



**SOCIAL RESPONSIBILITY AND SUSTAINABLE DEVELOPMENT REPORT
2011**



VKG is Estonia's largest producer of shale oil and relevant chemicals.

In year 2011 the processing volume of the Group was **2.4 million tonnes of oil shale** and profit exceeded **29 million euros**.

Viru Keemia Grupp AS (VKG) includes 9 business enterprises which provide jobs for a total of more than **1,800 people**.

The total amount of environmental investments of the Group for that past 8 years has exceeded **64 million euros**.

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



vastutustundlik
ettevõtte 2010



vastutustundlik
ettevõtte 2011



Our aim is to increase the transparency of our organisation's activities and establishment of the relationship of trust between the parties interested in the activities of the enterprise, the residents of the region, and the employees of VKG

On the photo: Saka village near the VKG production site

Introduction

Introduction of sustainable development report

This is the third sustainable development report of VKG and its goal is to publish the economical, social, environmental and organisational data of VKG for the period of 2010 - 2011.

The report reflects mainly the developments of the Group for year 2011 and for the beginning of year 2012, compares the results to those of previous years, and provides a moderate prognosis for years 2012-2013. The report includes primarily the data pertaining to the enterprise. The sphere of activities of the enterprise is also reflected in a smaller scope.

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

In addition to that, our goal is to:

- **Increase the transparency of our organisation's activities;**
- **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 for year 2010 is based on the guidelines of the Global Reporting Initiative (GRI). The GRI is a voluntary organisation promoting reporting and gathering the enterprises valuing 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.

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

The preparing 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.

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

Target groups

The sustainable development report of the VKG for year 2011 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 of sustainable development reports is a voluntary activity for organisations. The data presented in the report has not been verified beforehand by any independent parties, except in cases prescribed in the legislation.

The economic data for year 2011 and the prognoses for years 2012-2013 are prepared by VKG and they have not been audited. For that reason the data for year 2011 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.

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VKG	Viru Keemia Grupp AS
mIn EUR	million euros
ROA	Return on Assets
ROE	Return on Equity
th EUR	thousand euros
HPP	heat and power plant
GRI	Global Reporting Initiative

Recognition

Awards and recognitions received by VKG in years 2009 - 2011:

- The Best Estonian Enterprise 2009, VKG Oil AS;
- Best Enterprise of Ida-Viru County 2010, VKG;
- Estonia's Responsible Enterprise 2010, VKG;
- Estonia's Responsible Enterprise 2011, VKG;
- "Environmental Deed 2011" ("Keskonnategu 2011") in the category of environmental management, VKG;
- Nikolai Petrovitš, Board Member of VKG received a Level IV Order of the White Star from the President of the Republic of Estonia on February 23, 2012.

In years 2003 – 2012, VKG and its subsidiaries have been recognised in more than 20 cases.

The full list of recognitions is available at the website of VKG at www.vkg.ee and in the first Social Responsibility and Sustainable Development Report of VKG for years 2008-2009.

Foreword from the Chair of the Board

Major enterprises and local communities: is a dialogue possible?

In the beginning of year 2012, Estonia was shaken by a wave of strikes. A difficult situation coupled with a partial lack of a dialogue between the parties brought about a conflict which was felt by nearly all residents of Estonia.

As far as 2 years ago VKG started making efforts to involve the local population in its decision-making process. At that time it was a new option which required lots of effort to bear any fruit. Now the picture is wholly different. The cooperation between the major industry and the local population became regular by itself, the meetings of the enterprise and the population are always held with full attendance now. People want to know, they want to participate in the activities of the local major enterprise and they are willing to invest their own personal time for that.

Fortunately we were ready for such cooperation. We are open with the public and our openness has not been abused – quite the contrary. **Cooperation with the local people has brought an unexpected amount of benefits; the most important of those are being better informed and having a clear picture of the local community's expectations towards the enterprise.** We know what the local people think of VKG and what they expect, and we put our cards on the table about the current matters and the future plans.

VKG has participated regularly in the life of the region for as long as 3 years now, supporting the best local cultural and sports organisations and events. Since year 2011 our employees also have new opportunities to make a personal contribution to the solving of the region's problematic issues. The contribution of an enterprise with 1,800 employees is noticeable in every field of life, be it cooperation with the local blood bank or food bank, donation of toys or voluntary activities.

Back in year 2009 it seemed that it would be risky and difficult to involve the employees and the public, and that the publishing of the enterprise's data would be a high-risk measure. But now we can see that no initiative of VKG has ever become a problem. The sense of responsibility entailed only benefits for the business.

Priit Rohumaa

Chair of the Board, VKG





Viru Keemia Grupp AS is the largest Estonian oil shale processing enterprise based on private capital.

On the photo: VKG production site

Description of the enterprise

Viru Keemia Grupp AS (VKG) 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.

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

The fields of activities of the subsidiaries in the VKG Group are as follows →

VKG OIL AS

Producing shale oil and refined chemicals

VKG ENERGIA OÜ

Generating heat and electricity

VKG KAEVANDUSED OÜ

Mining oil shale as the main raw material of the Group

VKG SOOJUS AS

Generating (until 1.01.2013), distributing and selling heat

VKG PLOKK OÜ

Producing construction materials from oil shale ash

VKG ELEKTRIVÖRGUD OÜ

Selling and distributing electricity

VKG TRANSPORT AS

Providing logistics services for road and railway transportation

VIRU RMT OÜ

Providing repair and assembly services

VKG ELEKTRIEHITUS AS

Providing industrial power supply and electricity installation services

VKG's mission

Valuing the most important earth deposit of Estonia.

VKG's vision

To be the world leader in production of oil shale products and in opening the potential of oil shale

VKG's business philosophy

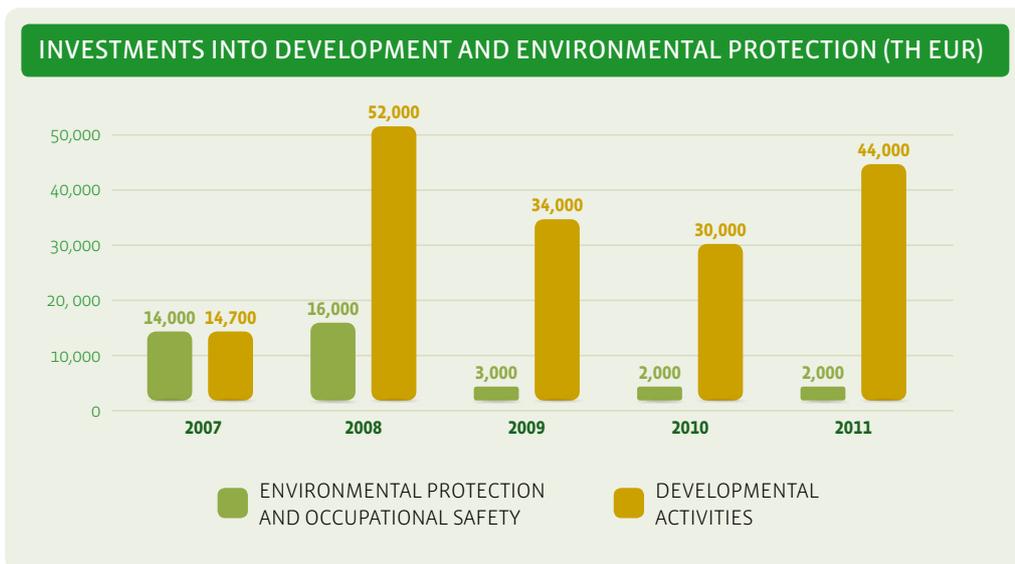
The business philosophy of VKG is the full opening of the mineral and organic potential of Estonia's most valued earth deposit and the managing of the full chain of oil shale industry from mining of oil shale to marketing of refined chemicals, for the benefit of the traditional Estonian industry and the growth and development of the entire industrial region of Ida-Viru County.

The main economic indicators of VKG

SALES REVENUE OF VKG ACROSS PRODUCTS AND SERVICES (TH EUR)	2010	2011
Shale oils	81,818	123,609
Electricity and distribution services	19,698	21,630
Railway and road transportation services	9,243	10,871
Heat energy	8,125	7,464
Coke and phenol products	3,322	6,802
Design, construction and assembly works	528	2,874
Maintenance and repairs of machinery and equipment	446	1,106
Other turnover (sales of materials, other services and products)	2,315	9,212

SALES REVENUE OF VKG ACROSS REGIONS (TH EUR)	2010	2011
Estonia	46,147	61,129
European Union	77,762	118,853
Russia and Belarus	1,492	1,558
Other countries	94	2,027

In the European Union, the products of VKG are bought by Austria, the Netherlands, Lithuania, Latvia; Malta, Poland, Sweden, Germany, Finland, United Kingdom, Denmark, Czech Republic, Italy.



Chronology of the group

1999

Founding the VKG 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 of oil shale processing waste, 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 **Boltyski deposit**

2009

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

Starting the construction of the **Ojamaa mine**

December 21, 2009 – **Opening the Petroter I plant**

2010

Petroter I has 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 restores the **tradition of Miners' Day** in Ida-Viru County

2012

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

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 Kohtla-Järve – Ahtme heat pipeline, terminating the activity of the Ahtme HPP

Starting the project of a follow-up processing plant for shale oils

2014

Constructing the second sulphur scrubbing unit

2015

Starting the project of a cement factory

2016

Commissioning the follow-up processing plant for shale oils and the production of diesel fuel in VKG

Main events of the reporting period

2010

March

Starting the long-term cooperation between VKG and the Jõhvi Concert Hall for the purpose of developing the local culture.

May

Issuing VKG's first proper Social Responsibility and Sustainable Development Report; it's also first in Estonia.

June

VKG signed a 225 million euro consortium loan agreement for the purpose of covering the enterprise's near-future investments into development and environmental protection.

July

Starting the design works for the heat pipeline running from Kohtla-Järve to Ahtme.

August

The Petroter I plant achieved full capacity;

VKG joined the world's most influential social responsibility initiatives – GRI and UNGP (United Nations Global Compact).

September

Starting the design works for the Ojamaa long-distance aboveground conveyor and for the enrichment plant.

October

VKG and Eesti Energia exchanged the mining permits of Usnova and Sompä mines;

VKG and Jõhvi Concert Hall established the Kaljo Kiisa grant for young filmmakers.

December

VKG received the title of Estonian responsible enterprise for year 2010.

2011

February

VKG challenged the issuing of the mining permit of Uus-Kiviõli.

March

VKG took over the local heat generating and distributing enterprise Kohtla-Järve Soojus AS (by signing a purchase-sales contract for 60% of its share capital); also, the brand new boiler plant of the enterprise was opened in March.

April

VKG purchased the bankruptcy estate of Silbet Plokk OÜ. Within a year, the first employees were hired for the enterprise and a new subsidiary was formed, named VKG Plokk.

May

VKG signed support agreements with Estonian Concert and Estonian National Opera. The total value of current support agreements is as high as 100,000 euros.

June

VKG conducted an economic influence analysis of the Group in cooperation with the consultations office PriceWaterhouseCoopers; the analysis indicated that the Petroter I plant alone provides up to 1% of the Estonian GDP.

VKG and the Jõhvi Concert Hall initiated the first photo competition of the Virumaa region: "Beautiful Virumaa" („Ilus oled, Virumaa!"). The jury panel included Evelin Ilves and Kaupo Kikkas. The competition turned into an annual tradition.

August

VKG restored the tradition of Miners' Day.

October

VKG opened ceremoniously the new turbine of VKG Energia. The cost of the project exceeded 16 million euros.

November

The City Council of Kohtla-Järve initiated a detailed plan for the shale oil follow-up processing plant and its strategic environmental assessment.

December

VKG turned to a court regarding the decision of the Ministry of the Environment to grant the mining permit of Uus-Kiviõli to Eesti Energia AS;

VKG initiated a year-long charity campaign among its employees. At the same time, cooperation started with the local representation of the Food Bank. Also in December 2011, the local orphanages received support;

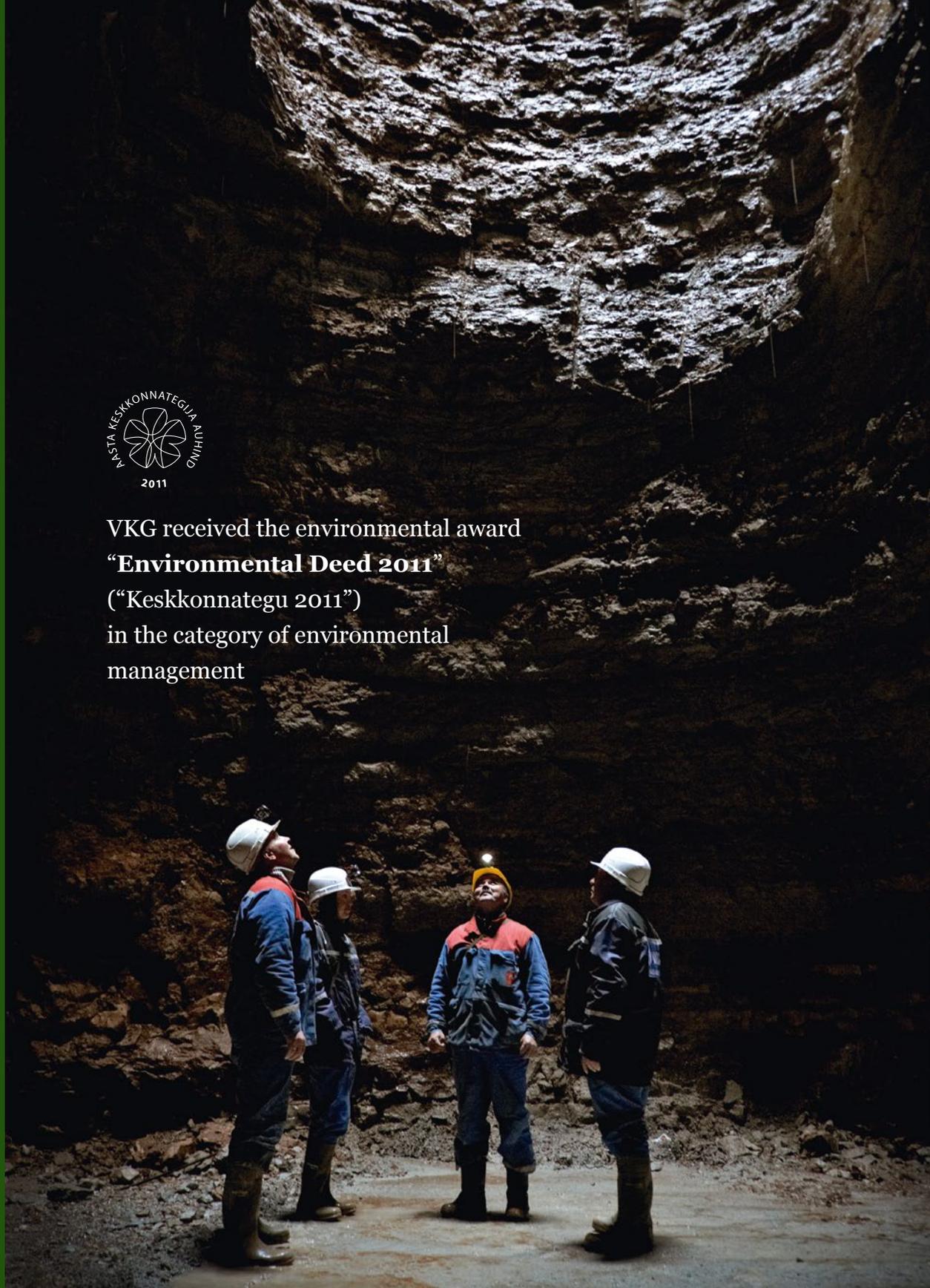
VKG received the environmental award "Environmental Deed 2011" ("Keskkonnategu 2011") in the category of environmental management;

For the second year in a row, VKG received the title of the Estonian responsible enterprise;

The Government adopted the new CO₂ allocation plan, and VKG received 100% of the quotas requested earlier.



VKG received the environmental award
“Environmental Deed 2011”
 (“Keskkonnategu 2011”)
in the category of environmental
management



VKG management

Organisational changes of VKG in year 2011

New subsidiary VKG Soojus AS – on March 8, 2011 VKG acquired Kohtla-Järve Soojus AS, and within the same month the name of the enterprise was changed to VKG Soojus AS. Andres Veske, the former Board Member of VKG Energia was assigned as the Manager of the new subsidiary. Sergei Kulikov, one of the former directors of the enterprise was assigned as the other Board Member of the enterprise.

In relation with Andres Veske leaving the management team of VKG Energia OÜ, a new Management Board was assigned for the enterprise. Tarmo Tiits, the former Administrative Manager of VKG and Sergei Kulikov, one of the Board Members of VKG Soojus AS were assigned as the new Board Members of the enterprise.

In April 2011 VKG purchased the bankruptcy estate of the former Silbet Plokk OÜ. Using the bankruptcy estate, a new subsidiary of the Group was formed in October 2011 – VKG Plokk OÜ. The new enterprise was given the task of producing construction materials on the basis of oil shale ash. Hannes Niinepuu, the former Head of Sales Department of VKG Soojus OÜ was assigned as the Director of the new enterprise.

In February 2012 the new production line of porous blocks made of oil shale ash was commissioned in VKG Plokk OÜ. The marketing of the new product was launched with a new trademark, Rocklite.



Targets and challenges of the upcoming period (2012 – 2013)

- Opening the **Ojamaa mine** and achieving its full capacity;
- Obtaining part of the Uus-Kiviõli resources for the production needs of VKG;
- Successful implementation of the **Petroter II project**. Construction works are planned to start in year 2013;
- Designing and starting the construction of a follow-up processing plant for shale oils;
- **CO₂ Footprint Directive**. Regarding this Directive, the target of VKG is to make it clear to the creators of the Directive that the oil shale industry will not develop in the situation of too harsh CO₂ quotas.

Corporate Governance

GOOD PRACTICES OF CORPORATE GOVERNANCE

The good practices of corporate governance are intended to be followed primarily by the enterprises having their shares traded in the Estonian regulated market, but it is 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 the description of the good practices of corporate governance. VKG follows the good practices of corporate governance in its activities.

SHARES AND SHARE CAPITAL

As of 01.01.2011, the nominal value of the share capital of VKG was **6,391,164.21 euros**. There were no changes in the share capital in years 2008–2011. The shares of the VKG are not noted on the securities market.

The Group has four shareholders with the following shares as of 01.01.2011:

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

GENERAL MEETING. EXERCISING THE RIGHTS OF SHAREHOLDERS

The highest management body of the 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. The new edition of the Articles of Association of the enterprise is valid since 20.10.2011.

Notices of summoning a general meeting are sent by the Management Board of VKG AS. 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. The meeting that approved the annual report of 2010 was held on June 29, 2011 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 2010.
- To approve the net profit of year 2010 in the amount of 300,830,000 EEK.
- To pay a total of 10,014,000 EEK as dividends from the net profit of year 2010.

Management Board. Staff, duties and remuneration

MANAGEMENT OF THE PARENT ENTERPRISE

The Management Board of VKG 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, 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 enterprises 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.

The activities of the Management Board are supervised by the Supervisory Board

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.



PRIIT ROHUMAA
Chair of the Management Board, VKG



AHTI PUUR
Deputy Chair of the Management Board, Financial Director, VKG



JAAANUS PURGA
Development Director, VKG



MEELIS ELDERMANN
Technical Director, VKG



MARGUS KOTTISE
Management Board Member VKG Kaevandused OÜ



NIKOLAI PETROVIČ
Management Board Member VKG Oil AS

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 three Members. 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 over telephone and e-mail.

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	MEMBER OF THE BOARD	MEMBERS OF THE COUNCIL
Viru Keemia Grupp AS	Priit Rohumaa (Chairman) Ahti Puur Jaanus Purga Nikolai Petrovitš Meelis Eldermann Margus Kottise	Toomas Tamme (Chairman) Jens Haug Jaan Uustalu
VKG Oil AS	Nikolai Petrovitš	Priit Rohumaa (Chairman) Meelis Eldermann Ahti Puur
VKG Transport AS	Raimond Niinepuu	Priit Rohumaa (Chairman) Meelis Eldermann Ahti Puur
Viru RMT OÜ	Uku-Madis Savisto	Priit Rohumaa (Chairman) Meelis Eldermann Ahti Puur
VKG Kaevandused OÜ	Ahti Puur (Chairman) Margus Kottise Aleksandr Borovkov	Priit Rohumaa (Chairman) Jaanus Purga Meelis Eldermann
VKG Elektrivõrgud OÜ	Marek Tull	Priit Rohumaa (Chairman) Toomas Rätsep Ahti Puur
VKG Energia OÜ	Tarmo Tiits Sergei Kulikov	Priit Rohumaa (Chairman) Meelis Eldermann Ahti Puur
VKG Elektrihitus AS	Andry Pärnpuu	Priit Rohumaa (Chairman) Toomas Rätsep Ahti Puur
VKG Soojus AS	Andres Veske Sergei Kulikov	Priit Rohumaa (Chairman) Meelis Eldermann Ahti Puur

Supervisory Board. Staff, duties and remuneration

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. 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.

Meetings of the Supervisory Board take place regularly once per month on the last Wednesday of every month. If there are any urgent matters requiring approval of the Supervisory Board between the regular meetings, then those are decided by way of voting in writing, without summoning a meeting.

In years 2010–2011 the Supervisory Board of VKG consisted of three members.

Toomas Tamme

Chair of the Supervisory Board since 29.12.1998

Jens Haug

Supervisory Board Member since 29.09.1999

Jaan-Mihkel Uustalu

Supervisory Board Member since 10.01.2006

Conflict of interests

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

In years 2010–2011, no Management Board Member notified about own actual or intended direct or indirect participation in entrepreneurship in the field of activities of VKG.

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 VKG has the duty of preparing financial reports. The accounting principles and methods of presenting information, utilised in accountancy of VKG (and all its 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 meeting.

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 the Financial Divisions of the subsidiaries having 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 in 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 enterprises is used in the accountancy of the Group.

The auditor of VKG 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 year 2011 when a decision of the general meeting assigned KPMG Baltics OÜ to be the auditor.

Risk management

Risk management system

The Management Board of VKG has the duty of shaping the risk management policy and effecting the risk management of the Group.

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 assets and reputation of the Group;
- To increase the efficiency of the Group's activities;
- To increase the efficiency of using the Group's resources (capital, energy);
- To reduce the occurrences of unexpected situations and to prepare action plans and risk scenarios for such situations.

In 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. 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.

Business risks

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 will open the Ojamaa oil shale mine in year 2012; it is the largest investment of the Group for the period of 2008-2012.

Oil shale processing may become uncompetitive primarily due to new environmental regulations or a significant decrease of the global price of crude oil (market risk).

VKG is carefully following the prescribed environmental requirements and participates actively in the 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 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 of 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 year 2010 was used for refinancing the Group's loan portfolio and for ensuring the financing for ongoing large investments like the Petroter I oil plant, construction of the turbine unit of 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 syndicate loan agreement of the Group is financed by AS SEB Pank, Nordea Bank Finland Plc Estonian Branch and Pohjola Bank Plc.

Market risks

The most influential of the Group's strategic market risks are changes of the crude oil price 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 the market prices of CO₂, because the dependency on those prices may continually increase in the future as the environmental directives will cause less and less emission quotas to be allocated for carbon-intensive producers.

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 the stock market prices of crude oil and crude oil products. The rest of the sales prices of shale oils (domestic sales) are also indirectly dependant on the global prices. The prices in the global market also affect the production costs of the Group, 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. A change of the crude oil specification "Brent" by 1 US dollar per barrel would bring about a change of the annual profit by ca. 1 mil EUR. 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 the activities of the Group's Financial Division which regularly monitors the market overviews and analyses the readiness to a market decline.

In year 2011 the share of 67% 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 the 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 the currency risk, in order to analyse the sensitivity of the budgeted profit to changes of the exchange rate of US dollar. A change of the exchange rate between euro and US dollar by 0.01 EUR/USD would bring about a change of the profit by ca. 1.7 mil EUR (at the crude oil price of 111 USD/barrel).

No financial instruments have been acquired for hedging the market risk of CO₂. The Group has been allocated emission quotas within the current allocation plan 2008-2012. Continual monitoring will be conducted until the adopting of the allocation plan for the next period, similar to monitoring other environmental regulations; long-term plans consider the possible risk scenarios and develop the competence regarding trading with quotas on the stock market.

Environmental risks

The 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 the 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 of the 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, implementation of an asset management programme was started in year 2011.

VKG has signed a complex property insurance agreement for business interruptions and liability insurance, in order to protect itself against destruction of assets. The complex property insurance agreement includes all subsidiaries (except VKG Soojus AS, VKG Plokk OÜ and VKG Elektrivõrgud OÜ which have signed separate property insurance agreements) and the insurance provider is 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 like the establishing of the mine and its plant complex which are planned to be completed in year 2012.

Credit risks

Credit risk is an inevitable part of entrepreneurship. Upon managing credit risks, careful attention is paid to the payment discipline of the 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 competence of the Management Board. The maximum credit risk resulting from unsecured claims is ca. 11 million euros as of the balance sheet date.

The liquid funds of the Group are held in short-term deposits of banks with the 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 the availability of at least 12 months' funds for loan repayments and interest payments.

Interest risks

As of 31.12.2011 the Group has interest-bearing liabilities in the amount of 124 million euros, making up 31% 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 2012-2020 the Group is planning to make extremely capital-intensive investments (more than 500 mil EUR), and these will increase the interest risk. The loan interests of the Group are based on the interest rate of (2.35-3.00%) 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 the 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 year 2012 and would affect the profit before income tax in the extent of ca. 1.3 million euros.

Internal Auditing Department

An important part of risk management is ensuring and monitoring the functioning of internal auditing systems. VKG has established an 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. This task requires the following:

- **Verifying the correctness of economic data;**
- **Verifying the sufficiency of action guidelines and regulations and their conformity to the prescribed requirements, and presenting suggestions for enhancing them if necessary;**
- **Monitoring the respecting of action guidelines and regulations;**
- **Verifying the efficiency of property protection and resource use;**
- **Verifying the efficiency of supervision system;**
- **Monitoring the risk management.**

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.

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 each subsidiary of VKG. The tables below list all subsidiaries of the Group and the management systems in use by those subsidiaries.

NAME OF SUBSIDIARY	ISO CERTIFICATES	OHSAS CERTIFICATE
VKG Oil AS	ISO9001, ISO14001	OHSAS18001
VKG Energia OÜ		OHSAS 18001
VKG Transport AS	ISO9001, ISO14001	OHSAS 18001
Viru RMT OÜ	ISO9001	OHSAS 18001
VKG Elektrivõrgud OÜ	ISO9001	



The consolidated net profit of VKG
for year 2011 was **29.4 mil eur**

Economic indicators

This chapter presents the consolidated economic results of VKG for year 2011, compared with the results for year 2010.

The economic indicators for year 2010 are based on the audited annual report of year 2010; the data for year 2011 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 year 2011.

Profit

The consolidated net profit of VKG for year 2011 was **29.4 MIL EUR**

The net profit for year 2010 was **19.2 MIL EUR**

Total retained profit as of 31.12.2011: **165.1 MIL EUR**

Sales revenue and its distribution

Total sales revenue for the year 2011 was **183.8 MIL EUR**

Total sales revenue for the year 2010 was **125.5 MIL EUR**

SALES REVENUE ACROSS PRODUCTS AND SERVICES (TH EUR)	2010	2011
Shale oils	81,818	123,609
Electricity and distribution services	19,698	21,630
Railway and road transportation services	9,243	10,871
Heat energy	8,125	7,464
Coke and phenol products	3,322	6,802
Design, construction and assembly works	528	2,874
Maintenance and repairs of machinery and equipment	446	1,106
Other turnover (sales of materials, other services and products)	2,315	9,212

SALES REVENUE OF THE VKG GROUP ACROSS REGIONS (TH EUR)	2010	2011
Estonia	46,147	61,129
European Union	77,762	118,853
Russia and Belarus	1,492	1,558
Other countries	94	2,027

In the European Union, the products of VKG are bought by Austria, the Netherlands, Lithuania, Latvia, Malta, Poland, Sweden, Germany, Finland, United Kingdom, Denmark, Czech Republic and Italy

Balance sheet

The balance sheet volume of VKG increased by 50 mil EUR during year 2011, reaching the level of **407 MIL EUR** as of 31.12.2011.

The share of equity capital was 55%.

CONSOLIDATED BALANCE SHEET OF VIRU KEEMIA GRUPP AS (TH EUR)

2010 2011

ASSETS

Current assets	30,719	54,006
Fixed assets	326,328	352,973
TOTAL ASSETS	357,047	406,979

LIABILITIES AND EQUITY CAPITAL

Short-term liabilities	90,077	76,848
Long-term liabilities	95,932	106,214
Total liabilities	163,001	183,062
Equity capital	194,046	223,917
TOTAL LIABILITIES AND EQUITY CAPITAL	357,047	406,979

Investments

The total volume of investments of the enterprises in VKG for year 2011 was **48,7 MIL EUR.**

The largest object of investment in year 2011 was the **OJAMAA MINE** of VKG Kaevandused OÜ (36 mil EUR).

INVESTMENTS IN 2011 (TH EUR)	
VKG AS	967
VKG Oil	2,379
VKG Transport	1,128
VKG Soojus	2,165
VKG Energia	4,276
Viru RMT	259
VKG Elektrivõrgud	1,286
VKG Elektriehitus	15
VKG Plokk	15
VKG Kaevandused	36,246
TOTAL	48,735

Loan encumbrance

The existing loan encumbrance of the Group (as of the end of year 2011) is indicated by the following table, presenting the balance of all loans and financial lease agreements of the subsidiaries which are signed with parties outside the Group, and also their payments for year 2012.

The largest part of the loan obligations comes from the loan undertaken for financing the establishing of the Ojamaa mine; it continues to increase the loan encumbrance in the first half of year 2012 until the commissioning of the mine.

In 2012 a loan will be added for the purpose of financing the construction of the Kohtla-Järve – Ahtme heat pipeline of VKG Soojus AS, in the amount of 13 mil EUR.

LOAN ENCUMBRANCE (TH EUR)	LOAN ENCUMBRANCE, BEGINNING OF 2012	PAYMENTS IN 2012
VKG AS	119,763	24,053
VKG Transport	3,062	1,785
VKG Energia	49	6
Viru RMT	78	29
VKG Kaevandused	1,270	412
VKG Elektrivõrgud	8	4
VKG Oil	5	5
VKG Elektrehitus	96	72
TOTAL	124,331	26,365

Social responsibility policy

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

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 the local and the national level and recognises the fact that it cannot be a single actor.

The support and sponsorship activities of VKG are clearly targeted to the Ida-Viru region and the people working and living here.

Directions of VKG's social responsibility and sustainable development policy:

- Environment protection. The environment protection policy of VKG was established in year 2001. During the past 8 years the Group has invested more than 64 mil EUR into environment protection. VKG's environmental investments in the period of 2012 – 2020 will require additionally nearly 60 mil EUR;
- Social reporting (full publishing of data about the social, economic and environmental influence according to the Global Reporting Initiative (GRI) which is the world's strictest reporting regulation);
- 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 agreement) in the enterprise;
- Paying special attention to the development of the region and to the local population (primarily via sponsorships and volunteer activities).

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 end of the same year the principles started to be implemented in the everyday life of the Group. The introducing of the principles among employees takes place via involving them into social initiatives (cooperation with the local food bank and children's institutions).



The best photo in the category „My Virumaa“
in the Virumaa’s first photo competition
“**Beautiful Virumaa**” („Ilus oled, Virumaa!”)

Author Dmitry Kolyshkin



VKG's own initiatives for local culture

VIRUMAA'S FIRST PHOTO COMPETITION "BEAUTIFUL VIRUMAA" („ILUS OLED, VIRUMAA!")

In year 2011, Virumaa's first photo competition "**Beautiful Virumaa**" („Ilus oled, Virumaa!") took place.

The competition was founded by VKG and the Jõhvi Concert Hall; later, other enterprises of the region joined the initiative. The purpose of the competition is to record the beauty and diversity of the Virumaa region, and especially to provide a hobby activity for young photographers.

The competition for year 2011 was headed by **Evelin Ilves** and **Kaupo Kikkas**.

The first competition lasted a little over four months (27.06.2011–01.11.2011) and during that time the competition gallery received about 1,500 beautiful photos from nearly 300 authors. Over 30 authors were awarded as a result of the photo competition. In year 2012 the next photo competition was initiated; it will end with a photo exhibition and a publication on the topic of Virumaa.

Read more about the competition at www.vkgsoojus.ee/konkurss

KALJO KIISA GRANT FOR YOUNG FILMMAKERS

In year 2009, VKG in cooperation with the Jõhvi Concert Hall and the Jõhvi Municipal Government established a grant for young filmmakers, to the honour of the well-known director and actor Kaljo Kiisa who was born in Ida-Viru County.

The initiators of the grant wish to preserve the memory of Kaljo Kiisk (1925–2007). 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. In the beginning of year 2012, the organisers jointly award the second grant. The first grant was awarded to Liis Nimik ("Alasti Kino" www.alastikino.ee) with the film "Helene elukool" ("Helene's School of Life") from a series of Estonian success stories.

CHILDREN'S ELECTRICAL SAFETY GAME

In the beginning of year 2012, VKG Elektrivõrgud OÜ initiated an **electrical safety campaign** intended primarily for children in the 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 game were developed. The posters will be distributed to all local schools and kindergartens. The purpose of the bilingual game is to provide children with more detailed advice about electrical safety. In time the enterprise plans to supplement the children's part of its website with useful information and to add more information about electrical safety to its website in general.

Read more about the campaign at www.vkgev.ee/lastele.

PROMOTING CHARITY AMONG EMPLOYEES

In December 2011, VKG initiated a charity year in its collective of more than 1,800 employees. The enterprise creates opportunities for its employees to participate in charity. In December and January the employees of the Group donated foodstuffs to the **Food Bank** and children's toys and clothes to the **local orphanages** and **kindergartens**. In each subsequent month VKG adds more initiatives, providing various opportunities for charity. The campaign is titled "**It's easy to be a good person**" ("Lihtne on olla hea inimene").

Read more about the social initiatives of VKG in **Facebook** and on the **Group's websites**:

→ www.vkg.ee

→ www.vkgsoojus.ee

→ www.vkgev.ee

A number of community celebrations are organised at the initiative of VKG and in cooperation with the local communities. For example Chemist's Day, Miner's day and Elderly people day.



Keeping the traditions of the industrial region

CHEMISTS' DAY

A community celebration organised at the initiative of VKG and in cooperation with the region's largest chemical industry enterprises MolyCorp Silmet, Eastman, Novotrade Invest. The tradition of Chemists' Day was restored in year 2000 and the event was held for the 10th time in year 2011.

More than 7,000 people participated in the event in 2011.

MINERS' DAY

In year 2011, VKG restored the tradition of celebrating Miners' Day. VKG considers it important to continue the tradition of Miners' Day as a community celebration. Organising the celebration is the enterprise's gesture of recognition and deep respect towards all miners and also the residents of the region. The event of year 2011 saw the participation of more than 25,000 people and the budget of the community celebration was in excess

of 60,000 euros.

ELDERLY PEOPLE'S DAY

In cooperation with the City Government of Kohtla-Järve, VKG is organising the annual Elderly People's Day. The celebration involves retired people with long work experience in the oil shale industry and also all other elderly people whose work has made a contribution to the development of the city.



VKG received the title of Estonia's Responsible Enterprise in years 2010 and 2011. In December of year 2011 the Group received the award "Environmental Deed 2011" ("Keskkonnategu 2011") in the category of environmental management.

VKG' principles of socially responsible behaviour

- VKG identifies and studies the industry's effect on the environment and if possible then eliminates or minimises it. VKG is conducting 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 a safe and comfortable work environment for its employees;
- VKG has initiated motivational and developmental systems for its employees;
- VKG supports the professional 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 the development of the region, keeping active contact with the local authorities and residents;
- VKG supports important projects of the region, especially cultural and sports events;
- VKG is a trustworthy partner for state and 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.

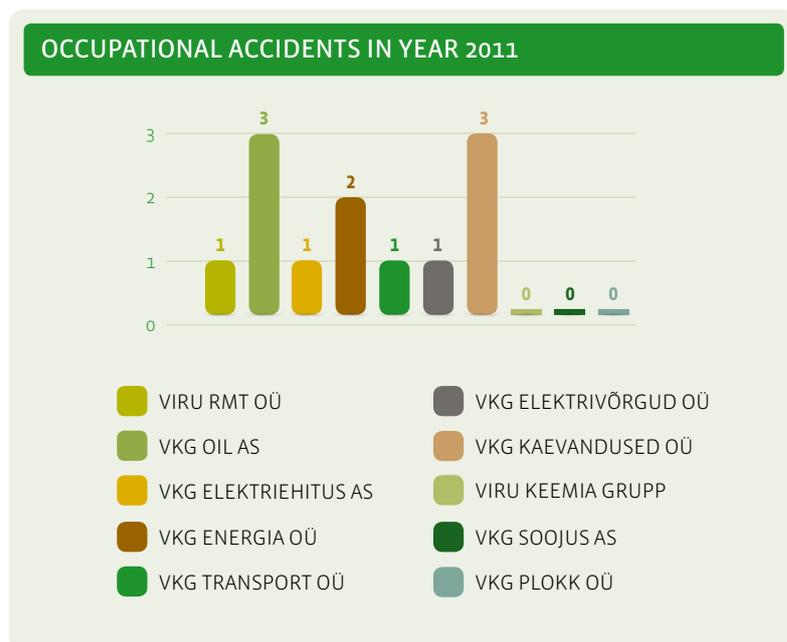
In year 2011 there were more than 1,800 employees in VKG; 80% of them are active in production and 20% are office employees



Occupational health and safety

The Group employs an occupational health and safety management system standard as means for ensuring safe work conditions and work practices for the employees, sub-contractors and visitors of the Group.

In order to achieve the best results, the subsidiaries of the Group employ the occupational health and safety management system standard EVS 18001. The relevant certificate is already held by VKG Oil AS, VKG Transport AS, Viru RMT OÜ and VKG Energia OÜ.

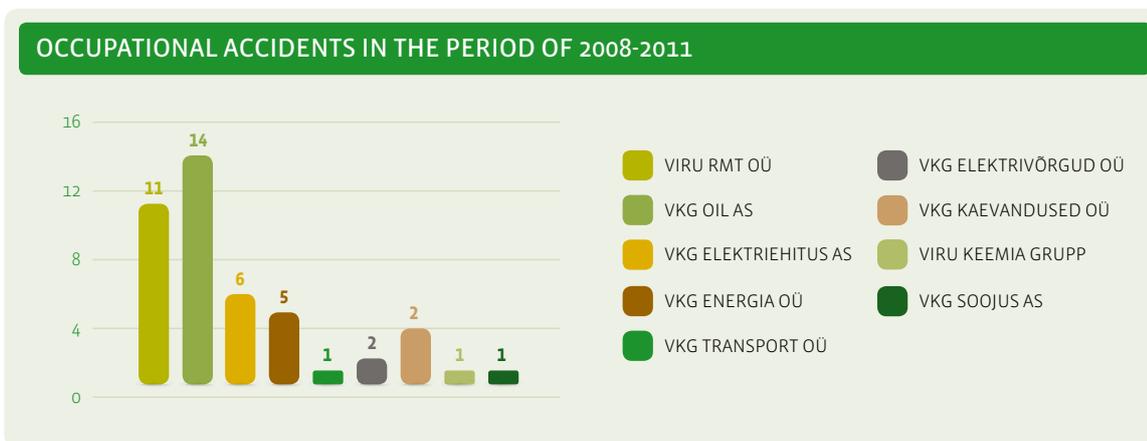


List of significant risks related to the Group's activities.

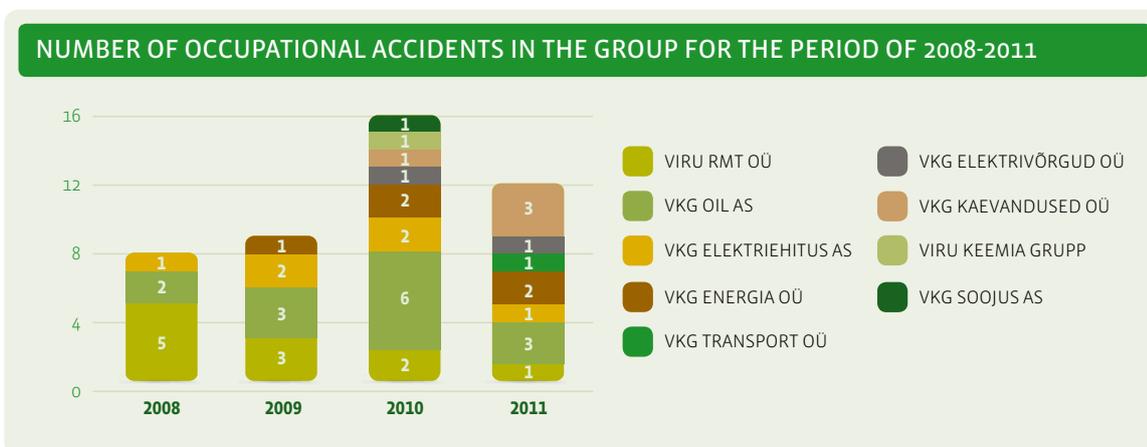
In year 2011 there were more than 1,800 employees in VKG; 80% of them are active in production and 20% are office employees.

Due to the job structure, the most significant risks are wrong work techniques, violations of safety rules, imperfect internal auditing of work environment, not using personal protection equipment, carelessness, and the work environment characteristic to the industry. In year 2011 there were 12 occupational accidents in the Group, of those 7 severe and 5 light accidents.

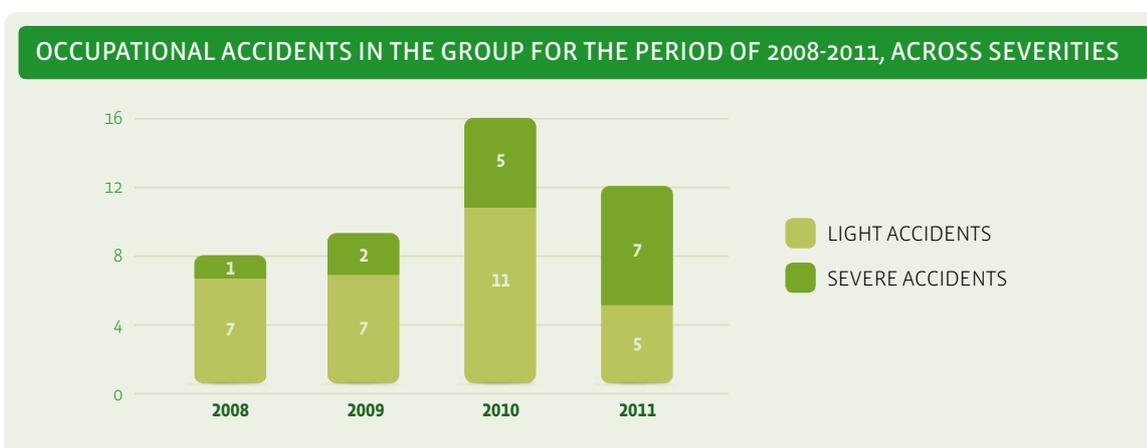
In the period of 2008-2011, the most occupational accidents took place in VKG Oil AS (14 accidents), followed by Viru RMT OÜ (11 accidents).



There were 8 occupational accidents in the Group in year 2008, and 9 occupational accidents in year 2009. The number of occupational accidents grew in years 2010 and 2011 – to 16 and 12 respectively.



During the past 4 years there have been a total of 46 occupational accidents in the Group, of those 30 light and 13 severe occupational accidents.



The number of light occupational accidents in year 2008 and year 2009 were equal – 7 accidents. In year 2010 the number of light occupational accidents increased by 4 accidents when compared to years 2008 and 2009. In year 2011 the number of occupational accidents decreased.

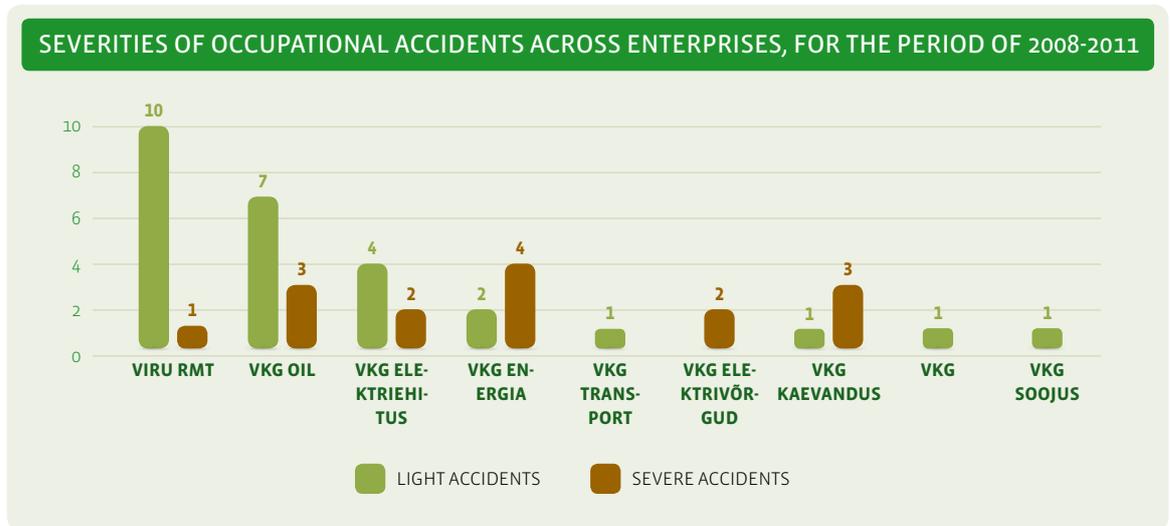
During the past 4 years, the occupational accidents entailing severe health damages have taken place primarily in production enterprises: VKG Energia OÜ (4); VKG OIL AS (3); VKG Kaevandused OÜ (3); VKG Elektrivõrgud OÜ (2) and VKG Elektrihitus AS (2).

The trend of increasing number of occupational accidents in year 2011 is correlated to the increase of the number of employees. During the same period a wide-scale performance of construction and reconstruction works took place in the territory of the Group, and this could also have had a role in the increase of the number of traumas.

There were no occupational accidents in the past year in VKG Soojus AS, VKG Plokk OÜ and Viru Keemia Grupp AS.

There haven't been any deadly occupational accidents in the Group for a long time.

Due to improving the work environment of the employees, the number of chronic occupational illnesses has decreased when compared to previous years. The most important factors for achieving this in the chemical industry are the improvement of work conditions and the investments made into environment protection and technologies. There were no cases of occupational illnesses in the Group for years 2008, 2009, 2010 and 2011.



List of measures employed to minimise accidents

The management team of the Group ensure the availability of the necessary resources for more efficient functioning of the management system. The basis for ongoing functioning of the occupational health and safety management system according to the standard EVS 18001 is as follows:

- Identified fields of responsibility of the management team;
- Identified rights and duties of the employees;
- Ongoing verification and ensuring of functioning of the management system;
- Implementing the corrective measures.

On the basis of management plans, the management teams of the Group and the subsidiaries have identified and planned various measures and ensured the availability of the relevant resources for achieving the occupational health and safety targets of the Group.

Employees and occupational safety.

The enterprises of the Group have developed a system of requirements which ensures that all employees have the competence necessary for their work duties. The system involves requirements for education, skills and experience. The requirements for each job are determined by job descriptions, procedures, regulations and occupational safety manuals.

Both the employees and the owners are interested in the continuation and development of the Group's activities. Incompetent economic managing can lead a company to a cease of activities or even bankruptcy and thus to loss of jobs. Insufficient organisation of occupational health and safety measures, on the other hand, may lead to loss of an employee.

Upon planning the activities of the Group, the Management Board has considered the need to ensure a healthy and safe work environment and the need to establish and maintain a successful organisation of occupational health and safety.

1. Nothing happen by itself, thus every subsidiary of the Group has determined a distribution of occupational health and safety duties among its employees and has shaped a **work environment structure**:

→ Competent work environment specialists have been assigned to organising the occupational health and

safety measures in the enterprise;

→ Employee representatives, i.e. work environment trustees have been elected to mediate the problems and worries of employees to the employer. A work environment trustee has the duty to ensure that the relevant occupational health and safety measures are implemented in each workplace and that the employees have proper and functioning personal protection equipment.

→ Work environment councils have been established; these are cooperative bodies of the employer and the employees, where issues related to occupational health and safety in the enterprise are solved. The duty of a work environment council is to plan the measures promoting a good working environment, to ensure their implementation and functioning, and to promote cooperation between the employer and the employees in order to develop the work environment further. The work environment council is active in helping the employer to develop, monitor and improve the occupational health and safety procedures. The work environment council regularly analyses the work conditions in the enterprise, registers all occurred problems, makes suggestions to the employer for solving those issues and monitors the performance of the adopted decisions.

2. The next step in organising the measures related to the work environment is the establishing of an **internal auditing system for occupational safety**, this is purely internal verification system of the enterprise, intended for ensuring safety in all work activities. This internal auditing is a planned and systematic activity with the goal of ensuring the respecting of all legal acts related to occupational health and safety, thus preventing occupational accidents and occupational illnesses and protecting the employer's property.

3. Every subsidiary has conducted a **risk analysis**.

This means identifying the risks factors of the work environment, measuring the relevant parameters and assessing the possible effect of the risk factors on the health of the employees, leading to management of the risk factors by way of preparing action plans. An **action plan** is a means for eliminating or preventing the shortcomings/problems found.

4. The Group's employees are provided with regular medical **health checks**. The enterprise also has an own medical office.

5. Very serious attention is paid to the **instructing and training of employees**. The Group conducts occupational training of its personnel. Upon a new employee starting to work, the work environment specialist conducts an introductory instructing of that employee. The initial instructing of the employee at the workplace is conducted by the relevant person (Manager of the structural unit) assigned by the employer. Training of safe work practices takes place after the initial instructing. The training follows an approved programme. After absolving the training programme, the employee is allowed to an examination for verifying the employee's knowledge necessary for allowing him or her to work independently. Unsatisfactory level of knowledge displayed by an employee at the examination can be grounds for terminating the employment contract with that employee. Employees are also provided with in-service training and periodic instructing. Safety regulations are compulsory for all employees of the Group.

6. The subsidiaries provide their employees with proper **personal protection equipment** and conduct training for proper use and maintenance of that equipment.



In year 2011, VKG invested a total of approximately **2 million euros** into environment protection measures.

On the photo: Marches near VKG production site

Environment protection

Overall environmental policy

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

The Group's environmental mission is to ensure conservative use of the oil shale resource and maximum utilisation of the potential of oil shale by employing the best available technology.

The Group's environmental vision is to be an open and trustworthy enterprise working under a unified management system towards preservation of the biological variety of environment and conservative use of the natural resources.

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 the legal acts, conventions and agreements of Estonia and the European Union;
4. We consider it important to inform the institutions and the population of the region about the activities of the enterprise and about possible environmental impacts of those activities;
5. We pay much attention to the promoting of 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 of oil shale, creating additional value with our oil shale products.

Environmental management system

CONFORMITY TOP 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.

VKG Energia OÜ and VKG Soojus OÜ are in the process of implementing an environmental and quality management system conforming to ISO 14001 and ISO 9001.

Investments into environment protection

VKG has an environmental priority of reducing the environmental impacts of valuing oil shale as an earth deposit. Investments, participation in the developing of legislation, monitoring the production process and the environment, modelling the outside atmosphere, and optimising the production process 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. We consider 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 toward 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 Group's enterprises.

The Group's investments into environment protection increased by ca. 64% in year 2008 when compared to year 2006, and decreased in year 2009 by 50% when compared to year 2008 (see Graph 1). The largest environmental investment of year 2008 was the construction of a sulphur scrubbing unit for VKG Energia OÜ. This unit cost more than 150 million EEK and was completed in May 2008. The sulphur scrubbing unit allows binding more than 65% of the sulphur contained in the fuels combusted in the Northern HPP, thus reducing significantly the emissions of

sulphur dioxide as a primary pollutant into the surrounding environment. In year 2009 the level of environmental investments decreased due to the economic decline. In years 2010 and 2011 the direct investments into environment protection have remained on a moderate level when compared to previous years, due to the larger environmental projects being completed and large investments being made into development activities. On the other hand, the principles of environment protection, energy efficiency and sustainable development are an integral part of planning and implementing the development activities.

The most important environmental measures undertaken in year 2011 were obtaining additional free CO₂ emission quota of the greenhouse gas emissions trading system for the current trading period, passing the verification procedure for free quota for the next period of 2013-2020 and submitting a relevant application to the European Commission according to the confirmed emission quantities of the Group's enterprises, and also reducing atmospheric emissions, organising waste management and taking steps related to storm water and waste water treatment.

In year 2011, VKG invested a total of approximately 2 million euros into environment protection measures and also approximately 3 million euros as the operating expenditure of the semi-coke solid waste deposit.

The most significant completed project for year 2011 can be said to be the obtaining of additional free CO₂ emission quota of the greenhouse gas emissions trading system for the current trading period. On the basis of the challenge submitted in the first year of the period, an additional amount of 743,497 tonnes of CO₂ quotas was allocated to VKG Energia AS. The new shale oil plant Petroter I as a new entrant of the period was allocated an amount of 450,000 tonnes of free CO₂ quotas on the basis of a relevant application. These green house gas emission quotas ensure sustainable development of shale oil production.

SHALE OILS FILTRATION PLANT

VKG Oil AS completed a shale oils filtration plant. The implementing of the relevant process allows eliminating several sources of atmospheric pollution and reducing 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. In 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 year 2009, an absorber for the tank fleet of shale oils was completed; this unit binds up to 70% of volatile organic compounds.

PETROTER I OIL PLANT

In year 2009 a Petroter I 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 more environment-friendly, because the organics content of the generated ash is significantly lower and thus conforms to the requirements prescribed in the legislation.

WASTE DEPOSIT

In 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.

OIL REMOVAL UNIT

Viru Veski AS has completed the 1st stage of reconstructing the oil removal unit (treating the water of the territory to remove oil shale processing wastes), with the cost of 21 million EEK. 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 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 treatment of industrial waste water to remove various mechanical additives.

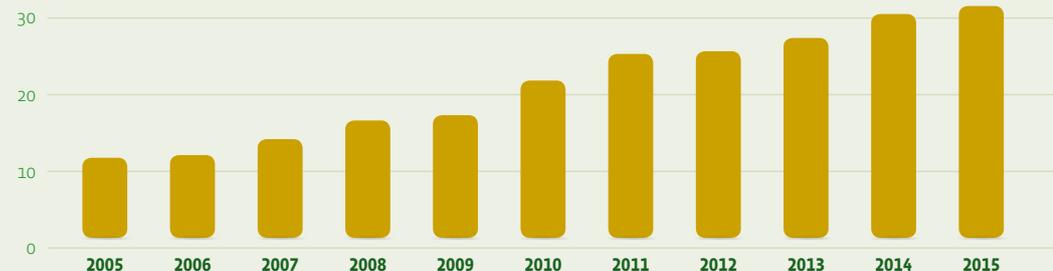
BELT CONVEYOR

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

INVESTMENTS INTO ENVIRONMENT PROTECTION IN 2007-2011 (TH EUR)



ENVIRONMENTAL EXPENDITURE OF THE GROUP AS COST PRICE OF OIL SHALE (EUR/TONNE)



Strategic vision of reducing the impact of the industry

The main environmental targets of VKG AS, stated in the environmental measures plan for years 2005–2009:

- Ongoing reduction of the environmental impact and hazard level of the deposited semi-coke, ensuring the suitability of semi-coke for depositing and establishing a new waste deposit, in order to ensure environmentally safe depositing of semi-coke, fly ash and bottom ash of oil shale;
- Reducing the number of atmospheric pollution sources of the Group's enterprises by a total of 15 and to reduce the emission quantities by up to 170 tonnes per year;
- Avoiding the pollution of soil, soil water and ground water, incl. by separating the polluted water and clean water of the leachate trenches surrounding the semi-coke heaps and by solving the issues of redirecting excessive storm water;
- Ongoing reduction of the losses of technical water and potable water, and ensuring a more purposeful use of that resource;
- Further developing of the best available technology for oil shale processing; implementing it for construction of a new plant and for improvement of the production processes of the existing plants;
- Continuing and improving the monitoring of work environment and natural environment, involving the best specialists of the relevant fields;
- Developing and implementing an environmental management system in the Group's subsidiaries.

The main directions of environmental activities for years 2012–2018 include reducing the atmospheric emissions, particularly regarding hydrogen sulphide. Also, heightened attention will be paid to possibilities of reducing the emissions of sulphur dioxide and volatile organic compounds. There are also issues planned to be solved regarding the depositing of oil shale ash and bottom ash and regarding the closing of the wet deposit.

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

- Reducing the sources of odorous 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 2 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);

- Implementing the environmental management system in VKG Energia OÜ and VKG Soojus OÜ;
- Further development of the best available technology for oil shale processing, and implementing it in construction of the new Petroter II plant and in improvement of the existing production processes.

The following research is planned for year 2012:

- Projects of allowed emission quantities of VKG Oil AS and VKG Energia OÜ, assessing the effect of the Group's main pollution sources on the surrounding territory;
- Selecting the sulphur scrubbing technology;
- Determining the pollution level of sources of odorous pollutants (aliphatic and aromatic hydrocarbons);
- Energy audit of the Group, to find opportunities for increasing energy efficiency;
- Environmental audit, to find opportunities for improving the functioning of the Group's environmental management systems and to prepare for new requirements of European Union Directives;
- Research to assess the possibility and feasibility of using mining water as coolant water.

Industrial wastes

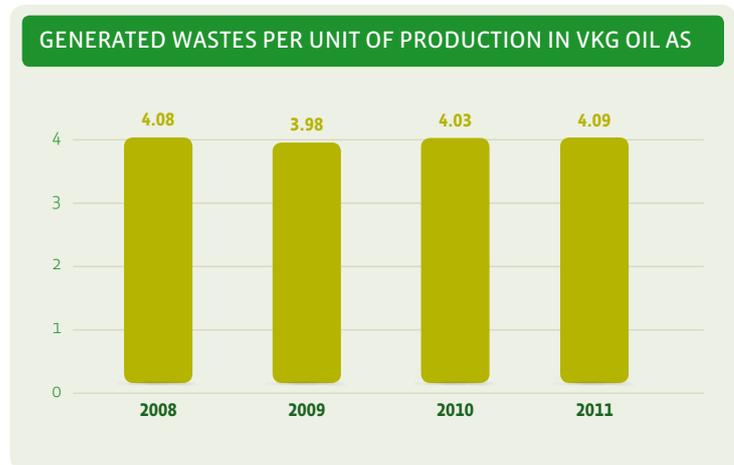
HAZARDOUS WASTES

In year 2011 the Group generated 1.58 million tonnes of hazardous wastes, which is 15.8% more than in year 2010. The increase of hazardous wastes is caused by more oil shale ash being deposited in the hazardous wastes deposit, due to the Petroter I plant achieving its 100% capacity.

VKG Energia OÜ generated ca. 10 tonnes hazardous wastes in year 2010 and ca. 15 tonnes in year 2011. The increase of hazardous wastes when compared to year 2010 resulted from removal of old equipment containing PCBs.

Figure on the right presents the quantities of hazardous wastes generated per 1 tonne of produced shale oil. The production volume in year 2011 increased by 56,481 tonnes and the quantities of generated hazardous wastes increased by 253,952 tonnes when compared to year 2010. The increase of these quantities comes from the commissioning and adjusting works of the Petroter I plant.

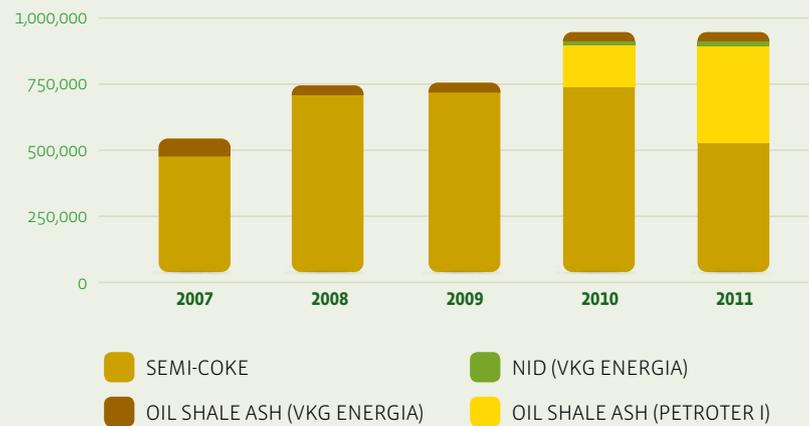
HAZARDOUS WASTES GENERATED BY THE GROUP	2009	2010	2011
Hazardous wastes (mil. t)	1.11	1.33	1.58
incl. oil shale pitch (t)	3,200	1,432	1,642
incl. oil shale ash (t)	8,100	150,000	382,636
incl. semi-coke (t)	772,600	791,000	794,975



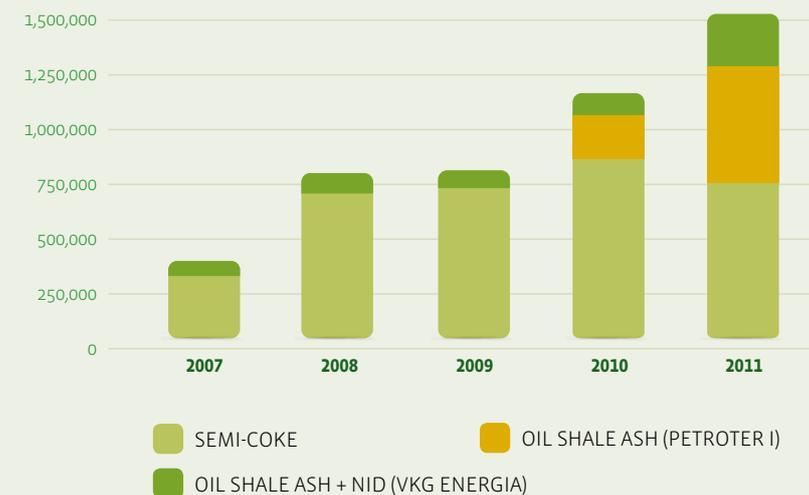
The total quantity of solid wastes deposited in year 2011 was 953,376 tonnes. The increase of the deposited wastes by 5,262 tonnes was mainly the result of depositing the ash generated by the Petroter I plant into the hazardous wastes deposit. Also, the quantity of wastes generated from the NID sulphur scrubber has increased when compared to year 2010.

The total amount of solid wastes depositing fees for year 2011 was ca. 1.56 million euros. The increase of the pollution fees by 21.8% when compared to the previous year is mainly due to the increase of the pollution fee rate, and the quantities of oil shale ash to be deposited have also increased significantly because the Petroter I plant has achieved its 100% capacity.

DEPOSIT QUANTITIES OF SOLID WASTES, TONNES



SOLID WASTES DEPOSITING FEES, EUR



NON-HAZARDOUS WASTES

In year 2011 the Group generated a total amount of 40,920 tonnes of non-hazardous wastes, which is approximately 80% more than a year before. The main waste types are mixed wastes from construction and demolition, common wastes, and calcium-based reaction wastes from the sulphur scrubbing unit. The increase of non-hazardous wastes is primarily caused by the demolition works of old buildings.

NON-HAZARDOUS WASTES GENERATED IN THE GROUP	2009	2010	2011
Non-hazardous wastes (t)	5,469	8,270	40,920
incl. construction and demolition wastes	62	253	662
incl. common wastes	204	201	219
incl. calcium-based reaction wastes from sulphur scrubbing	5,174	7,352	14,459

REUSABLE WASTES

In year 2011 the Group reused 667 thousand tonnes of hazardous wastes, which is nearly 42% more than a year before. The main wastes taken into reuse were the phenol water and semi-coke from VKG Oil AS, which were used as construction materials for covering old semi-coke heaps.

REUSABLE WASTES	2009	2010	2011
Reusable wastes (t)	336,500	386,970	667,010
incl. construction wastes	0	0	25,577
incl. phenol water	336,500	386,970	402,735
incl. oil shale pitch	0	0	0
incl. old oil	0	0	0
incl. semi-coke	0	0	238,695

Emissions

ATMOSPHERIC EMISSIONS

The industrial enterprises of the Group emitted a total of 643,630 tonnes of CO₂ in year 2011, which is 84,926 tonnes more than in year 2010. The increase of CO₂ emissions when comparing to year 2010 results from the Petroter I plant achieving its 100% capacity.

Most of the carbon dioxide emissions, i.e. 452,986 tonnes in year 2010 and 446,908 tonnes in year 2011 was generated in VKG Energia OÜ upon combusting the retort gas and semi-coke gas generated in the course of thermal processing of oil shale.

VKG Oil AS emitted 99,193 tonnes of carbon dioxide in year 2010 and 196,721 tonnes in year 2011. 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 I plant.

There were no atmospheric emissions of carbon dioxide from other subsidiaries.

SO₂ LEVELS IN YEARS 2007-2011

In year 2011 the Group emitted a total of 8,122 tonnes of sulphur dioxide, which is 275 tonnes more than in year 2010 (see Graph 6). The increase of sulphur dioxide emissions is due to semi-coke gas from the Petroter I plant, which is combusted in the burners of VKG Oil AS, and due to the flue gases of the Petroter I plant which achieved its 100% capacity.

Most of the SO₂ emissions, i.e. 7,215 tonnes in year 2011 and 7,297 tonnes in year 2010 was emitted from VKG



Energia OÜ upon combusting the retort gas and semi-coke gas generated in the course of thermal processing of oil shale.

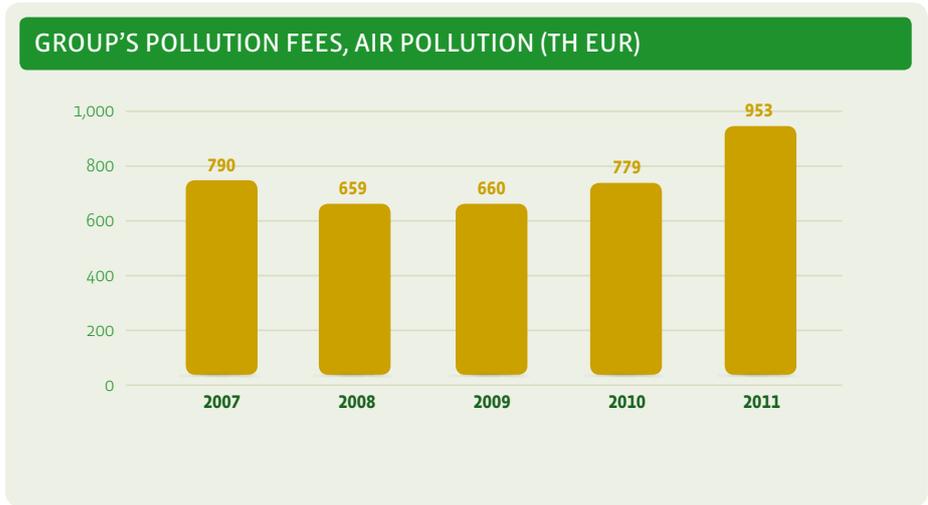
VKG Oil AS emitted 907 tonnes of SO₂ in year 2010 and 550 tonnes in year 2011. The emissions resulted from combustion of waste gases (retort gas, coke gas, sep-

arator gas) and natural gas in the shale oil distillation plant and the electrode coke producing plant, and in the course of operation of the Petroter I plant.

There were no atmospheric emissions of SO₂ from other subsidiaries.

The increase of the pollution fees for air pollution is mainly due to the increase of the pollution fee rate and due to the increased emissions coming from the Petroter I plant which has achieved its 100% capacity.

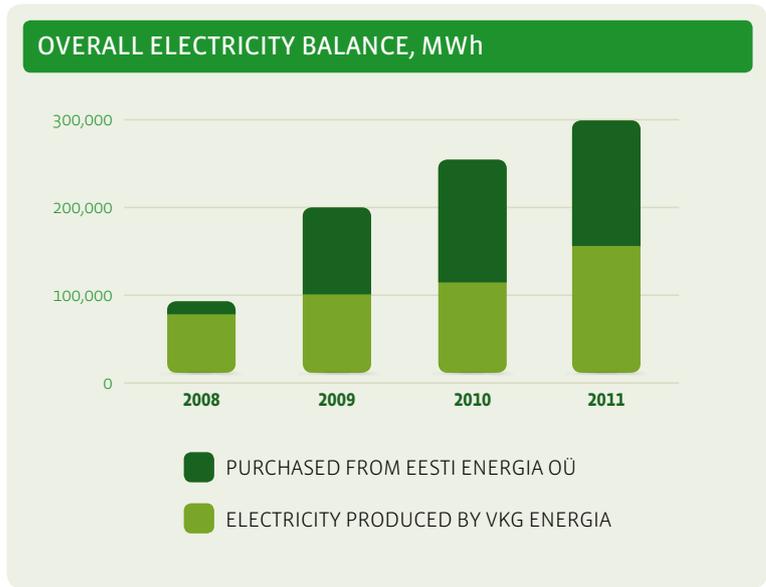
The increase of the pollution fees by 18% in year 2011 when compared to the previous year is mainly due to the increase of the pollution fee rate.



Resource use

ELECTRICITY CONSUMPTION YEARS 2008 - 2011

In year 2011 the electricity consumption of the entire Group was 121,217 MWh, whereas the largest consumers of electricity were VKG Oil AS and VKG Energia OÜ. The Group consumed 12,094 MWh more electricity in year 2011 than in year 2010. The increase of electricity consumption in year 2011 was caused by the Petroter I plant.

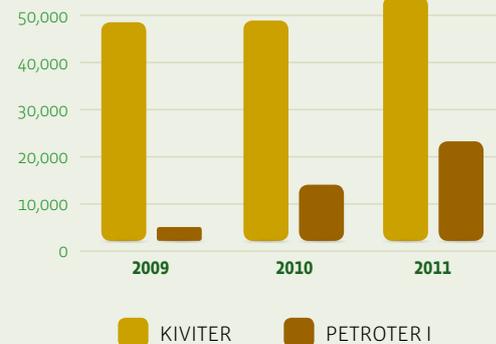


In year 2011, VKG Oil AS consumed 80,204 MWh of electricity, of which 24,726 MWh was consumed by the Petroter I oil shale processing plant. Out of the entire electricity consumption of VKG Oil AS, 3,549 MWh was consumed by lighting and 51,553 MWh was consumed by technological equipment. VKG Oil AS consumed 17,458 MWh more electricity in year 2011 than in year 2010. The increase of electricity consumption in year 2011 is due to the ongoing increase of the production rate of the Petroter I plant.

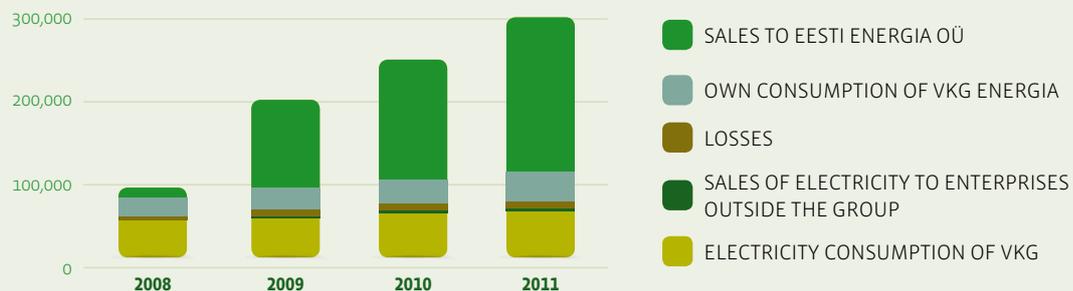
VKG Energia OÜ consumed 41,204 MWh of electricity in year 2011. The enterprise also produced electricity in the amount of 169,077 MWh.

In year 2011 VKG Energia OÜ didn't use any solid fuels in energy production. The semi-coke gas consumption of the Petroter I plant increased significantly. 26,725 toe of semi-coke gas, 102,111 toe of retort gas, 734 toe of natural gas and 7,871 toe of 34 bar steam from the Petroter process were consumed in year 2011.

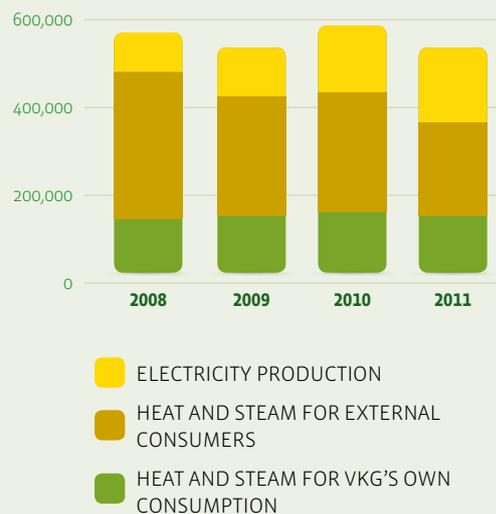
ELECTRICITY CONSUMPTION OF VKG OIL AS, MWh



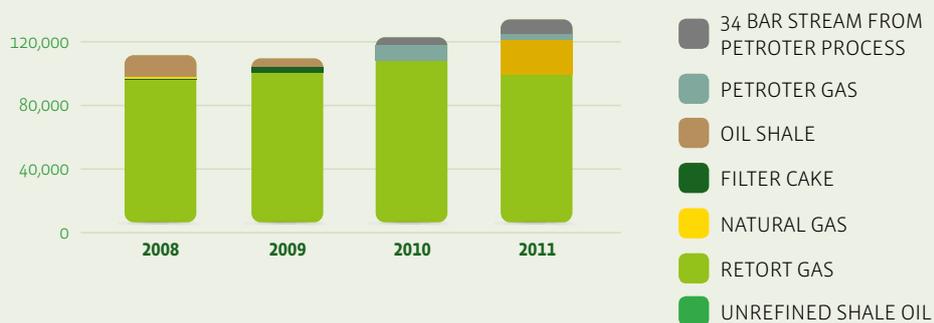
BALANCE OF ELECTRICITY SALES AND CONSUMPTION OF VKG, MWh



ENERGY PRODUCED BY VKG ENERGIA, MWh



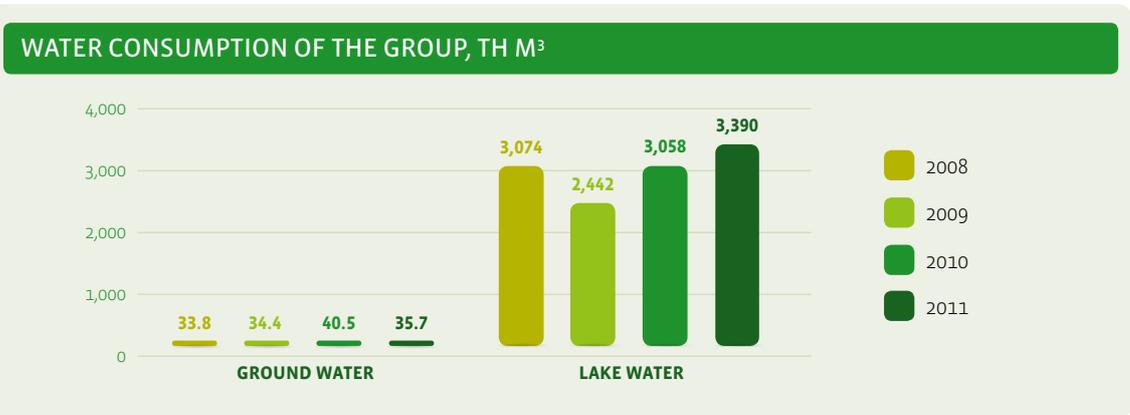
FUEL CONSUMPTION OF VKG ENERGIA IN TOE UNITS



WATER CONSUMPTION

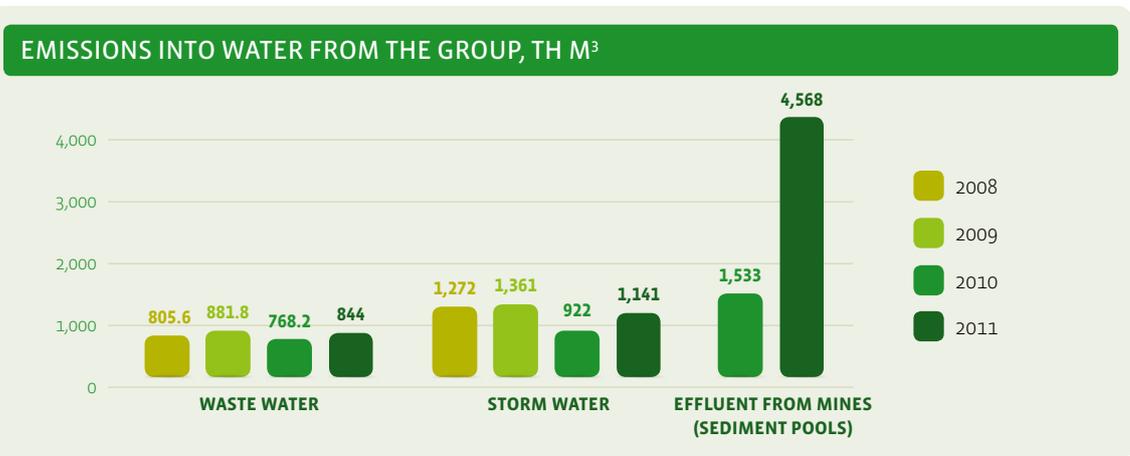
Water consumption in years 2010 and 2011

In year 2011 a total of 3,461 thousand cubic metres of water was consumed; of this, 35.7 th m³ was ground water and 3,390 th m³ was lake water. In year 2010 the total water consumption was 3,139 th m³, which is 322 th m³ more than in year 2010. The increase of water consumption when compared to year 2010 resulted from an increase of production volumes (due to the Petroter I plant) which required more coolant water.



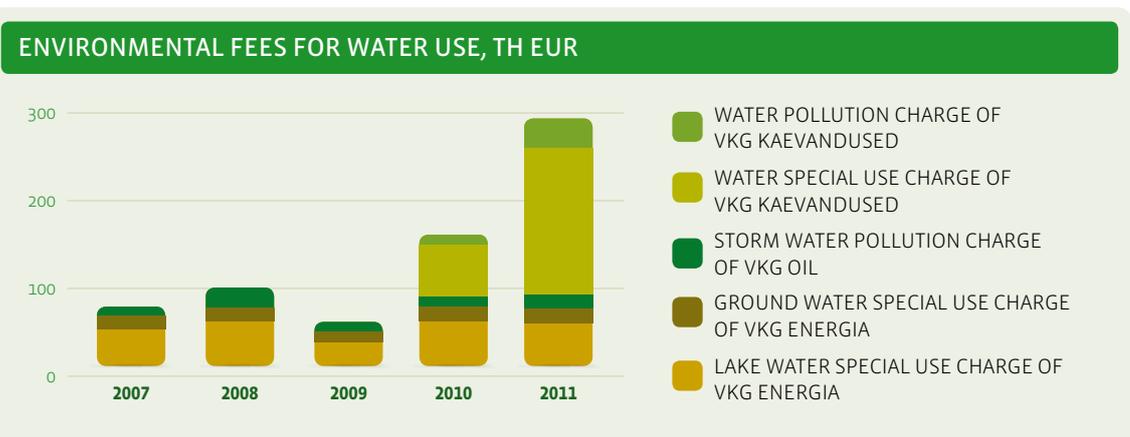
Water emissions in years 2010 and 2011

In year 2011 the Group's total emissions into water were 9.37 million cubic meters (m³); of this, 1.14 million m³ was effluent, ca. 0.84 million m³ was waste water and 4.57 million m³ was mine effluent. In year 2010 the Group's total water emissions into water were 3.99 million m³; of this, 0.92 million m³ was storm water, ca. 0.77 million m³ was waste water and 1.53 million m³ was mine effluent. Emissions into water increased by 5.38 million m³, which was due to the increase of water pumped out of mines.



Environmental fees

The increase of pollution charges by 42.7% in year 2011 when compared to the previous year is mainly due to the water special use charges and water pollution charges for water coming from mines, and somewhat due to increase of pollution charge rates.



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