

*together we are more...
...together we do more*

*Matáv Group
Annual Environmental
Report – 2002*



Based on the GRI 2002 Guidelines



Table of Content

<i>PREFACE</i>	4
<i>ABOUT THE REPORT</i>	5
<i>LINKAGE BETWEEN MATÁV AND THE ENVIRONMENT IN OPERATION</i>	8
<i>The profile of the organization</i>	8
<i>Environmental protection in operation</i>	9
<i>ENVIRONMENTAL PERFORMANCE INDICATORS</i>	14
<i>Summary of the environmental performance indicators</i>	14
<i>Materials</i>	15
<i>Energy</i>	16
<i>Water</i>	20
<i>Biodiversity</i>	20
<i>Emission, wastewater and waste</i>	21
<i>Suppliers</i>	25
<i>PRODUCTS AND SERVICES</i>	26
<i>Business solutions</i>	26
<i>Residential services</i>	27
<i>Internet services</i>	27
<i>Mobile services</i>	27
<i>Environmental analysis of the products</i>	28
<i>Environmental and other impacts of internal product use</i>	30
<i>MAJOR CORPORATE SOCIAL RESPONSIBILITIES RELATING TO ENVIRONMENTAL PROTECTION AND NATURE CONSERVATION</i>	31
<i>GOALS</i>	33
<i>APPENDIX</i>	35





GRI Indicator Codes

SECTION	INDICATOR CODE
<i>GRI indicator codes</i>	
<i>PREFACE</i>	
<i>ABOUT THE REPORT</i>	
<i>LINKAGE BETWEEN MATÁV AND THE ENVIRONMENT IN OPERATION</i>	
<i>The profile of the organization</i>	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
<i>Environmental protection in operation</i>	
<i>Group environmental policy</i>	2.20, 2.21, 3.7, 3.16, 3.17
<i>Group environmental coordination</i>	3.3, 3.4, 3.6, 3.15, 3.16, 3.17
<i>Linkage between operation and environment</i>	EN14
<i>Regulatory compliance</i>	EN16
<i>Environmental co-operations, communications</i>	2.9, 3.9, 3.10, 3.11, 3.12, 3.14, 3.15, 3.19
<i>Internal co-operations</i>	
<i>Domestic co-operations</i>	
<i>International co-operations</i>	
<i>Organizational politics and systems</i>	2.20, 2.21, 3.7, 3.16, 3.17, 3.20
<i>Development of environmental awareness</i>	3.19
<i>Transportation</i>	EN34
<i>Managing the environmental impacts</i>	3.16, 3.17, 3.19
<i>Expenditures</i>	EN35
<i>ENVIRONMENTAL PERFORMANCE INDICATORS</i>	
<i>Summary of environmental performance indicators</i>	
<i>Materials</i>	EN1, EN2
<i>Usage of materials</i>	EN1
<i>Materials collected from the consumers</i>	EN2
<i>Energy</i>	EN3, EN4
<i>Electricity consumption</i>	EN4
<i>Gas consumption</i>	EN3
<i>Fuel consumption of vehicles</i>	EN3, EN19
<i>Gasoline consumption</i>	EN3, EN19
<i>Unleaded petrol</i>	EN3, EN19
<i>Leaded petrol</i>	EN3, EN19
<i>Directly generated energy used for own purposes</i>	EN3
<i>Renewable resources</i>	EN17
<i>Carbon-dioxide indicator</i>	EN8, EN30
<i>Water</i>	EN5, EN21

Indicator Codes identified by GRI (Global Reporting Initiative) in Sustainability Guidelines 2002. (www.globalreporting.org)

SECTION	INDICATOR CODE
<i>Biodiversity</i>	EN6
<i>Landscape impact</i>	EN25
<i>Electro-magnetic radiation</i>	EN25
<i>Impact on biodiversity</i>	EN7, EN23, EN25
<i>Emission, wastewater and waste</i>	EN8, EN9, EN10, EN11, EN12, EN13
<i>Air pollution</i>	EN8, EN9, EN10
<i>Water pollution</i>	EN12
<i>Soil and underground water contamination</i>	EN13
<i>Noise and vibration</i>	EN14
<i>Waste</i>	EN11, EN31
<i>Hazardous waste</i>	EN11, EN31
<i>Communal and paper waste</i>	EN11
<i>Telecom wastes</i>	EN11
<i>Wastes balance</i>	EN11, EN31
<i>Suppliers</i>	EN33
<i>PRODUCTS AND SERVICES</i>	
<i>Business solutions</i>	EN14
<i>Matáv comTr@ck</i>	EN14
<i>e-Business, e-Working, e-Signo, e-Wall</i>	EN14
<i>Residential services</i>	EN14
<i>Internet services</i>	EN14
<i>Mobile services</i>	EN14
<i>Environmental analysis of the products</i>	EN14
<i>Comparative analysis of the traditional and web based tax returns</i>	EN14
<i>Comparison of business videoconference with the traditional meetings</i>	EN14
<i>Comparative analysis of the environmental impacts of phone cards</i>	EN14
<i>Environmental and other impacts of internal product usage</i>	EN14
<i>Teleworking</i>	EN14
<i>Online internal services</i>	EN14
<i>Videoconference for internal usage</i>	EN14
<i>MAJOR CORPORATE SOCIAL RESPONSIBILITIES RELATING TO ENVIRONMENTAL PROTECTION AND NATURE CONSERVATION</i>	
	EN27
<i>GOALS</i>	

Preface

"It is Matáv's mission to be a key player in the information society retaining its leading position in the Central and Eastern European region."

This mission entails certain responsibilities. It entails economic responsibilities and also social and environmental responsibilities of the defining market player. We interconnect lives, distances, businesses, but above all, interconnect people all over the world, either in words, or picture or simultaneously, in both. We create the basis for communications, and make possible the development of the information society. In accordance with the three main elements of sustainable development these responsibilities include not only financial, but also social and environmental aspects as well, and the notion of "beyond the words" is also reflecting this approach. Now the Matáv Group publishes its environmental report for the second time. We are happy to tell that last year – after publishing the environmental report – we received a lot of positive comments from our partners and we do hope that this year again, we manage to raise the interest of our partners and will get positive feedback on the report. This report is different from the last year one as it covers the first year of Group level operation and within that the cooperation in the area of environmental protection, nevertheless, quantifiable results of this cooperation will be reflected in the environmental reports of the years to come. The contents of the current year environmental report were aligned with the requirements of the sustainability report, and we used the general and environmental sections of the 2002-year Guidelines of the Global Reporting Initiative (GRI) as guidelines to the report.

The environmental strategy of our company group defined in 2002 is based on the following statements:

- *Matáv Group – as the leading info-communications service provider of Central-Eastern Europe playing the*

role of the model in the region – must be committed in the future to assume group-level responsibility for environmental protection and sustainable development contributing by that to the reduction of environmental burdens, by observing the requirements of the European Union and the international norms.

- *According to the core activity the Group is not among those causing significant environmental pollution, still, the volume of the activity, the resource requirements of info-communications technologies (ICT) and the burden imposed on the environment requires attention.*
- *We have to exploit and communicate the environmental opportunities offered by the core activities of info-communications service provider.*

The demand for implementation of the principles of sustainable development is increasing world-wide, in connection with that an increasing role is assigned to the rationalization of energy consumption within the energy-intensive industries and services, and to the application of renewing sources of energy that are targeted by researches in the areas of telecom services as well. Special attention must be devoted to the issues of waste recycling, which task must be assumed by all of the responsible service providers and manufacturers. In addition to the above, the companies must be aware of the life cycles of the products and services they provide, as it makes possible the advance planning of the amount of waste generated and the time of their occurrence, and the companies can get prepared to waste treatment generated in the economic processes, prepare to recycling, reuse, waste management or disposal. The development of info-communications technologies imposes substantial responsibilities on our company group, as due to the rapid development, quick changes of demands the facilities and equipment become obsolete, and a large amount of telecom and electronic waste materials is generated, that needs to be managed and recycled.

Accession to the European Union and increased competitiveness in telecommunications market are key aspects for the members of the Matáv Group. The

member companies maintain – among others – the objective of compliance with the environmental regulations, therefore we have implemented the environmental management system (EMS), together with the organizations having substantial environmental impact, based on ISO 14001, and launched the group-level environmental coordination process.

In these days the info-communications society raises increasing demands for telecommunications and info-communications services. Compliance with these requirements, operation, based on solid economic background and compliance with the principle of sustainability are the objectives that set the path for future activities and main priorities of the Matáv Group. We are convinced that increased compliance with the three aspects of sustainability proves a good investment that will establish the basis for our long-term profitability.

Budapest,
September 16, 2003



ELEK STRAUB
Chairman and Chief
Executive Officer





About the Report

The report covers the calendar year 2002, in terms of the information content we made efforts to cover all the subsidiaries of the Group therefore in it data are included from Hungary and Macedonia as well. To provide for comparability we also display the figures representing the environmental performance of the previous years. The data contained in the report were delivered by the subsidiaries and the responsible organizations of Matáv Rt. The Group Environmental Coordination Department is responsible for compiling the report. Any questions, comments are welcome relating to the environmental activity of the Group.

Contact kornyezvetvedelem@ln.matav.hu
 This year as a first step, we aligned the content of our report with the GRI 2002 Guidelines; still, it is different from the Guidelines as this document is primarily focusing on the environmental aspects, while its contents are harmonized with the Guidelines. The 2002 Annual Report of Matáv Group was published in print and also is also available on the Internet (http://www.ir.matav.hu/english/evesj/index_eves.htm). In our report we cover the issues of operation, its environmental impacts, our environmental performance, the changes of performance, our products, responsibil-

ities, goals. In the Report of this year we also displayed pictures of the First Hungarian Antarctic Expedition. The details of the expedition are contained in the section of "Major environmental, nature conservation and corporate social responsibility". Referring to the Group Environmental Report we published last year for the first time, we summarize in the following the status of attainment of the goals and the changes in the indicators. Out of the 23 goals identified last year we accomplished or initiated the implementation of 21 objectives. In the following we outline the goals in detail:

GOALS, SUCCESS CRITERIA

WASTES

Hazardous wastes

Reducing the generation of hazardous waste.

Target value: Reduce the amount of hazardous wastes by 3% from 2000 to 2004.

Increase the amount of re-collected batteries from mobile subscribers.

Target value: 28% growth by 2002.

Waste papers, communal waste, paper consumption

Reduce paper consumption.

Further development of selective collection and recycling (reducing by that the amount of communal waste).

Target value: Implementation of selective waste paper collection with at least two new Group members in 2002.

ATTAINMENT



DETAILS

Attainment of the goal depends on the 2003-year results.

The trends of the 2001-year and 2002-year results suggest successful progress.

The collected amount increased by more than 100%.
 The goal for 2002 was fulfilled.

The amount of paper purchased by Matáv Group was 84% of the 2001-year amount.

1. In 2002 Westel Mobil Távközlési Rt. launched in its Budapest plants the selective waste collection program that includes the collection of office waste papers, plastic, glass and metallic waste.
2. The amount of communal wastes reduced by 2%.
3. In 2002 Ept Rt. and Egertel Rt. – new member companies – started selective waste paper collection.



GOALS, SUCCESS CRITERIA	ATTAINMENT	DETAILS
<p>Decrease the amount of paper-based customer bills by electronic billing and printing on both sides of the invoice. Target value: 20% reduction by 2004, compared with 2000.</p> <p>Launch the phone book recycling campaign in 2002. Target value: Recycling of 500 tons of phone books.</p>	<p>↻</p> <p>∅</p>	<p>Preparation has been started. In the case of Westel the amount of paper used for billing has reduced by 30%. Matáv Rt. launches printing on both sides of the invoice gradually. The first printing was made on December 2002, when 10 thousand invoices were printed.</p> <p>Matáv Rt. started the re-collection of phone books in 2002. Attainment of the target value is near to 50%.</p>
<p>ENERGY</p> <p>Increase and disseminate alternative solutions to replace traveling (audio- and videoconference).</p> <p>Implementation, monitoring and feasibility analysis of combined, renewable energy source.</p>	<p>✓</p> <p>↻</p>	<p>In 2002 the registered videoconference applications within Matáv replaced 278,921 car travels which is representing substantial, 62% increase compared with 2001.</p> <p>Along with the combined renewing energy source (solar and wind energy) installed at Magyarsarlós monitoring systems were also installed. Evaluation of the results of the test operation is expected by the turn of 2003–2004.</p>
<p>MINIMIZE THE ENVIRONMENTAL NEGATIVE IMPACTS</p> <p>Double walls for the oil tanks. Target value: Reconstruction of 20 pcs of underground oil tanks in 2002.</p> <p>Efforts to increase facility sharing of mast infrastructure Target value: In 2002 the ratio of shared masts is above 30%.</p>	<p>∅</p> <p>✓</p>	<p>No departure from the target value in 2002 reconstruction was made at 11 locations.</p> <p>The target value has been reached at Group level.</p>
<p>ENVIRONMENTAL MANAGEMENT SYSTEMS, ENVIRONMENTAL COORDINATION</p> <p>Implementation of ISO 14001 with more Matáv organizations. Target value: In 2002 certification of the technical development and property management areas, in 2003 certification of the procurement and transportation areas.</p> <p>Regulated implementation of Group level environmental coordination.</p>	<p>✓</p> <p>↻</p> <p>✓</p>	<p>In December 2002 the areas of technical development and property management got the certification.</p> <p>The preparation of further, two areas for ISO 14001 has been completed.</p> <p>Implemented. The regulatory directive has been issued with the title “Regulation of environmental operation of the Company and Matáv Group, scope of responsibility and authority of the involved parties”.</p>

GOALS, SUCCESS CRITERIA	ATTAINMENT	DETAILS
<p>Development of "Performance assessment system" based on Group level environmental performance.</p>	<p>✓</p>	<p>The environmental indicators were set up at Group level, evaluation and review of which is made year by year.</p>
<p>COMMUNICATIONS Issue the Annual Group Environmental Report also in 2003. Organize repeatedly the environmental round-table conference. Developing a communication strategy for informing the interested parties and dissolving the unreasonable fears relating to electro-magnetic radiation. Continuous communications, increase the awareness of employees.</p>	<p>✓ ↻ ↻ ↻</p>	<p>Publishing this present report has fulfilled it. The round-table conference scheduled for 2002 took place with delay of some months in 2003. The related plan will be developed by the end of 2003. Task to be performed continuously. To provide information of appropriate amount and quality to change the mindset of all the employees, a plan was set up in 2002 relating to a Group Environmental Home page that will be displayed on intranet in 2003.</p>
<p>PRODUCT DEVELOPMENT, INFO-COMMUNICATIONS SYSTEMS Implementation of elaborated environmental impact analysis methods in the product development process. Target value: Supplement the process in 2002. Conduct the environmental assessment of three products. Completion of Phase I of the info-communications system for the Aggtelek National Park in 2002, preparation to Phase II.</p>	<p>✓ ✓ ✓</p>	<p>Environmental aspects have been included in the product development process. Three, analyzed products: Impacts of using videoconference in Hungary, comparative analysis of various types of phone cards, analysis of environmental impacts of the web-transmitters. Phase I of the ANPI project was completed in April 2002. Preparation to phase II has been completed; it is subject to the schedule of the Phare project and the tender invitation.</p>

Legend: ✓ accomplished; ↻ accomplishment is continuous or in progress ; ✗ not accomplished

The above objectives are highly significant as we set them last year jointly with the subsidiaries and published to the wide public. Attainment of these objectives reflects the joint efforts of us, with this report we aim to put a mirror to ourselves – we give a hopefully colorful, exciting, but objective picture about us to You – and show that together we are more, and we do.

Budapest, September 16, 2003


 MANFRED OHL
 Chief Technical Officer
 Manager responsible for Group environmental coordination


 KATALIN SZOMOLÁNYI
 Head of Group Environmental
 Coordination Department



Linkage between Matáv and the environment in operation

THE PROFILE OF THE ORGANIZATION

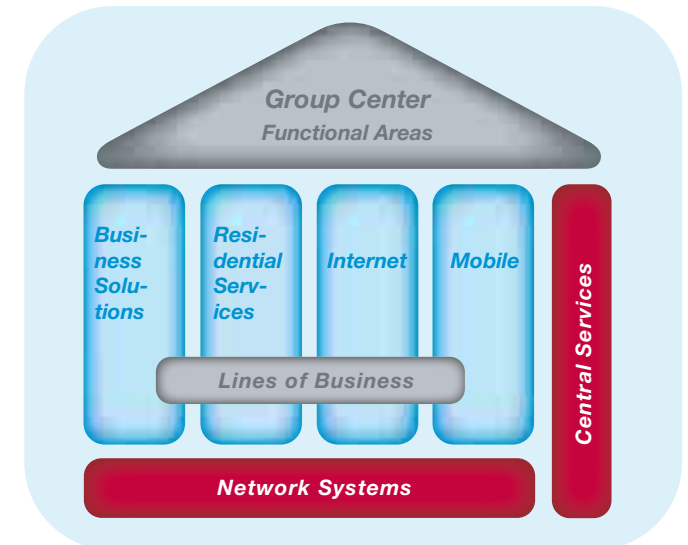
Matáv Group is the leading company group in Central Europe providing telecom services. Matáv provides wide circle of telephone, data communications and value added services, and through its subsidiaries it is the leading mobile communications and Internet service provider of Hungary. Matáv has a majority stake in Stonebridge Communications AD controlling MakTel, the exclusive fixed wire and leading mobile carrier of Macedonia.

The Hungarian Telecommunications Company Limited established in 1991, was privatized in 1993. The Matáv stocks were launched in the Budapest and New York stock exchanges in 1997. MagyarCom, the owner of Deutsche Telekom AG is the majority shareholder of Matáv (59.21%); while 40.79% of the stock is traded publicly.

The number of employees of the group was 16,114 in the end of 2002, which is 3.1% less than the 16,633 that the Group counted in the end of 2001.

So as to cope with the challenges of the liberalized market and the technological development, the new management structure of Matáv Group was launched as from January 1, 2002, covering four business areas through the coordinated activity of Matáv Rt. and the subsidiaries. These are services provided to the residential and business customers, Internet and mobile telephony. Accordingly, each of the four business lines of the Group represent an independent strategic unit, that carry out independent business activity on the basis of the strategic guidelines of Group Centre.

Matáv Rt.– as the leading company of the Group fills in a leading position in the fixed line market of Hungary both in business communications (including medium and large companies, banks, commercial and government customers) and the residential services provided to nearly three million fixed lines (81% of all the fixed lines in Hungary). As much as 18% of all the subscribers use advanced ISDN access and the customer segment using



high-speed ADSL service or broadband Internet access also shows constant increase.



A Matáv Group Company

The other large company of the Group is Westel Mobil Távközlési Rt. that has a nearly 50% share in the domestic mobile communications market with its 3.4 million customers. The innovative business activity of the company, its quality focused approach resulted in significant – 36% – growth of the customers. In April 2002 Westel was the first among the world's GSM carriers to launch its mobile multimedia message (MMS) commercial service that allows sending of colour photos, and even voice video records provided that the mobile phone is suitable for



the service. The company devotes special attention to the provision of services like Mobilebank; Mobileoffice, WebShop and other value added products.



A MATÁV GROUP COMPANY

Axelero Rt. covers 43% of the Hungarian Internet market (150 thousand subscribers), and it is the only Internet carrier who provides full-scale Internet services in Hungary. With its activities it contributes to a large extent to the proliferation of e-Business solutions.



MakTel is the only fixed line telecom service provider and the leading mobile carrier in Macedonia. The digitalization of the fixed line network reached 96% in 2002 that ensures faster access to the services and higher quality to the customers of MakTel. The capacity of the mobile network has increased substantially during the year, while penetration exceeded 98% among the population.

In 2002 the environmental tasks were performed within the Group by an independent professional group following the organizational restructuring, and since January 1, 2003 these tasks are performed by the Group Environmental Coordination Department, which is a significant step in the accomplishment of the commitments identified in the Environmental Policy of Matáv Group.



ENVIRONMENTAL PROTECTION IN OPERATION

Group Environmental Policy

Matáv and its subsidiaries officially started their group-level operation on January 1, 2002. In the area of environmental protection it also meant the elaboration of synergy. Elaboration of the major guidelines – i.e. policies – was absolutely necessary to the cooperation, to clarification of the objectives that were defined in 2002, and the senior

management of the Group approved them in the very beginning of 2003.

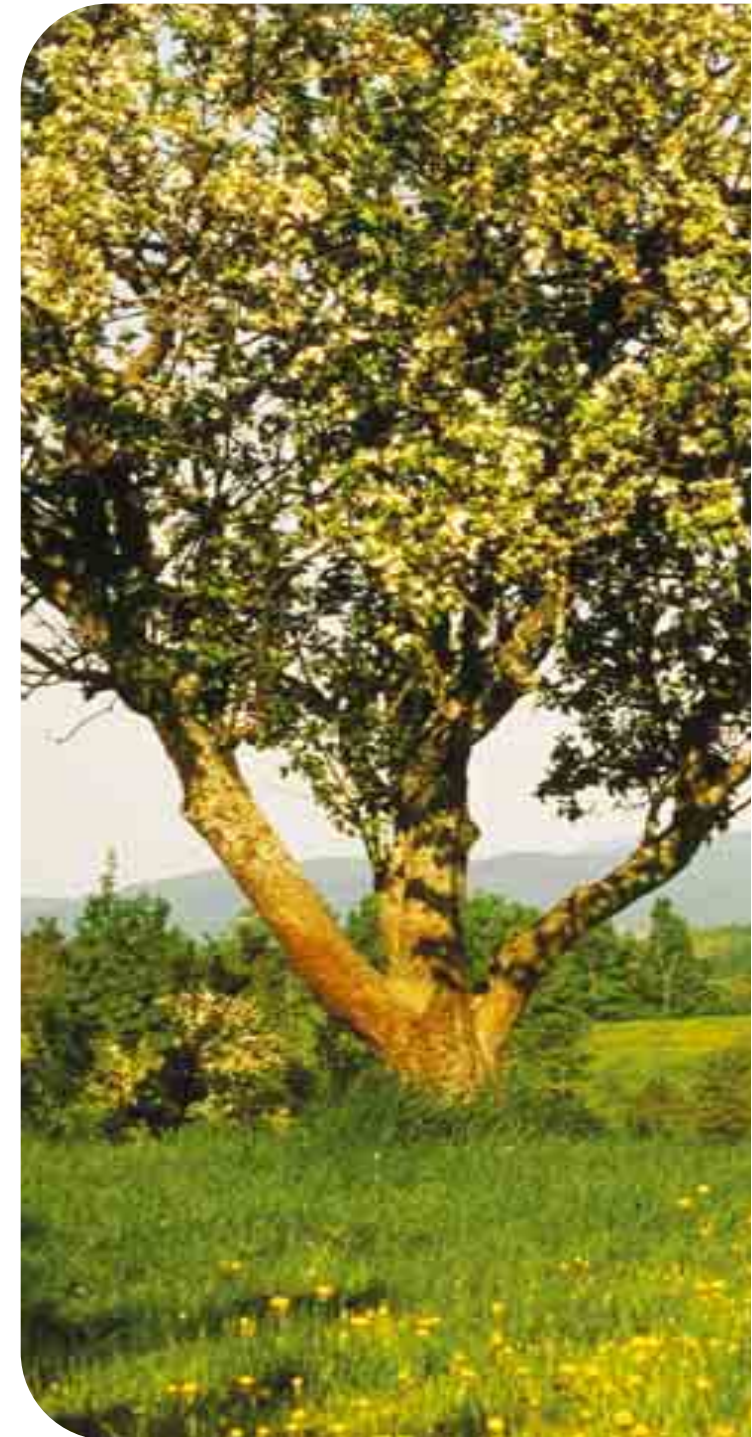
That is, the Group Environmental Policy (http://www.matav.hu/english/mtav/kapcsolodo_anyagok/ceginformaciok/kornyezeti_vedelmi_politika_en.pdf) requires the commitment of all the subsidiaries of the Group and requires similar approach from all the employees regarding the ques-

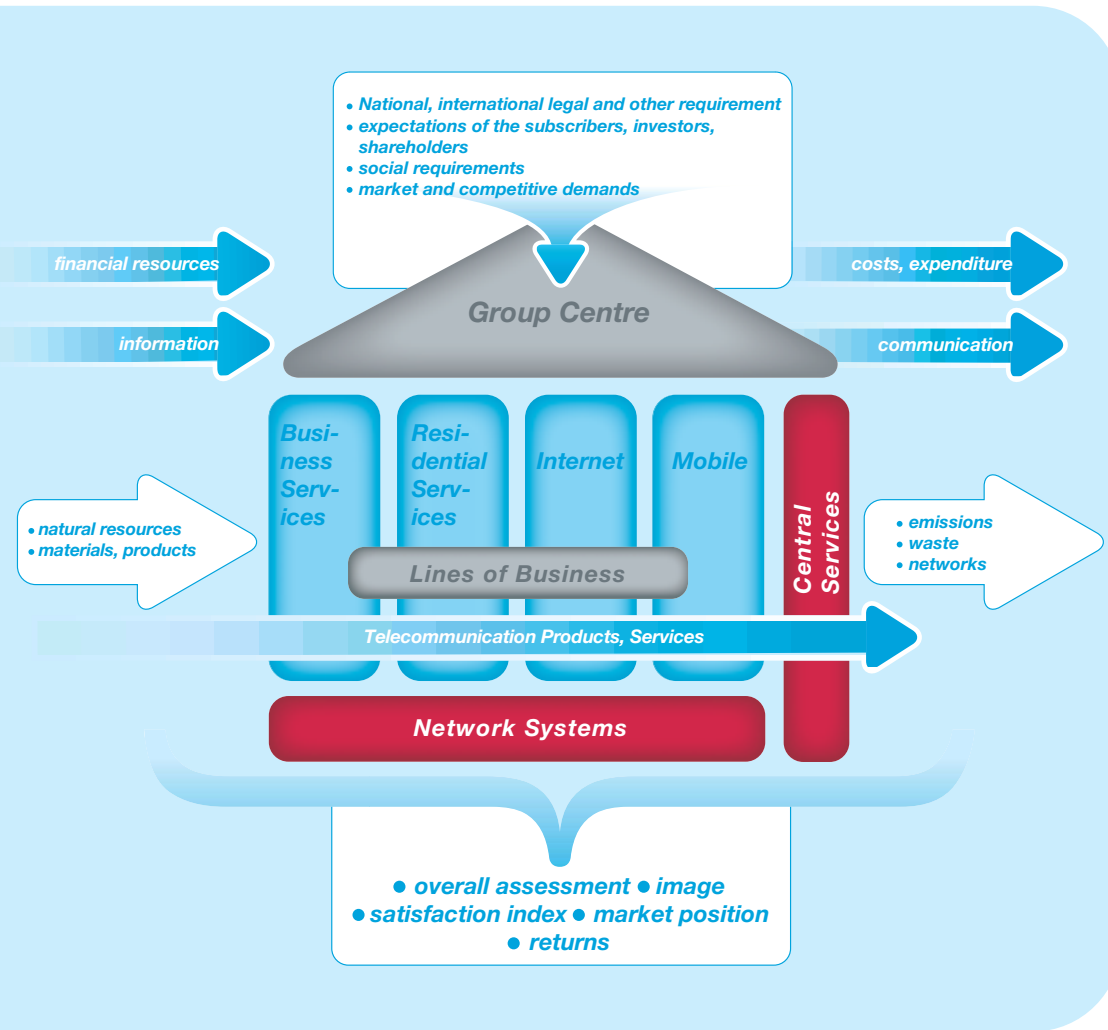


tions of environment and environmental protection, the guidelines of sustainable development, that were certified with the signature of the top management of the company group.

Group Environmental Coordination

In 2002 an internal directive was developed and published regulating the environmental operation of Matáv Rt. and Matáv Group, and specifying the responsibilities of the participants. In accordance with the above, a professional forum was operated both on Matáv Rt. level and Group level that carried out its activity on regular basis under the control of Group Environmental Coordination Group, with the environmental delegates of the affected organizations or subsidiaries. The meetings are organized within the Rt. once in two months, while the environmental session organized with the subsidiaries is held quarterly. The tasks and activities of environmental protection are coordinated continuously in these sessions to ensure the attainment of the defined objectives. Naturally, these sessions offer an opportunity for discussing the issues





and problems that arise in connection with environmental protection, raise awareness of expectations and ensure the internal communication of the achievements.

Linkage between operation and environment

The following figure that was also contained in the last year environmental report, it plays an important role in understanding the role of environment and the related themes in the operation of the company. Along these

and integrated into the landscape in certain cases. In 2002 just one complaint was made by the population relating to masts, the affected telecom mast – owned by Westel Mobil Távközlési Rt. – the subsidiary of the Group most affected by mobile issues – was modified to satisfy the customer.

In some cases the area surrounding the telecom switches or masts operated at unattended plants were untidy, the grass was not mowed, weeds covered the area,

influencing factors, inputs and outputs we are able to overview the place, role and significance of the particular factors within the system.

Regulatory compliance

The members of the Matáv Group did not break seriously the regulations, and were not required to pay environmental penalties in 2002. The local population reported in some cases about the noise effect of external air conditioning equipment. The air conditioning equipment located in densely populated areas were surrounded with noise protective walls, aiming to protect the population from noise pollution.

The Group takes preventive actions to eliminate reports relating to electromagnetic radiation, accordingly, the height of antenna masts is increased

which problems were sorted out by the subsidiaries when they received complaints from local people.

Environmental co-operations, communications

In our opinion the scope of interested parties includes the employees of the company group, the regulatory bodies working along with government focusing on environmental and nature conservation issues, the non-governmental environmental and nature conservation organizations, investors, creditors, all the organizations and private persons who are interested in, or affected by our environmental performance.

The European Public Telecom Network Operators' Association (ETNO), is also considered as interested party and in particular the Sustainability Working Group. Furthermore, Deutsche Telekom, the majority shareholder of Matáv Rt. is also our interested party.

Internal co-operations

In the frame of our internal cooperation in 2002 we focused primarily on the agreement with the subsidiaries, on the development of an efficient environmental operation, and the creation of a framework system. In addition to the quarterly meetings we organized a two-day environmental workshop with the subsidiaries, aiming to define the common policy, strategy, the objectives and tasks.

We published our achievements in the Matáv Group's newspaper, called "Telmondó" and in the news of the internal network to provide information to the staff persons. Next year we plan to display a home page with environmental content, on Intranet, the content structure of which was designed in 2002.

Domestic co-operations

The Environmental Round Table Discussion – considered the traditional forum of maintaining relations with the domestic organizations of environmental protection and the largest consumers of the services of Matáv Group – was planned to be organized for the sixth time in the end of last year. However, we had to postpone the session to

the beginning of 2003 as a number of the invitees announced that they would not be able to participate due to the congestion of tasks. Therefore the results of the round-table discussion will be assessed in detail in the following report.

Furthermore, we continued the activities and joint thinking about the development of advanced solutions associated with the environmental protection activities.

On April 16, 2002 the technical acceptance of Phase I. of the info-communications system development made jointly with the Directorate of the Aggtelek National Park was completed. The cameras were installed and put into operation in the Baradla cave, on Morea hill and in the Concert Hall, and the high voltage and IT equipment necessary to the remote control of the cameras were installed at the Aggtelek side of the Baradla cave, and in the tour guide's room in Aggtelek. One of the cameras enables recording of the events and concerts, and the events can be broadcast on intranet as far as the network allows, by that the tourists can be attracted to the National Park. The other camera has the goal of remote monitoring of the *Rhinolopus Euryale* – rare bat species – during the winter period. A touch monitor PC was also provided to the visitors to enable browsing the tourists information and create the basis for installing emergency telephone sets in the cave. We have set up temporary data communications between Aggtelek and Jósvalfó to facilitate the activities of nature conservationists.

During the year we set up an info-communications system plan of nature conservation for the Management of the Kiskunság National Park as well, the implementation of which has been postponed due to the lack of funds at the nature conservation and environmental protection organizations.

Within the professional cooperation in the area of environmental protection we have to mention the joint research and analysis work conducted with the University of Veszprém in course of which we made the environmental analysis of certain telecommunications products. For details see the section on "Products and services".

We have always devoted special attention to the environmental interest of the young generation, and supporting their environmental education has always been a key aspect of us. This is a reason for we were pleased to accept the invitation of IAESTE Hungary (International Association for the Exchange of Students for Technical Experience) to the Sustainable Development Opening Conference to be held on November 29, where we outline the achievements and efforts of the Group made in this field. The basic objective of the conference is to provide general information on sustainable development, to outline state, corporate and civil tasks.

Matáv Group is interested in learning the advanced technologies of electric and electronic waste management. This is the reason for we participated in the presentation of a project titled "Collection of obsolete electronic equipment and their environmental friendly dismantling" conducted by the Logistics and Manufacturing Technology Institute of the Bay Zoltán Fund held on October 16, 2002. The Environmental Conference of Matáv Group represented the public events of the Hungarian Environmental professionals in the Kick-off conference of UNEP Sustainable Consumption Opportunities in Europe organized by the Central European Regional Environmental Center (REC) held on November 11–12, 2002. The purpose of the conference is the preparation to the development of Sustainable Consumption Coalition among the representatives of various sectors.

International co-operations

In 2002 we continued our activity in the Environmental Working Group of ETNO (European Telecommunications Network Operators' Association). From 26 through 28 September 2002 the Budapest Headquarters of Matáv accommodated the 19th Plenary Session of the Working Group. In this session the project proposal was outlined,



that has the purpose of setting up a document system for DG Environment of the European Union showing the environmental commitment of the telecom companies, the opportunities for minimizing the environmental burden they cause, and the opportunities for reducing the environmental burden through the wide application of info-communications services. As far as these analyses are properly underlined by the calculations and the supporting assessment of the professional organizations, naturally, the project will have the objective of recommending its wide scale application. The project was approved in 2002, and launches in 2003, and the delegate of Matáv has been assigned the management tasks.

Our environmental relations include the regular cooperation with the Deutsche Telekom Group in the frame of which we received the environmental experts of the DT Group on October 28–29, 2002, to mutually learn the environmental activities of each other, and improve by that the cooperation. The areas of cooperation cover the issues of mitigating the negative impacts associated with our activities, development of our services and improvement of the flow of information, and also an opportunity for the development of a more efficient communication in the area of which we provided environmental information to be displayed on the Internet web-site of the DT Group.



Organizational politics and systems

Matáv made a decision about implementing an environmental management system based on ISO 14001 in the professional areas having significant environmental impact. In the frame of this program system building efforts were made in the following areas:

NAME OF THE PROFESSIONAL AREA

DATE OF THE CERTIFICATION

Technical servicing area	November 2001
Network management area	December 2001
Telecom development area	November 2002
Real estate management area	December 2002

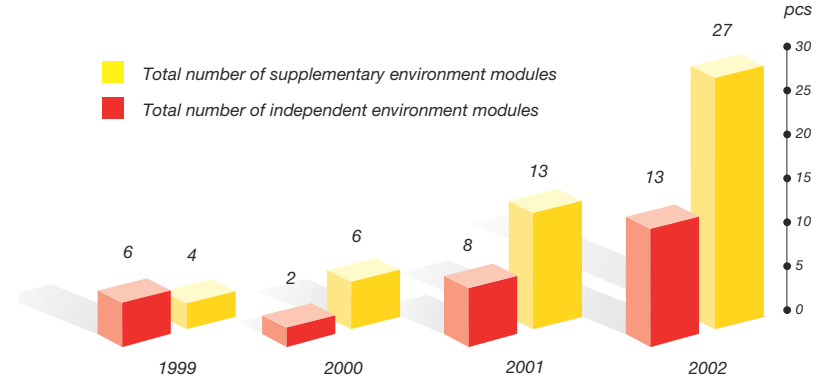
An integrated management system (based on ISO 9001 and ISO 14001) is operated in every functional area. More than half of the Matáv organizations has an ISO 14001 certificate, in accordance with the headcount proportion of the above organizations. Substantial environmental impacts of other professional areas of Matáv Rt. are handled by the experts of the above professional areas. Beyond the above, the quality management system of the Matáv Group received a successful certification in the end of 2002, in accordance with the ISO 9001:2000 standard. The successful audit of a quality management system of this volume and nature is a unique achievement in Hungary. With this achievement Matáv has proven that all the organizations of the company are committed to the quality oriented corporate culture. Group environmental coordination is one of the independent processes of the frame system. Operation of environmental protection in accordance with the process, and its regular audit creates the basis for the coordination of environmental activities of large number of subsidiaries with different activities, for the attainment of the objectives set in the Group environmental policy.

The Group level environmental policy was defined in 2002, that contains the commitment of all the subsidiaries toward an environmental conscious business

activity, protection of the environment and nature, and harmonization of the principles of sustainable development. By taking into consideration the data from 2002, we can start the analyzing work that qualifies the environmental consciousness of the subsidiaries, based on which recommendations can be made with the subsidiaries of the Group about the implementation of EMS system.

Development of environmental awareness

The number of the courses providing independent environmental training increased during the past year, and also the number of courses providing training on nature conservation as part of the curriculum also increased at Group level. Consequently, the number



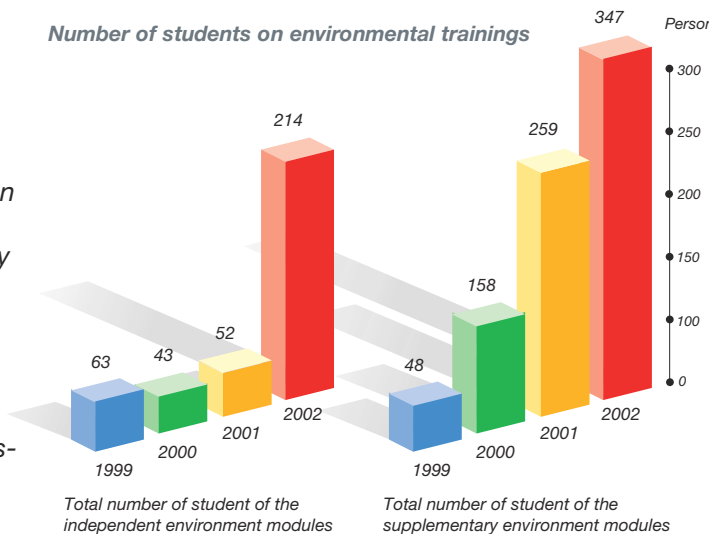
Number of environmental trainings

of participants in the training courses also shows an increase. Westel Mobil Távközlési Rt. made the most significant contribution to the growth of the number of training courses and participants, as they increased nearly three times the number of the courses compared to 2001 (from 5 to 14) while the headcount of attendants increased even more significantly, from 75 to 252. With the implementation of ISO 14001 environmental management system at Matáv Rt., the following training courses were organized, either integrated into the ISO 9001 training, or following this course:

- Integrated management training/EMS management training
- Integrated documentation training/EMS documentation training
- Integrated internal auditor training/EMS internal auditor training

In the frame of these training courses and by the implementation of the Group quality management frame system nearly six thousand employees partici-

Number of students on environmental trainings



Total number of student of the independent environment modules

Total number of student of the supplementary environment modules



participated in training-type courses of internal information which has not been taken into consideration in the charts, in accordance with the last year practice.

Transportation

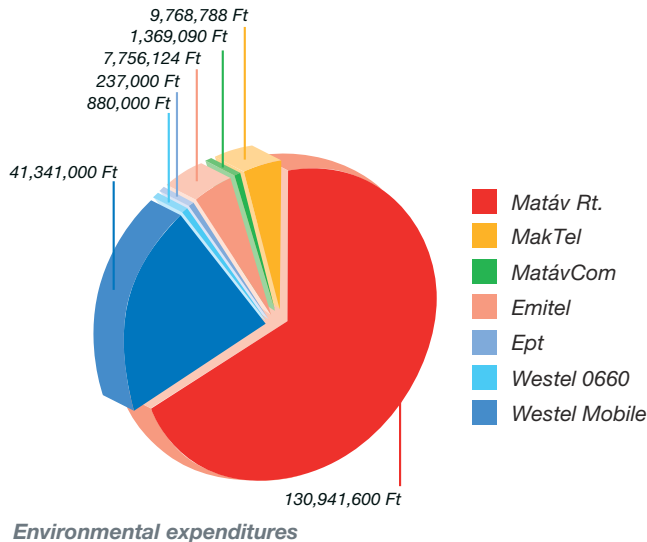
The significant environmental impacts of transportation are detailed under the chapter on "Energy". The subsidiaries of the Group operate their vehicle fleet in proper operating condition in accordance with the regulations, and make efforts to optimize the transportation and reduce the fuel consumption of diminish emission of exhaust by organizing return route transports.

Managing the environmental impacts

Matáv Group takes deliberate actions to mitigate the negative impacts of the environmental burden caused by the activities of the Group, by learning in detail and analyzing these impacts. In the section of environmental performance indicators we analyze in detail the changes of the impacts qualified as significant ones, assess the measures planned to mitigate the consequences of the negative impacts, by putting a special emphasis on the planned implementation of the quality certification system for the transportation companies, by which we aim to measure the environmental performance of the suppliers of the Matáv Group and we also aim to stimulate our partners to constantly carry out their activities in outstanding quality, at high standard of environmental protection.

Expenditures

During the year 2002 the subsidiaries of the Matáv Group have spent over 192 million HUF on environmental development, investments and operations. Westel Mobil Távközlési Rt., the most dynamically developing subsidiary of the Matáv Group spent 40% more on environmental protection than in 2001. The expenses show the following pattern within the Group.



The most significant element of the environmental budget of the Matáv Group was the cost of waste-management. In 2002 the subsidiaries of the Group spent over 50 million HUF on the proper management of wastes.

The costs of operative environmental protection activities amount to over 43 million HUF at Group level. It includes the costs of environmental measuring, analyses, charges paid to the authorities, costs of averting emergency situations, etc.

The cost element of environmental investments is rather significant, amounting to over 36 million HUF. These costs have been incurred at Matáv Rt. in connection with the modernization of its oil tanks. Costs relating to landscape reconstruction incurred in course of the operation of Matáv Rt exceeded 29 million HUF.

The cost budget on environmental development amounted to nearly 22 million HUF at Matáv Rt, which amount was spent on the assessment of the solutions of info-communications applications, on the procurement of life cycle analyzing software application, while Emitel purchased more environmental friendly batteries on account of this budget.

Out of the subsidiaries of the Group Matáv Rt. and Westel Mobil Távközlési Rt. incurred costs relating to the development of the environmental management system based on ISO 14001 with a total value of nearly 11 HUF million.





Environmental performance indicators

SUMMARY OF THE ENVIRONMENTAL PERFORMANCE INDICATORS

ENVIRONMENTAL INDICATOR

2002

- Number of independent environmental training
- Number of supplementary environmental training
- Total number of environmental training
- Total number of students on independent environmental training
- Total number of students on supplementary environmental training
- Total number of students on all kind of environmental training

- Paper consumption
- Budapest phone books sent out on CD

- Electricity consumption
- Relative figures of electricity consumption projected to 1000 lines

- Gas consumption



ENVIRONMENTAL INDICATOR

2002

- Running capacity of vehicles
- Total fuel consumption of vehicles
- Gasoline consumption of vehicles
- Unleaded petrol consumption of vehicles
- Leaded petrol consumption of vehicles

- Water consumption

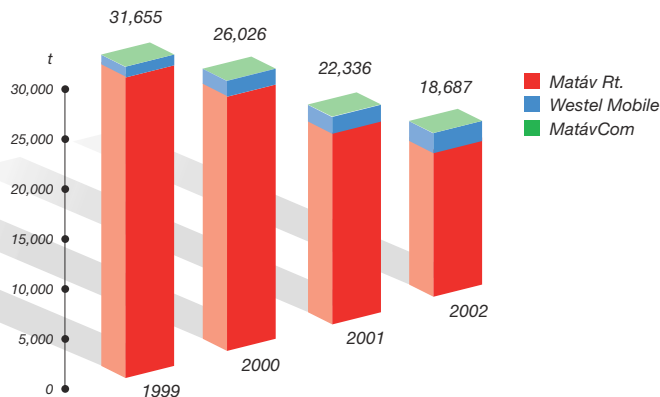
- Total amount of waste generated
- Amount of hazardous waste
- Amount of communal waste
- Ratio of recycled waste
- Amount of recycled hazardous waste
- Amount of recycled paper waste
- Amount of recycled telecom and other waste



MATERIALS

Usage of materials

In 2002 18,686,922 kilos of paper was purchased for the organizations of the Matáv Group. Due to the modernization of the organization and roll-out of electronic administrative, data processing and registration systems the amount of paper consumption decreases constantly. The consumption of last year made cca. 84% of the previous year consumption amounting to 22,335,785 kilos. Matáv Rt. always requests information about the basic materials used in the telecom products used on the telecom network. Afterwards the selected and purchased telecom equipment and its structure is registered in the Environmental Planning and Inventory System (KörTe).



Paper consumption

Materials collected from the consumers

The telephone sets delivered by the subscribers to Matáv Points are collected and transferred for utilization by sales. In 2002 altogether 42,169 pcs of telephone sets were taken over and sold away. Westel in its sale points collects the used mobile phone batteries and counts its price in case of buying a new battery. In 2002 the amount of these batteries was 964 kilos. Matáv started re-collection of the phone books in an organized form in 2002. Matáv transfers each year to the subscribers 2,460,000 pcs of printed phone books

with traditional contents, 1,783,000 professional directory assistances (Yellow Pages), and 245,000 local (city) phone books. It means the outflow of 2,800 tons of paper per year.

The quality of the material used for printing the phone books is selected within the competence of Magyar Telefonkönyvkiadó Társaság (Hungarian Phonebook Publishing Association). The paper used for printing the phone books (imported from Finland) needs to meet the quality requirements set by Matáv, therefore it is no recycled paper, still, it can be recycled in full, and can be used for manufacturing even the most sophisticated products (stationary), that can be made with this technology.

Re-collecting phone books from the counties upon delivery of the new one

In 2002 we launched the pilot project in Győr-Moson-Sopron, Nógrád and Vas counties where we re-collected the old, expired phone books simultaneously in the delivery of the new one. The results verified the results of an earlier telephone polling, according to 21.58% of

the provincial subscribers would return the old phone books when receiving the new one. The experiences of re-collecting the phone books suggest that the subscribers living in villages are willing to return their old phone books upon receipt of the new one, in higher rate than those living in the big cities. Normally the phone books published 1-2 year earlier were returned, still, a phone book printed in 1984 was also collected.

Re-collecting phone books in Budapest upon delivery of the new one

With the distribution of the 2002-year Budapest phone book and Yellow Pages (Arany Oldalak) we provide our customers the opportunity of returning their old phone books when receiving the new one, which idea got a positive reception. The amount of paper collected in 2002 by this action amounted to 16,210 kilos.

Collecting waste paper at the schools

Magyar Telefonkönyvkiadó Társaság organizes campaigns of re-collecting phone books in Budapest by organizing competitions for the schools through a fund

COUNTY	NUMBER OF SUBSCRIBERS	PHONE BOOKS RE-COLLECTED (PCS)	PHONE BOOK RE-COLLECTED (KG)	RATIO OF RE-COLLECTED PHONE BOOKS (%)
Győr	140,508	31,914	12,766	22.71
Nógrád	20,526	4,710	1,570	22.95
Vas	70,154	10,668	3,556	15.21
Total	231,188	47,292	17,892	20.46



established for this special purpose. According to the statement of MTT cca. 210-220 tons of phone books are collected each year.

Solutions diminishing the paper consumption

In Budapest we have been publishing CD Phone Books since 1998 the popularity of which increases year by year. In 2002 7,788 pcs of CD Phone Books were delivered to the customers, that resulted in the saving of 38,940 printed phone books, saving a total amount of 70 thousand kilos of paper.

BUDAPEST CD

YEAR	PUBLISHED	PCS	TARGET GROUP
1998	August	1,000	above 10 lines
1999	July	2,209	above 10 lines
2000	July	2,682	above 10 lines
2001	May	3,976	above 5 lines
2002	July	7,788	above 5 lines

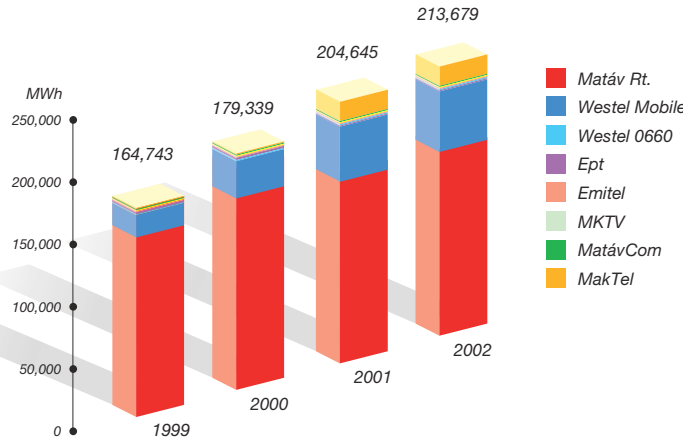
At the countryside the CD Phone Books will be launched with the 2003-year series of phone books. Apart from Győr-Moson-Sopron county a total of 2,430 pcs of CD Phone Books will be provided to cca 17% of the subscribers, based on the preliminary request of the customers substituting 12,150 pcs of phone books, that will result in saving 4,200 kilos of paper. In the end of 2001 a new series of Internet Phone Books was put on the home page of Matáv with the contribution of Axelero with an upgraded content, compared to the earlier version: the mobile number database is extended, e-mail and web-addresses are displayed, search criteria are extended. As a typical feature of the visits to Internet Phone Book,

in 2002 at least half million queries were made each month; the total number of search processes started by the customers was 10,037,721).

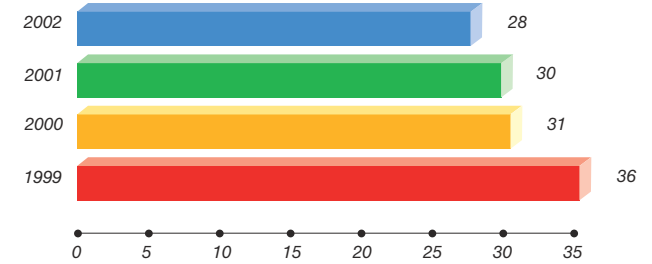
ENERGY

Energy consumption of the Group primarily comes from the provision of telecom services, that is, network operation, and the supplementary activities providing the background for network operation. (e.g. operating the air conditioning equipment). The most significant energy consumption of the company-group is related to electricity, as the info-communications technologies and their supplementary systems are based on the consumption of electric energy.

Notwithstanding the above, the Group consumes substantial amount of mineral gas to its services rolled out in the whole territory of the country and even cross the border, and also consumes petrol to the operation of its vehicle fleet.



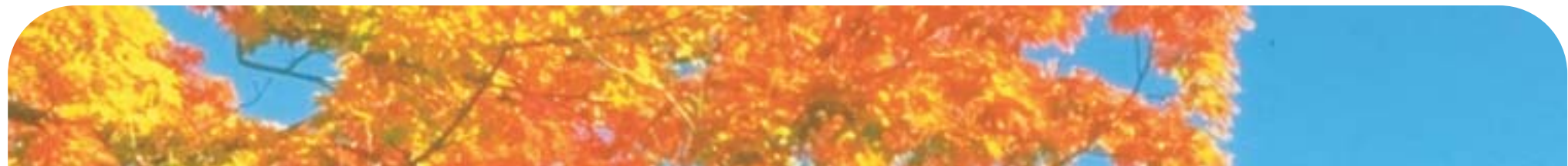
Electricity consumption (absolute value)

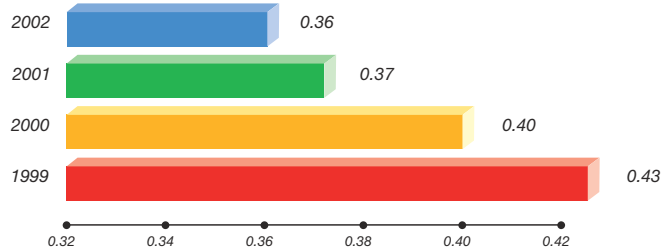


Relative figures of electric energy consumption of Matáv Group projected to 1000 lines

Electricity consumption

The electricity consumption of the Group increased by 4.4% to 213,679 MWh compared to last year. This slight growth being under 5% is due to the extension of the services provided by the subsidiaries of the Group. Along with the growth of electricity consumption due to the increasing services of the subsidiaries, the company-group follows the internationally experienced trend according to which the service providers apply advanced technology, and provide services of higher standard at relatively decreasing energy consumption. (It is clearly reflected by the chart "Relative figures of electric energy consumption of Matáv Group project to 1000 lines"). Matáv Rt. – the largest company of the Group – consumed nearly the same amount of electricity as in the previous year (with an increase of 0.7% compared to last year). The consumption of the second largest company of the Group, Westel Mobil Távközlési Rt. shows substantial growth of 19.5%, but this growth rate is lower than the increase of subscribers. The services of Westel Rádiótelefon Kft. have reduced, therefore the energy consumption decreased as well. The electricity consumption of MatávKábelTV Kft. increased 4.5 times, which is due to the successful business policy of the company as a result of which a lot of new customers had to be provided with services. The increased energy consumption can be explained

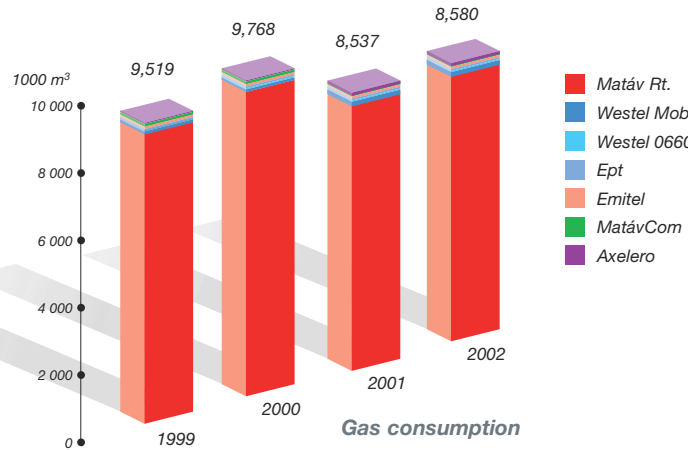




Relative figures of electric energy consumption of Matáv Group projected to total revenue

by the changes taking place in the domestic telecom and info-communications market, emergence of mobile telephony, extending scope of internet and cable television users, and the migration of the customers due to changes in the structure of fixed line telephony. In addition to the chart showing the relative values projected to 1000 lines the figures showing the tendencies of the relative figures vary proportionately with the revenues also underlines the above mentioned fact.

Gas consumption

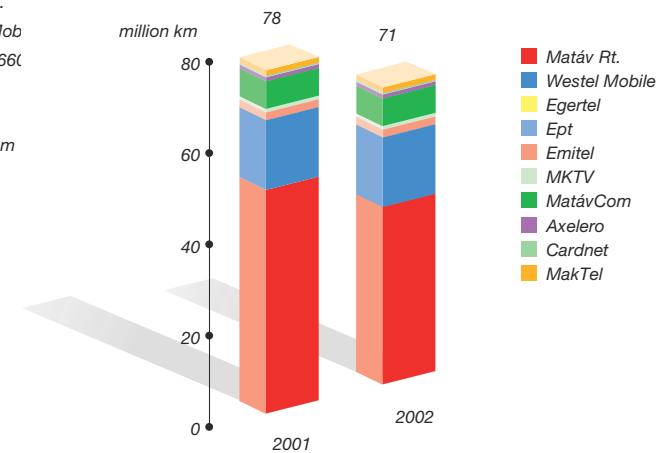


Matáv Group uses mineral gas for the operation of its buildings. One of the elements of the Group environmental policy is to reduce the pollution of environment. One of the means of achieving this endeavor is the application of clean and easily consumable sources of energy.

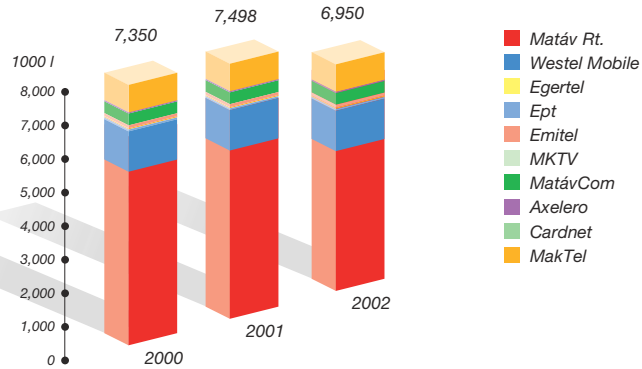
Majority of the subsidiaries applies to this purpose mineral gas-operated equipment of high efficiency, in addition to the distance heating. During the year we continued at Group level the modernization of the heating systems in the buildings, in the frame of which advanced, temperature controlling devices – thermostats –, were installed in further plants. This effort contributed to the relative decrease of gas consumption. As the chart shows, although the volumes of the services provided by the subsidiaries of the Group increased substantially, the amount of mineral gas used for social and operating purposes remained on nearly the same level – 8,580,000 m³ (0.5% can be experienced). Among the subsidiaries the gas consumption of Matáv Rt. – the largest consumer of the Group – increased slightly, by 3.5%, to 7,990,000 m³ while the gas consumption of the other subsidiaries is stagnating or shows just a slight increase.

Fuel consumption of vehicles

The services of Matáv Group cover the territory of the whole country. Provision of the info-communications services, network provisioning, maintenance, repair, fulfillment of the customer demands are performed by the member companies by using their own vehicles.



Running capacity of vehicles



Total fuel consumption of vehicles

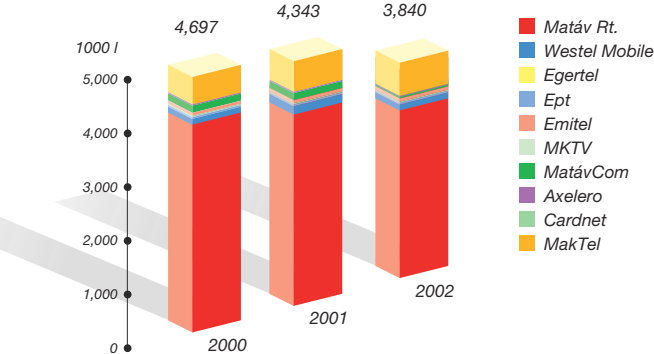
The member companies of the Group aim at optimizing the level of utilization of vehicles in transportation, in addition to that substantial resources are allocated to maintenance and environmental compliance of the vehicles. The members of the Group reduced in 2002 the running capacity of vehicles to 70,653,448 kms – i.e. the mileage covered by the vehicles was reduced by more than 7 million kms, a 9.2% reduction – which is in part due to the proliferation of the videoconference applications, and implementation of teleworking within the company group. (For more details see the section of “Products and Services”).

Within that the Matáv Group reduced the mileage covered by vehicles by 9%, Westel Mobil Távközlési Rt. by 14.6%, MatávCom Kft. by 17.6% while Axelero Rt. launching a large number of new services and servicing new customers increased the mileage covered by the vehicles by 45.6% and MatávKábelTV Kft. also increased it by 7%. All these resulted in the reduction of the fuel consumption of

Matáv Group in 2001 by 7.3%, to 6,949,785 liters, which – in terms of fuel saving exceeds 548,000 liters. This achievement is primarily due to the decreased consumption of diesel vehicles.

Gasoline consumption

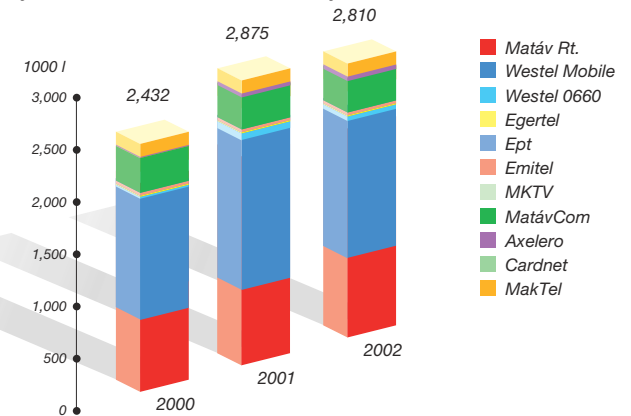
As majority of the services is provided by using diesel vehicles, therefore most part of the fuel consumption is gasoline within the Group. The chart clearly shows the results of the substantial rationalization made in 2002: At group level the reduction of consumption is near to 11.6% a compared with the previous year. Therefore the gasoline consumption of Matáv Group in 2002 reduced to 3,839,907 liter. Along with the 12.8% reduction in consumption at Matáv Rt. the largest consumer, 29.1% reduction is experienced at Westel Mobil Távközlési Rt. and 52.6% decrease at MatávCom Rt., MatávKábelTV Kft. shows nearly 46% increase, while the consumption of MakTel the only international subsidiary of the Group, was balanced, near to 8% which is due to the extending scope and roll-out of its services.



Total fuel consumption of vehicles (gasoline)

Unleaded petrol

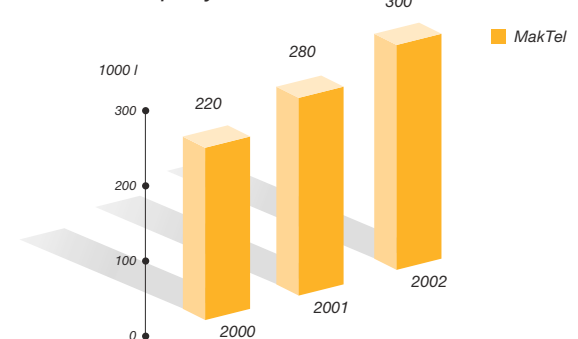
The trend of consuming unleaded petrol showing constant increase over years has been broken at the Group. In 2002 the consumed amount decreased by 2.3% to 2,809,878 liters. Still, we have to mention that while the petrol consumption of Westel Mobil Távközlési Rt. reduced by 10.2% and that of Westel Rádiótelefon Kft. decreased by 44.1%, Matáv Rt. increased its consumption by 9.4% while Axelero Rt. by 51.6%.



Fuel consumption of vehicles (unleaded petrol)

Leaded petrol

Within the Matáv Group MakTel, the telecom company of Macedonia was the only one, where leaded petrol was used in 2002, in accordance with the local environmental and economic characteristic. The amount was 300,000 liters, making 26% of the total fuel consumption of the company.



Fuel consumption of vehicles (leaded petrol)



Directly generated energy, used for own purposes

A special feature of the info-communications systems and equipment operated by the Matáv Group is the requirement for continuous, uninterrupted energy supply required to the provision of high reliability services. Under the existing technical conditions the electricity supply of these equipment is considered appropriate, still, the telecom systems are not supposed to stop even in case of failures or breakdowns or outages occurring at the electricity companies. To bridge such situations and manage eventual, special problems the companies of the Group operate diesel emergency generators.

Still, the necessary operation of diesel generators used in the case of eventual outages of electricity supply shows a decreasing tendency due to the higher reliability of power supply, so the usage of these equipment is less than 50 hours per year per equipment, including the test operation. A good example of applying directly generated energy for the own purposes of the company is the application of gas engines providing for the energy supply of the Matáv Headquarters at Budapest, Krisztina Krt. In 1999, when the headquarters were reconstructed, gas engines of special design were selected for installation based on economic, technical and environmental considerations. The equipment – due to their special heat- electricity generating and utilization features – are able to provide not only the complete electricity supply of the building but also the energy supply of the complete air conditioning system. As the energy supply and air conditioning system of the building are controlled by an advanced monitoring system, energy saving and environmental friendly solutions are applied in the operation of the building – like, for example, automated setting of the air conditioning system in different periods of the day, installation of move sensors in the office spaces, application of automated shadow sensing solutions for temperature control, and setting the lights according to periods of the day. Another special feature of operating the system is that the extra energy generated by the operation of the gas engines can be sold and the additional revenue generated covers the maintenance costs of them.

Renewable resources

The combined renewable energy source providing the energy supply for the Magyarsarlós IRT equipment (combination of solar panel and wind generator) had to be re-deployed due to an earlier steeling, which was preceded now by the development of the asset protection system in the area. Following the installation of the alarm system and after setting up a monitoring team at the local government, the wind generator was installed and put into operation. Following the test operation the live operation of the equipment has been started, the results of metering are expected to be summarized by the end of 2003.

Carbon-dioxide indicator

In accordance with the international tendency the amounts of the particular energy sources are translated into CO₂ emission in the following table. For this purpose we used UNEP (United Nations Environmental Programme) guidelines published in 2000 greenhouse gas indicators and the conversion factors contained therein.

Accordingly, the CO₂ emission derived from the energy consumption of the Matáv Group changed from 2001 to 2002 according to the following:

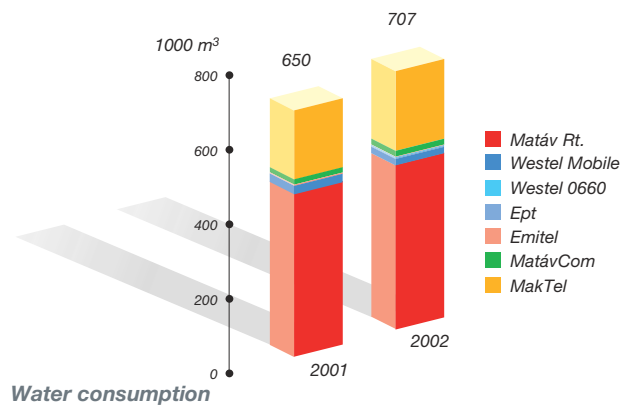
TYPE OF ENERGY UTILIZATION	CO ₂ EMISSION IN 2001 (TONS)	CO ₂ EMISSION IN 2002 (TONS)	CHANGE RATIO (%)
DIRECT ENERGY UTILIZATION			
Mineral gas	16,359	16,441	+ 0.5
Fuel	18,643	17,195	- 7.8
INDIRECT ENERGY UTILIZATION			
Electric energy	74,081	77,352	+ 4.4
Emission due to the total energy utilization	109,083	110,988	+ 1.75



WATER

The subsidiaries of the Matáv Group consume water exclusively for social purposes, for example in the workplace kitchens, for cleaning, bath and washing. Some more water is consumed in course of soil purification and treatment, where water is gained from the monitor wells designed to this particular purpose or fire distinguishing taps as it may be environmental necessary. The operating wells, monitor wells are licensed by the authority.

Due to the low level of usage the water consumption of the subsidiaries is not included among the significant factors therefore no separate project will be launched on this theme. The water used comes exclusively from the local network, no direct consumption is from living water. The water consumption of the Matáv Group shows 8.8% increase in 2002, which meant 707,000 m³ consumption. Among the member companies Matáv Rt. (2.3%), MakTel (18.1%) and MatávCom Kft. (21.4%) show increasing consumption. At the other subsidiaries is stagnating as compared to the previous years, or – as the offices in question are rented premises – the amounts used cannot be clearly identified.



BIODIVERSITY

The subsidiaries of the Matáv Group cover the whole territory of the country with their services.

Provision of these services requires from the companies the physical presence of the equipment and systems in all segments of the country. In addition to the urban and industrial areas, the same stands for the areas of nature conservation. The obligation of provision of service must be fulfilled in compliance with other regulations. Although on the one hand the service providers burden the environment simultaneously with their presence, on the other hand they also have a positive impact from the aspect of environment and nature conservation through the provision of info-communication service in these areas (e.g. they are absolutely necessary in case of emergency).

Environmental impacts associated with the presence are the following:

Impact on the landscape

The aerial cable network installed on poles has a significant impact on the landscape, the replacement of which is an issue of special relevance, primarily in the areas that make part of the world heritage (e.g. Hollókő) and in the environmental protection areas.

The telecom masts and base stations have similar impact, the Group members – like Westel Mobil Távközlési Rt. – devote increasing attention to the integration of these objects into the landscape. In 2002

Westel Mobil Távközlési Rt. integrated the masts into the landscape by using tree-shape masts or converting the masts into look-out towers. Four masts of this design were installed to the satisfaction of the inhabitants.

Electro-magnetic radiation

Among the companies of the Matáv Group electro-magnetic radiation is affecting primarily the activities of Westel Mobil Távközlési Rt.

In course of the planning the company observed the provisions of the standard MSZ 16260-86 that regulated the upper limit of radiation in the nearby of base stations. In 2002 Westel made the assessment of 68 plans, 105 measurements, altogether 173 expert opinions to ensure the safety of electro-magnetic radiation and its communication to the wide public.

The members of Matáv Group assign special importance to the location of the antennas regulated by the Hungarian Standard No. MSZ/T-17200-9.

We received just one report from a local resident regarding the electro-magnetic radiation of masts and base stations, that we managed to close with full satisfaction of the complaining party. Westel Mobil Távközlési Rt. considers it important to provide information to the customers, and to achieve this goal the staff persons of the company participated in 11 residential forums, 3 village meetings and 27 residents' meetings last year. In this respect the "GSM Association" membership of Westel Mobile Rt. is significant, the major activity of which is relating to electro-magnetic radiation.

Impact on the biodiversity

Along with the obviously negative impacts associated with the presence (like disturbing the flora and fauna, changing the natural environment, changing the landscape, increased environmental pollution, etc.) we can see substantial benefits as well.

Prevention of the natural disasters, losses, emergency events, criminal actions, an early treatment of the events, speeding up of responses are managed through the info-communications technologies (mobile telephones, high speed data communications, Internet). The assignments of natural research and monitoring can be supported by the flow of information, exchange of data and communications between two plants (mapping applications, videoconference applications). By using the remote Internet access and by operating an information kiosk we can publish materials, provide training, show and popularize tourists' targets and sites on spot to the visitors.

The infrastructure basis of servicing the customers of Matáv Group is made by the networks that are present in fixed-wire and wireless form in our environment. We have already mentioned the environmental impacts of wireless networks – that receive special attention from the society – under the chapter on electro-magnetic radiation.

Construction of the fixed networks, their extension and development to the required size has been completed during the past years, therefore no development was made beyond the fulfillment of the demands occurring, and they are not expected in the future, either.

The length of the underground fiber optic network can be considered stable, the non-significant changes

come from the maintenance, or minor extension of the network. In 2002 the length of the underground cables was cca. 100 000 kms.

The majority of the aerial cable networks is applied by Matáv Group on the network sections that provide for direct servicing of the subscribers. The length of the aerial cables is 128 000 kms. Due to the dynamic development of the MakTel network these values show increasing tendency, as the geographical conditions allow only limited underground network construction.

EMISSION, WASTEWATER AND WASTE

Air pollution

The companies of the Matáv Group – like the other players of info-communications sector – are not among the largest polluting companies with a view to the amount of polluting materials they put in the air as a consequence of their servicing activities. The gas engines considered as point source of pollution are the major heating equipment used for heating the offices, administrative buildings of the member companies of the Group. Uninterrupted operation of technological equipment is ensured by the emergency generators of diesel operation that are also point sources of pollution.

Furthermore, there are the vehicles applied for passenger and freight transportation the emission of which can be considered as linear air pollutant source. In addition to the above, we also have to mention halon and freon compounds that are known for damaging the stratospheric ozone layer, used in technological and building operation structures in fire extinguishing and air conditioning equipment, the replacement of which is currently underway, in the frame of a program launched among the subsidiaries of the Group.

The period of operation of the diesel emergency generators can be mentioned among the point-source pollutants does not exceed 50 hours per year, the most of which comes from the regular monthly test operation of the equipment. Therefore the operating

time of these equipment is less than the time limit for operation set by the regulations, above which limit the equipment must undergo environmental test and subject to reporting. The gas engines, mentioned as the other category of point sources of pollution, operating longer hours, undergo environmental tests at the member companies with annual regularity, for the purpose of checking observation of the emission limits, and providing for reporting to the authorities.

Measuring and setting of the emissions of vehicles mentioned as linear source of pollution is performed by the transportation organizations of the companies on regular basis, in compliance with the regulatory requirements of the environmental tests.

Application of air condition equipment and fire extinguishing equipment of high efficiency (using other

than water or powder as extinguishing agent) is of major importance in telecom technology as the operation of equipment is sensitive to changes of temperature, and in the case of failure even a minor fire can cause significant damage to the systems. This is the reason for the info-communications companies operate a large number of technological air conditioning equipment.

The agents used in the fire extinguishing and air conditioning equipment are regulated by the European and Hungarian law and regulations due to the damage they cause to stratospheric ozone layer, and due to the direct threat they harming human health they are put to the focus of public attention. In accordance with this expectation the members of the Matáv Group have launched a program with the involvement of significant funds for the replacement of the substances in the equipment, the type of which is regulated and prohibited by the regulations.



Water pollution

A special feature of the services provided by the Matáv Group is that no industrial water consumption or water treatment is included in the technology, the water consumption of the member companies provide for the water supply of the office and social buildings.

Drinking water supply of the Group's companies is provided by the public water pipeline network.

Most of the plants of the companies are located in areas that are supplied by the public water pipeline system of the locality. Where such canalization is not available collection of wastewater is made in insulated, closed system underground tanks in accordance with the regulations, emptying of which is made with the necessary regularity. In a plant of Matáv Rt. wastewater treatment equipment of active sludge is used, the efficiency of treatment and the composition of the output sludge is controlled in laboratory on regular basis.

With a view to the above, the members of the Matáv Group do not burden the environment with non-treated wastewater output.

Soil and underground water contamination

The underground diesel oil tank supplying the emergency diesel generators that are put into operation during the outage of electricity to ensure the continuity of the services of Matáv Group exhibit potential risk to the soil and the underground waters. The users are required by the regulations to mitigate such risk. Knowing these conditions, Matáv Rt. has launched a program several years ago in the frame of which the oil tanks with double wall, which is in compliance with the regulations and eliminates eventual harmful impacts on the environment. In 2002 in the frame of the program 11 oil tanks were covered with double sidewall and equipped with leakage signaling equipment.

In the frame of implementation of the investment the soil around the tank and the total petroleum hydro-carbons (TPH) content of the underground water have undergone laboratory test to reveal eventual, earlier contamination. One of the equipment of Westel that might cause soil pollution is the oil-insulated transformer, first of all

because of intended damages. For preventing this these are continuously changed for dry transformers. In 2002 there were 3 transformers changed.



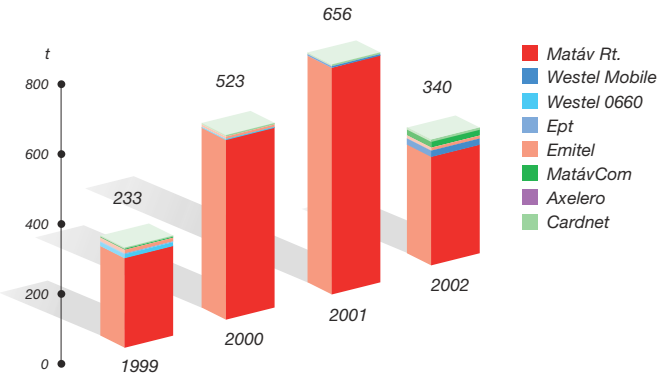
Noise and vibration

Out of the equipment operated by the Matáv Group the most significant noise effect comes from the outdoor air-conditioning equipment mostly used for air conditioning of buildings. The application of such equipment can give raise to complaints primarily in the densely populated urban areas. So as to prevent complaints and terminate the disturbing noise effect the equipment undergo regular maintenance primarily during the summer period as significant noise pollution can be caused by the failure of these equipment. When purchasing new equipment the member companies of the Group bear in mind the key requirement that – in addition to the technological compliance – the equipment must meet the requirement of low noise pollution as well. Before putting into operation the noise level of each equipment must be metered. Another typical source of noise of telecom operations is the operation of diesel emergency generators, still, today these equipment are covered with modern noise insulating wall or they are deployed in premises with noise insulation. Despite this fact the technological experts of the supplier company test the noise level upon in the technical acceptance.

Waste

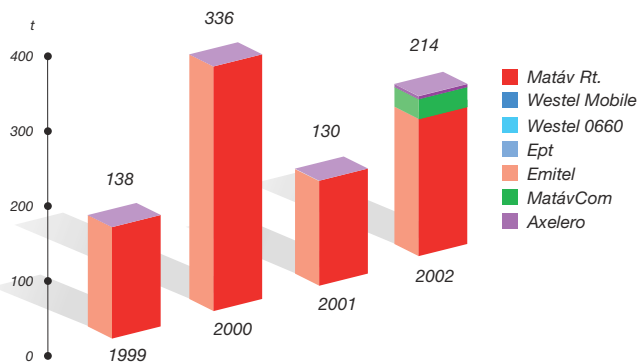
Hazardous waste

The technologies applied by the info-communications service providers do not generate significant amount of hazardous waste.



Amount of hazardous waste

Hazardous wastes are collected, administered by the member companies in accordance with the regulations in force, and transfer for treatment or disposal to professional organizations having the necessary authorization. The main economic and environmental endeavor of the Group Members is to transfer for recycling as



Amount of recycled hazardous waste

much of the hazardous wastes as possible, eventually sell such substance to authorized companies.

The amount of hazardous waste was 340 tons in 2002 at group level that shows substantial decrease compared to last year when it was 647 tons. It can be explained with the completion of the battery reconstruction program and the scheduled completion of the necessary soil recultivation program in 2001.

In addition to the reduction of the amount of hazardous waste we also can see the substantial growth of the rate of recycling. While within the hazardous waste mix contained higher rate of hazardous waste that is difficult to recycle or cannot be recycled at all, only a 20% rate of recycling could be reached.

In 2002 the recycling batteries, toners and cartridges represented higher rate, therefore the rate of recycling waste amounted to over 60%.

Communal and paper waste

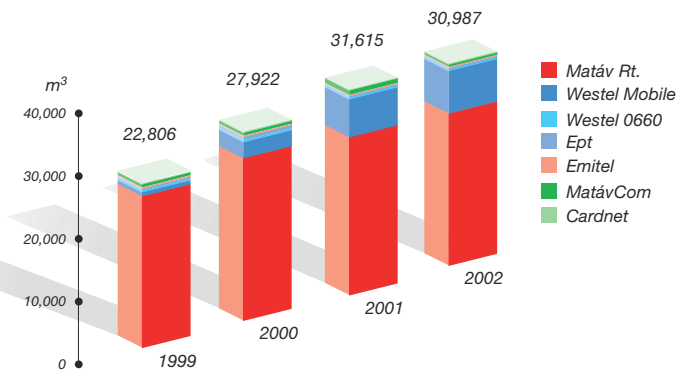
The composition of the waste generated by the subsidiaries of the Matáv Group shows the pattern of the communal waste in an average locality. The total amount of waste is deposited in waste depot, which is representing a threat to the environment even if these facilities are in conformity with the standards of the EU. The subsidiaries of the Group are committed to minimize the amount of the wastes generated that can be reached by recycling an increasing ratio of the components of the waste. Recycling has been started years ago, based on financial consideration, with the recycling of office paper, which is the waste generated in the largest amount. As far as the future is concerned, the plans include selective collection of plastic and glass, and starting of the recycling, which includes – in addition to the preparation of technical conditions – the assessment of the input capacity of the recycling industry. This progress will bring financial benefits to the group, too, as the amount of waste disposed at the waste depots will reduce, therefore the transportation costs of communal waste and the costs of treatment will reduce due to the decreased amounts, and the funds freed up this way

can be reallocated to other areas of environmental development.

In 2002 Westel launched the selective waste collection project in its Budapest plants, including more than 1,600 employees cooperation, that provides selective collection of office paper waste, plastic, glass and metallic waste, that will decrease the amount of communal waste.

Due to the structural and organizational changes of the subsidiaries of the Group in 2002 the total amount of communal waste decreased by 2% to 30,987 m³ compared to the previous year.

The reason for we lagged behind the expectations is that during the year the waste paper prices were at



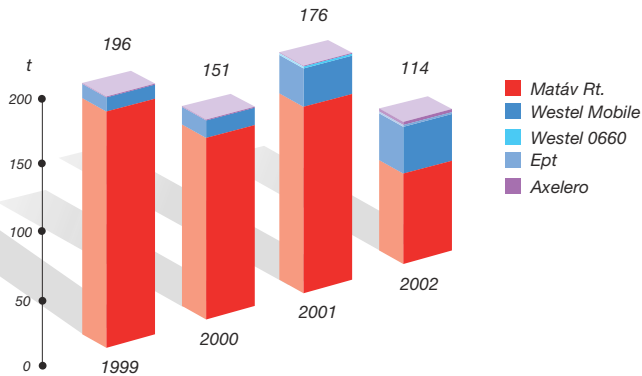
Amount of communal waste

very low level all over the world, which – under the Hungarian conditions – resulted in lack of interest in doing selective collection and take-over, as it was no profitable activity. This process resulted in that paper waste was put to the communal waste, which worsened the performance improvement due to other organizational changes.

To sort out this problem in the future we have to make efforts to make our contractual partners interested in the selective waste collection, and a “strategic” alliance must be developed in the long run in the area of selective waste collection, either by offering

the opportunities for treatment or transfer of other valuable waste to ensure realization of the selective waste collection.

As we have announced in the chapter of "Materials collected from the customers", in 2002 34 tons of



Amount of recycled paper waste

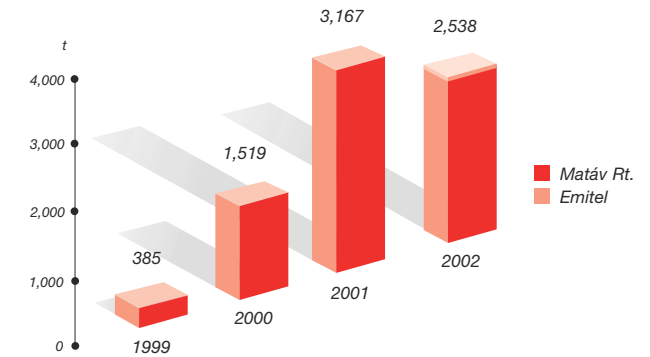
paper could be recycled due to the collection of phone books, while in 2002 we could save paper of 70 tons due to the proliferation of CD Phone Book.

Telecom wastes

Short life cycle, rapid development of the info-communications technologies, widening portfolio of the business and residential services, and their restructuring largely contributed to that in these days the asset management of the subsidiaries of the Group is characterized by constant modernization, and replacement of the obsolete facilities. In course of this activity equipment and network sections are replaced, that contain large amount of valuable metals that can be recycled, and provide plastic and electronic waste/basic materials for the companies and the recycling and processing industries. The scrapped obsolete measuring instruments, tools and IT facilities and equipment that are suitable for secondary utilization.

From among the member companies of Matáv Group Matáv Rt. providing fixed line services provides large

amount of telecom waste, which is transferred to the licensed professional companies. As the chart shows, the amount of telecom wastes generated and sold in 2002 (2,539,061 kilos) is more than in 2000, still, it shows a decreasing tendency compared with 2001. Variations among the years can be explained by that the amount of generated and sold telecom waste varies according to the schedule of the telecom reconstruction projects. The amount of waste generated between two major project periods is the amount of wastes generated in course of average maintenance.

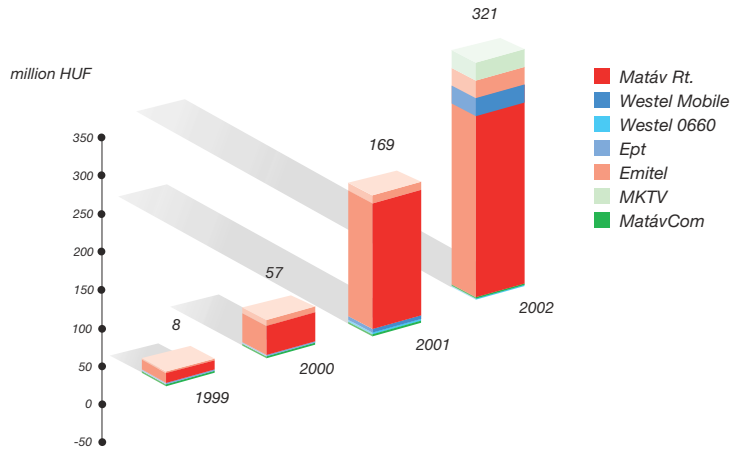


Amount of recycled telecommunications and other wastes



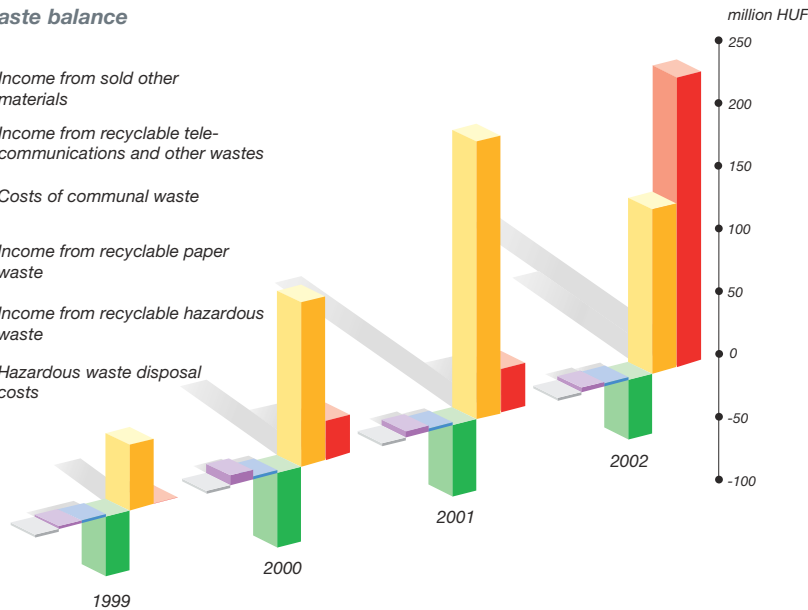
Waste balance

Waste management becomes a relevant issue for a company when it is considered as a financial issue. From this point of view waste which is no intended product just a by – product of manufacturing, an “unavoidable bad thing”, is devoted more attention.



Waste balance

- Income from sold other materials
- Income from recyclable telecommunications and other wastes
- Costs of communal waste
- Income from recyclable paper waste
- Income from recyclable hazardous waste
- Hazardous waste disposal costs



Waste balance by types of waste

The performance of the subsidiaries – not considering the transportation costs – showed improving results. This growth nearly reaching 90% is largely derived from the sales of other materials including for example the re-utilization of used furniture in connection with the termination of a real estate. The revenues generated from recycling of the telecom waste reduced by nearly 43%, in proportion with the reduction of the waste.

SUPPLIERS

Environmental protection is assigned special importance within the process of procurement. To ensure prevention of loss, when hazardous substances or products are purchased, such products should be delivered by the transportation

company directly to the customer ordering such product, apart from certain reasonable amount of stock. Matáv purchases materials, assets and services exclusively in the frame of regulated process, from certified supplier. The activity of the suppliers is assessed once in a half year in the frame of a performance evaluation process. Non-compliance will entail the termination of the agreement. One of the key aspects of sales is the high level compliance with the requirements of the ISO 9001: 2000 and ISO 14001:1996 standards. In 2002 the Group started elaboration on an environmental quality certification system that will be include in the supplier agreements. Implementation of the system is scheduled for 2003.

Products and services

The environmental load of Matáv Group – as a company group providing various telecommunications services – cannot be considered significant, still, it cannot be neglected, either. The services impose major burden on the environment primarily through the consumption of electric energy, the landscape impacts of the fixed wire network covering the entire servicing area, and the electro-magnetic radiation of the wireless technologies. The packaging materials of the various tools, equipment parts of outwork equipment and the waste substances and emission due to the consumption of other energy types (fuel, gas, etc) may eventually have significant environmental impacts, even if its extent is smaller.

In the following sections we provide a summary of the products, broken down first to the lines of business, then we analyze the significance of the products under survey and used internally, which diminish environmental impacts.



BUSINESS SOLUTIONS



The Business Services LoB of Matáv provides customized, complex telecom and IT services to the key business partners of the company. The product portfolio is unique in the domestic market: along with the total product portfolio of Matáv (voice and data products international and system integration services) the company management systems, the satellite vehicle tracing system, the various vide communications services and PABX systems are sold as well.

Matáv comTr@ck

We have to mention in particular the Matáv service that got the Antarctic with the First Hungarian Antarctic Expedition, supporting the work of the scientist group. The **comTr@ck** is basically a GPS- and GSM-based vehicle tracing and fleet management system that can trace any object or person by using a GPS receiver, and a multi-communication module the signals of which are received by the comTr@ck center. (In the case of the Antarctic Expedition the system had to prove its aptitude under very extreme environmental conditions).

e-Business, e-Working, e-Signo, e-Wall

The **e-Working** includes all the advantages and flexibility of teleworking as the user can get access to the corporate environment's info-communication background. The **e-Signo** electronic signature service will be available to all the market segments in the near future, so all the customer will be able to do business and banking on



Internet at the highest safety. The **e-Wall** offers managed firewall services that provide solution against the attacks coming from Internet.

The applications of these systems allow working and doing administration in course of which the affected staff are not required to move from one place to another, and although the energy consumption is slightly higher, the employee does not have to move to one place to another, therefore savings can be achieved on the energy consumption of transportation and the emission of exhaust gases can be prevented. Some of the services is able to reduce paper consumption to minimum level, by putting electronic signature on the documents, and the document will be fully acceptable without printing and without the subsequent signature.

RESIDENTIAL SERVICES



In 2002 the fixed line subscribers of Matáv Group amounting to nearly 3 million, increasingly select ISDN providing high quality fixed line access, and ADSL service providing high-speed quick Internet access. Matáv was the first among the domestic fixed line service providers to enter the market with text message sending service which allows sending SMS messages by using suitable telephone sets.

In 2002 multimedia telephone sets were put into operation extending the service portfolio of public payphones. The new, versatile card phone equipment can be used for Internet and e-mail sending in addition to the phone calls.

MatávkábelTV – the second largest player of the cable television market increased its customers by 12.6%, provides services to nearly 339 thousand customers. Implementation of the Cable-net service providing Internet access on the cable network is the result of a successful cooperation with Axelero another subsidiary of the Group.

INTERNET SERVICES



In 2002 Axelero reinforced its market leading position in all the three segments of the Internet market (in the markets of

residential, business and content services).

With the fast roll-out of ADSL service providing broadband access, Axelero contributed to the growth of the Internet market.

By the operation of Internet markets, and shops Axelero has become the leading market player of the Hungarian inter-company e-market. Travelport.hu

travels portal achieved constant growth in 2002 in terms of number of visitors, in booking accommodation and air tickets, and also in the sales of travels. These applications are serving not only the comfort of user but contribute to the saving on natural resources and to the reduction of harmful exhausts and emission.



MOBILE SERVICES



A Matáv Group Company

Along with the launching of **Multimedia Messaging Service** (MMS, multimedia messaging for forwarding text messages, image and voice) in 2002 moving picture sending and video streaming services were also implemented.

The **m-learning** (mobile learning and education) service being currently implemented offers extensive opportunities for the newly developing stage of mobile communications.

The company has extended further the portfolio of online services: the customers can settle telephone bills on the web, and Westel – in cooperation with OTP Bank – implemented an SMS-based service which is unique in Europe, called **Mobilbank** service suitable for banking transactions. The customers using **Mobiliroda** (Mobile office) service can get access to their own company mailing and office systems in 24 hours of the day, starting from October 2002.



ENVIRONMENTAL ANALISYS OF THE PRODUCTS

In 2002 Matáv Rt. incorporated in its product development process the criteria of environmental analysis. It means that the aspects of environmental protection can be taken into consideration in the process of development of products and services, and based on the analyses the eventual bottlenecks can be sorted out, and positive features can be reinforced and subscribers can get subsequent information.

In the frame of a joint research work conducted with the University of Veszprém three products were analyzed.

Comparative analysis of traditional and web based tax returns

The purpose of the analysis was to learn through comparison the expected changes in the values of environmental burden by migrating from the traditional paper based local tax returns to the web based tax returns developed by the Matáv Group in accordance with the intention of the government. We analyzed three, basically different systems, and made the analysis by maintaining the following assumptions: The goal was in both cases the compliance with the regulatory requirement of filling tax returns. According to the initial status, i.e. the currently applied system the person required to fill the tax return would purchase the form sheet fills it in and upon filling in the form sheet submits it by posting or personally to the tax authority (A version). In this case the submitter of the tax return has the option of filing the document electronically, in this case the document is printed out by the staff person of the tax authority, and it will be registered after the tax payer signs it (B version). In the case of filling in the web based document (assuming that electronic signature is widely applied) we do not have to count on the environmental burden of the paper based document, as electronic recording is considered as defining. Recording of the data is made within the

COMPONENTS OF CO₂ EMISSION

Manufacturing of materials
 Energy consumption
 Transportation
 Combustion
 Total

CO₂ EQUIVALENT EMISSION DATA (G CO₂)

	A VERSION	B VERSION	C VERSION
Manufacturing of materials	205.0	146.7	18.0
Energy consumption	22.32	86.5	86.5
Transportation	688.5	864.0	-
Combustion	203.0	145.0	-
Total	1118.8	1242.2	104.5

When setting up the chart we used the data tables of US EPA as the basis of conversion

scope of authority of the particular local government. No paper-based tax return is made at all (C version).

In course of the analysis we found that the environmental load due to CO₂ emission is 90% lower in the case of the web based tax return than in case of paper

based tax returns. Till we have to note here that the most significant value is the highest value I represented by submitting the completed tax returns to the tax authority, which can be reduced by the application of a number of alternative means.



Comparison of business videoconference with the traditional meeting

This analysis was based on the 2001-year results. In our analysis we made the comparison of the environmental impacts (CO₂-equivalent) of an alternative application of videoconference with the environmental impacts of traditional business trips. We included in the sample of business trip travels by train, car and airplane.

As the comparison suggests, the conditions of videoconference are given, and if we select it as a communications channel, we can achieve substantial environmental savings, as its specific indicators are much lower than those of the business trips and meetings. Environmental pollution caused by business travels can be decreased substantially by replacing the business travels with videoconference, and in addition to that the participants can manage their time better, and will be able to perform their tasks at a higher standard. The analysis has been made on the basis of the following assumptions relating to usage:

- 500 partners use the videoconference service,
- it is operated 35 times a year on the average,
- 4 staff persons participate in the meetings,
- the conference takes 3 hours each,
- the distance covered to reach the venue of the meeting 800 kilometers.

SAVING ON CO₂ EMISSION IN CASE OF VIDEOCONFERENCE (KG)

Train	262,221.3	267,855.3	279,855.3
Airplane	112,180,655.4	112,219,855.4	112,303,855.4



As far as we assume domestic usage of the service, we can maintain the following assumptions regarding annual usage:

- 100 partners use the videoconference service,
- it is operated 25 times a year on the average,
- 4 staff persons participate in the meetings,
- the conference takes 3 hours each,
- the distance covered to reach the venue of the meeting 350 kilometers.

SAVING ON CO₂ EMISSION IN CASE OF VIDEOCONFERENCE (KG)

Car	1,813,608.6	1,815,043.6	1,821,434.9
Train	112,390.5	113,681.6	116,584.0

The above suggest that by using videoconference application a significant amount of CO₂ emission saving can be reached, which amount certainly depends on – among some others – the replaced distance and travelling method.





ENVIRONMENTAL AND OTHER IMPACTS OF INTERNAL PRODUCTS USE

Teleworking

Matáv has no employee working full time as teleworker, the number of those working in the Teleworking system has doubled last year, while in 2001 we had 130 teleworker jobs, in 2002 we registered 260 teleworker positions.

80% of the part-time teleworkers spends two days of the week in the office, 14% of them spent three days, and 1% of them 4 days in the office at the workplace.

According to the experiences the teleworkers are extremely satisfied with this solution as both the affected employees and the workplace supervisors find teleworking more efficient than the work in the office.

Online internal services

In September 2002 Matáv was the first in Hungary who launched Payroll, i.e. the **electronic payroll** system, which enables the employees to get immediate information about their wages on Intranet simultaneously with the transfer. By using the **electronic holiday** service the employees can check at any time the number of annual days, the days they consumed and the remaining days of holiday. In addition to the increased efficiency and quickness this solution will result in the saving of enormous amount of paper.

Videoconference for internal use

In 2002 we managed to save at Matáv 278,921 kms of traveling due to the initiative of registered videoconferences initiated by the employees. In 2001 same amount was 172,294 kms a day, which shows a 62% average efficiency based on the general habits of car usage at Matáv it means savings of 10,030 liter gasoline and 8,200 liter petrol. Using the UNEP factors, it represents prevention of 45.1 tons of CO₂ emission.

	PVC BASE + CHIP CARD	ABS BASE + CHIP CARD	ABS BASE PREPAID CARD
g CO ₂ emission (materials)	9.9	12.57	12.35
g CO ₂ emission (energy)	57.0	33.6	30.5
g CO ₂ emission (total)	66.9	47.17	42.35

Comparative analysis of the environmental impacts of phone cards

In the analysis we compared phone cards of various types. Two types can be identified, based on the features: these are chip cards and prepaid cards. The carrier plastic card of the chip card can be made of PVC and ABS in Hungary. Their environmental burden is as follows, projected to CO₂ emission:

The above table clearly suggests that in the future the PVC based chip card must be subject to negative discrimination in the future while there is no significant difference between prepaid and chip cards, mainly in case the replacement of chip card requires eventual technological change.



Major corporate social responsibilities relating to environmental protection and nature conservation



Matáv Group as the leading telecom service provider of Hungary is participating in the public life as donor in accordance with its economic role. Commitment to environmental protection, catching up of the small settlements in the field of informatics and telecommunications, supporting of the groups in disadvantageous position and support to public health are the key responsibilities assumed by the members of the Matáv Group which is also a vehicle of building social relations. Among the donations and supports that Matáv provided in 2002 in the area of environmental protection and nature conservation we are the most proud of our cooperation with the First Hungarian Antarctic Expedition.

The First Hungarian Antarctic Expedition – supported by the Hungarian Geographic Society and the Hungarian Academy of Science – set the goal of supplementing a Hungarian basic research program launched in 1998 with the contribution of Poland. The basic concept of the research was to learn and model the terrestrial changes, that took place after the ice age – a research theme that has not been covered to – date: the expedition aimed to research the new ways of life in the “frozen oases” – sites, where global warming is causing icecaps to melt.

The Hungarian research efforts are considered pioneering even at international level, as they represent substantial contribution to the research on the history of development of the Carpathian basin following the ice age. The expedition carried on its research work in the coastal oases to study polar fauna and flora in areas not covered by ice, in internationally protected “Outstanding Scientific Areas”, on the surface and inside the glacier cracks of King George-Isle.

Scientific results of the expedition may mean the first steps on the way where our country will have an impact on the management of the continent – which is considered an international territory. Matáv subsidized the

expedition with 6,5 million HUF and one of the Matáv services supported the Antarctic expedition on spot. The *comTr@ck* is basically a GPS- and GSM-based vehicle tracing and fleet management system that can trace any object or person by using a GPS receiver, and a multi-communication module the signals of which are received by the *comTr@ck* center. The *comTr@ck* team provided the Expedition with a GPS hand receiver, and an Iridium satellite telephone. This equipment provided significant assistance to the Expedition. For the incoming data there was a *comTr@ck* webpage made with the map of the island, where Hungarians could follow the activities of the Expedition.



In the frame of the corporate responsibility Matáv Rt. puts a special emphasis on supporting the Hungarian cultural life and mass sports. Matáv has been involved in the supporting of a number of health care institutions and social organizations through its donations. In 2002 the **Donation line** of Matáv was established as a new initiative – providing an opportunity to the collection of donations from the population on the phone. Hungarian Red Cross (Magyar Vöröskereszt), the Association of Hungarian Clowns for patients (Magyar Bohócok a Betegekért Alapítvány), and the Anti-cancer League (Magyar Rákellenes Liga) received the most subsidies through phonecalls.

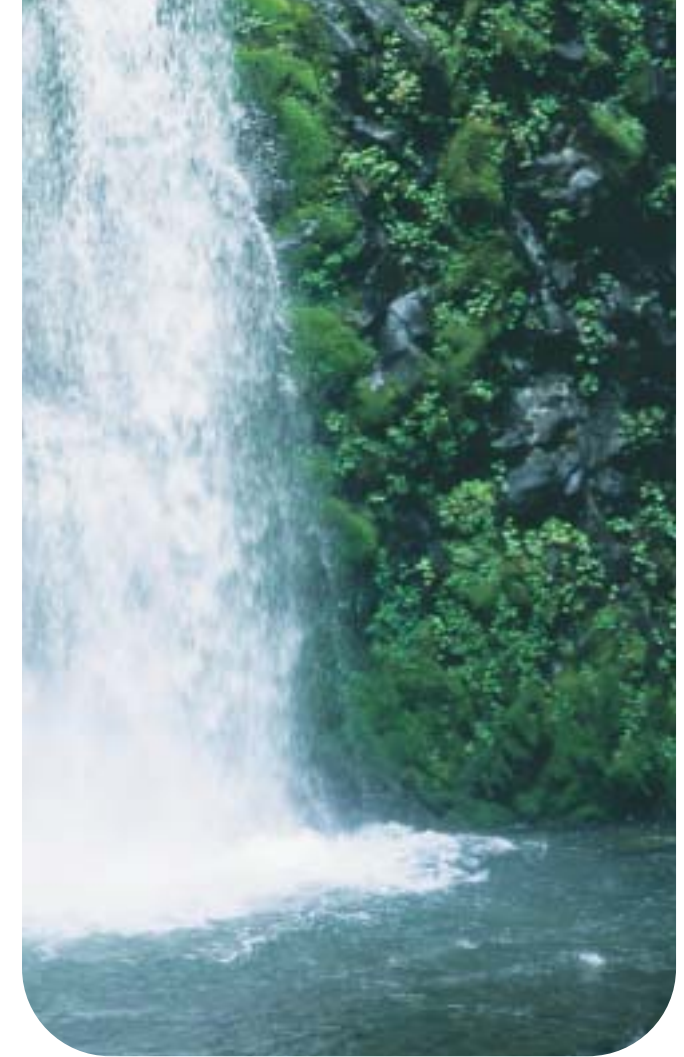
In August 2002 the customers of five Hungarian telecom companies – including Matáv and Westel contributed with 100 HUF per call to the support to be provided to families hit by the **flood on Danube**. As a result of the contribution more than 32 million HUF was collected. In September 2002 Matáv – together with Axelero and the Hungarian Academy of Science launched its **All Knowledge University** (Mindentudás Egyeteme) program. Lectures are held every week, when outstanding Hungarian scientists cover the issues of public interest relating to various scientific areas. The lectures can be accessed via phone, in the press, and on Internet as well.



Matáv Rt. is an ardent supporter of the wider proliferation of the information technologies and makes substantial efforts to **solve the digitally divide** of the Hungarian society, this is the reason for a computer awarding campaign was launched in 2002 in the frame of the donation activity. In 2002 Matáv replaced the most of its computer fleet. The scrapped computers – still being in good operating condition – were awarded to the local governments of small settlements, to provincial institutions of education, primary and secondary schools. Nearly one hundred institutions showing serious backlogs in terms of information technology got computers in 2002 through the donation of the company.

During the past years Westel continuously developed its relations with the various segments of the society. Participated in a number of scientific, cultural and sport events while it was committed to support people in need and those being in disadvantaged position. For example, in 2002 Westel was awarded the title of the “Outstanding donor of Hungarian Red Cross”, provided regular financial support to the Hungarian Maltese Charity Service, to International Children Saving Service, provided support and assistance to disadvantaged or sick children through the Hungarian organization of UNICEF and the Hand-in-Hand Fund (Kézzenfogva Alapítvány).

Through its communications technology the company provided assistance to the regions in trouble, and by supporting the activity of the Special Reconnaissance and Rescue Group of the city of Miskolc (Miskolci Speciális Felderítő- és Mentőcsoport) the name of the company became known internationally in the countries hit by earthquake and in protection against flood. The GSM Pro system of Westel provided serious assistance to those participating in the protection and rescue of the Tisza flood in 2002. Westel provided the affected organizations with mobile phones, and established temporary base stations in the areas hit by the natural disaster. Just like Matáv, Westel also established a **flood assistance line**, and other mobile carriers of the country also joined the campaign.



The Macedonian subsidiary of Matáv also played an outstanding role in international sponsorship activities. The most significant direct contribution of MakTel to the program of protecting our national heritage was the contribution to the reconstruction of the Samoilo fortress located in Ohrid. In addition to that the company also provided significant support to the summer cultural festival, the Jazz festival, various sports events, and contributed to the programs of the Macedonian National Philharmonics the Macedonian National Theatre, sports clubs, and children's events, and participated as the initiator and supporter of the roll-out of primary school Internet program.



Goals

GOALS/ACTIVITIES

TIME SPAN OF IMPLEMENTATION

COMMUNICATIONS (FOR TARGET GROUPS, BASED ON THE COMMUNICATIONS PLAN)

- Publishing the Annual Environment Report*
- Development of Sustainability Report*
- Organize environmental forums (internal and external) participation in external forums (min 2 each year)*
- Internal communication*
 - Changing the mindset of employees*
 - Group Environmental Coordination home page on Intranet*
- Publish the environmental benefits of our products and the results of the environmental projects*
- Communications on electro-magnetic radiation*

Continuous (1/year)
2006
Continuous
Continuous
Continuous
2005
Continuous
2004

ORGANIZATION

- Operation of a Group level environmental coordination organization*
- Development of the environmental organizations of the Group members, define their responsibilities*
- Operate the environmental organizations of the Group members*
- Implementation of the ISO 14001 management system with the organizations of significant environmental impact*
- Roll-out of the applications of environmental process supporting system (KörTe) within the group*

Continuous
2004
Continuous
2006
2006

INTERNATIONAL COOPERATION

- Development of European cooperation through ETNO*
- Support in other Central European companies, catching up of the Matáv subsidiaries*

Continuous
Continuous

PROCUREMENT

- Define environmental conditions, guidelines for procurements*

2006





GOALS/ACTIVITIES

TIME SPAN OF IMPLEMENTATION

WASTE MANAGEMENT

Development of complex waste management
 Reduce the amount of hazardous waste
 Reduce paper consumption
 Implementation of selective collection
 Application of replacement solutions
 Recycling, recollection (phone books, equipment)

2004
 Continuous
 2005
 Continuous
 2006

ENERGY CONSUMPTION

Implementation, application of solutions to replace travels
 Application, analysis of combined, renewable resources

Continuous
 Continuous

MINIMIZING OTHER ENVIRONMENTAL BURDENS

Define the areas of reducing environmental pollution, elaborate and approve guidelines
 Infrastructure sharing within the Group
 Optimization of operated telecom network

2004
 Continuous
 Continuous

ENVIRONMENTAL AND NATURE CONSERVATION IMPACTS AND OPPORTUNITIES OF THE PRODUCTS AND SERVICES

Implementation of elaborated methods for environmental impacts analysis in the group-level product development process
 Implementation of info-communications systems in the area of environmental protection and nature conservation

2006
 Continuous





Appendix

FACTORS, UNITS OF MEASUREMENT USED FOR THE CALCULATION:

	QUANTITY	CONVERSION FACTOR	CO ₂ CONVERSION FACTOR (UNEP)
DIRECT ENERGY CONSUMPTION			
Mineral gas	m ³	9.486 kWh/m ³	0.0002020 t CO ₂ /kWh
Fuel (gasoline)	l		0.00268 t CO ₂ /l
Fuel (petrol)	l		0.00222 t CO ₂ /l
INDIRECT ENERGY CONSUMPTION			
Electricity	kWh		0.000362 t CO ₂ /kWh

