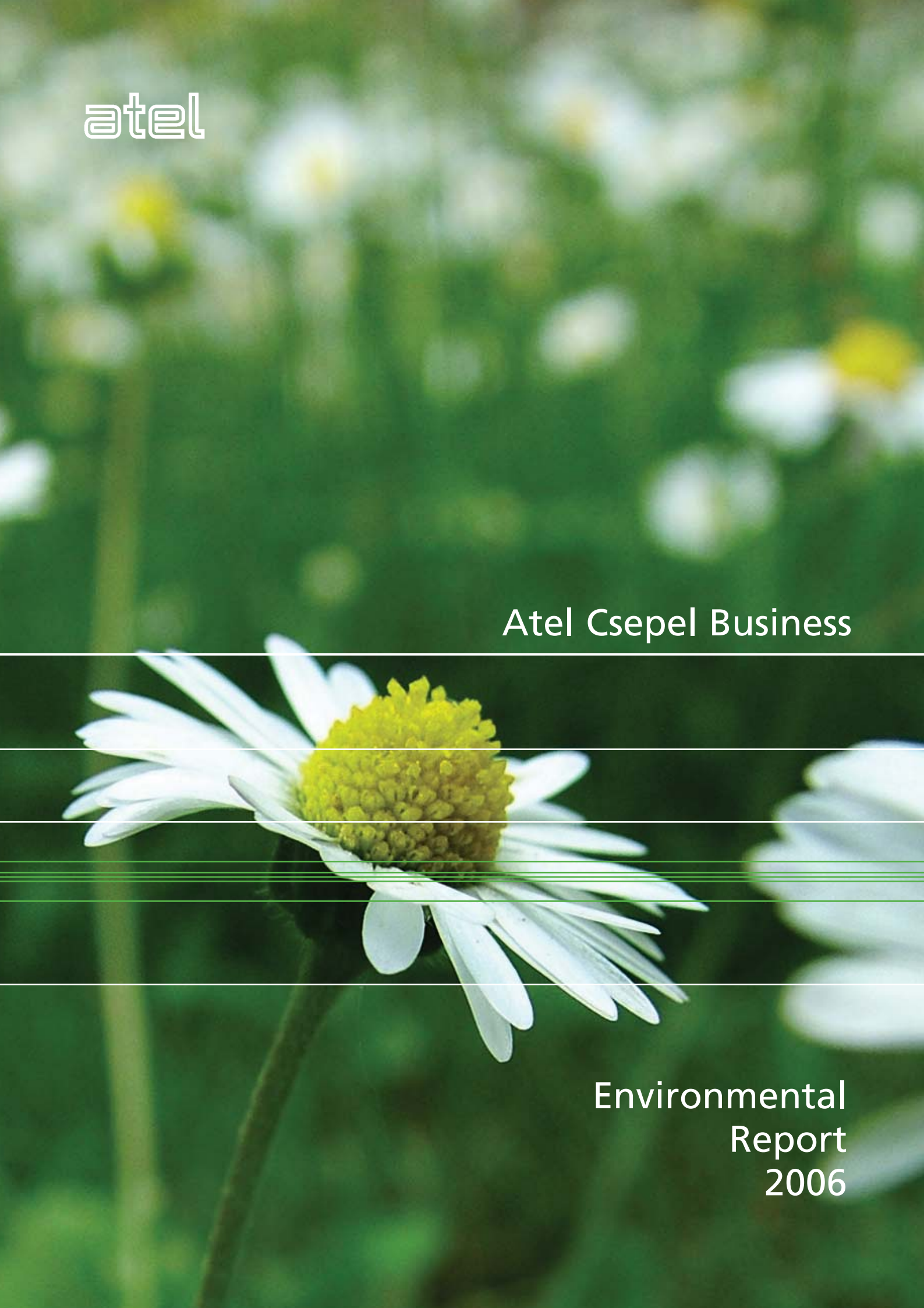
atel
Atel Csepel Business
Environmental
Report
2006

Atel Csepel Business

Atel Csepel Business is fully owned by one of Europe's leaders in energy trading, the Swiss-based Atel AG. The Group comprises three companies based in Budapest, Hungary: Csepeli Áramtermelő Kft., the owner of the Csepel II CCGT power station; Csepel Energia Kft., which performs the operation and maintenance tasks at Csepel II Station; and Csepeli Erőmű Kft., which operates Csepel I, a public utility service business.

Csepel II, a modern, efficient and environmentally friendly combined-cycle gas turbine power plant is located on the area of the former Csepel Works, in South Budapest. Csepel II Station, commissioned on 1st November 2000, was the first power station in Hungary built on a business basis using private capital. The plant can meet 5 to 7 per cent of the electricity need of Hungary providing up to 389 MW power capacity for the national grid.

Heat is sold to domestic and industrial heat consumers. District heating supplies about 19,500 flats in the southern districts of Budapest. The Group also manages natural gas distribution and public utility services.

Acknowledgements:

ISO 14001 • ISO 28001 • ISO 9001 • RoSPA (2005 Gold Medal) • Hewitt/Figyelő Best Workplace Award (2005: Central and Eastern Europe's 13th best workplace) • „Green Frog“ Certificate (Deloitte) •

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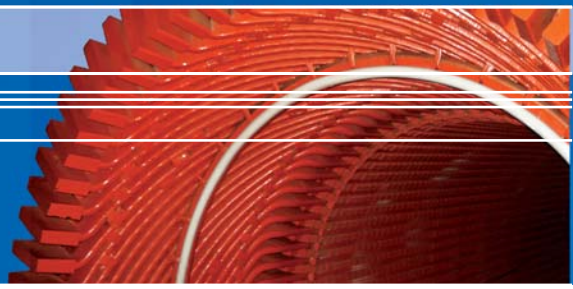
Name of the Group:	Atel Csepel Business
Address:	1211 Budapest, Hőerőmű u. 3.
Telephone / fax:	+36-1-278-3800 / +36-1-278-3838
Parent company:	Aare-Tessin AG für Elektrizität (Atel)
Main activities:	power generation, heat production and supply
Contact person:	György Keszler
Environmental Leader:	Beáta Leveles +36-1-278-3812
e-mail:	beata.leveles@atel-csepel.hu
For more information:	http://www.atel.hu/

Management letter



Dear Reader,

Welcome to our 6th bilingual Annual Environmental Report.
This report is an opportunity for us to present the environmental performance of the Atel Csepel Business by collecting together in one document the entire environmental management activities for the past year and comparing it to performance criteria that are recognised throughout the business world.
Our business group is based on two electricity and heat production units close to Budapest in Hungary: the Csepel I Power Station and the Csepel II Power Station. Together, these operations are managed as a single Csepel Business, owned 100% by Swiss-based Atel AG.
Whilst we are aware of the potential impacts that power generation can have on the environment, we firmly believe that our main business, the process of electricity generation at Csepel II, is environmentally more friendly than many other energy businesses. Nevertheless, we still understand the need to manage the environmental impact of our production processes and the need to comply with accepted standards. Consequently we aim to minimize both environmental risk and environmental impact through utilisation of "state of the art", highly efficient plant technology and proactive management systems.

Our business processes and managerial organisation are designed with the intention of doing everything within our control to avoid any possibility of contamination and to continuously review and improve our performance. However we recognise that with a multi-million euro investment and considering the nature of the electricity production process, some impact on the local environment is inevitable. We try therefore to achieve a balance between our industrial activities and the environment.
In addition to supplying some 6 % of Hungary's electricity needs, we produce district heat for nearly 20,000 homes in two districts of Budapest. We also supply natural gas and water products within the Csepel Industrial Estate. The environmental impact of all these activities is also strictly monitored and regularly assessed through accredited internal and external auditing processes, and compliance is ensured through competent and well trained staff. The selection and careful management of contractors working in the local environment is also an important consideration for us. These contractors often act as our representatives and in that role we require them to represent high standards of commitment to environmental issues.

In addition to environmental issues, the report also gives us an opportunity to review our corporate performance in health and safety issues. At the Atel Csepel Business, standards of behaviour and responsibilities for health and safety are high on the agenda for managers at all levels. This focus has close parallels with the long term safety and health of the natural environment.
Both priorities serve a common purpose – to ensure that our plants have no detrimental impact to the people who work and visit us and to ensure that the people of Csepel continue to view us as a good neighbour and a positive addition to the community.
Our objective in this publication is to promote open communication on the environmental, health and safety issues. If you wish to comment in any way, the report includes a feedback form or you can contact the Company – contact details are given in the report.
Thank you for your interest.

Allan Walmsley
General Manager

Environmental Policy

The Atel Csepel Business recognizes the interaction between its activities within the Group and the environment, and does everything in its control to ensure continuing improvement where necessary and sustainable development.

The Atel Csepel Business aims to develop and maintain a high standard of environmental care, to prevent environmental pollution and continually improve environmental performance. As part of this objective the Atel Csepel Business aims to prevent any adverse impact from its activities on the environment. These aims will be achieved by:

- understanding our environmental responsibilities and meeting our environmental obligations;
- operating an effective environmental management system;
- ensuring the safe management of raw materials and by-products;
- promoting the efficient and environmetally friendly use of energy and material resources, and by recycling and reuse where appropriate;
- monitoring and controlling the impact of our activities on the environment;
- considering the impact on the environment in decision making;
- reporting on any environmental incidents, and striving for establishing and maintaining good relations with the agencies;
- responding promptly and effectively to any environmental incidents;
- developing ways of reducing the environmental burden caused by plant operations;
- promoting and managing in a sensitive manner the protection of soil;
- maintaining close liaison with the appropriate regulators, authorities and environmental organisations;
- educating and training employees to conduct their activities in an environmentally responsible manner;
- ensuring that contractors on site work to the same environmental standards as adopted by Atel Csepel Business;
- promoting openness and a structured approach towards environmental issues amongst staff, suppliers and contractors, and within the community;
- regularly monitoring and auditing processes, procedures and compliance with them, and reviewing arrangements where necessary.

Atel Csepel Business sets specific targets and objectives to support this policy, and reviews them regularly.
In addition, the Atel Csepel Business fully maintains the ISO 14001 Environmental Management System ("EMS") accreditations which demonstrate to the local community and the agencies that the Group is dedicated towards setting, achieving and maintaining high environmental targets set.

Introduction of the Atel Csepel Business

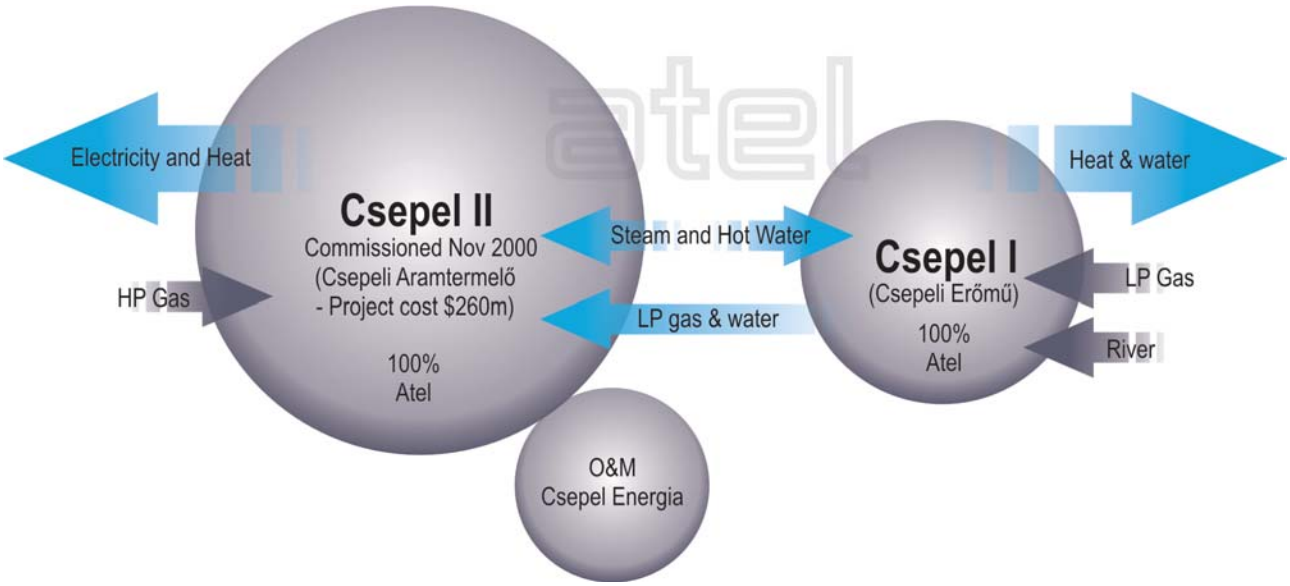
COMPANY CONTACTS AND ORGANISATION

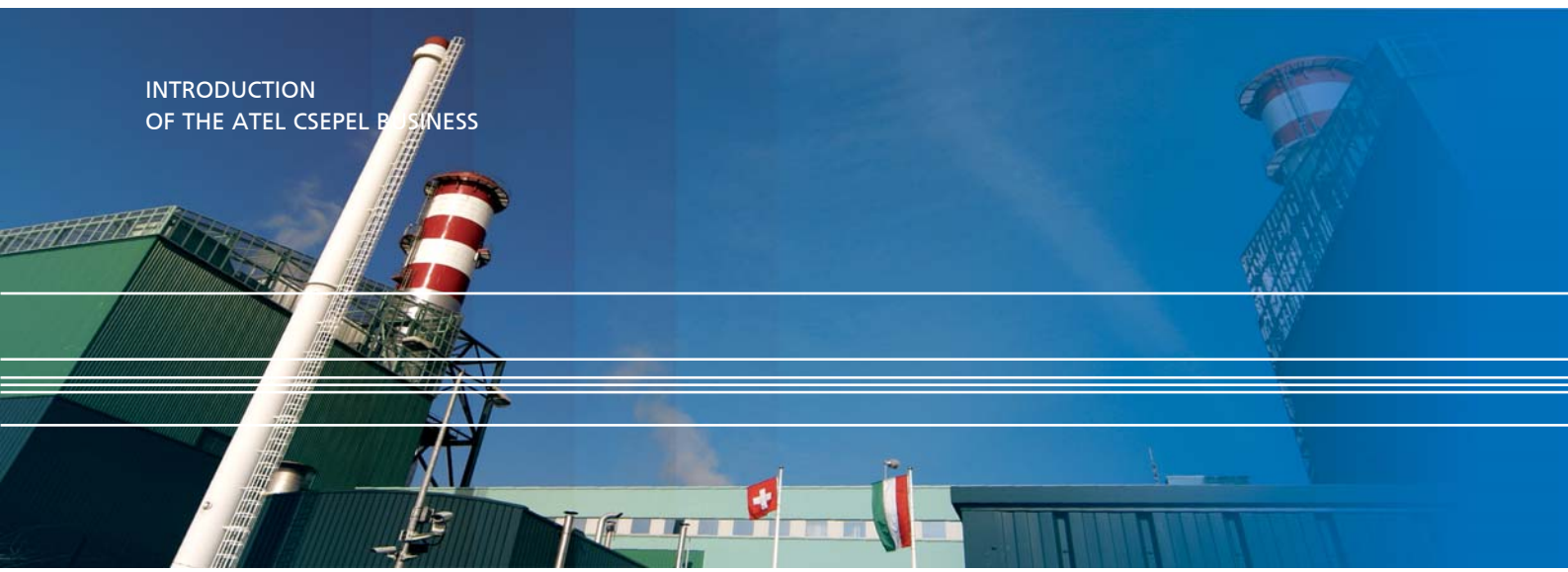
Csepel II is the main focus of the Atel Csepel Business, and it is a modern, efficient and environmentally friendly combined-cycle gas turbine plant commissioned in 2000. The Csepel II Plant is capable of meeting some 6 % of the country's energy needs and is fuelled by a direct, high-pressure gas supply line from the MOL network. The business also includes the Csepel I public utility business which primarily manages heat and gas supplies to 240 local customers and ensures critical supplies to the Csepel II.

Both businesses are within the Csepel Industrial Estate on the Csepel Island of the Danube at district 21 of Budapest.

Both plants are owned by the Swiss-based European energy business, Atel AG (www.atel.ch).

The structure of Atel Csepel Business in Hungary and main connections are shown by the next figure.





INTRODUCTION OF THE TECHNOLOGY AND ACTIVITIES OF CSEPEL II STATION

Csepel II Station received the environmental licence, required for operation, in October 2000, and started commercial operation on 1 November 2000. A staff of 34 skilled employees ensure developing and maintaining high standards of the environmental system.

The Csepel II Station is a combined cycle gas turbine plant consisting of two power generating cycles in sequence, typical of the similar stations built all over the world and considered as most favourable in terms of clean, efficient energy production. Emission limits on such large combustion equipment are very strict. For example, level of nitrogen-oxide emission by Csepel II gas turbines is about one-fourth of that of coal-fired power plants, while carbon-monoxide emission is 1:50 and sulphur-dioxide emission is 1:400 less, virtually near to zero.

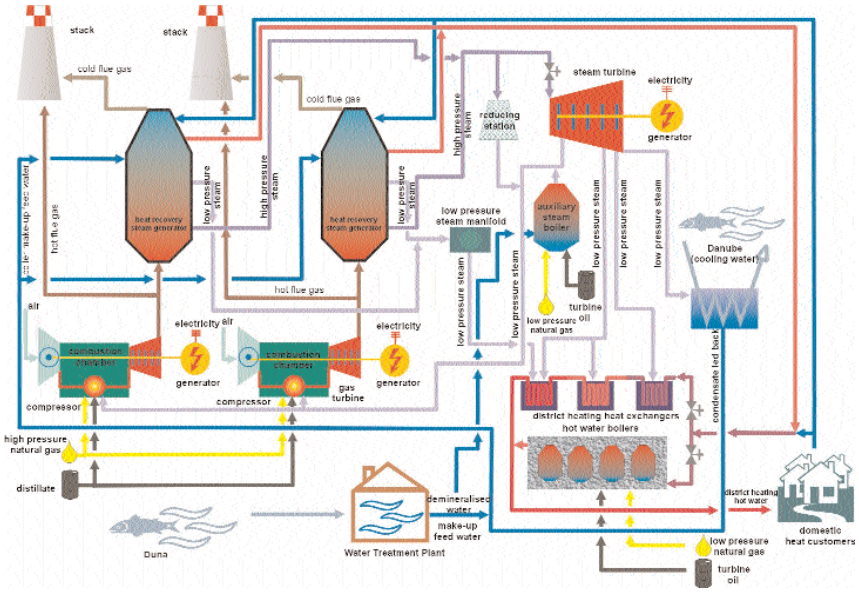
Main station plant show the popular 2:2:1 structure consisting of two gas turbines, two heat recovery steam generators and one steam turbine. That structure enables the plant to change load within a relatively broad load range.

Power generation and public utility energy production are controlled by Hungarian Power Companies ("MVM") following the schedule reflecting national demand levels.

The operation of the national power grid and load on the power station fleet are controlled by Hungarian Power System Operator Rt. ("MAVIR"), an MVM subsidiary. The Station has remote control feature where the load base signal is sent from a MAVIR computer directly to the Station unit control thus not requiring any human action. In that operation mode, load can be changed between 50-92 %.

The main purpose of the Station is electricity generation, therefore, four hot water boilers and one auxiliary steam boiler were built in to provide continuous an smooth district heat supply.

The primary fuel is natural gas (identical to domestically used gas although at a different pressure) with distillate as alternative fuel. There are very strict quality standards for distillate (for example, max. sulphur content is 0.2 %), and may only be used when natural gas supply is suspended. In 2006, distillate was burned in January and March in line with the request of MOL and MVM to bridge the disturbances of gas supply from Russia.



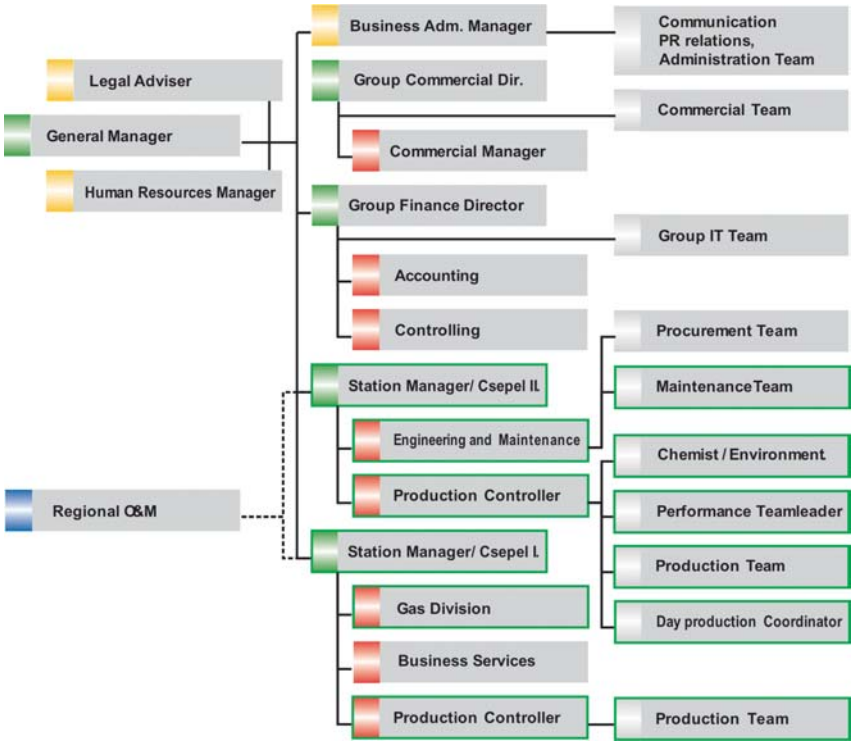
BRIEF INTRODUCTION OF THE ACTIVITIES OF CSEPEL I STATION

Csepel I Station provides utility services to the businesses on Csepel Industrial Estate and also to Csepel II. Its main activities are the production of heat and industrial water and the provision of hot water, industrial process steam, natural gas, drinking water and industrial water, and sewer service. It has contracts with about 240 industrial, trade or other businesses as consumers within the Csepel Industrial Estate. It also provides low pressure gas and industrial water and drinking water to Csepel II Station, whilst managing the delivery of hot water from Csepel II in order to supply the local industrial customers and also heat offtaker Fotav.

Its activities are:
heat production and supply,
industrial water production and supply,
gas distribution and public utility supply,
operation of the drinking water and industrial water networks,
sewage and rainwater drainage.

THE STRUCTURE OF ENVIRONMENTAL ORGANISATION

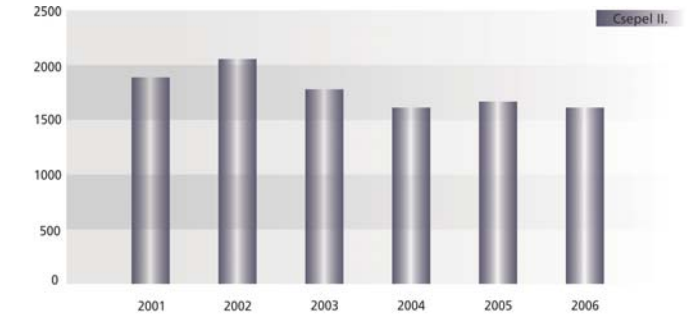
An environmental organisation was established to cover and regulate all the factors related to an environmentally focused approach. Representatives of various functions whose activities or processes may have an impact on the environment or may interfere with it, are active members in the Environmental Organisation (or Emergency Team). Controllers' scope and duty is to provide conditions required. Emergency Team members are regularly trained to make capable of performing remediation actions should any unexpected environmental emergency or incident occur.
Structure of the Group and remediation organisations in green boxes are shown in the next figure.



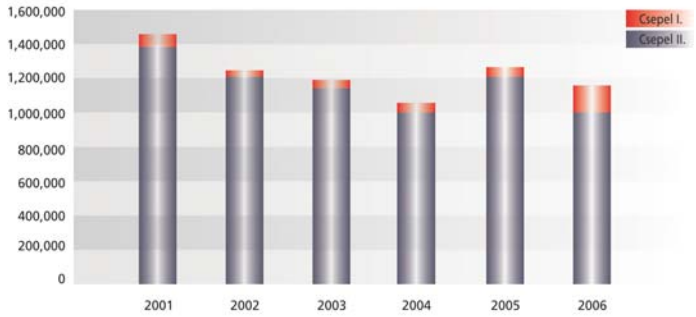
Presentation of "products" made

The next graphs present power generation indicators and heat production volumes over the past 6 years and for each month in 2006.

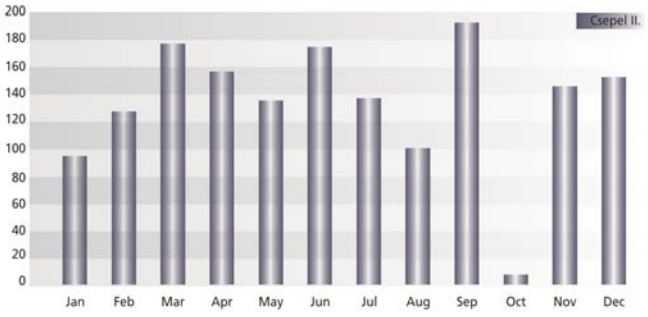
Generation in 2001-2006, GWh



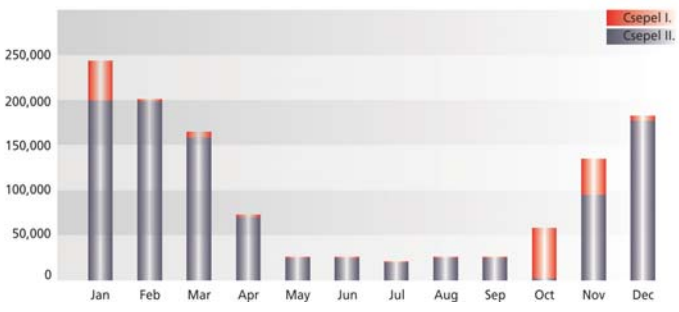
Heat production in 2001-2006, GJ



Generation in 2006, GWh



Heat production in 2006, GJ



Introduction of The Management Systems

The Group set up the objective of implementing the Environmental Management Systems (EMS) in its power stations, an effective tool to protect the environment and better utilise resources, and to describe environmental factors and impacts, and environmental responsibilities. EMS was developed under the coordination of the environmental managers and supported by Denkstatt Hungary Kft. at both stations.
First an environmental assessment was performed at both Csepel I and Csepel II, and secondly the environmental factors and impacts of the stations were explored and evaluated. Targets and objectives were set up to reduce the more significant environmental impacts, organised into a structured framework by environmental programmes. An EMS documentation system was developed through the creation of the environmental organisation, and specified actions were introduced.

Steps of implementing the EMS:

Csepel I Plant operates an integrated management scheme which meets three harmonised European standards. Csepel II environmental protection system was first certified by SGS Hungária Kft. in 2002. Csepel II acquired its Workplace Health & Safety Management ("HSMS") Certificate in January 2006.

In 2006, the Group went through quality assurance (QMS), environmental protection (EMS), health and safety (HSMS) review and renewal audits performed by independent certification consultants. Those successful audits prove that the Company continues to meet the international set of standards as shown in the next table.

The management systems that have been implemented in production and supply processes improve work performance and support the achievement of targets set up in our Environmental Policy.

	MIR MSZ EN ISO 9001	KIR MSZ EN ISO 14001	MEBIR MSZ 28001(OHSAS)
Csepel I	✓	✓	✓
Csepel II		✓	✓


SGS

Csepel Energia Kft.

ISO 14001:2004


IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and MSZT

hereby certify that the organization

Csepel Energia Kft.

H-1211 Budapest, Hőerőmű u. 3.

for the following field of activities

electricity generation, steam and hot water production
(EA scope: 25, 27)

Occupational Health and Safety Management System

which fulfils the requirements of the following standard:

OHSAS 18001:1999

Issued on: 30-01-2006
Validity date: 30-01-2006 – 29-01-2009

This document is valid only together with MSZT's certificate referred to the registration number below

Registration Number:
HU-MSZT-MEBIR/20/2005-17


IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and MSZT

hereby certify that the organization

Csepeli Erőmű Kft.

H-1211 Budapest, Gyepsor u. 1.

for the following field of activities

heat production and supply; industrial water production and supply; sewage and rainwater drainage, natural gas distribution and public utility supply
exclusions: design and development (7.3), validation of processes for production and service provision (7.5.2)
(EA scope: 26, 27, 39)

has implemented and maintains a

Quality Management System

which fulfils the requirements of the following standard:

ISO 9001:2000

Issued on: 22-04-2005
Validity date: 22-04-2005 –21-04-2008
Date of the first certification: 17-05-2002

This document is valid only together with MSZT's certificate referred to the registration number below

Registration Number:
MSZT-503/0810(1)-719(1)


IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and MSZT

hereby certify that the organization

Csepeli Erőmű Kft.

H-1211 Budapest, Gyepsor u. 1.

for the following field of activities

heat production and supply; industrial water production and supply; sewage and rainwater drainage, natural gas distribution and public utility supply
(EA scope: 26, 27, 39)

has implemented and maintains a

Environmental Management System

which fulfils the requirements of the following standard:

ISO 14001:1996

Issued on: 22-04-2005
Validity date: 22-04-2005 – 14-05-2006
Date of the first certification: 17-05-2005

This document is valid only together with MSZT's certificate referred to the registration number below

Registration Number:
MSZT-KIR/59(1)/2004-34(1)


IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

IQNet and MSZT

hereby certify that the organization

Csepeli Erőmű Kft.

H-1211 Budapest, Gyepsor u. 1.

for the following field of activities

heat production and supply; industrial water production and supply; sewage and rainwater drainage, natural gas distribution and public utility supply
(EA scope: 26, 27, 39)

has implemented and maintains a

Occupational Health and Safety Management System

which fulfils the requirements of the following standard:

OHSAS 18001:1999

Issued on: 22-04-2005
Validity date: 22-04-2005 – 21-04-2008

This document is valid only together with MSZT's certificate referred to the registration number below

Registration Number:
MSZT-MEBIR/18/2005-14

WORKPLACE HEALTH AND SAFETY

At Atel Csepel Business, safety of people is the utmost value, and world-class workplace health and safety are regarded as corner stones of our business success. Our ultimate safety goal is to prevent accidents of any form and thereby ensuring people leave the sites in the same condition to that in which they arrived.
In order to be able to realise this vision the commitment and contribution of everyone is needed. That includes staff of the Csepel Group, contractors, suppliers and visitors.

In achieving the objectives, focus on the following will be needed:

- demonstrating, through line management actions, the commitment to health and safety;
- communicating by organising internal and external forums inviting everyone's active contribution to the information flow;
- continuing to establish and develop a positive safety culture by utilising internal and external resources;
- acknowledging efforts in achieving outstanding safety performance;
- providing regular training and education for the continuous development of all employees.

2006 health and safety achievements

The Group has performed more than eight full years by its employees without a lost-time accident.
Both sites of the Group have acquired Workplace Health & Safety Management System certifications by the Hungarian and also the international standards (MEBIR 28001, OHSAS 18001). As an external recognition, the UK's Royal Society for the Prevention of Accidents (RoSPA) has granted Gold Awards for the applications of both Stations, which followed a number of similar previous awards.

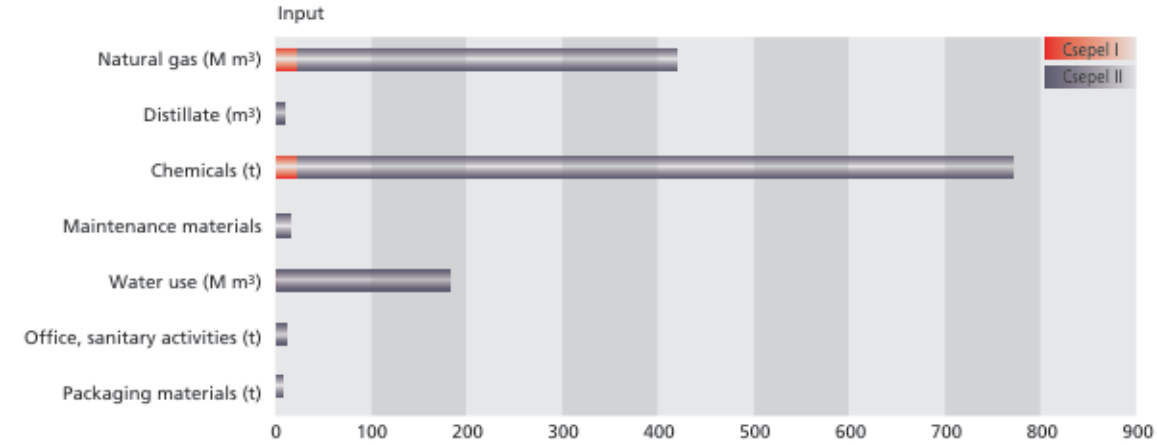
As part of our comprehensive safety processes, we have implemented management schemes unparalleled in Hungary, to achieve "Safety from the System" and "General Safety". Training course and authorisation assessments for persons authorised under the Safety Rules have again been arranged in 2006 with support from an international consultant.
Extremely useful sessions (see photo) and meetings have been held during the year about safety issues with various organisations (Kladno Power Station and Zlin Power Station in the Czech Republic, AES Tisza Station, National Labour Safety Inspectorate) to share practices and utilise lessons in the continuous improvement of safety at our businesses.

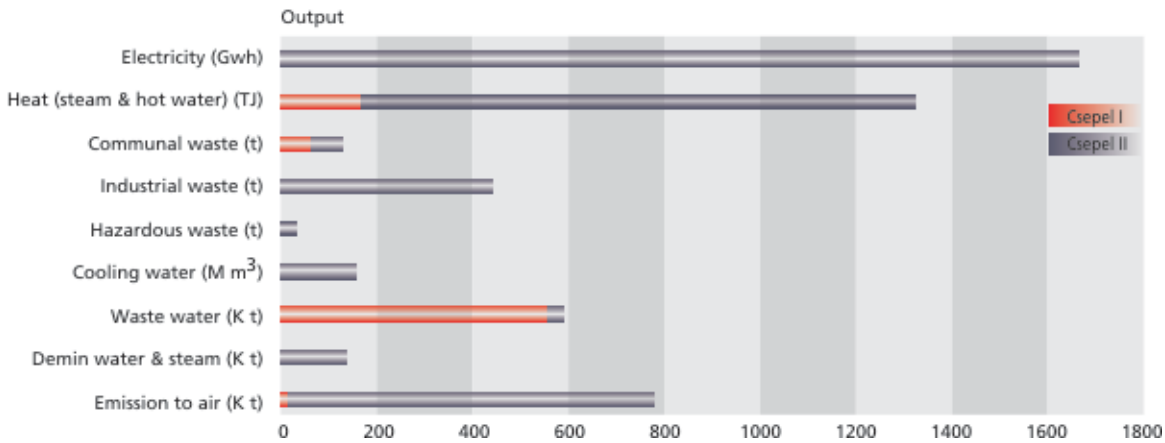
Target

It is our strong and honest belief that, by having appropriate management, people and control systems and by working in a proactive manner, all injuries and accidents can be prevented and avoided. The clear target is to maintain the zero accident level.

PRESENTATION OF DIRECT AND INDIRECT ENVIRONMENTAL FACTORS AND IMPACTS

Turnover of materials at the two sites in 2006.



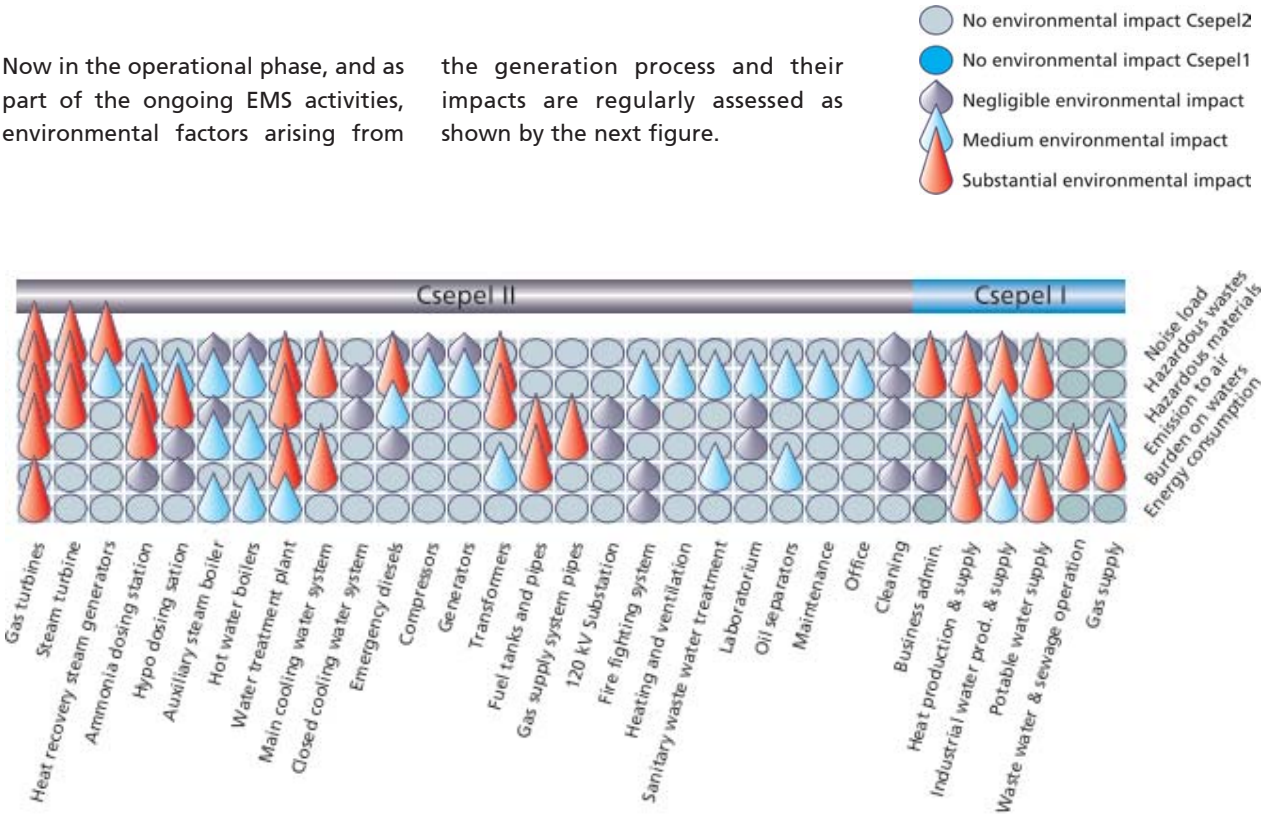


Prior to construction of Csepel II, a detailed study was completed on the foreseeable environmental impacts of both the construction and commercial operation.

In terms of land use, Csepel II is a brown-field project as the footprint is on land formerly in joint ownership of a number of traditional Hungarian companies and of uncertain historical use. Consequently the legacy of the previous industrial processes presented an environmental challenge for the developers. Soil and ground water were thoroughly surveyed including 40 boreholes deepened on the site central area. Contaminated soil, approximately 80 m³, was disposed of, and the area was filled up with fresh soil.

In addition to engineering and economy aspects, solutions to minimise the environmental impact were given high priority throughout the design process and the construction phase of the project.

Now in the operational phase, and as part of the ongoing EMS activities, environmental factors arising from the generation process and their impacts are regularly assessed as shown by the next figure.

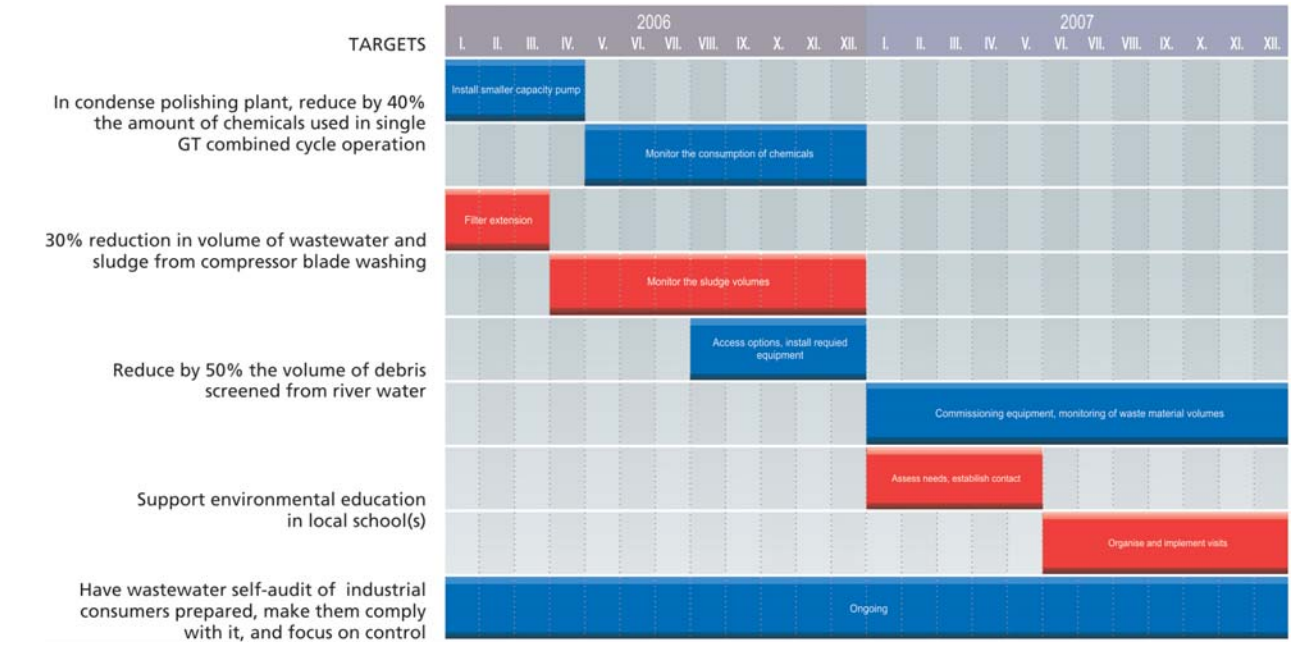


Environmental impacts by Csepel II Station are shown on the left side of the graph which is the larger field with dark blue background, and the smaller field on the right side with light blue background illustrates the impacts created by Csepel I Station. The horizontal axis of the graph lists plant areas creating the impact, and the vertical axis lists the environmental elements where the impacts take effect. Height of cones is proportional to the impact.

ENVIRONMENTAL TARGETS AND PROGRAMMES

Each year new targets are set up internally to ensure continued reduction or eliminate negative environmental impacts. Detailed implementation requirements, compulsory to us, are established to promote the achievement of those targets and programmes.

Progress in key targets is shown in the following. In the month columns of the graph.



In this period, most of our environmental targets were related to water management. Relevant information is presented in detail in the next section.

On Csepel II Site, which is a combined-cycle gas turbine plant, the target of reducing by 40 % the amount of chemicals used in the condensate polishing plant was set in 2006. Therefore, one of the previous two, high-capacity condensate pumps was replaced with one of smaller capacity. The logic there was that when there is just one gas turbine running, and the volume of steam leaving the steam turbine is also just half of the usual volume, ion exchangers in the condensate polishing plant would have to clean less condensate. A lower load on the ion exchangers results in less frequent regeneration by chemicals. However, operation showed that quality of water delivered by the smaller-capacity pump and cleaned in the condensate polishing plant was satisfactory even with two gas turbines running, and the saving of chemicals turned out to be higher than expected.

Protection of The Elements of The Environment

Another target was to reduce by 30 % the volume of waste water and sludge created by compressor blade washing. To implement that, the ceramic inserts in the ultra filter (see photo on the previous page) were doubled to increase capacity. Finally we could reduce the volume of such waste water by 24 % over the year but other improvement options are also being examined.

An undertaking was to reduce by 50 % the volume of debris screened from river water. Late 2006 we began to install a desiccation equipment which is hoped to reduce the volume of wastes, currently holding a lot of water, by removing its water content (see photo).

The Power Station sponsored the installation of Csepel Air Quality Monitoring Station which operates continuously. It is the 9th such station in Budapest, located on Szent Istvan Avenue, but the display is at the centre of Csepel District on Szent Imre Square. In November 2004, Miklós Persányi Minister for Environmental and Water Affairs and on behalf of Atel Csepel Businesses Allan Walmsley General Manager signed a letter of intent to integrate the Csepel Metering Station into the national system with support from Atel. In preparation to the integration, Csepel Group donated HUF 13 million in February 2006 to modernise the Monitoring Station. Central Danube Valley Environmental and Water Inspectorate undertook to operate the refurbished Air Monitoring Station from March 2007 on.

The project made Csepel air quality data widely available and comparable to such data of communities and regions that have already joined the national system. Implementation is planned for 1st Quarter in 2006.

To monitor sewage discharge, the consumers who operate industrial, food industry or restaurant technologies and release waste water into the sewer system run by Csepeli Erőmű Kft., are required to have a self-audit scheme in accordance with authority rules. Our company is represented when samples are taken within the self-audit scheme. We evaluate the laboratory results and take necessary actions towards the consumers and the authority.

PROTECTION OF THE ELEMENTS OF THE ENVIRONMENT

At Atel Csepel Business, protection of the elements of the environment is given high priority. Due to the nature of activities, focus is on the protection of water and air. Our main goal is to prevent any breach of limits by operation – and we are proud of the fact that this has been successfully achieved to date. Changes in legislation are monitored, with any new requirements promptly built into our operation processes and procedures.

Csepel II Station has a licence for Integrated Pollution Prevention and Control (IPPC) since 2005. Csepel I acquired the same licence in 2006.

No environmental incident has occurred in 2006, either. Incident prevention and management include refreshing training courses and remediation drills for the Emergency Team. Such a drill has been held in 2006 to simulate a chemical spillage incident, and Production staff have proved their skills during the drill.

In the following section, the elements of the environment and environmental impacts are shown.

WATER CONSERVATION, AND WASTE WATER TREATMENT

Water conservation at Csepel II Station

Process waste water

The majority of process waste water is the saline reclaim created at the Water Treatment Plant. Daily volume is approx. 96 m³. In 2006 the total volume was 35 200 m³.

The Water Treatment Plant (see photo) produces very pure demineralised water using clarified river water from the Danube and removing all salinity by ion exchange process. Demin water is used as make-up water to the HRSGs and the hot water circulation system. Approx. 95 % of the make-up water used in the HRSGs serves environmental purpose. Steam produced here is forwarded to the combustion space of gas turbines to reduce nitrogen oxide levels created by combustion. Ion exchange units are regenerated by hydrochloric acid and sodium hydroxide. Highly saline reclaim is led to a neutralisation tank. Majority of the salt content is sodium chloride known as common salt created by the reaction of sodium hydroxide and hydrochloric acid. In the neutralisation tank, the solution is mixed and pH is automatically set (pH: 6.5-9). The next step is a shaft pump station where saline is strongly diluted before discharging into the recipient (the Danube).

Since 2003, quality of discharge and impact on river water is controlled by a self-audit plan approved by the Environmental Inspectorate, with majority of water quality measurements performed in an independent accredited laboratory, and some parameters are monitored in our own lab.

Gas turbine compressors tend to collect contamination from ambient air which deteriorates plant capacity and efficiency. Therefore compressor blades need regular washing. The washing liquid is a non-ionic detergent solved in pure demin water. Majority of the waste water created there is cleaned by an equipment using a ceramic filter. Treated water is moved to a pump shaft and is strongly diluted before discharge to the recipient. Screen waste is taken away by a licenced contractor for neutralisation.

Waste water potentially polluted by oil

In normal operation, no oily waste water is created on site.

There are 3 oil traps operating on site to prevent damage. The oil separator next to the oil tanks is to catch potential leaks. The bunds underneath the electrical transformers are connected to an oil trap. The third oil trap is to withhold oil that may leak from the hot water boiler house in emergency, and also the oil that may be washed off the roads by storm water.

Treated water is diluted and sent to the receiving water body. The oil traps are flushed each year to clean them, and water from them is disposed of as oily water by certified contractor although no oil has been found in the equipment yet. Oil traps are regularly maintained. Quality of water in and out is checked annually. The oil content of discharge from the site is monitored and reported to the environmental agency within the self-audit plan.

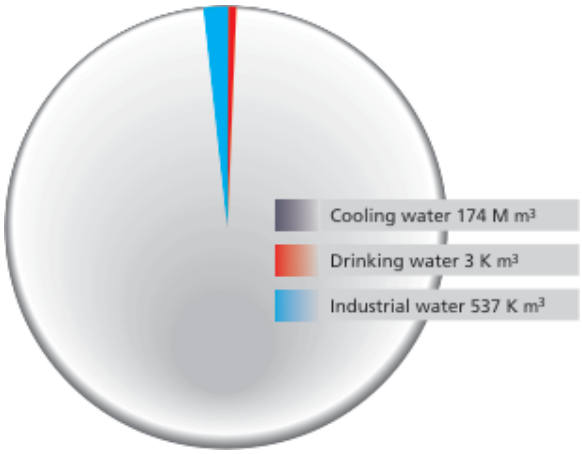
Sanitary sewage

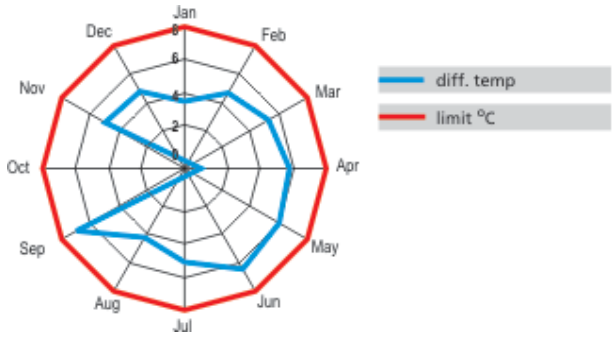
Sanitary sewage from the kitchens and changing rooms on site, 1 to 1.5 m³ a day, is cleaned in the microbiological sludge treatment plant (see lids on photo, page 17). Plant is regularly maintained. Water after the treatment facility is quarterly analysed by a laboratory with proper accreditation.

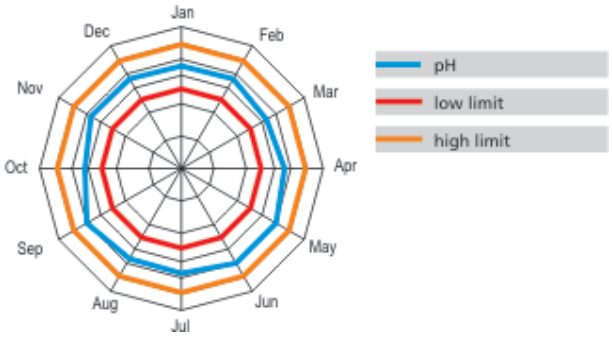
Site sewer system is annually inspected, and necessary cleaning actions are identified, together with responsibles and timescales.

Cooling water discharge

Steam from the steam turbine is led to the main condenser where it is cooled down using river water. Danube water, nearly 477 000 m³ per day in 2006, is extracted and screened in 3 stages before it gets into the condenser and then back to the Danube. This process raises the temperature of water by maximum 8 °C which rapidly decreases when mixing with colder river water. Temperature and pH degree of water extracted and returned are monitored (see "cobweb" diagrams). As a result of the multi-stage screening, the floating material content of the discharge is substantially less than before intake which means less contamination tied to the floating particles, and thus the river water leaves the site cleaned. Measurements of the Station's laboratory show that floating material content of discharged waste water is 33 % lower in average than that of Danube-water. In 2006, nearly 6 tons of screened riverwash and 439 tons of river sludge have been disposed of as industrial waste. Volume of wastes collected by screening largely depends on the quality of river water, and to some extent also on production levels. The large volume of screened water dilutes all the above mentioned waste waters before those return to the receiving water body. More than 99.8 % of the discharge into the river is screened Danube water (see cake diagram).







Water conservation at Csepel I Station

Sewage and rainwater drainage

The sewer network operated by Csepel I Station is an integrated sewage and rain water gravitational network. Approximately 98 % of collected sewage is led into the main stream of the Danube through two main lines equipped with pump shafts and partly with oil and mud traps. Some of the sewage created on the Industrial Estate is led into the network of Metropolitan Sewer Works Rt.

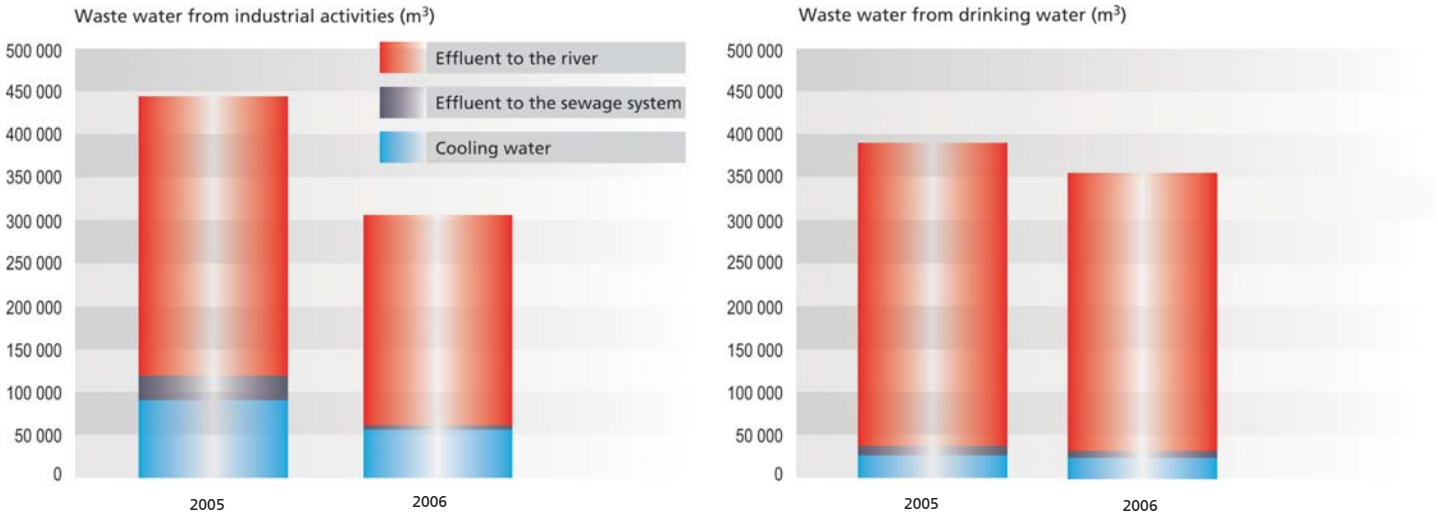
Volumes of sewage water have continued to reduce due to changes in the activities of customers on the Csepel Industrial Estate and spreading of technologies that use less water.

As sewage is collected from a relatively large number of customers pursuing a variety of business activities, it takes a considerable effort to keep its parameters under the limits for discharge into natural water. In 2006 our company has continued the complex approach of previous years to keep within the limits the parameters of sewage discharged into the recipient. Main features of that approach:

- risks of letting sewage from a technology process into the network are examined in advance, and future customer is informed about such risks already in the permitting stage;
- the sewage cleaning technology of customers is regularly inspected;
- outcome of self-audits held by customers is regularly analysed and evaluated;
- changes to legislation on sewage discharge are regularly communicated to customers, and using our options as suppliers, we support the enforcement of such changes.

In 2006 the parameters of sewage received from customers into our network have moved toward a higher organic content because of the increasing number of catering and food industry businesses while heavy metal contamination has reduced.

Volumes, origin and discharge locations of sewage are presented in the next graph.



Industrial water production and supply

Industrial water production and supply to Csepel II Station and the customers on the Industrial Estate is a key element of our complex water management business.

The volume needed for the process is extracted from the Danube. In 2005 a substantial technology improvement project has been implemented which has a positive effect on the environment. Raw water is first screened. In the second stage, instead of the aluminium sulphate flocculator we tried the application of more advanced poly-aluminium chloride (BOPAC), and introduced it.

Benefits of the development:

- floating material content of industrial water is lower;
- algae number is less;
- volume of sludge created by the process has reduced, with less aluminium ion content;
- flocculation technology can better withstand hydraulic changes, and is steadier.

Operation of the drinking water network

Csepel I takes drinking water from Budapest Water Company and distributes it to customers through the drinking water network on the Industrial Estate. The operation of the drinking water network does not require any special environmental procedure because it does not place any burden on the environment.

Groundwater

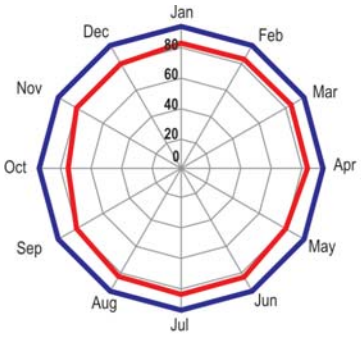
The Group operates 19 ground water wells to monitor ground water parameters. Our operation has no impact on the ground, therefore, the system is operated to track the contaminations that appear with the movement of ground water. Groundwater parameters are checked by an accredited laboratory in every quarter, and results are reported to the relevant government agency.

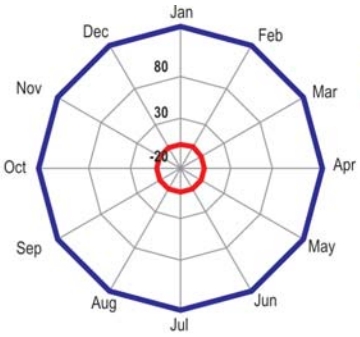
AIR PROTECTION

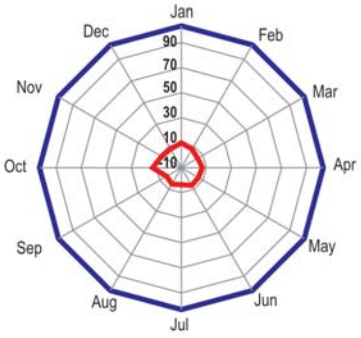
Major emission components released by Csepel II Station are: carbon dioxide (CO_2), nitrogen oxides (NO_x), sulphur dioxide (SO_2), carbon monoxide (CO) and soot. The Station is able to control those major emission components and keep them below the limits by taking suitable technological measures. The high engineering standard of existing General Electric gas turbines enables a complete burning of fuels which keeps carbon monoxide emission at a low level. Choice of fuels (natural gas and low-sulphur distillate) minimises sulphur dioxide emission. Steam is directly injected into the combustion chambers of gas turbines which reduces the emission of nitrogen oxides by 70 %.

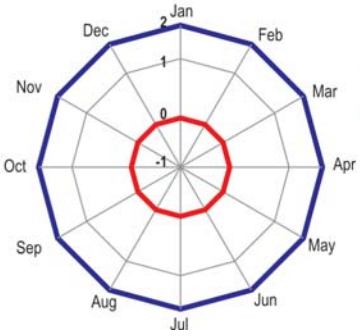
Since the monthly average values of nitrogen oxides emitted is, unlike the other parameters, closer to the limit, a strict managerial instruction was issued to set up a procedure to manage short-term excursions. In the procedure, the provision is that the turbine must be stopped if steam injection is not available and normal operation cannot be restored, although law would allow for a period longer than 2 hours. No such shutdown of the turbines has ever been necessary.

Major emission parameters of gas turbines are monitored by continuous measurements. Data of such continuous measurements are processed in a central computer, and declarations are based on reports processed by the computer. No limits have ever been exceeded during the operation of the Station (see "cobweb" graphs).

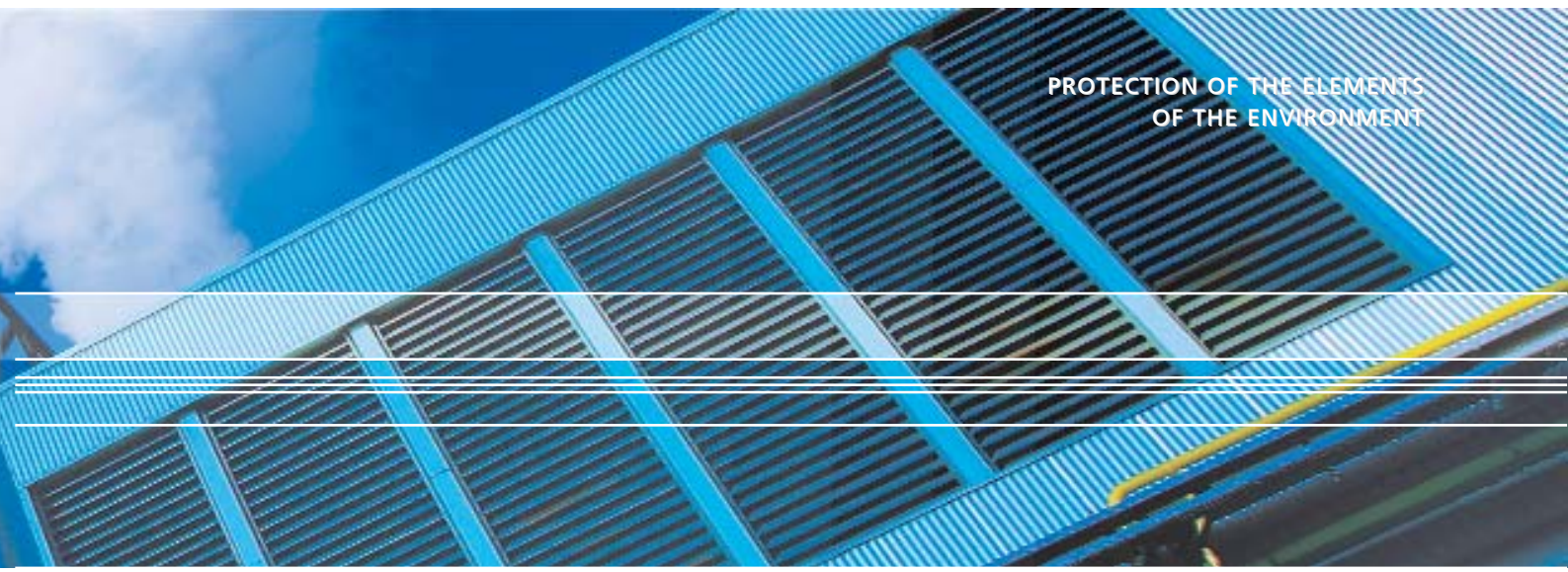






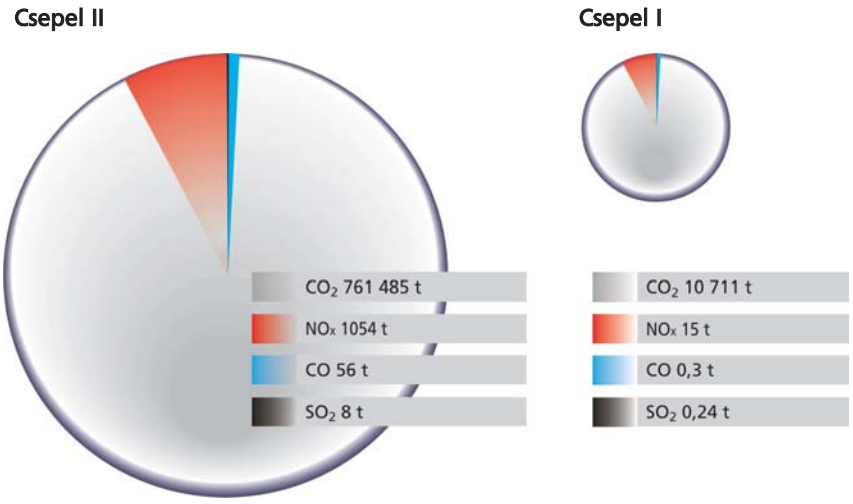


Aiming at the reduction of CO_2 emissions, the Emission Trading Scheme was introduced to Hungary. The large emitters, listed in the Scheme, are allocated certain quotas (free emission permits) and will account for those quotas, based on an audited emission reports, at the end of each year. Emission levels are monitored under very strict requirements, and declarations are authenticated by independent specialist. The goal is to find the most efficient solutions to reduce CO_2 emission. Thanks to the environment-friendly, modern and clean technology of Csepel II Station, it is basically in favourable position in terms of specific emission by power plants although experience is that the National Allocation Plan does not expressly support early action. As a first step, we obtained the required licence in 2004 because no CO2 may be emitted from 1 January 2005 on without official permit.



Emission volumes of the two sites are shown in the cake graphs, and Csepel II emission / electricity rate (gram/kWh) is presented in the Table.

Carbon dioxide emission is above the other emission levels by orders of magnitude. Carbon dioxide emission is a function of fuel used.
The power station primarily burns natural gas (also see the Section "Fuel") which has almost the lowest specific emission factor among all the fuel types, that is, when burning the volume of natural gas having 1 TJ heat value, it produces almost the lowest amount of CO_2 in tons units. The following table compares main fuel types (source: Government Decree 272/2004.):



Emission levels per unit electricity gram/kWh	2003	2004	2005	2006
Carbon monoxide	0,02	0,03	0,03	0,03
Nitrogen oxides	0,55	0,57	0,56	0,63
Sulphur dioxide	0,02	0,00	0,00	0,00
Carbon dioxide	442,39	470,58	452,69	458,38

Fuel type	Emission factor tCO_2/TJ
Fire wood, and waste wood	109,63
Bio bricks and other bio fuels	109,63
Domestic black coal	94,6
Diesel oil	74,07
Distillate	74,07
Petrol	69,3
Natural gas	56,1
Bio gas	54,9

Heat production and supply at Csepel I Station

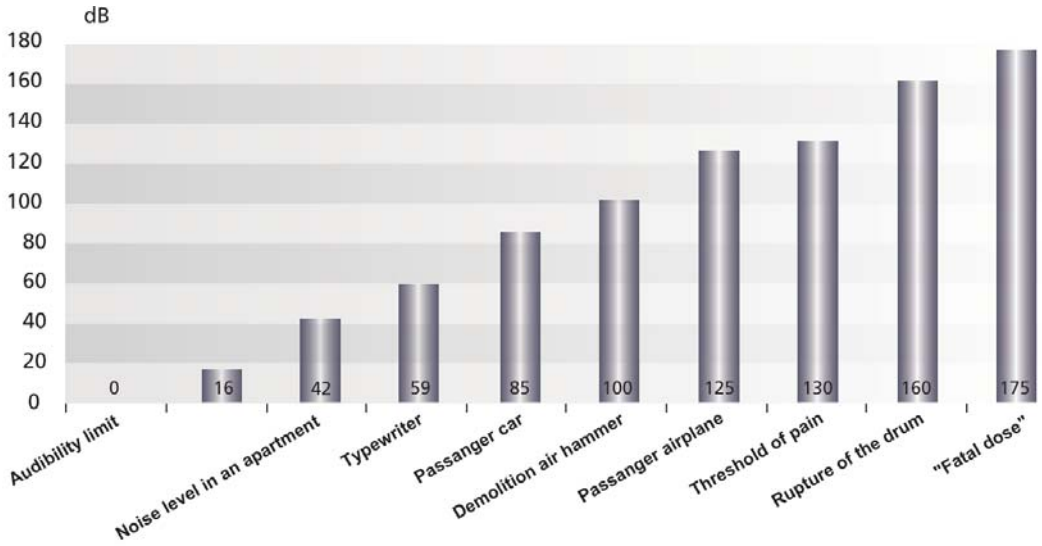
Csepel I main activities include heat production and supply. Csepel I has a role in the supply of hot water to Főtáv for heating purposes, and also to customers on the Industrial Estate. Most of the hot water needed for the service is produced in Csepel II Station, but hot water boilers are also used during peak periods and as reserve plant. Csepel I has its own boilers (two PTVM hot water boilers) which operate with one chimney as emission source. Emission levels are always below the agency limits, and the absolute volume of emission has a very low impact on the environment.
Hot water network is a closed system. Temperature is controlled by Főtáv under daily schedules. Operation of the hot water circulation system creates no pollution harmful to the environment.

NOISE PROTECTION

Noise protection was a priority aspect already at the planning of the station. A main source of noise, the machine hall was orientated to protect sensitive areas (see photo with residential quarter at Budafok), and noise sources were installed with insulation and / or mufflers.

Noise generated by the station, which was built in an industrial environment, and its impact on areas to be protected from the noise was surveyed by a specialist contractor during test runs in 2000. Contractors have been appointed on several occasions to measure noise levels, and the station purchased a noise meter. Plant noise is measured quarterly. According to the measurements, noise levels never exceeded 60 dBA at the site fence and do not have any significant impact on the areas to be protected.

The following graph compares the typical noise levels of a few sources.



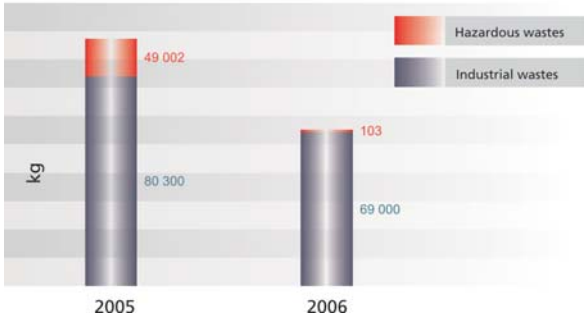
Wastes Created on Site

Volumes of wastes created in 2006 are shown by the following graph.

Csepel II operations create just a very low amount of hazardous wastes. The largest volume of non-hazardous wastes is the industrial waste screened from river water to provide cooling water. Its volume depends on the quality of river water.
For an efficient waste material management, we have waste management plan including goals for the plan period.
Plan is to reduce the volume of hazardous wastes by 90 % against the 2002 level by the end of the period in 2009. However, the volume of non-hazardous wastes is expected to grow mainly because some waste types are not considered hazardous as the result of classification examinations. We wish to increase the proportion of selectively collected wastes within non-hazardous wastes (see photo).
Hazardous wastes are taken away by accredited and licenced contractors directly from the location where they are created. No temporary storage is operated by us.

Wastes created in Csepel II - 2006

Wastes created in Csepel I - 2006



Regulation on the Management of Hazardous Materials

Volumes of chemicals used in 2006 are shown by the cake diagram.
Hazardous materials of the following types are used:

HAZARDOUS MATERIALS IN WATER TREATMENT

Water treatment in Csepel II Station uses a 90 g/L sodium hypochlorite solution (hypo), 30-33 % hydrochloric acid and 48-50 % sodium alkaline (sodium hydroxide). Hypo is delivered to the site in 1 m³ containers. Hydrochloric acid is stored in two tanks, 30 m³ each. Alkaline is stored in one 30 m³ tank. Underneath the tanks, bunds were built capable of holding the full volume back in case of emergency. In emergency, spillages can be pumped to the neutralisation tank by an ejector.

Csepel I uses poly-aluminium chloride (Bopac) as flocculation material to produce industrial water by substantially reducing the amount of floating materials and algae.

FEEDWATER TREATMENT

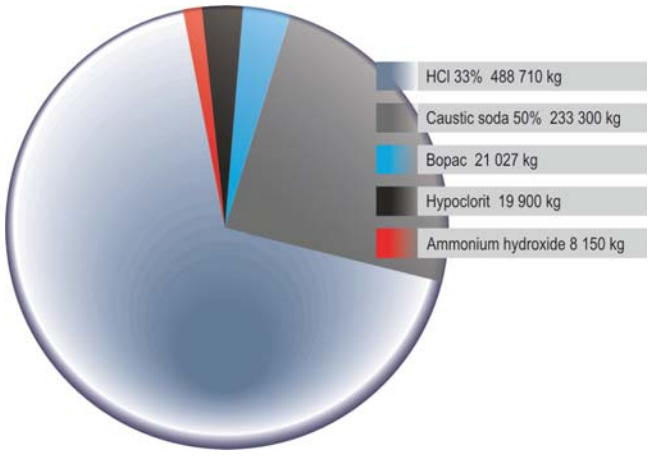
A 24 % ammonia is applied to the feedwater of the heat recovery steam generators to set pH. Ammonia is delivered in a 1 m³ container to the site, and the contractor replaces empty balloons.

Potassium hydroxide (NALCO 72230) and oxygen scavanger (NALCO 1700) are applied to treat the feedwater of the auxiliary steam boiler. A corrosion inhibitor (Corrshield) is used in the closed circuit cooling water system.

OTHER HAZARDOUS MATERIALS

The non-ionic detergent used for compressor washing, as described in the chapter on technology wastewaters, is Penetone 19 delivered to the site in balloons, that are taken away by the supplier.

Tanks storing chemicals are all equipped with bunds of sufficient size.



FUEL

Main plant fuel is natural gas, and the alternative fuel is distillate as mentioned at the section on Csepel II plant technology.

Two 8,000 m³ tanks (see photo) store the low sulphur content distillate which is restricted for periods of gas supply interruption and testing. Tanks are built with double walls and any leaks can be detected in the initial stage by monitoring the bottom pressure. Design would prevent any oil spillage to the environment even in the case of a leak.

2006 fuel consumption is shown in the next figure.

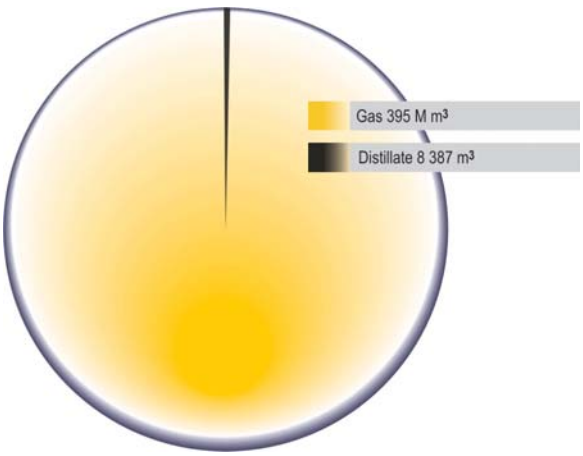
WATER USAGE

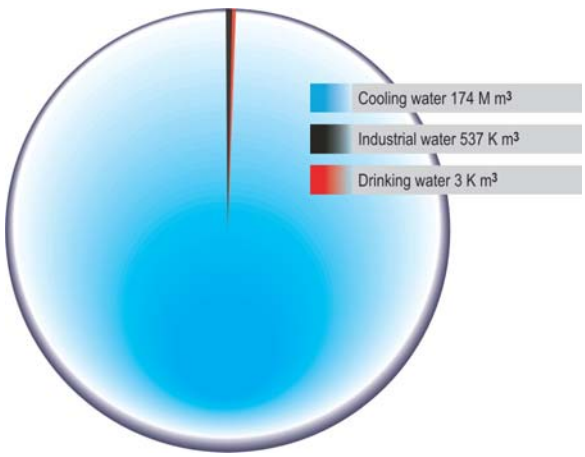
Stations uses water of three different qualities, and volumes are presented in the next graph.

Cooling water is used for two purposes. In the condenser, main cooling water condensates the steam coming from the steam turbine, as explained in the section "Cooling Water Discharge". Auxiliary cooling water is obtained by further filtering main cooling water, and is used to cool closed circuit cooling water.

Industrial water is virtually river water cleaned and settled with aluminium sulphate and supplied by Csepel I to Csepel II, and it is the raw water for the Water Treatment Plant producing high-purity demineralised water.

Drinking water is used in the kitchens, changing rooms and for irrigation.

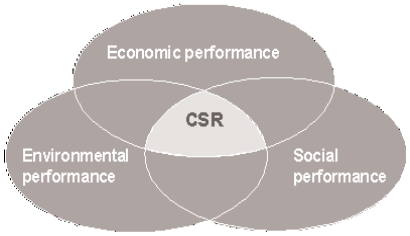




Social responsibility

The Atel Csepel Business wishes to influence its environment and, in the broader sense, to society not only as a market player but also using its business culture and ethical behaviour. We believe that for the sake of long-term success and sustainable development in the economic sense, a profit-oriented business must respond sensitively to the expectations of social groups which are affected by its operations.

In our set of values, our business strategy includes taking roles in the life of the community and supporting the development of local economy. Therefore, we deem it important to contribute to the environmental, social and cultural objectives of our closer and wider neighbourhood.



We are committed to take efforts beyond Hungarian norms for the protection of the our environment and conservation of our natural values. In addition, we initiate projects which raise the quality of life and the local environment, and we take part in the implementation of projects for the development of Csepel District.

Our social responsibility programme has the following targets:

- environmental development projects;
- support to local area development programmes;
- support to health protection programmes;
- volunteering campaigns with the involvement of staff;
- ethical business behaviour.

Support to local area development programmes

Ever since its foundation, Atel Csepel Business has given priority to the interests of Csepel community. We are aware of the effect the existence of an industrial park of this size exercises on the life of community. Therefore, it is the goal of our Group to have a positive contribution to improve the environment of local society which is our neighbourhood, and raise the wealth and living standards of local community. In the past years we have implemented a number of development projects together with the Municipality. The biggest investments of 2005 and 2006 were the rehabilitation programme for Small Danube Bay, a nature conservation area, and donation to the construction of the fountain at the main square (see photo).

In recent years, our local commitment has manifested itself among others in the refurbishment and making safe of the playground at the Main Square, and also the construction of

Déli connecting road and Salak Street. Further plans include participation in the programme to make local public buildings accessible by wheelchair.

"In the protection of the environment over the past years, Csepel Municipality and Atel Csepel Business have diversely cooperated as shown by a number of joint projects. In addition to support to infrastructure developments in Csepel, our joint efforts have led to significant results in environmental awareness education, the restoration and conservation of public squares, parks and nature conservation areas. All

those have substantially contributed to raising the quality of life of Csepel people. In 2006, Atel Group has also supported the construction of the pedestrian bridge across the

Small Danube Bay which, as part of the full reconstruction of the Bay, connects two sectors of the river-front offering comfortable access for wheelchairs and baby carriages, as well."

Dr. Polinszky Tibor, Chief Architect of Budapest-Csepel Municipality

Support to local health protection and community development programmes

Sports represent an important element in the social responsibility activities of Atel Csepel Business, promoting sports and health conservation activities. Support for the Csepel Wrestling Club was the most important sponsorship act in this area in 2006, enabling club athletes at the peak of their careers to successfully compete at a number of national and international competitions in 2006.

Support to international cultural events

In 2006 we have continued the sponsorship that has been going on for a number of years with Merlin International Theatre in Budapest which spreads a wide choice of cultures with a variety of programmes and performances.

In 2006 we took a role in supporting the Budapest Spring Festival. This time Switzerland was the guest country invited to the 2006 Spring Festival. Being a Swiss company, we deemed it important to join the events and provide support that offered to Hungarian audience pieces from Swiss composers.

Volunteering – involvement of staff

Our Group promotes the concept of staff volunteering and participating in charity or community fund raising initiatives, and supports them through donations to those organisations or in support of donations made by staff members. In 2006, upon the initiative of our employees, we offered to a music school in Csepel the amount intended for company Christmas presents.

Ethical business behaviour

We feel committed to meeting under all circumstances the highest ethical requirements of business life. We believe that by following the ethical principles of Swiss-based Atel and the Csepel Group, we will contribute to our own success and to the success of our business partners.

Our business philosophy is to undertake and spread social responsibility, and that philosophy is strongly supported by communication in the Group (intranet, newsletter, Communication Days, meetings) and also towards external business partners.

Communication

FLOW OF INFORMATION IN-HOUSE

Internal network

At Atel Csepel Business, in addition to the integrated e-mail network, the internal network, that is, the Intranet is an essential internal communica-

tion forum. It offers up-to-date information to all staff on planned and completed environmental projects and measures. Intranet provides access to electronic copies of EMS and other environmental documents, policies and procedures. Stock records are kept on a central server also available for all staff members.

Newsletter

The monthly newsletter "Energise informs on environmental achievements and news in the Group so even staff not being close to a computer every day will not miss information on environmental subjects. Besides the Intranet, this is a news forum for environmental support projects and initiatives where staff involvement is encouraged.

Daily reports and operational meetings

Production team leaders prepare daily reports which also describe any special environmental events from the previous day. The reports and events are discussed at the morning meetings with actions taken as necessary.

Management meetings

Production management meetings are held each month, and senior management meetings take place quarterly - both with presentations by the Chemist / Environmental Manager on recent environmental performance and relevant EMS information.

Communication days

The agenda of quarterly Communication Days, to which all staff members of the Group are invited, include presentation and discussion on safety and priority environmental issues. Communication days minutes are made available on the intranet.

EXTERNAL COMMUNICATION

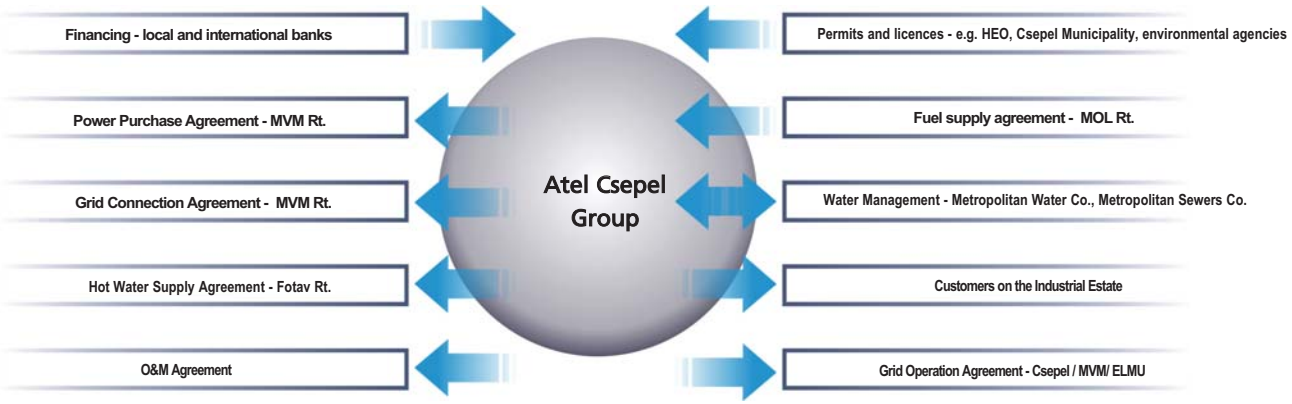
The following channels are the key means for external communication of environmental subjects:

Agencies and municipalities – proactive co-operation

The Chemist / Environmental Team Leader liaises with environmental agencies. Agency relations are built on timely reporting and constructive co-operation. With the local municipality, district environmental development programmes have continued in 2006: support to the rehabilitation of Small Danube Bay was another step to make that area a leisure nature park for the public on Csepel Island.

Interested parties – good relations

Group objectives include to establish and maintain good relations with all interested parties. Relations between Csepel II and the interested parties are shown by the following figure.



Publications – regular communication

Publications are a means of providing general company and environmental information for interested parties. To inform our partners and the public of Csepel we regularly publish articles in local and national papers on company environmental aims and achievements (e.g. Csepel Újság, Világgazdaság, magazines (Ma és Holnap, Energy Consumers' Paper) and other publications.

Our Environmental Report has been issued each year since 2001, and circulated to interested parties. Feedbacks are important for us, and we strive to consider them. A few comments received on the 2005 Report:

- KDV-KÖVIZIG – Lujza Osgyáni:
  „ Nice-looking and well-structured document, covering all areas of environmental protection. It is sufficiently detailed in content, providing the necessary amount of data but not oversized. It is perfectly easy to read for professionals, but it may not be so for outsiders."
- Budapest-Csepel Municipality – Mrs Ágnes Simon Járai:
  „ Good idea to present specific environmental data! Carry on with it!"
- Ferenc Kölcsey Elementary School – Mrs László Fazekas:
  „ It is something special and full of lessons for education people. Easy to understand for non-professionals, as well. Definitely we utilise it with our students in teaching biology, physics, geography, technical skills and environmental education."

We supported the event "Day for the Environment" organised by the Company "Data for Us" in the House of the Future in the summer of 2008 where the wider public could have gained some understanding about the benefits of environment-friendly production and mentality (see photo).

Site visits – open doors

To promote open communication, we organise visits to the site by schools, other plants and agencies to become familiar with the plant and staff activities. To learn about the operation of plant and our environmental activities, in 2006 visitors have been received at the site from.

Atel on 24 Jan 2006
EGI Energy Management Rt. on 23 Feb 2006
KAM Team on 24 Feb 2006
Budapest Technical College on 10 Aug 2006
Hungarian Co-gen Energy Company on 10 May 2006
Atel on 9 May 2006
Atel on 1 June 2006
Atel on 13 June 2006
Hungarian Energy Office on 13 June 2006
Metso on 26 Sep 2006
Atel Energia Kft. on 20 Sep 2006
Brestanica Power Plant on 28 Sep 2006
Nordisk Energiapartner on 22 Sep 2006
Phoebus Kft. – MVM Óbuda Project on 23 Nov 2006

Practice periods on the site are available for students, with support for the preparation of diploma works.
In 2006 a student graduating at General Business School, International Relations Department wrote his thesis titled "Company environmental protection in practice" on the operation of Csepel II Station environmental management system.

FAX

TO:
Leveles, Beáta
Chemist/
Environmental Team leader

SENT BY:

COMPANY:
Atel Csepel Business

DATE:

FAX:
+36-1-278-3838

SUBJECT:
Atel Csepel Business - 2006 Environmental Report

Dear Reader,

Thank you for showing interest towards our Report. We would appreciate any feedback that could help us learn your opinion and improve this Report.

Thank you:

Atel Csepel Business

	Scoring Score 1 - 5 1 - to be improved 5 - very good	**Comment**
Structure of the Report		
Informative contents		
Clarity		
Areas to improve		