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We do not inherit the Earth from our ancestors: we borrow it from our children

Last year the Hera group published its first Sustainability Report (hereafter the Report), which appears to be the most appropriate and advanced tool to fully integrate the three aspects of sustainability: economic, social and environmental. The present Report, which details the Hera group's activities in 2003, also presents the results of the first year of implementation of the three-year project aimed at the goal of achieving sustainability, and in particular of the Report, a Group management and communication tool.

The presentation adopts commonly used definitions and terminologies: terms normally "reserved to specialists" are defined in the clossary at the end of the Report.

For further explanation or information, you can visit our website www.gruppohera.it, from where you can download the online version either in Italian or English. Should this not suffice, you can directly contact the company organization concerned using the references provided here at foot. A CD ROM version is also available. Here you can find other company documents and resources providing further insight into corporate social responsibility.

We hope you enjoy reading our Report!.

Note for the reader

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The Hera group was established in 2002 following an integration process involving twelve multi-utility companies operating in the Provinces of Bologna, Forli-Cesena, Ravenna and Rimini: it is now one of the largest local public utility service operators in Italy, heir to a deep-rooted, wide-ranging and successful business tradition in the management of public utility services.

The establishment of Hera proved to the entire sector that it is possible to build a true "public utility service industry" in Italy, with the aim of consolidating current quality standards and improving them until they reach levels of excellence.

In order to achieve a company's goal, i.e., the creation of value in a socially responsible and ecologically compatible manner, a philosophy of long-term development must be guaranteed. This is possible if it can satisfy the demands of all interested parties, actively involving them in the process, Suppliers are partners of Hera: The Group can, and must, drive and stimulate the development of the best energies and skills present in the territory in which we operate. We want to establish the best possible relationship with customers, whose level of satisfaction with the services we provide must at least match their expectations. Customers provide feedback enabling Hera to better define its services, so that the company's dimensional growth and its new horizons for the creation of value can go hand in hand with an increase in the quality of life within the territory.

The results of the first financial period, 2003, were more than satisfactory and fully in line with the commitments undertaken: our excellent stock exchange performance and the exceptional market response to the publication of our 2003 results demonstrate that business expectations have been satisfied.

With regard to the environment, the number of our plants with environmental certification continues to grow; amid the intense and attentive discussion that characterizes our region and its traditions of citizen participation in public affairs, we have continued to develop designs and seek authorization, for important projects in the energy and environmental sector in which we plan to invest.

Naturally, the results that Hera achieved in its first year of life would have been impossible without the commitment, energy, competence and professional skills of all those who work with us. It can be asserted that a company creates value when its management is oriented toward the goal of sustainability. Its development must simultaneously consider three aspects, economic, social and environmental, in order to increase intangible resources at the basis of the value creation process. In fact, economic performance is closely linked to the level of social legitimization and to the efficient use of natural resources. As a result, sustainability is a strategic goal: a goal to be achieved with longterm economic development in line with the demands of social promotion and protection and compatible with the environment.

Tomaso Tommasi di Vignano Chairman of the Board of Directors



In the region and sectors in which the Hera group operates, the principles of sustainable development have for years represented a typical concern of local governments and one that guides their policymaking choices. Here the system of institutional, economic and social relations has introduced elements of environmental and social efficiency, anticipating issues that have now become extremely important to the public at large.

Hera aims to play a leading role in this context, fully accepting the challenge that its shareholders boldly launched in 2002 when they created the Group. assigning it the task of perpetuating the traditional efficient administration of local public utility services formerly provided by "municipal" enterprises. And the tool that was placed in our hands, as directors, had, and has, the objective of building a genuine service "industry". Now that the company has got off to a successful start, we must sharpen its capabilities, endow it with a vision and strength such as to make it a further tool at the service of the community, one that represents, thanks to its multiple offshoots, a "driver" of local economic and social development in full harmony with the environment. Balanced development depends on the capacity to deliver a valid response to all those who harbor legitimate expectations vis-à-vis the company. In order to fulfill these expectations and ensure effective and efficient management, a company must develop appropriate internal reporting methods that integrate economic, social and environmental aspects.

After drawing up its "Sustainability Report 2002" last year, and with the aim of achieving continuous improvements in its economic, environmental and social performance, Hera has launched a three-year project for the complete embrace of sustainability principles within its strategies. In this second Report we provide data on a Group level, which, in our view, bear highly educent testimory to our commitment to building a fully "sustainable" business.

The contents of Hera's Sustainability Report have been laid out on the basis of current international and national methodological guidelines. It is published together with an abstract, designed to reach a wider target, which also features the complete version on CD-ROM, plus additional company materials and documents relating to the subject of corporate social responsibility. The Report is also available on the Group's website (www.gruppohera.it) and employees, can access it through the company Intranet. I hope that all those who are directly or indirectly involved in our businesses will use this Sustainability Report to better understand our way of working, to give us constructive criticism and stimulating suggestions so that we can achieve new and rewarding goals for increasingly sustainable development.

Stefano Aldrovandi Amministratore Delegato

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Methodological premise

The Sustainability Report 2003 is the result of a process of continuous improvement both in the management of Social Responsibility in the Hara group and the consequent process of "integrated reporting" of social, environmental and business performance.

In fact, the Sustainability Report lends visibility to the management's commitment and efforts in promoting a harmonic development of the Group, such as to combine economic growth with Hera's social and environmental responsibilities toward different stakeholders.

Thanks to the social-environmental reporting procedures that the Group is progressively implementing in accordance with GRI guidelines (Global Reporting Initiative - "Informal Application of the Guidelines"), the accordance with curi gualerines (social regioning interwork) - informal representation of the 2003 Sustainability Report features some improvements compared to the first editor: — a new section dedicated to 'Dialogue with stakeholders'; — refinement of the section dedicated to the governance of sustainability; — progressive extension of the scope of reporting to include other Group companies;

- enrichment of the sections dedicated to social and environmental performance, with the inclusion of new indicators.

The Hera group's Sustainability Report 2003 references the following:

- Account Ability 1000 (drafted by the ISEA), guidelines for social reporting which focus special attention on stakeholder involvement: the Sustainability reporting guidelines 2002, drawn up by Global Reporting Initiative for the assessment
- of the economic, environmental and social performance of businesses, from which it has derived the relevant indicators;
- the principles for drawing up the Social Report 2001, set forth by the Social Report Study Group (GBS). The Sustainability Report 2003 is divided into seven sections, preceded by a Methodological premise and followed by a certification of conformity:
- + methodological premise: a description of the postulates and principles adopted to guide the
- corporate identity: explicit expression of the basic values which guide, together with the mission, the strategic design and choices of action. The institutional and organizational characteristics of the
- Group are also highlighted:
- governance of sustainability: the Hera group and Sustainable Quality. An illustration is given of the Group's sustainability principles and the main systems for managing quality, environment, safety and social responsibility. This section outlines the governance model adopted by the Group to manage

- Social Responsibility: based on the methodological approach of "Total Responsibility Management", Hera calls it "Sustainable Quality"
- economic performance: a report disclosing the economic resources produced and the method of calculating and distributing value added according to the Phinoples of the Social Reporting Study Group; 4. social performance: a report on social relations, i.e. a qualitative and quantitative representation of
- interactions with the main stakeholders (employees, shareholders, customers, suppliers, financial providers, institutions and communities); 5. environmental performance: the environmental dimension, i.e. a description of the processes and
- main environment related aspects of the Group defined according to the method proposed by the Fondazione Eni Enrico Mattei, which analyzes environmental performance by identifying the resources.
- consequence in the processing with a resigner environmental performance by beinging the resources utilized, characteristics of the process and consequent messions;
 6. dialogue with stakeholders: sn-kyrg system designed to assess whether the gutainability Report is sufficiently clear, complete and understandable. The suggestions for improvement proposed by salekholders included in the process are gathered for the purpose of monitoring satisfaction and batter orienting future management choices:
- 7. improvement objectives, 2003 results and future commitments: a programmatic outline of the improvement objectives set for each category of stakeholders, with information on the results achieved
- + Certification of procedural conformity: issued by KPMG, evidence that the reporting process
- conforms to the applicable standards and "best practices".
- Scope The Group has committed numerous resources and energies to implement a system for collecting social and environmental data and information relating to its subsidiaries, in order to prepare a Sustainability Report embracing the main Group companies. Unless otherwise specified, the data and information
- report entration of the main circulo companies. Onless otherwise specified, the data and information contained in the Sustainability Report refer to Hera and the Group companies consolidated with the integral method as at 31/12/03. More specifically:
- Information of a strategic, organizational and programmatic nature refers to the Hera group;
 the data and information related to economic performance have been drawn from the Group's.
- Consolidated Einancial Statements:
- the data and information relating to social and environmental performance, unless otherwise specified, refer to Group companies consolidated with the integral method and have been acquired from sources
- other than accounting records.
- Finally, it shall be noted that the terms Hera, Company, Enterprise and Group refer to the Hera group as a whole.









< Group ownership structure









The Hera group: origins and main stages of development

The Hera group came into being at the end of 2002 following one of the most ambitious and complex merger operations ever achieved in Italy in the public utilities sector. It is one of the largest local utility groups: Italian leader in the environment sector in terms of waste treatment capacity, it ranks second in the domestic gas industry and among the top five in the water sector. The process of aggregation leading to the creation of the Hera group was founders, which was to build a modern enterprise capable of combining the creation of wealth with environmental protection and of fulfilling the legitimate expectations of all stakeholders.



Population served: 2 million Number of employees: 4,428 Value of production: 1,331.3 million euros Costs for raw materials and services: 829 million euros Gas customers: 700 thousand Water customers: 640 thousand Environment customers: 1.749 million Gas sold: 1,634 million m³ Electrical power sold: 1,628 GWh Water sold: 180 million m³ Waste collected: 1.1 million tonnes Waste treated: 2.4 million tonnes

The key numbers for Hera (2003)



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Purchase of goods and services 40%_

2003 and 2004: the present

Today the Hera group operates in about 140 municipalities in the region of Emilia-Romagna, belonging to the provinces of Bologna, Rimini, Ravenna and Forli - Cesena. This territory boasts a gross product and per capita consumption that are among the highest in Europe. High quality, extensive local public utility services have always been a hallmark of economic and social development here.

As of 1 January 2003 the following companies have been operational: Hera Bologna, Hera Rimini, Hera Ravenna, Hera Forlì-Cesena, Hera Imola-Faenza (wholly owned by the parent company Hera S.p.A.). These local utilities engage in the main activities related to the management of networks, plants and waste collection, attentive to the needs of customers in their respective target territories. The process of reorganization continued throughout 2003 with the consolidation of the operations of Geat SpA, a provider of environmental and public lighting services in the municipality of Riccione and neighboring towns, and the purchase of a 42% stake in Agea S.p.A., the former municipally-owned utility of the city of Ferrara. These steps confirmed the validity of the Group's model of territorial expansion and served to complete a basic territorial strategy that has resulted in approximately 10% growth in terms of volume and population served. In October 2003 the Group also reached an agreement with the Swiss Atel corporation to buy electricity for distribution in the regional market of noncaptive customers.

This fifteen-year agreement will enable the Hera group to become an important player in the electricity distribution market and to exploit, in particular, the so-called "Dual Fuel" marketing policy, which combines the sale of gas and energy on the free market. Today Hera is a multi-utility that operates in the following sectors of activity, in a territory with

over 2 million residents:

- -energy: gas (distribution and sale of natural gas and LPG) and electricity (distribution and sale):
- -integrated water cycle: collection, adduction and distribution, sewers and wastewater treatment;
- -environment: operative environmental services (waste collection and transport, segregated collection and street sweeping) and waste treatment (recycling, waste-toenergy treatment and disposal);

1 Forfi, strolling under the porch.

- other services: district heating, public lighting, cemetery services and other complementary services.



Factors influencing definition of Hera group's strategic plan:

- + liberalisation of markets
- + aggregation of public utilities
- + territorial planning and energy policies
- + rate and financing policies and efficiency of public service operators
- + decrease in public transfers
- + technological evolution
- + customer demand for higher quality
- + plans for sustainable development (local Agenda 21s,
- environmental certifications of local authorities)
- + planning strategies deriving from climatic changes
- + growing public awareness of environmental matters

The reference context

Changing laws, technological progress and growing customer demands for new, efficient services have brought about a progressive transformation in the competitive context in which public utilities operate. In the new competitive context, the utility service providers will no longer be local authorities, which will instead have the task of regulating contract assignment procedures. This trend was confirmed by art. 35 of the 2002 finance act, which calls for a separation between infrastructure ownership-management and service provision as well as the awarding, through open tenders, of contracts for the management of utilities for which it is physically possible to divide the network from the service.

However, the legislative framework is not yet fully defined: in fact, a sentence recently passed by the Council of State (Section V sentence 679/04) legitimizes the direct assignment of public utility services to wholly publicly owned stock corporations, reflecting a change in course from the previous law no. 326/03. The sentence regards services having an industrial relevance, which since 19 February 2004 have been newly defined as services of "economic relevance".

2_Bologna, relax in the city center.



The gas market is mainly regulated by the "Letta Decree" of June 2000 (Legislative decree no. 164/00), which implemented Directive 98/30/CE regarding the creation of a European natural gas market. Under this decree all consumers are free to choose whom to buy gas from. The definition of rates is left up to the Electricity and Gas Authority (AEEG): to encourage competition, it has imposed new information requirements on sellers as well as instituting a "gas exchange" modeled after the one already existing in the electricity sector. The "Bersani Decree" (Leg. decree no. 79/99) governs all aspects of the electricity market:

- production: no company can control more than 50% of electricity production in Italy;
- transmission: grid ownership is assigned to TERNA, distribution to the National Grid Operator (GRTN);
- sale: end users were broken down into "non captive" customers (who may purchase energy on the free market) and "captive" customers (not in a position to buy on the free market), with the institution of an energy exchange.

The water sector is mainly governed by law no. 36 of 5 January 1994 ("Galli Law"), which aimed to overcome the fragmentation of utilities in the water sector by launching a reorganization of water services and industrialization of the system through the creation of Optimum Territorial Areas (OTA). In Emilia-Romagna, in implementation of Regional Law 25/99 "Definition of optimum territorial areas and regulation of the forms of cooperation among local authorities for the organization of integrated water services and municipal solid waste management services", the Regional council appointed a Regional Authority for the Supervision of Water and Municipal Solid Waste Management Services. This Authority relies on a monitoring system, collaborates with the advisory committees of users and interfaces with the Optimum Territorial Area Agencies. •

The fundamental regulatory guidelines in this sector are still based on Leg. decree no. 22/97 ("Ronchi Decree"), which pursues such objectives as:

- definition of optimum management districts, coinciding or lie within OTAs;
 unified management of the entire cycle within the defined optimum areas;
- environmental impact reduction;
- promotion of segregated waste collection;
- cost-effective, efficient, effective service management,

Regional Law no. 25/99 assigns the OTA Agency functions related to regulation and control of the integrated water system and municipal solid waste management service within the provincial territory. Its main functions are:

- determining the area tariff and rates structure;
- specifying service demand;
- drafting and approving a program of intervention, budget plan and organizational and management model;
- carrying out the procedures for contracting out services;
- monitoring the service provided to the management authority in accordance with the specific terms contained in the contract;
- administering the instrumental means entrusted to it by local authorities;
- defining service quality standards;
- gathering data and information about services provided to promote more active user participation.

The OTAs Hera interacts with are:

	No. of municipalities	N° of residents (ISTAT 2001)				
OTA Rimini	20	274.669				
OTA Ravenna	18	352.225				
OTA Forlì-Cesena	30	356.659				
OTA Bologna	60	921.907				
The changing scenario of social responsibility in the utilities sector						

1.2.1 Energy Sector

1.2.2

1.2.3

Water Sector

Environment Sector

The Optimum Territorial Area

(OTA) Agencies

2.3

Values and principles of conduct

Focus on People

resources.

The Group undertakes to respect the rights and physical, cultural and moral integrity of all the women and men with whom it interacts. The focus on people is expressed through the value the Group places on those who work for it (whether employees or individuals with whom it has other working ties), the attention it devotes to customer needs and demands, its concern for shareholders and transparency in relations with the latter, correctness and transparency in dealing with suppliers and government agencies and active involvement in the social life of the Community.

On February 16th 2004 the Board of Directors approved a Group Code of Ethics, designed to provide partners and stakeholders with guidelines whose observance is of fundamental importance for the attainment of Hera's social and business objectives. Emphasis is laid first of

all on the value of focusing on people, since lasting economic growth can be guaranteed only by combining efficient and effective business management with a sustainable use of

Sustainability

The Group works through dialogue open to the legitimate expectations of all stakeholders. In particular, it promotes participative dialogue with all local authorities, institutions and consumers' associations to work together to improve the quality of life of citizens and protect the natural heritage of the territories in which it works.

Focus on the environment

Hera manages its activities with an eye to protecting the environment. It has set itself the goal of achieving continuous improvement in this particular area, also in view of the environmental impacts resulting from the company's activities.

Fairness and impartiality

In its relations with different stakeholders, contacts with the community and government agencies, communication with shareholders, personnel management and organization of work and selection and management of suppliers, the Group avoids all forms of discrimination based on age, sex, health, race, nationality, political opinions and religion. In short, the Group is committed to acting in a fair and impartial manner and adopts the same behavior toward all those with whom it comes in contact, though the forms of interaction and communication may vary depending on the nature and institutional role of the parties concerned.

Honesty

The Group is constantly committed to observance of the law and to developing programs and procedures such as to ensure its application and enforcement.

Effectiveness and efficiency

The Group undertakes to constantly improve the effectiveness and efficiency of its company processes by formulating and implementing service quality improvement plans and adopting technological and organizational solutions aimed at combining fulfillment of the needs of the communities served with efficient, cost-effective management.

Transparency

The Directors, employees and outside personnel engaged by the Group undertake to supply complete, accurate, adequate and timely information both outside (Authorities, market, users) and within the company. Information is transmitted in a clear, simple manner, normally through written communications.

Confidentiality

The Group assures the confidentiality of all personal and sensitive data in its possession. Directors, employees and outside personnel engaged by the Group are forbidden to use confidential information for purposes not related to the performance of their job. \bullet

Mission

Hera aims to create value by optimizing the infrastructures it manages, set up for the provision of public utility services, in order to combine business expansion of the Group with sustainable development of the territory.

This underlying philosophy is expressed in the Group's mission statement:

"To conquer a market position that enhances the value of plants, networks and experience in the core business areas of the utilities taking part in the merger; increase the value of the Group and its competitive capabilities, by seizing the opportunities that will arise as a result of market liberalization.

Create a "Hera system" by forming synergies and maximizing resources within a better cost/quality ratio, and ensuring additional margins of growth and development.

Combine the ability to successfully meet market expectations with the objective of always offering responses suited to the needs of consumers/customers, ensuring the quality, continuity and safety of services, respect for the environment and an ongoing relationship with the local territory.

Develop core business activities in territories neighboring the current geographical area of reference that offer the potential for achieving economies of scale and synergies of scope in the short-medium term."



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Strategic orientation

The Group's strategy can be broken down into macro-objectives: operational, development and sustainability objectives. The success of the Hera model depends on a harmonic application of these three macro objectives.

Operative strategy

Continuation and completion of the program to streamline and maximize operational processes, to take full advantage of the integration process by achieving economies of scale and scope

Growth and

development strategy Further development of business in the main reference areas (gas, electrical energy, water and environmental services), taking advantage of liberalization in the Hera group's fields of activity

Sustainability strategy

Ensure that the Group's growth is sustainable in economic, social and environmental terms

The Group's strategic development in 2003 was consistent with this approach; in fact it: — worked to transform the utilities involved in the merger into a single entity through a process of reorganization that capitalized on the experience of each of the twelve companies joining to form Hera: we need only consider the effort made to complete the integration of organizational, accounting and management functions. By the end of 2003, all the operative companies had successfully completed implementation of the new SAP/R3 information / accounting system. Progressive upgrading of the information system

3_Brisighella, the railroad. 4_Cattolica, Potability plant. continues and in 2004 the Group has launched a project for a new customer system (SAP IS/U and CRM by Siebel), which, besides being integrated with SAP/R3, will enhance organizational and commercial efficiency and favor a yet more effective response to needs within the territory;

— began implementing the Group expansion strategy outlined in the industrial plan by acquiring a 42% stake in Agea, a utility based in Ferrara. The Group's goal is to continue seeking new opportunities for growth through companies operating in neighboring territories, preferably according to the multi-utility model, which are open to complete integration with the Group, have economic and financial situations in line with Hera's and offer a significant potential for the creation of synergies.

It is important to highlight that, despite the numerous priorities tied to the Group reorganization process, the management have considered social responsibility and sustainable development to be an overriding strategic objective. In future years the Group's strategic plans will be aimed at:

- further exploiting the important synergies resulting from the recent merger, through an optimization of costs and management processes;
- enhancing its intangible assets such as human capital, relational networks, its reputation as a responsible player and its structural capital;
- investing in activities consistent with the sustainable development policies the Group has espoused;
- increasing turnover by offering customers a vast range of services and optimizing the
 opportunities arising from the multi-utility business. The "Dual Fuel" policy (offering
 customers an integrated supply of electricity and gas) launched during the year represents
 a first significant outcome of this strategy;
- expanding production capacity in all core business sectors through the implementation of a plan that provides for one billion euros in investments over the next five years;
- expanding current waste-to-energy conversion capacity (in combination with the production
 of electricity under the incentives system, CIP 6 and green certificates) and increasing the
 electrical power production capacity (through the construction of two combined-cycle
 plants with an overall capacity of 310 MW and financial investments in "Generation
 Companies", such as Tirreno Power and Calenia Energia).

Consistently with its strategic orientation, the Group has continued its intense engineering activities and initiatives to gain authorization for strategic plants included in its industrial plan. At the end of April 2004 the situation stood as follows:

- 80 MW cogeneration plant in Imola: requests for the statement completing the Environmental Impact Assessment (EIA) application are expected. The official outcome of the EIA is likely to be known by the end of July;
- + 230 MW combined-cycle plant in Rimini: the last utilities conference may be announced by the end of June. The official outcome of the EIA is expected to come within the following two months;

SB

- Forli waste-to-energy plant: a request for the environmental statement has been received from the Province of Forli-Cesena. A final response on the EIA is expected by the end of May;
- + Ravenna waste-to-energy plant: the documentation relating to the Environmental Impact Study and Final Project is being completed. A request for an EIA would be submitted immediately thereafter;
- Faenza "CDR" waste-to-energy plant: the Environmental Impact Study and Final Project have been completed. An EIA application and environmental statement will be submitted shortly;
- Rimini waste-to-energy plant: the Environmental Impact Study and Final Project have been completed. An EIA application and environmental statement will be submitted once the Province of Rimini has adopted the Inter-provincial Waste Management Plan.

We shall also point out the importance of investments connected to the Regional Telematic Plan for the construction of fiber optic infrastructures and the provision of management services for the "Emilia-Romagna Local Government Network". These investments, backed by a substantial contribution of regional funds, will enable construction of a computer network joining all local government organizations within the region, and in particular within the Group's target ferritory. The subsidiary Acantho has been appointed to manage this project.



Organization chart

1.5.1 Institutional structure Hera is the only Italian multi-utility company with a diversified ownership structure that ensures the stability of the company's governing bodies. Following the success of the public offering that took place on 26 June 2003, 55.5% of the shares are held by government bodies (Municipalities: the largest shareholder is the City of Bologna with about 19.7%) and the remaining 44.5% are free-floating shares.

At the time of the public offering, the ownership structure was characterized by the lack of a single controlling shareholder – a typical trait of all other Italian multi-utilities – and a significant presence of institutional investors (see breakdown in section 4.2).

In 2003 Hera completed the complex process of internal reorganization: the rooting of public utilities within their territory became the distinctive feature of a business model which concentrated the strategies and all the activities for which economies of scale could be achieved in the holding company and maintained and locally reorganized, through the Territorial Operative Companies, the operational activities entailing an ongoing relationship with customers and their need for efficient services.

The main central services have been reorganized by the General Management, which has set up a streamlined organization with a strong focus on the objectives of improving profitability and expanding business.

The model adopted is based on an "open business formula", which may be further replicated, thus allowing new member companies to acquire a role and take part in overall Group management while maintaining a local organization capable of fully interpreting the needs of their respective territories. Being able to draw on the "best practices" established at a Group level and benefit from the synergies created, they can assure a high standard of quality.

The main responsibilities were divided up between the Holding Company and the Territorial Operative Companies at the end of a management assessment process which identified the best professional assets in the merged companies; all the key figures boast longtime experience in the sector.

At the start of 2003 all the operations related to water, gas distribution and environmental services (waste collection and sanitation) were reorganized and assigned to the five Territorial Operative Companies, wholly controlled subsidiaries of Hera.

The sale of gas and electricity has been concentrated in Hera Comm., also to comply with corporate laws providing for the separation of distribution and sales.

The present Group configuration is also the result of an intense reorganization of share capital investments in 2003: shareholdings were combined, subsidiaries merged and, to a lesser extent, stakes no longer considered of strategic value were disposed of. By the end of 2003, the Group had rationalized its share capital investments by selling 17 subsidiaries, liquidating 7 companies and merging 4 companies into other subsidiaries. The rationalization process is still underway, with further disposals planned.



1.5.2

Organizational structure











pages 32-33: Bologna, Via dell'Archiginnasio; 34-35: Rimini, relax in Piazza Cavour; 36-37: Imola, sunday morning in the city center.







Corporate social responsibility in the Hera group

For Hera, being a socially responsible company means adopting a business model that can successfully balance financial and growth objectives on the one hand with satisfaction of the legitimate expectations of stakeholders and development of the territory on the other.

Businesses are becoming increasingly aware that commercial success and benefits for shareholders cannot be achieved simply by maximizing short-term profits, but rather that responsible behavior is necessary in order to strengthen economic growth and competitiveness without causing damage to the environment and protect the interests of customers, workers and all those with whom they interact. Support for this claim comes from a recent study conducted by the Australian government, which shows that the economic interests of shareholders and the social and environmental interests of all other stakeholders tend to converge in the medium and long term.

For the Hera group, being socially responsible means acting in such a way as to combine the three aspects of sustainable development:

- + economic responsibility: acting in such a way as to ensure that business decisions do not only serve to increase the company's value in the short term but also guarantee long-term continuity through the application of an advanced model of corporate governance. The economic dimension involves the ability to generate income, profit and work; economic balance in the industrial management of the services rendered by the Group represents an unrelinquishable objective of sustainable development;
- + social responsibility: promoting an ethical business conduct and simultaneously fulfilling the legitimate expectations of different stakeholders in accordance with shared values. Social sustainability, defined as the ability to ensure fairly distributed well-being and growth opportunities in the territory, and the ability to respect human and labor rights, relates directly to the everyday business of a company such as Hera that provides essential public services;
- + environmental responsibility: producing while minimizing the direct and indirect environmental impact of production processes so as to preserve the natural environment for the benefit of future generations. The environmental dimension of sustainable development refers to the capacity to maintain the quality and reproducibility of natural resources; this implies the need for a company to take into account the different environmental concerns within its territory, for example by tapping water sources in places

where this action will cause the least environmental impact (subsidence) and thus allow groundwater reserves to be replenished.

The three dimensions of responsibility represent the foundation of Hera's actions, which follow a logic consisting in an integrated systemic approach within the territory it operates in. This is expressed at the environmental level through the presence of specific plants located in various parts of the territory but which act for large portions thereof. For example the solid waste collected in over twenty municipalities of the central Province of Bologna (including Bologna) is treated in large plants located in the municipalities of the Bologna plants located (Granarolo, Baricella, etc.); part of the sludge produced by the Granarolo plant is disposed of at another plant located in Castel Maggiore. Equally, much of the liquid waste produced in many municipalities in the surrounding area is treated at the large plant in the provincial capital, Bologna. The systemic principle is manifested in the economic dimension where, for example, the high concentration of users in the provincial capitals makes it possible to apply "area" rates, thus attaining economies of scale in management, which in turn allow modest rates to be applied even in areas with a lower user density. Finally, it is evident in the social dimension through the application of reduced rates to various categories of disadvantaged users.



Concerning corporate governance, the Group has adopted codified procedures adhering to the guidelines contained in the Italian Stock Exchange Code of Conduct. In 2003, after the company was listed on the stock exchange, three new directors were elected to represent minority interests.

Board of directors

2.2

Corporate

3_The Council Room in Hera headquarters, Viale Berti Pichat, Bologna.

The procedures for appointing the Board of Directors are laid down in article 17 of the articles of association, which assign the following rights:

- City of Bologna: 4 board members
- Province of Bologna (on behalf of 47 other municipalities): 1 board member
- Con.Ami: 1 board member
- City of Ravenna (and on behalf of 11 other municipalities): 1 board member
- City of Forlì: 1 director
- City of Rimini (and on behalf of 26 other municipalities): 1 board member
- City of Cesena (and on behalf of 25 other municipalities): 1 board member - Private investors: 3 board members

Functions Under the articles of association, the Board meets at least on a guarterly basis or every time the Chairman judges necessary; the Board of Directors is endowed with broad and unrestricted powers for the ordinary and extraordinary administration of the company; it is empowered to carry out all such actions as it deems necessary and expedient for the purpose of achieving the company's goals, except those placed specifically under the shareholders' responsibility. The Board of Directors met 25 times in 2003.

Composition

During the general shareholders' meeting of October 16th, 2003 it was decided that the board would be made up of 13 members, 11 of whom independent non-executive directors.

Board of directors

Office	Name and Surname	
Chairman	Tomaso Tommasi di Vignano	Independent non-executive director
Managing Director	Stefano Aldrovandi	Executive director
Vice Chairman	Aleardo Benuzzi	Independent non-executive director

Vice Chairman	Ermanno Vichi	Independent non-executive director
Board Member	Enrico Biscaglia	Non-executive director
Board Member	Filippo Brandolini	Independent non-executive director
Board Member	Piero Collina	Independent non-executive director
Board Member	Pier Giuseppe Dolcini	Independent non-executive director
Board Member	Gianluigi Magri	Independent non-executive director
Board Member	Nicodemo Montanari	Independent non-executive director
Board Member	Fabio Roversi Monaco	Independent non-executive director
Board Member	Roberto Sacchetti	Independent non-executive director
Board Member	Giovanni Tamburini	Independent non-executive director

The present Board of Directors will remain in office until the approval of the annual report for the year 2004. In the performance of its duties the Board of Directors is aided by 2 technical committees: the Pay Committee and the Committee for Internal Control.

Pav Committee Functio

It has the task of submitting proposals to the Board of Directors for the salaries to be paid to the Managing Director, Chairman and Group managers who hold special offices. In addition, based on the indications furnished by the Managing Director, it sets down general criteria for the salaries of managers, though the task of defining the policies and levels of management pay rests with the Managing Director. In 2003 the Committee met only once.

Composition

The Committee is made up of 3 directors: the Managing Director and Chairman of the Board of Directors can take part in committee meetings on the express invitation of the committee chairman.

Onice	Name / Sumame
Chairman	Aleardo Benuzzi
Member	Piero Collina
Member	Gianluigi Magri

Committee for Internal Control

Function

It has advisory functions and is made up of non-executive directors, a majority of whom must be independent. It has the task of evaluating the reliability of the internal control system in order to assure the efficiency of company operations, as well as the reliability of financial information, compliance with laws and regulations and the safeguarding of company assets. Specifically, the Committee for Internal Control: - assists the Board of Directors in fulfilling the above-described duties;

- assesses the work plan prepared by the internal controllers and receives periodic reports from the latter
- assesses, jointly with the company's administrative directors and auditors, the suitability of the accounting principles adopted and their consistency for the purposes of preparing the consolidated financial statements;
- evaluates the proposals formulated by independent auditing firms seeking appointment as well as the working scheme set out for auditing procedures and the results presented in the report and letter of recommendations;
- reports to the Board at least every six months, on the occasion of the approval of the semiannual report and interim financial statements, to illustrate the activities conducted and its opinion regarding the efficiency of the Internal Control System.

Composition

the Committee is made up of 3 directors. The participants in its meetings include the Chairman of the Board of Auditors or another auditor appointed by the latter and, upon the express invitation of the committee chairman, the Managing Director and Chairman of the Board of Directors. The Committee for Internal Control met 6 times in 2003.

Office	Name / Surname
Chairman	Ermanno Vichi
Member	Enrico Biscaglia
Member	Fabio Roversi Monaco

SB

2

Internal Auditing Function

In order to fulfill internal control requirements according to the guidelines set forth by the Code of Conduct for companies listed on the Italian stock exchange (so-called Preda Code), to which the Board of Directors of Hera formally adhered in a resolution adopted during the meeting of April 4th 2003, the Managing Director has instituted, via a specific service order, an Internal Auditing function, which is placed directly under his supervision and reports to the Chairman of the Board of Directors.

The Internal Auditing function provides independent, objective assurance and advice aimed at improving the effectiveness and efficiency of the organization. It aids the organization in attaining its objectives by means of a systematic, professional approach that generates added value since it is geared toward improving control, risk management and corporate governance processes.

Thus Internal Auditing is part of the internal control system, understood as a complete set of organizational structures, activities and rules designed to ensure, with a reasonable degree of reliability, the achievement of a company's main objectives in terms of business and production (operational efficiency and effectiveness), information (transparency and reliability of information flows both outside and inside the company) and conformity of behavior with applicable standards

The internal control system and internal auditing function thus offer an opportunity for attaining the organization's goals.

The Internal Auditing function of Hera SpA is designed to benefit the whole Group; it provides services to the holding company and its subsidiaries.

Risk Management

The adoption of a structured, solid risk management system within Hera makes it possible to document and illustrate the company's risk profile in tangible form, thereby permitting a dialectical exchange between insurers and the company itself.

Risk Management is based upon a systematic, non-stop control process designed to confront and overcome business risks. Its practical implementation typically involves such aspects as risk awareness, identification of hazards, risk analysis, risk management and handling and control / verification of Risk Management policies.

In January 2004 Hera set up a Risk Management & Insurance function within its organizational framework. It represents the concrete implementation of Group policies aimed at keeping risks under control and assuring an increasingly efficient management to protect company assets.

The insurance needs of the Hera group are met by a pool of major insurance companies that have formed a joint venture. The insurance program was assigned by open tender, has a threeyear term and was formulated on the basis of a previous risk analysis, for which outside consultants were also called in. The result is an insurance coverage package tailored to the company's specific needs and designed to protect company assets, cover general liability risks and protect individuals.

Compagnia Assicuratrice Unipol S.p.A Accitational a Accientrazioni d'Italia S n A Assicurazioni Generali S.p.A. Assicurazioni Generali S.p.A. Milano Assicurazioni S.p.A. Riunione Adriatica di Sicurtà S.p.A.

management

Sustainable

Responsibility:

of Social

Quality

2.3 In the Hera group Corporate Governance also represents the mainstay of the Quality, Safety and Environment management system (QSE system). Strategic

In the Italian context, the Group is developing an original and innovative approach defined Sustainable Quality, which integrates the basic principles of Total Quality Management with the principles of "Total Responsibility Management (TRM)".

- integration of responsibilities for economic, environmental and social performance; - involvement of all stakeholders in the continuous improvement process;
- awareness about basic values, strategies and actions aimed at the attainment of objectives; assessment of problems and risks, with the implementation of integrated initiatives for improvement:
- integration of the social responsibility management system into existing strategies and management practices;
- definition of a learning system to provide management with guidelines and a structure that encourages responsible practices:
- transparent reporting of economic, environmental and social impact and performance;
- enhancement of human capital;
- promoting responsible leadership.



auditing and measuring system sustainability indicators ongoing learning Internal analysis, adapted from Waddock-Bodwell, From TQM to TRM, 2001

The approach to Total Responsibility Management is founded upon three well-defined elements: 1) definition of the concept and system of responsible leadership;

- 2) integration within management strategies and processes;
- 3) training, monitoring, auditing and reporting.

Within the framework of this approach, a specific system has been devised with the aim of satisfying the Management's information requirements, which largely depend on critical management processes and the drivers of value, which are in turn tied to the critical factors of success and corporate risk factors. The critical factors of success are the elements necessary in order to perform effectively and achieve better results than competitors while the risk factors are events whose manifestation may prevent the company from attaining its strategic goals. As highlighted by a recent study conducted by the IMD (International Institute for Management Development - Lausanne, Switzerland) in conjunction with the Forum for Corporate Sustainability Management, in the utilities sector, sustainability objectives are the fundamental drivers behind the creation of value

At Hera this process is implemented by means of a planning and control procedure that begins by identifying business risks and opportunities. To this end, the Hera group has deemed it to be strategically important to maintain tight integration between operational planning and control activities and QSE planning and control activities, according to a logic of continuous improvement and strategic thinking. The aim is to increasingly integrate social responsibility management within the Group's strategic planning process.

The Hera group's Industrial Plan represents an opportunity to focus on defining strategies and objectives that make it possible to maximize the creation of value. The Industrial Plan is updated yearly and sets the outlook for the upcoming five years. It is a document that begins by introducing the competitive strategies at the corporate as well as business sector levels. It then goes on to illustrate strategic choices, the actions to be carried out in order to achieve objectives, and the evolution of expected outcomes. Sustainable quality objectives have been identified as an integral part of Hera's strategy serving to complement the Group's business and financial objectives. They include:

- building a reputation for reliability, efficiency and sustainability;
- enriching human capital;
- reducing risks;
- enhancing plant and network assets in the core business areas;
- making a tangible contribution to environmental protection;
- disseminating a business culture coherent with the guiding principles and values;
- dialoguing with stakeholders.

In pursuing these objectives, the Group is particularly careful to identify the right balance between the use of resources and the long-term patterns of resource availability, from both a qualitative and quantitative standpoint. The identification of these objectives is tied to a process aimed at sustainability, in which KPIs (Key Performance Indicators) are defined for each strategic objective; the balance between benefits for Hera and benefits for stakeholders is another criterion by which performance is judged.

Creation of value and strategic sustainability objectives

ŝ

sustainability on the creation of value				
Opport	creation of value	+ Investment funds attentive to Company's Social Responsibility Greater legitimisation, higher reputation + Potentials deriving from GHG (exchange of greenhousegas emission rights)alues		
unities	conservation of value	+ Certifications demanded by the market (for exampleISO 14000 certification) + Coverage of potential risks (for example, application of Leg. Decre 231/2001) + Adjustmento demands of Institutions		
Risks	limitation of value	+ Excessive pressure on purchasecosts, underestimating supplier quality and reputation and partnership possibilities + Scarce growthin human resources + Lack of attentionto company's intangiblevalues		
nisks	destruction of value	+ Conflicts with stakeholders + Loss of ability to innovate + Missed growthopportunities		



С С

Organizational model

for the prevention of

corporate crime

2.5.1

- 2.5 The Hera group is developing a series of management tools and systems that favor the extension of social responsibility throughout the company. More specifically, it has: - defined an organizational model for the prevention of corporate crime:
 - defined a Code of Ethics;
 - continued in its implementation of the QSE system; - created a special Risk Management function (see section 2.2).

- To increase the visibility of its commitment to applying the principles of legality and transparency in day-to-day activities, the Group has adopted an organizational model conforming to Italian Leg. Decree no. 231 of 2001 and guidelines issued by Confindustria and Confservizi (Italian associations of manufacturers and service providers) in order to prevent illicit behavior by directors, employees, outside personnel and business partners. Leg. Decree 231 introduced into Italian legal system the principle of corporate administrative responsibility, which now exists alongside the penal and civil liability of the individuals who materially commit crimes. The spheres of activity where crimes are likely to be perpetrated are those involving relations with government agencies and company assets, for which several additional categories of crime were envisaged by Leg. Decree no. 61/2002
- The Group has implemented the organizational model outlined in Leg. Decree 231 and between the end of 2003 and beginning of 2004 the following activities were completed:
- mapping of "sensitive" company activities, i.e. where corporate crime is more likely to occur, and analysis of the existing control procedures;
- definition of ethical and behavioral standards, taking into account the categories of crime envisaged by the decree (formalized in the Code of Ethics);

- identification of the Supervisory Body responsible for ensuring the correct and efficient functioning of the organizational model:
- definition of the information to be furnished to the Supervisory Body;
- definition and application of suitable disciplinary measures for punishing failure to comply with the guidelines set forth in the organizational model;
- information, dissemination and building of awareness about the established procedures and rules of behavior:
- definition of responsibilities for approving, receiving, completing and implementing the organizational model, as well as for verifying performance and behavior within the company, subject to periodic updates.

The Code of Ethics has the aim of guiding Group management activities according to such principles as respect for the law, professional integrity and economic efficiency, in both internal and external relations, in order to encourage policies and behaviors conducive to the satisfaction of stakeholder needs and a positive, transparent reputation for Hera. The Code of Ethics, applied throughout the Group, was approved in conjunction with the model of organization, management and control, in accordance with Leg. Decree 231. It aims to create an organic, structured system of procedures and control activities designed to prevent illicit conduct.

The Hera Code of Ethics starts off with an introduction explaining the project goals. It then illustrates the basic values and principles adopted and describes the standards of conduct underlying internal and external relations. It ends by defining the responsible bodies and implementation and control mechanisms: the Group has defined an internal monitoring function that is independent of those who are subject to monitoring, since it answers directly to the top management, and is relied on to ensure effective implementation of the model. •

2.5.2

Code of Ethics

4_Directional Offices in Viale Berti Pichat, Bologna.

Hera group's Quality Safety and Environment Management System



2.6.1 Basic principles

According to ISO standards 9000:2000, a management system is defined as a set of correlated or interacting elements that establish policies and objectives. Such a system may provide a framework for continuous improvement and to increase the likelihood of satisfying customers and other stakeholders.

The QSE (Quality, Safety and Environment) management system is that part of Hera's management system that intends to produce results in terms of objectives for quality, safety and the environment capable of adequately satisfying the needs, expectations and requirements of all stakeholders. The QSE objectives complement the other organizational objectives, such as those relating to growth, financing and profitability, objectives consistent with the definition of sustainability.

Integrating the various parts of the system makes it easier to plan, allocate resources, identify complementary objectives and evaluate the overall effectiveness of the organization. In this regard Hera has made the strategic decision to integrate the QSE System within the framework of governance, and to create synergies with the Internal Auditing and Risk Management system. The ultimate aim of the QSE management system is to carry out regular and systematic assessments of the appropriateness, adequacy, effectiveness and efficiency of the overall management system in relation to the policy and objectives of sustainable quality.



Quality, safety and environment policy

HERA S.p.A. represents the tangible realization of an industrial policy choice aimed at creating, as in other countries of the European Union, an actual public utilities industry, through actions fully coherent with the objectives of economic, environmental and social sustainability This goal, which is linked to the principle of sustainable development at the local level, translates into the following commitments:

- + guaranteeing legislative compliance in the areas of the environment, quality and safety;
- preventing or reducing the <u>negative environmental impact</u> of our activities and the <u>risks</u> to the health and safety of employees and citizens;
- for every action and decision made, also considering the corresponding impact on quality, environmental aspects and workplace safety;
- adopting, where possible, the technologies available on the market that are <u>most compatible with</u> the <u>environment</u> and most apt to protect health and safety, as well as being economically sustainable;
- guaranteeing an effective system for <u>monitoring and reporting</u> the quality of service offered to customers, the most significant environmental aspects related to business activities, workplace accidents and illnesses that affect employees;
- pursuing <u>continuous improvement</u> of our performance by defining measurable, comparable objectives and targets as well as indicators: objectives and goals are reviewed on at least an annual basis;
- <u>communicating</u> commitments regarding environmental, quality and safety policies, <u>raising</u> <u>awareness</u> of environmental, quality and safety aspects, and <u>involving employees</u>, <u>suppliers</u>, <u>customers</u> and <u>citizens</u> in our business objectives and targets;
- + educating and training company personnel to observe regulations and internal procedures;
- + communicating our <u>own performance</u> and promoting <u>dialogue</u> with all interested parties (public authorities, citizens, environmental associations, etc.), with a firm commitment to take into account the demands of the parties concerned.

The Board of Directors recognizes as a strategic choice the introduction of an integrated management system for Quality, Safety and the Environment.

The Managing Director is personally involved in upholding and implementing these commitments, ensuring and periodically verifying that the QSE Policy is documented, implemented, kept active, periodically reviewed, notified to all personnel and made available to the public.

Chairman of the Board Tomaso Tommasi Di Vignano

Managing Director Stefano Aldrovandi



2.

The QSE control system: control plans and KPI to measure the quality of services

- 2.6.2 The QSE management system that Hera has created essentially meets three requisites: — the logic of "multi-site" certification:
 - process control;
 - product and service control.

After identifying the processes needed to manage its activities and establishing the sequence of steps and mutual interactions, Hera determined the criteria and methods to ensure effective operation and control of these processes.

These methods must monitor and measure the management system processes; thus they must illustrate that the processes are capable of attaining the planned results. Hera considers it fundamental for the parent company to clearly identify guidelines and policies. For this reason it has decided to apply a few principles of so-called "multi-site logic" to its QSE management system, which involves identifying all problems that require centralized

governance attentive to the growth of the various local components. In order to meet these aims, Hera has also identified the following three key aspects to be supervised:

- processes in statistical "control status;
- technically competent testing laboratories;
- information and protection of consumers/citizens.

To this end, Hera has developed a "Control plan" that takes the characteristics of the processes into account, and that aims to ensure reliable management thereof. Certification of the QSE system and laboratory accreditation requires the relative uncertainty to be stated for each "accredited testing method". The uncertainty factor is a key element in: determining whether the pre-set limits have been observed and results have been correctly interpreted. The process control strategy adopted by Hera includes key service quality performance indicators in addition to the classic economic and financial indicators (service quality KP) which are explained in a monthly report for top management. Service quality KPI are used to monitor and measure the quality of services provided in aggregate and concise form and the trend in the main company processes, of which, in most cases customers have direct perception.

The QSE organizational structure

2.7.1 1st level:

Top Management of Hera S.p.A. The experts who are part of this unit are in charge of developing and coordinating the management of those parts of the system in which the Group's top management is involved as well as centrally managed processes such as purchasing and control plans.

2.7.2 In each Territorial Operative Company and Divis 2nd level: Environment Unit is available which is in charge Integrated Management System of the Group.

Management System of the Hera group.

Territorial Operative Companies and Divisions of Hera S.p.A.

In each Territorial Operative Company and Division of Hera S.p.A. a Quality, Safety and Environment Unit is available which is in charge of controlling the second tier of the QSE

The General Management of Hera S.p.A. also includes the Quality, Safety and Environment

Management: they are entrusted with the task of controlling the first tier of the QSE Integrated

Experts in this unit follow the development and the subsequent management of those parts of the system which pertain to local operations (TOC) and the productive systems directly managed by Divisions of Hera S.p.A. This level, again by way of example, includes the delivery of services, the management of the measures for protecting employees' health and safety and the management of environmental aspects. At the end of 2003, Hera could boast the following certifications:

- ISO 9001:2000, with application in "Planning and control of the management of the services of: integrated management of the three cycles (water, energy and environment)", awarded to Hera S.p.A.;
- ISO 14001:1996, with application in "Design and management of waste (hazardous, non-hazardous and T/N) disposal, treatment and recycling plants" for eight plants plue BMAS registration (Reg. CE 761/2001) of 1 plant, awarded to Hera S.p.A. Environment Division; ISO 9001:2000 and ISO 17025 (accrediting of test procedures), awarded to Hera S.p.A.
- ISO 9001:2000 and ISO 17025 (accrediting of test procedures), awarded to Hera S.p.A. -RRS Division – Laboratory Unit;
 ISO 9001:0000 with any line time in "Degine and responsement of any incention in the procedures".
- ISO 9001:2000, with application in "Design and management of services for the integrated management of the three cycles (water, energy and environment)", awarded to Hera Forli-Cesena S.r.l. (applies solely for the District of Forli).

Hera plans to obtain ISO 9001:2000 certification of the entire Group (Hera S.p.A., Hera Comm and territorial operative companies) by the end of 2004 and extension of ISO 14001:96 certification to an additional group of plants.

2.8 Overview of certifications obtained and planned















This section focuses on the business performance of the Hera group and directly references the consolidated financial statements. It presents results and indicators that provide a complete picture of the Group's position from an economic and financial viewpoint. The report includes a calculation of the value added created by company activities and its allocation among all those who benefit from it by virtue of their interrelations with the company. The present Sustainability Report contains data and indexes both for 2002 and 2003, calculated on the basis of the reclassified income statement submitted with the Consolidated Annual Report for 2003.

3.1.1 Reclassified income statement

(million euros)	31-Dec-02	%	31-Dec-03	%	% change
Revenues from sale and services	1,067.0		1,221.5		14.5%
Other income and revenues	32.3		19.5		(39.6%)
Incr. in construct. and work in progress	34.0		90.3		165.6%
Value of Production	1,133.3	100.0%	1,331.3	100.0%	17.5%
Operating costs	(752.0)	(66.4%)	(896.4)	(67.3%)	19.2%
Cost of labor	(189.4)	(16.7%)	(192.4)	(14.5%)	1.6%
EBITDA	191.9	16.9%	242.5	18.2%	26.4%
Depreciation, Amortization and Allowances	(114.3)	(10.1%)	(129.7)	(9.7%)	13.5%
EBIT	77.6	6.8%	112.8	8.5%	45.4%
Profit before tax	75.3	6.6%	88.6	6.7%	17.7%
Net profit	36.6	3.2%	53.0	4.0%	44.8%
Profit pertaining to third parties	(3.4)	(0.3%)	(3.5)	(0.3%)	2.9%
Net profit pertaining to the Group	33.2	2.9%	49.5	3.7%	49.1%



Turnover by business sector				
(million euros)	200	2002		03
Gas area	473	44.7%	514	42.1%
Electrical energy area	78	7.4%	127	10.4%
Water cycle area	195	18.4%	212	17.4%
Environment area	288	27.2%	285	23.3%
Other services	24	2.3%	84	6.9%
ΤΟΤΔΙ	1.058		1 222	

Breakdown of production costs by business	s area				
(million euros)	2	2002		2003	
Gas area	415	43.8%	430	38.9%	
Electrical energy area	71	7.5%	121	10.9%	
Water cycle area	202	21.3%	235	21.3%	
Environment area	233	24.6%	224	20.2%	
Other services	27	2.8%	95	8.6%	
τοται	948		1 105		

2003 turnover by activity area

e

Hera

3.1.2 Reclassified balance sheet

(million euros)	31-Dec-02	%	31-Dec-03	%
Intangible fixed assets	383.3	34.3%	360.8	26.9%
Tangible fixed assets	774.4	69.2%	909.8	68.0%
Long-term investments	44.9	4.0%	156.7	11.7%
Total fixed assets and I/t investments	1202.6	107.5%	1427.3	106.6%
Net working capital	73.8	6.6%	88.9	6.6%
(Funds)	(157.3)	(14.1%)	(177.4)	(13.3%)
Net capital invested	1119.1	100.0%	1338.8	100.0%
Net equity	865.3	77.3%	894.5	66.8%
Long-term financial payables	185.3	16.6%	352.1	26.3%
Short-term financial payables	68.5	6.1%	92.2	6.9%
Net Financial Standing	253.8	22.7%	444.3	33.2%
Total sources of loan	1119.1	100.0%	1338.8	100.0%

3.1.3 Breakdown of investments by business area

Listed below are the investments made by the Hera group in the different business areas.

Investments		
(million euros)	2002	2003
Gas area	27.7	21.4
EE area	2.3	2.7
Integrated water cycle area	42.9	54.8
Environment area	61.9	77.4
Other services area	12.8	23.5
Central organization	29.4	30.8
TOTAL	177.0	210.6

During the year 2003, the main investments in the Gas area were earmarked for special maintenance, upgrading and extension of the distribution network (including the linkup of new users), which went from 7,880 to 8,261 km following the awarding of utility contracts in new municipalities.

As regards the electrical energy area, the power grid managed by Hera increased from 1,410 to 1,423 km.

In the Integrated Water Cycle area the huge increase in investments made is ascribable to routine maintenance costs and extension of the distribution network, as well as compliance with regulatory requirements and special maintenance on water treatment plants. The data pertaining to the Environment area highlight the efforts required to complete the new waste-to-energy plant in Bologna, which is expected to become fully operational in 2004. During the financial period, the company also completed all the preliminary engineering activities and procedures for requesting authorization to construct four new waste-to- energy lines, which will serve to increase the Group's capacity in this sector. Other initiatives regarded the rationalization and maintenance of the waste disposal and treatment capacity of the plants owned by the Group.

In the Other Services area, worthy of note is a 13.2 million euro investment in the construction of fiber optic infrastructures, as part of the Regional Telematic Plan for the rationalization of the Local Government Network in Emilia-Romagna. The project, assigned to the subsidiary Acantho, also received major regional funding.

2003 Investment





Economic indicators

Profitability indexes

3.2.1

Economic indicators are calculated to analyze the company's "health" and management results.

Profitability indexes 2002 2003 Changes % ROE (Net Profit/Net Equity) 4.2% 5.9% +40.1% ROI (Operating Income/Net Capital Invested) 6.9% 8.4% +21.5% ROS (Operating Income/Revenues) 7.3% 9.2% +26.0% Incidence of extraordinary operations (Net Income/Operating Income) 17.2% 47.0% -0.4% Leverage (Net Capital Invested/Net Equity) 1.29% 1.50% +15.7% Rotation of Invested Capital (Revenues/ Net Capital Invested) 95.3% 91.2% -4.3%

The year 2003 was characterized by reorganization activities aimed at unifying the group of companies which had merged into the Hera group at the end of 2002.

This entailed a distribution of results among the individual Group companies, which did not affect, however, the comparability of consolidated financial data with those pertaining to the previous year.

The main indicators regard the profitability of company activities and the solidity of the organizational structure, that is to say the short- and long-term balance between assets and liabilities.

To ensure that performance as expressed by these indicators is correctly interpreted, a comparison is always made with corporate entities having the same degree of operational and financial risk.

Return on equity (ROE) is a concise indicator of the company's overall business performance. In 2003 it rose significantly, from 4.2% to 5.9%. A breakdown of ROE into its constituent factors shows that the result achieved is largely ascribable to the major operating synergies arising, as forecast, from the merger, not only in the medium/long term, but also in the short term. In fact: the return on investments (ROI) saw a substantial increase (+21.5%), mainly as a result of the improvement in the margin of operations on the value of production; incidence of extraordinary operations: practically unchanged from the previous year (-0.4%), it is mainly tied to the tax burden; leverage: somewhat higher than in the previous year (+15.7%); the company can exploit the benefits of financial leverage since the returns on capital invested are higher than the costs of servicing its financial debts.

Employee performance indexes are useful to determine employee participation in and contribution to the company's activities and the achievement of company results. They are also an important indicator of employees' performance in a long time lapse.

Employee performance indexes (€/000)	2002	2003	Changes %
Turnover per employee	235.1	275.9	17.3%
EBITDA per employee	42.3	54.8	29.5%
Average cost per employee	41.7	43.5	4.1%
Net income per employee	7.3	11.2	52.8%
Employees as at 31/12	4.538	4.428	-2.4%

3.2.2 Employee performance indexes

1 Hera Group customer care offices. Bologna

Calculation and allocation of added value

Value added, understood as the difference between the value and costs of production, quantifies the exchanges between the company and the main stakeholders: employees, shareholders, suppliers, customers, institutions and community. This reclassification goes beyond traditional approaches and is based on the principles laid down by the GBS (Social Report Study Group), which guide the allocation of Added Value among all beneficiaries.

VALUE ADDED		31/12/02		31/12/03
thousands of EUR				
Revenues from sales and services		1,066,974		1,221,533
Changes in the invent. of work in progress and semi-finished and fir	nished product	s 284		-309
Change in contract work in progress		2,713		23,131
Increases in assets due to internal improvements		30,990		67,501
Other revenues and income		32,290		19,443
Contributions received from public institutions		(8,065)		(5,504)
Production value		1,125,186		1,325,795
Consumption of raw, auxiliary and expendable materials and goo	ds			
(net of change in inventories)		(469,392)		(520,583)
Costs for use of non-owned property		(54,386)		(58,217)
Costs for services		(199,731)		(290,386)
Sundry expenses		(7,893)		(6,304)
Write-downs of fixed assets		(983)		(23)
Write-downs of receivables		(2,918)		(3,775)
Accruals to provisions for contingencies and other provisions		(28,983)		(30,359)
Costs of production		(764,286)		(909,647)
Gross value added		360,900		416,148
Ancillary and extraordinary items				
Financial income		4,707		3,964
Adjustment of investment assets		(5,277)		(5,216)
Balance of ancillary items	-	570	-	1,252
Net extraordinary income (expenses)		12,054		(2,905
Balance of extraordinary items		12,054		(2,905)
Balance of ancillary and extraordinary items		11,484		(4,157)
Global value added, gross		372,384		411,991
Depreciation of tangible fixed assets		(49,361)		(57,493)
Amortization of intangible fixed assets		(32,110)		(38,025)
Total amortization and depreciation of fixed assets		(81,471)		(95,518)
Global value added, net		290,913		316,473
VALUE ADDED ALLOCATION (thousands of E)	2002	0/	2002	0/
VALUE ADDED ALLOCATION (Inclusands of €)	2002	%	2003	%
Employees	100.000		100.400	
face poid to directore	1 776		1 5 4 2	
ees paid to directors	1,776		5,343	
expenses for employees	4,195	50 400/	0,728	40 400/
	190,369	02.40%	199,700	48.48%
company system	E 607		7 414	
sell-linarioing	0,027		7,414	
T-t-1	01,471	00.000/	100,000	04.000/
Notal Shareholder	87,098	23.39%	102,932	24.98%
di idanda allasetad	07 500		42.040	
aividends anocaled	21,529		42,040	
Tatal	3,459	8 22%	3,003	11 07%
	30,968	0.3270	40,093	11.07%
financial packers	10 777		10.050	
Tatal	10,777	0.700/	10,958	4 9 4 9/
	13,777	3.70%	19,958	4.84%
Government institutions	00.050		05 500	
income taxes (irpeg and irap)	38,659		35,588	
a second s	40.40			
taxes other than income taxes	12,105		9,174	
taxes other than income taxes contributions given for operating expenses	- 8,065	-	9,174 5,504	

Community				
donations	109		463	
sponsorships and advertising	2,344		4,087	
Total	2,453	0.66%	4,550	1.10%
GROSS OVERALL VALUE ADDED	372,384		411,991	



The largest share of value added is absorbed by employees, further evidence of the importance the company attributes to this stakeholder group and a strong commitment to protecting it. The company system also receives a significant share of value added; this is primarily due to constant production investments aimed at improving the efficiency of the service provided. Taxes paid (net of contributions received toward operating costs) totally account for the share destined to government agencies. Shareholders receive approximately 11% of value added in the form of dividends and income due to minority interests. Approximately 1% of the value added is transferred to the community through gifts and sponsorships of events (cultural, artistic, etc.) and investments in awareness-building campaigns designed to promote sustainable development of the territory.








Employees

Employees represent the key factor for delivering and ensuring quality services to consumers and allowing the company to seek increased customer satisfaction, through continuous improvement of performance.

The entire process leading to the creation of the Hera group was conducted according to a socially responsible approach, which ensured the participation and involvement of interested parties through an open exchange of information and consultation; special attention was devoted to protecting workers' right in order to guarantee satisfactory placement or retraining for new jobs where applicable.

Personnel policies

4.1.1 Hera pays close attention to enhancing its human resources through intensive training activities and by planning programs of incentives and professional growth. The basic principles underlying the relationship between the Group and its employees are:

- + to promote involvement of both employees and outside personnel by motivating them to share the company's goals and strive toward their attainment;
- + to create a serene, socially responsible working climate to enhance cohesion within the company and cooperation among coworkers;
- + to increase job efficiency and promote a helpful, respectful attitude toward customers;
- + to establish a fair and transparent working relationship;
- + to provide employees with appropriate education and training; + to guarantee a high level of professionalism in line with the roles and duties of personnel;
- + to protect and nurture the workforce, with the aim of improving and increasing individual knowledge and skills;
- + to respect the principles of non discrimination and promote equal opportunities;
- + to ensure that the assessment procedures and the awarding of bonuses are clear to all;
- + to maintain good relationships with internal and external workers' representatives;
- + to guarantee the protection of worker's health and safety in the workplace.



The Group's personnel management policies are consistent with the principal international guidelines pertaining to workers' rights, such as, for example, the Global Compact, standard SA 8000 and related II O standards.

The principles set forth in standard SA 8000 (available at the website www.cepaa.org) regard the following topics:

- Child labor
- Forced labor
- Worker health and safety
- Freedom of association and right to collective bargaining
- Discrimination
- Disciplinary procedures
- Working hours
- Pav

The Principles of the Global Compact (available at the website www.unglobalcompact.org) in regard to human and workers' rights are:

- promoting and respecting universally recognized human rights within the respective spheres of influence:
- П. making sure you are neither a direct or indirect accessory to human rights abuses;
- supporting workers' freedom of association and recognizing the Ш. right to collective bargaining:
- IV. eliminating all forms of forced labor:
- V. effective elimination of child labor;
- VI. elimination of every form of job and professional discrimination.



Hera

4.1.2 Composition of the labor force

 4.1.2 As at 31 December 2003, the total of employees within the Hera group was 4,428. The 2003 data presented in this section refer to the companies of the Hera group, as defined in the section under the heading "Scope", whereas the Sustainability Report 2002 only considered Hera S.p.A, Hera Comm and the five Territorial Operative Companies, which together employ a total of 4,322 people, or about 39% of the Group workforce. Considering the same scope of consolidation, the total workforce shows a net decrease of - 214 employees compared to the end of 2002: 277 left while 63 new employees were hired.

No. of employees						
	Men	Women	Total	Men	Women	Total
Executives	63	5	68	62	5	67
Managers	79	17	96	113	37	150
Clerical	949	677	1,626	994	670	1,664
Labor	2,262	180	2,442	2,349	198	2,547
TOTAL	3,353	879	4,232	3,518	910	4,428
Employment contract type				2002		2003
Employees:						
Open-term contracts				4,048		4,428
Fixed-term contracts				53		57
Job training contracts				29		13
Other workers:						
Temporary workers				50		23
Employer-coordinated freelance work				52		37
Trainees				n.a.		6
Professional services				n.a.		1
Trainees and Seasonal Workers				n.a.		3
Total				4,232		4,568
Job training				2002		2003
No. of omployees with job training ees	tracte ac at	01/10				13
IND. OF EITIDIOVEES WILL OD LIAITING COL	ii auis as ai	. 31/12		29		
% of JTC expired and replaced by ope	n-term cor	itracts		29		81%
% of JTC expired and replaced by ope People hired with open-term contracts	n-term cor	itracts		29		81% 13
% of JTC expired and replaced by ope People hired with open-term contracts	n-term cor	itracts		29		81% 13
% of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function	n-term cor	itracts		29 2002		81% 13 2003
No. of employees with but training con % of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function	n-term cor	tracts	м	29 2002 W	M	81% 13 2003 W
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector	n-term cor	itracts	M 666	29 2002 W 47	M 754	81% 13 2003 W 51
No. of employees with job training Coth & of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Water Sector	n-term cor	tracts	M 666 945	29 2002 W 47 67	M 754 818	81% 81% 2003 W 51 46
No. of employees with job training con §6 of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Emergy Sector Production - Water Sector Production - Environ. Sector	n-term cor	tracts	M 666 945 1,279	29 2002 W 47 67 262	M 754 818 1,592	81% 13 2003 W 51 46 334
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Energy Sector Production - Environ. Sector Administration	n-term cor	tracts	M 666 945 1,279 326	29 2002 W 47 67 262 379	M 754 818 1,592 320	81% 81% 2003 W 51 46 334 327
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales	n-term cor	tracts	M 666 945 1,279 326 137	29 2002 W 47 67 262 379 124	M 754 818 1,592 320 87	81% 81% 2003 W 51 46 334 327 99
No. of employees with job training con §6 of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales ToTAL	n-term cor	tracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879	M 754 818 1,592 320 87 3,571	81% 13 2003 W 51 46 334 327 99 857
No. of employees with job training con §6 of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL	n-term cor	tracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879	M 754 818 1,592 320 87 3,571	81% 13 2003 W 51 46 334 327 99 857
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence	n-term cor	itracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879 2002	M 754 818 1,592 320 87 3,571	81% 13 2003 W 51 46 334 327 99 857 2003
No. of employees with job training con §6 of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna	n-term cor	iracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879 2002 1,799	M 754 818 1,592 320 87 3,571	81% 81% 2003 W 51 46 334 327 99 857 2003 2,106
No. of employees with job training con go of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Water Sector Production - Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Fordi-Cesena	n-term cor	3//12 ltracts	M 666 945 1,279 326 137 3,353	2002 W 47 67 262 379 124 879 2002 1,799 595	M 754 818 1,592 320 87 3,571	81% 81% 2003 W 51 46 334 327 99 857 2003 2,106 540
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Forli-Cesena Province of Forli-Cesena	n-term cor	3//12 Irracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879 2002 1,799 595 5925	M 754 818 1,592 320 87 3,571	81% 81% 13 2003 W 51 46 334 327 99 857 2003 2,106 540 865
No. of employees with job training Cot § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Raivenna Province of Raivenna	n-term con	3//12 ltracts	M 666 945 1,279 3266 137 3,353	2002 2002 W 47 67 262 379 124 879 2002 1,799 595 925 734	M 754 818 1,592 320 87 3,571	81% 81% 13 2003 W 51 46 334 327 99 857 2003 2,106 540 865 890
No. of employees with job training con §6 of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Emroy, Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Bologna Province of Forl-Cesena Province of Rivenna Province of Rivenna Province of Rimini	n-term con	3//12 ltracts	M 666 945 1,279 326 137 3,353	2002 2002 W 47 67 262 379 124 879 2002 1,799 595 925 734 179	M 754 818 1,592 320 87 3,571	81% 81% 13 2003 W 51 46 334 327 99 857 2003 2,106 540 8900 865 8900
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Fool-Casena Province of Fool-Casena Province of Roir-Casena Province o	n-term con	3//12 ltracts	M 666 945 1,279 326 137 3,353	2002 W 47 67 262 379 124 879 2002 1,799 595 925 734 179 4,232	M 754 818 1,592 320 87 3,571	81% 313 2003 W 51 466 334 327 99 857 2003 2,106 540 865 890 27 4,428
No. of antipultyees with job training Coth Sof JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Energy Sector Production - Vater Sector Production - Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Forli-Cesena Province of Forli-Cesena Province of Rimini Other provinces Total	n-term con	3//12 ltracts	M 666 945 1,279 3,266 137 3,353	299 2002 W 47 67 262 379 124 879 2002 1,799 595 925 734 179 4,232	M 754 818 1,592 320 87 3,571	81% 313 2003 W 51 46 334 327 99 857 2003 2,106 540 865 890 27 4,428
No. of employees with job training Cot So of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Vater Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Forli-Cesena Province of Rimini Other provinces Total Hours worked per capita 2003	n-term con	3/r/2 ltracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879 2002 1,799 595 925 734 1,749 4,232 Regular	M 754 818 1,592 320 87 3,571	81% 313 2003 W 511 46 334 327 99 857 2003 2,106 540 865 890 27 4,428 vertime
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production – Enroy, Sector Production – Enrivon. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Forti-Cesena Province of Forti-Cesena Province of Forti-Cesena Province of Ratenna Province of Ratenna	in-term cor	3//12 ltracts	M 666 945 1.279 326 137 3,353	299 20002 W 47 67 2622 379 124 879 2002 1,799 595 595 925 734 179 4,232 Regular 1,786	M 754 818 320 87 3,571	81% 313 2003 W 511 46 334 327 99 857 2003 2,106 540 865 890 27 4,428 vertime
No. of employees with job training con § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Foril-Cesena Province of Foril-Cesena Province of Ravenna Province of Ravenna Province of Ravenna Province of Rimini Other provinces Total Hours worked per capita 2003 Executives Vanagers	n-term cor	3//12 Itracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879 2002 1,799 595 734 1,799 4,232 Regular 1,786 1,720	M 754 818 1.592 320 87 3,571	813% 813% 2003 W 51 46 334 327 99 857 2003 2,106 540 865 890 277 4,428 vertime
No. of enhances with not italining Cod § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Forli-Cesena Province of Forli-Cesena Province of Rologna Province of Sologna Province of	in-term cor	3/12 Itracts	M 666 945 1,279 326 137 3,353	29 2002 W 47 67 262 379 124 879 2002 1,799 595 925 734 1,798 4,232 Regular 1,786 1,720	M 754 818 320 87 3,571	813% 813% 2003 W 51 46 334 327 99 857 2003 2,106 540 865 890 27 4,428 wertime - 74
No. of employees with job training Coth § of JTC expired and replaced by ope People hired with open-term contracts Breakdown by function Production - Energy Sector Production - Environ. Sector Administration Sales TOTAL Breakdown by place of residence Province of Bologna Province of Bologna Province of Forli-Cesena Province of Forli-Cesena Province of Forli-Cesena Province of Rimini Other provinces Total Hours worked per capita 2003 Executives Vianagers Ciercal Labor	in-term cor	3//12 ltracts	M 666 945 1,279 326 137 3,353	2002 W 47 67 2622 379 124 879 2002 1,799 595 925 734 179 4,232 Regular 1,786 1,720 1,443	M 754 818 320 87 3,571	13 13 2003 W 51 46 46 46 43 47 2003 2,106 540 540 540 2,77 4,428 850 2,7 4,428 850 850 2,7 4,428 850 2,7 4,428 850 850 850 850 850 850 850 85

Absences (in nours)						20	02		2003
Sickness						356,6	50		322,874
Pregnancy						47,70	00		82,624
Accident						71,2	25		65,455
Strike						85,8	00		19,638
Meeting						n	.a.		8,969
Union leave						n	.a.		22,474
TOTAL						561,3	75		522,034
Average age	2002		2003	Ye	ears of	service		2002	2003
Executives	50		49	Ex	ecutives	3		12	12
Managers	48		45	M	anagers			17	10
Clerical	41		41	CI	erical			13	10
Labor	42		42	La	lbor			11	8
Ane brackets			2003	S	niority				2003
< 25			41	<	5				1 845
26-30			225	6.	10				682
31-40			1 667	11	-15				809
41-50			1,856	16	3-20				570
51-60			620	20	1-25				3/6
> 61			19	>	25				176
TOTAL			4,428	T	DTAL				4,428
Academic qualifications	LAB	OR	OFFICE PE	RSONEL	L CAD	RES	EXECU	TIVES	TOTAL
(as at 31/12/03)	M	w	M	W	м	W	М	W	
Primary education	81	4	7	1					93
Secondary education	1,400	111	160	54	1		1		1,727
High School Diploma	721	62	674	496	48	14	8	3	2,026
0			1	4	1				6
Abbreviated degree							50	0	007
Abbreviated degree University Degree	3	1	128	97	61	23	52	2	307
Abbreviated degree University Degree Other	3 144	1 20	128 24	97 18	61 2	23	52 1	2	209

. .

Turnover of personnel*	Employed as at 31/12/02	Hired	Dismissed or retired	Employed as at 31/12/03	Changes in scope of consol.
Executives	68	4	-	67	
Managers	105	10	-	150	
Clerical	1,646	41	-	1,664	
Labor	2,719	8	-	2,547	
TOTAL	4.538	63	277	4.428	+104

According to the current personnel policy, the process of integration for the companies merged into Hera must include a plan for the enhancement and redeployment of the human resources made available by the internal rationalization processes. This implies an efficient management of tumover and further outsourcing of activities with limited added value. Recruitment efforts focus only on highly qualified, sought-after resources, according to the above-described criteria.

Recruitment	2002	2003
Employees:		
Open-term contracts	66	63
Fixed-term contracts	187	106
Seasonal		80
Job training contracts	10	5
Other workers:		
Temporary		11
Employer-coordinated freelance work	49	28
Professional services		4
Total	312	297

Hera

SB

It was not possible to break down the employees leaving by category due to promotions and consolidation changes occurring in 2003; thus only the total is shown. For the sake of completeness, a "Consolidation Changes" column has been included to summarize the total changes (new entries and leavers) that occurred in the companies in 2003. Personnel for clerical or labor jobs are selected by internal recruitment. To fill high-level jobs, the Group relied on outside employment agencies.

Selection process	c c	% of applications received			
Applications received	1,945				
Interviews	234	12.03			
Hired	63	3.24			

Over the next three years Hera plans to invest in human resources with a high potential and recruitment of highly educated professionals in order to not only to improve efficiency from an operational standpoint but also to contribute to the company's overall development. Hiring in the three-year period will be based on need and involve the following stages:

- + recruitment by assessment,
- + fixed-term contract for the first 18 months,
- + hiring on an indefinite basis, conditional upon the positive outcome of employee assessments.

University graduates represent a valuable resource for the company, one to be treated with extreme care, from recruitment to hiring and development. The development plan for graduates in the first three years consists in: - hiring plan,

- meetings with top management and personnel managers,
- training
- verification of job suitability and performance assessment.



4.1.3 Diversity and equal opportunities

The Group is aware of the issues related to equal opportunities and committed to avoiding all forms of discrimination.

In selecting personnel it aims to protect equal opportunities by assessing professional and psychological profiles and aptitudes while respecting the candidate's private sphere and opinions. At December 31st 2003, 85% of employees hired on a part-time basis, most often at their own request, were women.

In our company the absences due to maternity are normally longer than the minimum leave to which employees are entitled by law, both in the clerical and labor categories. As regards the labor category, it is worth noting that the presence of women is not insignificant (4%), even in jobs classifiable as "male" due to the physically arduous nature of the tasks typically assigned, particularly in the environmental hygiene sector.

In 2003 Hera contributed, with the payment of a membership fee, to the activities of ASPHI ONLUS, an association that promotes the integration of disabled individuals in schools, the workforce and society through the use of information technology and telecommunications. Hera fulfilled its obligations under Italian Law no. 68/99.

Hera pays close attention to enhancing its human capital through intensive training activities and by planning programs of incentives and professional growth.

Employee training is a distinguishing feature of Hera group, an important strategic lever for managing organizational change and ensuring the growth of organizational performance.

In 2003, consistently with its job training program, the company engaged in intense training activities aimed at preserving its wealth of technical know-how, developing the managerial skills necessary in order to speed up the process of change currently underway and implementing the new company information system.

Continual training of workers is part of the Group's human resource development and management policy. It is manifested through actions aimed mainly at technical and administrative staff and includes on-the-job and field training. These actions primarily aim to improve the efficiency of production processes and maintain high standards of quality, safety and environmental protection.

Vocational training and specialized education of personnel entail a significant commitment of resources given both the number of employees who need to update their skills in the use of machinery, equipment and new technology and the diversity of the technical know-how required in the multi-utilities sector.

The training plan for the development of managerial skills focuses on the sharing of management models coherent with the new organizational structure and the effects of the company's listing on the stock exchange.

Several important initiatives have been dedicated to communication and customer management areas

Teaching staff to use the new Company Information System has entailed a substantial investment of resources in all Group companies, such as to guarantee the necessary support for change management in the inauguration of new information procedures.

Finally, training in the quality, safety and environment areas has been further increased in order to promote continual improvement in employee awareness about these topics and assure adequate standards of safety, health and environmental protection,

Training	2002 *	2003	Target
(in man hours, as regards Hera S.p.A., Hera Comm and the Territorial Operative Companies)			2004**
Vocational training and specialized education	44,244	24,665	79,896
Quality	10,916	7,962	15 000
Safety and environment		8,532	10,009
Management training	4,578	4,051	7,263
Information technology		14,330	16,040
Total	59,738	59,540	119,098

In 2003 the expenditure for training (without considering the costs due to non-production) exceeded 400,000 EUR: the 2004 budget has set aside 700,000 EUR for training, excluding the courses tied to the new information system.

Hera presently has an agreement with the University of Bologna which provides incentives for the training of undergraduates and graduates, with a particular emphasis on water, energy and waste management. These incentives consist in 6-month and 12-month scholarships (for a total of 96,150 EUR in 2003) awarded respectively to undergraduates and graduates. In 2003 Hera moreover stipulated a framework agreement with the Department of Chemical Engineering, under which students may benefit from free curricular training, vocational training or guidance. For the academic year 2003-2004, Hera provided funding to the Higher College of the University of Bologna in the form of a 10,000 EUR grant used for a scholarship. In 2004 Hera plans to extend the agreement for the placement of students in free curricular training, vocational training or guidance programs to other university departments, Engineering in particular.

4.1.4 Training and enrichment

* Estimates ** From the 2004 Training Plan

1 Hera Group call center, Bologna,

4.1.5 Pay and incentive system

Health and safety

* values rounded to hundreds of thousands of euros

The national collective labor agreements applied within the Group provide that all employees be awarded productivity bonuses according to the degree to which the results attained meet defined objectives; in 2004 the company will seek to reach an agreement with union organizations to harmonize the bonus across the Group.

A Management-by-Objectives system has been put into effect for managers at Hera. Its aim is to establish a homogeneous and transparent policy, within the framework of the total remuneration. To this effect as of 2003 a management mechanism has been implemented based on achieving specific objectives for each area of results, according to precise budget forecasts, based for the top management on three objectives which are valid for the company as a whole, and for executives three company objectives plus three individual objectives. Again as of 2003, initiatives have been under way to define and standardize the incentive system for management personnel based on an appraisal of performance (which aims to measure the results of a person's work in a transparent fashion) and assessments designed to provide an objective analysis of professional traits and abilities necessary for development and working in different roles or at higher levels of responsibility.

Finally, with regard to social security, Hera employees have the option of joining voluntary pension plans provided for under labor agreements. The plan is financed through contributions withheld from employees' wages, employer contributions and amounts deducted from the employee's leaving indemnity.

Over 48% of the value added created in 2003 was absorbed by employees, further evidence of the importance the company attributes to these stakeholders and a strong commitment to protecting them.

Cost of labor*	20	002	200	03
(thousands of euros)				
Energy sector	36,000	18.9%	34,500	17.9%
- gas area	32,200	16.9%	29,900	15.5%
 electrical energy area 	3,800	2.0%	4,600	2.4%
Water sector	65,000	34.3%	59,700	31.0%
Environment sector	79,100	41.8%	75,100	39.0%
Other services	9,400	5.0 %	23,200	12.1%
Total	189.500		192.500	

Breakdown of labor costs	2002	2003
(thousands of euros)		
Wages and salaries	131,272	134,010
Social security contributions	45,284	47,473
Employee leaving indemnity	10,335	9,922
Other costs	2,507	1,022
Total	189.398	192,427

The Hera group intends to make an ongoing commitment to ensure high standards of health and safety at the workplace, referencing the guiding principles upon which the current regulatory system is based.

Organization of Safety

A Safety Coordination function was instituted within the Quality, Safety and Environment department of the holding company in March 2003. It is assigned the task of harmonizing the levels of safety throughout the Group by implementing and/or facilitating synergies and exchanges of the best experiences to be found in the Group.

The Safety Coordination function relies on input from the managers of the Prevention and Protection Services of the main Group companies and may count on the professional experience acquired by individual technicians over the years. The principal results achieved in 2003 were the definition of safety organization guidelines and standardization of the procedures for managing personal safety equipment.

The organizational document clarifies the roles that each company figure must perform to ensure effective monitoring of worker health and safety, particularly with respect to the responsibilities present in the sphere of operations and the support that must be provided by different staff members. Workers' Representatives for Safety issues (WRS) are periodically consulted and informed through both informal contacts and formal meetings. The appointed physicians, who similarly established their own coordination system at the end of 2003, offer constant, active support toward improving the levels of safety.

The standardization of personal safety equipment is founded upon a single catalogue that includes descriptions and technical specifications of all the personal safety equipment employed within the Group. Now the catalogue is used by each technician to choose the most suitable equipment and by purchasing staff to manage purchases and devices kept as spares. The efforts with regard to personal safety equipment have also resulted in the definition of centralized trial procedures, which allow the work of a few people to be turned to the advantage of all those in the Group who are exposed to the same risk.

Information, training and education

In 2003, within the new organizational frameworks, efforts continued to enhance awareness as well as attitudes and behaviors consistent with the culture of workplace health and safety through training initiatives implemented with yearly programs based on an analysis of training needs:

The main actions include:

- + information and training of new recruits and workers who are changing their roles;
- + in-depth courses for homogeneous departments or groups;
- + acquisition or updating of the necessary skills to best carry out the role of "safety supervisor", cornerstone of the safety management system laid down by Leg. Decree 626/94;
- + training in fire-fighting procedures;
- + training in emergency management.
- In 2003, personnel received 8,532 hours of safety and environment training.

Accidents

Hera devotes a great deal of attention to prevention and the continuous reduction of accidentrelated phenomena.

It is for this reason that we constantly and thoroughly analyze accidents with the final aim of identifying and remove the causes underlying each event, especially the most serious ones: our commitment is demonstrated by the fact that in 2003 all the main accident indexes showed a downward trend.

Indicator *	2002	2003
Frequency index (number of accidents / hours worked * 1,000,000)	73.17	67.58
Severity index (days of absence due to accidents / hours worked * 1,000)	1.90	1.62
Rate index(number of accidents / number of employees * 100)	11.15	10.23
Average length of absence due to accidents(absences due to accident/number of accidents)	25.97	23.94

Health monitoring

Hera relies on qualified outside physicians to verify the sound mental and physical health of workers, whether or not their job requires them to undergo preventive and routine health checks by law.

Below is a summary of the health monitoring activities conducted in 2003 on employees of Hera S.p.A., Territorial Operative Companies, Frullo Energia Ambiente, Famula On-line and Uniflotte.

Deserie

Description	
Preventive and routine medical checkups	2,408
Clinical services	46
Laboratory tests	1,291
Electrocardiograms	474
Audiometric and spirometric tests	2,290
Screening of vision	794
Biological monitoring	560

Improvement programs

For 2004, based on the results of risk assessments and internal audits conducted with the participation of all interested parties, the company has defined programs of what it judges to be suitable measures for ensuring improvements in the levels of safety over time. The programs, designed fully in line with the methods for the planning and control of company activities (investment plan, annual budget), include technical initiatives and actions aimed at guiding behavior. In 2004, such actions, which, in consideration of the characteristics SB

SB

The data refer to Hera SpA, Hera Comm and the five Territorial

- training for safety supervisors: before classes of 15-18 people we will bring several hundred technicians who occupy this role, of central importance for the correct application of the overall regulatory system currently in force under Leg. Decree 626/94, so that together they may discuss the regulatory aspects connected to their role and the best strategies for its effective fulfillment;
- safety audits on the efficacy of and compliance with existing prevention and protection measures by both Hera workers and the employees of contracting companies.

4.1.7 Th

Industrial relations

The evolution of the Hera group is characterized by constant, transparent and suitable relations with labor organizations.

In 2003, following the initial stage of consolidation of the corporate structure, the process of adjustment in the internal organization of different Group structures continued, accompanied by a constructive exchange with unions in observance of current laws.

As part of the process of definition of the Group's structure, several activities (Call Centers, Information Systems, Fleet and Equipment Management) were also reinforced and developed within the companies set up for specific purposes (Hera Comm, Famula and Uniflotte), which thus became references for the Group, in line with a strategy of expansion and reinforcement of specific competencies. The labor organizations have shared a role in these processes, also through the formulation of different agreements.

As of the beginning of 2004 several important union initiatives have been underway. One aims to further an exchange that had been inaugurated in 2002 to define a new system of Group Industrial Relations. A second initiative has the objective of defining a single performance bonus for all Group employees.

Lastly, negotiations have been opened with the objective of standardizing employment benefits and the legal conditions and pay of Group employees.

The process requested and followed by both sides aims to make the unification of the 13 companies a concrete reality also as far as human resources are concerned, favoring a profile that is consistent with the Group's size and integrity.

Unionization of the Hera group as at 31/12/03 (%)							
Trade union	Managers/clerical	Labor	Total				
CGIL	38.88%	49.72%	45.18%				
CISL	13.22%	11.50%	12.22%				
UIL	16.15%	15.10%	15.54%				
CISAL	1.41%	4.98%	3.48%				
UGL	0.06%	0.12%	0.09%				
Total	69.72%	81.42%	76.51%				

The hours of absence due to strikes fells from 85,800 in 2002, when they were exclusively connected to domestic political events and the renewal of national collective labor agreements, to 19,638 in 2003, again in connection with domestic political events, whereas no industrial action was taken locally or in relation to Group policies.

Data	Duration	CCNL	Reason	% particip.
21/02/03	4 hours	FGA FDE (CGIL)	Government's industrial policy	44.1
15/03/03	24 hours	FDA (CGIL)	threat of war in Iraq	15.1
20/03/03	2 hours	all	war in Iraq	75
26/09/03	2 hours	FDA (CGIL)	Measures tied to the "Biagi Law"	15.9
03/10/03	2 hours	FGA (CGIL)	Measures tied to the "Biagi Law"	25.8
24/10/03	4 hours FGA and FDE	all	Social security reforms, political, economic	70.8
	24 hours FDA		and social reforms advanced by the government	

For the sake of completeness, it will be noted that at the end of 2003 there were twenty five disputes pending with individual employees and a specific provision was made to cover the possible costs deriving therefrom. In 2003 eight disputes were settled.

The Group adopts codified and consolidated methods of internal communication via electronic mail to all the people concerned and/or to all managers, with postings on notice boards.

The Directives concern the creation, suspension or change of hierarchical orders, appointments, terminations of work relations, transfers, assignment of tasks and their revocation and changes in the name of organizational units.

Regulatory Provisions set rules, including transitional rules, regulating operative methods for a service in relation to a specific topic and lay down actions and behaviors to which all or specific employees must conform.

Internal Communications deal with news or general provisions, supplementary procedural instructions, new rules and communications.

The Bulletin Board has all notices concerning internal mobility.

The internal procedures relevant to the company are communicated to all managers through a Regulatory Provision, specifying issue and scope.

A legal information bulletin containing updates on regulatory issues of interest to the company is issued on a weekly basis.

In addition a review of local and national newspapers is sent through the company intranet every morning.

This review includes articles with news on Hera and other operators in the sector, news on water issues, energy, waste, environment, telecommunications, as well as issues that may concern the company's strategy and policy.

A new communication tool aimed at management is the convention, which periodically brings them up to date on the state of the art, results and key issues tied to the Group's activity.

Social activities for employees are managed by recreational and cultural associations within the different Territorial Operative Companies of the Group, which mainly aim at promoting and organizing cultural, recreational, sport and tourist activities as an opportunity for the company's employees to meet and interact.

Cultural activities include theatre season tickets, photographic exhibitions and literary events. Furthermore, libraries are also available from which books can be borrowed.

Recreational activities include social dinners and trips, card games, Christmas and carnival parties as well as festive events tied to tradition and the company culture (water party).

Sport activities include tournaments of various sports, fishing competitions and skiing trips. Furthermore, members are also entitled to contributions toward the purchase of textbooks for student employees and employees' children, contributions for sports courses or activities as well as discounts in some shops and travel agencies

The associations are independently managed by an executive board elected directly by the members, on the basis of annual budgets and plans. \bullet



4.1.8

4.1.9

Social activities and

organizational climate

Internal communication



4.2 Shareholders Maintaining a positive ongoing relationship with shareholders and offering them guarantees and transparency with regard to the investment made is a priority that the Hera group has pursued through intense relationship building activities starting from the year just ended. The placement of a significant percentage of its capital stock in a financial market that is increasingly global, sensitive and concerned about ensuring correct, sustainable corporate behavior has induced the Group to increase the intensity of its interrelations with different categories of investors in all major European and American financial markets. The portion of value added allocated to Hera shareholders in 2003 was positive (about 11%) thanks to company performance during the year, which generated profits of around 49.4 million Euros, distributed to shareholders in the form of a dividend of 0.053 Euros per share. This corresponds to a payout ratio higher than 86% (after appropriations to the legal and extraordinary reserves) and represents a 4.2% return on the share placing price (€ 1.25). The return on shareholders' capital is noteworthy also considering the substantial capital gains deriving from the uptrend in the price of Hera stock in the first months of 2004 (+37%, from € 1.24 to € 1.70 at the end of April), following the disclosure of 2003 results that surpassed all expectations. Retail investors moreover benefited from 2% discount in the share price quoted in the public offering, and will benefit from the awarding of a Bonus share (1 every 10 or 20 shares), which will be distributed to those entitled on 26 June 2004.

The Hera group adopts a Corporate Governance system aimed at protecting its shareholders and guaranteeing returns on their investment: the system conforms to the requirements of law and the "Codice di Autodisciplina" (self-regulatory code of conduct) promoted by the Italian stock exchange. The Group is committed to creating medium- and long-term value for its



shareholders through the pursuit of its mission and a socially responsible, sustainable management of the business sectors it operates in. This commitment is manifested through the adoption of a Code of Ethics (see chapter 2), which ensures the transparency of ethical values and of the transparency procedures governing the management of relations with all stakeholders.

The Group pursues its mission assuring the full transparency, to the outside world, of the choices it makes and the information relating to company performance. Hence it offers complete, accurate, balanced and timely information so that investors' decisions may be based on the company's strategic choices, business performance and expected returns on the capital invested.

Information is disseminated in accordance with the guidelines concerning "price-sensitive" information established by Consob (Italian securities and exchange commission) resolutions.

In 2003, to further protect its shareholders, Hera amended its articles of association and procedural rules for shareholders' meetings in observance of the requirements set for publicly traded companies and introduced changes based on the principles contained in the "Preda Code" of conduct.

It has set up a Management Pay Committee and a Committee for Internal Control: it has adopted a self-regulatory code of conduct for so-called "internal dealing", which provides that all relevant transactions made by management concerning the company's stock be duly communicated. These committees include Board of Directors members who represent minority interests.

4.2.1

Hera's Stock Exchange Listing On June 26th 2003, following a public offering of 305 million common shares representing 38.7% of registered stock, Hera was admitted to a listing on the Italian Stock Exchange, in the blue chip segment.

The IPO saw a demand that was 2.4 times the volume of shares offered, coming both from institutional investors (about 150 major players of Europe's biggest capital markets: Italy, United Kingdom, Germany, Switzerland and France) and private investors (about 90 thousand), which resulted in a full exercise of the green shoe option for 45 million additional shares representing a further 5.7% of capital stock.

hareholders after the public offering

Municipality of Rimini	3.8%
Municipality of Cesena	3.4%
Municipality of Forli	3.5%
CON AMI	6.8%
Municipality of Ravenna	7.1%
Municipality of Bologna	19.7%
Other Municipalities	11.2%
Total Municipalities	55.5%
Nextra	2.3%
Kairos	2.0%
Other institutional and private investors	40.1%
Free float	44.5%
Total	100.0%

Shareholders after the public offering



At the date of the listing, the company ownership structure was characterized by the absence of a single controlling interest – a typical feature of other Italian multi-utilities – and a significant presence of institutional investors (as at 31 December 2003 Nextra Asset Management SGR and Kairos Investment Ltd held a stake of more than 2%).

In 2003 reserved capital was increased by about 6.7 million shares following the integration of a business division of the company Geat SpA (relating to the provision of services in the Environment and Public Lighting sectors in the province of Rimini) as well as other activities previously managed directly by several municipalities in the Group's tareet territory.

The capital stock is made up of 793,202,121 common shares, 350 million of which free floating.

The articles of association of Hera S.p.A. reflect its nature as a mainly publicly owned enterprise and therefore provide that each individual private shareholder may be allowed at most a 2% voting right in shareholder decisions.

For a description of the mechanisms for appointing the Board of Directors, see Chap. 2: in 2003 the total membership increased to 13 following the addition of three directors appointed by private shareholders; two members of the Board of Auditors (a statutory member and a substitute) are appointed by private shareholders.

The IPO described previously, which fixed a selling price of 1.25 euros per share (1.225 euros for private investors), also proved to be in a success in terms of subsequent stock market performance: the IPO price was substantially reconfirmed in year-end trading.

4.2.3

Stock market performance

In 2003, Hera stocks performed better than the Utilities index (reference benchmark) for long periods of the year, thanks to the positive growth displayed by the Group in all business areas.

Performance of the stocks was further buoyed by the market's positive reception of several extraordinary transactions made by the Group, such as its strategic supply agreements with international players (with Atel for the purchase of electricity and VNG for the importation of natural gas from abroad) and its purchase of a 42% stake in the utility company Agea.



4.2.2

Evolution of share capital and its breakdown

In early 2004 investors took a cautious stance due to a situation of increased macroeconomic and political uncertainty (a dollar that continued to fall against the euro, high oil prices and fears of interest rate increases). Preferences shifted toward defensive, «recession-proof» investments such as utility stocks, which performed well in the marketplace compared to list averages.

In this market context Hera stocks have enjoyed a strong uptrend in 2004, the sharpest rise coinciding with the disclosure of 2003 results which surpassed the highest market expectations. Share prices continued to rise steadily throughout the first months of the year and gained further momentum toward the end of May (attaining growth of around +50% compared to the beginning of the year) following the publication of preliminary quarterly data, which revealed growth in all business sectors and an improvement in financial performance.

The average market value in May hovered near the economic value ascribed by consensus of the analysts (this, too, has been gaining uninterruptedly since the month of September 2003, as shown by the dotted line in the graph).



Average daily trading of Hera shares increased significantly in the first part of 2004, with volumes surging from 570,000 (in 2003) to over 1,100,000.

The significant levels of trading illustrated have benefited from the substantial number of foreign and Italian institutional investors that actively trade the security as well as a high floating percentage (over 44%).

Relations are maintained with investors through shareholders' meetings and a vast range of other activities conducted to ensure the continuity and transparency of the relationship. In March 2003 Hera instituted an Investor Relations function, which oversees relations with financial markets in accordance with the guidelines set down by Consob and the Italian stock exchance.

Besides the initial relations established with a road show staged for the placement of shares on the stock exchange, in 2003 the management arranged over a hundred meetings with investors in the form of voluntary road shows, also in an international setting (Canada, USA, United Kingdom, Denmark, France, Germany, Switzerland), designed to increase acquaintance with the Group and diversify the shareholder base.



Relations with investors

4.2.4

On the occasion of the presentation of the draft financial statements approved by the Hera Board of Directors, an extensive road show was staged in which management illustrated the results to over 150 institutional investors in the most important European and American financial marketplaces.

The Group's institutional website (www.gruppohera.it) now features an Investor Relations

section containing information updated on a real-time basis and various other tools have been adopted to improve the visibility and transparency of financial communication aimed at shareholders (newsletters, real-time presentation of results on line, conference calls, etc.). The activity of financial communication conducted during the year earned Hera the Milano Finanza "Leone d'oro" prize (awarded on March 8th 2004).

As at April 15th 2004, Hera stocks were included in the basket of securities with a high ethical rating forming the Axia Ethical index; moreover, since April 1st 2004 it has been included in the Kempen SNS Smaller Europe SRI Index, a sustainability index for small European enterprises.

The Hera group is undergoing scrutiny by a growing number of financial analysts; in March 2004 there were 13 financial analysts who issued updated studies on the Group (Abn Amro, Actinvest, Caboto, Chevreux Indosuez, Euromobiliare, Cofiri, IMI, Intermonte Securities, ING, Jefferies, Rasbank and UBM).

The consensus among analysts (the median rating expressed by analysts with regard to the worth of Hera stocks) rose steadily after the listing on the stock exchange (see graph in par. 4.2.3.). Analysts' recommendations improved accordingly: all thumbs up as at May 21^e 2004, with 4 recommendations to +Buy».

In 2004 the yearly results achieved by the Hera group have reassured analysts, who have expressed positive ratings and assessments also in view of the sharp uptrend in the stock market quotation. Hera is not involved in any litigation with shareholders. •

The Group adopts a policy toward financial backers that is designed to ensure utmost

4.2.5

4.3

Financia

backers

Relations with financial analysts and the worth of Hera stocks

transparency and correctness in communication: in 2003 it had relations with major Italian and foreign lending institutions.

Net short-term borrowing (thousands of euros)		31/12/03
Securities held as fixed assets and other financial receivables		260
Receivables for loans covered by government transfers		292
Long-term payables to banks/loans		- 352,648
Medium/long-term borrowing	- 352,096	
Short-term payables for bonded loans		- 5,165
Other financial receivables		4,350
Short-term payables to banks/loans		- 194,087
Cash and banks		92,718
Investment assets that do not represent fixed assets		9,935
Net short term borrowing	- 92,249	
Total net borrowing		- 444,345

The net capital invested by the Group increased by 219.7 million Euros, from 1,119.1 to 1,338.8 million Euros, primarily as a result of the major investment plan carried out during the financial period.

It is worth highlighting the leverage maintained by the Group, whose ratio between debt capital and total sources of finance is equal to 0.33.

The three main financial backers of Hera account for about 18% of its overall borrowing (see Financial Statements for details).

Long-term borrowing increased by 166.8 million Euros, reflecting the increased financial requirements associated with investments in fixed assets. In particular we shall note the increase in non-recourse project finance tied to the construction of the new Frullo waste-toenergy plant (total of 48 million Euros), as well as the acquisition of a 65 million Euro loan from a pool of banks, used to the purchase the stake in Agea Ferrara. The remainder was borrowed from banks to finance further share capital investments (e.g. Tirreno Power). The portion of value added generated by the company which is used to service its borrowing debts remained at a level of about 5%.

Hera is not involved in any litigation with financial providers.



Suppliers

As expressly stated in the European Union's Green Paper on Corporate Social Responsibility, a company's sustainability is realized throughout its production chain: from suppliers to subcontractors and their employees. Hera has chosen to establish a partnership with its suppliers, believing in the importance of sustainable development, which the company also pursues indirectly by inducing suppliers and all allied enterprises to adopt a business culture founded on sustainability principles.

4.4.1 Policies regarding suppliers

The Group bases all its relations with suppliers on principles of correctness, fairness and impartiality, at every stage in the purchase of goods and services; its search for the highest competitive advantage goes hand in hand with a commitment to guarantee equal partnership opportunities, loyalty and impartial judgment.

Complete, correct, adequate and timely information assure transparency in every relationship.

In 2003 the Group engaged in intense efforts to build and improve its relations with suppliers. The basic elements of this action regarded:

- + definition of standard rules for the selection of suppliers, to be applied throughout the Group;
- + forms to be used both for public contract bidding and private negotiations;
- redefinition of the process for including suppliers in the list of qualified suppliers, with more complex qualification criteria for items critical to the quality of the service provided: requirements include company quality system certifications, product certifications, test certificates, conformity with laws and regulations, verification of authorizations.

4.4.2 Characteristics and

analysis of suppliers

The supplier data included in this Sustainability Report refers to the commercial ties of: Hera S.p.A., Hera Comm, the Territorial Operative Companies, Famula on Line, Frullo Energia Ambiente and Uniflotte. The upgrading of the information system, currently under way, will enable us to have more complete data for 2004.

Supply of raw materials (gas, electricity, water)

The natural gas distributed by the Hera group in 2003 was obtained from the following sources: 84% from ENI Gas & Power S.p.A., 6% from other minor domestic suppliers, while 10% was purchased on the European market from various international operators and imported independently (the most important supply agreement was reached with VNG of Leipzig). In 2004 the quantities imported independently are expected to undergo a progressive increase. The sources of the electrical power sold to eligible customers were: wholesalers operating in the free market, imports, CIP 6 auctions and Hera's own production. A long-term agreement for the supply of domestic and imported energy has been in effect with the Swiss ATEL since the beginning of 2004. As regards the water sector, in 2003 the Group covered about 79% of its water demand by drawing on its own supply sources (springs, rivers and lakes, well fields): the remaining 21% was supplied by Romagna Acque S.p.A., a company in which many of the municipalities that are shareholders of Hera own a stake, and which manages the reservoir of Ridracoli (Forli-Cesena).

Supply of goods and services

In 2003 the relations with the over 9,000 suppliers of goods and services were guided by the policies illustrated at the start of the chapter and the working methods described below. Basically speaking, three working approaches are used:

- centralization of supply agreements: process started at the beginning of 2003; at the end of 2003 70 centralized agreements were in place, for an estimated overall yearly turnover of about 19 million euros;
- bargaining: to exploit the margins of savings made possible by the new dimensions of the Group and thus of the quantities supplied;
- standardization: overcoming specificity and the consequent fragmentation in purchasing leads to further margins for improvement.

Of great importance to the Group is the provision of maintenance services for its water and gas networks. At the end of 2003, eleven contracts, ten of which awarded to local, private and cooperative enterprises based on the outcome of bidding procedures, assigned jobs worth an estimated 30,000,000 Euros per year. These contracts represent an important partnership between Hera and businesses playing a significant role in local production, businesses that have developed and continue to build, working together with our engineers, specialized skills both in the construction work (excavation and road repair) and technological areas (supply mains and connections) involved in the maintenance of our networks. ●

The criteria for choosing product and service suppliers are based on assessments of quality and cost-effectiveness, technical and professional proficiency, respect for the environment and broad social commitment, according to specific, formalized internal rules. Periodic supplier assessments ensure the constant suitability of suppliers and promote the growth of their organizational culture.

4.4.3 Supplier qualification

Supplier qualifier the

The requirements listed below are expressly defined and classified as mandatory, fundamental and optional. They are essentially based on organizational criteria and criteria tied to the quality of goods and services purchased:

- + certifications,
- + results of audits conducted by Hera,
- + analysis of suppliers' self-assessment questionnaires,
- + results of tests and inspections on supply samples,
- + public health and safety,
- + compliance with laws and regulations,
- + technical requirements,
- + delivery times.
- + completeness of documentation,
- + quality of customer service,
- + quality of service for production,
- + adoption of measures to lessen damage.

In its ongoing relationship with suppliers, Hera promotes corrective or preventive actions whenever it detects serious nonconformities that undermine the quality of the goods and/or services supplied.

In contexts where ISO 14001 or Emas certifications are present, suppliers of goods and services must satisfy additional, more restrictive environmental performance requirements, expressed in specific procedures:

environmental certifications.

- safety in the event of environmental emergencies,
- compliance with all environmental standards,
- personnel with adequate training and awareness.

As of the end of 2003, purchasing processes have been managed via SAP/R3 management software.



As regards purchases of goods and services, Hera launched a process of document standardization which, in 2003, for the area of Bologna, led to the definition of "Standard Supply Conditions", a document sent to all suppliers for acceptance. It regulates all aspects tied to delivery, quality over time and the responsibilities related to the goods and services supplied. In 2004 the Group plans to extend this practice to all its local units, introducing improvements as necessary.

In 2003 Hera standardized the basic conditions and specifications relating to jobs and services contracted out to other firms. In particular it revised the terms concerning the observance of safety regulations, highlighting the need to integrate the risk assessments conducted by contractors and the specific risks and environmental hazards identified by Hera for the job being contracted out, the need for cooperation among the companies concerned and for coordination of Hera customers.

With respect to the employees of contractor firms, special emphasis is laid on compliance with the law in matters related to wages, social security and insurance in order to prevent recourse to illegal labor.

Consistency and uniformity in contract conditions serve to prevent discrimination among firms, ensuring transparency in the awarding of contracts and assessment of contractors. The process of normalizing and standardizing the behavior shown toward suppliers by all Group companies also makes it possible to identify the contract conditions that best serve Hera's interests in the management of outsourced jobs, services and supplies, incorporating the best practices adopted by the merged companies. This process enables a standardization of contract provisions relating to the key economic aspects, thus guaranteeing common standards of quality in terms of guarantees, insurance coverage, payment terms, advances and price adjustments.

The Special Contract Specifications focus special attention on the most delicate issues to be dealt with in the management of public contracts, e.g. worksite safety, ban on labor brokerage and employment of workers who are not duly insured, technical reliability of contractors and their company organization.

4.4.5 Contribution to local communities

The Hera group contributes to the development of local communities and the territory it operates in by increasing the value of all related activities; in the process of buying goods and services, it has an opportunity to promote the exchange and dissemination of good practices within the SMEs that have historically characterized the productive context in the region where Hera operates. The high percentage of suppliers based in Emilia-Romagna (over 70%) reflects the close links between Hera group companies and suppliers and facilitates a process of mutual growth and cooperation: companies are favored and grow thanks to periodic inspections and mutual assessments, the historical nature of relations enables more detailed knowledge and closer insight into the changing needs of the parties on both sides.

2003 suppliers by geographical region	Number	%
Hera Territory (Provinces of BO-RA-FC-RN)	6,103	64.93
Region of Emilia Romagna	6,605	70.27

4.4.6 Information and communication The main communication tool supporting the purchase of goods and services is the Tender Request. In it potential suppliers are asked to specify their contract terms in relation to a technical specification.

The Contracts Function communicates with suppliers through public invitations for tenders; as a rule these are published on the Group's Internet site (www.gruppohera.it) where current laws require Hera to abide by procedures of public disclosure. Where the awarding of a contract is not preceded by open competitive bidding, the standard method of communication is to send suppliers a tender request to determine whether the company meets technical requirements and to verify the technical and financial terms presented.

Hera is currently involved in four significant legal disputes with suppliers.





4.5 Customers

6_Tourists strolling around Forfi.

4.5.1 The creation of the Hera group has also entailed a different approach to the target market, which in some sectors of activity is now like a free market. The Group's focus is primarily on customer care and customer satisfaction, considered factors of primary importance for its image and the attainment of company objectives.

The Group quality policy is aimed at ensuring that the services provided meet the minimum standards published in the "Service Charters".

All employees and outside personnel of the Group are committed to ensuring compliance with these standards of service.

The Group communicates with customers in a clear and transparent fashion, correctly and constantly informing them about the characteristics of the services offered and the Group's activities, using simple and understandable language and always ensuring that customers are placed on an equal footing.

Hera also aims at constantly increasing the value of the services provided, in particular in the energy sector (electricity and gas), where it has developed new offerings and new commercial products.

The package it offers to eligible customers in the energy sector is based on a combination of gas and electricity (Dual Fuel package), which enables it to build a loyal customer base and offer a reduction in operating costs (two products, one supplier).

Value added services have also been developed for the enjoyment of energy products (postmeter services) which allow energy savings to be combined with additional advantages. These include the Energy Service, ideal for the management of heating systems in apartment buildings; it offers the possibility of entrusting the management of the central heating system, maintenance, fuel purchasing and all operations necessary to ensure the rationalization and efficiency of the system to a single service provider.

In 2003, the Group also launched a policy of offering services to medium-sized businesses and users outside its traditional territory with the aim of defining the most suitable commercial offerings and sales channels and acquisition tools and processes. The services offered on the free market were characterized by the creation of a standard profile for user segments to enable customers to benefit from the advantages deriving from a more rational use, in terms of methods of consumption, of gas and electricity.

Energy Sector	2002	2003
Natural gas		
Customers served	667,930	699,885
GPL		
Customers served	1,614	1,674
District heating		
Residential units served	14,833	14,432
Electrical power		
Captive users	48,796	49,049
Non-captive users	138	1,026
Total	48,934	50,075
Traffic light management		
Municipalities served	14	17
Public lighting management		
Municipalities served	39	46

Water Sector	2002	2003
Water supply system		
Domestic users	512,746	535,697
Others	104,114	103,866
Total	616,860	639,563
Sewer system		
Civil users	469,285	486,411
Industrial users	1,058	1,181
Total	470,343	487,592
Water treatment		
Civil users	526,984	543,819
Industrial users	1,316	1,404
Total	528,300	545,223

Environment Sector	2002	2003
Waste collection		
Municipalities served	100	104
Inhabitants served	1,663,241	1,749,194
Street sweeping and cleaning		
Municipalities served	64	64
Inhabitants served	1,499,217	1,499,217
Winter road clearance service		
Municipalities served	6	6
Inhabitants served	796,000	796,000
Beach cleaning		
Municipalities served	8	11

4.5.2

Characteristics and analysis of the market served

Hera operates in a territory that includes almost 140 municipalities in the provinces of Bologna, Ravenna, Forlì-Cesena and Rimini and offers its services on the free market outside this territory as well. In order to achieve economies of scope and exploit the cross-selling opportunities vis-à-vis end customers, the Group's commercial channels manage their different activities in a unified, integrated manner. In addition, to maximize the efficiency of sales activities, sales channels have been differentiated according to type of customer:

- medium and large-sized companies ("Business") and government agencies (Government), which have been sub-segmented based on geographical location, specific sector of activity and dimension and number of sites present in the territory;
 trade associations or consortiums;
- apartment buildings:
- residential customers and "small offices" ("Mass market"), divided into different subsegments according to behavioral characteristics and attitudes.

For the sale of energy services (gas and electricity), Hera has established the company Hera Comm, whose mission is to play a forefront role, on a regional and national level, in the new competitive setting arising from the process of liberalization in its target market. Hera Comm is thus endowed with a commercial organization extending throughout the territory to guarantee customers broad coverage.

As a first point of communication with customers, Hera Comm runs a contact center which is active in all target provinces, for all market segments and all services, liberalized and cantive.

The creation of a single Group contact center, one of the major objectives of 2003, involved the following steps:

- structuring and optimization of services, by centering activity on three poles;
- establishment of a single toll-free number for the whole territory;
- implementation of a new CRM (customer relations management) information system; La nuova organizzazione del servizio è lo strumento per raggiungere gli obiettivi di soddisfazione del cliente in termini di:
- levels of service quality;
- consistent standards of service, uniform processes and procedures for all services throughout Hera's territory;
- harmonization and extension of service opening times.

As regards business customers in particular, Hera Comm has two specific areas dedicated to large companies on the one hand and SMEs on the other. Hera Comm interfaces with large companies through an organization of dedicated operators capable of satisfying specific supply and after-sale service requirements; special care is taken to constantly monitor consumption and the supply variables for each customer.

In 2003 another dedicated area was defined for the management and development of two specific market segments: apartment building managers and government agencies. For trade associations, which have an important role deeply rooted in the local socioeconomic fabric of the region where Hera operates, it was decided to set up a Relational Marketing Unit with the aim of

- maintaining close relations, conducive to loyalty building, with associations throughout the territory, relations to be renewed or 'recovered', to be started up and/or managed with recard to environmental and socioeconomic issues, etc.;
- devising, coordinating and monitoring the relational and marketing initiatives aimed at trade associations;
- pursuing any actions of mutual interest, such as the acquisition of EU funding, etc.;
- managing 'joint participation' of Hera and associations in trade shows and national and international events.

Lastly, Hera is building new tools and channels for customer contact and service and developing a new range of services for businesses and homes, also in conjunction with outside partners.

The quality of the service we provide to our customers has always been regulated within the framework of formal contractual commitments today taking the form of "service agreements", supply contracts and, where provided by specific laws, "Service Charters". Service agreements are made with the local authorities we provide environmental services for and drawn up in conformity with regulatory changes.

In the energy sector, where the relationship with each customer is regulated via a supply contract, Resolutions 47 and 236 issued by the Electricity and Gas Authority in 2000 take on particular importance in guaranteeing customers a gas distribution service. The former resolution establishes commercial standards that every distributor must abide by: it addresses such concerns as hookup times, the response to customers who go to a service desk for any problem and complaint handling. Resolution 236 addresses the topic of safety in gas distribution: it focuses on such aspects as the efficiency and promptness of emergency and breakdown service and the number and duration of service disruptions due to special maintenance on pipelines. The parameters contained in the two resolutions must be included in a yearly report submitted by the gas utility.

In captive markets (water, gas, electricity, environment services) users' rights are assured by the Authorities: the Group strictly applies the set guidelines regarding information to users. Customers are guaranteed gas supplies at a fixed, all-inclusive price: all the costs and potential 'risks' of accessing the market, which depend on the changing conditions of the international market, are borne by Hera. We need only consider, for example, the strategic importance of such assurances for Italian businesses.

The new website of the Hera group (online as of May 2004) features a specific section dedicated to customers, containing complete information about the services provided and directions on how to contact the Group. It also specifies the tariffs for the captive market and the basic conditions offered for services on the free market.

Plant surveillance

The unstable international situation and frequent acts of terrorism and sabotage make it a strategic priority to protect company plants, and water supply infrastructures in particular, both from accidents (fires, road accidents with spilling of toxic substances,...) and deliberate acts (intrusions by would-be thieves or terrorists). The surveillance plans, whose most critical stages have been defined by the local police authorities (Prefecture), are based on an ample presence of video surveillance systems.

These systems are made up of fixed, trainable television cameras located in places considered to be the most likely points of intrusion and strategic for visual monitoring of processes. The images captured by the cameras installed in the plants are relayed to stations that are manned 24 hours a day to ensure that immediate action will be taken when necessary and stored to allow subsequent viewing. Video surveillance is completed by broad application of other innovative technologies for remote monitoring of plants, access control and fire safety.

Safety of user gas equipment

To guarantee the safety of equipment on user premises, an emergency service has been set up to assure that help arrives on the site of the call within an hour in case of gas leaks or damage to the distribution network.

Hera moreover promotes information campaigns to draw customers' attention to the importance of complying with the main gas equipment safety standards and to promote models of behavior aimed at keeping equipment running efficiently and reliably over time.

Protection of privacy

The introduction of the SAP IS/U platform and Siebel application program, scheduled for the second half of 2004, will provide greater assurance of the confidentiality of personal data. In this regard, Hera constantly seeks customers' consent before using sensitive data, in accordance with applicable data protection laws. When sellers first join a sales unit, they are required to complete an in-depth training course that deals with general contract conditions, details of the offerings aimed at customers and privacy regulations.

4.5.3 Service quality

and safety

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4. Tariff syste

(*) The increase refers to the tariff or contract if the municipality has not switched to the tariff system

4.5.4	Yearly average tariffs				
Tariff system	Service		2001	2002	2003
	Distribution/sale of natural gas and LPG	euros/m ³	0.31	0.28	0.24
	Sale of electricity	euros/kWh	0.101	0.097	0.0599
	Water supply	euros/m ³	0.754	0.82	0.862
(*) The increase refers to the tariff or contract rates: unicipality has not switched to the tariff system it can decide whether to transfer the increase to residents	Sewer system	euros/m ³	0.087	0.098	0.102
	Wastewater treatment	euros/m ³	0.275	0.277	0.292



For the distribution and sale of natural gas, LPG and electricity the tariffs applied by Hera for captive customers follow the criteria fixed by the Electricity and Gas Authority (AFEG)

During the year, the Authority (AEEG) asked natural gas distribution companies to provide the necessary information for defining the tariff options for the new heating season; the implementation of these options will enable gas utilities to optimize the flows of revenues through better customer management tied to actual consumption patterns, as occurs in the electricity sector.

In its resolution no, 138/03 the Authority defined a "basic tariff" that vendors of natural gas distributed through local networks are obliged to offer all customers (resolution no.

237/2000 continues to apply for gas supplied through channels other than the distribution networks)

Despite the complete opening of the market as of January 1st 2003, therefore, a situation of strict price control continues to prevail, pending a greater opening of the market on the supply side. To stimulate competition, the Authority has imposed new information requirements on vendors and introduced a "gas exchange" modeled after the one already existing in the electricity sector.

In 2004 the new regulation will serve to cut the average gas price by about 0.77 euro cents per cubic meter, equivalent to a reduction of 2,3%-2,4%. No further significant changes are expected in the 2nd guarter of 2004. To partly offset the economic effect of the average tariff reduction, the Authority has granted utilities the option of applying increases up to a predefined maximum on retail charges to customers with a consumption of up to 20 GJ/vear in the period 2002/2003.

In the electricity sector, the legislative bill for the reorganization of energy markets (so-called "Marzano bill"), which has been undergoing scrutiny by the Senate Industry Committee since September, aims to speed up liberalization of the electricity market, proposing that all business customers be immediately considered "eligible"; as of July 1st 2004 all "nondomestic" consumers and as of July 1st 2007 (deadline fixed by the new EU directive for complete liberalization of the electricity market) all customers will be able to freely choose whom to buy electricity from.

On 8 October 2003 the guidelines adopted by the Authority for the presentation and assessment of projects seeking energy efficiency certification (Ministry of Industry decrees of 24 April 2001) were published in the Official Gazette. The guidelines complete the legislative process that began with the Bersani and Letta decrees, whereby the obligations of electricity and gas distributors were defined in terms of energy efficiency gains. The establishment of a market based on energy efficiency certificates will enable companies that were prompt to react to the new regulatory framework to effectively meet the requirements of law and create value through projects for saving energy at the points of use.

On 31 January 2004 the Electricity and Gas Authority (AEEG) defined the tariff structure for the transport, distribution and sale of electricity in the regulatory period 2004-2007, fixing a 3.5% "price cap" for distribution activities in the years after 2004.

Water tariffs are determined on the basis of CIPE (Interdepartmental Committee for Economic Planning) directives. The tariffs applied for the water supply service are differentiated according to use of the resource (domestic, industrial, commercial or service sector, animal husbandry. farming....). The tariffs for sewer and wastewater treatment services vary in the different districts served, as do those for the supply of drinking water. In the future the tariffs will be determined by the OTA Agencies using the "normalized" method (ministerial decree of 1 August 1996). The tariffs will take into account operating costs, depreciation and return on capital.

The fees for the collection of municipal solid and kindred waste and street sweeping and waste treatment services take the form of a tax on solid waste disposal ("TARSU") in some municipalities and a tariff in others.

The Ronchi Decree (Leg. Decree 22/97) provides for the TARSU to be phased out and replaced by a tariff that covers all waste management costs and is directly collected by the service provider

The tariff is calculated using parameters that differ for domestic and non-domestic users and comprises a fixed portion, based on the essential cost components of the service (including, in particular, infrastructural investments and depreciation) and a variable portion, related to the guantity of waste handled, the service provided and the entity of operating costs.

The transition to a system of "normalized tariffs" covering the costs of the entire waste collection and treatment cycle has not vet been completed; the deadline set by the Ronchi decree is the end of 2004. Though OTAs have been created within the region, as at the end of 2003 contractual agreements were still mainly defined with municipalities; the first "Start-up Agreement" for the waste management service was signed by Hera in 2002 with OTA 9 (Rimini) and we may assume that in 2004 agreements with the other OTAs will likewise go into effect.



4.5.5 Customer satisfaction surveys

Hera places a priority on assuring the quality of the services it provides to customers. To attain this objective it is necessary to:

- + identify and understand customer requirements and expectations;
- + ensure that the objectives and goals of the organization are consistent with customer requirements and expectations;
- + communicate these customer requirements and expectations to the whole organization;
- + measure customer satisfaction and act accordingly;
- + manage customer relations in a systematic fashion;
- + ensure a balanced approach toward customers and other stakeholders (shareholders, employees, financial backers, local communities, ...).

For these reasons, in the past the companies that merged into Hera have conducted user satisfaction surveys aimed at assessing the perception and quality of services and customer expectations as to their improvement. In one of the areas within Hera's territory, a survey asking customers to rate the water and environment services provided by the Group revealed: — a high degree of satisfaction with waste collection services;

- a high level of awareness concerning the benefits of segregated collection, with calls for its expansion;
- appreciation for the regularity of waste collection services;
- dissatisfaction with the tariffs charged;
- a highly positive overall rating of the water service.

4.5.6 Information and

communication

- 4.5.6 In 2003 Group companies employed different tools to communicate with users:
 periodic newsletters and press campaigns through major local weekly publications;
 - partnerships with municipal periodicals published within the territory, with full-page features on topics related to utility services;
 - · radio and TV broadcasts;
 - Internet sites:
 - press conferences:
 - advertising;
 - scientific meetings:
 - traditional channels of communication with users (offices open in all service locations, tollfree numbers, locals meetings and assemblies).

As regards contact with users, an increasingly important role is being played by consumers' associations, which Hera considers an important counterpart, both as a source of stimuli and constructive criticism and as a partner.

7_Taiking to the city through the Hara communication campaign. There is only one significant pending lawsuit with a customer.

The European Commission's statement on Corporate Social Responsibility ascribes to the relations between businesses and institutions a central role in promoting a productive framework that considers the social and environmental dimension of every activity. Institutions acknowledge that companies' adherence, albeit voluntary, to the principles of CSR, helps bring benefits to the entire community; for this reason it is essential to encourage businesses by promoting a free and transparent exchange of information on both sides, such as to instill a climate of mutual trust that makes these tools credible and effective.

Chap. 2 contains a description of the internal control system the Group has adopted in order to ensure compliance with the law, particularly as regards Leg. Decree 231/01, and the "Code of Ethics" project. \bullet

The Hera group promotes positive relations with institutions, in particular with the institutions operating in its reference territory and, on a national and supranational level, the organizations it interacts with in carrying out its activities.

The personnel who have relations with institutions and government agencies for various reasons must ensure maximum transparency, clarity and correctness to prevent partial, false, ambiguous or misleading interpretations by institutional figures.

No benefits or promises of favors may be offered by Directors, employees or external personnel of the Group to public officials or individuals appointed to public service (such as representatives of the authorities or local government), with the aim of serving an interest or gaining an advantage of their own or on behalf of Group companies.

Hera group's cooperation with institutions is the result of the choice to collaborate with local authorities, who are both shareholders and customers of the company, as well as the decision to play an active and proactive role in institutional relations.

With the framework of the liberalization process and the new regulatory context, the main institutions Hera has relations with are:

Energy Sector:

- + Electricity and Gas Authority,
- + National Grid Operator (GRTN),
- + Single Buyer (SB),
- + Electricity Market Operator (GME S.p.A.).

Water sector:

- Optimal Territorial Area (OTA) Agencies,
- Region of Emilia-Romagna.

4.6.2

4.6.1

Policies

4.6

Institutions

Methods of institutional relations

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- Italian government,
- Region of Emilia-Romagna,
- Provincial authorities,
- Municipal authorities.

the form of taxes.

(in thousands of euros)

Taxes other than income taxes

Income taxes (IRPEG and IRAP)

Within the Group, relations with local institutions are directly maintained by the Territorial Operative Companies through the "Relations with Local Institutions" function.

Approximately 9.5% of value added is transferred to government agencies, almost entirely in

2002

12,105

38 659

2003

9,174

35 588

4.6.3

Income taxes, other taxes and contributions paid

4.6.4

Partnership with research organizations, public institutions and universities

Decision no. 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 established the "Sixth Community Environment Action Program", which aimed to define guidelines, principles, objectives and priorities that should be the focus of European Community activities in the environmental sector. Such activities as applied research and the development of new technologies for reducing pollution and limiting the use of natural resources are assigned a major role in the policies of the Community, which will contribute technical know-how and funding to support innovative projects addressing environmental concerns. The priority areas for action are: — climate change:

- nature and biodiversity;
- environment and health and quality of life:

Amounts paid to national and local government and agencies

natural resources and waste.

Hera works together with research organizations, public institutions and universities in the areas of action defined by the sixth action program, on innovative, specifically targeted research projects.

The choice to invest substantial resources in research aims to meet the following objectives: + to improve products and services: projects and studies aimed at improving quality and

- sustainability and increasing the availability of water and energy resources; + to guide investments: coordination of raw materials purchasing strategies and investment nane:
- to reduce operating costs: definition of technical specifications for materials, services and projects and dissemination of the best practices for network management and maintenance;
- + to increase the gross operating margin (EBITDA): by reducing losses and inefficiencies, increasing the volume of services managed and optimizing the tariff policy.

Research and development activities, focusing both on applied research and development projects, have often benefited from public funding thanks to the innovative character distinguishing them. For its projects Hera not only avails itself of a qualified internal research staff but also engages in technical and scientific collaboration with outside partners, including research centers, universities, other companies and public institutions.

Main research activities in 2003

Environment Area

- Experimentation of a fluid bed reactor for handling corrosive gases in waste-to-energy plants, with the aim of reducing the polluting content of fumes, increasing energy recovery efficiency and cutting plant maintenance costs. The project is being conducted jointly with University of Bologna and receives funding from the MIUR (Italian Ministry of Education, University and Research).
- Termination of the project "Technologies for Reclamation of Polluted Land", funded by the Italian Ministry of Education, University and Research and conducted in conjunction with the University of Bologna, National Institute for Cancer Research and Edison S.p.A. The project included training and research activities aimed at the development and use of innovative methods for reclaiming land polluted by inorganic and organic substances, with a focus on vitrification by exposure to electrical currents (Joule effect) and biodegradation.
- LIFE-GIDUT project for segregated waste collection and communication in the leading tourist centers: the project will come to an end in 2004.

Networks Area (Water and Energy)

- + Trials conducted in some drinking water production plants to test a device based on MIMS (Membrane Introduction Mass Spectrometry) technology for real-time monitoring of volatile organic substances in drinking water. In conjunction with ARPA ER and VARIAN Inc., a project was subsequently defined for the construction of an integrated monitoring system extending throughout the Group's territory; European Community funding has been applied for under the LIFE Environment program.
- + Laboratory trials with a device based on MIMS (Membrane Introduction Mass Spectrometry) technology for real-time monitoring of volatile organic substances in wastewater. Continuous monitoring may enable an improvement in the management of wastewater treatment plants. In 2004 experimentation will continue with field trials at the main plant in Bologna.
- + Development of a model for determining the areas of protection of wells used to supply drinking water (W-SAHARA project - Stochastic Analysis of Well Head Protection and Risk Assessment). The area of protection of the principal wells in the Reno water basin was defined. The project was conducted in conjunction with City of Bologna, Milan Polytechnic, AGSM Verona, University of Tuebingen (D), Université Louis Pasteur (F), Delft University of Technology (NL), Swiss Federal Institute of Technology (CH) and the Imperial College of Science Technology & Medicine (UK); funding was provided by the EU under the 5th R&D Framework Program.
- + SASCO project (Plowing Systems for Controlled Spread of Sludge), prototype of an extensive farming enterprise dedicated to the reuse, in non-food agriculture, of dehydrated sludge coming directly from municipal wastewater treatment plants; the project brought to light the possibility of achieving further economies in sludge management.
- + Research continued into the Marecchia river water basin, consisting in qualitative and quantitative analysis to support sustainable water resource management, and an experimental trial (ISA) on the treatment and reuse of treated effluents to safeguard the wetland zones of the Po Delta Park was launched. The project partners are: Region of Emilia Romagna; Marecchia-Conca Interregional Basin Authority; Province of Rimini; City of Rimini; Optimum Territorial Area Agency of the Province of Rimini.
- + MIDI-CHIP (Microbial Diversity Chip) project, which analyzes DNA in microarrays for the purpose of monitoring microbiological diversity, conducted in conjunction with a number of European universities. It represents a stride forward in the analysis of biological content in surface water: the project came to an end in 2003.

Other initiatives

- Pyrolytic analysis of polymers used by Hera (above all polyethylene piping for water and gas) to improve methods for verifying the materials used and assessing suppliers.
- Financing obtained under the Technological Innovation Fund introduced by law no. 46/82 for the new continuous VOS monitoring systems (monitoring of the emission of volatile organic substances and odors in gases emitted during ceramic tile firing processes). Developed in conjunction with IPEG S.p.A., Smaltochimica Srl, Centro Ceramico.

Main development activities in 2003

- + Identification of the best practices for network maintenance and intervention.
- + Normalization and standardization of the main materials used, maintenance and operating specifications and frequent jobs performed in connection with networks.
- + Implementation of a single information system for the laboratories and district lab facilities.

Research and Development Investments	2002	2003
Networks Area	872,500	950,000
Environment Area	460,000	400,000
Sundry Services	1,022,080	950,000
Total	2.344.580	2.300.000

- + Definition of shared operating standards for the management of network services (effectiveness and efficiency indexes).
- + Start-up of a project to define an emergency plan for the integrated water service.
- + Definition of technical guidelines for the gualification of polyethylene suppliers.
- Scheme for identifying the most critical parameters for the water and environment services: chlorites, dioxins, asbestos fibers.





4.6.5 Information and communication

In line with the objective of periodically reporting the operating results attained in specific areas to the municipal authorities in the four provinces Hera operates in, the Top Management arranged a series of meetings with Mayors to inform them about the activities launched by the new Group. This initiative aimed to convey to one of the major stakeholders the message that Hera is the key partner in the provision of everyday services that are essential to the whole community and that it intends to provide such services under the best possible conditions, by optimizing local resources, in harmony with the principle of "sustainable quality", and identifying local needs.

The strategic communication plan approved for 2004 includes a series of initiatives specifically aimed at the mayors of municipalities with a stake in Hera.

For information about pending litigation see section 4.7.



4.7 Community

4.7.1 Policies

The Group strives to maintain and develop positive ethical relations with all stakeholders, i.e. all individuals, groups or organizations with legitimate interests or rights connected to the Group: the community, in general, is a stakeholder with broad-ranging interests in Hera.

About 1% of the value added deriving from company operations goes toward the community.

4.7.2 The public offering

A highlight of 2003 in terms of communication was the initial public offering of shares in Hera S.p.A., which saw the successful deployment of a large part of the resources dedicated to communication. The excellent result obtained with the shares' debut the stock market, which earned the company a prize for the best financial communication of the year, fits within the macro objective: "Hera, a reliable partner for all stakeholders, focused on the sustainability of tis actions, committed to creating value on behalf of all the people living in its territory". A spatial territory of this campaign, the company activated all major communication levers (advertising, sponsorships, events and media relations activities) and used the main contact tools, such as advertising in daily newspapers and general and specialized magazines, radio, TV and tools for interfacing with users (customer desks, toll-free numbers, local meetings) in order to effectively publicize the public offering and its aims.

9_Touring the hills of Bologna.

The Group's strategy places a priority on the principles of clarity and transparency and a sense of responsibility toward individual stakeholders (investors, financial community, customers and citizens); hence its relations with the media are also informed by the same principles and may be divided into several principal macro areas.

In 2003 Hera engaged in communication activities aimed at raising awareness among citizens about environmental problems, promoting knowledge of natural resources and how to use them correctly. We launched information and advertising campaigns and Environmental Education projects targeting schools and young people in particular. In the former case, the most frequently addressed topics were segregated waste collection and how to behave correctly when dropping off waste, and the Asian tiger mosquito, a phenomenon that significantly impacts our territory. The Environmental Education projects for schools included visits to plants, workshops, competitions, games and refresher courses for teachers. One of the most important initiatives is the "Materiality" School Project dedicated to pupils and teachers in the Ravenna and Lugo school districts; in the academic year 2003-2004 the environmental education initiatives promoted in previous years have been further extended with the "Scartabellando" project.

Children are ideal targets because they represent the most effective channel for conveying information, the best advocates, in everyday life, of ecological concepts and behavior within their respective families and society at large, being as yet free of prejudices and entrenched attitudes. Their contribution favors a fundamental and necessary change in behavior toward the environment, useful for promoting a new living culture that is sensitive to sustainability issues.

The topics addressed in educational activities are waste and segregated collection, water, the services and plants managed by the company and their relationship with the environmental context.

The same topics also underlie the projects aimed at schools throughout the rest of the territory in which Hera operates.

In 2004 the Group's communication will focus on "Quality", to highlight the quality of the services provided by Hera across the territory in which it conducts its activities, assuring continuity and safety.

All communication activities will thus be aimed at reinforcing an image of strength and safety, of values, assurance and reliability of Hera's results throughout the target geographical region, affirming both its role as a partner in the provision of services (qualitative and technological standards) and its social commitment (to enhancing of the territory and improving the quality of life of the citizens living there). Institutional campaigns will thus be promoted on such topics as service quality, environmental impact, educating citizens how to use Hera services correctly to help improve their quality, the importance of saving energy, segregated collection and a careful use of water resources. Similarly, the Group will promote and sponsor events to publicize the Hera experience, show the quality of the service and deliver key messages (e.g. "the quality of water").

The Group's initiatives to support culture and sport included the sponsorship of exhibitions, conferences and sports and entertainment events. Hera also took part in Ecomondo 2003, an international exhibition dedicated to the recovery of materials and energy and sustainable development. On this occasion an exhibit of young artists' works was organized in conjunction with the municipalities of Bologna, Forli, Ravenna and Rimini, sponsored by GAI (Young Italian Artists). The works focused on environmental issues – relating to Hera's environmental hygiene business – and were created using computerized video techniques. This activity, which will be further developed in 2004, has the aim of exploiting local creative resources and identifying original media and languages for communicating the company and its businesses.

4.7.4

Initiatives in support of culture and sports

Hera's communication

4.7.3

4.7.5 The project for Woliso Woreda

For Christmas 2003, Hera developed a project in conjunction with Save The Children that will bring sustainable long-term improvements to the people of Ethiopia. The project, to be completed by 2005, provides for the realization of wells and springs in the area of Woliso Woreda, a total of 75 water points in 8 villages and 57 small communities that will guarantee thousands of people access to potable water. Consistently with the Group's mission, the project involves different stakeholders: employees, consultants, customers, mayors, suppliers and associations. The pledge made on behalf of Save The Children is not an ad hoc donation. but rather represents a precise commitment of Hera, which seeks to play an important role in social change and in supporting projects to help children and third world populations.

Gifts and sponsorships	2002	2003	Budget 2004
(in thousands of euros)			
Donations and other disbursements on behalf of local communities (schools, community centers,)	109	143	215
Other gifts	-	320	N.D.
Social and environmental communication	2 344	745	1307
Investments in communities (sponsorship of events and exhibitions)	2,044	978	982
Communication for the public offering	-	2,000	-
Other communication expenses	-	364	-

4.7.6 Media relations

From the standpoint of press relations, 2003 was definitely focused on sharing, with absolute transparency, the Hera project, which embraced the two main stages of the merger and subsequent stock exchange listing. To this end it engaged in intense press relations, targeting both national and local media through the use of dedicated tools (interviews, releases, press conferences, company profiles). On a national level, attention was turned mainly to communication of an economic-financial nature, whose effectiveness was demonstrated both by the success of the IPO and Hera's being awarded the 2003 "Leone d'Oro" prize by Milano Finanza for the best financial communication. On a local level, the existing flows of communication between the press and former local utilities were confirmed: on an organizational level, to confirm the desire for involvement and sharing, territorial communication units were set up locally with the function of supporting the Holding company. Finally, in order to communicate its know-how and plant performance in the core business sectors in greater detail, the Group planned a series of editorial advertisements in industry journals and the trade press.

In 2004, as regards the economic-financial area, which will impact more directly on the national press, Hera plans to issue press releases relating to major occasions for the presentation of periodic data (annual and interim reports, shareholders' meetings) and engage in other communication activities (interviews/meetings, press conferences/press briefings) providing insight into the Group's growth strategies. As to business development in the three specific sectors of activity (energy, water, environment), this area will offer numerous occasions for communicating Hera's results in terms of service and quality; for this purpose, both nationally and locally, we will rely on traditional press involvement channels (releases and conferences) and plan in-depth features in special national editions and editorial advertisements in trade magazines. Particular attention will also be given to projects for the development of the Group's plants and facilities, again to promote involvement and sharing, with the organization of such initiatives as guided tours for journalists. As further confirmation of Hera's focus on the press, a survey (media audit) will be conducted among a selected number of journalists in order to quantitatively and qualitatively measure what they know about the company and a Press area will be set up inside the new company website, with dedicated access for journalists. Critical analyses will be periodically conducted on the articles about Hera in the main Italian newspapers and magazines; a purposive press review will be carried out, which will serve as a valid support for presenting the company, as well as specific documentation for internal/external use.

In 2003 the new Internet site of the Hera group was created with the objective of communicating the organizational complexity of Hera, the local peculiarities of its member companies and the public services provided through the Web; this part will be developed over time during the process of organizational integration currently underway in the Group. There are plans to revise the present website in 2004 to make it both informative and interactive, strongly service oriented with a particular focus on customer needs. These objectives can be attained thanks to the development of a project that is strongly focused on the needs of end users and the development of a design that is coherent with the usability and accessibility logic of international standards, which enable all types of users to access Web technologies.

This logic does not place a constraint on creativity and innovation: on the contrary, by setting precise gualitative parameters in the production stage it makes it possible to build projects of high quality in every respect, which may successfully target both the public at large and professional users. More specifically, areas will be dedicated to citizens/customers, shareholders and the financial community, businesses and industrial associations. A special educational-games area for kids will also be developed to teach about the company's activities and to complement the environmental education projects already implemented locally by the Territorial Operative Companies.

In 2003 there was no violation of advertising and marketing regulations.

At the end of 2003, Hera had twenty-eight lawsuits pending with private companies: eleven regard advance extinction of gas utility contracts in several shareholder municipalities, while five arbitration proceedings are currently underway for the same reasons. In 2003 a settlement was reached in four legal disputes with private companies, one with the GRTN (National Grid Operator) and arbitration proceedings against two private companies.

At the end of 2003, there were also twelve criminal cases pending: with one exception they are all at the stage of preliminary investigation and largely concern the failure to observe environmental regulations, though this did not result in any damage to the environment or third parties.

4.7.7

4.7.8

Virtual community: the

Group's Internet site

Lawsuits pending











pages 102-103: Waste collection in Piazza dei Martiri, Rimini; 104-105 Riolo Terme, trees lining the strada della Lavanda; 106-107 Imola, bins for segregated waste collection.

The ability to maintain the quality of and regenerate natural resources implies the need to take into account the various environmental sensitivities of the territory in which one operates. The purpose of this chapter is to analyze the Group's environmental performance by identifying the resources used, the characteristics of processes and the resulting emissions. It starts off by presenting aggregate data on resource consumption and emissions, albeit limited to a few matrixes. The gradual implementation of the sustainability management system should enable Hera to produce a complete Sustainability Report for the year 2004. The collection of data regarding resource consumption and emissions continues to pose some difficulties, above all because of the incomplete stage of development in second-tier information systems, not yet fully harmonized, thus precluding data processing on a uniform basis for the whole Group. The three-year project for the development of sustainable management also provides for a standardization of the methods for monitoring and reporting resource consumption and emissions.

5.1.2 Waste produced

5.1.1

Energy consumption

Resource use

and emissions

Shown below are the energy consumption data submitted to the Ministry of Industry, Trade and Handicrafts by the technician in charge of the conservation and rational use of energy, a figure better know as "Energy manager", who, in art. 19 of Law no. 10 of 9 January 1991, is ascribed the responsibility of monitoring efficiency in terms of energy consumption (the data pertain to the consumption of Hera S.p.A. plus that of the five Territorial Operative Companies). The majority of data are derived from point measurements; where the latter are unavailable, the Energy Manager has made estimates based on installed power and/or historical trends.

Energy source and/or use	ETP
HV/MV electricity	45,304.87
LV electricity	28,524.12
Natural gas for processes	47,743.72
Natural gas for heating offices	4,203.34
BTZ oil for heating	261.91
Transport	5,849.03
Diesel for processes	35.62
Total	131,922.61

The activities conducted by the Hera group imply the production of different types of waste: depending on its specific chemical and physical characteristics, this waste can either be subsequently treated in order to recover energy or material or disposed of internally, in the Group's own facilities. The diversity of the plants managed by Hera enables it, in fact, to «self-dispose» of a large part of the waste produced in other Group facilities. For example, the waste resulting from the maintenance of company green areas is treated in composting plants and the lechates from landfills are treated in chemical – physical – biological treatment facilities.

Data relating to the main types of waste produced in integrated water cycle and waste treatment activities are shown below. \bullet

Main types of waste produced		2003
Water Sector		
Sludge from potability treatment	t	5,601
Sludge from wastewater treatment	t	150,477
Ash from incineration of sludge	t	3,623
Environment Sector		
Dust from electrofilters of waste-to-energy plants	t	13,352
Ash from waste-to-energy plants	t	89,807
Sludge from thermal treatment wastewater	t	2,451
Sludge from chemical-physical-biological treatment	t	73,245
Lechates from landfills	t	164,165

5.1.3 Carbon dioxide emissions

Hera has started an in-depth analysis that, as of next year, will provide us with a complete picture of the greenhouse gas (GHG) emissions connected to the company's activity. For this first year, Hera can report the level of greenhouse gas emissions (expressed in t/year of CO₂ equivalent) generated by the Group's waste-to-energy plants in 2003.

Method of calculation

In order to quantify the greenhouse gas emissions associated with waste combustion, an evaluation was made of the different constituents of:

- + direct emissions, i.e. emissions of CO_2 and N_2O (nitrous oxide) deriving from the combustion process; '
- + emissions avoided through the production of electrical and thermal energy recovered from the combustion process.² ●

Greenhouse gas emissions in 2003 for Hera waste-to-energy plants

Waste-to-	Direct CO ₂ emissions	CO ₂ emissions avoided	CO ₂ emissions avoided
energy plant	from plant (t)	by energy recovery (t)	per tonne of waste
Bologna	45,632	31,237	0.200
Forli	12,400	6,573	0.137
Ravenna	11,508	14,286	0.356
Rimini	36,486	20,183	0.171
Total	106 026	72 279	0.200

(1) Celocation of CO₂ of tossil origin. Wastis incharation causes a complete transformation of carbon, whether of biogenic origin (contained in wood, paper, cardboard, tostiles, organic, etc.) or fossil origin (contained in plastic, unlike and synthetic resins, etc.). The carbon contained in fractions of biogenic origin was initially removed from the air by glastis through children yields with the simulation conditions it would return to the atmosphere in the form of CO₂, deriving from degradation processes. Combustions merely serves to speed up a process that would occur spontaneously in any case. The graden contrabution of organic carbon dates not include from the activation of CO₂ equivalent emissions. According to estimates reported in the iterature, the fraction of fossil carbon dates not include in the learator, the fraction of isoal carbon is approximately 1/3 of total carbon present in municipal waster. It was also have substantially confirmed by data resulting from an analysis of incoming waste at the Bolgong paints.

ucusal many commerci by outer resulting information and allegissis of incoming wasts at the Bologran plant. (2) if this energy were supplied by fossil fuel, CO₂ emissions would occur as a result, calculated using the standard emission factor of 0.550 g/kWh (source ANPA, 2000), average value of domestic thermoelectric plants.

SB

5.1.4 Vehicle emissions

In Italy the transportation sector accounts for 24.3% of total energy consumption; road transport is the main source of nitrous oxide emissions (NO_x - 53.2%), volatile organic compounds (VOC - 36.2%), fine particles (PM10 - 30.2%) and carbon monoxide (CO - 64.7%) (data source: "Environmental Data Yearbook" APAT 2003).

The Hera group has always been committed to using technological solutions that aim to limit atmospheric pollution: approximately 15% of the vehicles making up the company fleet run on fuels with a reduced environmental impact (methane, biodiesel and electric powered vehicles) and around 25% already belong to the EURO III class of low environmental impact vehicles. For the year 2003 the Group has conducted a study on some of the main atmospheric emissions produced by the gasoline, diesel and biodiesel fueled vehicles it uses for its activity. The method recommended under the CORINAIR (COordination-INformation-AIR) project of the European Environment Agency was applied on data deriving from consumption measurements, broken down by fuel and vehicle class (Euro 1,...). Where such data were not available, they were replaced with estimates. The analysis regarded 2,113 vehicles (see par. 5.6.3) and a total of 27,709,863 km traveled, around 90 % of the total distance traveled.

Substances emitted	Tonnes
NO _x	77.9
COV	16.4
CO	167.8
PM	9.5
CO ₂	21,012.6

The Hera group manages facilities that produce electric and thermal energy using plant engineering and distribution solutions such as cogeneration and district heating characterized by high energy and environmental efficiency (see details in section 5.2). For the year 2003 the Group has conducted a study on several of the main atmospheric emissions resulting from these energy production systems: the study follows the quidelines of

the Italian Association for Municipal Heating (AIRU).

Emissions 2003 (in t)	SO ₂	NOx	CO ₂
Cogeneration			
Barca (former Cogen) - Bologna	-	37.3	24,265.6
Fossolo - Bologna	-	9.0	3,926.7
Ecocity - Casalecchio (BO)	-	17.8	7,773.2
Monterenzio (BO)	-	0.2	82.2
Montericco – Imola (BO)	-	62.6	40,657.8
Forli	-	0.7	285.5
Plants providing backup thermal capacity			
Berti Pichat - Bologna	-	1.3	1,791.2
Telefrullo - Bologna	1.5	0.4	232.2
S.Giacomo - Bologna	-	3.0	4,049.6
Montericco – Imola (BO)	-	2.9	3,838.8
Forli	-	0.3	403.3
Barca (former Cogen) - Bologna	3.9	7.2	8,917.3
Fossolo - Bologna	-	0.7	936.3
Ecocity - Casalecchio (BO)	-	1.9	2,552.6
Monterenzio (BO)	-	0.2	324.0

5.1.5

Emissions deriving from the production of electric and thermal energy





5.2 Energy Sector

The Group Energy Sector includes: + distribution and sale of methane gas and LPG;

+ provision of other utility services: district heating, heat, public lighting and traffic lights management;

- + electricity production;
- + electricity distribution;
- + sale of electricity to captive and non-captive customers.

The main type of environmental impact deriving from Energy Sector activities is the emission of greenhouse gas. Also for this reason, the Group has set the goal of increasing its energy production from renewable sources, from energy recovery and from kindred sources. Other types of environmental impact from the energy cycle are the use of energy and doorizers for the distribution of methane gas and the use of gas, i.e., consumption of a non-renewable energy source, for the production of electrical and thermal energy.

Energy and environment

A conference held in Bologna on 4 February 2004, during the Europolis exhibition, focused on the interconnection between the regional energy balance and the environment issue. In addressing this topic, the Managing Director of Hera, Stefano Adrovandi affirmed that Hera firmly believes that the environment issue cannot and must not be separated from the energy issue. Indeed, it feels that a certain number of energy policy tools should be usefully employed on behalf of the environment: we are pleased to note, from this point of view, that talian legislators have chosen to implement the EU directive on renewable sources, no. 77/2001, which promotes the use of renewable sources in the domestic electricity market by introducing simplified procedures for plants objectively having a low environmental impact given their characteristics and the sources used.

Closing the material-energy-environment cycle is in Hera's "genes": its investment decisions are always based on an integrated outlook toward energy supplies and environmental issues. The reason is clear: given the role it occupies, the company is not, nor considers itself, merely an energy producer, as it has global responsibilities for the quality of the environment we must deliver to citizens. Accordingly, Hera is ready to constantly reduce the quantity of municipal solid waste disposed of in landfills in order to recover as much material as possible through the system of segregated collection, plus low-cost energy. This has a positive impact on the overall energy balance.

Citizens and businesses want a safe electrical system and access to low-cost energy. This is undoubtedly the meaning of the pressures to achieve energy self-sufficiency in our Region. The point is that consumption continues to rise, thanks also to economic growth, which is occurring at a lively rate in our Region.

Since the interconnections with other systems are being used to capacity, and other ones cannot be built, the answer is to support regional economic growth with a reliable electrical system on a regional basis. The plants run by Hera are delivering the maximum output that technology allows. The overall environmental impact can only decrease, because up to today the electricity we consume above and beyond our needs comes in large part from coal and fuel oil plants. With regard to liberalization, it is evident that if independent operators like Hera build new plants, the market can only benefit.

Finally, Hera is directly participating in the development of hydrogen technology through a joint project being set up with a German partner.

However, it is hard to imagine a large-scale application of such unripe technologies in the short term. If we are to obtain concrete results, everyone must do their part: government, by issuing guidelines and making resources available; industry, by directing its efforts in the direction indicated; the academic community, by experimenting; and citizens, by changing their habits.

Hydrogen has inspired the fancy of many, but its introduction into everyday life will take a great deal more research, which will in turn require a critical mass of resources that is beyond the reach of any subject, however important. The Region certainly does have new tools at its disposal: it can apply for European Union grants, which it can use to promote, in partnership with Emilia-Romagna-based utilities, industry and the academic community, a region of excellence for research and application of cutting-edge technologies.

2



Routine plant and network maintenance serves to maintain adequate levels of safety, quality and service continuity. Interventions are designed to prevent failures and monitor the efficiency of the network and plants: remote control systems are widely used for routine and emergency intervention; remote alarm systems are similarly used for the detection of faults. At some 1^{er} rise offtake points the Group has installed turbo expansion plants for energy recovery. This energy is supplied to internal users or sold to customers. In some areas not yet reached by the natural gas distribution network, Hera distributes and sells LPG through small networks served by central storage tanks, periodically filled by tankers. •

	Installed electrical power (MW)
Bologna turbo-expansion plant	1.7
Forli turbo-expansion plant	1.5
Ravenna turbo-expansion plant	1
Total	4.2



5.2.2 District heating and cogeneration

District heating consists in the supply of heat (thermal energy) in the form of hot or superheated water delivered through a distribution network.

District heating and	cogeneration					
Municipality	Buildings	Tertiary volume served	District heating	Total extension of district	Thermal energy	Estimated energy
	served (n)	servita (m³)	systems (n)	heating networks (km)	produced (MWh)	savings (etp)
Bologna	7,393	1,860,751	5	21.88	161,787	11,659
Casalecchio di Reno	1,743	215,527	1	6.14	20,166	242
Monterenzio		35,260	1	1.7	1,238	59
Imola	4,447	1,107,641	1	88.66	87,917	1,609
Castel Bolognese	8	77,000	1	3.52	1,707	0
Forlî		443,000	2	8	1,759	-8
Cesena	841	494,448	1	5	7,480	-6
TOTAL	14,432	4,233,627	12	134.9	282,054	13,555

The production of electrical and thermal energy in cogeneration plants, completed by the distribution of heat through district heating networks, makes it possible to optimize the use of energy sources and increase the possibilities of controlling, and, thus reducing emissions into the air. Cogeneration uses the primary energy derived from fuels in a more efficient manner: the fraction of energy at a higher temperature is converted into electricity while the lower temperature fraction, instead of being dispersed in the environment, is used for district heating

Within the framework of a cogeneration and district heating project, an Environmental Impact Assessment (EIA) was conducted; it included the application of a mathematical model simulating the phenomena of atmospheric dispersion of fumes emitted from a point source in order to compare the situation with a cogeneration plant and district heating network (using the parameters associated with the designed plant) with that of independent heating systems (small boilers, evenly distributed). The comparison showed that around the stack of the cogeneration plant there is an area (of about 800 x 800 meters) where the concentration of emissions is practically nil. Moreover, the maximum concentration is distinctly lower (about 80 times less) than in the case of independent systems.



with widely distributed boilers



with cogeneration plant and district heating

The Group's production of electricity, based on the exploitation of renewable sources (wasteto-energy, use of biogas from landfills and wastewater treatment plants, hydroelectric plants) and assimilated sources deriving from energy recovery processes (turbo expansion and cogeneration), amounted to 274,419 MWh in 2003.

A portion of the electric power produced by Hera is sold to the GRTN (National Grid Operator) at particularly favorable conditions, under the incentives program established by CIP (interministerial price committee) resolution no. 6/92; another portion is sold to the Group's customers; finally, a substantial portion is consumed internally.

In 2003 Hera sold 228 GWh of electricity (-5% compared to 2002) to 49.049 captive customers, and 1.018 GWh (+ 40% compared to 2002) to 1.026 non-captive customers and brokered 382.5 GWh to other traders. The HERA power grid, serving users in the municipalities of Imola and Mordano (Province of Bologna), Sant'Agata sul Santerno, Massalombarda and Bagnara di Romagna (Province of Ravenna), consists in a HV, MV and LV network extending for 1.423 km.

The power grid comprises high (HV), medium (MV) and low (LV) voltage networks, receivers/substations and transformer stations.

The primary distribution network draws high-voltage electricity (130 kV) at two points of interconnection with ENEL Distribuzione S.p.A.. HV electricity is transported to two substations where it is transformed into MV (15 kV) and then injected into the secondary MV distribution network

MV electricity is further transformed into LV electricity (220/380 V) and injected into the secondary LV distribution network. The primary distribution network is made up entirely of aerial power lines, whereas underground insulated cables make up 30% of the secondary MV and LV network.

For the maintenance of its power grid and substation monitoring system, high-voltage distribution lines and secondary transformer stations, Hera relies on a remote control system that has the dual purpose of promptly detecting faults and controlling current loads.

In 2003 scheduled maintenance activities were carried out both by internal staff and contractors and the aerial power lines underwent inspection and control procedures. In 2003, grid losses were estimated at 3.85%.



5.2.3

Electricity distribution and sale

Electricity production

5. Electric sunset in the hills of Bologna

5.2.5 Future plans

5.2.5 The Group will seek to extend the gas distribution network to municipalities within its territory that are not yet served and acquire contracts for managing the service in municipalities of neighboring territories.

It will continue in its efforts to gain new customers in municipalities outside its reference territory and to implement its dual fuel marketing policy, i.e. a commercial package combining the supply of natural gas and electricity.

With the aim of creating alternatives that may enhance the Group's competitiveness in the liberalized gas market, Hera has acquired a 10% stake in GALSI S.p.A., whose other partners include Sonatrech (Algerian National Hydrocarbon Society), which owns 40%, Edison Gas S.p.A. with 20%, ENEL Power S.p.A. and Wintershall A.G. (German energy operator belonging to the BASF Group), each with 15%. The purpose of this company is to determine the feasibility of developing an Algeria-Italy gas pipeline, via Sardinia, to import Algerian gas into Italy.

In the district heating sector, Hera's industrial plan provides for the development by 2007 – also in Provinces where the service is not presently available – of projects aimed at determining significant increases both in terms of residential users (with the addition of 24,500 buildings) and volumes served in the tertiary sector (2.9 million cubic meters), with further energy savings of around 11,000 ETP.

In early 2003 Hera acquired a 5.5% stake in Tirreno Power, formerly Interpower, which owns a number of plants with installed electrical power of about 2,600 MW.

Hera intends to participate actively in the Regional Energy Plan to contribute to eliminating the generated power deficit, in harmony with the environment and specific local needs.

As regards the efforts in this direction at the beginning of 2004 the following initiatives were at the most advanced stage in terms of design activities and authorization procedures: — combined-cycle electric power plants

- + Imola construction, by the end of 2005, of a cogeneration plant with an installed capacity of about 80 MW, which will provide about 580 GWh/year when fully operational. An environmental impact assessment is presently underway, and the official result may be expected by the end of July 2004;
- Rimini construction, by the end of 2006, of a combined cycle plant with an installed capacity of 230 MW, which will provide about 1,650 GWh/year when fully operational. The last ministerial conference on services (MAP) may be scheduled by June 2004; consequently, the official result of the EIA should be expected within the next two months;

- upgrading and construction of waste-to-energy plants

- Frullo (Bologna) renovation and environmental upgrading of the plant in order to reach, by the end of 2004, an electric energy recovery capacity of about 130 GWh/year against the current 41 GWh/year;
- Faenza construction, by August 2005, in a 50% joint-venture with the company Caviro, of a new plant situated inside an existing plant, which will allow energy to be recovered from about 60,000 tonnes a year of WDF (Waste Derived Fuel), with an electricity production of 56 GWh/year;
- Forli construction, by June 2006, of a third waste-to-energy line, which when fully
 operational will allow an additional 120,000 tonnes of municipal urban waste to be
 disposed of, with an energy recovery of 54 GWh/year;
- Rimini construction, by September 2006, of a fourth waste-to-energy line, which when fully operational will allow an additional 120,000 tonnes of municipal urban waste to be disposed of, with an energy recovery of 54 GWh/year;
- Ravenna construction, by the end of 2007, of a second waste-to-energy line, which will allow disposal of an additional 120,000 per year of WDF, with an energy recovery of 75 GWh/year.

Through one of its subsidiaries Hera holds a 10% stake in the company Calenia Energia S.p.A., which will build an 800 MW combined-cycle electric power plant in the province of Caserta (Sparanise).

With the aim of further developing its business in the electricity sector, Hera will evaluate the possibility of participating in other projects for the construction of combined-cycle plants with leading operators in the sector.

6_Stroling through the park, Faenza.

5.2.6 Distribution of gas and LPG

Data and indicators

DIStributio	011 01	yas	anu	LFG	

RESOURCES		2000	2001	2002	2003
Natural gas purchased	millions of Sm ³			1,452	1,674.3
Electric energy	MWh				492
PROCESS		2000	2001	2002	2003
PROCESS Natural gas distributed	millions of Sm ³	2000	2001	2002 1,440.8	2003 1,657.6
PROCESS Natural gas distributed (excluding Hera users)	millions of Sm ³	2000	2001	2002 1,440.8	2003 1,657.6

Production and distribution of electric and thermal energy

RESOURCES *		2000	2001	2002	2003
Renewable sources	Waste	t			361,897
Assimilated sources	Methane	Sm³			42,288,605
Conventional sources	Methane (thermal plants)	Sm³			12,956,970
	Diesel (thermal plants)	t			312
	L.P.G. (thermal plants)	t			29
	Biodiesel (thermal plants)	t			117
	BTZ Fuel oil	t			267
Electric energy		MWh			209,127
Thermal energy (from IRE t	urbo expansion)	MWh			88,924
Data regarding only the territories of	Bologna, Ravenna, Imola - Faenza				

INDICATORS		2000	2001	2002	2003
Gas not metered (not metered / added to network)	%			0.771	0.997
Average rate of losses in electricity distribution	%	5.165	2.259	2.947	3.850
Share of electric energy produced from renewable sources	%	46.21	58.59	56.91	52.61
Share of electric energy produced from assimilated sources	%	53.79	41.41	43.09	47.39
Share of thermal energy produced from renewable sources	%	22.92	19.24	16.02	16.07
Share of thermal energy produced from assimilated sources	%	68.20	69.27	72.94	71.93
Share of thermal energy produced from conventional sources	%	8.88	11.49	11.04	12.00

PROCESS			2000	2001	2002	2003
Electricity produced	Totale	MWh	191,530	207,919	252,037	274,419
- from renewable sources	total from renewable sources	MWh	88,512	121,821	143,433	144,364
	Bologna waste-to-energy plant	MWh	36,273	36,262	36,558	41,209
	Ravenna waste-to-energy plant	MWh	12,402	23,574	25,969	29,663
	Forî waste-to-energy plant	MWh		8.500	13.483	11.196
	Rimini waste-to-energy plant	MWh	31.685	41.306	49,161	43,645
	Waste to energy	MWh	80.360	109.642	125.171	125,713
	Guelfa Bologna landfill	MWh	430	354	113	
	Baricella landfill	MWh	-	-	-	2.048
	Imola landfill	MWh	2.626	2 642	3 151	3.082
	Bavenna landfill	MWh	2,020	3,490	8 195	6,866
	Lugo landfill	MMb		0,100	2,180	2 188
	IDAB Bologna treatment plant	MM/b	1 // 9	1 232	1 180	1.054
	By a bologina treatment plant	MM/b	1,440	1,202	1,100	123
	Corona treatment plant	MM	2.004	2 161	2 000	1 061
	Biogas combustion	MMD	6,500	0.870	16 810	17 222
	Cavationia Rologna	MMD	1,642	2 200	1 4 4 2	1 220
	Undrealectric	N/N/D	1,040	2,000	1,440	1,029
from assimilated sources	total from assimilated sources	N/N/VI	102.019	2,300	1,443	120.055
- trom assimilated sources	lotar rom assimilated sources	IVIVVN	103,018	80,098	108,604	130,055
	Barca (former Cogen) Bologna	IVIVVn	35,924	33,335	34,473	36,629
	Fossolo Bologna	IVIVVn	5,411	3,923	7,031	6,740
	Ecocity Casaleccnio Bo	IVIVVn			6,148	13,746
	Monterenzio Bologna	MWh	338	288	416	468
	Montericco Imola	MWh	52,918	38,837	48,581	61,633
	Forli	MWh		55	349	400
	Cesena	MWh			771	300
	Cogeneration	MWh	94,591	76,438	97,769	119,916
	Bologna turbo expansion plant	MWh	3,035	4,770	5,107	3,168
	Forlì turbo expansion plant	MWh	2,920	3,075	2,885	3,555
	Ravenna turbo expansion plant	MWh	2,472	1,815	2,843	3,416
	Turbo expansion	MWh	8,427	9,660	10,835	10,139
Useful thermal energy produced	Total	MWh	186,332	229,352	252,066	282,580
from renewable sources	total from renewable sources	MWh	42,700	44,120	40,381	45,404
	Bologna waste-to-energy plant	MWh	42,700	44,120	40,381	44,994
	Ravenna treatment plant	MWh	-	-	-	410
from assimilated sources	total from assimilated sources	MWh	127,084	158,883	183,846	203,256
	Barca (former Cogen) Bologna	MWh	48,220	69,480	75,721	83,409
	Fossolo Bologna	MWh	8,730	9,670	11,109	10,526
	Ecocity Casalecchio Bo	MWh	11,850	15,300	16,495	20,166
	Monterenzio Bologna	MWh	810	1,070	1,068	1,238
	Montericco Imola	MWh	57,474	62,541	78,076	87,917
	Forli	MWh		252	435	N.A.
	Cesena	MWh		570	942	N.A.
from conventional sources	total from conventional sources	MWh	16.548	26.349	27.839	33.920
	Sede Berti Pichat (Bologna)	MWh	3.410	3.520	3,903	7.339
	Telefrullo (Bologna)	MWh	.32	6.250	1 755	NA
	S Giacomo (Bologna)	MWh	11.840	12 480	13 120	15.635
	Imola	MMA	0	0	2 106	N A
	Castal Rolognese	MAD	032	060	1 164	1 707
	Earli	N/MA	932	1 000	2 205	1,707
	Cococo	IVIVII A di A d-		0.100	2,305	7 490
lociticity optoring neuror grid	Ceselia	IVIV/N	494	2,139	3,480	7,480
Electricity entering power grid		GVVh	484	487	509	529
Electricity distributed		GWh	459	476	494	509
Network losses		GWh	25	11	15	20

2.6

2



	energy		energy	reagents	
ground water surface water	OFFTAKE		POTAE TREAT	BILITY MENT	
		I	leaks	emissions	
	emissions	losses	losses	emissions	
treated waste-water	Wastewater treatment	Sewage collection	Distril	oution	
	energy reagents	storm- water energy	energy	reagents	

5.3 Water sector

- sewers;
- wastewater treatment;
 in nearly all of the municipalities located in its territory.

The Hera group manages the integrated water service:

Italy has or of the highest per-capita rates of water consumption, a quarter of which comes from underground sources and three quarters from surface sources. The Hera group is strongly committed to the basic principles embraced by the current regulatory framework in this sector (also see section 1.2): integrated water service, protection of water quality and water savings.

5.3.1 Water supply management involves the following sequence of phases:

7 Potability plant, Sasso Marconi,

Water supply service - collection of water; - potability treatment of the extracted water;

- water supply;

- adduction of potable water to the distribution network;
- distribution of drinking water through a system of networks, pumping stations and reservoirs.

Water collection, i.e. the withdrawal of water from supply sources, takes place in 26 well fields, with 6 surface water offtakes from 7 main groups of springs: added to this water are the supplies from Romagna Acque.

The water collected by Hera undergoes a potability treatment to eliminate any polluting substances present at higher levels than allowed under current drinking water standards. More specifically, the treatments serve to:

- + eliminate suspended solids and micro pollutants present in surface waters;
- + eliminate, where present, organo-halogenate compounds, chiefly of industrial origin, from groundwater or surface water situated in areas with a high industrial density;
- eliminate nitrogenous compounds from groundwater and surface water situated in areas with a high residential, commercial or agricultural density;
- + eliminate iron and manganese from deep groundwater;
- + eliminate undesirable microorganisms by disinfection.

The main adduction networks used by the Group are represented by the primary system of Bologna (maximum flow rate 4,000 L/s) and the pipelines of Romagna Acque (maximum flow

rate 3,000 L/s), supplemented by other minor adduction networks. The adduction networks are interconnected with the distribution system, whose mesh-like configuration allows it to be supplied from several points so that drinking water can be distributed to users even in case of temporary disruptions in sections of the network.

The final phase of the water supply service is distribution to the users. In order to assure an adequate level of pressure, 48 main plants and about 700 smaller pumping stations are used.

The Group uses storage reservoirs (52 main reservoirs plus 1,772 secondary ones, for a total of 1,824 reservoirs with an overall capacity of 480,767 m³) to maintain a reserve of water for backing up the main supply system at times of peak hourly consumption and in case of electricity blackouts.

In the event of supply disruptions, the emergency service ensures the distribution of drinking water either with tankers or by producing and delivering water in 1 and 5 liter bags.

The Hera water supply system	31/12/02	31/12/03
Network length (km)	17,465	18,052
Main springs	7	7
Well field springs	26	26
Surface offtakes (>50 L/s)	6	6
Main potability plants	17	21
Main pumping plants (>150 kW)	48	48
Average daily throughput (L/s)	6,800	6,800

Hera seeks to reduce groundwater collection by exploiting to the fullest the plants supplied by surface water, being aware that, though this process is more costly than groundwater extraction it helps slow down the phenomenon of subsidence (sinking of the soil caused by lowering of the underground water table, in turn caused by withdrawal of groundwater at a faster rate than the natural recharging time) and represents a factor of solidarity among the municipalities with a stake in Hera and among the residents of different territorial areas. Groundwater is however indispensable to ensure the system has a high degree of safety, i.e. the capacity to make up for surface water shortages in periods of drought or anomalous contamination.

Water added	2	000	20	001	20	02	2	003
to network	(thsds of m ³)	%						
Groundwater	92,518	42.97	84,507	39.86	90,310	42.11	93,727	41.35
Surface water	62,920	29.22	66,496	31.37	63,349	29.54	58,479	25.80
Springs	5,830	2.71	5,861	2.76	7,391	3.45	8,594	3.79
Total own sources	161,268	74.9	156,864	73.99	161,050	75.10	160,800	70.94
From Romagna Acque (1)	54,046	25.1	55,140	26.01	53,392	24.90	65,856	29.06
and other minor sources								
Total	215,314	100	212,004	100	214,442 1	00	226,656	100

The distribution network consists in pipes made of polyethylene, asbestos cement, steel, cast iron and other materials. The average age of the pipelines is about 25 years, lower than the national mean of about 30 years (Source: Report to Parliament of the Watchdog Committee on Water Resources – 2002).

				Su
2.71%	2.76%	3.45%	3.79%	So
54.32%	57.38%	54.44%	54.86%	Su Gr
42.97%	39.86%	42.11%	41.35%	
2000	2001	2002	2003	

Supply sources

(1) Source of surface wate

Sources Surface water Groundwater 3



The Hera group carries out monitoring activities and maintenance of the water distribution system with the objective of maintaining and further enhancing the quality of the service it provides to users.

The main parts of the system are monitored via a remote system that picks up alarm signals and records process parameters 24 hours a day. The plants located in different areas of the territory are monitored in turn by means of preventive periodic inspections, followed up by scheduled interventions based on the necessities that emerge during the inspections.

Network monitoring mainly consists in pressure and flow rate measurements, as well as efforts to locate network losses. Network losses are due to pipelines breaks (physical losses) or measurement errors or internal consumption (administrative losses): the breakdown shown is based on the effects of the different physical and administrative phenomena. The data relating to the last few years confirms that the Group's control efforts succeed in keeping network losses within a range of 15 - 20%, far below the estimated national average of 42% (Source: Report to Parliament of the Watchdog Committee on Water Resources – 2002).

With the aim of reducing network losses, Hera has installed pressure reduction and regularization systems in its own network, in particular in the province of Bologna, to reduce the stress and level of tension to which the pipes are subjected. This step serves to decrease breaks and the small, hard-to-detect underground leaks of water often preceding an actual

(in millions of m³)	2000	2001	2002	2003
Water added to network	215	212	214.4	226.7
Water not metered	34	32	35.2	43.86
Water billed to users	181	171.5	176.3	180.7
Physical losses ¹	9.8%	9.1%	10.4%	11.35%
Administrative losses ²	6%	6%	6%	8%
Total losses	15.8%	15.1%	16.4%	19.35%

break, where the outflow of water will be proportionate to the pressure in the pipelines. For the same purpose the company is implementing a rehabilitation plan for user connections to the network: priority is given to areas where breakdowns are more frequent, in relation to the number of user connections present and the number of people affected.

Lastly, after analyzing network breaks and leaks, we proceed to repair the pipes using relining techniques, which enable us to work above ground, without excavation, so as to minimize inconvenience: work is completed faster, less noise, dust and debris are produced and fewer aggregates are consumed. With these techniques it is possible to intervene in areas where lengthy excavation would be problematic, for example in busy streets or places with valuable paving.





8_A better environment for everyone

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Hera

5.3.2 Sewers and wastewater treatment

The sewerage service consists in the collection of wastewater, which is disposed of through drains and channeled through pumping stations and trunk lines into treatment plants. Based on the purposes for which the water was used, the sewage is classified as domestic or industrial. Domestic sewage originates from household or kindred types of use and contains both organic substances and substances deriving from household cleaning products or products used for personal hygiene. Industrial sewage is made up of wastewater from manufacturing processes, which generally contains large quantities of polluting substances.

The sewerage system comprises three types of sewers: combined, sanitary and storm-water. Combined sewers collect domestic and industrial wastewater and storm-water sewage in a single sewer main: sanitary sewers collect only domestic and industrial wastewater: stormwater sewers collect only storm water runoff. The prevalence of combined sewers makes it necessary to have a large number of overflows whose function is to divert diluted wastewater into surface bodies of water in the event of rainfall, according to the limits set in the disposal permits issued by the Provincial Authorities.

With the exception of the sewer lines constructed in the last few years (property of the Hera group), the sewer system is owned by the municipalities or asset management companies and managed by Hera under contract.

The sewer service is carried out in 89 municipalities of the provinces of Bologna, Forli-Cesena, Ravenna, Rimini, Florence and Pesaro-Urbino.

Main sewer system data	2002	2003
Volumes (millions of m ³)	133.9	136.7
- civil	122.1	125.9
- industrial	11.8	10.8
Total length of sewer lines (km)	6,601	6,812
- combined	4,066	4,132
- sanitary	1,726	1,806
- storm-water	809	874

In order to limit the environmental impact of wastewater, the sewer system in coastal areas is equipped with barrier mechanisms that regulate sewage discharge into the sea in the event of heavy rainfall. Tanks are also being built to collect runoff water, which will later be sent to treatment plants.

Sewer system management entails such activities as emergency intervention, routine maintenance, monitoring of the performance of pumping stations, removal of sediment and obstructions blocking the flow of water, maintenance of street manhole covers, special maintenance aimed at restoring or improving the necessary level of hydraulic efficiency and infrastructure safety.

The integrated water service is completed by wastewater treatment and subsequent reintroduction into the environment. The sludge resulting from treatment processes is first dehydrated and then disposed of by incineration, landfilled or, when possible, sold as agricultural fertilizer

Hera's main wastewater treatment plants are equipped with odor treatment systems using biofilters. These plants are supervised around the clock by personnel who work in rotating shifts, supported during daytime hours by maintenance personnel.

For all the other plants, management is organized with daily visits or 2-3 visits per week, depending on plant size.

Wastewater treatment	2002	2003
Volumes (millions of m ³)	153.8	158.3
- civil	141.2	146.4
- industrial	12.6	11.9

The utility manages the wastewater treatment service in 124 municipalities with about 1.7 million inhabitants. It relies on 346 treatment plants, of which 10% are capable on their own of treating over 90% of the total wastewater collected from the sewer lines managed.

Residual concentration of pollutants in water leaving	unit of	Bologna	Imola	Cesena	Ravenna	Rimini
some of the main plants: yearly averages	measurement	(1 plant)	(2 plants)	(1 plant)	(13 plants)	(1 plant)
Total treated water	millions of m ³	49	10.7	7.5	36.8	13.6
COD (lim 125)	mg/L	39	66	28	42.2	35
BOD5 (lim 25)	mg/L	14	5	6	8.7	6
SST (lim 35)	mg/L	22	21	12	11.1	10
Ammonia nitrogen (lim 15)	mg/L	11	2	1	4.2	3
Nitrous nitrogen (lim 0.6)	mg/L	0.4	0.4	-	0.3	0.2
Nitric nitrogen (lim 20)	mg/L	8	5	7	7.9	18
Total phosphorous	ma/l	24	1.8	2.6	0.9	0.7

Wastewater

treated 2003

(millions of m³)

(millions of m³)

Type

of treatment

Wastowato

source

Treatment Potential Wastewater (thousands of A.E.) treated 2002

		•		,	
Bologna	900	49	49	Biological activated sludge	Bologna and 9
				treatment with energy	municipalities of Bologna
				from biogas produced	province, industrial sludge
				by sludge digestion	treatment plant
Imola (BO)	75	4.3	4.2	Biological activated sludge treatment	Imola and 4 neighboring
					municipalities
Faenza (RA)	100	N.D.	6.5	Biological activated sludge treatment	Faenza
Cesena	193	7.5	7.5	Biological activated sludge treatment	Cesena and neighboring areas
					characterized by the presence
					of numerous livestock farms
Ravenna	180	16.7	15.6	Biological activated sludge treatment	Ravenna, rural, coast
				with refinement process for	and industrial zone
				phosphorous and nitrogen removal	
Santa Giustina (RN)	440	13	13.6	Biological activated sludge treatment	Rimini and 6 municipalities
				with refinement process for	of Rimini province,
				phosphorous and nitrogen removal	Republic of San Marino

The final phase of the water supply service is distribution to the users. In order to assure an adequate level of pressure, 48 main plants and about 700 smaller pumping stations are used.

Constructed wetland

plant

Hera manages wastewater treatment plants known as "constructed wetlands". These are systems to further refine wastewater already subjected to treatment, made with a system of biological ponds and of macrophytic vegetation that function as actual "filter ecosystems," with the aim of further improving treated water. This project involves reclaiming borderline areas, recreating aesthetically pleasing environments with significant "architectural" value as nature oases and in terms of landscape, refuge for various species of birds, amphibians and reptiles. The "constructed wetland" reserves an important role for plants in removing certain pollutants from wastewater such as suspended solids, organic substances, nitrogen, phosphorous, heavy metals, viruses and bacteria, through the combined action of natural processes including sedimentation, filtration, bioaccumulation, adsorption, microbes working in both aerobic and anaerobic conditions, and sunlight.

The Bentivoalio (BO) experience

In Bentivoglio Hera manages a constructed wetland facility built in collaboration with the Municipalities of Bentivoglio, Argelato and San Giorgio di Piano. The purification system used on the Bentivoglio sewer drains consists of an activated sludge plant with biological disks, followed by a final "constructed wetland" stage consisting of a swampland rebuilt to form a free water surface (FWS).

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5.3.2

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The system consists of a series of biological ponds that use macrophytic vegetation, extending over a surface area of approximately 48,000 m², of which 24,000 are set aside for the actual water treatment in the form of wetland surface.

The water reservoirs, used as actual biological processing systems, grow various species of water plants that develop best in wetland environments.

The first section, made up of three basins with a water blade approximately 50 cm deep, contains rooted plants emerging from the water (helophyte) from the typha, scirpus and phragmites genus. The next two reservoirs hold water lentils (Lemna gibba), a floating water plant (pleustophyte).

Between the reservoirs are adjustable wooden benches that maintain the predetermined levels for the flooded area.

Water thus flows into a fish breeding reservoir containing not only common goldfish but also carp and tench, which prevent undesirable plant and plankton development.

At the end of the cycle are two finishing ponds, and finally a swamp zone growing various rare plants along a specially designed educational path.

This latter area of approximately 5,000 m² has been developed according to naturalistic engineering criteria and includes a pond where visitors can observe spontaneous plant growth such as pondweed, water lilies, rushes, reeds, cattails.

Finally, an automatic lifting station has been provided, equipped with submerged pumps, to send the final effluent to a series of lakes where a local recreational association practices "sports fishing", thus reusing the purified water for breeding fish. \bullet

5.3.3 Water quality control

Here conducts constant and accurate tests and analyses on drinking water and wastewater in order to assure the quality of the services provided and compliance with current laws and regulations. Given that a significant percentage of the pipes making up the distribution network are made of asbestos cement, samples of water are taken and tested for the presence of asbestos.

The levels found have always shown to be well below the limits set, in the United States, by EPA (Environmental Protection Agency) drinking water standards, which the Group has taken as its reference, since no specific guidelines on this subject exist either in Italy or in the European Union. The presence of asbestos fibers in water deserves attention not so much because it may pose a specific sanitary or health hazard (ruled out by the world Health Organization), but rather because its presence is perceived by users as indicative of poor service quality: therefore, an asbestos fiber detection program has been developed and is implemented by the Hera group on a routine basis throughout the territory served.

The chemical, physical and microbiological characteristics of water are monitored and controlled in the plants and pipelines of the water supply system and treated wastewater is similarly analyzed; the frequency and type of testing varies according to the potential and importance for the service. \bullet

In order to monitor the quality of drinking water and its conformity with standards and continuously improve its qualitative characteristics, Hera relies on a performance indicator, referred to as the product quality and conformity KPI, which takes into account the most relevant parameters. Product quality is assessed on the basis of specific parameters: Hardness, Fixed Residue at 180°C, Nitrates, Chlorides and Fluorides, according to the optimal ranges established by the WHO, and the presence/absence of odor. These parameters estended because they are among the most representative and have the most immediate impact. Noting that product conformity is systematically monitored in accordance with Italian Leg. Decree no. 31/01, to obtain a simpler assessment for internal use we compared the measured concentrations of three parameters – the same for the whole territory served by Hera (Chlorites, Tinlalomethanes and *Escherichia coli*, to which other parameters may be added in relation to specific local characteristics) – with the maximum concentrations allowed. The three parameters were chosen because judged to be among the most significant for the purpose of identifying, and hence preventing, potential problems in treatment processes and addressing sanitary and health concerns.

Product quality is an aggregate KPI calculated as follows:

average concentration measured for each parameter, homogenous area and month;
 attribution of a performance rating (from 1 to 10) based on the optimal range for each

- parameter, homogeneous area and month;
- + average rating for each homogeneous area, per month:
- + weighted average for the volumes supplied per month.

Product conformity is an aggregate KPI calculated as follows:

- + average concentration measured for each parameter, homogenous area and month;
- + ratio to the max concentration for each parameter, homogenous area and month;
- + average ratios for each homogeneous area, per month;
- + weighted average for the volumes supplied per month.

The KPI measurements began in January 2004 and partial data for the first months of 2004 are now available.



5.3.4 Future plans

The Group is committed to seeking a better combination of supply sources, more effective interconnection of distribution networks and a further reduction in network losses. In addition, Hera is a partner in research and development programs aimed at enhancing the protection of groundwater sources and developing disinfection systems with a lower environmental impact than those used today.

Problem areas in the water service and strategies

- + Supply deficiencies with a prevalent use of groundwater. Subsidence, torrential regime and progressive pollution of groundwater in densely populated urban areas (Bologna), high cost of water from the Ridracoli reservoir.
- + Economic and operating imbalances due to seasonal factors (Rimini, Ravenna).
- + Network losses remain significant.
- + Some potability and disinfection plants do not full conform to new standards. The presence of chlorites indicates that the main plants need to be upgraded.
- Customers are not always satisfied with water quality.
 Evaluate innovative disinfection technologies and further develop remote network monitoring systems.
- + The sewer system is not always adequately sized and almost completely devoid of first flush collection tanks. Major projects have been planned for the separation of sewer systems from first flush tanks.
- + Wastewater treatment plants need to be modernized and upgraded. Increasingly strict regulations require us to update the systems with increasingly complex technologies: work is already underway with transitional plans providing for the installation of equalization tanks, dual treatment lines, rainwater tanks, filters and membranes.
- + New laws have introduced more severe penalties for the dumping of toxic substances, even if deriving from industrial waste. A more effective control of effluents is imperative.
- + All of Emilia-Romagna will soon be considered a sensitive area. It will be necessary to build additional plants for denitrification and phosphorus removal.

Collection, potability treatment, distribution

RESOURCES			2003
Industrial water		m ³	11.749762
Electrical power **		MWh	104,782
Reagents and products	Coagulants/flocculants	t	3,142
	Flocculation aids	t	127
	Oxidants	t	3
	Sodium Hypochlorite (12% active Cl p/p)	t	1.627
	Hydrochloric acid (32% p/p)	t	1,692
	Hydrochloric acid (9% p/p)	t	101
	Sodium chlorite (24 % p/p)	t	2,012
	Activated carbon	t	136
	Carbon dioxide	t	124
	Caustic soda	t	331
	Polyphosphate	t	4
	Liquid oxygen	t	97
	Reagents for sludge treatment	t	1

5.3.5

2003

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Data and indicators

* This figure does not include the Forli-Cesena territory ** This figure does not include the Forli-Cesena and Rimini territory

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Wastewater treatment
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EMISSIONS

Sludae **

RESOURCES			2003
Electric energy		MWh	85,711
Natural gas		Sm ³	2,645,361
Reagents	Liquid oxygen	t	5,548
	Sodium hypochlorite solut.	t	128
	Hydrochloric acid and sodium chlorite solut.	t	26
	Peracetic acid solut.	t	2,789
	Flocculants and polyelectrolyte	t	343
	Aluminum polychloride	t	1,617
	Sodium aluminate	t	718
Lubricant oils and grease		t	1.6
PROCESS			2003

11100200			2000
Biogas from sludge digestion	Total biogas produced	m ³	4,352,146
	Electricity produced	MWh	3,138

EMISSIONS			2003
Sludge produced	Liquid	t	23,182
	Solid	t	127,295
Sludge disposal	in agriculture	t	84,520
	treatment plant	t	6,005
	in landfills	t	7,459
	in composting	t	9,933
	in sludge incinerator	t	36,354
Sludge incineration ash disposed of	in landfills	t	3,623
Atmospheric emissions	particulate material	kg	902
from sludge incinerator	HCI	kg	264
	NO _x	kg	10,815
	SO _x	kg	407

INDICATORS		2003
Natural gas consumption per m³ of treated water	Sm³/m³	0.017
Electricity consumption per m ³ of treated water	kWh/m ³	0.54
Biogas production per m ³ of treated water	m³/m³	0.027





5.4 Environment sector

The Hera group can boast solid know-how in plant design, construction and management and has a complex system enabling it to cover the entire waste treatment cycle and handle the needs of its target territories in a highly efficient, cost-effective manner. In line with the commitments undertaken, Hera has set itself the objective of progressively certifying its plants to standards UNI EN ISO 9001:2000; UNI EN ISO 14001:96 and EC Regulation 761/2001 (EMAS), a goal pursued through the adoption and management of an integrated Quality. Safety and Environment System: at the end of 2003 eight plants were certified in conformity with ISO 14001:1996, since 2001 the Baricella landfill (BO) has been registered under EMAS (Registration n. I-000085).

The main environmental impacts deriving from the waste management cycle consist of the use of fuels and the consequent emissions connected to street cleaning and waste collection, emissions in air and water, and solid residues generated by waste treatment plants, plus impacts connected to the management of landfills.

With regard to these aspects, Hera, in conformity with the principles and goals of the Ronchi Decree, is committed to reducing the production of waste, to increasing its re-use, recycling and recovery, and to assuring its final disposal in the most environmentally appropriate manner.





Operative environmental services

5.4.1 The Group's activities in the sector of environmental services include: sweeping and cleaning of public outdoor areas; segregated and non-segregated collection of municipal solid waste and kindred waste; collection of special waste.

> The activities aimed at keeping public outdoor areas clean include street sweeping, emptying and maintenance of rubbish bins, street and sidewalk cleaning and weed removal. Sweeping is carried out both manually and mechanically.

Hera's sweeping and waste collection services cover a territory whose yearly per capita production of municipal solid waste is among the highest in the nation: 665 kg per inhabitant in 2003, compared to an average in Italy of 522.6 kg.

The Group also provides a beach cleaning service to the eleven municipalities located on the Romagna coast. This activity is of particular importance, especially in summertime when 20 million tourists flock to these resort areas. On behalf of some municipalities Hera provides a winter road maintenance service with the aim of keeping roads open and safe in case of snowfall and in periods when ice is likely to form.

Segregated collection levels



Non-segregated collection of municipal solid waste and waste treated as such mainly consists in the emptying of bins and dumpsters in the territory served. To increase the efficiency of the service and limit the environmental impact. Here has introduced new equipment, e.g. "singleoperator" vehicles, and the use of alternative fuels (methane, biodiesel and diesel/water emulsion). The non-segregated waste collected is taken to a disposal facility, either directly or after temporary storage in transfer stations. Temporary storage serves the purpose of optimizing transport to disposal facilities and sorting waste according to its final destination (waste-to-energy plant, composting plant, treatment and recovery plants, landfill).

The Hera group engages in segregated collection both of single materials (paper, glass, aluminum, plastic, batteries...) and mixed materials ("dry" fraction, "wet" fraction,...). The materials collected are taken to recycling or disposal facilities as appropriate: the waste deriving from single-material collection, including some types of dangerous municipal waste (batteries, drugs, chemical products), are delivered to sector consortiums (e.g. CONAI, COMIECO, CIAL) or directly to recycling facilities; mixed waste materials are allocated according to how they may be best exploited. In recent years the percentage of segregated waste has increased significantly: this facilitates subsequent treatment and economic exploitation of waste (production and recovery of materials and energy) and reduces the quantity of waste that ends up in landfills, which also means a lower environmental impact. Hera uses dumpsters, bins and various other containers for segregated waste collection: moreover, specially equipped ecological stations are being set up throughout the territory served by Hera: here citizens can drop off different types of waste (see tables at the end of this chapter). Since 1997, the year when the Ronchi decree went into effect, the companies which merged to form the Hera group have seen the average percentage of segregated waste jump from 11% to 29.3% (net of the quantities deriving from street sweeping) thanks to the integration of traditional single-material collection (glass, paper, aluminum cans, batteries, plastic) with combined material collection (dry fraction and wet fraction)

Hera also collects special waste, i.e. waste produced by the industrial, commercial and service sectors which cannot be treated as municipal solid waste from a qualitative or quantitative



A new communication campaign to stimulate differentiated waste collection and resource conservation Hera's goal for the future is to increase the percentage of differentiated collection and reach the 35% target provided by the Ronchi Decree. To achieve this, it launched the new "RECYCLE

PROPERLY" communication campaign in April 2004. The campaign is being conducted in the provinces of Bologna, Ravenna, Forli-Cesena and Rimini, and utilises a variety of means (posters, buses, press, radio, bread bags) to successfully reach the public.

In addition, more than 700,000 Hera customers were delivered a pamphlet containing advice and information on how to correctly separate waste, as well as about the Group's "environment system," the waste life cycle, and how waste can be recovered/reused.

This clear and forceful communication, aimed at increasing public awareness of the importance of differentiated collection, sustainable development, and respect for the environment, pays special attention to the allocation of materials and conservation of resources through the collection, recovery, and recycling of packaging waste.

4.0

viewpoint.



5.4.2

Waste treatment

* including 84,000 t of waste treated in Sotris, not accounted for in the 2003 Annual Report due to a delay in data transmission

- mechanical separation;
 selection;
 - + vaste-to-energy treatment:

Waste treatment activities include:

- + composting and biostabilization;
- treatment and recycling of special liquid waste/sludge;

recycling and treatment of municipal solid waste and special waste:

Iteat hericand recycling of special liquid waste
 landfill disposal of non-recyclable waste.

Waste treatment activities are aimed at recovering materials to be reused in production cycles, producing electric and/or thermal energy, reintroducing the residues of treatment processes into the environment and reducing the potential harmfulness of landfilled waste.

Waste treated (thousands of tonnes) in 2003	
Municipal waste	1,179
Special waste	1,299
Hazardous	116
Non-hazardous	1,183
Total waste treated*	2 479



Special hazardous waste



Hera operates over 40 waste treatment, recycling and disposal plants and to further increase its treatment capacity it has launched the construction of new plants and upgraded existing ones.

The Group has built up longtime experience and is today able to handle significant flows of material, having optimized its treatment and disposal capacities, sufficient to ensure cooperative support to other regions of Italy that are facing "garbage emergencies".

The table below shows the trend in the quantity of waste (municipal and special) handled by Hera, broken down by type of facility.

(in thousands of tonnes)	1997	1998	1999	2000	2001	2002	2003
Landfill	830	932	971	932	1.009	956	991
Heat-to-energy plants	293	278	300	306	332	371	362
Selection plants	107	138	141	169	180	366	433
Composting plants	59	87	67	60	57	130	141
Inertization and chemical-physical treatme	nts 185	240	487	584	674	667	550
Total	1,474	1,675	1,966	2,051	2,252	2,490	2,478



In 2003 the percentage of waste disposed of directly in landfills was 40%, in an Italian context in which 67.1%* of waste went to landfill disposal in 2001, whereas in the same year Hera landfilled only 44% of waste.

The industrial plan of Hera calls for a phasing out of landfill disposal within the next four years and a focus on the recovery of materials and energy from waste. By 2007, the Group's plants will enable it to recycle a good 80% of the waste collected, allocating to landfills only the remainder of waste, which, despite going through a preliminary sorting process, cannot be exploited to recover material or even energy.

2003 confirmed the uptrend in the quantity of waste undergoing pretreatments (mechanical selection and separation) for the purpose of recovering materials; the fractions treated by composting plants likewise showed an increase.

* Source "APAT Waste Report 2003"

Mechanical separation plants

23,226

3.469

71,934

17.382

116.011

414,685

66,204

466,071

236.020

1.182.989

Hera makes use of specific facilities for the mechanical separation of the dry fraction, wet fraction and metals contained in municipal solid waste or waste treated as such and special solid waste from non-segregated collection.

The treatment is designed to ensure a correct recovery of materials: wet fractions are sent to biostabilization plants; metals are sent to sector consortiums or industry; WDF (waste-derived fuel, which represents the "dry" fraction) is sent to waste-to-energy plants; the remainder is sent to other waste-to-energy plants or disposed of in landfills.

(in thousands of t/year)	Authorized capacity	Qty. of waste treated	Type of waste treated
CDR Ravenna	180	120.76	Munic. solid and special
Bologna	150	123.24	Municipal solid
Forli	108	16.89	Municipal solid
Total	438	260.89	

Selection plants

Hera operates specific plants for sorting the municipal solid waste obtained through singlematerial segregated collection and special solid waste collected from manufacturing facilities. The activity of selection has the objective of enabling materials to be recycled and reused in production processes; the selected materials are delivered to sector consortiums, which provide for their reintroduction into manufacturing cycles, or directly to industry.

(in thousands of t/year)	Authorized capacity	Qty. of waste treated	Type of waste treated
Coriano (RN) - Selecta	73.98	23	Municipal solid and non-hazardous special
Mordano (BO) - Dirama	67.5	42	Municipal solid and non-hazardous special
Cir Secco	90	79	Municipal solid and non-hazardous special
Other external plants		28	
Total	231.48	172	

Waste-to-energy plants

Municipal and special solid waste (including hospital waste) undergoes waste-to-energy treatment, i.e. a process allowing them to be disposed of while producing electric and thermal energy at the same time. The waste is treated at a temperature ranging between 850° C and about 1,100° C.

The Group operates four waste-to-energy plants, one for each province, and they have sections for producing electricity from the heat recovered from the waste combustion process. Thermal treatment of waste for energy production is considered by law a recovery activity and the electrical power thus produced is classified as energy from renewable sources. In the waste-to-energy process, three main outflows are produced which have a potential environmental impact:

- + ash, corresponding to about 8% in volume and 28% in weight of the waste treated. This is treated as special waste and disposed of in suitable landfills;
- the fumes produced by combustion, which undergo dry and wet treatment before being released through the stack. To keep fume quality under tight control, the plants are equipped with systems that continuously monitor the concentration of the main pollutants;
- the wastewater from the fume cleaning process which, together with the water used to extinguish cinders, undergoes a chemical-physical treatment prior to being disposed of in the sewer system.

	Authorized	capacity	Qty. of waste	Electric e	nergy	Thermal	Thermal energy	
	(t/	/year)	treated	produced (MWh)		produced (Gcal)		
	2002	2003	2003	2002	2003	2002	2003	
Frullo (BO) FEA	148,000	156,000	155,994	36,558	41,209	46,405	52,328	
Forli-Cesena	60,000	60,000	47,813	13,483	11,196	-	-	
Ravenna	56,500	56,500	40,093	25,969	29,663	-	-	
Rimini	127,600	127,600	117,997	49,161	43,645	-	-	
Total	392,100	400,100	361,897	125,171	125,713	46,405	52,328	

Diagram showing mass and energy flows connected with thermal treatment of one tonne of municipal solid waste



Composting and biostabilization plants

Composting is a process consisting in the aerobic digestion of the biodegradable organic fraction of waste. The process reproduces and accelerates, in controlled conditions, a natural biological process. Composting enables us to derive agricultural fertilizer by transforming the wet fractions from segregated waste collection (e.g. kitchen scraps), leaves and prunings, as well as refuse from the agroindustrial sector. The product obtained at the end of treatment is compost, a material similar to a loam rich in humus. It may be used for environmental rehabilitation, in farming and in nursery gardening.

Biostabilization, on the other hand, is a treatment carried out on wet fractions from nonsegregated waste collection, after they have been separated from the dry fractions in separation plants. The product obtained can be used for environmental engineering purposes and planting cover over landfills.



XENA (for ecological natural agricolture)

The synergy with the partner Unieco has been exploited in order to launch the production and sale of a complete range of farming and gardening products.

Xena loams and fertilizers derive from carefully selected organic matrixes obtained from specific segregated collections and stand out for the traceability of the raw materials used and the compliance with high standards of quality in the selection of composts. Their use restores the natural fertility of soil as well as improving its physical structure.

The production plant operates in accordance with ISO 14000 and the strict procedures imposed by certification to this family of standards, a reflection of the commitment to placing Xena within a design framework geared toward sustainable development: all the products are aimed at promoting ecological awareness and environmental education throughout the production sector.

Traceability, availability of records documenting the origin of the raw materials and ISO 14001 certification are an expression of a desire to invest in safety, always identifying the best solutions for defending the environment and protecting workers' health.

Traceability – ensured by assigning an "electronic identity card" to each production batch – satisfies the most important standards relating to product identification and makes it possible to track the product's entire history, from production to processing and distribution. It is thus at the basis of an increasingly ecological agriculture attentive to the needs and health of end users and consumers.




(in thousands of t/year)	Authorized capacity	Qty. of waste treated
Composting (Rn)	35	18.29
Romagna Compost (FC)	15	8.68
Nuova Geovis Sant'Agata (Bo)	115.5	101.21
Nuova Geovis Ozzano (Bo)	16	11.28
Other external plants		2,0
Total	181.5	141.46

Inertization and chemical-physical treatment plants

The Hera group treats special liquid waste/sludge arising from manufacturing activities and liquid waste deriving from treatment plants and the performance of environmental services. The treatment, which relies on different techniques (chemical-physical, filtration, sedimentation, inertization ...), has the aim of reducing the pollution caused by the organic and inorganic substances present in liquid waste and sludge by separating the liquid and solid fractions. The solid fraction containing polluting materials is landfilled in facilities for special waste. The liquid fraction, prior to being released into surface water, undergoes a biological treatment designed to eliminate the pollutants from organic substances.

The treatment is performed directly in the plants or the liquid fraction is sent to municipal wastewater treatment facilities.

(in thousands of t/year)	Authorized capacity	Qty. of waste treated
Forlì (PTN) chemical phys.	40	29.34
Ravenna chemical phys.	180	153.80
Ravenna sludge treat.	100	79.49
Alfonsine chemical phys.	70	26.04
Russi chemical phys.	85	22.12
Lugo Ravenna	170	134.63
ITFI Bologna	100	92.58
Sotris (inertization)	15	12.4
Total	760	550.4

Landfill disposal

The materials not recycled, or not recyclable, and numerous other types of waste are landfilled. The Group manages disposal facilities for inert, hazardous and non-hazardous waste, based on the classification given by Italian legislative decree no. 36 of 13 January 2003. It is a priority objective of the Hera group, in harmony with the principles set forth in the Ronchi Decree, to limit recourse to landfill disposal in favor of recycling and waste-to-energy treatments. In 2003 the landfills managed by Hera received 991,000 tonnes of waste, with a residual volumetric capacity of 4,671,870 cubic meters. Being set up with a facility for on-site recovery of energy from landfill biogas, in 2003 they produced 14,184 MWh of electricity, thus making it possible to reduce the use of natural gas and, consequently, the emission of pollutants into the atmosphere. •



Environmental rehabilitation

The Hera group provides technical consulting services and plans projects for the rehabilitation of contaminated sites. Each project is carried out with maximum guarantees for worker safety, in strict compliance with applicable laws and a high assurance of reliability thanks to the application of quality plans and standard operating procedures. Each waste treatment and disposal facility operated by the Hera group undergoes constant analysis and monitoring in order that we may identify and manage all significant environmentrelated aspects using the best available technology. These activities take place in full accordance with regulatory requirements: the Group has adopted environmental management systems certified by notified bodies and develops numerous initiatives and partnerships with public institutions and authorities with the aim of acquiring further scientific and statistical bases attesting to the safety of plants vis-à-vis the surrounding environment. By way of example, we shall describe a few of the most noteworthy monitoring systems implemented.

Frullo waste-to-energy plant

The Frullo waste-to-energy plant, situated about 11 km northeast of Bologna in the town of Granarolo Emilia, has been operational since 1973. Over the years it has undergone major improvements in terms of environmental and energy performance: post-combustion chambers, electrofilter ash separation system, energy recovery, fume cleaning, wastewater treatment and continuous fume analysis.

In order to effectively monitor its operation and assess its impact on the environment and on people's health, a chemical-biological monitoring system was set up, on the basis of a voluntary agreement with the local authorities (Province of Bologna, Municipalities of Castenaso and Granarolo), in the area surrounding the plant. The project, financed by Hera and conducted by ARPA (Regional Environmental Protection Agency) of Bologna in conjunction with the University of Bologna, the local public health care unit and Istituto Ramazzini, provided for:

- + tests on emissions from the plant;
- identification of ten sampling stations for monitoring the quality of soil, storm water, dust, naturally deposited dry residue, concentration of HCI, SO_x, NO_x in air, and, using passive samplers, bioaccumulation of heavy metals through lichen;
- tests for the presence of heavy metals in fresh honey produced by bees in five specially built stations, each comprising two hives;
- epidemiologic investigation into the causes of death and hospitalization among residents of the municipalities of Castenaso and Granarolo.

The results of the monitoring led ARPA to conclude that the impact caused on the environment and public health by the failout of emissions has no significant relevance in relation to the quality of the territory undergoing investigation.

In 2004 the Province of Bologna, in partnership with Hera, is working toward a new agreement with the local authorities concerned, which would provide for periodic repetition of the monitoring: this is a strong commitment, coherent with the project for the renovation and environmental upgrading of the plant, scheduled for completion by the end of 2004.

Coriano - Rimini waste-to-energy plant

A broad study was conducted in conjunction with the University of Bologna to monitor air pollution fallout. The study aimed to measure the concentration of specific pollutants (metals, halogenate acids) at deposition monitoring stations (Wet & Dry deposition measurements) installed in the neighborhood of the plant. Another project was carried out in partnership with the CSA laboratory to monitor PM10 in the emissions from the stacks of the waste-to-energy plant; the monitoring took place in the final months of 2003. The findings showed that concentrations were well below regulatory limits.

Forlì TN Platform

A project was conducted in conjunction with the local ARPA to monitor groundwater quality. The monitoring took place on a six-monthly basis and consisted in the collection and analysis of groundwater samples drawn from piezometric wells installed along the perimeter of the plant.

The results showed no evidence of pollution attributable to the activities taking place on the site and were consistent with the data recorded in previous years.

Voltana Facility (Lugo - RA)

The Voltana waste treatment center was the focus of an environmental monitoring study aimed at investigating and analyzing bioaccumulation in animals and plants (livestock and crops) in proximity to the facility.

The results of the analyses conducted on samples showed no deviations from the means observed in the broader territorial context in which the center is situated. ${\bullet}$

5.4.3

Environmental monitoring of plants

5.4.4 Future plans

In the environmental services sector, Hera intends to proceed with the introduction of vehicles that use low environmental impact fuels (methane, biodiesel and diesel/water emulsion) and the reorganization of collection and sweeping activities, which will follow a timetable such as to limit

the environmental impacts connected to the noise and road traffic produced. In the waste treatment sector, the Group has launched projects aimed at increasing the waste treatment and energy production capacities of waste-to-energy plants in order to exploit the surplus of non-segregated municipal solid waste that is still landfilled. One of such projects, currently underway, provides for the renovation and technological upgrading of the Frullo plant (Bologna) in order to reach, by the end of 2004, a waste treatment capacity of around 180,000 t/year and electric energy recovery of about 130 GWh/year. We have applied for permission to raise the treatment capacity of the Finin plant to 220,000 t/year and electricity production to 103 GWh/year. In addition, the output of the Forii plant will be increased through the construction of a new line that will raise its capacity by 120,000 tonnes per year and electricity production by about 54 GWh/year.

To reduce the amount of waste in landfills and take advantage of the potential demand for agricultural fertilizers, new compositing plants are being built. One was opened in Rimini in June 2003 and has a capacity for handling 35,000 t/year of wet fractions from municipal solid waste and special waste, while another plant with a 45,000 t/year capacity is under construction in Lugo (RA).

Hera considers the activities in the environment sector to be strategic for the Group's growth and plans to invest around 230 million Euros in this sector between 2003 and 2007, largely for the purpose of boosting the capacity of waste-to-energy plants.

Investments in the environment area (in millions of Euros)	2002	2003
Bologna waste-to-energy plant	27	55.5
New waste-to-energy projects		2.4
Waste disposal and treatment facilities	23.9	15.1
Other investments	11	4.4
Total	61.9	77.4

The above data highlight the entity of the commitment for the renovation and environmental upgrading of the Bologna waste-to-energy plant, which will become fully operational, according to schedule, in 2004. The plant will have a waste disposal capacity of about 180,000 t/year and has obtained CIP 6 authorization for the 22 MW of installed power generation capacity. In 2003 we completed the preliminary plant engineering activities and procedures related to our application for authorization to build the new waste-to-energy lines, which will serve to increase the Group's treatment capacity. Other plant projects were aimed at the rationalization and maintenance of the Group's waste disposal and treatment capacity.

10_Sweeper at work in Rimini.



Municipalities served n 104 Inhabitants in the municipalities served n 1749.194 Total waste collection Multi-material waste t 52,372 Segregated waste collection Multi-material waste t 52,372 Paper and cardboard t 58,799 Glass t 34,014 Organic waste t 34,708 Green waste t 42,786 Oversized items t 23,444 Used clothing t 1,427 Plastic containers t 6,319 Refigerators t 1,035 Hazardous munic. waste t 201 Automotive batteries t 340 Wood t 15,882 Used batteries t 77 Expired drugs t 740 Wood t 15,882 Percentages of the main segregated Multi-material waste % Others (ron, trics, etc) t 29,938 Percentages of the main segregated Multi-material waste % Oversized items % 71,76 waste fractions % 7,95 Used clothing % 11,77	PROCESS			2003
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Glass % 11.53 Organic waste % 11.77 Green waste % 11.77 Green waste % 14.51 Oversized items % 7.95 Used clothing % 0.48 Plastic containers % 2.14 Total segregated waste in all municipalities served t 294,932 Total vaste collected in all municipalities served t 812,957 Total waste collected t 82,602	waste fractions	Paper and cardboard	%	19.94
Organic waste % 11,77 Green waste % 14,51 Oversized items % 7,95 Used clothing % 0.48 Plastic containers % 2,14 Total segregated waste in all municipalities served t 294,932 Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served t 1,107,889 Hazardous waste collected t 82,602		Glass	%	11.53
Green waste % 14.51 Oversized items % 7.95 Used clothing % 0.48 Plastic containers % 2.14 Total segregated waste in all municipalities served t 294,932 Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served t 1,107,889 Hazardous waste collected t 32,602		Organic waste	%	11.77
Oversized items % 7.95 Used clothing % 0.48 Plastic containers % 2.14 Total segregated waste in all municipalities served t 294,932 Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served by Hera t 1,107,889 Hazardous waste collected t 82,602		Green waste	%	14.51
Used clothing % 0.48 Plastic containers % 2.14 Total segregated waste in all municipalities served t 294,932 Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served by Hera t 1,107,889 Hazardous waste collected t 82,602		Oversized items	%	7.95
Plastic containers % 2.14 Total segregated waste in all municipalities served t 294,932 Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served by Hera t 1,107,889 Hazardous waste collected t 82,602		Used clothing	%	0.48
Total segregated waste in all municipalities served t 294,932 Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served by Hera t 1,107,889 Hazardous waste collected t 82,602		Plastic containers	%	2.14
Total non-segregated waste in all municipalities served t 812,957 Total waste collected in all municipalities served by Hera t 1,107,889 Hazardous waste collected t 82,602	Total segregated waste in all municipalities s	erved	t	294,932
Total waste collected in all municipalities served by Hera t 1,107,889 Hazardous waste collected t 82,602	Total non-segregated waste in all municipalit	t	812,957	
Hazardous waste collected t 82,602	Total waste collected in all municipalities ser	t	1,107,889	
	Hazardous waste collected		t	82,602

Waste-to-energy plants

Sweeping and collection

Resources utilized			Rimini	Bologna	Forlì	Ravenna	Total
Drinking water		m ³	38,866	5,294	137,575	428	182,163
Industrial water		m ³				40,469	40,469
Well water		m ³		96,531	284,500		381,031
Surface water		m ³		555,108			555,108
Total water		m ³	38,866	656,933	422,075	40,897	1,158,771
Electric energy		MWh	12,177	12,548	4,475	8,917	38,117
Methane		Sm³	479,539	626,827	124,226	278,719	1,509,311
Oil and grease		kg	5,500	1,435	15,000		21,935
Reagents for fume cleaning	Caustic soda	t		528	68	9	605
and wastewater treatment	Bicarbonate	t	1,640				1,640
	Lime	t		404	248	654	1,306
	Sodium hypochlorite	t		97	11		108
	Ferric chloride	t		274	354		628
	Others	t		15	290		305
Reagents and additives for boiler	Hydrocloric acid (30%)	t	5	22	57	17	101
water and water treatment	Caustic soda (30-33%)	t	7	13	27	34	81
	Antiscaling agents and other products	t	4	25	1	3	33
Total reagents		t	1,656	1,378	1,056	717	4,807

5.4.5 Data and indicators

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Emissions from waste-to-energy treatment			Rimini	Bologna	Forlì	Ravenna	Total
Electrofilter dust		t	2,477	4,974	971	4,930	13,352
	mean humidity	%	2.50	10.52	0.30		
Residual sodic by-products		t	1,149.90				1,149.90
	mean humidity	%	2.5				
Ash		t	35,702	41,324	12,261	520	89,807
	mean humidity	%	23	19.80	20.00		
Sludge from water treatments		t		551	1,773	127	2,451
	mean humidity	%		63.62	90.00		
Water leaving the treatment plant		m ³	86.5	182,665	124,000	15,884	322,635.5
Atmospheric emissions	Dusts (lim 30)	mg/Nm ³	1.6	8.7	4.7	1.3	
		t	0.76	7.00	1.400	0.52	9.68
	HCI (lim 50)	mg/Nm ³	7.3	4.1	2.2	< 0,005	
		t	3.93	4.000	0.800	0.04	8.73
NO _x (lim 600) including SO _x)	mg/Nm ³	154.0	297.0	117.0	158.8	
		t	82.19	243.000	37.000	64.500	426.69
	SO _x (lim 300)	mg/Nm ³	3.7	27.0	4.0	< 1	
		t	1.76	22.000	1.200	0.04	25.00
	CO (lim 100)	mg/Nm ³	3.7	31.0	5.9	< 1	
		t	2.40	25.000	1.900	0.400	29.70
Emissioni in aria in rapporto al rifiuto trattato	Polveri	g/t	6.4	44.9	30.2	12.9	
	HCI	g/t	33.3	25.6	15.9	1.0	
	NO _x	g/t	696.5	1,557.8	774.5	1,609.7	
	SO _x	g/t	14.9	141.0	25.7	1.0	
	CO	g/t	20.4	160.3	38.9	10.1	

Emissions produced								
Sludge produced	t	6346	57004	390	415	2500	6590	73,245
Separated oils	t	545	128					673
Surnatant from bio treatment	t	159,057	35,176	21,500	20,100	96,300	100,897	433,030

DiscaricheLandfills	Category	Residual	Quantity	Lechate	Electricity
		authorized capacity	of waste received	produced	from biogas
		as at 31/12/03 (m ³)	(t/year)	(t/year)	(MWh)
OMTELLA FC	Cat. 1	460,000	17,214	3,364	-
BUSCA	Cat. 1	Full	31,248	9,849	-
LANDFILL 1C Ra	Cat. 1	315,000	183,275	14,551	4,505
LANDFILL 2B Ra	Cat. 2	30,000	9,677	43,191	2,361
2A+2B Piangipane	Cat. 2	Full	6,335	417	-
LANDFILL 2C Ra	Cat. 2	12,000	1,675	1,925	-
LANDFILL 1C LUGO	Cat. 1	510,000	41,205	8,273	2,188
GALLIERA	Cat. 1	1,059,000	81,526	2,421	-
BARICELLA	Cat. 1	***	88,724	12,562	2,048
TRE MONTI Imola	Cat. 1	1,736,870	218,926	48,659	3,082
IL PAGO Imola	Cat. 1	215,000	76,869	8,775	-
SOTRIS L.F. 2B SUPER	Cat. 2	119,000	59,800	10.179	-
SOTRIS L.F. 2B SUPER TN	Cat. 2	215,000	12,900	10.170	-
DISC. SOGLIANO (external)			162,000		-
Total		4,671,870	991,374	164,165	14,184

*** Authorization no. 155119 of 19/12/2000 (expiry 2005 - expected to receive 105,000 t of waste per year).

CHEMICAL-PHYSICAL TREATMENT AND INERTIZATION PLANTS

Resources utilized		CHIFI	ChifiBi	Sludge	ChifiBi	ChifiBi	Lugo	ITFI	Sotris	TOTAL
		Forlì	Ravenna	treat.	Alfonsine	Russi	Ravenna	Bologna		
		(PTN)		Ravenna						
Drinking water	m ³	700	3,214	-	5	-	-	3,200	-	7,119
Industrial water and/or water recovered by bio treatment	m ³	1,500	9,919	4,537	2,700	1,300	40,000	14,593	3,100	77,649
Reagents and additives	t	82	841	5,968	152	121	1,425	904	875	10,368
Diesel fuel for vehicles	L		3,500	7,900				2,100	16,000	1.501,06

INDICATORS		2003
Percentage of segregated waste collection	%	29.28
Waste collected per inhabitant served	kg/inh	633.435
Waste collected per day per inhabitant served	kg/g/inh	1.735
Segregated waste collected per inhabitant served	kg/g/inh	0.465
Total electric energy recovered	MWh	87,597
Electric energy recovered per unit of waste treated in waste-to-energy plant	MWh/t	0.24

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Within the Hera group, we manage some activities that may be considered complementary to our main operations, namely: district heating, already described in the chapter on energy, public lighting, traffic light systems and telecommunication services. These activities will be further optimized and rationalized in 2004.

The Group also provides funeral and cemetery services (we shall point out that in early 2003 we took over management of the municipal funeral services of Bologna) and heat management, public park and garden maintenance and other minor services.

5.5.1 Telecommunications

In the telecommunications sector, Hera is an active partner in the Regional Telematic Plan, through which the Region of Emilia-Romagna aims to develop, by the end of 2004, the technological infrastructures necessary for linking the provinces of Bologna, Ravenna, Forli-Cesena and Rimini in a fiber optic network consisting in 460 km of cables and 200 km of interconnections between the backbone and the municipalities in the areas involved. The Plan also provides for satellite linkups to cover hard-to-reach mountain communities. This project will place Emilia-Romagna among the most technologically advanced regions in Europe and earn it a reputation as a cutting-edge "digital land".

The fiber optic network, with a guaranteed 100 megabit transmission capacity, will link all local government organizations, universities, public enterprises and institutions, which will be able to exchange documents, data and other materials (pictures, audio files,...) faster and more efficiently.

Private entities will also later be allowed to operate on the same network, thus going the "last mile" toward offering innovative telematic services to citizens.

The project partners are the Regional government, Consorzio Romagna-Acque – which will upgrade its network of ducts to accommodate the fiber optic cables – and the Hera group, which, through its subsidiary Acantho S.p.A., will complete part of the telematic network (above all in urban districts) and provide interconnections and drop cables. In 2003 the Group made investments of 13.2 million Euros in order to carry out the work scheduled under the Regional Telematic Plan and also achieved significant synergies with the maintenance activities on the distribution networks managed. •



The Hera group manages about 202,000 light fixtures and 490 traffic light installations, assuring efficient service to 46 (42 as at 31/12/03) municipalities as far as public lighting is concerned and to 17 municipalities in the case of traffic light systems.

The service we offer includes a call center, fault reporting and emergency service, special and scheduled maintenance, supply of electric power and data transmission, design and construction of new installations or uncarding of additional actuality and the service and the service actual transmission.

construction of new installations or upgrading of existing installations to meet regulations and georeferenced management of installations data.

Hera's public lighting management goals are to improve service while reducing power demand and real consumption thanks to the gradual replacement of incandescent and mercury vapor lamps with other long-life, high luminous efficiency lamps and an overall upgrading of technical and equipment conditions.

Since 1 January 2004, the technical and operational activities tied to the public lighting and traffic lights management service contracted to Hera have been carried out by Hera Luce S.r.I., a Group company based in San Lazzaro (Bologna).

5.5.2

Public lighting and traffic lights management

SB

.5.2

11+12_Suggestive play of lights and shadows on a springtime evening in Bologna.



5.6.1 Testing laboratories

13 A refreshing taste of cool water in the park.

The Hera group views laboratory activities as fundamental tools for the maintenance and continuous monitoring of the quality of its services. In 2003 the process of integration of sampling and analysis activities served to consolidate the organization of laboratories: procedures were rationalized through the implementation of standard methods and supply and service contracts were likewise standardized.

The analyses concerned the Group's three core businesses (water, gas, waste); determinations in the food and other sectors were also performed on behalf of external customers. Revenues from services to external customers rose 52% compared to 2002, also as a result of competitive tendering for water and land environmental monitoring contracts.

The two main laboratories located in Bologna and Ravenna are accredited by SINAL (n. 0110 and n. 0392): a two-year plan has also been defined with the aim of obtaining ISO9001:2000 certification for the remaining seven lab units as well. The laboratories are equipped with state-ofthe-art test instruments: to this area the Group has dedicated a specific investment plan. The operational structure of the Hera group's centers of analysis is today made up of two laboratories (Ravenna and Sasso Marconi - BO) and seven district laboratory units (Imola, Forli 2, Bologna, Rimini, Cattolica, Lugo).

INVESTMENTS 2004 - 2007	2004	2005	2006	2007	Total
	442,000	208,000	691,000	386,000	1,727,000

As a further tool for promoting the culture of quality and exchange with different operational and research organizations in the sector, Hera takes part in the "Interlaboratory comparison circuit". In this context, which offers us an opportunity to find research ideas and an international validation of



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BOLOGNA AND RAVENNA LABORATORIES

BOLOGNA

The Hera Group laboratory system

our analytic methods, we play a part in the dissemination of knowledge in analytic fields and in the consequent improvement of measuring precision and reliability.

Participation in interlaboratory comparison circuits

, , ,		
MATRIX	ORGANIZATION	CIBCUIT
Drinking and surface water	HPA OXOID	Equal scheme for indicator organism EQA-Water Microbiology
	01/ PL B 1 -	
Drinking and surface water	GK BioProduts DID	SENALE Water Microbiology scheme
°		
Drinking and surface water	ISS and UNICHIM	Microbiological agents in water
Wastewater	UNICHIM	Wastewater chemical parameters
Drinking water and wastewater	WATER RESEARCH CENTRE	Aquaceck chemical parameters
Brinneng Water and Waterbridter	WITE THEODY TO FY OF THE	rigadoor or or ionidal parameters
Compost	CIC (Consorzio italiano compostatori – Italian Con	nposting Consortium)
Composi	olo (ooriooizio halario ooripoolatori halari oor	npooling opinion damy

For 2004 the following major projects and lines of development are planned:

- unification of the information system (LIMS - Laboratory Information Management System);

- standardization of internal procedures;

- assignment of a univocal code to all sampling points;
- increase in business from outsourcing;
- extension of accredited parameters to both the Bologna and Ravenna laboratories;
- unification of the district laboratories of Rimini/Cattolica and the two units in Forli;
- application of service agreements with Group companies.

5.6.2

Office management

The guidelines followed for the management of company premises aim to reduce social and environmental impacts caused by the presence of offices and workshops in what have become essentially residential areas over the years and to preserve a strong bond with local communities, also through physical points for receiving citizens. These guidelines may be summarized as follows:

 rationalization: centralization of operational activities in larger headquarters (e.g. vehicle) maintenance shops, test laboratories, environmental services and network management logistical departments):

extensive local presence of help desks and front-office services for contact with customers.

Resource consumption by offices		2003
Water	m ³	314,000
Electricity	kWh	8,050,000
Natural gas	m ³	2,093,000
Diesel fuel	L	476,000

Two projects stand out for their particular social and environmental value; they have the objective of moving operational activities into outlying districts so that vacated city areas may be recovered for residential use and services while the strain on the environment caused by the vehicles and logistical aids connected to our activities are eliminated. These projects are:

Berti Pichat - Bologna

Hera's headquarters are situated practically in the heart of Bologna, where buildings classifiable as "industrial archaeology" stand alongside others in a variety of architectural styles, which accommodate offices, vehicle repair shops, front office and cafeteria. The area represents a piece of Bologna's history: the gasometer, visible from much of the city and the iron cantilever roof by the bridge in via Stalingrado are vestiges of a time when people used coal for heating and cooking every day. They remain as testimony to the productivity and modernity of Boloanese efficiency. Under the lead of the architect Pierluigi Cervellati, the project for the renewal of this area has become an occasion for reinventing the entire space, for exploiting the past by connecting it to today's needs. Bologna will have new green areas, new homes, underground parking facilities and gvms, The restoration of the existing gasometer and the reconstruction of the adjacent one and the two to the north and south will result in an image reminiscent of the one existing at the time of the "Gasworks", in the 1930s. The gasometers will be set in a vast public park with a gazebo and fountain, while gyms will be obtained by converting existing buildings in via Ranzani. The area's renewal will thus be an example of "urban restoration", which, combining old and new, will endow the historical city center with cultural and representative value. It is a project for the city, one designed to conserve memories while offering citizens additional

green areas, facilities and opportunities for enjoyment.



14 Picture of the "Cervellati" project -

Gas meters new Bologna headquarters. 15_ Building site of the new Rimini offices.

Frullo

The operational activities presently located in Berti Pichat will be moved to new premises to be built in the municipality of Castenaso, about a dozen kilometers away from the avenues delimiting the center of Bologna, in the vicinity of the present "Frullo" facility.

Rimini

The new headquarters of Hera Rimini, designed by architect Gae Aulenti, are currently under

construction: the project provides for a new office building, a multifunctional and leisure facility and a building with employee dressing rooms plus the remodeling of an existing rural building to accommodate the president's office.

The area is close to the important Rimini Sud exit of the A14 highway. The building housing the management and administrative offices, the largest in size, will rise to a height of four storeys. It is conceived as a large open space, making it extremely flexible.

The landscaping has an architectonic function: expanses of lawn alternate with thickly planted trees arranged in a geometric pattern that relates to the axes defining the buildings themselves.

Hera manages the fleet of vehicles it uses for operational purposes (compactor trucks. sweepers, ...) or to support network management (vans, cars, ...) paving constant attention to the environmental impacts connected to resource consumption (non-renewable fuels, ...), the atmospheric emissions and noise produced, especially in such activities as bin emptying and mechanical sweeping. The basic policies may be summed up as follows:

5.6.3

Company fleet

- + logistical rationalization: this strategic policy embraces operations such as, for example, waste collection with so-called "satellite" logistic systems, which use smaller vehicles to empty bins in narrow streets and then transfer the waste into vehicles of higher capacity to optimize transport to the plants, the setting up of facilities in different locations within the territory to reduce travel for non-operational purposes and, conversely, the closure of small maintenance shops so as to concentrate activities in modern facilities, duly equipped both to treat emissions and assure the safety of the work performed using fixed equipment and tools:
- + use of fuels with low environmental impact: the companies merging to form Hera have made constant use of methane- and biodiesel-fueled vehicles over the years. In recent years we have also started to introduce operational vehicles that run on methane, e.g. compactor trucks, and to use other alternative systems, such as small electric-powered vehicles for moving around in downtown areas:
- constant fleet renewal: the Group has identified fleet turnover as one of the fundamental measures for keeping operational performance and environmental impacts in line with the best opportunities offered by technological development, particularly in urban districts, For the majority of vehicles, the period of use has been established as seven years.

Hera uses a fleet of about 2,730 vehicles driven by endothermal engines: of this total, about 150 are fueled by methane, 1.023 by gasoline, 107 by a fuel mixture, 1.396 by diesel fuel and 54 vehicles are electric powered.

Among the low environmental impact vehicles we shall mention methane-fueled compactor trucks, the use of biodiesel and electric vehicles (some vans, tricars, motor-assisted pedal bicvcles).

As of January 2004, the company fleet is managed by the company Uniflotte, a subsidiary of Hera S.p.A., set up together with several sector operators for the purpose of optimizing global fleet management and technological development.

Consumption 2003		Total
- Diesel fuel	L	6,064,200
- Biodiesel	L	185,829
- Gasoline	L	916,718
- Methane	Sm³	230,400
- Electricity	kWh	242,860

In 2003 we introduced 64 new vehicles, among which we should highlight 10 methane-fueled compactor trucks and 14 sweepers: given that these are fairly noisy vehicles, which operate above all in urban areas, often in the evening or at night (to avoid getting in the way of or being obstructed by traffic), the lower acoustic impact produced by methane-fueled systems is yet a further benefit.

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Breakd. of He	ra fleet *	Conventional	EURO 1 **	EURO 2 ***	EURO 3	Total
		(up to 1991)	(1992-1995)	(1996-2000)	(2001-2004)	
Diesel	Ν.	270	197	398	256	1.121
	km	3,853,198	2,750,252	5,897,089	4,019,630	16,520,169
Gasoline	Ν.	140	283	248	189	860
	km	909,763	3,297,031	2,736,725	2,192,155	9,135,674
Biodiesel	Ν.	24	27	36	45	132
	km	170,025	368,645	543,881	971,469	2,054,020
Methane	Ν.	8	20	38	54	120
	km	87,228	282,323	447,930	539,374	1,356,855
Electric	Ν.					53
	km					495,000

* Vehicles sold or not used in 2003 are excluded from the calculations.
** For light diesel fuel and gasoline from 1993 to 1997.
*** For light diesel fuel and gasoline from 1998 to 2000.

The experience in Ravenna with biodiesel

In 2000, within the sphere of actions aimed at improving environmental performance, Area, a Ravenna-based utility that has since joined the Hera group, launched an experimental project for the use of biodiesel as fuel for motor vehicles.

Biodiesel is a fuel obtained by chemical conversion of vegetable oils, derived for example from rapeseed, sunflower seeds and soybeans. Based on currently available data it is believed that using this fuel provides significant advantages for the environment.

Its partial (in the case of mixtures) or total (in a pure state) replacement of traditional diesel fuel in fact serves to reduce the main air-polluting emissions. In a pure state, biodiesel fuel is completely sulfur free, so it does not produce sulfur dioxide nor is it responsible for acid rain formation.

It contains no aromatic polycyclic hydrocarbons, aromatic compounds or heavy metals such as lead and cadmium. It is also safer to store than gasoline, mainly for two reasons: it has a higher flash point and is highly biodegradable, up to 95 % in 28 days: in the same number of days diesel will only degrade by 40%.

Its production moreover allows a reduction in carbon dioxide emissions, primarily due to the process of photosynthesis carried out by the plants the fuel is obtained from.

It is estimated that for every liter of biodiesel used in the place of diesel fuel, 2.1 kg less $\rm CO_2$ will be released into the atmosphere.

AUTOMEZZO ALIMENTATO BIODIESEL



Real-time mapping of the operations conducted within one's territory is indubitably an imperative for utility companies, municipal, provincial and regional authorities and, more generally speaking, all the organizations they manage within the territory and/or those who work there.

In this context, it is fundamental to develop shared methods and tools, such as to enable all players to stay abreast of the state of the art, and to plan activities within their territory of jurisdiction. Based on the experience which started in Bologna in 1988, Hera plans to define agreements with institutions and companies that play a role in the management of the territory, using the WEB GIS system to map and manage, in a coordinated manner and with continuity over time, all routine and special maintenance involving road work: excavation, for example, can be efficiently managed while exploiting all the potential synergies with other operators, from the planning stage to complete restoration of the road once the job is done.

The Territorial Information System (TIS) implemented in Bologna comprises:

- management of technological networks: water, gas, sewer and wastewater treatment networks, district heating, digital telecommunications network, public lighting and traffic lights;
- excavation and worksite system (since September 2001, over 7,000 worksites have been mapped and managed);
- management of collection sites and containers for municipal solid waste and segregated waste;
- management of sweeping routes, winter snow and ice clearance, waste collection;
- management of the road graph covering the territory served;
- management of gas and water sampling points;
- management of network breakdown and emergency services;
- generation of procedures and databanks as tools for satisfying requirements introduced by the Electricity and Gas Authority;
- possibility of viewing all mapping data in the databank via the company Intranet;
- WEB dissemination of numerical mapping data;
- GIS applications for the management of databanks linked to remote monitoring systems, weather reporting systems and systems for monitoring efficiency and productivity indexes.

With the aim of extending use of this tool in a complete and integrated manner, in 2003 a TIS organizational unit was set up within the parent company Service Division. In early 2004 the following modules were to have been released throughout the Group:

- GPS management of company fleets;
- planning of network repair jobs on the basis of statistical analyses and models generated by real-time georeferencing of fault reports and interventions on the water and gas networks;
- system for management of post-meter work and mapping of network consumption;
- Georeferenced Call Center (GEO Call Center).

5.6.4

TIS support in the management of local operations

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(0) DIALOGUE WITH STAKEHOLDERS

6.2

Project aims

The efforts undertaken thus far have involved a variety of stakeholders and different methods have been adopted to investigate the most relevant issues for each category represented. The following dialogue tools were used:

Through a policy of open dialogue with the main stakeholders, Hera seeks to respond to the new concerns and expectations of citizens, consumers, government agencies and investors, principally with regard to the principles of social, economic and environmental sustainability

In 2003, in order to implement a policy of constructive dialogue with stakeholders and gather useful suggestions for improving the layout and contents of the Sustainability Report, the Group inaugurated a process of dialogue and exchange with the main stakeholders inside and

Hera fully espouses the principle expressed in the Green Paper on corporate social responsibility concerning the necessity of responding to the social, economic and environmental pressures arising through interaction with all interested parties: employees, shareholders, investors, consumers, public authorities and non-profit organizations. In this context, the Company states its social responsibility and voluntarily takes on commitments that go beyond regulatory and conventional requirements, embracing a system of open

governance capable of reconciling the interests of various stakeholders.

which should underlie corporate decision-making.

- + focus groups: planned discussions aimed at gathering perceptions about defined areas of interest, conducted in groups whose members interact and mutually influence one another during discussion, led by a moderator who guides participation and outlines the topics to be addressed;
- + workshops: planned discussions aimed at gathering perceptions about defined areas of interest; small groups are formed, each aided by a facilitator, the goal being to arrive at a group consensus on a specific topic; in a subsequent plenary meeting, the various groups discuss their respective positions;
- + personal questionnaires.

outside the company.

Methods	Targets	Subjects involved	Scope	Topics
QUESTION- NAIRES	Institutions and associations	Regional Authority for the Supervision of Water Services, API Bologna, Legacoop Bologna, Assindustria Bologna, CNA (National Federation of Craftsmen) Emilia Romagna	Use and value of the Report for transparency and control. Effectiveness and usefulness, completeness of communication	Usefulness of the tool Type of information Completeness Reliability Communication
	Financial institutions	Morley Fund Management Kempen Capital Management Calvert Group	Completeness and usefulness of information	Relationship with stakeholders
WORKSHOP	Institutions and government	ARPA (Regional Environmental Protection Agency) Emilia Romagna ADICONSUM Bologna Legambiente Forli-Cesena Province of Forli-Cesena Municipality of Ravenna Municipality of Castel S. Pietro Municipality of Cesena	Completeness and thorough- ness in the treatment of critical aspects and potential problem area	Corporate identity Environmental Performance Social Performance
FOCUS GROUP	Hera Employees	Managers and Executives	Strengths and weaknesses of the BS in relation to Hera group policies and strategies	Ideas for improving strategies and communication for the various stakeholders
		Office personnel and workers	Assessment of one year of Hera: fears and expectations in terms of results	Strategy Communication Training Safety Organization of work

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6.3 Overview of results

6.3.1 Questionnaires

- Below is a point-by-point overview of the results of questionnaires.
- The Sustainability Report was judged to be a highly useful tool by all respondents; financial analysts, in particular, pointed out that it is an indispensable tool for evaluating the Group's sustainability.
- Appreciation was expressed for the process of dialogue inaugurated with stakeholders, with respondents also hoping to see greater involvement in future years.
- + Communication:
- it was suggested to prepare a concise Sustainability Report, easily and immediately understandable, which referred readers to the Group's website for in-depth information;
 invest more in the communication of Hera's sustainability;
- appreciation for the clarity and transparency of the data reported for the year 2002.
- + Additional information deemed useful for reporting the company's sustainability:
 - national and international benchmarking with major players in the utilities sector in order to compare Hera's performance to that of other companies that have similarly chosen the path of corporate social responsibility;
 - more detailed description of future commitments and plans for improvement;
- breakdown of data by local territories.

6.3.2 "Controllers" Workshop

1 Bologna baadquarters, Viale Rerti Pichat

In the workshop conducted with representatives of government agencies, associations and supervisory bodies having a close involvement with Hera's activities, attention was focused on specific realms of discussion in order to assess the completeness and comprehensiveness of the Sustainability Report 2002 with respect to critical aspects and potential problem areas. The aim of the meeting was to examine the contents of the Sustainability Report 2002 in depth to evaluate its meaningfulness as a tool for communicating the company's sustainability and social responsibility.

Among the relevant points that emerged, by consensus of the majority of the participants:

- corporate identity: extension of the information about the company's organization and activities in relation to the territory in which services are provided;
- external communication: introduce the voice of stakeholders concerning the company's performance and conduct and give citizens-users a greater possibility of communicating with the company;
- usefulness of a comparison with other players operating in the utilities sector by means of a national and international benchmarking study;
- strengthening citizens'/customers' confidence and sense of belonging through a policy of openness and transparency.

The topics of discussion arising during the workshop particularly concerned Hera's ties with all the different local contexts and the complexity of the external stakeholders it interacts with. In particular, as regards relations with local authorities and customers, Hera is expected to be open to dialogue with these stakeholders, such dialogue representing an essential tool for communicating corporate social responsibility, as well as integrating and involving the local community in the development of the economic, social and environmental capital of all related sectors. • The meeting with Hera's management personnel was aimed at evaluating the strengths and weaknesses of the Sustainability Report 2002 in addressing the policies and strategies of the Hera group.

Managers from different departments and different territorial operative companies were asked to take part so as to have a sample group of 15 people representative of all company situations. The most relevant tooics that emerged, by consensus of the maiority of participants, were:

- organization of work: need to pursue the process of harmonization among all organizational divisions in order to achieve a homogeneous management approach that takes into account, however, the different operating necessities. The same focus on employees (enrichment, safety, quality of life) must remain at the center of company commitments;
- suppliers: centralization as regards both supplier selection and the formulation of framework
 agreements has brought large benefits in terms of cost reduction and product quality
 standards; the Company must reconcile these benefits with the territorial character of Hera, in
 consideration, therefore, of how the distribution of value added impacts related sectors; it is
 similarly a good idea to continue relationships that consider the social value of suppliers (e.g.
 social cooperatives);
- + customers: in its relations with customers, Hera attributes great importance to the transparency of its commercial offerings; in a free market context, where this condition is not always respected, the Group must emphasize the value of the transparency offered. Relevant suggestions were also made on the topic of communication:
- + reinforce communication aimed at all stakeholders, highlighting in particular:
- company mission and values;
- identity, organization, roles and responsibility;
- best practices implemented in various operating sectors;
- + enhance the potential of the Sustainability Report as a tool for improving communication with stakeholders;
- + formulate guidelines for managing non-stabilized communication, where:
- the subjects of communication change due to rapid, continual changes in the organization;
- the sources of information change as the organization changes;
- + integrate the action of the different Group companies in the sphere of communication:
- the information communicated must be consistent;
- the Holding company must aim at the definition of shared strategies, while the TOCs can exploit the benefits of dialogue with local realities.

The objective of the meeting with employees was to survey the opinions of the workforce one year after the Group's establishment, comparing the results attained with internal expectations. Office staff and workers from different departments and different territorial operative companies were asked to take part so as to have a sample group of 25 people representative of all company situations.

- + to reinforce and disseminate the Group's mission, objectives and commitments;
- to implement highly efficient systems for internal communication among different operational divisions and different Group companies;
- + to continue prioritizing investments in training and safety, aspects that have always represented values in the culture of the companies that merged into Hera;
- + to improve the organizational machine;

+ to limit recourse to outsourcing, focusing instead on promoting processes of internal growth. Among the topics addressed by the Focus Group, internal communication proved to be of utmost importance: in fact, open and transparent dialogue across all levels of organization may serve as the basis for reinforcing both the shared identity of the Group and operating efficiency. The implementation of new communication tools and methods would enable the Group's objectives and strategies to be conveyed efficiently, thus increasing the likelihood of success.

The employees involved in the meeting positively viewed Hera's policy of dialogue with all stakeholders; the drafting of a Sustainability Report is itself a demonstration of the Group's commitment to implementing a socially responsible corporate model.

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Focus aroup:

managers executives

Focus group: office personnel and workers

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IMPROVEMENT OBJECTIVES: 2003 RESULTS AND FUTUR COMMITM **JRE**

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For the Hera group, the Sustainability Report is testimony to a management process which is aimed at continuously improving the corporate culture within a framework of social responsibility, through the integrated management of the different paths to excellence in the environmental, social and economic spheres. This is also demonstrated by the precise definition of improvement objectives for each stakeholder category: below we present the results attained in 2003 with respect to the commitments described in the 2002 Report.

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AMI I MEI	Stakeholder	Commitment in SR02	2003 Results	Commitments 2004 and beyond	Stakeholder	Commitment in SR02	2003 Results	Commitments 2004 and beyond
IS AND FUI URE COM	All	Progressively refine the indicators included in the Sustainability Report	A first series of Group indicators was applied in the Sustainability Report	Continue developing indicators, so that they provide an increasingly comprehensive view of the Group's economic, social and environmental performances	Community	Educate citizens how to use Hera services correctly to help improve their quality, about the importance of saving energy, segregated collection	See information about 2003 awareness building campaign in section 4.7	Institutional campaigns on such themes as service quality, environmental impact and citizen awareness. Engage in environmental education
SI: 2003 HESUL	All	Dialogue with internal and external stakeholders via specific meetings and working together (implement the surveving system)	Involvement activities were implemented (see chap. 6)	Increase the dialogue with stakeholders	Environment	and a careful use of water resources Energy – Improve energy efficiency	Start-up of studies for analyzing impact due	Draw up a report on the impact of the
VEMENT OBJECTIVE	All	Achieve certification of our quality, environment and safety systems	ISO9001:2000 certification of Hera SpA (planning and control).	ISO9001:2000 certification of Hera SpA and TOCs in relation to the three core business sectors by 2004.		Increase electrical energy production from renewable and assimilated sources	to CO ₂ emissions of waste-to-energy plants. Continuation of authorization procedures/ engineering of projects to expand capacity at waste-to-energy and cogeneration plants	Group's activities on greenhouse gases. Proceed with development of the projects underway
7 IMPHX	Employees	Introduce a manager	The process was started with the assessment system	Define a performance bonus for all Group personnel, as an incentive to improving productivity and quality of work	Environment	Energy – Improve energy efficiency of the local system Extend district heating	See section 5.3	Proceed with development of the projects underway
2003	Employees	Carry out training on market/ customer orientation and the value and awareness of decisions	Training was provided, also in the areas indicated, for a total of about 60,000 hours in 2003 and expenditure of over 400,000 Euros	Carry out training on shared values and management and operational skills, for an estimated total of about 120,000 hours in 2004 and expenditure of 700,000 Euros	Environment	Water – Improve efficiency in the use of water resources, reducing network losses. Reduce operating pressure.	Completion of project for reducing the operating pressure in the Bologna city network, continuation of special maintenance on user connections	Complete special maintenance on user connections and networks
sustainability repo	Employees	Publish an in-house newsletter (to facilitate involvement of employees)	Management conventions were organized. An internal communication plan was formulated	Quarterly management conventions, dissemination of data and materials through Intranet, definition of community spaces, two-monthly house organ		special maintenance of user connections and distribution networks for Bologna	and networks	
50	Suppliers	Favor relationships with suppliers who base their actions on principles of economic, social and environmental sustainability	The rules governing relations with suppliers were harmonized	Implement the Code of Ethics, introduce compliance with standard SA8000 in the supply chain, include sustainable quality criteria in supplier assessments	Environment	Environment – Recover more material from waste. Increase composting and biostabilization	Segregated waste collection increased to 29.28 %. Increase in composting Terms introduced for monitoring segregated waste material recovery	Define and implement a system for monitoring the quantities of materials recovered from segregated waste. Reach 35 % by 2007
	Institutions	Periodically report to the municipal administrators of the four provinces in which we operate magnified to operate the second to be administration of the second to be administration of the second to be administration of the second se	The Top Management of Hera met with Mayors to inform them about the activities launched by the new Groups	Monthly electronic newsletter; six-monthly conferences with activity reports; specific communication initiatives	Environment	Environment – Recover more energy from waste. Increase waste-to-energy treatment	See section 5.4	Implement projects to renovate and boost capacity of waste-to-energy plants; treat up to 49% of total collected waste by 2007
	Community	Hold meetings with citizens	Local meetings with Hera technicians, focus groups on the	Develop occasions for meetings between operational divisions of the Group and	Environment	Environment – Certify the integrated quality, environment and safety management system EMAS registration of all main waste treatment plants	Renewal of existing ISO14001 (6) and EMAS (1) certifications, ISO 14001 extended to an additional 3 plants	Renew existing ISO 14001 (9) and EMAS (1) certifications; extend certification to 3 more plants in 2004 and 5 in 2005
era sp.A. page 162	Community	Accept young people for apprenticeships and internships	Sustainability Report Continue partnership with University of Bologna and Masters Degree Programs	Individual citizens or associations Define stable relations with Universities and/or Masters Programs, within a Group	Environment	by 2005 Energy – Certify the heating system EMAS registration of the Hera Bologna heating	An environmental management system was developed for the Hera Bologna heating system	Apply the environmental management system of the Hera Bologna heating system, certify it to ISO 14001
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Glossary

AEEG	Electricity and Gas Authority, established under Italian Law 481/95. It is a government agency set up for the purpose of regulating and controlling the Italian energy market.	International standard setting the requirements for quality management system certification (also referred to as "Vision 2000").	ISO 9001:2000
Captive customer	This is an end customer who may stipulate supply contracts solely with the distributor offering the service in the area where the user is located.	Specific indicators selected according to company information requirements and used to monitor company performance. They may be financial, production-related, commercial, environmental or social or embrace several dimensions.	Key Performance Indicators (KPI)
Cathodic protection	System for preventing corrosion of underground metal pipes, consisting in the application of a negative electric potential.	Unit of measure for electrical energy, equivalent to the energy produced in 1 hour by a machine with a power of 1 kW.	Kilowatt hour (kWh)
CIP 6	Ruling no. 6/92 of the CIP (Interministerial Price Committee) concerning incentives to the production of electricity from renewable sources. It determines the tariffs and contributions relative to the production and sale to ENEL (national electric power utility) of energy from conventional, renewable and assimilated sources.	It is the process of partnership through which local authorities work together with all sectors of the local community to define plans of action for pursuing sustainability at a local level.	Local Agenda 21
Corporate Social Responsibility (CSR)	The whole set of social, environmental and economic responsibilities that a company must take on to meet the legitimate expectations of stakeholders.	Gaseous fossil fuel made up of methane (from 88 to 98%) and small quantities of other hydrocarbons. Herein the terms "methane gas" or "gas" are used synonymously with "natural gas".	Natural gas
District Heating	Transfer of heat originating from thermal power plants or cogeneration or waste-to-energy plants through an energy vector (hot water, superheated water, steam).	They are the consequence of network leakage. Due to these losses, the quantity of gas, water and electricity injected into the network exceeds actual consumption.	Network losses
Electric box	Enclosure containing electrical equipment and/or transformers connected to transport or distribution networks	With reference to the electrical energy sector, this is an individual or organization that is eligible to stipulate supply contracts with any manufacturer, distributor or wholesaler, either in Italy or abroad.	Non-captive customer
Energy recovery	Using the energy released during a process (of combustion, pressure change,) to produce steam and/or electricity.	Sulfurized organic gaseous compound or mixture of compounds added in trace quantities to methane gas to lend it a characteristic odor, thereby enabling any leaks to be detected and assuring safe distribution and use.	Odorizer
EMAS	EC regulation no. 761/2001 dated 19 March 2001 on voluntary adherence by organizations to a community eco-management and audit scheme. What distinguishes it from ISO 14001:1996 is its public nature and the fact that it is open to the local community (preparation of the environmental statement)	Form of cooperation introduced by art. 3 of the Galli Law, set up by the provincial and municipal authorities of each OTA; it represents the mutual interests of the local authorities involved and fulfills all municipal administrative functions with respect to water and environmental services.	Optimum Territorial Area Agency (OTA Agency)
Environment	Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.	Instituted by the Galli Law to allow management entities of adequate size, overcome the fragmentation of local utilities and achieve economies of scale in the integrated water service and environmental services.	OTA (Optimum Territorial Area)
Environmental aspect	Element of the organization's activities, products, or services which can interact with an environment (definition according to UNI EN ISO 14001:1996).	Unit of measurement defined by sector regulations as "organic biodegradable load having a five- day biochemical oxygen demand (BOD ₅) of 60 grams of oxygen per day": it allows the polluting	Population equivalent
ETP	Equivalent tonnes of petroleum. Conventional unit of measurement for energy sources, equivalent to 10,000 Mcal, or the energy obtained from the combustion of one tonne of petroleum.	load in the wastewater entering a treatment plant to be expressed as the assumed load per inhabitant, i.e. individual person.	
Fiber optics	Cables consisting of slender silicon or glass fiber strands. They carry information in the form of light beams.	Technological platform for integrated development of company information systems. Individuals and groups inside and outside a company, with different interests and needs, who are	SAP Stakeholders
Global Reporting Initiative (GRI)	An institution whose mission is to develop and extend the applicability of guidelines for social and environmental reporting.	able to influence the choices and conduct of a business and help determine its success. The main stakeholders are: employees, shareholders, financial backers, customers, suppliers, institutions and community.	(interested parties)
Green Certificates	Certificates defined in article 5 of the decree issued by the Ministry of Industry, Trade and Handicrafts on 11 November 1999. Each producer or importer must procure 2% of his electric power from recourded energy electric for the detail wave following the importion and that up period, the	Sinking of the soil caused by lowering of the underground water table, in turn caused by withdrawal of groundwater at a rate exceeding that of natural recharging.	Subsidence
	production of electricity from renewable sources is entitled to receive certification (Green Certificates), assigned a value of 100 MWh. These certificates can be traded to fulfill the obligation of procuring energy from renewable sources.	"Development that meets the needs of the present, without compromising the ability of future generations to meet their own needs" (Brundtland Report – World Commission for Economic Development, 1987)	Sustainable development
Greenhouse gas	Gases that contribute to climate changes due to a greenhouse effect: in addition to naturally occurring gases, the main greenhouse gases resulting from human activities are carbon dioxide, methane, chlorofluorocarbons and nitrogen oxides.	It is an indication of the return on internal factors of production (capital: amortization, depreciation and self financing, and labor: wages and salaries). Value added is given by: revenues +/- changes in inventory – costs of bought-in materials and services.	Value added
ISO 14001:1996	International standard setting the requirements for environmental management system certification.	Italian legislative decree no. 22 of 5 February 1997 defines waste as "any substance or object II which its holder has discarded, or has decided to or is required to discard".	Waste

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Report of the auditors on the sustainability report Attestation

To the based of directors of HERA S.p.A.

- We have carried out the compliance procedures and analyses on the national/Dity report of the IEBLA Group at 31. December 2003, described is paragraph 2 of this topost.
 - The size of for presidence was in ordenic file based of discisses' externect, resided in the program's entitled "Methodological pressure" of the austatuality report of the BERA Group 2.1.1 Described 2000, base auch report was program in complement with the guidelines established by GRI (Olivies Reporting Instance) and by GRI (Study Group for Nation result reporting standards). The programme of the instantiality report in the wells wells prior the size squares in the second start compares? I transportent,
- 2 Se order to evaluate the board of distances: manimal in paragraph 1, in accordance with the Instrumentational Auditing Sizuktra's local by the Interestional Tederation of Assositions (FAC) applicable in this angaptement and with Rescissib Document on 1 search by 1086, we performed the full-instag procedures:
 - verifying that the fromulal Egrans and followation are consistent with from included in the consolidated fromous dataparents of the XEEA. Group as at soft the file your ended 37. Disconfield 2003, approved by the starsholders, with respect to which other auditors insued that and terent Actual 9 April 2004.
 - assigning here the processor ariderlying the proceeding, recording and sumagreeses of quantitative data spectra. In particular:
 - interviews and documines with management delegates and personal of certain 100RA Group comparison, to obtain an overview of the group's activity, to gatho indicated on or far IC, accounting on trepering events and all as preparing 20 metainshifting report, and to itself the presents and a preseduation comparison of de IEEA Sp.A. offset that prepare the statisticality report.
 - inciple-based analysis of supporting documentation used in preparing the constantiality report is conferen the establishing of the interchare-derived information, as well as the effectivenesis of pressense and flater adequacy in plation to functions objectives, and that the messal control symme surrectly manages data and information for the representes of the substantiality report.
 - analysing the completenese of the qualitative information included in the HERA. Circup autointidely report and its strategiesely descipled. This activity was survived aut in know with the public membrane above.

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- vertifying the stakeholders' involvement process, in terms of the methods could, whether all indefinitions were involved and if the salised futures arising from months with them are in lines with these installed in the maximality report.
- obtaining the representation latter signed by the parent company's legal representative on the reliability and complements of the statisticality report, on the information and data contained therein and its complement with the guideliner mentioned to paragraph 1.

Reference should be made to the report dated 5 June 2003 for our attentation on the prior year figures, which are presented for comparative purposes as registed by the guidelines referent above.

- 3 Based on the proceedants listed in paragraph 2, we believe that the transmissivity report of the IEERA Group at 31 Documenter 2005 complien with the preparation guidelines described in the paragraph activities "Matchedological paratise" of such report. Moreover, the filmunial figures and information contained in the matchedol preparate memory of the IEERA Coupy as at and for the year model in the constrained in the transmission for the IEERA Coupy as at and for the year model 31 Documentar 2007 and with the documentations we were provided with, and news the contained memory and with the documentation we were provided with, and news the contained memory and balance of the IEERA Coupy the set outstained/off y event parametries.
- 4 We draw your attentions to the Editoring information provided by the parent company's management in the paragraph entitled "Improvement objectives" of the IHEA Genep soutcombility report to as and first the your odded 31 Distributes 2000, for the perport of complying with the guidelines governing the samtanukliday development management process and the samtaneouslikity report.
- 4.1 The HERA Group intends to continue improving the number of occurrents, social well environmental indicators and the information included in future nutrient/HTy reports, to fully new the private generating their propagation and to neprose the group involute.
- 4.2 With respect to the improvement process undertaken in the field of social responsibility, in 2003 the EERA Group began developing a system to survey stakeholders' expectations, in line with the paidelinest emotioned in paragraph 1. Moreover, the HERA Group intends to interense shalogue with its main internal and esternal ankeholders, so as to encourage the participation of all involved.

Bologna, 24 May 2004

KPMU Sp.A.

(Repeat on the original)

Massing Tamburini Director of Audit

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Rating of the 2003 Su	istainability Report			
Which stakeholder ca	tegory do you belong ti	o?		
Employees	Shareholders	Financial Backers		
Suppliers	Customers	Institutions	Community	
Do you believe that th stakeholders?	e Sustainability Report	represents an opportunity	for a fair and accurate ra	ting of Hera's relations with its
Yes				
No	if No, why not?			
How do you rate Hera	's Sustainability Report	?		
Excellent	Good	Average	Fair	Poor
c) Completeness d) Ability to increa e) Graphic layout f) Overall rating of Do you feel that Hera expectations of the va Yes	the information giver se awareness of the or the company's perform has acted consistently rious stakeholders?	n ompany nance in the following field economic-financ social environmental with the values stated in t	s: ial he Sustainability Report a	nd in line with the legitimate
No	if No, why not?			
Do you have any rema and/or the quality of s	arks to make or sugges ocial engagement betw	stions on how improvemer veen Hera and its stakeho	its can be made to next y ders?	year's Sustainability Report
I wish to receive the S Send to:	Sustainability Report 200	04		
Name: St. Address: Postcode: e-mail:		Sumame: N°: City/Town:	F	Prov./Cty./State: