans taken by VKG (see note 8).

Note 3. Derivative financial instruments**Receivables**

(In euros)		
As at 31 December	2020	2019
Derivative financial assets	167,228	0
<i>Of which current derivative financial assets</i>	<i>167,228</i>	<i>0</i>
Total derivative financial assets	167,228	0

Liabilities

(In euros)		
As at 31 December	2020	2019
Derivative financial liabilities	2,256,226	3,598,392
<i>Of which current derivative financial liabilities</i>	<i>2,256,226</i>	<i>3,598,392</i>
Total derivative financial liabilities	2,256,226	3,598,392

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

¹ Liquid fuel sales contracts as at 31 December 2020 have been entered into to hedge the group's exposure to variability in future cash flows. For further information, see note 27.

Note 4. Receivables

(In euros)		
As at 31 December	2020	2019
Trade receivables	21,265,221	21,819,390
Loss allowance	-253,071	-261,868
Total trade receivables	21,012,150	21,557,522
Value added tax	140,079	908,500
Miscellaneous receivables	127,118	442,290
Total other receivables	267,197	1,350,790
Prepayments	253,487	161,357
Total prepayments	253,487	161,357
Total receivables	21,532,834	23,069,669

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

(In euros)		
	2020	2019
Opening balance	-261,868	-510,837
Recovery of items classified as doubtful ¹	59,770	66,497
Items classified as doubtful ¹	-58,921	-55,321
Items written off as uncollectible	7,948	237,793
Closing balance	-253,071	-261,868

¹The difference between the amounts reported in note 18 and this note results from amounts recognised in other income in connection with the recovery of items classified as doubtful or uncollectible in earlier periods.

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

The group's movable property, including receivables, is encumbered with a commercial pledge (see note 8).

Note 5. Inventories

(In euros)		
As at 31 December	2020	2019
Finished goods	2,520,943	9,709,480
Raw materials and consumables	9,826,724	12,201,207
Work in progress	9,615,946	14,014,367
Prepayments to suppliers	0	223,234
Goods purchased for sale	70,147	7,828
Total inventories	22,033,760	36,156,116

Due to the decrease of net realisable value below cost, inventories as at 31 December 2020 were written down by 579 thousand euros (2019: 890 thousand euros).

At 31 December 2020, the carrying amount of finished goods inventories that had been written down was 1,978 thousand euros (31 December 2019: 1,148 thousand euros) and the carrying amount of work in progress that had been written down was 1,392 thousand euros (work in progress was not written down in 2019).

The group's movable property including inventories is encumbered with a commercial pledge (note 8).

Note 6. Property, plant and equipment

(In euros)	Land	Buildings and structures	Plant and equipment	Other items	Assets under construction and pre-payments ¹	Total
Carrying amount at 31 December 2018	2,905,656	270,130,261	306,691,029	654,710	6,701,091	587,082,747
Initial application of IFRS 16	0	174,803	1,641,910	0	0	1,816,713
Additions ¹	0	3,293,796	12,069,270	319,115	13,687,626	29,369,807
Reclassification	0	7,184,192	5,599,544	45,942	-12,829,678	0
Disposals	0	-112,474	-138,751	-1,734	0	-252,959
Depreciation for the year ²	0	-22,299,635	-50,786,421	-266,980	0	-73,353,036
Carrying amount at 31 December 2019	2,905,656	258,370,943	275,076,581	751,053	7,559,039	544,663,272
Additions ¹	0	1,116,675	2,307,704	9,652	9,896,812	13,330,843
Reclassification	0	-1,786,761	15,888,764	-30,234	-14,078,285	-6,516
Disposals	-166	-67,005	-38,503	-1,241	-44,814	-151,729
Depreciation for the year ²	0	-22,861,374	-50,593,891	-231,070	0	-73,686,335
Carrying amount at 31 December 2020	2,905,490	234,772,479	242,640,655	498,160	3,332,752	484,149,535

As at 31 December 2018

Cost	2,905,656	307,500,650	372,438,607	3,946,561	6,701,091	693,492,565
Accumulated depreciation	0	-37,370,389	-65,747,578	-3,291,851	0	-106,409,818

As at 31 December 2019

Cost	2,905,656	318,040,967	391,610,580	4,309,884	7,559,039	724,426,126
Accumulated depreciation	0	-59,670,024	-116,533,999	-3,558,831	0	-179,762,854

As at 31 December 2020

Cost	2,905,490	318,408,957	398,091,918	2,818,603	3,332,753	725,557,722
Accumulated depreciation	0	-83,636,480	-155,451,263	-2,320,443	0	-241,408,186

¹ Assets under construction

At the year-end, assets under construction were 3,333 thousand euros (2019: 7,559 thousand euros).

The group's binding commitments for the acquisition of property, plant and equipment in subsequent periods totalled 4,700 thousand euros at 31 December 2020 (31 December 2019: 3,684 thousand euros).

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

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

Other capitalised costs consisted of labour costs of 1,524 thousand euros (2019: 1,693 thousand euros) and depreciation expense of 438 thousand euros (2019: 534 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 446 thousand euros, which is attributable to non-cash transactions. The changes in payables reported in operating cash flows in the statement of cash flows have been adjusted for non-cash transactions (including acquisitions through leases and reclassifications between asset classes). The change in payables in the statement of cash flows has also been adjusted for amounts payable to suppliers of items of property, plant and equipment as at the end of the reporting period. Payables to suppliers of items of property, plant and equipment totalled 280 thousand euros at 31 December 2020 (31 December 2019: 1,038 thousand euros).

Other information

² Notes 16-18 include depreciation expense, which has been allocated to different income statement line items. The total amount of depreciation and amortisation expense presented in those notes differs from depreciation for the year presented in note 6 by 440 thousand euros (2019: 1,559 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.

The carrying amounts of assets pledged as collateral for borrowings are disclosed in note 8.

Fully depreciated items

The cost of fully depreciated items of property, plant and equipment that were still in use at 31 December 2020 was 20,100 thousand euros (31 December 2019: 11,920 thousand euros).

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

(In euros)

Business line	Oil shale processing				Regulated business				Other activities				Total
Asset subclass	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	
Asset class	Buildings and structures		Plant and equipment		Buildings and structures		Plant and equipment		Buildings and structures		Plant and equipment		Total
Fair value at 31 December 2019	60,823,633	143,475,083	911,044	244,967,851	5,746,874	35,386,323	119,867	22,014,761	3,375,285	9,563,805	5,992,713	1,070,285	533,447,524
Gains and losses for the period													
Depreciation (in profit or loss)	-3,733,416	-16,100,043	-224,662	-47,588,609	-281,509	-1,764,804	-34,100	-1,584,541	-370,562	-611,185	-933,719	-228,114	-73,455,265
Additions, disposals and other movements													
Additions	115,592	1,061,696	114,362	727,996	52,720	561,215	18,892	589,055	0	0	158,824	24,027	3,424,379
Reclassifications	685,693	-6,938,391	82,067	16,431,935	0	2,962,922	-12,933	60,950	829,760	-1,208	-594,279	1,370,652	14,102,003
Disposals	-15,723	0	-53,234	-65,103	-27,843	-23,439	-2,155	-109,677	0	0	-577,942	-5,557	-105,508
Fair value at 31 December 2020	57,875,779	121,498,345	829,577	214,474,070	5,490,242	37,122,217	89,571	20,970,548	3,834,483	8,951,412	4,045,597	2,231,293	477,413,133

(In euros)

Business line	Oil shale processing				Regulated business				Other activities				Total
Asset subclass	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	Buildings	Structures (civil engineering assets)	Vehicles	Other plant and equipment	
Asset class	Buildings and structures		Plant and equipment		Buildings and structures		Plant and equipment		Buildings and structures		Plant and equipment		Total
Fair value at 31 December 2018	64,193,656	154,177,347	549,955	276,739,267	5,986,914	34,317,991	39,433	22,503,423	3,454,897	9,592,813	4,149,810	1,115,784	576,821,290
Initial application of IFRS 16	0	0	499,247	0	0	0	75,435	0	174,803	0	1,067,228	0	1,816,713
Gains and losses for the period													
Depreciation (in profit or loss)	-4,215,540	-15,173,102	-563,160	-47,599,173	-282,250	-1,695,573	-18,042	-1,585,521	-673,219	-402,042	-800,348	-78,086	-73,086,056
Additions, disposals and other movements													
Additions	558,227	1,525,764	317,876	9,374,427	0	913,853	23,041	978,533	295,951	0	1,364,550	10,844	15,363,066
Reclassifications	287,290	3,011,595	113,788	6,521,611	42,210	1,895,805	0	129,012	122,853	373,234	260,000	26,338	12,783,736
Disposals	0	-66,521	-6,662	-68,281	0	-45,753	0	-10,686	0	-200	-48,527	-4,595	-251,225
Fair value at 31 December 2019	60,823,633	143,475,083	911,044	244,967,851	5,746,874	35,386,323	119,867	22,014,761	3,375,285	9,563,805	5,992,713	1,070,285	533,447,524

Measurement of fair value

The group's management measured the fair values of the items of property, plant and equipment of group entities involved in the regulated business and other activities as at the end of the reporting period and concluded that 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 2020.

The fair values of the items of property, plant and equipment of entities involved in oil shale processing depend greatly on the projections of the curve of future global liquid fuel prices. Future sales prices of liquid fuels are projected based on the forecasts of reliable independent sources and management's estimates. The fair values of the items of property, plant and equipment of VKG Kaevandused OÜ are measured using the same assumptions about future liquid fuels prices as those applied in the case of VKG Oil AS.

The fair values of the items of property, plant and equipment of entities involved in oil shale processing are measured using the budgets prepared by the group's management and the assumption that transactions between group entities are performed on the same terms as transactions between independent market participants. The results of a test conducted during the period reflected that the carrying amounts of the items of property, plant and equipment corresponded to their fair values and there was no need to carry out a revaluation in 2020.

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 2020¹

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.	<ol style="list-style-type: none"> 1) The future cash flows of VKG Oil AS were calculated for four different future oil price scenarios which were assigned different weights based on management's assessment of their probability. 2) Out of the future price scenarios one was based on a Refinitiv monthly oil market poll, one was based on Brent forward prices at the date of the test and two were based on management's construction of possible future developments. 3) The forecasts were prepared assuming that all Petroter technology-based plants and 2 Kiviter technology-based plants (GGJ-4 and GGJ-5) would be operating but 1 Kiviter technology-based plant (1000t GG) would be idle due to absence of the required oil shale. 4) The future cash flows of VKG Kaevandused OÜ were based on contracts in force but it was assumed that in 2027 sales prices would increase by 5%. 5) The cash flows of VKG Energia OÜ are influenced by contracts in force and the market prices of electricity and CO₂ emission allowances. The calculations were made based on forward prices as at the date of the test. 6) For CO₂ emission allowances allocated free of charge, it was assumed that in 2021-2030 the refining sector will remain on the carbon leakage list of sectors whose access to free emission allowances will decrease by 2.2% per year until 2025 and 5% per year in 2026-2030. 7) The discount rates applied were 7.95% (2019: 9.5%) for VKG Kaevandused OÜ and VKG Oil AS and 7.5% (2019: 8.5%) for VKG Energia OÜ 8) The USD/EUR exchange rate applied was 1.20. 	<p>The fair values of the property, plant and equipment of VKG Oil AS are the most sensitive to forecasts of the future price of Brent crude oil. The price of Brent crude is highly volatile. Thus, in 2018 the group began to curb the volatility of fair value with the multiple scenario approach whereby management assesses the probability of different scenarios and assigns them different, probability-based weights. The baseline scenario, which was assigned the highest, 40% probability, was based on the median outcome of the Reuters oil market poll conducted in March 2021 according to which the next 5 years' average price expectation for Brent is 62 \$/bbl. Another stability scenario, which was assigned a 30% probability, was based on the Brent crude oil forward curve at the time of the test, which assumes that within 5 years the average price of Brent crude will drop from 66 to 58 \$/bbl. The more extreme negative and positive growth forecasts, which were assigned a 20% and 10% probability weight, respectively, were constructed by management. According to the negative growth scenario, the average price of Brent crude is 66 \$/bbl in 2021, 55 \$/bbl in the next four years and will drop thereafter at the rate of 2% per year due to the decline in the demand for fossil fuels. The positive growth scenario was based on the swap price for 2021 of 66 \$/bbl and it was assumed that the price will remain stable. The fair values of the assets are also strongly affected by the discount rate applied, the EUR/USD exchange rate and the company's production volume. Based on the analysis performed, management concluded that the assets are carried in the statement of financial position at their fair values. An increase in the discount rate or the EUR/USD exchange rate and a decrease in production volume would have a negative impact on fair value.</p> <p>The mining operations of VKG Kaevandused OÜ 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.</p> <p>The fair values of the property, plant and equipment of VKG Energia OÜ depend heavily on the price of CO₂ emission allowances and the decrease in the quantity of allowances allocated in the future. An increase in the price and a decrease in the quantity of allowances allocated would lower the fair value of property, plant and equipment. The fair values of the assets are also influenced by the electricity price, the discount rate applied and the heat sales volume. An increase in the discount rate and a decrease in the heat sales volume or the electricity price would lower the fair value of property, plant and equipment.</p>

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 2020

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.	<p>Since the assets are of a specialised nature, the group did not use uniform inputs to measure the fair values of all asset classes.</p> <p>The cost of a new asset of equal utility at the date of valuation. Each individual asset has its own specific cost.</p> <p>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.</p>	<p>The fair value of an asset would increase (decrease) if:</p> <ul style="list-style-type: none"> - the cost of a new asset of equal utility increased (decreased); - adjustment for deterioration and obsolescence decreased (increased).

Determination of the fair value of vehicles (except assets used in the provision of electricity distribution service) of group companies engaged in other business activities as at 31 December 2020

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

Determination of the fair value of buildings, structures, vehicles and other plant and equipment used in the provision of electricity distribution service as at 31 December 2020

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

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

(In euros)	Land	Buildings and structures	Plant and equipment	Other items	Assets under construction and prepayments	Total
As at 31 December 2019	2,905,656	200,643,334	167,566,051	751,053	7,559,039	379,425,133
As at 31 December 2020	2,905,490	149,859,554	191,879,028	498,160	3,332,752	348,474,985

Note 7. Intangible assets

(In euros)	CO ₂ emission allowances ¹	Mining licence ²	Service concessions arrangements ³	Other ⁴	Total
Carrying amount at 31 December 2018	6,395,028	16,564,256	951,178	1,094,239	25,004,701
Additions	19,278,547	0	0	1,621,073 ⁴	20,899,620
Amortisation for the year	-19,867,504	-897,268	-31,709	-96,093	-20,892,574
Sales	-1,327,628	0	0	0	-1,327,628
Carrying amount at 31 December 2019	4,478,443	15,666,988	919,469	2,619,219	23,684,119
Additions	34,904,452			369,368	35,273,820
Amortisation for the year	-31,905,938	-904,430	-31,695	-146,873	-32,988,936
Other adjustments	0	0	0	-17,901	-17,901
Carrying amount at 31 December 2020	7,511,631	14,762,558	887,774	2,823,813	25,985,776

As at 31 December 2018

Cost	6,395,028	22,382,692	1,109,807	3,661,470	33,548,997
Accumulated amortisation and impairment losses	-	-5,818,436	-158,629	-2,567,231	-8,544,296

As at 31 December 2019

Cost	4,478,443	22,382,692	1,109,807	5,282,543	33,253,485
Accumulated amortisation and impairment losses	-	-6,715,704	-190,338	-2,663,324	-9,569,366

As at 31 December 2020

Cost	7,511,631	22,382,692	1,109,807	5,634,010	36,638,140
Accumulated amortisation and impairment losses	-	-7,620,134	-222,033	-2,810,197	-10,652,364

¹The third phase in the EU CO₂ emission trading scheme began in 2013 and lasted until 2020. Under the allocation plan approved by the European Commission, the group was allocated 4,944,940 tonnes of free CO₂ emission allowances of which 1,292,415 tonnes was received in 2020 (2019: 977,294 tonnes) and recognised at the price of 28.94 euros per tonne.

On recognising CO₂ emission allowances received free of charge, the group also recognises a government grant liability that is amortised to income in proportion to the use and write-down of CO₂ emission allowances received free of charge (see note 10).

At the end of the year, the remaining balance of free CO₂ emission allowances allocated to the group under the national allocation plan was 348,599 tonnes (31 December 2019: 795,524 tonnes), which has been recognised in an amount of 7,475,956 euros (31 December 2019: 4,478,443 euros).

Management tested the group's CO₂ emission allowances for impairment at the end of the financial year and did not identify a need for a write-down.

² The group has acquired a licence for mining oil shale at the Sompa mine under an agreement on the exchange of mining licences. The cost of the licence was 17,910,287 euros (licence registration no. KMIN-066, valid until 31 December 2024).

The licence allows mining a specific quantity of oil shale during the term of the licence. Amortisation of the licence began in July 2012 and will end in 2030. Amortisation is charged using the straight-line method.

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

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

The oil shale mining licence has been pledged as security for the group's loans. For further information, see note 8.

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

⁴ The cost includes capitalised labour costs of 150 thousand euros.

Note 8. Borrowings

(In euros)	Current portion	Non-current portion	Total liability	Effective interest rate	Maturity date
Long-term bank loans ¹	20,934,179	75,069,004	96,003,183		
<i>Of which syndicated loan</i>	<i>20,934,179</i>	<i>75,069,004</i>	<i>96,003,183</i>	6 month EURIBOR + 3%	2024
Lease liabilities	2,441,148	2,328,132	4,769,280	1.1% to 2.15%	2022-2025
Total borrowings at 31 December 2020	23,375,327	77,397,136	100,772,463		
<i>Of which repayable:</i>					
<i>Not later than 1 year</i>	<i>23,375,327</i>	<i>0</i>	<i>23,375,327</i>		
<i>Later than 1 and not later than 5 years</i>	<i>0</i>	<i>77,397,136</i>	<i>77,397,136</i>		

(In euros)	Current portion	Non-current portion	Total liability	Effective interest rate	Maturity date
Long-term bank loans ¹	20,934,179	96,003,181	116,937,360		
<i>Of which syndicated loan</i>	<i>20,934,179</i>	<i>96,003,181</i>	<i>116,937,360</i>	6 month EURIBOR + 3%	2024
Lease liabilities	2,795,426	3,350,784	6,146,210	1.1% to 3.2%	2020-2025
Loan from a related party (note 25)	13,400,277	0	13,400,277	9% per year	2019
Total borrowings at 31 December 2019	37,129,882	99,353,965	136,483,847		
<i>Of which repayable:</i>					
<i>Not later than 1 year</i>	<i>37,129,882</i>	<i>0</i>	<i>37,129,882</i>		
<i>Later than 1 and not later than 5 years</i>	<i>0</i>	<i>99,353,965</i>	<i>99,353,965</i>		

¹ The base currency of the bank loans is the euro.
All bank loans are secured with the following collateral:
- a mortgage of 561,276 thousand euros;
- a commercial pledge of 152,165 thousand euros.

In addition, the group has pledged:
- patents, licences;
- the shares in Viru Keemia Grupp AS and its subsidiaries;
- bank accounts with SEB, Swedbank, Luminor Bank and OP Bank.

Carrying amounts of assets pledged as collateral	As at 31 December 2020
Cash and cash equivalents (note 2)	115,202,928
Trade receivables (note 4)	21,012,150
Inventories (note 5)	22,033,760
Property, plant and equipment (note 6)	484,149,535
Mining licence (note 7)	14,762,558
Investment property	896,820
Total	658,057,751

In conformity with the loan agreements, the average cash balance for any period of 20 business days may not be less than 15 million euros. The covenant may affect the group's liquidity as it imposes restrictions on the use of cash.

Note 9. Accrued expenses

(In euros)		
As at 31 December	2020	2019
Payables to employees	6,047,089	5,713,035
Interest payable	8,321	530,648
Payable for realised derivative financial instruments	1,041,120	53,767
Other accrued expenses	2,500	2,264,148 ¹
Total accrued expenses	7,099,030	8,561,598

¹ Other accrued expenses for 2019 include an amount of 1,839,004 euros related to the sale of CO₂ emission allowances.

Note 10. Government grants

(In euros)	CO ₂ emission allowances allocated	Grants related to assets	Total
Carrying amount at 31 December 2019	4,478,443	3,492,385	7,970,828
<i>Of which current portion</i>	388	136,149	136,537
<i>Of which non-current portion</i>	4,478,055	3,356,236	7,834,291
Return of CO ₂ emission allowances sold	1,327,628	0	1,327,628
Allocation of free CO ₂ emission allowances	33,576,824	0	33,576,824
Amortisation (notes 7 and 16)	-31,905,938	0	-31,905,938
Allocation of grants related to assets	0	31,833	31,833
Depreciation of assets acquired with government grants (note 19)	0	-173,499	-173,499
Carrying amount at 31 December 2020¹	7,476,957	3,350,719	10,827,676
<i>Of which current portion</i>	6,326,564	155,341	6,481,905
<i>Of which non-current portion</i>	1,150,393	3,195,378	4,345,771

(In euros)	CO ₂ emission allowances allocated	Grants related to assets	Total
Carrying amount at 31 December 2018	6,395,028	2,149,780	8,544,808
<i>Of which current portion</i>	1,778,710	140,492	1,919,202
<i>Of which non-current portion</i>	4,616,318	2,009,288	6,625,606
Allocation of free CO ₂ emission allowances (note 7)	19,278,547	0	19,278,547
Amortisation (notes 7 and 16)	-19,867,504	0	-19,867,504
Sale of CO ₂ emission allowances	-1,327,628	0	-1,327,628
Allocation of grants related to assets	0	1,446,602	1,446,602
Depreciation of assets acquired with government grants (note 19)	0	-103,997	-103,997
Carrying amount at 31 December 2019¹	4,478,443	3,492,385	7,970,828
<i>Of which current portion</i>	388	136,149	136,537
<i>Of which non-current portion</i>	4,478,055	3,356,236	7,834,291

¹ At the reporting date, the balance of the government grant liability recognised on the recognition of free CO₂ emission allowances allocated to the group under the national allocation plan amounted to 7,476,957 euros (31 December 2019: 4,478,443 euros).

The government grant liability is amortised to income in proportion to the use of the allocated free CO₂ emission allowances. Amortisation of CO₂ emission allowances allocated free of charge that are recognised as intangible assets is recognised in the cost of sales and income from government grants is recognised in other income in the same amount. Therefore, use of CO₂ emission allowances allocated to the group free of charge has no impact on profit or loss for the period.

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

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

Note 11. Provisions

(In euros)	Mine closure provision ¹	Provision for shortfall in CO ₂ emission allowances	Other	Total
As at 31 December 2019	4,629,306	7,905,552	81,995	12,616,853
<i>Of which current</i>	<i>0</i>	<i>7,905,552</i>	<i>37,500</i>	<i>7,943,052</i>
<i>Of which non-current</i>	<i>4,629,306</i>	<i>0</i>	<i>44,495</i>	<i>4,673,801</i>
Use	0	-7,905,552	-10,035	-7,915,587
Discounting	93,440	0	481	93,921
As at 31 December 2020	4,722,746	0	72,441	4,795,187
<i>Of which current</i>	<i>0</i>	<i>0</i>	<i>36,761</i>	<i>36,761</i>
<i>Of which non-current</i>	<i>4,722,746</i>	<i>0</i>	<i>35,680</i>	<i>4,758,426</i>

¹ The mine closure provision has been recognised for closing the Ojamaa mine in the period 2025-2032. Until 1 January 2019, the discount rate of the provision was 5% per year. From 1 January 2019, the discount rate is 2% per year.

Note 12. Deferred income

(In euros)		
As at 31 December	2020	2019
Deferred income:		
Current portion	393,018	330,746
Non-current portion	7,750,627	7,615,377
Total deferred income	8,143,645	7,946,123

The fees charged for connecting to the power and district heating networks are recognised as revenue over the periods in which the energy service is expected to be provided via the connection point. Connection charges received in the reporting period totalled 552,825 euros (2019: 816,196 euros). The amount recognised as revenue was 340,152 euros (2019: 324,846 euros).

Note 13. Share capital

(In euros)

As at 31 December

	2020	2019
Share capital	6,391,164	6,391,164

At the year-end, share capital consisted of 9,999,999 shares without par value (31 December 2019: 9,999,999 shares without par value). The rounded proportionate par value of one share is 0.64 euros.

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

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

In the reporting period, the group distributed a dividend of 8,000,000 euros (2019: 3,200,000 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	38.13%
Alvekor OÜ	24.98%
Ants Laos	19.14%
Sergos Invest OÜ	15.75%
Viru Keemia Grupp AS	2%
Total	100%

Note 14. Reserves

(In euros)		
As at 31 December	2020	2019
Revaluation reserve ¹	135,680,244	171,783,854
Statutory capital reserve ²	639,116	639,116
Hedge reserve ³	-2,256,226	-3,598,393
Total reserves	134,063,134	168,824,577

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 or expense 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 on the accounting policy is provided in note 1.

The revaluation reserve was first recognised at 31 December 2004.

Further information on the revaluation of property, plant and equipment is provided in note 6.

In 2020, 36,103,610 euros of the revaluation reserve was transferred to retained earnings (2019: 37,822,979 euros). The revaluation reserve may not be distributed as dividends.

Revaluation reserve at 31 December 2018	209,606,833
Transfer to retained earnings	-37,822,979
Revaluation reserve at 31 December 2019*	171,783,854
Transfer to retained earnings	-36,103,610
Revaluation reserve at 31 December 2020*	135,680,244

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

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

Note 15. Revenue

(In euros)

Revenue by geographical area	2020	2019
European Union, excluding Estonia	69,805,087	197,222,444
Estonia	66,548,311	54,599,281
Other countries	71,488,088	4,940,981
Total revenue	207,841,486	256,762,706

Timing of revenue recognition**Goods transferred to customers at a point in time**

Sale of self-produced shale oil	170,105,880	214,789,388
Sale of electricity	7,867,537	10,005,273
Sale of district heating and hot water	12,823,401	13,753,719
Sale of district heating and steam	3,740,466	3,377,151
Transmission and distribution of natural gas	132,241	1,721,050
Sale of other products and materials	746,395	1,555,223
Total revenue recognised at a point in time	195,415,920	245,201,804

Goods and services transferred to customers over time

Logistics services	551,389	682,246
Construction of electricity and telecommunication networks	1,742,426	563,483
Transmission and distribution of electricity	7,558,716	7,749,546
Connection to electricity and district heating networks	464,422	381,754
Other services	2,108,613	2,183,873
Total revenue recognised over time	12,425,566	11,560,902
Total revenue from contracts with customers	207,841,486	256,762,706

Balances from contracts with customers

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

	2020	2019
Contract assets	15,763	307,289
Contract liabilities	8,143,645	7,615,377
Total	8,159,408	7,922,666

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 2020, the unsatisfied portion of performance obligations related to the connection charges amounted to 8,065,270 euros (2019: 7,615,377 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 2020, connection charges of 340,152 euros (2019: 324,846 euros) were transferred from contract liabilities to revenue. Information about trade receivables is provided in note 4.

Note 16. Cost of sales

(In euros)	2020	2019
Depreciation, amortisation and impairment losses	-73,089,676	-72,273,054
Personnel expenses (note 22)	-39,774,599	-41,117,234
Raw materials, consumables and goods used	-45,739,999	-39,321,973
Services purchased	-18,280,808	-20,638,403
Pollution charges	-15,867,817	-17,274,028
Amortisation of CO ₂ emission allowances (note 7)	-31,905,938	-19,867,504
Costs of recognising a provision for CO ₂ emission allowances (note 11)	0	-6,974,286
Inventory write-down (note 5)	-579,309	-890,126
Change in inventories of finished goods and work in progress	9,358,893	2,794,566
Other costs	-198,167	-180,621
Total cost of sales	-216,077,420	-215,742,664

Note 17. Marketing and distribution expenses

(In euros)	2020	2019
Services purchased	-4,676,185	-4,546,440
Personnel expenses (note 22)	-626,886	-570,113
Depreciation and amortisation	-51,400	-57,191
Raw materials, consumables and goods used	-188,160	-75,425
Other expenses	-5,355	-55,217
Total marketing and distribution expenses	-5,547,986	-5,304,386

Note 18. Administrative expenses

(In euros)	2020	2019
Personnel expenses (note 22)	-5,972,967	-6,173,577
Services purchased	-3,895,257	-3,079,031
Depreciation and amortisation	-1,190,496	-1,508,797
Raw materials, consumables and goods used	-107,621	-155,253
Doubtful receivables (note 4)	548	13,302
Other expenses	-12,757	-219,694
Total administrative expenses	-11,178,550	-11,123,050

Note 19. Other income

(In euros)	2020	2019
Government grant income from allocation of free CO ₂ emission allowances (note 10)	31,905,938	19,728,324
Foreign exchange gain	1,082	598
Sale of waste metal	631,118	367,911
Government grant income from depreciation of assets (note 10)	173,499	103,996
Late payment interest and penalties	33,564	46,654
Miscellaneous income	8,197,128 ¹	347,349
Total other income	40,942,329	20,594,831

¹ Miscellaneous income includes the reversal of a provision for CO₂ emission allowances at VKG Energia OÜ of 7,937,521 euros.

Note 20. Other expenses

(In euros)	2020	2019
Loss on disposal of non-current assets	-47,731	-268,171
Foreign exchange loss	-966,322	-43,391
Late payment interest and penalties	-14,602	-3,557
Personnel expenses (note 22)	-15,704	-29,862
Professional associations' membership fees	-33,910	-35,768
Write-off of inventories	-10,433	-145,736
Miscellaneous expenses	-142,917	-1,613,688
Total other expenses	-1,231,619	-2,140,173

Note 21. Finance income and costs**Finance income**

(In euros)	2020	2019
Interest income	203,029	118,269
Foreign exchange gain	0	74,501
Total finance income	203,029	192,770

Finance costs

(In euros)	2020	2019
Interest expense on loans	-4,351,925	-5,085,110
Foreign exchange loss	-1,302	-115,541
Unwinding of the discount on non-current provisions (note 11)	-93,921	-92,202
Other finance costs	-85,824	-866,703
Interest expense on lease liabilities related to right-of-use assets (note 24)	-93,962	-109,982
Total finance costs	-4,626,934	-6,269,538

Note 22. Personnel expenses

(In euros)	2020	2019
Employee remuneration	-36,046,978	-37,259,156
<i>Of which remuneration of the management board</i>	<i>-1,479,752</i>	<i>-1,492,221</i>
<i>Of which remuneration of the supervisory board</i>	<i>-60,585</i>	<i>-34,512</i>
Social security charges	-11,657,941	-12,086,078
Unemployment insurance contributions	-271,990	-285,132
Total personnel expenses	-47,976,909	-49,630,366

The group employed, on average, 1,665 people in 2020 (2019: 1,792 people), 93 of whom were employed by the parent, Viru Keemia Grupp AS (2019: 111). During the period, there were 1,635 employees working under employment contracts, 12 members of the management board and 18 people working under contracts for services (2019: 1,731 employees working under employment contracts, 12 members of the management board, and 49 people working under contracts for services).

Personnel expenses are allocated to different income statement line items as set out in notes 7, 16, 17, 18 and 20. The difference for 2020, of 1,587 thousand euros (2019: 1,739 thousand euros) results from the capitalisation of personnel expenses incurred in the production of self-constructed assets (notes 6 and 7).

Note 23. Taxes

(In euros)	2020		2019	
	Receivable	Payable	Receivable	Payable
Prepaid taxes (note 4)	31,977	0	591,010	0
Value added tax	108,102	0	317,490	0
Personal income tax	0	953,215	0	1,024,096
Social security tax	0	1,783,038	0	1,954,196
Corporate income tax	0	10,595	0	1,458,942
Unemployment insurance contributions	0	123,798	0	133,827
Mandatory funded pension contributions	0	78,404	0	90,571
Mining rights fees	0	422,186	0	400,889
Excise duties	0	156,220	0	327,209
Environmental charges	0	1,757,858	0	2,834,482
Deferred tax liability	0	3,177,326	0	3,555,231
Total	140,079	8,462,640	908,500	11,779,443

Income tax expense on dividends:

(In euros)	2020	2019
Income tax rate on dividends:		
20/80	-1,124,999	-1,113,453
14/86	-569,767	-121,472
Deferred tax liability	1,450,580	941,860
Total income tax expense on dividends	-244,186	-293,065

Note 24. Leases

The group as a lessee

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

The group has also entered into leases for which the underlying asset is of low value (the asset, when new, has a value of less than 5,000 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 euros)	Land and buildings	Plant and equipment	Total
Balance at 1 January 2019	174,804	1,641,909	1,816,713
Depreciation for the year	-34,580	-457,027	-491,607
Additions	0	1,680,507	1,680,507
Balance at 31 December 2019	140,224	2,865,389	3,005,613
Depreciation for the year	-43,768	-760,502	-804,270
Additions	58,899	1,499,178	1,558,077
Derecognition	0	-451,470	-451,470
Balance at 31 December 2020	155,355	3,152,595	3,307,950

Amounts recognised in the income statement

(In euros)	2020	2019
All leases under the requirements of IFRS 16		
Interest expense on lease liabilities (note 21)	-62,434	-109,981
Expenses on short-term leases	-393,895	-97,848
Expenses on leases of low-value assets	-685,993	-294,414
Total expenses	-1,142,322	-502,243

The group as a lessor**Finance leases**

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

Operating leases

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

Operating lease income for the period (In euros)	2020	2019
Leases of premises	22,579	23,727
Leases of equipment	40,132	6,135
Leases of other assets	25,594	34,067
Total	88,305	63,929

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

Operating lease payments receivable in subsequent periods under IFRS 16 (In euros)	2020	2019
Not later than 1 year	63,614	49,278
Later than 1 year and not later than 5 years	191,146	154,195
Total	254,760	203,473

Note 25. Related party disclosures

For the purposes of these consolidated financial statements, parties are related if one controls the other or can exert significant influence on the other's operating decisions. Related parties include:

- owners of the parent company;
- other companies belonging to the same group; and
- members of the group's management and supervisory boards and shareholders with a significant ownership interest unless those persons cannot exert significant influence on the group's operating decisions.

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

(In euros)	2020	2019
Transactions with members of the management and supervisory boards and owners		
Purchase of services (remuneration provided under management board members' service contracts)	1,474,252	1,510,175
Purchase of services (remuneration provided to members of the supervisory board)	60,585	34,512
Transactions with companies and persons related to owners of the group		
Purchases of goods and services	45,641	124,844
Repayments of a loan received	13,400,277	0
Lease expenses (note 24)	129,677	284,762
Sales of goods and services	20,334	58,068
Interest expense (note 21)	1,015,071	1,222,775
Other related parties		
Sales of services	0	1,747
Purchases of services	199,885	0
Lease expenses	12,923	0
Receivables from related parties		
Companies related to owners of the group	730	5,679
Other related parties	395	116
Liabilities to related parties		
Loan liability to a company under the control of owners of the group (note 8)	0	13,400,277
Interest liability to a company under the control of owners of the group	0	408,708
Liabilities to members of the management board, owners and parties related to owners	119,622	109,385

Note 26. Investments in subsidiaries

Subsidiary	Domicile	Core business	Ownership interest at 31 Dec 2020	Ownership interest at 31 Dec 2019
VKG Oil AS	Estonia	Production of oil shale chemicals	100%	100%
VKG Logistika OÜ	Estonia	Transport, maintenance and repair services	100%	100%
Viru RMT OÜ	Estonia	Production of metal structures	100%	100%
VKG Kaevandused OÜ	Estonia	Oil shale mining and processing	100%	100%
VKG Elektrivõrgud OÜ	Estonia	Electricity import, purchase, distribution and sale	100%	100%
VKG Soojus AS	Estonia	Production and sale of heat and electricity	100%	100%
VKG Diisel OÜ	Estonia	Development	100%	100%
VKG Energia OÜ	Estonia	Production and sale of heat and electricity	100%	100%

Note 27. Financial risk management**A. Financial instruments by class and category**

Class of financial instruments	Category of financial instruments	Note	Carrying amount	
			31 Dec 2020	31 Dec 2019
Cash and cash equivalents	Amortised cost	2	115,202,928	90,593,497
Derivative financial instruments	Fair value – hedging instrument	3	167,228	0
Trade receivables	Amortised cost	4	21,012,150	21,557,522
Other receivables	Amortised cost	4	127,118	442,290
Loan liabilities	Amortised cost	8	96,003,183	130,337,637
Lease liabilities	Amortised cost	8	4,769,280	6,146,210
Trade payables	Amortised cost		6,383,047	8,507,831
Other liabilities	Amortised cost	9	6,057,910	6,583,003
Payable for realised derivative financial instruments	Amortised cost	9	1,041,120	53,767
Derivative financial instruments (liabilities)	Fair value – hedging instrument	3	2,256,226	3,598,392

B. Fair value

All of the group's financial assets and 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 liabilities are reasonable approximations of their fair values and therefore their fair value has not been disclosed.

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

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

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

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

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

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

C. Financial risk management

Credit risk

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

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

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

(In euros)		
As at 31 December	2020	2019
Allowance for expected credit losses on trade receivables and contract assets	-253,071	-261,868
Total	-253,071	-261,868

Trade receivables and contract assets

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

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

Credit risk of receivables and contract assets by geographical area at 31 December 2020:

(In euros)		
As at 31 December	2020	2019
European Union, excluding Estonia	7,920,581	11,862,032
Estonia	8,096,123	9,552,102
Other countries	4,995,446	143,392
Total	21,012,150	21,557,526

The carrying amount of receivables due from the group's most important customer at 31 December 2020 was 7,839,606 thousand euros (2019: 8,505,635 thousand euros).

Trade receivables and contract assets:

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

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

Ageing of trade receivables	31 December 2020	31 December 2019
Trade receivables not past due	20,262,288	20,761,607
1-30 days past due	397,098	351,391
31-90 days past due	50,139	282,645
Over 91 days past due	302,623	161,883
Total trade receivables	21,012,149	21,557,526

(In euros)

Balance at 31 December 2019	261,868
Written off the statement of financial position as uncollectible	-7,948
Recovery of items written down in prior periods	-59,770
Change in loss allowance during the period	58,921
Balance at 31 December 2020	253,071

Cash and cash equivalents

At 31 December 2020, the group's cash and cash equivalents totalled 115,202,928 euros (2019: 90,593,497 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. The group is of the opinion that the credit risk of its cash and cash equivalents is low based on the credit ratings of the financial institutions where the assets are held.

Derivative financial instruments

Derivative instruments have been entered into with banks and financial institutions whose ratings range from Aa2 to Ba1 according to Moody's.

Maximum credit risk exposure arising from unsecured receivables

Credit risk		
As at 31 December	2020	2019
Cash and cash equivalents	115,202,928	90,593,497
Trade receivables	21,012,150	21,557,522
Other receivables	267,197	1,350,790
Maximum credit risk exposure	136,482,275	113,501,809

Interest rate risk

The group's interest-bearing liabilities totalled 100,772 thousand euros (2019: 136,891 thousand euros), accounting for 15% (2019: 19%) of total assets as at 31 December 2020. Since all loans have floating interest rates, they are exposed to interest rate risk. If 3 month EURIBOR rose to 1% on average in 2021, the effect on the group's profit before tax would be approximately 1 million euros. Considering the size of the risk and the fact that its realisation is unlikely because the euro base rates have been negative for years and there is no indication in the market that interest rates are going to rise, management has estimated that the risk of a rise in market interest rates is insignificant.

Liquidity risk

Liquidity risk is the risk that the group will not have sufficient liquid funds to cover its expenses and investments. Liquidity risk is mitigated with various financial instruments such as loans, working capital management, creation of reserves, hedging transactions, etc. At the year-end, the group's current ratio (current assets/current liabilities) was 3.11 (31 December 2019: 1.95). The group's cash and cash equivalents as at the end of the reporting period totalled 115,203 thousand euros (2019: 90,593 thousand euros). Accordingly, management believes that the group's liquidity position is strong and the probability of the realisation of the liquidity risk is remote.

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

Liabilities by maturities at 31 December 2020

	Not later than 6 months	Later than 6 months but not later than 1 year	Later than 1 year but not later than 5 years	Total undiscounted amount	Carrying amount
Loan liabilities	11,930,641	11,778,828	81,336,748	105,046,217	96,003,183
Lease liabilities	1,224,009	1,247,485	2,352,509	4,824,003	4,769,280
Trade payables	6,383,047	0	0	6,383,047	6,383,047
Accrued expenses	6,057,910	0	0	6,057,910	6,057,910
Payable for realised derivative financial instruments	1,041,120	0	0	1,041,120	1,041,120
Derivative financial instruments (liabilities)	2,256,226	0	0	2,256,226	2,256,226
Total	28,892,953	13,026,313	83,689,257	125,608,523	116,510,766

Liabilities by maturities at 31 December 2019

	Not later than 6 months	Later than 6 months but not later than 1 year	Later than 1 year but not later than 5 years	Total undiscounted amount	Carrying amount
Loan liabilities	13,234,735	25,865,456	104,724,399	143,824,590	130,337,637
Lease liabilities	1,517,449	1,321,586	3,382,967	6,222,002	6,146,210
Trade payables	7,620,887	0	0	7,620,887	7,620,887
Accrued expenses	8,507,831	0	0	8,507,831	8,507,831
Payable for realised derivative financial instruments	53,767	0	0	53,767	53,767
Derivative financial instruments (liabilities)	2,319,108	1,279,284	0	3,598,392	3,598,392
Total	33,253,777	28,466,326	108,107,366	169,827,469	156,264,724

Capital management

The primary objective of the group's capital management is to ensure an optimal capital (net debt and equity) structure, which would support profitable operation of the group and the interests of shareholders. Due to the volatility of the oil market, it is more financially efficient for oil producers to keep the level of their debt capital below the usual in the long-term perspective. VKG's target is to maintain the net debt to total capital ratio below 20%. By the end of 2020 the indicator had decreased to -3% (2019: 8%), which refers to the group's strong capitalisation.

As at 31 December	2020	2019
Interest-bearing borrowings (note 8)	100,772,463	136,483,847
Less: cash and cash equivalents (note 2)	115,202,928	90,593,497
Net debt	-14,430,465	45,890,350
Equity	516,734,263	517,939,853
Total capital (net debt plus equity)	502,303,798	563,830,203
Net debt to capital ratio	-3%	8%

Market risks

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

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

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

Out of oils sold by the group in 2020, 408,000 tonnes, i.e. 64% of total oil sales for the period, was covered with derivative transactions (2019: 363,000 tonnes, i.e. 56%). At the end of the reporting period, the group had entered into liquid fuel forward transactions for the sale of 45,000 tonnes of oil products. The average floor price was at the level of 202 €/t and the average price cap at the level of 293 €/t.

The fair value of the transactions and their expected impact on the group's net result at 31 December 2020 was as follows.

The following table shows the periods in which the cash flow associated with the hedging instruments is expected to occur as at the end of 2020:

(In euros)	Up to 6 months	6 months to 1 year	Over 1 year	Total
Liquid fuel sales options				
Liabilities	2,256,226	0	0	2,256,226

The following table shows the periods in which the cash flow associated with the hedging instruments is expected to affect profit or loss as at the end of 2020:

(In euros)	Up to 6 months	6 months to 1 year	Over 1 year	Total
Liquid fuel sales options				
Liabilities	2,256,226	0	0	2,256,226

The following table shows the periods in which the cash flow associated with the hedging instruments was expected to occur as at the end of 2019:

(In euros)	Up to 6 months	6 months to 1 year	Over 1 year	Total
Liquid fuel sales options				
Liabilities	2,319,108	1,279,284	0	3,598,392

The following table shows the periods in which the cash flow associated with the hedging instruments was expected to affect profit or loss as at the end of 2019:

(In euros)	Up to 6 months	6 months to 1 year	Over 1 year	Total
Liquid fuel sales options				
Liabilities	2,319,108	1,279,284	0	3,598,392

Forward contracts for the purchase of electricity have been entered into to hedge the risk of variability in electricity prices. All forward contracts have been signed to purchase a specific quantity of electricity at each trading hour. Transactions designed to hedge the risk of variability in electricity prices have been designated as hedging instruments in cash flow hedges where the underlying hedged items are highly probable forecast electricity sales transactions on the Nord Pool power market. VKG Elektrivõrgud OÜ uses electricity forwards to purchase electricity in order to fulfil its fixed-price electricity sales contracts.

The following table shows the periods in which the cash flow associated with the hedging instruments is expected to occur as at the end of 2020:

(In euros)	Up to 6 months	6 months to 1 year	Over 1 year	Total
Forward contracts for the purchase of electricity				
Receivables	83,614	83,614	0	167,228

The following table shows the periods in which the cash flow associated with the hedging instruments is expected to affect profit or loss as at the end of 2020:

(In euros)	Up to 6 months	6 months to 1 year	Over 1 year	Total
Forward contracts for the purchase of electricity				
Receivables	83,614	83,614	0	167,228

Currency risk

In 2020, 69% of the group's sales (2019: 75%) 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 high risk for the group. Taking into account the fact that 64% of the group's oil sales in 2020 were covered with forward transactions conducted in euros, only 17% of sales were actually exposed to currency risk. According to management's assessment, this is a satisfactory level. Moreover, historical experience reflects that currency risk and market price risk mostly move in divergent directions and, thus, partly counterbalance each other.

The group's currency risk exposures (in euros)

Financial assets	EUR	USD	Other currency	31 Dec 2020
Cash and cash equivalents (note 2)	114,760,196	442,732	0	115,202,928
Trade receivables	7,498,734	13,513,416	0	21,012,150
Total	122,258,930	13,956,148	0	136,215,078

Financial liabilities	EUR	USD	Other currency	31 Dec 2019
Borrowings (note 8)	100,772,463	0	0	100,772,463
<i>Of which non-current</i>	<i>77,397,136</i>	<i>0</i>	<i>0</i>	<i>77,397,136</i>
Trade payables	6,338,945	43,319	783	6,383,047
Total	107,111,408	43,319	783	107,155,510
Net exposure	15,147,522	13,912,829	-783	29,059,568

Carbon risk

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

Shale oil production is one of those activities whose competitiveness is directly undermined by the EU climate policy. The group's CO₂ emissions in 2020 totalled 1,391 thousand tonnes (2019: 1,439 thousand tonnes). Emission allowances received from the EU free of charge covered 1,292 thousand tonnes (2019: 977 thousand tonnes), i.e. 93% of the group's emissions. If the remaining 99 thousand tonnes had been covered with allowances purchased from the market at an average price of 25 €/t, the expenditure would have amounted to 2,475 thousand euros. Since VKG has been able to save emission allowances allocated to it free of charge in earlier years, it did not incur any direct emission allowance expenditure in 2020.

According to forecasts, the group can also cover its emissions in 2021 with emission allowances received free of charge but thereafter carbon risk will be the most critical risk for the group's sustainability.

Note 28. Events after the reporting period

Between the reporting date of 31 December 2020 and the date on which these financial statements are authorised for issue, the following significant events occurred:

- On 19 March 2021, shareholders were paid a dividend of 8,000,000 euros for 2020.
- On 21 May 2021, Tartu Circuit Court delivered a judgment in the civil lawsuit involving the VKG group and Enefit Kaevandused AS by which it granted the claim filed by VKG against Enefit Kaevandused AS in part and dismissed the claim filed by Enefit Kaevandused AS in full. The judgement can be appealed to the Supreme Court within 30 days. Therefore, at the date this report is authorised for issue, the case cannot yet be considered closed.

Note 29. Contingent liabilities

The group's retained earnings as at the end of the reporting period amounted to 388,427,965 euros (31 December 2019: 354,872,112 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 77,679,779 euros (31 December 2019: 88,718,028 euros) and the amount that could be distributed as the net dividend is 310,719,117 euros (31 December 2019: 266,154,084 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 2021 (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. 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 euros)		
As at 31 December	2020	2019
ASSETS		
Cash and cash equivalents	59,217,828	48,840,530
Trade receivables	596,467	196,827
Other receivables	24,857,156	55,973,662
Prepayments	53,513	62,971
Inventories	15,723	81,908
Total current assets	84,740,687	105,155,898
Investments in subsidiaries (note 26)	424,031,840	430,020,663
Other long-term receivables	108,409,254	123,996,235
Property, plant and equipment	12,550,483	13,133,897
Intangible assets	1,434,969	1,165,261
Investment property	6,219,819	6,219,819
Total non-current assets	552,646,365	574,535,875
Total assets	637,387,052	679,691,773
LIABILITIES		
Borrowings	21,056,637	35,130,507
Trade payables	392,352	393,516
Taxes payable	729,335	1,953,628
Accrued expenses	1,704,162	1,010,653
Derivative financial instruments (note 3)	2,256,226	3,598,393
Other liabilities	0	7,274
Total current liabilities	26,138,712	42,093,971
Borrowings	75,178,369	96,228,525
Other liabilities	3,900,000	3,913,090
Total non-current liabilities	79,078,369	100,141,615
Total liabilities	105,217,081	142,235,586
EQUITY		
Share capital	6,391,164	6,391,164
Statutory capital reserve	639,116	639,116
Revaluation reserve	1,423,883	1,808,334
Revaluation reserves of subsidiaries accounted for under the equity method	117,066,293	151,080,945
Hedge reserve of a subsidiary	-2,256,226	-3,598,393
Retained earnings	421,053,741	393,283,021
Equity attributable to owners of the parent	544,317,971	549,604,187
Own shares	-12,148,000	-12,148,000
Total equity	532,169,971	537,456,187
Total liabilities and equity	637,387,052	679,691,773

Parent company's income statement

(In euros)	2020	2019
Revenue	9,612,250	9,866,061
Cost of sales	-502,560	-781,186
Gross profit	9,109,690	9,084,875
Administrative expenses	-7,845,665	-8,423,692
Other income	51,730	59,604
Other expenses	-21,252	-1,459,943
Operating profit/loss	1,294,503	-739,156
Share of loss/profit of subsidiaries accounted for under the equity method	-98,114	43,149,148
Finance income	5,601,108	6,881,537
Finance costs	-4,448,822	-5,365,698
Profit before income tax	2,348,675	43,925,831
Income tax expense	-244,186	-293,065
Profit for the year	2,104,489	43,632,766

Parent company's statement of comprehensive income

(In euros)	2020	2019
Profit for the year	2,104,489	43,632,766
<u>Items of other comprehensive income that may be reclassified subsequently to profit or loss</u>		
Cash flow hedges – effective portion of changes in fair value	1,342,167	-13,559,907
Total comprehensive income for the year	3,446,656	30,072,859

Parent company's statement of cash flows

(In euros)	2020	2019
Cash flows from operating activities		
Profit for the year	2,104,489	43,632,766
Adjustments for:		
<i>Depreciation, amortisation and impairment losses</i>	887,242	885,825
<i>Gain/loss on sale and liquidation of non-current assets</i>	-415	108,120
<i>Other adjustments</i>	244,186	294,154
Accrued finance income and costs	-1,239,372	-1,980,314
Total adjustments	-108,359	-692,215
Share of loss/profit of subsidiaries accounted for under the equity method	98,114	-43,149,148
Change in receivables and prepayments	772,754	-5,886,350
Change in inventories	66,185	-45,762
Change in payables and advances received	-1,725,144	12,609,376
Net cash from operating activities	1,208,039	6,468,667
Cash flows from investing activities		
Purchase of property, plant and equipment	-241,732	-504,468
Purchase of intangible assets	-319,209	-347,723
Purchases and improvements of investment property	0	-49,135
Proceeds from sale of investment property	6,000	0
Loans provided to subsidiaries	-1,000,000	-2,600,000
Repayments of loans provided to subsidiaries	46,473,334	62,150,447
Interest received, intra-group	5,114,144	7,414,619
Interest received, external	142,495	80,466
Dividends received	6,500,000	4,000,000
Lease payments received	629,528	647,204
Net cash from investing activities	57,304,560	70,791,410
Cash flows from financing activities		
Loans received	0	4,001,148
Repayments of loans received	-34,420,277	-26,275,312
Change in overdraft	0	-33,610
Payments of lease principal	-698,643	-732,469
Interest paid on loans	-4,762,425	-8,736,140
Interest paid on lease liabilities	-9,770	-21,765
Dividend paid	-8,000,000	-3,200,000
Corporate income tax paid	-244,186	-293,065
Repurchase of own shares	0	-12,148,000
Net cash used in financing activities	-48,135,301	-47,439,213
Net cash flow	10,377,298	29,820,864
Cash and cash equivalents at beginning of year	48,840,530	19,019,666
Increase in cash and cash equivalents	10,377,298	29,820,864
Cash and cash equivalents at end of year	59,217,828	48,840,530

Parent company's statement of changes in equity

(In euros)	Share capital	Statutory capital reserve	Revaluation reserve	Hedge reserve of a subsidiary	Revaluation reserves of subsidiaries	Own shares	Retained earnings	Total
Balance as at 31 December 2018	6,391,164	639,116	2,021,707	9,961,514	186,894,730	0	316,822,010	522,730,241
Profit for the year	0	0	0	0	0	0	43,632,766	43,632,766
Other comprehensive expense of subsidiaries	0	0	0	-13,559,907	0	0	0	-13,559,907
Total comprehensive income for the year	0	0	0	-13,559,907	0	0	43,632,766	30,072,859
Changes in reserves	0	0	-213,373	0	-35,813,785	0	36,027,158	0
Dividend paid	0	0	0	0	0	0	-3,198,913	-3,198,913
Other changes in equity						-12,148,000	0	-12,148,000
Balance as at 31 December 2019	6,391,164	639,116	1,808,334	-3,598,393	151,080,945	-12,148,000	393,283,021	537,456,187
Profit for the year	0	0	0	0	0	0	2,104,489	2,104,489
Other comprehensive income of subsidiaries	0	0	0	1,342,167	0	0	0	1,342,167
Total comprehensive income for the year	0	0	0	1,342,167	0	0	2,104,489	3,446,656
Changes in reserves	0	0	-384,451	0	-34,014,652	0	34,399,103	0
Dividend paid	0	0	0	0	0	0	-8,000,000	-8,000,000
Other changes in equity	0	0	0	0	0	0	-732,872	-732,872
Balance as at 31 December 2020	6,391,164	639,116	1,423,883	-2,256,226	117,066,293	-12,148,000	421,053,741	532,169,971

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

Parent company's adjusted unconsolidated equity at 31 December

(In euros)		
As at 31 December	2020	2019
Parent company's unconsolidated equity	544,317,971	549,604,187
Less: carrying amount of investments in subsidiaries in parent company's separate statement of financial position	424,031,840	430,020,663
Plus: value of investments in subsidiaries under the equity method	424,031,840	430,020,663
Equity attributable to owners of the parent	544,317,971	549,604,187
Own shares	-12,148,000	-12,148,000
Total equity	532,169,971	537,456,187

SIGNATURES TO ANNUAL REPORT 2020

The management board of Viru Keemia Grupp AS has prepared the directors' report and the consolidated financial statements for 2020.

Management board

Ahti Asmann	Chairman of the Management Board		31 May 2021
Meelis Eldermann	Vice-chairman of the Management Board		31 May 2021
Jaanis Sepp	Member of the Management Board		31 May 2021
Margus Kottise	Member of the Management Board		31 May 2021
Nikolai Petrovitš	Member of the Management Board		31 May 2021



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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 (the Group), which comprise the consolidated statement of financial position as at 31 December 2020, the consolidated income statement, the consolidated statements of comprehensive income, cash flows and changes in equity for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the consolidated financial statements presented on pages 19 to 85, present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2020, and of 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 Financial Statements* section of our report. We are independent of the Company in accordance with the Code of Ethics for Professional Accountants (Estonia) (including Independence Standards) and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

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

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

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. 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.



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.

KPMG Baltics OÜ
Licence No 17

signed
Eero Kaup
Certified Public Accountant, Licence No 459

signed
Kristiina Kivila
Certified Public Accountant, Licence No 702

Tallinn, 31 May 2021

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PROFIT ALLOCATION PROPOSAL

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

Total retained earnings at 31 December 2020: 388,398,896 euros

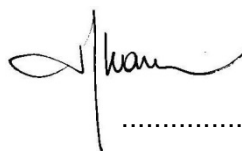
The management board proposes that the general meeting make the following allocations:

Dividend distribution: 8,000,000 euros

Retained earnings after allocations: 380,398,896 euros

Ahti Asmann

Chairman
of the Management Board



31 May 2021

Meelis Eldermann

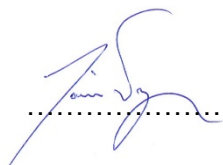
Vice-chairman
of the Management Board



31 May 2021

Jaanis Sepp

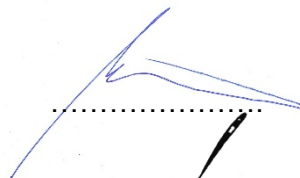
Member
of the Management Board



31 May 2021

Margus Kottise

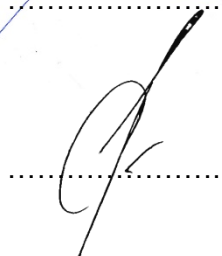
Member
of the Management Board



31 May 2021

Nikolai Petrovitš

Member
of the Management Board



31 May 2021

PARENT COMPANY'S REVENUE DISTRIBUTION BY EMTAK

(In euros)

Activity	EMTAK	2020
Activities of head offices	70101	8,488,901
Renting and leasing out of other machinery, equipment and tangible assets not elsewhere classified	77399	1,005,360
Recovery of sorted materials	38321	117,989
Total		9,612,250