SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT REPORT 2013

VKG

VIRU KEEMIA GRUPP

PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: SILVER KÄMÄRÄ

Viru Keemia Grupp AS (VKG) is Estonia´s largest oil shale processing enterprise, producing approximately **60% of total Estonian shale oil**.

In the year 2013, the oil shale processing volume of Viru Keemia Grupp was **2.4 million tonnes**, and its profit exceeded **19 million euros**.

The Group includes 12 business enterprises, which provide jobs for a total of approximately **2,200 people**.

The total amount of environmental investments of the Group for the past 9 years has exceeded **66 million euros**.

This sustainable development report is the fourth such report to be issued in the history of the organisation. With this report, we intend to highlight our openness and commitment to the protection of the environment and social development of the region.

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ESTONIAN SUSTAINABLE BUSINESS INDEX BRONZE LEVEL 2013

PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: DMITRI VOROBJOV

INTRODUCTION

Introduction to the sustainable development report

This is the fifth sustainable development report of Viru Keemia Grupp AS (VKG), and its goal is to publish the economical, social, environmental and organisational data of VKG for the year 2013.

The report reflects mainly the developments of the Group for the year 2013, compares the results to those of previous years, provides the analysis of the oil shale sector and a moderate prognosis for the years 2014-2015.

With this report, VKG intends to introduce and promote the concept of sustainable development and the basics of responsible entrepreneurship in Ida-Viru County and in Estonia as a whole.

In addition to that, our goals are to:

- **Increase the transparency of the activities of our organisation**
- **Establish a relationship of trust between the parties interested in the activities of the enterprise, the residents of the region, and the employees of VKG.**

Structure and methods of the report

The sustainable development report of VKG is based on the guidelines of the Global Reporting Initiative (GRI). The GRI is a voluntary organisation promoting reporting and gathering enterprises that value sustainable development all over the world. This organisation is considered to be the founder of the concept of sustainable development and it has developed recommended guidelines for sustainable development reports.

This report conforms to the GRI Application Level B. You can read more about the report's conformity to the disclosure requirements on the report's last page which lists the GRI content.

Read more about the organisation and the guidelines at www.globalreporting.org.

The preparation of the report was also guided by the document "Oil and Gas Industry Guidance on Voluntary Sustainability Reporting" issued in cooperation of the International Petroleum Industry Environmental Conservation Association (IPIECA) and the American Petroleum Institute (API).

The ISO and OHSAS certification materials of the enterprise were also used in preparing the report. The data pertaining to environment protection and occupational safety conform to the requirements prescribed in the relevant standards.

The reports for the years 2008-2009 and for the year 2012 have been prepared in cooperation with the consulting and auditing agency Ernst & Young Baltic AS. The present report has been prepared by the company.

All questions related to the report can be sent to Julia Piilmann, Public Relations Manager of VKG (julia.piilmann@vkg.ee).

Target groups

The sustainable development report of VKG for the year 2013 is a public document available in Estonian, English and Russian languages on paper and in electronic form via the website of the Group. With this report, we primarily want to introduce our enterprise in more detail to:

- **Strategic investors, in order to allow informed investment decisions;**
- **The population of Ida-Viru County, in order to present the developments of recent years and the plans for future;**
- **The employees of VKG, in order to explain more aspects of organisational changes and activities.**

Limitations of the report

Preparing the sustainable development reports is a voluntary activity for organisations. The economic data for the year 2013 and the prognoses for the years 2014-2015 are prepared by VKG and they have not been audited. For that reason, the data for the year 2013 may be somewhat different from the data stated in the approved annual report.

The enterprise is presenting the data in its report on the basis of the principles of transparency and good business practice.

ABBREVIATIONS

VKG	Viru Keemia Grupp
MLN EUR	million euros
TH EUR	thousand euros
HPP	heat and power plant
TFE	tonne of fuel equivalent (indicator for expressing any gaseous or solid fuels as tonnes)
EU	European Union
GRI	Global Reporting Initiative

CONTENTS

You are holding in your hands another CSR report, in which we provide an overview of the activities of VKG within the last year. Since the activities of VKG are connected with processing the oil shale resource which belongs to the nation, in our opinion, it is very important to provide a good overview of what we bring to the Estonian state, the local society, and to each and every citizen in the result of our work, and of the bottlenecks we expect to come across in the process of the development of the sector in question.

PRIIT ROHUMAA, CHAIRMAN OF THE MANAGEMENT OF VKG

TROUBLES AND JOYS OF THE OIL SHALE INDUSTRY

WHAT BRINGS US JOY?

First of all, we are very proud of the fact that we provide jobs to about 2,200 people in Ida-Virumaa at the moment. Owing to our longstanding extensive investment programme, we managed to create over 800 new workplaces. VKG is a well-known and respected employer in its area of activities. The labour relations we offer are honest and transparent, while the working conditions are always up-to-date and are visibly improving year after year. The most important thing is the fact that the salaries we offer are way higher than the average salaries in the area and in Estonia on the whole. I am convinced that only the best experts in the field work at our company, and these people fully realize that our future plans imply huge development potential for everyone, including themselves. Thanks to the efforts of our diligent employees, all our factories are functioning properly and smoothly. The money we are earning from our activities does not remain at the disposal of the company and its shareholders only: we also make a significant contribution by supporting cultural, sports, and educational events on both local and state levels. We do close cooperation both with reputable state organisations, for example, the Estonian National Opera, Eesti Kontsert, KUMU and the Estonian Wrestling Federation, and with a large number of local enterprises.

We are going to provide an overview of our numerous projects in this report. Within the last ten years, VKG invested over 650 million EUR into the expansion of the production process and the protection of the environment. This is a significant amount, which means passing the investment milestone of the magical 10 billion kroons. In addition to the well-paid jobs I have already mentioned, we are also very proud about the fact that the state gets considerable revenue from taxes both at the construction stage and in the course of our everyday oil shale production and processing processes. There are indeed over 60,000 companies operating in Estonia, but just a few of them can boast with the fact that their contribution into GDP and the tax base is about one percent. The value chain that is connected exclusively with processing oil shale at VKG has provided about 40 million EUR of the total amount of government revenue. This amount is supplemented by the profit generated by large construction projects and other VKG´s subsidiaries that are not directly connected with oil shale.

We are very happy about the fact that the Petroter technology, which was developed as an expansion of the shale oil processing industry, has turned out to be so successful. This summer the second factory Petroter II will be completed, and the construction of Petroter III is well under way. The Petroter technology is, undoubtedly, the most up-to-date of all of the other technologies used at the companies which deal with the production of shale oil all around the world. We are also very proud of the fact that leading international mining experts regard the VKG Ojamaa mine as the most up-to-date and the best managed mine in the world, both in terms of management of subsurface mining and its environmental friendliness in terms of stone beneficiation and logistics. The construction of such factories and mines is very anticipated in Estonia, since we are dealing with up-to-date high technology production facilities that are of extreme importance for the whole country. In addition to the skill of building factories, it is essential to hold relevant competence in several fields for maintaining the entire oil shale value chain. I will name just some of them: mining, chemistry, energy production, logistics, mechanical science, automatic control engineering, material technology, construction materials, construction, water management, protection of the environment, economy, marketing, etc. The oil shale value chain is extremely science- and knowledge-based. This is why our enterprise is a good partner for all Estonian universities, which help us to develop our business and to train the right staff. I can totally assure you that the oil shale value chain of VKG is the longest and the most integral in the world. We use the entire volume of the energy potential, since it is only us who heat the neighboring towns with the cheap residual energy remaining from the process. We use the chemical potential, offered by the Estonian oil shale, at its maximum. We produce very expensive fine chemicals, which are used all over the world in popular hair dyes, medications, electronic goods, and mobiles. The range of our products includes high quality rubber resins, which are used by the companies producing tires in different countries. We produce the first-class construction materials from the residues of oil shale. The innovations that we use while developing our value chain and the business model help to reduce the load on the environment and to increase the value of oil shale that belongs to the nation. In the long-term perspective, the company which will get the maximum out of oil shale will also be the most successful company in the oil shale industry.

WHAT BOTHERS US?

The oil shale value chain has already had a very positive effect on the state, but its future potential is several times greater. At the moment, there is the annual extraction limit of 20 million tonnes, due to political reasons, out of which amount the largest share is used for producing energy at power plants. Only 5 million tonnes is used by shale oil factories operating in Estonia. In the long-term perspective, the state will be able to get the largest profit if it uses the entire amount of oil shale in the value chain similar to the one used by VKG, in which, in addition to energy production, the total potential of oil, chemistry, heat-power engineering, and construction materials industries is used. Such reorganisation of the sector as a whole requires significant investments. Within the next 10 years the company is planning to invest about 3 billion EUR into the sector. In Estonia, there is no other branch of economic activity, in which such a desperate need for investments is present. However, quite often we can see that not everyone understands the importance of the complicated oil shale processing value chain and its actual huge contribution into the total amount of revenue from taxes. We should also take into consideration the environmental requirements, which are becoming stricter every year and are creating the completely new context for the whole sector. For the state, the most important thing is to understand that the more complicated and thorough the value chain is developed by manufacturers, the larger is the profit. This way we will be able to employ the maximum number of people in production and to leave the smallest environmental footprint.

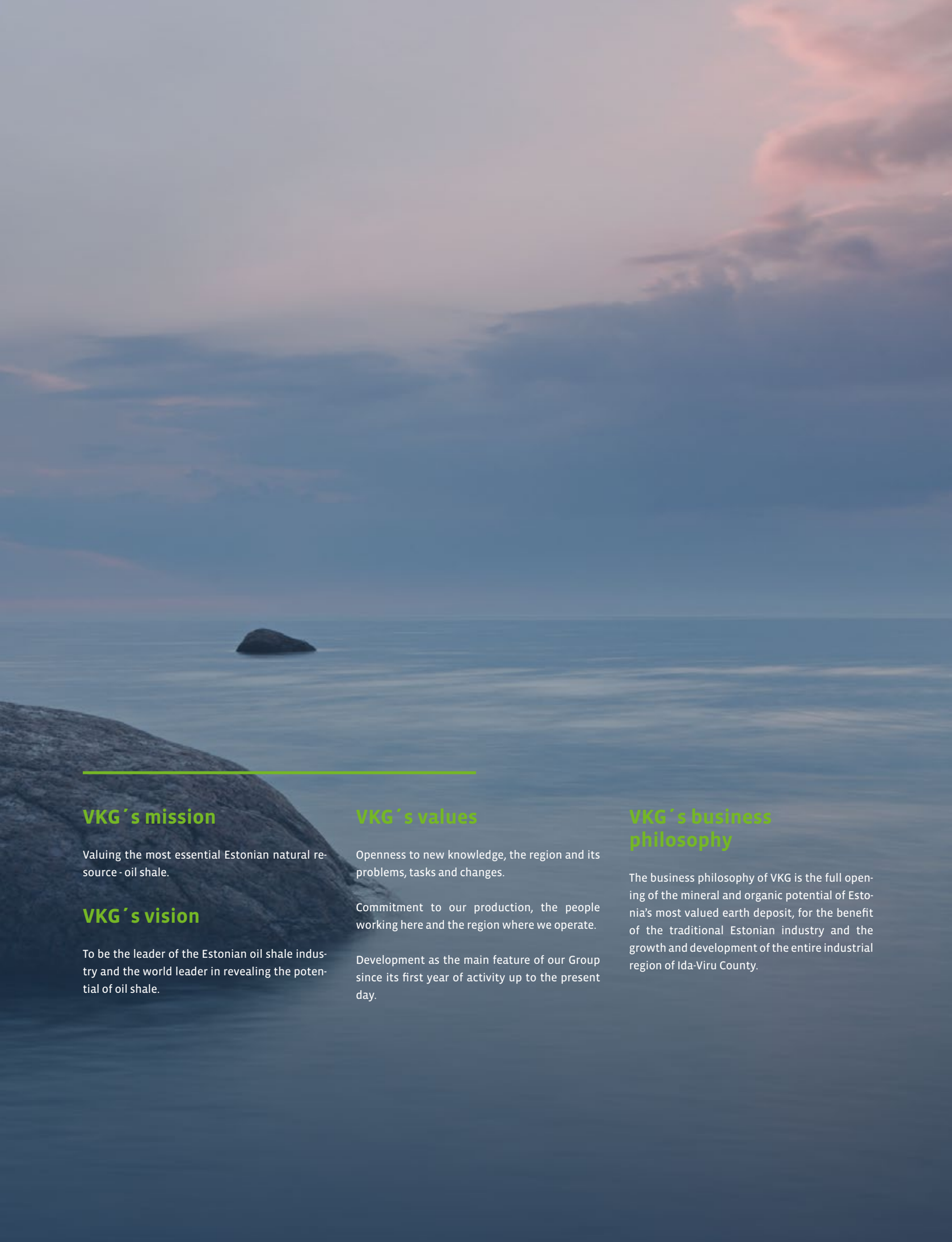
The state could do much more to facilitate the fast development of the sector. Both private companies and state enterprises in the sector need long-term sustainable support from the state in order to make considerable investments. Hence it is really crucial to develop long-term oil shale and energy management development programmes, to coordinate the competition situation at the oil shale market, to provide the oil shale resource for long-term use to those manufacturers who actually value it, and to reshape the taxation policy, which would provide the investors with the possibilities to retain the profitability level suited to their risks. There is a great risk that the state will put a complete stop to the development of the sector by increasing the short-term tax load. In this case the future potential will mainly remain unused.

Priit Rohumaa
Chairman of the Management of VKG

DESCRIPTION OF THE ENTERPRISE

Viru Keemia Grupp AS is the **largest Estonian oil shale processing enterprise**, based on private capital. The main field of activities of the Group is producing shale oil and generating heat and electricity.

PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: JANEK LAANEMÄE



VKG´s mission

Valuing the most essential Estonian natural resource - oil shale.

VKG´s vision

To be the leader of the Estonian oil shale industry and the world leader in revealing the potential of oil shale.

VKG´s values

Openness to new knowledge, the region and its problems, tasks and changes.

Commitment to our production, the people working here and the region where we operate.

Development as the main feature of our Group since its first year of activity up to the present day.

VKG´s business philosophy

The business philosophy of VKG is the full opening of the mineral and organic potential of Estonia's most valued earth deposit, for the benefit of the traditional Estonian industry and the growth and development of the entire industrial region of Ida-Viru County.

Strategic goals of VKG

1. USING THE TOTAL ORGANIC AND MINERAL POTENTIAL OF OIL SHALE

- Separating 100% of fine chemicals from oil shale and processing them on industrial scale;
- Producing high quality fuel oils;
- Producing construction materials from the industrial residues of oil shale.

2. INCREASING THE PRODUCTION VOLUMES OF FUEL OILS MANUFACTURED ON THE BASIS OF OIL SHALE AND IMPROVING THE QUALITY OF FUEL OILS

- Increasing the processing volumes of oil shale;
- Selecting the suitable technology for manufacturing diesel fuel and launching its production with the aim of covering the all-Estonian consumption need.

3. DEVELOPING THE KIVITER AND PETROTER TECHNOLOGIES USED BY VKG

4. DEVELOPING THE COOPERATION INSIDE ESTONIA FOR INCREASING THE EFFICIENCY OF USING THE OIL SHALE RESOURCE

The fields of activities of the subsidiaries in VKG

The production activities and the services supporting the Group´s main activities are divided between separate subsidiaries, the shares of which are 100% owned by the parent enterprise.

VKG Kaevandused
Mining oil shale as the Group's main raw material

VKG Oil
Producing shale oil and refined chemicals

VKG Energia
Generating heat and electricity

VKG Soojus
Distributing and selling heat

VKG Plokk
Producing construction materials from oil shale ash

VKG Elektrivõrgud
Selling and distributing electricity

VKG Transport
Providing logistics services for road and railway transportation

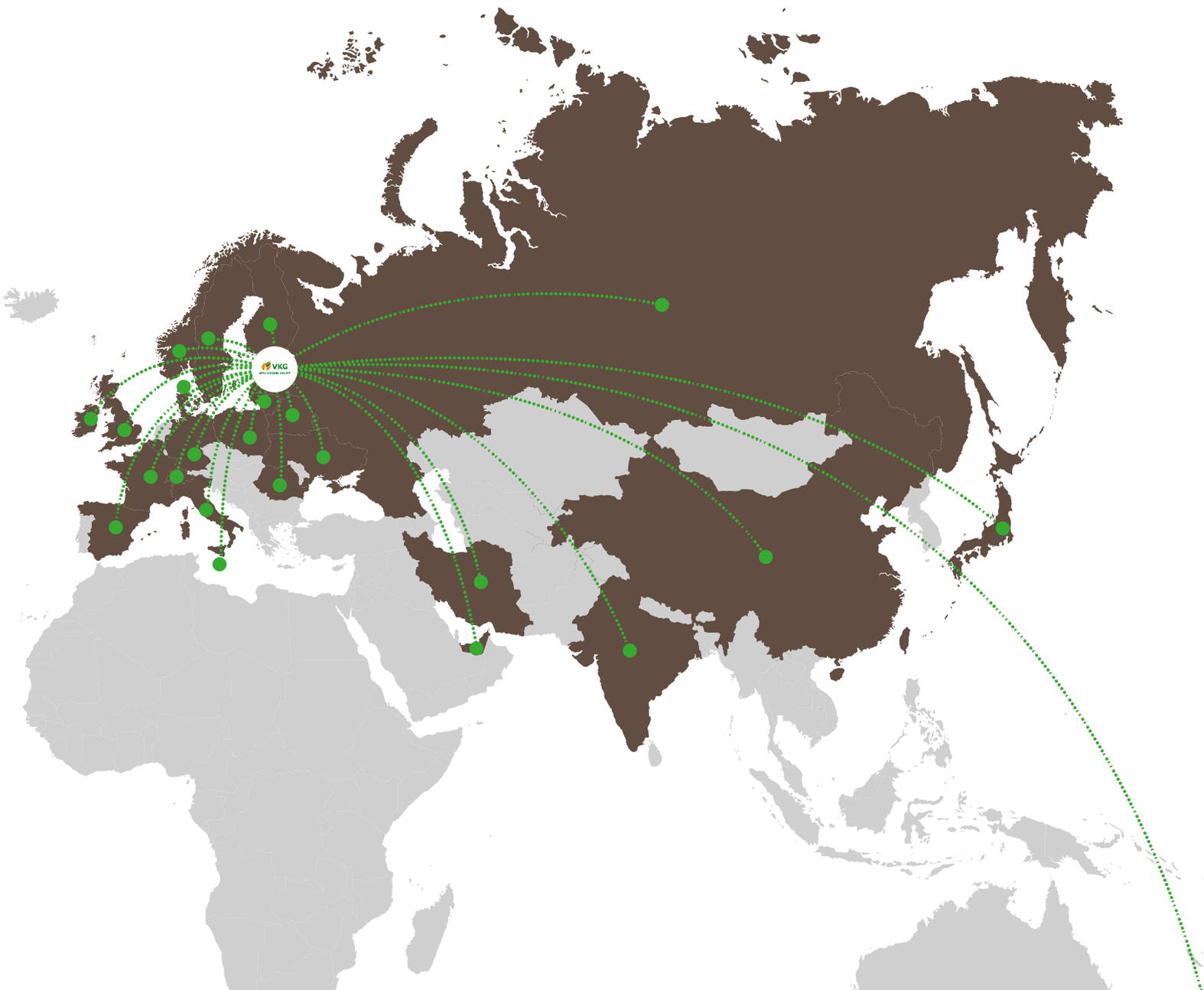
Viru RMT
Providing repair and assembly services

VKG Elektriehitus
Providing industrial energy supply and electricity installation services

VKG Diisel
The project of post-processing of shale oils

Sales geography of the products and services of VKG

- Estonia
- Latvia
- Lithuania
- Sweden
- Finland
- Norway
- Denmark
- Poland
- Belarus
- Ukraine
- Romania
- Great Britain
- the Netherlands
- Switzerland
- Germany
- Malta
- Austria
- France
- Spain
- Italy
- China
- India
- New Zealand
- Russia
- the United Arab Emirates
- Japan
- Iran
- South America



Chronology of the Group

1999
Founding Viru Keemia Grupp AS on the basis of the state enterprise Kiviter.

2002
Starting to separate refined chemicals from oil shale.

2004
Starting to utilise oil shale retort gas in boilers of VKG Energia.

2005
Expanding the oil shale processing plant, 4 new retorts.

2006
Starting the industrial production of refined chemicals.

Completing the largest environmental project for reduction of organic content in oil shale processing waste by up to 8%.

2007
Constructing and commissioning the shale oil purifying plant, thus solving an 80-year problem of oil shale filtering. The implemented technology is a protected invention of the engineers of VKG oil

Starting the construction of the Petroter I plant.

2008
Commissioning the sulphur scrubbing unit, obtaining the surveying and mining permit for the boltyshski deposit.

2009
Obtaining state support for the project of developing technology for producing diesel fuel from shale oil.

Starting the construction of the Ojamaa mine

December 21, 2009 – Opening the Petroter I plant.

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Chronology of the Group

2010

The Petroter I plant achieved full capacity.

Issuing the first proper social responsibility and sustainable development report of VKG; it's also the first in Estonia

Starting the project of a heat pipeline running from Kohtla-Järve to Ahtme.

2011

Purchasing the enterprise Kohtla-Järve Soojus AS (the new name of the enterprise becomes VKG Soojus)

Opening the reserve and top load boiler plant of Kohtla-Järve Soojus AS

Purchasing the bankruptcy estate of Silbet Plokk OÜ; establishing a new enterprise in October – VKG Plokk OÜ

Opening a new turbine of VKG Energia

VKG restored the tradition of Miners' Day in Ida-Viru County.

2012

Commissioning the production line of VKG Plokk OÜ, establishing the trademark of Roclite.

Commissioning a long-distance aboveground conveyor from the Ojamaa mine

Opening the Ojamaa mine; the mine achieving its full capacity

Starting the construction of the Petroter II plant

Implementing the project of a heat pipeline running from Kohtla-Järve to Ahtme.

2013

Commissioning the heating main between Kohtla-Järve and Ahtme, closing the HPP in Ahtme.

The start of construction of the Petroter III plant.

The launch of the second new turbine project at VKG with the aim of more efficient co-production of electricity and heat.

Closing down the ash storage site in Ahtme.

2014

The start of construction of the second sulphur trap.

Commissioning the Petroter II plant.

Increasing the efficiency and environmental awareness of the energy-producing facility of the Group, the start of the large-scale reconstruction works.

Commissioning the lime plant.

2015

Start of the construction of the third sulphur trap.

2016

Commissioning the Petroter III plant.

The management of VKG will decide whether to launch the construction of the shale oils post-processing facility.

Main events of the reporting period

JANUARY 2013

On January 31, 2013, the VKG Ojamaa mine was opened. The purpose of the Ojamaa mine is to reduce VKG's dependence on the raw materials provided by its partners and to cover the demand for raw materials to the full extent. From the middle of 2013, the mine has been operating at full capacity. The production volume of the Ojamaa mine in 2013 exceeded 2.83 million tons of oil shale.

FEBRUARY

On February 20, the students and teaching staff of the Estonian Academy of Arts (EAA) and Tallinn University of Technology (TUT) published the results of their research work, which lasted for over four months, the subject of which were the four concepts of renovation of the old oil factory tower located on the production territory of VKG, which was built in 1924. In order to develop the renovation concepts, the new subject had been introduced into the curricula of the EAA and TUT, which was taught by seven professors, among which were architects, the people dealing with the preservation of old and ancient buildings, renovators, interior designers. The workgroup also included a legendary renovator of the Seaplane Harbour Karl Öiger. The aim of the process which had been initiated by VKG was to start dealing with the historical object located on its production territory, step by step. The goal of the Group is to preserve its symbol of the oil shale industry and to turn it into an object of study and a tourist attraction. Additional information:
www.vkg.ee/est/sotsiaalne-vastutus/vkg-alga-tused/vana-olivabriku-torni-taastamine

MARCH

The manufacturer of construction blocks VKG Plokk OÜ, which launched production operations a year ago, exported 80% of the total amount of its manufactured goods within the first year of operation - mainly to Latvia and Lithuania. In 2013, Russia also joined the range of its export markets.

VKG Plokk OÜ, which launched its operations in January 2012 at Ahtme factory, manufactures the construction blocks under the new Roclite brand, and it has proved to be a successful enterprise both on the Estonian market and on the construction material markets of several neighbouring countries.

APRIL

The lime plant construction project was launched on the production territory of VKG. It is scheduled to commission the plant in April-May 2014, and the group is going to use the lime produced at the plant as a raw material both in the existing and in the future sulphur trapping equipment. The cost of the project is about 5 million euros.

MAY

On May 29, the volume of the processed raw material at the oil shale plant, working on the basis of the VKG PETROTER technology, exceeded 2 mln tonnes. The plant, which reached its full capacity in 2010, processes over 800,000 tonnes per year and provides jobs directly and indirectly to up to 500 people. According to the assessment methods used by PriceWaterhouseCoopers, processing oil shale at an amount as large as that has already provided over 45 million EUR of tax revenue to the state so far at the investment and processing stages.

The investments into the plant in the years 2007-2010 amounted to 70 million EUR. The plant was successfully commissioned in 2010. In the result of the commissioning works, which lasted six months, the plant started operating smoothly in July 2010. It reached its full capacity one year later - in June 2011.

AUGUST

The traditional Miner´s Day took place on August 25 in Toila Oru park at the initiative of VKG. Thomas Anders and the band Modern Talking performed for the audience with their all-time-favourite hits. The concert was free for everyone. It was visited by over 50,000 people.

VKG Energia, the subsidiary of the VKG Group that deals with heat and energy production, launched the construction of the new fifth turbine. The project, which costs 15 million EUR, was signed by VKG Energia and the Lithuanian company Ecobana in the end of July. According to the contract, by July 2015, the new turbine will have been erected on the production territory of VKG with the capacity of 25 MW. This piece of equipment, which was manufactured on the turbine plant in Kaluga, Russia, was manufactured with due regard of technological requirements of VKG, and in terms of specifications, it is one of the most up-to-date and efficient energy-producing piece of equipment in Estonia. The territory is already being prepared for erection operations.

SEPTEMBER

VKG became the main sponsor of the Estonian National Opera. The ceremonial signing of a co-operation agreement took place on September 8. The new sponsorship agreement was actually a renewal of the agreement that was already in place. VKG has had the honour sponsoring the Estonian National Opera for over three years. The new agreement extends the scope of sponsorship and the validity of the agreement. This has also been a symbolic initiative for VKG, since along with the Estonian Theatre and Opera House that celebrates its 100th anniversary this autumn, the Estonian oil shale industry is also celebrating a respectable jubilee – 90 years.

On September 19, the ash storage site in Ahtme was closed, which means the completion of one of the largest environmental projects in Ida-Virumaa within recent years. The cost of the project was 5.6 million EUR, out of which amount 2.7 million EUR was received from the European Cohesion Fund via SA Keskkonnainvesteeringute Keskus (KIK). The company VKG Soojus, the subsidiary of the VKG Group dealing with the sale and distribution of heat, arranged a meeting, on which it greeted its partners, the representatives of the local government, and its employees in order to thank everyone who devoted their time and effort to the implementation of the project and to its timely completion.

OCTOBER

On October 17, the largest Estonian oil shale processing company Viru Keemia Group got a permission from Kohtla-Järve town government for the construction of the third Petroter plant. The works were initiated within the same month. Petroter is the oil shale processing technology developed by VKG, on the basis of which the first plant of the same kind was launched in 2009, named Petroter I. The new plant will provide about 500 new workplaces directly and indirectly, and the cost of the project amounted to 1.1 billion Estonian kroons (70 million EUR). The technology proved very success-

ful within the subsequent two years, and in August 2012, the construction of the second Petroter II plant began. The Petroter III plant will be completed next spring. At the third plant, we will be dealing with further development of this technology. It will also be partially using the common raw material supply systems, which were built for the two existing plants, as well as the system of residue ash removal and the engineering systems.

NOVEMBER

In the beginning of November, the largest Estonian oil shale processing enterprise named Viru Keemia Group (VKG) entered into a new loan contract with the loan syndicate consisting of Scandinavian banks. The aim of the contract is to finance VKG´s projects of crucial importance from the point of view of the sustainable development of the Group.

The value of the loan contract is 150 million EUR (2.3 billion Estonian kroons). The new loan will cover the construction of the new VKG Petroter III oil plant, the expansion of energy production, and the compliance with environmental requirements.

On November 11, VKG entered into a contract for services with Wesiko Projekt OÜ. The object of the contract is the construction of the new amenity facility for the employees of the company on the production territory of VKG Kohtla-Järve. In the new facility, which will be completed in September 2014 and will accommodate up to 1,000 people, the employees will be able to change their clothes, to keep personal items, to wash and to rest. The volume of investments amounts to 3 million euros.

DECEMBER

VKG in cooperation with Jõhvi Concert Hall and Jõhvi municipality government awarded the 4th Kaljo Kiisa grant for young filmmakers. It was granted to Mart Saar, the production manager of several films. In the beginning of December, the oil shale enterprise VKG Group launched the new webpage www.eestifosforiit.ee. It provides a thorough and independent overview of the natural resource, the research of which is regarded to be very important by the Group.

Recognition in 2013

- For the fourth year in a row, VKG received the title of the “Responsible Estonian Enterprise”.
- On April 12, Priit Rohumaa, the Chairman of the Management Board of Viru Keemia Group, was awarded the Medal of Honour of the Second Class for his special services in the regional development of Estonian entrepreneurship and the industrial sector and active introduction of Estonia as an investment destination, by the Estonian Chamber of Commerce.
- For the second year in a row, VKG also received the title of the “Culturally-Friendly Enterprise”.

Targets and challenges for the upcoming period (2014-2015)

- Successful launch of the plant Petroter II, successful implementation of the Petroter III project.
- Large-scale reconstruction of the energy production facility at VKG, which will improve the reliability of processes and increase production capacity.
- Successful implementation of the sulphur trapping project. The project involves three new desulphurization units as well as construction and launch of the lime plant which will produce the raw material for sulphur trappers.
- Implementation of the innovative plan of constructing the pyramids at the Ojamaa mine in Maidla rural municipality. The barren rock generated as a result of mining operations at the Ojamaa mine will be used as the material for the pyramids.
- Ongoing improvement of the working conditions and the industrial environment indicators. In 2014, the plan is to carry out large-scale repair and reconstruction works of amenities. The design team of Tartu Art College will help to make the working environment more employee-friendly.

Forecasts for 2014

OIL SHALE PROCESSING

2.8 million tonnes

PROCESSING VOLUME OF PETROTER I

0.9 million tonnes

NUMBER OF EMPLOYEES IN VKG

2,250

SOCIAL RESPONSIBILITY POLICY

VKG's integral policy of social responsibility and sustainable development was founded in the year 2009 and its purpose is to increase awareness of the Group's overall influence on the country's economy, social life and environment and to assess and manage this influence.

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The concept of social responsibility and sustainable development is the basis of the Group's everyday activities and the framework for its decisions. VKG is following the international principles of a socially responsible enterprise in all its activities. VKG also promotes those principles on local and national level and recognises the fact that it cannot be a single actor.

In the year 2010 VKG joined the world's most influential social responsibility initiatives: the **GRI** and the **United Nations Global Compact**.

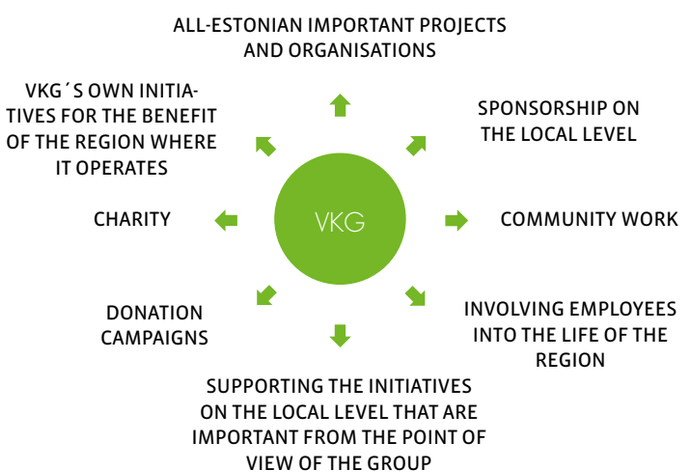
VKG is a member of the **Responsible Business Forum** in Estonia. The enterprise received the title "Responsible Estonian Enterprise" in the years 2010, 2011, 2012, and 2013. Based on the Responsible Business Index of 2013, VKG was awarded a Bronze Quality Award (detailed information www.csr.ee).

The support and sponsorship activities of VKG are clearly targeted to the **Ida-Viru region and the people working and living here**. As an exception, VKG also supports all-Estonian important projects and institutions.

Directions of VKG´s social responsibility and sustainable development policy

- Environment protection. The environment protection policy of VKG was established in the year 2001. During the past 9 years the Group has invested more than 66 mln EUR into environment protection. VKG's environmental investments in the period of 2012–2020 will require additionally nearly 50 mln EUR.
- Social reporting i.e. full publishing of data about social, economic and environmental influence according to the Global Reporting Initiative (GRI).
- Socially responsible organisation of production in the enterprise itself (creating safe work conditions, motivating employees, additional benefits, additional pays, ongoing dialogue between the employees and the employer), and among employees (everyone accepts responsibility for everything).
- Public relations standards approved in the enterprise, prohibiting the publishing of incorrect or inaccurate data.
- Implementing social responsibility principles approved by international organisations (GRI, UN Global Compact) in the enterprise.
- Paying special attention to development of the region and to the local population (primarily via sponsorships and volunteer activities).

MAIN AREA OF SPONSORSHIP AT VKG



The drawing illustrates sponsorship at VKG

VKG's principles of social responsibility and sustainable development are implemented into the management process of the enterprise on the level of top management. In October 2011, the enterprise implemented the principles of responsible behaviour, and from the end of the same year the principles started to be implemented in the Group's everyday life. Introducing the principles among employees takes place via involving them into social initiatives (cooperation with the local food bank and children's institutions).

VKG´s influence on regional and national economy

VKG acknowledges its major influence on the Estonian economy and the Ida-Viru region, and declares its willingness to accept responsibility before the public for its decisions. The study conducted within the framework of preparing VKG's first report of social responsibility and sustainable development for the years 2008–2009 indicated that VKG Group and its employees contribute ca. 4% of the budget of the town of Kohtla-Järve.

According to the study conducted by AS Price Waterhouse Coopers Advisors (PwC) in the year 2011, the total economic influence of VKG on the Estonian economy was as high as 0.9% of the country's GDP in the year 2010. The Group's influence on the country's tax basis was on the level of 29.4 million euros, i.e. 0.6% of the total tax income of the country in the year 2010. Upon commissioning Ojamaa mine in the beginning of the year 2012, VKG provided jobs for a total of nearly 2,000 people and also creates hundreds of new jobs as a result of consumption of its products and services. Taking into account the fact that Ida-Viru County is one of the regions having the highest unemployment rate in Estonia, the jobs created by the Group are especially important for the region.

According to VKG's internal analyses, every mining employee creates four jobs within VKG and in turn, every employee of the Group creates four more jobs in Kohtla-Järve, Jõhvi and the surrounding municipalities.

VKG also has a marked influence on the export and foreign trade balance of the country, i.e. 0.9% and 14.6% respectively. All this shows VKG's importance for the Estonian economy.

In the year 2013, VKG provided support and aid to

Organisations
Ahtme Gymnasium
Ahtme Art School
Estonian Association of Engineers
Ida-Virumaa Sports Association
Jõhvi Culture and Hobby Centre
Kiikla Children's Home
Kirderanniku Choir
Kohtla Kaevanduspark-Muuseum SA (Kohtla Mining Park and Museum)
Kohtla-Järve Järve Gymnasium
Kohtla-Järve Cultural Centre
Kohtla-Järve Kindergarten "Tuvike"
Kohtla-Järve Children's Home
Kohtla-Järve Sports Society "Kalev"
Maarja Päikesekodu
Non-Profit Association "Eesti Mäeseltsi Mäering"
Non-Profit Association "Külaselts KAI"
Non-Profit Association "Rakvere Volleyball Club"
Non-Profit Association "Uljaste Guest Centre"
Non-Profit Association "Virumaa Kultuurisõbrad", Kukruse
polar manor
Mäetaguse Kindergarten "Tõruke"
National Opera "Estonia"
Sonda Rural Municipality Government
Sports Centre Afina
Sports Centre NRK, Kohtla-Järve
Sports Centre "Viru Sputnik"
Tae Kwon Do Club "Tekken"
Dance Group "Virulane"
Mining Academy of the Tallinn University of Technology

Events
Alutaguse ski marathon
AutoCad competition at Kadrina Secondary School
Avo Talpas memorial competition
Mining Conference held by the Estonian Mining Society
ELO winter games
Kiikla village sports day
TV programme "Kodutunne" in Virumaa
Kohtla-Nõmme triathlon competition
Children's Day in Kohtla-Nõmme rural municipality
Concert "Mõisatuled" at Maidla manor
Maidla Manor Days
Film Festival at Rakvere Gymnasium
Joint conference of the Tallinn University of Technology and ESTIS "Where Are You Heading, the Heating Industry?"
Eurovision song contest of the students of the Tallinn University of Technology
Competition between five schools

The assistance and support of the Group can be provided to any non-profit association and/or organisation operating in Estonia, which is interested in improving the life in Ida-Virumaa or in Estonia on the whole. The rules of sponsorship and assistance valid at the Group prohibit to provide assistance to private individuals. The procedure for applying for assistance from VKG looks like this:

MAIN AREAS OF SPONSORSHIP AT VKG

VKG IS AWARE OF THE LOCAL LIFE AND MONITORS ITS TRENDS → SUBMISSION OF THE APPLICATION → THE INITIAL ANALYSIS OF THE APPLICATION, ASKING FOR CLARIFYING INFORMATION WHENEVER REQUIRED → DISCUSSION OF THE APPLICATION BY THE MANAGEMENT BOARD →

\+
If the feedback is positive, the next steps are the detailed discussion and the implementation of the project.
–
If the feedback is negative, the project is EITHER terminated OR amended and re-submitted to the initial stage of the spiral.

ONE OF THE LARGEST SPONSORSHIP PROJECTS OF VKG THROUGHOUT THE YEARS HAS BEEN **JÕHVI BALLET FESTIVAL**, WHICH TOOK PLACE FOR THE 8TH TIME IN JÕHVI IN 2014.

ONE OF THE OLDEST AND THE MOST FAVOURITE EVENTS SPONSORED BY VKG: **THE SCHOOL BELL DAY**.
WE CONGRATULATE CHILDREN ON STARTING SCHOOL.

VKG´s initiatives for local culture

The main target groups of VKG are its investors and partners, its employees and the people living in Ida-Virumaa. In order to involve the two latter groups, VKG has launched several initiatives. We strongly believe that the implementation of values and the effective communication are most efficiently put into effect through involvement.

FIRST PHOTO COMPETITION IN VIRUMAA „MY BEAUTIFUL VIRUMAA"

In the year 2014 VKG and Jõhvi Concert Hall organised the third photo competition dedicated to the Virumaa region and its people. The purpose of the initiative is to promote the beauty of Virumaa and its unique role in Estonia's life. The photos could be submitted until 2 December.

The competition was founded by VKG and Jõhvi Concert Hall; later, other enterprises of the region joined the initiative. The competition is headed by Evelin Ilves and Kaupo Kikkas. More than 1,300 photos by nearly 70 authors were submitted to the competition; 31 prizes were awarded. Read more about the competition www.vkgsoojus.ee/konkurss.

KALJO KIISA GRANT FOR YOUNG FILMMAKERS

In the year 2009, VKG in cooperation with Jõhvi Concert Hall and Jõhvi Municipal Government established a grant for young filmmakers, in the memory of well-known director and actor Kaljo Kiisk (1925–2007) who was born in Ida-Viru County. The purpose of the 2,500 EUR grant is to support young filmmakers who have used Ida-Viru County in their works thus far, and to encourage young filmmakers to discover and record the variety of Ida-Viru County. The grant of 2012 was awarded to director Martti Helde and his creative team for the films "Risttuules" ("Cross-wind", Allfilm) and "Külm on" ("It's cold"). The grant of 2013 was awarded to director Anna Hints for the film "Vaba maa" ("Free Country"). In 2014, the grant was awarded to Mart Saar. Read more about the competition at www.vkg.ee/kaljokiisk.

CHILDREN´S ELECTRICAL SAFETY CAMPAIGN

In the beginning of the year 2012, VKG Elektrivõrgud OÜ initiated an electrical safety campaign intended primarily for children in pre-school and basic school age. The purpose of the campaign is to inform children at an early age about the dangers of electricity and to increase their awareness. In the course of the campaign, an electrical safety poster and a relevant online game were developed; the online game is playable in Estonian and Russian languages at VKG's website. The posters were distributed to all local schools and kindergartens. In time the enterprise plans to supplement the children's part of its website with useful information and to add more general information about electrical safety. A safety-related theatrical play popular among children is performed in kindergartens and schools. Read more about the campaign at www.vkgev.ee/lastele.

PROMOTING CHARITY AMONG EMPLOYEES

December 2012 rounded up a charity year in VKG's collective; the campaign was titled "It's easy to be a good person" ("Lihtne on olla hea inimene"). The enterprise created opportunities for its employees to participate in charity, e.g. donating foodstuffs to the Food Bank and children's toys and clothes to local orphanages and kindergartens. Cooperation continued between VKG and the local blood bank; the blood bank's medics visited VKG and its subsidiaries several times during the year.

Forest-planting took place in Maidla rural municipality, and the cleaning-up events took place in Mäetaguse.

Read more about VKG´s social initiatives in Facebook and on the Group´s websites:

- www.vkg.ee
- www.vkgsoojus.ee
- www.vkgev.ee

Communication of the group with the region and the people living in it

CONVERSATION BETWEEN THE LARGE INDUSTRY AND THE LOCAL PEOPLE

VKG is the first and the only Estonian enterprise which discloses all of its data concerning the use of resources and environment in conformity with the World Social Responsibility report standard GRI G3. In 2014, our fifth report was released.

VKG communicates with the local people very open-mindedly. Every year, several meetings with the locals take place, the main topic of which is environment and the development of the group. VKG publishes the invitations to meetings in local newspapers or using the available databases of the local inhabitants by phoning them or sending them e-mails.

One of the first Estonian civil initiatives in the field of environmental protection also originates from Ida-Virumaa, namely the PurFest festival, the aim of which is to protect the Purtse River and to involve local people into its protection. VKG has been supporting the initiative for years and assisting it. The event is organized by Laila Meister and Gerli Romanovitš, who received the title of the most prominent figure in Ida-Virumaa in 2013.

Several times a year the group holds the so-called Open Doors Day, during which everyone can visit the production territory of VKG.

Every year, on the last Thursday of May, the traditional Day of the Environment is held, which deals with one of the most important problems in the area. The event is visited by the most prominent figures of Virumaa and Estonia as a whole, local citizens, and the people who are in charge of the environmental issues. In 2014, the main topic will be the resource and taxation policy in the oil shale sector.

PUBLIC EVENTS HELD BY THE GROUP WITHIN A YEAR:

Chemist´s Day – every year on the last Saturday in May a public event takes place at the initiative of VKG in cooperation with the largest enterprises operating in the chemical industry in the area, such as Molycorp Silmet, Eastman, Novotrade Invest. The tradition of celebrating the Chemist´s Day was re-established in 2000. In 2012, over 8,000 people took part in the event.

Miner´s Day – in 2011, VKG re-established the tradition of celebrating the Miner´s Day. This annual large-scale public event takes place on the last Sunday in August. This event enables the Group to make a deep bow of respect both to the miners and to all of the other people living in the area. In 2013, over 50,000 people took part in the event, and its budget exceeded 90,000 EUR.

Elderly People´s Day – every year on October 1 VKG holds the Elderly People´s Day in cooperation with Kohtla-Järve town government. Both the people who were working in the oil shale industry for a long time and other elderly people, who have made a contribution into the development and improvement of the area, take part in this event.

For the Group, the meetings with the locals are of particular importance, since they provide the Management Board with an opportunity to share the information about the development and plans of the company with the people as well as to get feedback and comments from them and to answer their questions pertaining to the activities of the Group. The meetings take place both according to the schedule and at the request of the Group or the locals.

VKG' principles of social responsibility behaviour

- VKG identifies and studies the industry's effect on the environment and if possible then eliminates or minimises it. VKG conducts ongoing environmental monitoring;
- VKG develops resource-conservative and environment-friendly fields of technology and implements those into its production processes;
- VKG provides the public with regular reports about its activities;
- VKG communicates proactively with the media and the public, doesn't hide information and provides only accurate and truthful data about itself;
- VKG ensures safe and comfortable work environment for its employees;
- VKG has initiated motivational and developmental systems for its employees;
- VKG supports the trade union in its activities, offers additional benefits for its employees and supports ongoing dialogue between the management team and the employees;
- VKG promotes the idea of everyone accepting responsibility for their work: everything depends on everyone;
- VKG employs internationally recognised principles of social responsibility;
- VKG pays special attention to regional development, keeping active contact with the local authorities and residents;
- VKG supports important regional projects, especially cultural and sports event;
- VKG is a trustworthy partner for the state, for local authorities and for its business partners;
- VKG promotes the principles of social responsibility and recognises the fact that it cannot be a single actor.

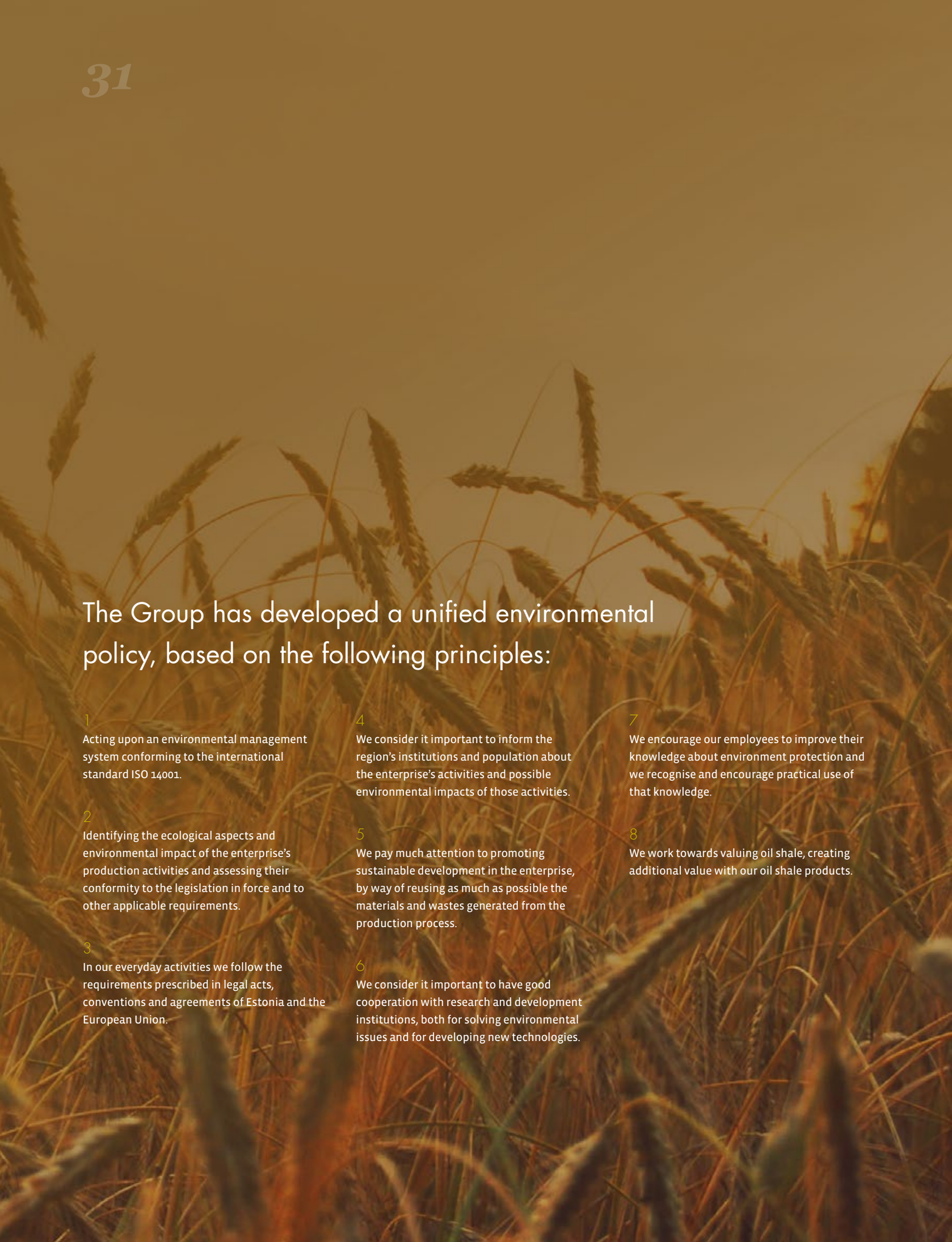
ENVIRONMENT PROTECTION

VKG pays much attention to environment protection in its activities. The main priorities are **prevention or minimisation of environmental impacts resulting from production activities**.

The environmental mission of the group is the **efficient consumption of the oil shale resource** and **revealing its ultimate potential through the implementation of the best possible technology**.

The aim of the environmental policy of VKG is to operate on the basis of the common management system for the benefit of the preservation of the environment that is rich in species and the rational use of natural resources.

PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: ANASTASSIA VOLKOVA



The Group has developed a unified environmental policy, based on the following principles:

1
Acting upon an environmental management system conforming to the international standard ISO 14001.

2
Identifying the ecological aspects and environmental impact of the enterprise's production activities and assessing their conformity to the legislation in force and to other applicable requirements.

3
In our everyday activities we follow the requirements prescribed in legal acts, conventions and agreements of Estonia and the European Union.

4
We consider it important to inform the region's institutions and population about the enterprise's activities and possible environmental impacts of those activities.

5
We pay much attention to promoting sustainable development in the enterprise, by way of reusing as much as possible the materials and wastes generated from the production process.

6
We consider it important to have good cooperation with research and development institutions, both for solving environmental issues and for developing new technologies.

7
We encourage our employees to improve their knowledge about environment protection and we recognise and encourage practical use of that knowledge.

8
We work towards valuing oil shale, creating additional value with our oil shale products.

Environmental management system

CONFORMITY TO THE ISO STANDARD

Most of the subsidiaries of VKG are employing an environmental management system conforming to the international standard ISO 14001.

Since year 2006, VKG Oil AS and VKG Transport AS hold the ISO 14001: 2004 and ISO 9001: 2000 certificate for environmental and quality management system. Viru RMT holds the ISO 9001: 2000 certificate for quality management system and the OHSAS 18001 certificate for occupational safety.

VKG Energia OÜ has implemented an occupational health and safety management system conforming to OHSAS 18001, and in 2013, it also implemented the environmental and quality management system conforming to ISO 14001 and ISO 9001.

VKG Soojus OÜ and VKG Plokk OÜ have implemented the environmental and quality management system conforming to ISO 14001 and ISO 9001.

INVESTMENTS INTO ENVIRONMENT PROTECTION

Viru Keemia Group AS has an environmental priority of reducing the environmental impacts of valuing oil shale as an earth deposit. Investments into best available technology and environment protection, participation in the development of legislation, monitoring the production process and the environment, modelling the outside atmosphere, optimising the production process, and increasing the energy efficiency are the means by which the Group ensures sustainable development of shale oil production.

The Group follows the requirements prescribed in the legislation, takes into account the relevant opinions of various interested parties, and acts as a reliable partner for state institutions, local governments and the local community. VKG considers it important to have good cooperation with research and development institutions.

The recent years have seen much work being done for the benefit of environment; tens of millions of euros have been invested and significant shifts towards more environment-friendly production have been made. At the same time, the legislation of the European Union and the Republic of Estonia and the increasing production needs are setting higher and higher requirements and new, higher environmental targets for the enterprises of the Group.

In 2010, the Industrial Emissions Directive (IED) of the European Commission came into effect, which was taken over into the Estonian legislation by the Industrial Emissions Act (hereinafter IEA) in 2013. The new legal framework imposes an obligation to conform to the requirements of the best possible technology (BPT), in addition to the end-of-pipe technologies (in previous reports, the investments into environment were presented in the form of a graph). It means that now the investments into the protection of environment are considered on a much larger scale than before.

This is why the methods for calculation of investments into environment, used by the companies covered by the IEA, have changed. Now these investments also include the investments into the development of environmentally-friendly technologies. On the basis of the new method, the graphs representing the investments into environment have also changed, which is why it is not possible to compare them with the earlier graphs.

On the basis of the new method, the investments into environment are now divided into two categories:

- the investments that reduce the effect on the environment directly
- the investments that reduce the effect on the environment indirectly

The investments that reduce the effect on the environment directly include such investments which provide immediate effect on the environment. They include, for example, the so-called end-of-pipe investments (trapping equipment), the renovation of tank fleets, closing the existing sources of pollution, or the investments aimed at the reduction, waste disposal, etc. The investments that reduce the effect on the environment indirectly include the activities which help to reduce the effect on the environment in the result of long-term ongoing activities. They include the investments in the BPT, into the development and implementation of new environmentally-friendly and efficient technologies, the technologies that facilitate the rational use of resources, the implementation of relevant measures, etc.

The amount of environmental investments increased in 2008 by ca. 64% compared to 2006 and decreased in 2009 by 50% compared to 2008 (see graph 1). In 2008, the largest investments were made into the construction of the sulphur trap at VKG Energia. This piece of equipment cost 9.5 million EUR and was completed in May 2008. The sulphur trap will allow to bond up to 65% of sulphur contained in fuels combusted at the Northern Heat and Power Plant, which will significantly reduce the emissions of sulphur dioxide into the atmosphere as the primary pollutant. In 2009, the volume of environmental investments decreased due to economic recession. In 2010 and 2011, the amount of environmental investments directly reducing the environmental impact was still quite moderate, the reason for which was the completion of large-scale environmental projects in 2008 and large amounts of investments into development activities. In the course of planning and implementing of development activities, the principles of environmental protection, energy efficiency, and sustainable development are taken into consideration as the integral parts of planning and implementing.

In 2012, the amount of investments reducing the environmental impact directly was 27.5 million EUR, which is 13 times more than in the previous year. The main investments in 2012 were made into closing the hazardous waste storage site, closing the old heat and power plant in Ahtme, building the oil shale belt conveyor, and acquiring the sulphur trap.

In the year 2013, VKG directly invested a total of approximately 16.4 million euros into environment protection measures; this is ca. 40% less than in the previous year 2012 (see the drawing). The reason was a considerable increase in the amount of investments into the development of the BPT and the rational use of the oil shale resource.

Environmental management system

The largest environmental investments in 2013 were:

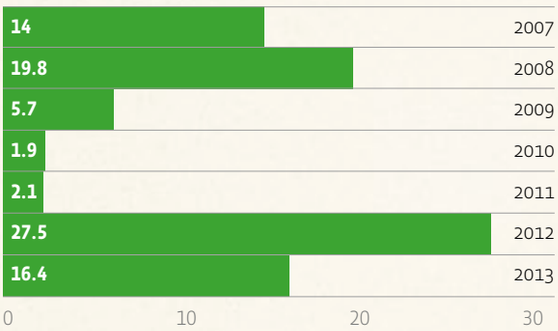
Construction of the sulphur trap at VKG Energia OÜ. It costs 9.5 mln EUR and will be completed in November 2014. The sulphur trap will allow to bond up to 92% of sulphur contained in fuels combusted at the Northern Heat and Power Plant, which will significantly reduce the emissions of sulphur dioxide into the atmosphere as the primary pollutant.

Just like before, considerable investments are made into the development of environmentally-friendly technologies and into a more rational use of natural resources, on the stage of planning of which the requirements of the best possible technology and the limit values, which are becoming stricter every year, are always taken into consideration. The most important of them are the construction of Petroter 2 and 3, which will allow to use the energy potential of oil shale at its maximum (the energy efficiency of the Petroter plant is 80%). The heating main between Kohtla-Järve and Ahtme was completed, owing to which it has become possible to produce heat and electricity from the residue heat generated in the result of oil shale processing, through effective co-production. In addition to that, considerable investments were also made into boosting the efficiency of boilers at VKG Energia.

In the following years, we are expecting an increase in the amount of the investments that reduce the environmental impact directly, since VKG Energia is planning to put into operation another sulphur trapping device, and one more similar device is supposed to be commissioned by 2016. Besides, we should also make ongoing investments into the development of technologies improving the energy efficiency.

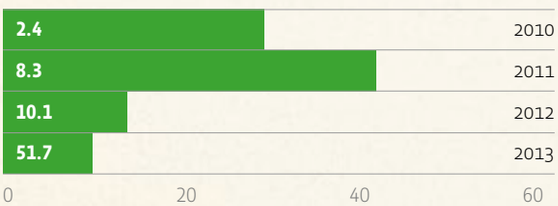
Just like in 2012, the main environmental trends in 2013 were the determination of the environmental footprint of the greenhouse gases generated by the fuels produced from oil shale and taking part in the negotiations on this topic in the European Commission, taking part in the development of the oil shale industry best possible technology document, updating and implementing the programme of elimination of pollution sources causing unpleasant odours, tidying up the hazardous waste storage sites, and updating the waste water processing technology.

INVESTMENTS THAT REDUCE THE ENVIRONMENTAL IMPACT DIRECTLY 2007-2013 (MLN EUR)



The investments that reduce the environmental impact directly (occupational safety, trapping equipment, reducing the number of pollution sources, other projects that reduce the environmental impact directly)

INVESTMENTS THAT REDUCE THE ENVIRONMENTAL IMPACT INDIRECTLY 2010-2013 (MLN EUR)



The investments that reduce the environmental impact indirectly (investments into the development and launching of the best possible technology, investments into the rational use of natural resources)

Environmental management system

THE LARGEST COMPLETED AND ONGOING ENVIRONMENTAL PROJECTS AT THE GROUP:

Shale oils filtration plant

VKG Oil AS completed a shale oils filtration plant. The implementing of the relevant process allows to eliminate several sources of atmospheric pollution and reduce emissions and production losses. As a result of implementing the new technological scheme, no hazardous liquid wastes of oil shale pitch are generated anymore, and instead a fine-dispersing solid fuel – filter cake is produced.

Tank fleet

Other measures of reducing atmospheric emissions are investments into the tank fleet and reconstructing of the heavy oil cycle of shale oils. In the year 2008 a tank fleet was constructed and scrubbing equipment was installed for the shale oil storage and the distillation plant. These investments resulted in significant reduction of emissions of hydrocarbons and phenols. By the end of the year 2009, an absorber for the tank fleet of shale oils was completed; this unit binds up to 70% of volatile organic compounds. Since the beginning of the year 2013, emissions of organic volatiles from the absorber of the distillation unit's tank fleet are fully eliminated. Also, the tank fleet of the phenol water dephenolation unit is being reconstructed. The years 2013–2014 will see the catching systems of other tank fleets being made more effective as well.

Petroter oil plants

In the year 2009 the first Petroter oil plant was completed, allowing the use of fine oil shale for oil production. This plant has several devices for environment protection. Its chimney stack has a continuous monitoring device for flue gases; it allows us to monitor the concentration of pollutants emitted into the atmosphere and to react immediately in case of any exceeding of limits. The plant also has an utilisation boiler for using up the waste gases and the heat resulting from those gases. The solid wastes resulting from processing of oil shale in that plant are also more environment-friendly, because the organics content of the generated ash is significantly lower and thus conforms to the requirements prescribed in the legislation.

At the moment, the works aimed at the construction of the Petroter 2 line are being completed, and the construction of the Petroter 3 line is being initiated.

The new lines are similar in process to the Petroter 1, but they have been supplemented with several measures that facilitate the rational use of the resource and which conform to the principle of the environmental protection:

- The utilisation boiler will be enhanced, allowing for even more efficient use of the organic content and carbon dioxide in the fuel gases
- Other equipment (ash heat exchanger, flash furnace) will be enhanced as well, allowing for more efficient use of heat generated from the production process, producing steam and heating water.

As a summary it can be said that more than one hundred big and small changes will be made in the Petroter II and III plants, all for the main goal of ensuring more efficient and environment-friendly functioning of the process. This will allow higher production volume with less raw material and thereby with less emissions. The changes will also allow for maximum use of heat energy generated in the process and for reduction of regular maintenance and standstill periods. The changes will ensure stability of the process, rendering it more effective and environment-friendly.

Waste deposits

In the year 2007 a new semi-coke solid waste deposit was completed, conforming to all environmental requirements; the depositing technology used excludes any seeping of storm water into the body of the deposit. The leachate is collected into a separate water-tight pool and is treated in the regional waste water treatment plant if necessary. Due to special inclines, the time of contact between storm water and the deposit surface is minimal, thus minimising the polluting of storm water. Tidying of old hazardous waste deposits continued in 2012 until summer 2013, rendering them all watertight. Tidying of the old waste deposits will minimise their environmental impact.

Oil removal unit

In the previous years, Viru Vesi AS completed the 1st stage of reconstructing the oil removal unit (the purpose of this piece of equipment is the purification of the water on the territory of the residues of oil shale processing), with the cost of 1.4 million euros. The new floatation devices allow pre-treating of the industrial waste water and ensure the required water quality on exit from the oil removal unit. In the beginning of the year 2012, the 2nd stage of reconstructing the oil removal unit was completed, with the cost of 1.1 million euros. The new unit allows better pre-treatment of industrial waste water to remove various mechanical additives. In the year 2013, atmospheric emissions from that unit were eliminated, the works will be continued in 2014.

Belt conveyor

A significant environmental project is the 12.5 kilometre belt conveyor for oil shale, constructed by VKG Kaevandused OÜ in the years 2010-2012 to run from the Ojamaa mine to the Kohtla-Järve industrial territory. The belt conveyor helps to reduce significantly the environmental load resulting from road transport.

Environmental management system

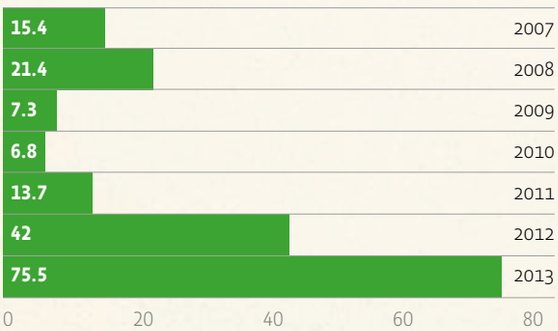
Lime production plant

There are plans to commission a lime production plant of VKG Energia in the year 2014, for the purpose of maximum reuse of mining scrap from the Ojamaa mine, to produce low-quality lime necessary for SO_2 capture. The plant's design takes into account all requirements of best available technology, in order to ensure minimum emissions.

Heating main between Kohtla-Järve and Ahtme

In the beginning of 2013, the new heating main was completed that conforms to all of the BPT requirements, which, in addition to Jarve district in Kohtla-Järve, also allows to heat Ahtme district and Jõhvi. Owing to the heating main, it has become possible to increase the efficiency of co-production of heat and electricity at VKG Energia considerably and to use up the residue heat generated in the result of oil shale processing. Besides, the construction of the new heating main also allowed to close the old heat and power plant in Ahtme, which did not conform to the old requirements pertaining to environment.

ENVIRONMENTAL EXPENDITURE OF THE GROUP
2007-2013 (MLN EUR)



Environmental expenditure of the Group (the graph does not include the commissioning of the sulphur trap, environmental monitoring, environmental research, and other expenses)

Strategic vision of reducing the impact of the industry

The main directions of environmental activities for the years 2012–2018 include reducing atmospheric emissions, especially pertaining to sulphur dioxide and the sources of pollution causing unpleasant odours.

Also, heightened attention will be paid to improving the quality of storm water and waste water and to enhancing of treatment technologies. There are also issues planned to be solved regarding depositing of oil shale ash and bottom ash and regarding closing of the wet deposit.

Besides, the measures aimed at an increase in energy efficiency are also being sought for.

The main environmental targets for the next 5 years are as follows:

- Reducing the sources of air pollutants and emissions of aliphatic hydrocarbons and hydrosulphide;
- More efficient and complex monitoring of the Group's air pollution and precise forecast modelling of the effect of expansion;
- Reducing the quantities and concentrations of sulphur dioxide emission, by installing two additional sulphur scrubbers;
- Closing and tidying old hazardous waste deposits, thus reducing the pollution load of soil water and ground water;
- More efficient treatment of storm water and waste water;
- More conservative resource use, by way of developing energy efficiency (with energy audit) and conserving natural resources (research of using mining water as coolant water, lime production plant), boosting the efficiency of co-production
- Development of the best available technology for oil shale processing, and implementing it in construction of the new Petroter II and III plants and in improvement of the existing production.

The following research is planned for the year 2014:

- Updating the project of allowed emission quantities at Kiviter
- Project of allowed emission quantities of the Petroter III plant
- Updating the project of allowed emission quantities at VKG Energia
- Assessing the environmental impact of the Northern Heat and Power Plant of VKG Energia, in the course of which the impact of the expansion on the surrounding territory will also be assessed
- Researching the location of the ongoing monitoring station of VKG Oil AS, in the course of which the adequacy of the location of the monitoring station will be assessed as well as its suitability to environmental conditions
- Updating the software for ongoing monitoring of the industrial territory
- Research into possibilities for treating storm water
- Energy audit of the Group, to find opportunities for increasing energy efficiency
- Report of baseline conditions of the soil and the ground water in the Group's industrial territory
- Research of environmental impact and deposit-suitability of hazardous wastes generated in the Group
- Research of the best possible technology in order to find out different technological solutions and reveal the trends in new requirements
- Proving the CO_2 emission quantities generated in the Group

The following main environmental investments are planned for the year 2014:

- Completing the tidying works of the ash deposit and starting the construction of a new waste deposit conforming to all prescribed requirements;
- Works to ensure air-tightness of VKG Oil's gas retort stations;
- Eliminating odorous pollution sources in the Group
- Starting the construction works of storm water sewage system;
- Renovating the tank fleet of the oil-containing waste water pre-treatment plant, the 3rd stage;
- Completion the construction works for the sulphur trap equipment of VKG Energia's Northern HPP and starting the construction of the new equipment
- Updating the ongoing monitoring device at Petroter
- Boosting the efficiency of the warehouse for commercial oils and the trapping devices at the tank fleet of the oil processing facility (purchasing additional purification devices and renovating the available ones)
- Investments facilitating energy efficiency and co-production
- Investments into the development of the best possible technology

Industrial wastes

HAZARDOUS WASTES

In the year 2013, the Group generated 1.88 million tonnes of hazardous wastes, which is 9% more than in the year 2012. The increase in hazardous wastes is caused by more oil shale ash and semi-coke being deposited in the hazardous wastes deposit, due to increased production volumes (more oil shale was used) and the transitioning to oil shale from the Ojamaa mine with higher mineral content.

VKG Energia generated 29,329 tonnes of hazardous wastes in the year 2013 and 3,147 tonnes in the year 2012. The increase of hazardous wastes when compared to the year 2012 resulted from starting to use oil shale ash in addition to lime for removal of SO_2, which allows to save lime and to use up free CaO potential available in ash.

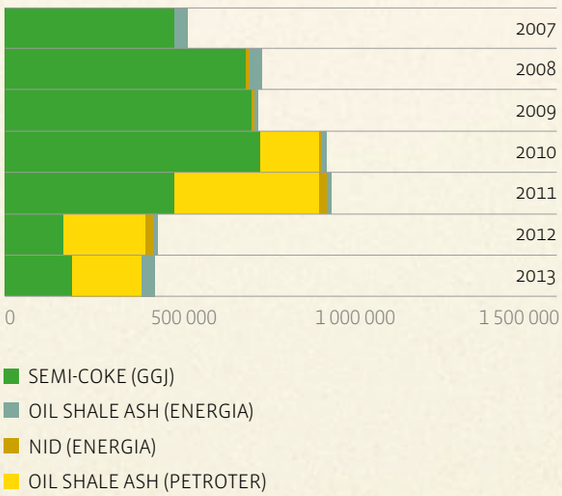
HAZARDOUS WASTES GENERATED BY THE GROUP	2010	2011	2012	2013
Hazardous wastes (mil t)	1.33	1.58	1.71	1.88
incl. the residues generated while cleaning the tanks (t)	1432	1643	365	122
incl. oil shale ash (t)	150 000	382 637	423 777	477 774
incl. semi-coke (t)	791 000	794 975	868 885	972 801

GENERATION OF HAZARDOUS WASTE AT VKG OIL AS PER PRODUCTION UNIT

The figure presents the quantities of hazardous wastes generated per 1 tonne of produced shale oil. The production volume in the year 2013 increased by 15,947 tonnes and the quantities of generated hazardous wastes increased by 135,835 tonnes when compared to the year 2012. The increase of that ratio comes from transitioning to oil shale from the Ojamaa mine, the higher mineral content of which causes more wastes to be generated from oil shale processing.

Besides, another reason for the increased ratio is an increase in the share of the Petroter technology. Since Petroter uses in its production process fine oil shale with lower fuel value, less oil is generated in the result of this process, which in its turn causes increase in the ratio. At the same time, in terms of the Petroter technology, we are dealing with much more effective energy production, with the energy efficiency of ca. 80%. It allows to use up the potential of fine oil shale much more efficiently than burning it for producing electricity.

DEPOSITED QUANTITIES OF SOLID WASTES (TONNES)

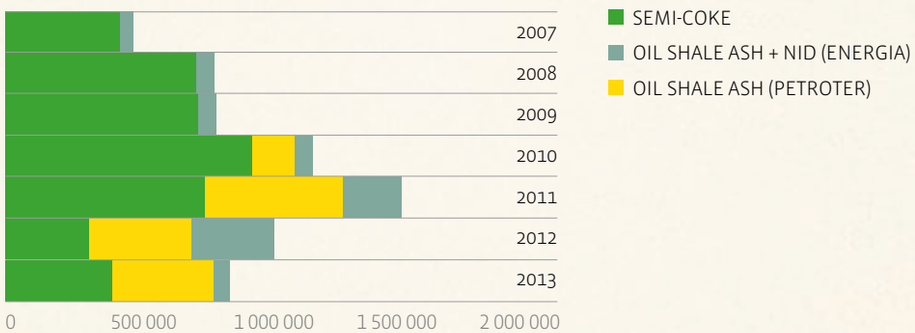


The total quantity of solid wastes deposited in the year 2013 was 408,609 tonnes, meaning a decrease by 14,835 tonnes (see drawing 4). The decrease of deposited wastes was the result of reusing generated ash and semi-coke in closing of hazardous waste deposits.

Industrial wastes

The total amount of solid wastes depositing fees for the year 2013 was ca. 845.8 thousand euros. The decrease of pollution fees from waste depositing by 15.76% when compared to the previous year is mainly due to reuse of wastes in closing of hazardous waste deposits and changes in the rates that used to be valid previously, on the basis of the Environmental Fees Act.

SOLID WASTES DEPOSITING FEES (EUR)



NON-HAZARDOUS WASTES

In the year 2013, the Group generated a total amount of 582,464 tonnes of non-hazardous wastes, which is approximately 21% less more than a year before. The main waste types are mixed wastes from construction and demolition, common wastes, and mining scrap from oil shale mining. The decrease of non-hazardous wastes is primarily caused by mining scrap generated from the Ojamaa mine. In 2013, the limestone from the mine was certified. It means that owing to the advanced technical solutions, we managed to start obtaining limestone from the mine, in addition to oil shale, which can be used in different construction works.

NON-HAZARDOUS WASTES GENERATED AT THE GROUP	2010	2011	2012	2013
Non-hazardous wastes (t)	8 270	15 340	739 653	582 464
incl. construction and demolition wastes	253	662.5	433.5	318.09
incl. common wastes	201	219	229	382
incl. calcium-based reaction wastes from sulphur trapping	7 352	14 459	17 757	0
incl. mining scrap	0	0	714 914	570 241

REUSABLE WASTES

In the year 2013, the Group reused 2.04 million tonnes of hazardous and non-hazardous wastes, which is nearly 0.5% more than a year before. The main wastes taken into reuse were:

- phenol water used for producing phenol fractions and refined chemicals;
- semi-coke and oil shale ash used as construction material for closing the old semi-coke hills;
- mining scrap used as filler and raw material for crushed stone

REUSE OF WASTES	2010	2011	2012	2013
Reusable wastes	386 970	698 831	2 025 319	2 044 781
incl. construction wastes	0	25 578	0	8000
incl. phenol water	386 970	402 735	419 599	423 931
incl. fusses	0	0	0	0
incl. old oil	0	0	0	0
incl. semi-coke	0	23 8695	694 211	775 240
incl. oil shale ash	0	0	192 135	266 726
incl. mining scrap	0	0	714 914	570 241

Atmospheric emissions

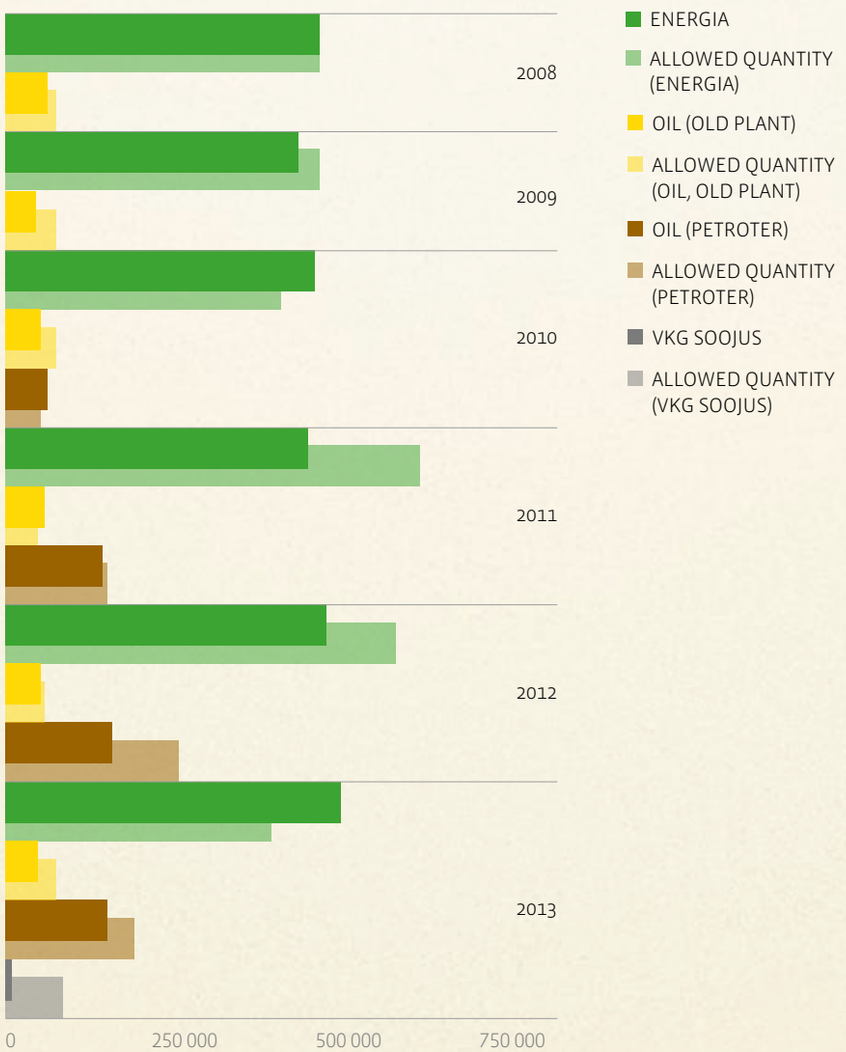
CO_2 EMISSIONS

The industrial enterprises of the Group emitted a total of 690,939 tonnes of CO_2 in the year 2013, which is 5,583 tonnes more than in the year 2012. The increase of CO_2 emissions when comparing to the year 2012 results from increase of production capacity of the Petroter plant and increase of fuel volumes combusted in VKG Energia.

Most of the carbon dioxide emissions (472,759 tonnes in the year 2012 and 489,195 tonnes in the year 2013) were generated in VKG Energia upon combusting the retort gas and semi-coke gas generated in the course of thermal processing of oil shale, and also upon combusting oil shale and filter cake.

VKG Oil emitted 212,597 tonnes of carbon dioxide in the year 2012 and 198,200 tonnes in the year 2013. The emissions resulted from combustion of waste gases (retort gas, coke gas, separator gas) and natural gas in the shale oil distillation plant, the phenol rectification plant and the electrode coke producing plant, and in the course of operation of the Petroter plant.

CO_2 EMISSIONS (TONNES)



Atmospheric emissions

SO_2 EMISSIONS

In the year 2013, the Group emitted a total of 8,767 tonnes of sulphur dioxide, which is 120 tonnes less than in the year 2012. The increase of sulphur dioxide emissions is due to two main reasons:

- VKG Oil AS reduced the combustion quantities of gases;
- the amount of retort gas combusted at the Southern Heat and Power Plant decreased.

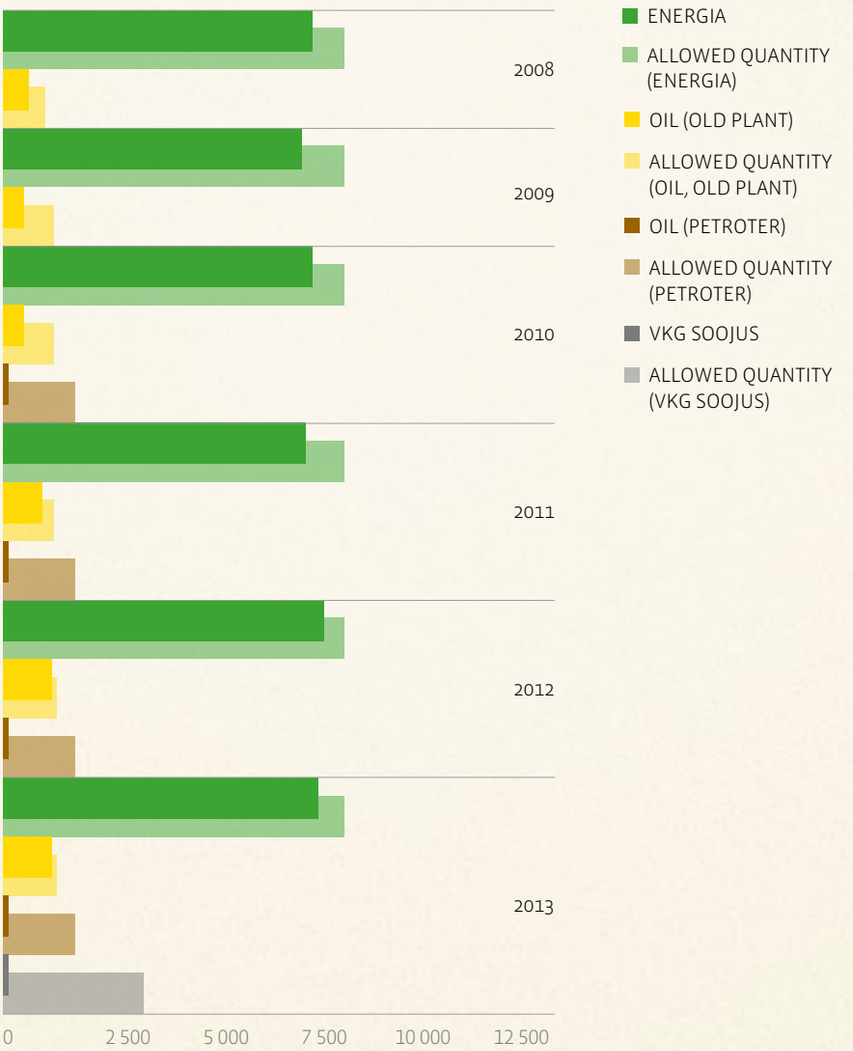
Most of the SO_2 emissions, i.e. 7,792 tonnes in the year 2013 and 7,846 tonnes in the year 2012 were emitted from VKG Energia upon combusting the retort gas and semi-coke gas generated in the course of thermal processing of oil shale, and upon combusting oil shale and filter cake.

VKG Oil emitted 972 tonnes of SO_2 in the year 2013 and 1,041 tonnes in the year 2012. The emissions resulted from combustion of waste gases (retort gas, coke gas, separator gas) in the shale oil distillation plant and the electrode coke producing plant, and in the course of operation of the new Petroter plant.

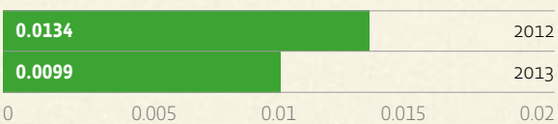
In 2013, there was a decrease in the amount of special emissions of SO_2 by 26% compared to 2012 per the production volume of VKG Energia. The decrease in the amount of special emissions was achieved through the development of effective co-production (the production volumes increased significantly). Owing to Ahtme heating main, which was launched in 2013, it has become possible to use up the energy of residue gases generated in the process of production of oil shale effectively. Besides, the old Ahtme Southern Heat and Power Plant was closed, since it did not conform to the environmental requirements.

In 2013, there was a decrease in the amount of special emissions of SO_2 by 11% compared to 2012 per the production volume of VKG Oil. The decrease in the amount of special emissions was caused by technological advancements, owing to which the amount of oil at the output increased.

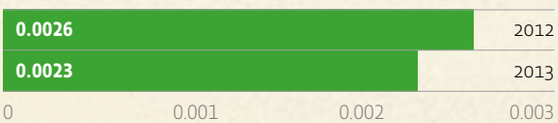
SO_2 EMISSIONS (TONNES)



SPECIAL EMISSIONS OF SO_2 PER THE PRODUCTION VOLUME OF VKG ENERGIA



SPECIAL EMISSIONS OF SO_2 PER THE PRODUCTION VOLUME OF VKG OIL

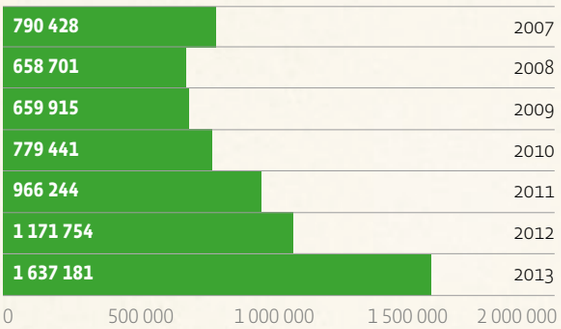


Atmospheric emissions

AIR POLLUTION FEES

The increase of the pollution fees by ca. 28% when compared to the previous year is mainly due to increase in pollution fee rates.

AIR POLLUTION FEES IN THE GROUP (EUR)

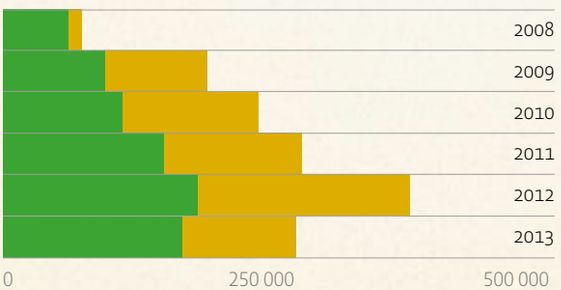


Resource use

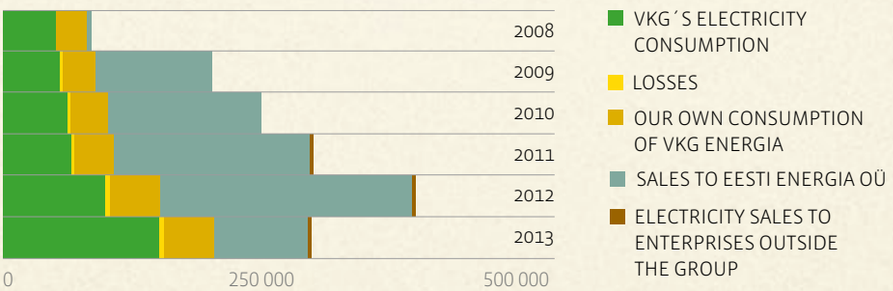
ELECTRICITY CONSUMPTION

In the year 2013, the electricity consumption of the entire Group was 202,681 MWh, whereas the largest consumers of electricity were VKG Oil and VKG Energia. The Group consumed 52,877 MWh more electricity in the year 2012. The increase of electricity consumption in the year 2013 was caused mainly by the Ojamaa mine and a slight increase in consumption at VKG Oil and VKG Energia.

OVERALL ELECTRICITY BALANCE (MWh)



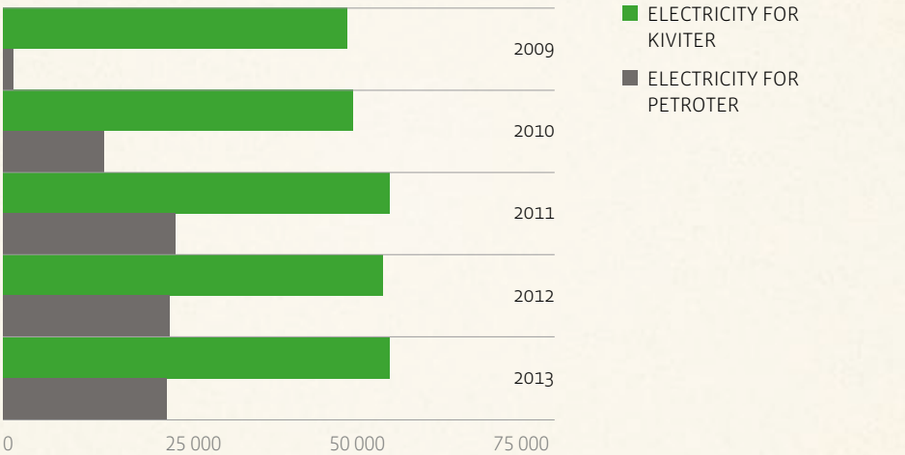
VKG´S ELECTRICITY SALES AND CONSUMPTION BALANCE (MWh)



Resource use

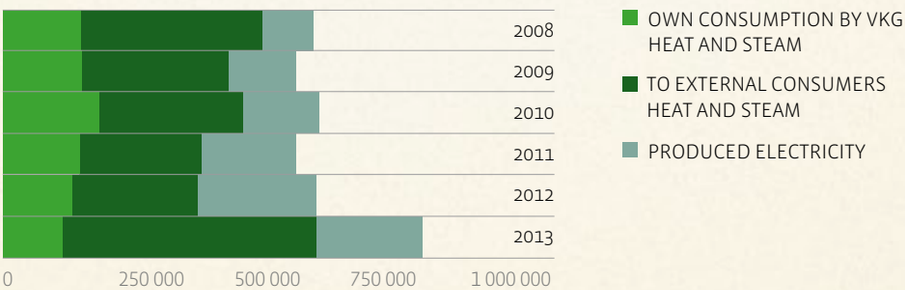
In the year 2013, VKG Oil consumed 79,544 MWh of electricity, of which 23,730 MWh was consumed by the new Petroter oil shale processing plant. Out of the entire electricity consumption of VKG Oil, 5,209 MWh was consumed by lighting and 74,335 MWh was consumed by technological equipment. VKG Oil consumed 1,852 MWh more electricity in the year 2013 than in the year 2012. The increase in electricity consumption in the year 2013 is due to an increase in production volumes.

ELECTRICITY CONSUMPTION BY KIVITER AND PETROTER TECHNOLOGIES AT VKG OIL (MWh/a)



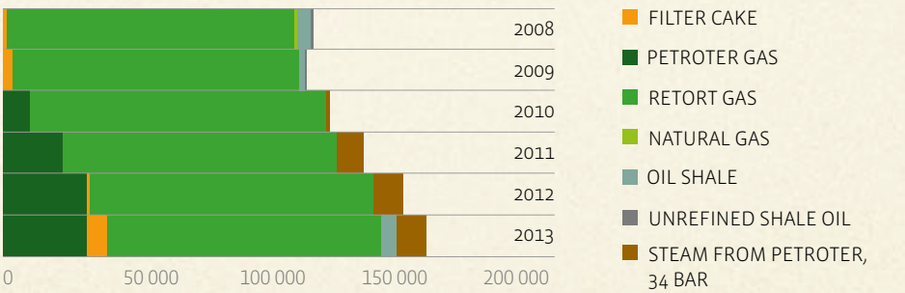
VKG Energia consumed 47,073 MWh of electricity in the year 2013 (see graph 10). The enterprise also produced electricity in the amount of 189,840 MWh.

ELECTRICITY AND HEAT PRODUCED BY VKG ENERGIA (MWh)



In relation with an increase of heat demand in the year 2013, VKG Energia started also to use solid fuels – filter cake and oil shale. Semi-coke gas consumption at the Petroter plant increased significantly. To some extent the consumption of retort gas decreased.

FUEL CONSUMED BY VKG ENERGIA (TFE)

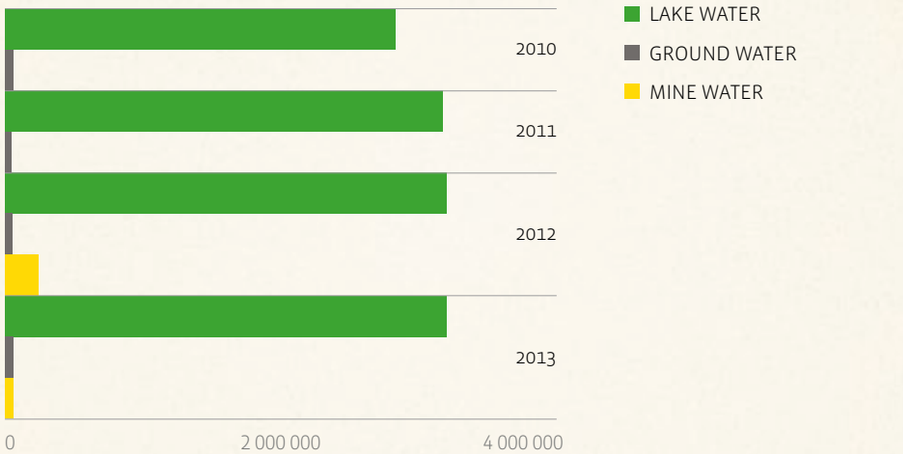


Resource use

WATER CONSUMPTION AND WATER EMISSIONS

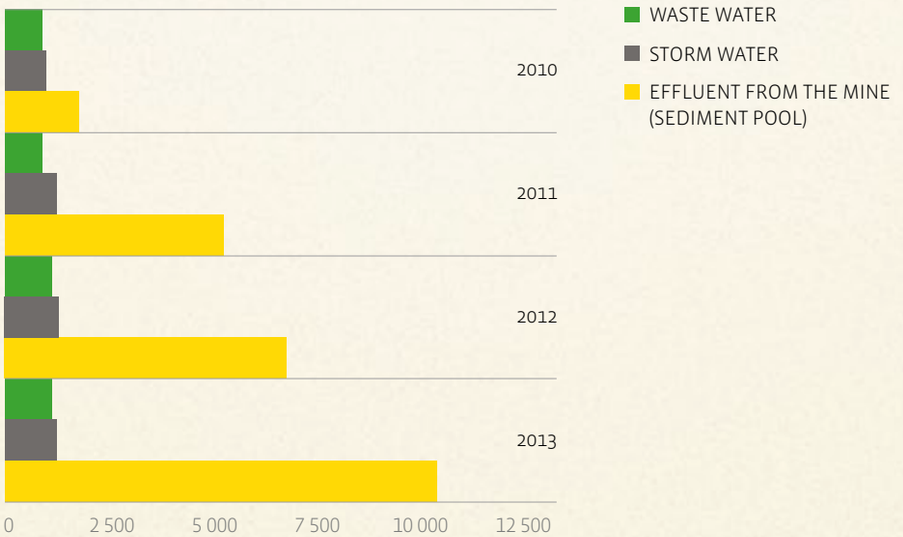
In the year 2013, a total of 3,557 thousand m³ of water was consumed; of this, 48.7 thousand m³ was ground water, 3,457 thousand m³ was lake water and 51.2 thousand m³ was water used in the refinery plant. In the year 2013, the total water consumption was 120 thousand m³ less than year 2012. The decrease in water consumption when compared to the year 2012 resulted mainly from the Ojamaa mine, where ground water is used for common needs and sediment pool water is re-used for the enrichment plant.

WATER CONSUMPTION AT THE GROUP (m³)



In the year 2013, the Group's total water emissions were 12.7 million m³, of this, 1.16 mln m³ was effluent from the industrial territory, ca. 0.99 mln m³ was waste water and 10.6 mln m³ was mine effluent from the sediment pool. In the year 2012, the Group's total water emissions were 8.36 mln m³, of this, 1.32 mln m³ was storm water from the industrial territory, ca. 0.97 mln m³ was waste water and 6.07 mln m³ was mine effluent. Water emissions increased by 4.4 mln m³ compared with the previous year, which was mainly due to increase of storm water pumped out of the mine.

WATER EMISSIONS FROM THE GROUP (THOUSAND m³)



The increase in water pollution charges by 43.7% in the year 2013 when compared to the previous year is mainly due to increase of water emissions and special use of water from the mine and largely also due to increase in pollution charge rates.

WATER POLLUTION CHARGES (EUROS)

EMPLOYEES

No company can exist without loyal employees. An employee of VKG is capable of working at the enterprise and wants to work here. On the average, employees remain employed by VKG for **nine years**. In our company, one can see fathers and sons, mothers and daughters working side by side.

The peculiar nature of the oil shale industry requires qualified labour force that is eager and able to learn. Among the employees of the Group, **25% have higher education**.

PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: DMITRI VOROBJOV

- As of 31.03.2014, **2,172 people** were employed at the VKG, among which there were **600 women** and **1,572 men**. The peculiar nature of the chemical industry and the difficulty of mining work are the main factors that explain the fact that the majority of employees are men.
- **1,145** of our employees have children younger than 18 years old.
- The youngest employee is **18 years old**.
- The oldest employee is **76 years old**.
- The longest term of employment at the company is **50 years**.

Our employees in numbers

Age distribution of the employees:

Up to 19 years old	5
20-24 years old	125
25-54 years old	1577
55-59 years old	265
Over 60 years old	200

Average age of the employees at different companies:

Viru Keemia Grupp AS	43.74
VKG OIL AS	42.48
Viru RMT OÜ	42.66
VKG Kaevandused OÜ	40.92
VKG Transport AS	50.53
VKG Energia OÜ	45.92
VKG Soojus AS	49.13
VKG Plokk OÜ	36.25
VKG Elektriehitus	40.2
VKG Elektrivõrgud	41.0
The average age at the Group on the whole	43.28

The representatives of twenty different nationalities work at the Group. The most represented are the Russians, the Estonians, the Belarussians, and the Ukrainians.

Other nationalities:
the Finnish, the Latvians, the Lithuanians, the German, the Polish, the Moldavians, the Koreans, the Bulgarians, the Armenians, and many other nationalities.

VKG AS AN EMPLOYER

In 2013, the Group recruited 400 new employees. More experienced co-workers act as instructors for newcomers and offer training to them, for which they are rewarded by the company. 90 young people completed their in-service training at VKG in 2013. The company does cooperation with the Kohtla-Järve Trade Union of Chemists, with which a new collective agreement was entered into in December 2013 for the next two years. The company pays child birth benefits and also makes payments to its employees on sadder occasions, such as funerals. VKG pays good motivating salaries to its employees. The average gross salary at the Group in 2013 was 1,300 EUR. Compared with 2012, the average monthly gross salary increased by 10.1%.

We pay bonuses for evening and night shifts, and also child birth benefits as well as make payments on sadder occasions, such as funerals. The mothers of small kids can make use of additional paid leave. Our employees can benefit from the availability of the healthcare station service, where they can get help from qualified medical staff. Also we offer vaccination against flu.

We value our employees through traditions:

- Chemist´s Day, which is the largest family event in Kohtla-Järve
- Miner´s Day, which is the largest summer event in Ida-Virumaa
- Christmas
- The event honouring the people celebrating their employment anniversaries
- Organising trips for the kids who go to the 1st grade and their parents and providing the kids with schoolbags filled with everything needed for going to school, as gifts.

FUTURE GENERATIONS

At present, our future employees are still at comprehensive schools, vocational schools, and high schools. We are open for school excursions and study trips. The employees of the Group take active part in the “Back to School” events and also make school visits at other times.

VKG has established the scholarship to motivate the students to acquire important skills they will need in the future at the Group. With the help of the scholarships, we want to support, motivate, and also to forward the information that we are waiting for new experts and specialists at our company.

VKG has offered the scholarship to the students who have been successful in the specialties of chemistry and material technology at Tallinn University of Technology and in the specialties of fuel technology, automatic production systems, machinery construction technology, and energy producing technology (higher applied education) as well as in Master studies for the specialty of fuel chemistry and technology at Virumaa College of TUT.

The annual scholarship fund is 19,000 EUR. We also communicate with the youth at different fairs and career days. In spring 2014, we took part in the fair named “The Key to the Future”, held at TUT, and in the Career Days at the University of Tartu.

Training and professional development

VKG's employees belong for the most part to the regular labour force prepared at the time of the former Soviet republic of Estonia. Due to their ageing they start leaving the labour market. The average age of VKG's personnel is now 44.1 years and this index is not high for an industrial enterprise. At the same time the Group is constantly working to provide itself with young engineers. For that purpose, VKG helps to promote engineering education in oil shale field on both national and local levels through student grants and providing opportunities for practical training.

To enable a newcomer to work independently, the new employee is first assigned an instructor and has to complete a training programme (up to three months); at the end of the test period the new employee must pass an examination in order to be allowed to work independently. Employees who wish to upgrade their qualification and get higher salary can pass a qualification examination for a higher level.

Guidance in occupational safety takes place periodically once in six months or once a year. The length of the period depends on the danger level of the working place. Occupational safety instruction includes introduction of safety devices and reminds about actions to be taken in case of emergency.

There are two directions of professional training VKG can propose to its employees:

- Training and examination system within the Group, aiming first of all to meet requirements of occupational safety and to gather knowledge in the field of oil shale industry and sustain working experience;
- Training outside the Group, targeting professional development and education of the personnel.

The training inside the Group is aimed not only at improving one´s knowledge, but also at generating the supportive spirit within the team and improving communication and strengthening bonds between the employees. For that purpose, a large-scale training project was implemented in 2013, in which 140 middle-ranking managers from all of the companies of the Group took part. The training helped to unite the middle-ranking managers at VKG, to understand each other better, to establish cooperation for the benefit of achieving common aims, and to boost the efficiency of their management - both of themselves and of others.

The main training fields in the year 2013 were:

- management courses for middle-ranking managers at the Group
- IT courses > Business English
- ISO management system training course for auditors
- BPMN and IFS courses

Training outside the Group is budgeted in each subsidiary for each financial year.

Our employees in numbers

Since one of the main resource of the Group is its employees, they should definitely be competent, qualified, interested and committed to achieving the aims set by and for the Group. They should be ready to move ahead together with the company. This is why we find it extremely important to order the training courses for our staff in different fields and from different training companies. In 2013, we involved several new partners into large-scale training projects. VKG has got a special room for carrying out courses and other training activities. It is equipped with everything that is required for successful learning and is very convenient both for students and lecturers. For IT courses, we have purchased a mobile computer classroom, which allows to organise courses at the time and at the place that is suitable for the company.

TRAINING EXPENDITURE OF VKG´S ENTERPRISES (TH €)	2011	2012	2013
VKG	28.9	47.1	49.7
VKG Kaevandused	0.1	5.6	17.1
VKG Oil	31.9	47.1	82.0
VKG Energia	2.9	9.5	13.3
VKG Soojus	7.6	6.9	6.3
Viru RMT	10	26	55.6
VKG Transport	17.1	18.9	21.6
VKG Elektrivõrgud	13.3	11.6	15.8
VKG Elektriehitus	4.3	11.4	9.9
VKG Plokk	0.5	3.8	2.5
KOKKU	**116.6**	**187.9**	**273.8**

Participation of employees in decision-making process

VKG has several procedures involving employees into the organisation's management process. First of all, employees have a right to express their opinion when drafting the next collective agreement.

The participation of employees in decision-making is being mediated by a trade union active in VKG. Trustees of the trade union who represent employees` interests have regular meetings with the management team members of VKG's enterprises, delivering to them questions and requests of employees and discussing employee-related problems and their possible solutions. The meetings usually take place once a month. The specific members of the supervision or management team are selected for the meeting by the trade union.

The chemical workers trade union active in VKG includes the Group's subsidiaries and also other chemical industries of the city. The trade union includes the employees of VKG Oil, Viru RMT, VKG Energia, VKG Transport, VKG Soojus and also ISS Eesti, Nitrofert and Novotrade Invest. The professional association of employees of chemical enterprises has been active since the year 1948 when the first collective agreement was signed. Directors of VKG's subsidiaries and top-level managers of the Group facilitate relations between administration and employees – the e-mail addresses and work telephones of the Management Board are open to employees.

The drawing illustrating the involvement of the employees into the decision-making process.

Occupational health and safety

In the year 2013, a total of 11 occupational accidents took place at Viru Keemia Group AS. Taking into consideration the number of employees, the number of occupational accidents (occupational accidents per one employee) in 2013 was the lowest within 2009-2013. The main causes of occupational accidents were:

- Employees violating occupational safety requirements;
- Lacking internal control of work environment;
- Not using personal protection equipment;
- The building, room or movement path not conforming to requirements;
- Lacking training or instructing.

As the absolute number, the most serious accidents were registered within 2009-2013 at VKG Kaevandused OÜ, VKG Oil AS and VKG Energia OÜ (7, 4 and 4 respectively). The probability of a severe occupational accident at VKG Kaevandused per a working hour was approximately 4.5 times higher than at VKG Oil within the same period, while the probability of a severe workplace accident at VKG Energia per a working hour was approximately 3.6 times higher than at VKG Oil AS and just 30% lower than at VKG Kaevandused.

The largest number (of both minor and severe) occupational accidents per one million of working hours was at VKG Energia OÜ – 6.2 accidents per one million of working hours. This is more than two times higher than at the VKG Group on the average. Hence while working at the reduction of the general number of accidents at Viru Keemia Group AS (both minor and severe), special attention should be paid to VKG Energia.

The most important accident prevention measures in 2014-2015:

- More frequent internal check-ups of the working environment.
  - Internal check-ups at subsidiaries, performed by working environment specialists, at least once in two weeks.
  - Internal check-ups at every subsidiary in the presence of the VKG working environment manager at least 2 times a year.
- Updating the working environment and safety training programmes in 2014. Digitalising the register of the courses.
- > More frequent check-ups of using the means of individual protection by working environment specialists at subsidiaries.

ACCIDENTS STATISTICS AT VKG GROUP (2009 - 2013).

According to the statistical data provided by the Labour Inspectorate, 3,956 occupational accidents were registered in Estonia in 2013, which is 24.10% less than in 2012 (4,197).

According to the data provided by the Labour Inspectorate, 18 people were injured at Estonian companies in 2013.

At Viru Keemia Group AS and its subsidiaries (hereinafter referred to as the Group), 11 accidents took place in 2013 altogether, which is 31.25% less than a year before (16 accidents). Luckily, there were no accidents resulting in death. Taking into consideration the number of employees, the number of registered accidents (the number of accidents per an employee) within 2009-2013 was the lowest in 2013.

NUMBER OF ACCIDENTS PER AN EMPLOYEE AT VIRU KEEMIA GRUPP WITHIN 2009-2013	2009	2010	2011	2012	2013
Number of employees	1233	1386	1641	1888	2025
Number of accidents	9	16	12	16	11
NUMBER OF ACCIDENTS PER AN EMPLOYEE	**0.007**	**0.011**	**0.007**	**0.008**	**0.005**

Occupational health and safety

In terms of the severity level of health damage, 5 severe accidents and 6 minor accidents were registered at the Group in 2013.

Compared with 2012, the number of both minor and severe accidents at the workplace decreased.

The accidents causing severe health damage took place in production:
VKG Transport AS – 2 accidents;
Kaevandused OÜ, VKG Energia OÜ and Viru RMT OÜ – 1 accident.

The main reasons that caused accidents:

- Employees violating occupational safety requirements;
- Lacking internal control of work environment;
- Not using personal protection equipment;
- The building, room or movement path not conforming to requirements;
- Lacking training or instructing.

The prevention system meant for the industry, in which chemical substances are used, has been operating at the company for years and proved its efficiency. It involves the advancement of technological processes and equipment, the use of personal protection devices and the protection devices for the whole team/staff, monitoring the content of hazardous substances in the air, and the installation of automatic industrial systems. All of the measures listed above are actively implemented at our company. And still, their implementation does not rule out the need for increasing the level of awareness of occupational safety. In the end of April, the posters saying "Follow safety rules! Your family needs you!" were put up at all companies of the Group.

In the course of cooperation between the working environment specialists and the staff from the Vocational Training Centre, the in-service training in the assembly and dismantling of scaffolds takes place on the industrial territory of VKG both for improving the level of qualification of our employees and for educating future experts in the field.

In 2013, a large cleaning was held on the territory of VKG Energia, which is also a very good means of prevention of accidents.

ACCIDENTS AT THE GROUP WITHIN 2009–2013 BY SEVERITY LEVEL

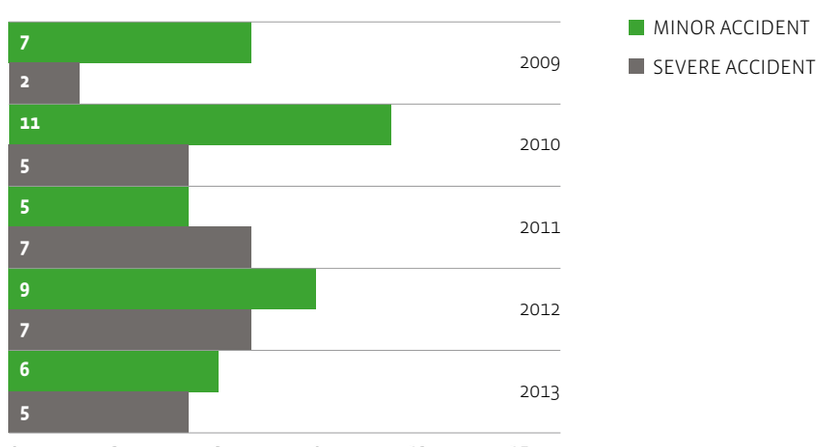


PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: SILVER KÄMÄRÄ

VKG´S MANAGEMENT

Organisational changes at VKG in 2013

In the beginning of August, the member of the Management Board of Viru RMT Madis Savisto notified the Board about his intention to resign from the position of the member of the Management Board of Viru RMT in the nearest future. The Management Board of VKG and Madis Savisto agreed that he would stay in his position until a new member of the Board is selected. The second member of the Management Board of the company is still Peeter Ilves. The reason for resigning was Madis Savisto´s desire to devote more time and effort to setting up his own business and family life. From October, the second member of the Management Board of Viru RMT has been Rein Ungert.

On January 15, 2014 Jaak Saar, the former manager of the North-Estonian regional department of Swedbank AS, started working as the member of the Management Board of VKG Plokk. The range of tasks of the new member of the Management Board includes everyday management of financial activities of the company. The most important goals of the company for the future are the increase in the market share of the company´s products mainly on the domestic market (in Estonia) and strengthening the positions of the Roclite trademark.

Corporate Governance

GOOD PRACTICES OF CORPORATE GOVERNANCE

VKG follows the good practices of corporate governance in its activities. The good practices of corporate governance are intended to be followed primarily by enterprises having their shares traded in the Estonian regulated market, but they are also recommended for other enterprises subject to public interest. The objective of VKG is to follow the good practices of corporate governance and to present the activities of the enterprise in a transparent manner; thus the sustainable development report includes a chapter dedicated to description of the good practices of corporate governance.

SHARES AND SHARE CAPITAL

As of 01.01.2013, the nominal value of the share capital of VKG was 6,391,164.21 euros. There were no changes in the share capital in the years 2008–2012. VKG's shares are not noted on the securities market.

The Group has four shareholders with the following holdings as of 01.01.2013:

- **OÜ Tristen Trade 38.91%**
- **OÜ Alvekor 25.49%**
- **Ants Laos 19.53%**
- **OÜ Sergos Invest 16.07%**

EXERCISING THE RIGHTS OF SHAREHOLDERS

The highest management body of VKG is the general meeting of shareholders. General meetings can be regular and extraordinary. The competence of the general meeting is prescribed in the Commercial Code of Estonia and in the Articles of Association of VKG.

General meetings are summoned by the Management Board of VKG. The notice of summoning a regular general meeting of shareholders is sent to the shareholders at least 3 weeks before the date of holding the general meeting; the notice of summoning an extraordinary general meeting is sent at least 1 week before the date of holding the meeting. Annual reports are available to shareholders at least 2 weeks before the date of holding the general meeting.

A general meeting of shareholders is competent to make decisions if more than 50% of the votes granted by shares are represented at the meeting.

- to pay out dividends in the amount of 1,000,000 EUR
- to increase the amount of undistributed profit up to 207,302,764 EUR

The meeting that approved the annual report of 2012 was held on May 5, 2013 with the participation of 100% of the votes granted by shares. The following decisions were made in the course of the general meeting of shareholders:

- **To approve the annual report of the financial year 2012;**
- **To increase the amount of undistributed profit up to 207,302,764 EUR;**
- **To pay a total of 1,000,000 EUR as dividends.**

Management Board. Staff, duties and remuneration

MANAGEMENT OF THE PARENT ENTERPRISE

The Management Board of Viru Keemia Grupp AS consists of six members: Chair of the Management Board, Deputy Chair of the Management Board and Financial Director, Development Director, Technical Director, Management Board Member of VKG Kaevandused OÜ and Management Board Member of VKG Oil AS.

Four Management Board Members – Priit Rohumaa, Ahti Puur, Jaanus Purga and Meelis Eldermann – manage the activities of the Group as a whole and are also Supervisory Board Members of subsidiaries.

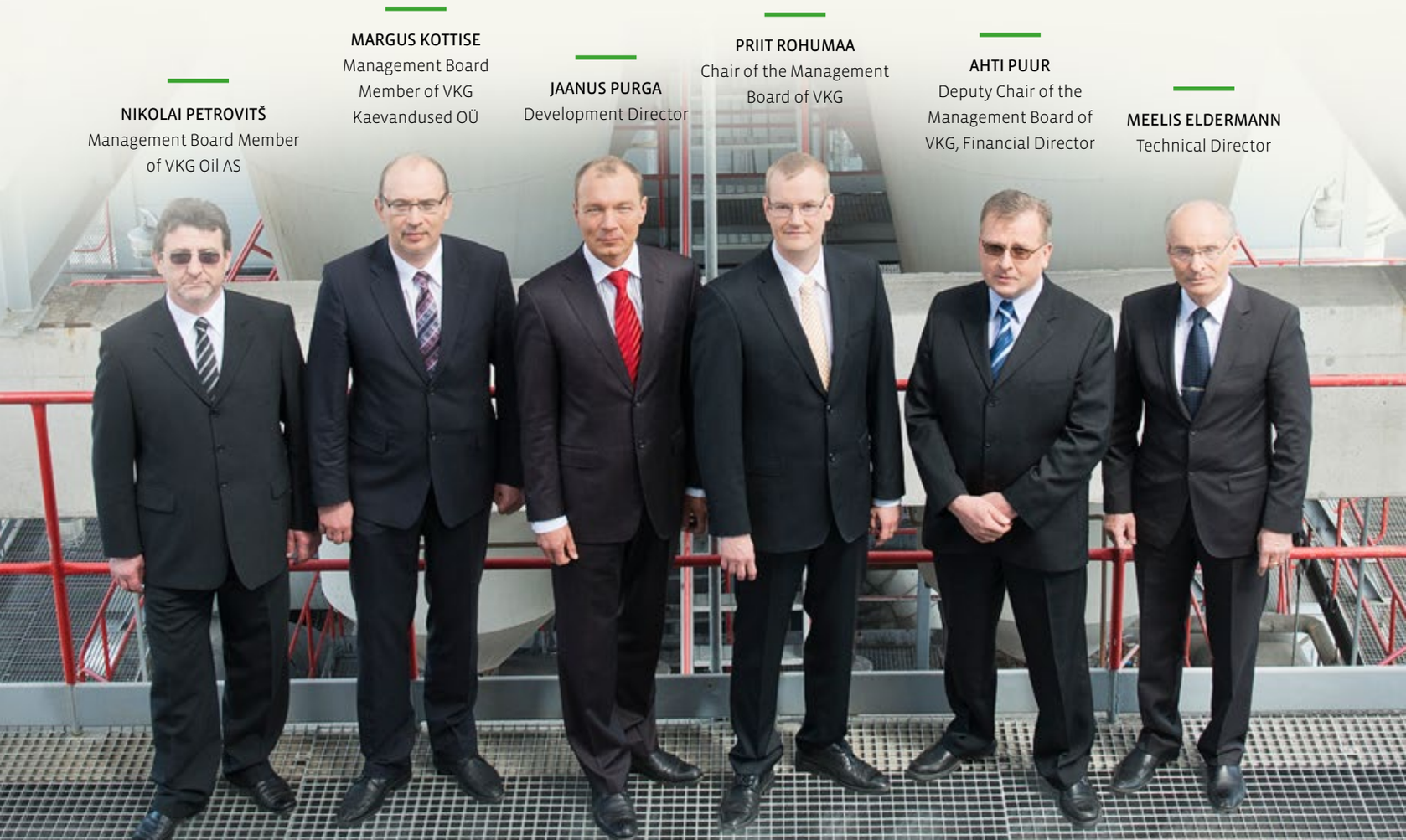
Two Management Board Members – Margus Kottise and Nikolai Petrovitš – are the Managers of the strategically most important subsidiaries of the Group.

The duties of the Management Board include everyday management of VKG's economic activities and representing the business association.
In all legal procedures of the Group, an enterprise is always represented by two Management Board Members together, whereas one of them must be the Chair or Deputy Chair of the Management Board.

START TIMES OF TERMS OF OFFICE OF MANAGEMENT BOARD MEMBERS

Priit Rohumaa, Chair of the Management Board – 11.09.2000
Ahti Puur, Deputy Chair of the Management Board – 07.10.2009
Jaanus Purga, Management Board Member, Development Director – 26.01.2001
Meelis Eldermann, Management Board Member, Technical Director – 06.03.2008
Margus Kottise, Management Board Member – 09.05.2000
Nikolai Petrovitš, Management Board Member – 16.11.1999

The Management Board Members are paid a monthly remuneration consisting of the pay for performing the duties of a Management Board Member and the pay for keeping business secrets and for respecting the competition prohibition. The duties of Management Board Members are stated in service contracts signed with the Management Board Members. According to the service contracts, the Management Board Members can get additional monetary remuneration which is paid according to the relevant decisions of the Supervisory Board.



Supervision over the Management Board's activities

Supervision over the activities of the parent enterprise's Management Board is effected by the Supervisory Board, consisting of six Members since 01.02.2012. Meetings of the Supervisory Board take place once per month, on the last Wednesday of every month. Urgent matters requiring approval of the Supervisory Board are constructively decided using electronic means of communication.

Pursuant to the Authorised Public Accountants Act of the Republic of Estonia, VKG is considered to be an entity subject to public interest and is thus required to have an Audit Committee. The members of the Audit Committee of VKG are Ants Laos (Chair of the Committee), Priit Piilmann, Margus Kangro and Elar Sarapuu. According to the Statutes, the Audit Committee is an advisory body for the Supervisory Board of VKG in the fields of accountancy, auditing, risk management, internal audits, supervision and budgeting and also legality of activities. Meetings of the Audit Committee are held at least twice a year.

The staff of the Management Boards and Supervisory Boards of the parent enterprise and subsidiaries of the Group is stated in the following table.

COOPERATION BETWEEN THE MANAGEMENT BOARD AND THE SUPERVISORY BOARD

Cooperation between the Management Board and the Supervisory Board takes place in a constructive manner. In addition to regular monthly meetings of the Supervisory Board, any urgent matters requiring approval of the Supervisory Board are decided without summoning a meeting. Consultations are provided as well.

COMMERCIAL NAME	MANAGEMENT BOARD MEMBERS	SUPERVISORY BOARD MEMBERS
Viru Keemia Grupp AS	Priit Rohumaa (Chair) Ahti Puur Jaanus Purga Nikolai Petrovitš Meelis Eldermann Margus Kottise	Toomas Tamme (Chair) Priit Piilmann Margus Kangro Ants Laos Elar Sarapuu Jaan-Mihkel Uustalu
VKG Oil AS	Nikolai Petrovitš Priit Pärn	Priit Rohumaa (Chair) Meelis Eldermann Ahti Puur Jaanus Purga
VKG Transport AS	Raimond Niinepuu	Ahti Puur (Chair) Priit Rohumaa Jaano Uibo
Viru RMT OÜ	Rein Ungert Peeter Ilves	Meelis Eldermann (Chair) Ahti Puur Jaano Uibo
VKG Kaevandused OÜ	Margus Kottise	Priit Rohumaa (Chair) Jaanus Purga Meelis Eldermann Jaano Uibo
VKG Elektrivõrgud OÜ	Marek Tull	Ahti Puur (Chair) Jaano Uibo Toomas Rätsep
VKG Energia OÜ	Sergei Kulikov Tarmo Tiits	Priit Rohumaa (Chair) Meelis Eldermann Ahti Puur Marti Viirmäe
VKG Elektriehitus AS	Andry Pärnpuu	Jaano Uibo (Chair) Toomas Rätsep Ahti Puur
VKG Soojus AS	Andres Veske Aleksandr Šablinski	Priit Rohumaa (Chair) Meelis Eldermann Ahti Puur Jaano Uibo
VKG Plokk OÜ	Jaak Saar	Jaanus Purga (Chair) Ahti Puur Meelis Eldermann
VKG Diisel OÜ	Jaanus Purga Ahti Puur	-
VKG Tsement OÜ	Jaanus Purga	Priit Rohumaa (Chair) Meelis Eldermann Ahti Puur

Supervisory Board. Staff and duties

The Supervisory Board plans the activities of the Group, organises its managing and exercises supervision over the Management Board; according to the Articles of Association the Supervisory Board has three to seven members.

STAFF OF THE SUPERVISORY BOARD:

Toomas Tamme (Chair)
Priit Piilmann
Margus Kangro
Ants Laos
Elar Sarapuu
Jaan-Mihkel Uustalu
Jens Haug (Advisor of the Supervisory Board)

The Articles of Association of the Group state that transactions and activities on behalf of the Group require consent of the Supervisory Board if they bring about the following:

- Acquiring and terminating holdings in other associations;
- Acquiring, transferring or terminating an enterprise;
- Acquiring, transferring and encumbering immovable property;
- Acquiring, transferring and encumbering constructions;
- Establishing and closing foreign subsidiaries;
- Making investments which exceed the investment funds allocated from the budget for the current financial year;
- Taking loans and assuming debt obligations in amounts exceeding the relevant allocations in the year's budget or under terms differing from those approved by the Supervisory Board;
- Granting loans, if outside the scope of everyday activities;
- Securing debt obligations;
- Deleting hopeless accounts receivable;
- Signing any employment contracts with employees, if those contracts grant pension and/or benefits after the end of the employment relation;
- Approving the annual budget of the Group;
- Establishing and terminating subsidiaries.

Conflicts of interest

Management Board Members are prohibited from competing with Viru Keemia Grupp AS in its field of activities, unless having the prior consent of the Supervisory Board.

In the year 2012, no Management Board Member notified about own actual or intended direct or indirect participation in entrepreneurship in the field of activities of Viru Keemia Grupp AS.

In order to avoid conflicts of interest, all Management Board Members and middle-level managers of the business associations belonging to the Group are required to submit upon any and all changes a declaration in approved format, stating their holdings in legal entities and/or membership in management bodies of legal entities and/or activities as self-employed persons.

Financial reporting and auditing

The Management Board of Viru Keemia Grupp AS has the duty of preparing financial reports. The accounting principles and methods of presenting information, utilised in accountancy of all VKG's subsidiaries, conform to the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and to the relevant issued interpretations. Decisions about VKG's largest transactions and about its strategic financial targets are made by the Management Board of the Group at its weekly meetings.

The Financial Division of the Group manages and plans the everyday cash flows, i.e. prepares the budgets of the Group and its subsidiaries, exercises supervision over the respecting of those budgets, prepares business projects, and communicates with sources of financing. The Financial Division of the Group is aided in this by Financial Divisions of subsidiaries, which have the duty of analysing the economic activities of the relevant subsidiary. All technical financial transactions are performed by the centralised Accountancy Department of the Group, located at the head office of VKG. The Accountancy Department makes the necessary payouts, accounts the salaries, makes the payments of vacation pay and sick pay, and prepares the annual balance sheet of the financial year. An accounting entity is required to ensure the availability of relevant, significant, objective and comparable information about its financial state, economic results and cash flows. If the internal regulations don't describe an event occurring in the accountancy of VKG, then the event is accounted according to the International Financial Reporting Standards (IFRS), the Accounting Act of the Republic of Estonia, the guidelines issued by the Estonian Accounting Standards Board (EASB), and other legal acts.

The accounting period is a financial year with the length of 12 months. The financial year begins on January 1 and ends on December 31. Upon establishing or terminating an accounting entity, changing its starting date of the financial year, and in other cases prescribed in the law, the financial year can be shorter or longer than 12 months but it can never exceed 18 months.

VKG has the right and obligation to keep independent accounts on the basis of the internal regulations of accountancy approved according to the procedure prescribed in the Articles of Association of the Group. The internal regulations of accountancy are replaced and amended with the approval of the owners of VKG, if necessitated by economic considerations, reorganisation of the activities of the Group, amendments of the accounting principles on the basis of the contents of the International Financial Reporting Standards (IFRS) and the guidelines and recommended methods issued by the Estonian Accounting Standards Board (EASB) or on the basis of amendments of the national tax laws and tax guidelines, or by other reasons.

The enterprise is required to document all its economic transactions and to register those transactions in its accounting ledgers. Economic transactions are carried on debit accounts and credit accounts according to the double entry method. Economic transactions are recorded in chronological and systematic accounting registries at the moment of them taking place or immediately after. An accounting registry is a database used in accountancy. An accounting registry is formed in chronological order (ledger) and as accounts (turnover balance). All reports and registries of accounts are prepared on the basis of the accounting software in use. Reports and registries of accounts are preserved on computer diskettes, CDs and/or as paper printouts. Since January 1, 2001 the Baan software for resource planning and financial management of subsidiaries is used in the accountancy of the Group. The auditor of Viru Keemia Grupp AS is assigned with a decision of the general meeting of shareholders.

The Management Board organises a competition to find an auditor, with the goal of finding the auditor for the next financial year. The latest competition to find an auditor took place in the year 2013 when a decision of the general meeting assigned KPMG Baltics OÜ to be the auditor.

Risk management

RISK MANAGEMENT SYSTEM

The Management Board of the Group has the duty of shaping the risk management policy and effecting the risk management of Viru Keemia Grupp AS.

The goals of risk management of VKG are as follows:

- To support the making of management decisions;
- To avoid or diminish any damages to the Group's assets and reputation;
- To increase the effectiveness of the Group's activities;
- To increase the efficiency of using the Group's resources (capital, energy);
- To reduce occurrences of unexpected situations and to prepare action plans and risk scenarios for such situations.

In the year 2011 the main risks of VKG were mapped and the base document for risk management was prepared. The document provides descriptions of significant risks of the Group, assessments of those risks, and opportunities to hedge them. The risks are determined on the basis of the Group's most important targets, related to VKG's striving to value oil shale as much as possible and to process it as efficiently as possible. The results of risk assessment highlight the risks which should be considered more and which require a further plan of actions for hedging them. Risk management takes place on the basis of the precise vertical structure. The risk assessment document has been approved by the Management Board of VKG, and a responsible person from among the Management Board Members has been assigned to every significant risk, whereas such responsible persons must ensure that the Group actually hedges the relevant risk. The person responsible for managing the risk prepares an action plan for hedging the risk and presents the action plan to the responsible Management Board Member. On the basis of the results of risk minimisation, a new report is prepared annually about the assessment of risks, and new goals are set for the following year.

Risk management

BUSINESS RISKS

Taxation

Business risks are the main strategic risks of VKG. Regular attention must be paid to the risk of delivery continuity of raw material, the risk of competitiveness of oil shale processing and the risk of managing capital-intensive investments.

The delivery continuity of raw material is one of the main business risks in the production chain of shale oils. In order to secure the availability of oil shale resource and to hedge the relevant risk, VKG opened the Ojamaa oil shale mine in the year 2012; it was the largest investment of the Group for the period of 2008-2012.

Oil shale processing may become uncompetitive primarily due to increasing taxation load, increasing labour force expenses, and an increase in the prime cost of the final product, which is connected with new large-scale investments into environment. VKG is carefully following the prescribed environmental requirements and participates actively in activities of professional associations, in order to be in knowledge about future regulations. The Environmental Department of the Group is centralised and internal monitoring processes have been developed for it.

New investments into up-to-date technologies are continually made in case of environmental regulations becoming stricter. The activity of VKG depends on timely making and financial success of large investments. In order to hedge risks, attention must be paid to management of investments – planning, project management and follow-up assessment. A comprehensive process is used for budgeting investments: investment budgets are prepared across subsidiaries and a separate project team is assigned for more important investments, involving relevant specialists from all levels of responsibility within the Group.

Securing the financing of investments is also considered an important part of managing investments. A syndicate loan agreement signed in the year 2010 was used for refinancing the Group's loan portfolio and for ensuring financing for ongoing large investments like the Petroter I oil plant, construction of a turbine unit for VKG Energia OÜ, and establishing of the Ojamaa mine. For new capital-intensive investments, new targeted loans will be undertaken on the basis of the syndicate loan. The Group's syndicate loan agreement is financed by AS SEB Pank, Nordea Bank Finland Plc Estonian Branch and Pohjola Bank Plc. New development projects will be financed featuring EBRD, with which an agreement was entered into in the beginning of 2014.

MARKET RISKS

The most influential of the Group's strategic market risks are changes of the crude oil and CO_2 prices and the exchange rate of US dollar; these would cause the Group to have insufficient cash flows. Also, more and more attention must be paid to market prices of CO_2, because dependency on those prices may continually increase in the future as environmental directives will cause less and less emission quotas to be allocated for carbon-intensive producers. In the result of the directives regulating sulphur content in maritime fuels, its content should be reduced significantly, in connection with which VKG is carrying out relevant research and tests, so that the main products manufactured at the enterprise would be up to the level.

The risk of changes of global prices is an inevitable part of the Group's activities. Most of the shale oil sales contracts of VKG Oil AS are directly dependent on stock market prices of crude oil and crude oil products. The rest of sales prices of shale oils (domestic sales) are also indirectly dependant on global prices. The prices in the global market also affect the Group's production costs, primarily via the price of natural gas used in the production process and the price of raw oils purchased from other producers. The purpose of monitoring that risk for the enterprise is to conduct ongoing analysis of the sensitivity of budgeted profit to changes of global prices for crude oil and crude oil products. The decrease in the price of fuel oil residual by 10 dollars per tonne is going to reduce the profit by about 2.9 mln EUR (based on the exchange rate 0.76 EUR/USD), and the higher the exchange rate of US dollar is, the higher is the impact of the fuel residual oil price change, and vice versa, the lower is the exchange rate, the lower is the impact of the price change. In order to hedge the risk of a sharp drop of crude oil prices, the Group is acquiring oil price fixation options and gathering a liquidity reserve. The risk is indirectly hedged through activities of the Group's Financial Division which regularly monitors market overviews and analyses the Group's readiness to a market decline.

In the year 2013, 70% of the Group's turnover came from sales to the European Union and to third countries. The most important sales currencies are euro and US dollar. The Group's expenditure is mainly in euros. Contracts are primarily signed with the currency of the country of location, and open currency positions are being avoided in organising everyday activities. The most important foreign contracts are signed in euros and in US dollars. The Group has not signed any contracts for derivative instruments for the purpose of hedging the currency risk. The dollar risk is indirectly hedged with oil price fixing options signed in euros. The Group is conducting an ongoing monitoring of currency risk, in order to analyse the sensitivity of the budgeted profit to changes of the exchange rate of US dollar. Decrease in the exchange rate of US dollar by one euro cent (0.01 EUR) is going to reduce the profit by about 2.2 mln EUR. No financial instruments have been acquired for hedging the market risk of CO_2. The Group has been allocated emission quotas within the current allocation plan for 2013-2020. Continual monitoring will be conducted until adoption of allocation plan for the next period, similar to monitoring other environmental regulations; long-term plans consider possible risk scenarios and develop competence regarding emissions trading.

ENVIRONMENTAL RISKS

VKG has an environment-intensive production cycle. Environmental impacts are expressed upon mining the resource and there is environmental risk present in both producing and marketing of shale oils. Environmental risks are assessed very highly and attention is being paid to those risks in many aspects.

Centralisation of the Environmental Department and mapping of risks on the Group's level ensure an integral availability of environmental knowledge and competences. Environmental risks are mapped in the production cycles of each enterprise, quality standards for environmental management are adopted, and environmental risks are taken into account when establishing new investments, utilising independent experts for assessing the environmental impacts. Environmental risks are hedged via fulfilment of all legal requirements and via exercising of supervision. There is cooperation with the Rescue Board, and conformity to the requirements prescribed by regulations is being audited.

RISKS OF DESTRUCTION OF ASSETS

Destruction of assets can be caused by risks of production technology and in turn it can cause liquidity risk. The main cash flows of the Group depend on the oil industry, thus diagnostics need to be performed and repair schedules of equipment need to be followed. Mapping significant elements of the production process allows timely reactions to occurrences of technological risks. In order to systematise this activity and to hedge the risk, an asset management programme has been implemented.

VKG has signed a complex property insurance agreement for business interruptions, in order to protect itself against destruction of assets. The complex property insurance agreement includes all subsidiaries (except VKG Soojus, VKG Plokk and VKG Elektrivõrgud which have signed separate property insurance agreements) and the insurance provider is Seesam Insurance AS, If P&C Insurance AS and AIG Europe Ltd. SVAG Schwarzmeer und Ostsee. The insured object is the immovable and movable property which belongs to the insured entity, is administrated or controlled by the insured entity, or for which the insured entity bears legal liability. Separate construction insurance agreements are signed for major investments. All of the operations, from construction to registration as fixed assets, at the Petroter II and Petroter III plants have been insured by Zurich Insurance plc.

CREDIT RISKS

Credit risk is an inevitable part of entrepreneurship. Upon managing credit risks, careful attention is paid to payment discipline of partners, their financial state is analysed and if necessary then third parties are involved as guarantors in transactions. In case of pre-payments to suppliers, the beneficiary of the payment is requested to present a bank guarantee. We grant business credit fundamentally only to our long-term cooperation partners. In case of one-off transactions and new clients we always request either pre-payment or a letter of credit.

Delayed accounts receivable from clients are managed on daily basis. In case of exceeding a payment deadline of an invoice issued to a buyer, the debtor is sent reminder notices and warnings. Conditions have been determined for initiating a court action for collecting the debt. Signing of special agreements belongs to the Management Board's competence. The maximum credit risk resulting from unsecured claims is ca. 16 million euros as of the balance sheet date.

Liquid funds of the Group are held in short-term deposits of banks with highest credit ratings. Deposits with moderate risk level are used for hedging liquidity risk in addition to credit risk: the Group has a target of ensuring availability of at least 12 months' funds for loan repayments and interest payments.

INTEREST RISKS

As of 31.12.2013, the Group has interest-bearing liabilities in the amount of 152 million euros, making up 30% of the balance sheet volume. Due to the large share of interest-bearing liabilities, the management considers the risk of increase of money market interest rates to be a significant risk to the Group's activity. Regarding loan obligations, the Group has primarily the risk of decrease of cash flows. In the period of 2014-2020 the Group is planning to make extremely capital-intensive investments (ca. 1,000 mln euros), and these will increase the interest risk. The loan interests of the Group are based on the interest rate of (2.2–2.75%) plus 1 month's Euribor. In relation with possible fluctuations of Euribor, the Group is analysing the sensitivity of its cash flows and profit to an increase of the interest rate by 1%. The analysis performed indicates that an increase of interest rates by 1% would influence the cash flows generated by the Group in the year 2014 and would affect the profit before income tax in the extent of ca. 1.5 million euros.

INTERNAL AUDITING DEPARTMENT

An important part of risk management is ensuring and monitoring the functioning of internal auditing systems. VKG has established the Internal Auditing Department for that function; the Department is a structural unit that operates independently from VKG and monitors the activities of the Group, its subsidiaries and their subsidiaries, and other business associations belonging to the consolidated group of VKG, in order to make sure that those activities conform to the laws of the Republic of Estonia and to other legal acts, the Articles of Association of VKG, decisions of general meetings of shareholders, decisions of the Supervisory Board and the Management Board, and internal regulations and action guidelines of the Group and its subsidiaries. The central task of the Group's Internal Auditing Department is to study and assess the economic activities of the Group on the basis of trustworthiness and efficiency of internal auditing.

The task of internal auditing is to identify possible shortcomings in the activities of the employees of the Group and its subsidiaries, their possible work errors and cases of abandoning of duties and exceeding of authorisations, to draw attention to those, and to make suggestions for avoiding those in the future.

The internal auditor prepares an act or report of internal auditing and presents it to the audited entity for reviewing and opinion-taking. The Internal Auditing Department prepares reports of discovered shortcomings together with assessments, conclusions and suggestions, consolidates data about the activities of the Group and its subsidiaries, and prepares overviews and analyses thereof for presenting to the Executive Managers and Management Board Members of the Group and/or its subsidiaries depending on their importance and level of generalisation.

Risk management

INTERNATIONAL MANAGEMENT SYSTEMS

International management systems like ISO and OHSAS have separate procedures for risk hedging in quality management, environmental management and occupational safety management. Those internationally recognised systems are in effect in VKG as well. The table below lists the management systems in use in the Group's subsidiaries.

NAME OF SUBSIDIARY	ISO CERTIFICATES (ENVIRONMENTAL AND QUALITY MANAGEMENT SYSTEMS)	OHSAS CERTIFICATE (OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM)
Viru Keemia Grupp AS	ISO9001, ISO14001	-
VKG Oil AS	ISO9001, ISO14001	OHSAS18001
VKG Energia OÜ	ISO9001, ISO14001	OHSAS 18001
VKG Transport AS	ISO9001, ISO14001	OHSAS 18001
Viru RMT OÜ	ISO9001	OHSAS 18001
VKG Soojus AS	ISO9001, ISO14001	OHSAS 18001
VKG Plokk OÜ	ISO9001	-
VKG Elektrivõrgud OÜ	ISO9001	OHSAS 18001
VKG Elektriehitus AS	ISO9001, ISO14001	OHSAS 18001

SAFETY OF CHEMICALS AND PRODUCT LIABILITY

VKG takes active part in the chemical industry undertakings on local, national, and international levels. The Group is the member of the Federation of Estonian Chemical Industries (FECI), through which it is closely connected to the application of voluntary initiatives CEFIC[1] and ICCA[2] launched by the European and global chemical industry umbrella organisations.
VKG has been committed to the Responsible Care (RC) initiative for over 10 years already, and in 2013, a decision was made to join the project of implementation of the Global Product Strategy[3] (GPS) among the first in Estonia.

GPS is a voluntary initiative managed by ICCA, which, together with the RC Global Charter, is the foundation for the contribution made by the chemical industry into the Strategic Approach to International Chemicals Management (SAICM[4]), implemented by the United Nations. For the chemical industry all over Europe, GPS will allow to boost the results and to expand the range of use of REACH as well as to raise the level of trust displayed by the public in terms of safe handling of chemical substances.

While the REACH subject files are very thick, specific, complex, and detailed, the GPS files are summaries of safety information (GPS Product Safety Summary), which contain risk analysis and the information concerning risk management in a clear format that can be forwarded to employees, subusers, and other interested parties. Those summaries contain the information about dangers and exposure, recommendations for risk management, and the description of benefits this or that chemical substance can bring to society. In Estonia, the application of GPS is coordinated by FECI, but it is implemented by companies themselves, and in our particular case, VKG has assumed the functions of the direction indicator on the level of the Estonian chemical industry. In 2013, the main efforts were spent on getting ready for the project: mapping essential activities, clarifying the needs, planning resources, etc. The first tangible results will be achieved in the next year, i.e. in 2015, when the first summaries of safety information will be uploaded to the GPS portal, and the completion of the project is connected with the last REACH registration deadline in 2018, by which the safety information summaries about all of the substances present on the market must be made available for the public.

THE MAIN GOALS OF GPS:

- Wide distribution of knowledge about hazardous substances
- Promotion of product liability and provision of adequate handling and use of chemical substances within the entire value chain, regardless of geographical position (the minimization of differences between developing and industrial countries), offering relevant and reliable information
- Increase in transparency, helping the companies to offer to interest groups the information about chemical substances on sale easily and in clear format: GPS safety information in the form of a summary.
- In 2018, the product safety information about all of the substances on the market will be available for the public.

RECORDING AND REPORTING HAZARDOUS CHEMICAL SUBSTANCES

The important principles of the Responsible Care initiative is the provision of assistance to other companies and taking responsibility for the company´s own products within the entire value chain. In addition to ordinary customers, those principles should also be applied within the Group, which is why the principles of recording and reporting hazardous chemical substances are being harmonized and improved at VKG as a whole at all levels. The priority of the Group in this field is cooperation and synergy between subsidiaries as well as learning from each other. The preliminary works that prepare the company for harmonization of the principles of recording and reporting had started earlier, but in 2013, the first tangible and comparable results were achieved. The aim of subsequent years shall be the advancement of the system and the ongoing increase in the quality of information to be collected through the distribution of the best practices among subsidiaries.

[1] The European Chemical Industry Council - www.cefic.org
[2] International Council of Chemical Associations - www.icca-chem.org
[3] www.keemia.ee/et/keemiatoeoestus-hoolib-ja-vastutab/uelemaailmne-tootestrateegia-gps
[4] Strategic Approach to International Chemicals Management (SAICM) is a policy framework to foster the sound management of chemicals - www.saicm.org

ECONOMIC INDICATORS

This chapter presents VKG's consolidated economic results for the year 2013, compared with results of previous years.

Economic indicators for the year 2013 are based on the audited annual report of 2012. The data for the year 2013 are initial and not yet audited by the time of preparing this SDR, thus the data presented in this report may differ from the data presented in the annual report of 2013.

PHOTO FROM VKG ORGANISED PHOTO CONTEST "**VIRUMAA IS WONDERFUL!**"
AUTHOR: GERIT TIIRIK

PROFIT

VKGs' consolidated net profit of the year 2013 was
19 MILLION EUROS.

The net profit of 2012 was
35 MILLION EUROS.

The total retained profit as of December 31, 2013 was
228 MILLION EUROS.

SALES REVENUE AND ITS DISTRIBUTION

VKG's sales revenue of the year 2012 was
215.8 MILLION EUROS.

VKG's sales revenue for 2013 was
220.4 MILLION EUROS.

According to the terms and conditions of loan contracts, entered into by VKG recently, the shareholders´ rights for dividends at VKG are limited to 1 million EUR per year.

Sales revenue and its distribution

VKG exports 70% of its production. In addition to Estonia, VKG sells its products and services in Latvia, Lithuania, Sweden, Finland, Norway, Denmark, Poland, Belarus, Ukraine, Romania, United Kingdom, the Netherlands, Switzerland, Germany, Malta, Austria, France, Spain, Italy, China, India, New Zealand, Russia, United Arab Emirates, Japan and Iran.

CONSOLIDATED INCOME STATEMENT IN THOUSANDS	2009	2010	2011	2012	2013
Sales revenue	107 480	125 496	183 567	215 754	220 406
Targeted financing	139	188			
Revenue from sales of products	95 383	102 777	129 231	164 599	182 971
GROSS PROFIT	**12 236**	**22 908**	**54 336**	**51 155**	**37 436**
Marketing expenditure	3 261	3 514	3 563	4 923	5 802
General administrative expenditure	7 326	7 167	8 974	16 137	13 835
Other business revenue	9 481	9 990	6 054	15 611	9 872
Other business expenditure	583	645	12 262	7 171	4 025
BUSINESS PROFIT	**10 547**	**21 574**	**35 591**	**38 533**	**23 645**
Financial revenue and expenditure	–1 348	–2 260	–5 980	-3 230	-3 974
PROFIT BEFORE INCOME TAX	**9 198**	**19 311**	**29 610**	**35 304**	**19 671**
Unplanned expenditure					
Income tax		85	170	436	315
NET PROFIT OF FINANCIAL YEAR	**9 198**	**19 227**	**29 440**	**34 867**	**19 356**

Balance sheet

VKG's balance sheet volume increased by 40.5 million euros during the year 2013, and was **516.5 MILLION EUROS** as of 31.12.2013.

Equity capital's share in the balance sheet volume was **61.4 %.**

CONSOLIDATED BALANCE SHEET OF VIRU KEEMIA GRUPP AS (TH €)	2012	2013
ASSETS		
Current assets	75 949	85 239
Fixed assets	400 109	431 265
TOTAL ASSETS	**476 058**	**516 504**
LIABILITIES AND EQUITY CAPITAL		
Short-term liabilities	88 692	75 797
Long-term liabilities	88 480	123 388
Total liabilities	**177 172**	**199 185**
Equity capital	298 886	317 319
TOTAL LIABILITIES AND EQUITY CAPITAL	**476 058**	**516 504**

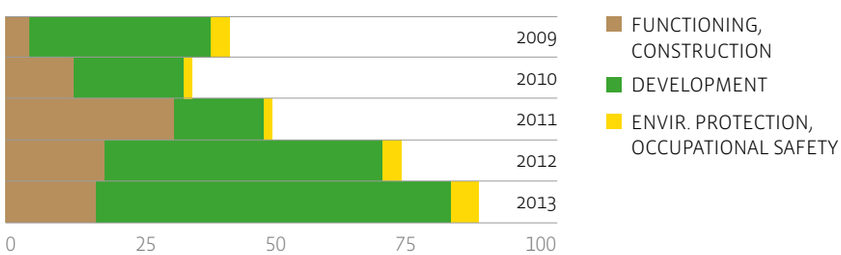
Investments

The largest investment objects of the year 2013 were:

- Petroter II plant 43 mln EUR
- Petroter III plant 7 mln EUR
- Lime plant 3.5 mln EUR
- Kohtla-Järve railway station 3.3 mln EUR
- Oil shale distribution system 2 mln EUR
- Purchasing the crane, 350 t 2 mln EUR

INVESTMENTS OF VKG'S ENTERPRISES (TH €)	2012	2013
Viru Keemia Grupp	8 334	51 101
VKG Kaevandused	27 087	11 980
VKG Oil	11 468	5 545
VKG Energia	4 905	7 987
VKG Soojus	19 844	5 343
Viru RMT	39	2 141
VKG Transport	1 809	4 253
VKG Elektrivõrgud	1 709	2 204
VKG Elektriehitus	107	36
VKG Plokk	355	306
TOTAL	**75 658**	**90 896**

VKG INVESTMENTS (MLN EUR)



Loan burden

The existing loan burden of the Group is indicated in the following table, presenting the balance of all loans and financial lease agreements of subsidiaries which are signed with parties outside the Group, and also their payments for the year 2014.

In the year 2012 a loan agreement was signed for the purpose of financing the construction of the Petroter II plant and the accompanying investments. At the same time, loan burden as a whole decreased during the year. Earlier loans were repaid; the loans of VKG Kaevandused and the Petroter II plant were used in lower extent. Loan burden is expected to increase in the year 2014.

LOAN BURDEN (TH €)	LOAN BURDEN IN THE BEGINNING OF 2014	PAYMENTS IN 2014
VKG AS	141 650	29 587
VKG Transport	1 284	547
VKG Energia	37	13
Viru RMT	38	0
VKG Kaevandused	473	359
VKG Elektrivõrgud	0	14
VKG Elektriehitus	51	6
TOTAL	**285 184**	**30 526**

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Application Level Criteria

STANDARD DISCLOSURES	REPORT APPLICATION LEVEL	C	C+	B	B+	A	A+
	Profile Disclosures	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15	REPORT EXTERNALLY ASSURED	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	REPORT EXTERNALLY ASSURED	Same as requirement for Level B	REPORT EXTERNALLY ASSURED
	Disclosures on Management Approach	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach disclosed for each Indicator Category	
	Performance Indicators & Sector Supplement Performance Indicators	Report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.**		Report fully on a minimum of any 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.***		Respond on each core and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.	

* Sector supplement in final version

** Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines

*** Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines

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