Corporate Structure

Main Activities of the Business Units









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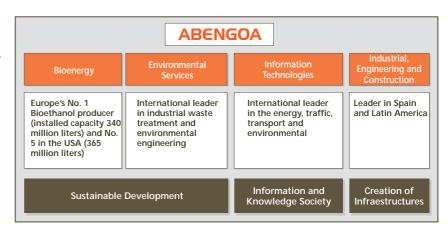
#### **Corporate Structure**

Abengoa is an industrial and technological company providing solutions for sustainable development, the Information and knowledge society and infrastructure provision. It operates in four extensive activity areas: Bioenergy – second-largest world producer of bioethanol; Environmental Services – International leader in industrial waste treatment and environmental engineering; Information Technologies – International leader in the energy, traffic, transport and environmental; and Engineering and Industrial Construction – Leader in Spain and Latin America.

**Bioenergy**, Abengoa Bioenergía, the bioenergy holding company, produces ethyl alcohol from vegetal products (cereals, biomass). Alcohol (bioethanol) is used to manufacture ETBE (a gasoline component), or a direct blend with gasoline or diesel oil. As it is a renewable energy, net CO<sub>2</sub> emissions are reduced (minimizing the greenhouse effect).

**Environmental Services**, whose holding company is Befesa, whose activities include: Recycling of aluminum waste, salt slag, zinc; recycling and desulphurisation; industrial waste management; industrial cleaning services and environmental engineering (engineering and construction for water treatment and waste management).

Founded in 1993, Befesa is a listed company on the Madrid stock exchange and closed 2004 with a capitalization of over 393.7 million euros.



Information Technologies. In the information technology activity area, Telvent is the holding company for a number of Abengoa businesses. It manages real-time information technologies in the energy, environment, traffic and transport sectors. The solutions offered facilitate the full integration of information in realtime with the mission-critical applications, connecting the operations layer with the enterprise.

Telvent has been listed on the American stock market NASDAQ since October 21, 2004l. Share ownership is as follows: Abengoa 62.2%, Management Team 5.80% and Free Float 32.0%. The Telvent share offering closed in 2004 with a capitalization of 361.5 million US dollars.

Engineering & Industrial Construction. Abeinsa is Abengoa's holding company in this activity area, which includes: engineering, construction and maintenance of electrical, mechanical and instrumentation infrastructures for the energy, industry, transport and service sectors; design, construction and operation of industrial plants and conventional energy (cogeneration and combined cycle); renewable energy (bioethanol, biomass, geothermic, solar and wind); and telecommunications networks and other "turnkey" projects.

Main Activities of the Business Groups

### Main Activities of the Business Units

#### **Bioenergy**

Abengoa manufactures and markets bioethanol, a renewable product obtained from cereals which is used as a substitute for gasoline. Bioethanol is an alcohol which is produced from corn, potatoes, sorghum, wheat, sugar cane, as well as from biomass, such as corn stalks and other vegetal waste. Blended with gasoline, it raises octane rating, promoting better combustion and reducing pollutant exhaust emissions, including carbon monoxide and hydrocarbons.

Ethyl alcohol (bioethanol) which is produced in Abengoa plants can be used to manufacture ETBE (ethyl tertiary butyl ether), which is a gasoline component, and it can also be directly blended with gasoline or diesel oil. Because it represents a source of renewable energy in both processes, net CO<sub>2</sub> emissions are reduced, thereby minimizing the greenhouse effect.

After extracting ethanol from grain via fermentation and distillation, various byproducts are obtained, representing a valuable source of energy and protein for beef and dairy cattle alike. Recent research studies point to a potential demand for this product within the pork industry.

For this Business Group the key to growth is increased production through the construction of new plants, participation in new projects, and a continuous focus on technological innovation. The importance of innovation in Abengoa's strategic objectives is demonstrated by the considerable resources being committed to R&D&I projects in areas such as improvements in process performance, and the production of bioethanol from biomass.

Highlights	2003	2004
Sales (M €)	291.4	335.3
EBITDA (M €)	36.3	47.5
Ethanol production (millions litres)	574	618
N° of People	338	369

Abengoa currently operates five plants within Europe and the United States, with a total production capacity of 175 million gallons (662.4 million litres). In Spain, a sixth plant is under construction (50 million gallons /189 million litres). The head office for this Business Unit is located in Saint Louis, Missouri. Abengoa is one of the major world producers of bioethanol: the leader in the European Union and the fifth largest producer in the United States.

#### **Environment Services**

Abengoa is dedicated to providing environmental services for industry and to the construction of environmental infraestructures through the following units:

The <u>Aluminium Waste Recycling</u> unit provides collection and treatment services for different aluminum-content wastes, the fabrication and marketing of aluminium alloys and the design, fabrication and installation of equipment for recycling this metal. Befesa is specialised in the treatment of an kind of aluminium-content waste and, over the years, it has developed optimum techniques, procedures and equipment for each type of material. Some of the high-quality products produced in this area: secondary aluminum alloys, extrusion ingots, fermachine, plates and bands.

Main Activities of the Business Groups

In the activity of <u>Salt Slag Recycling</u> a highly hazardous waste generated by the aluminium waste recycling process. Salt slag recovery is the alternative to discharge. Its purpose is to separate metallic aluminium, salt and aluminium oxide so as to reuse all components. Because salt slag recycling is regarded as having zero discharge, this activity, together with the activity developed in the aluminium waste recycling business unit, enables Abengoa to fully close the recycling and total reutilization cycle for aluminium content waste.

Zinc and Desulphurisation Recycling Recovery and recycling of waste dust (steel plant dust) generated by the manufacturing process and steel smelting in electric arc ovens. Services provided by the Befesa companies in the area of zinc are a fundamental component in the zinc recovery cycle. These services prevent tonnes of this metal from being needlessly wasted, while lessening discharge and reducing the overall zinc mineral extraction requirement. Abengoa is the only company in Spain to offer an integrated service for steel plant dust collection and recovery processing, and is also the only company offering an optimum environmental solution for steel plant dust processing.

Desulphurisation, for its part, utilizes the cleanest and safest process for waste sulphur reutilization. It serves petrochemical plants, solving problems relating to desulphurisation waste generated by their production processes.

Industrial Waste Management unit, its activity is targeted on the provision of an integral service for industrial waste producers. This service follows a processing hierarchy which prioritises minimisation, reuse, recycling, recovery (energy or material reutilization of waste) and elimination of waste, as set forth by national and European environmental standards.

<u>Industrial Cleaning and Hydrocarbons</u> unit, the objective of this activity is to provide: industrial cleaning services utilizing specialized equipment;

Highlights	2003	2004
Sales (M €)	365.4	359.1
EBITDA (M €)	37.8	38
Waste processed (tonnes)	1,230	1,374
N° of People	1,338	1,249

the cleaning and repairing of tanks; and the treatment of wastes on site by means of stationary and mobile equipment. In addition, PCB contaminated equipment is treated and recycled and plastics are recycled to produce polyethylene plastic screenings.

Engineering and Services unit, includes the design, construction, operation and maintenance of large environmental installations in the desalination sector. This activity has been carried on for over 20 years, with an installed capacity in Spain of over 400,000 cubic metres of water a day (enough to supply two million inhabitants), produced by plants located in Almería, Cartagena, Carboneras (Almería) and Atabal (Málaga), and an additional installed capacity of over 250,000 cubic metres of water produced by desalination plants situated in Skikda and Oran in Algeria, among others.

In addition to the above activities, the following environmental areas are also included in Abengoa's operations: water management, the processing of leachate at disposal sites (installations to collect and process leachate, the liquid waste resulting from the interaction of rainwater and solid waste deposited at the disposal site), and biomethanization (reutilization of waste to generate energy).

Main Activities of the Business Groups

#### **Information Technologies**

Through Telvent, Abengoa manages real-time information technologies in the energy, environment, traffic and transport sectors. With over 40 years experience in control and business process management systems, Telvent is present in Europe, North America, Latin America, China and South East Asia.

The solutions offered by Telvent facilitate the full integration of real-time information with the mission critical applications, enabling connectivity of operations with the enterprise layer of the organization..

In the Energy Sector Telvent works in Petroleum and Gas, offering a wide range of software for managing the movement of petroleum, refined products and liquids derived from natural gas, as well as advanced applications managing other commercial processes. The technological applications developed by Telvent, used by over 35 of the largest petroleum pipeline operators in the world, provide diverse functions such as the control of the volume of hydrogen flow, leak detection, and a wide range of measurement processes which facilitate commercial energy management. In the Electrical Sector, real-time automation solutions are developed for the energy transportation and distribution service sectors. Telvent leads the electrical market in Spain and is one of the major suppliers of control and communication solutions for the electric industries in Latin America and North America.

Telvent's activity in <u>Traffic</u> centres on applications, products and services relating to intelligent traffic systems (ITS). Telvent supplies global solutions to urban traffic flow, and also provides for the control, surveillance and administration of dual-carriageways and motorways so as to ensure safety and optimise driving conditions.

Highlights	2003	2004
Sales (M €)	265.5	270.4
EBITDA (M €)	31	38.8
Contracting portfolio (M €)	163.7	284.9
N° of People	2,123	2,124

Telvent's objective is to design, install and implement infrastructure projects for control and communication in the traffic sector. To this end, the latest generation technologies and real-time applications are used, which provide effective solutions for the daily requirements of cities and intercity areas.

In Transport, Telvent offers solutions for the control of railway traffic, management of toll roads, ticketing, automatic identification of vehicles, video surveillance, navigation systems and simulators for sea traffic training. Telvent has developed a suite of industry-leading solutions for the management and control of toll roads for concession holders of motorways, tunnels and bridges, the management and control systems for sale and cancellation of tickets for passengers at train stations and control systems for railway transport.

In the <u>Environment</u>, Telvent develops its activities in the business areas of water and meteorology. Telvent has developed systems which provide measurement, in real-time and historical time, of all the parameters that affect water management, enabling flood prediction and warning, remotely-controlled irrigation management and water management. For over 20 years, Telvent has provided technological solutions in the area of weather observation. Virtually all airports in Spain have been equipped or modernised with Telvent Automatic Weather Observing Systems (AWOS).

Main Activities of the Business Groups

Telvent also offers solutions for surface weather observation and provides remote detection tools for early warning and nowcasting of adverse weather phenomena.

There is also a small percentage of the company's information technologies business which stems from the opening of new business lines. Telvent's current portfolio includes diverse opportunities within the sectors of the public administrations and health.

Telvent offers a wide range of services relating to the outsourcing of information systems. These services include engineering, project management, installation, operation, system technique, monitoring, administration, maintenance, security, technical consulting and 24/7 helpdesk support. Telvent professional services also provide data centres with critical mission information systems. Telvent has four strategic centres to provide these services in Madrid, Barcelona, Seville and Lisbon.

### **Engineering and Industrial Construction**

Abengoa, through Abeinsa, the parent company of its Engineering and Industrial Construction Business Unit, provides solutions to five key activity areas: energy, telecommunications, transportation, industrial manufacturing, and the environment. It focuses on the achievement of a common objective, namely, to attain customer satisfaction by offering fully-integrated solutions.

Experience acquired over the past 60 years in the creation of infrastructures has made Abeinsa the leader in Spain and Latin America, with a broad base of institutional and private customers.

In the Energy area, the company's activity is related to design, installation and implementation of industrial plants and conventional energy (cogeneration and combined cycle) and renewable energy (bioethanol and biomass), solar and geothermal; exploitation of businesses, and activities relating to electric energy production through fuel cells.

The activity must be highlighted in relation to the design, engineering, construction, operation and maintenance of energy-generating plants such as conventional stations, combined cycle stations, cogeneration plants, biomass plants (forestry, agriculture), waste incineration plants (urban, agricultural, livestock) and bioethanol plants.

Equally important, in terms of pursuing sustainable development, some significant projects have been carried out in the area of solar energy, namely, in the design, financial and viability study implementation, construction and operation of solar plants intended to produce and sell energy.

The technologies currently considered by this Business Unit for generating electricity from solar energy include: thermal solar energy technology with tower and heliostat; thermal solar energy technology with parabolic troughs; and thermal solar energy technology with Stirling dishes.

A further objective being pursued within this division is the organisation and development of activities and projects relating to electricity production utilizing fuel cells based on different technologies, including the use of hydrogen.

Research, development and innovation activities are primarily conducted in four major lines of work: production of clean hydrogen from renewable energy sources; search for new applications for fuel cells of different technologies (installations for telecommunications, residential applications and transport); development of new, compact, direct, reversible fuel cells; and projects to integrate renewable energies, producing hydrogen from solar or wind energy.

<u>The Installations activity</u> is centred on the engineering, construction and maintenance of electrical, mechanical and instrumentation infrastructures for the energy, industry, transport and services sectors, including the installation of insulation and passive protection against fire.

Services developed in the electric installations sector encompass virtually all activities associated with applied engineering, construction and equipment for the creation of infrastructures, concentrating on the following main fields of activity: hydroelectric, thermal and combined cycle stations; substations and transformation centres; airport infrastructures; industrial infrastructures; buildings open or closed to the public; shopping centres and department stores; sea and rail transport; housing complexes and industrial parks; hospital, education and high-technology buildings.

Main Activities of the Business Groups

Within this business sector, mechanical activities encompass design, supply, manufacture, assembling and testing of mechanical systems associated with hydroelectric stations, thermal stations, combined cycle stations, cogeneration plants, gas and chemical and petrochemical industry plants.

In relation to insulation, refractory and passive protection against fires, the following activities are carried out: thermal and noise insulation, supply and installation of refractory materials, fire protection systems; and sectioning smokescreens.

Similarly, in instrumentation and maintenance, the customer is provided with an integral infrastructure service in installations, contributing staff and specialised equipment.

With over 60 years' experience, Abengoa plays an active role in power line projects, implementing medium, high and very high voltage projects of up to 800 kV for customers in locations all over the world. Dating back to 1944, Abengoa also has significant experience in railway installations, having installed over 4,000 km of rail lines throughout Spanish territory, and has also been active worldwide since 1998.

<u>In Telecommunications</u>, Abengoa is specialized in the integration of telecommunication networks and "turnkey" projects.

The classic activity of external plant construction and maintenance is noteworthy in this area, as is the supply of loop and customer equipment, as well as specialising in the provision of engineering services and integration of telecommunications networks.

This same type of coverage also applies to the complete range of products and services for the deployment, installation and operation of telecommunication networks, including: design and engineering, infrastructure construction, equipment supply, installation and testing, operation and maintenance. In summary, this represents Abengoa's capacity and ability to execute "turnkey" projects.

Highlights	2003	2004
Sales (M €)	713	722,3
EBITDA (M €)	80.1	78
Contracting portfolio (M €)	566.9	761.8
N° of People	4,930	5,576

In the Marketing and Auxiliary Manufacture area, the following activities are included: marketing of the products from the activities of the other Business Unit, as well as the manufacture of auxiliary components for energy and telecommunications.

Abengoa has maintained its leading position in the domestic market as a supplier of electrical material, instrumentation and communications to the chemical, energy, industrial and telecommunications sectors.

Within the scope of activities of Auxiliary Manufacture, materials and complex products are developed and sold for the energy, industry, telecommunications and service sector.

Cabins and switchboards for distribution of low and high voltage, powerful electronics and control electronics for remote stations, control and protection panels and switchboards for auxiliary services for all types of energy, industrial and service installations are designed and manufactured; steel lattice structures such as towers for electrical lines, telecommunications towers, substations and towers for wind generators are manufactured; products derived from plate steel are produced, such as panels, signs and telephone booths; and products for outdoor telephone networks are manufactured.

<u>Latin America</u>, is a market in which Abengoa has maintained a constant presence for over 30 years by way of local businesses which autonomously develop all Business Unit activities, such as energy, installations, telecommunications and marketing, and industrial manufacturing, and in the process, applying the Abengoa common management standards.