

Befesa Medio Ambiente, the holding company of Abengoa's environmental services Business Unit, focuses its activity on providing environmental services for industry and on the construction of environmental infrastructures, while conducting aluminum waste recycling, zinc recycling, industrial waste management and environmental engineering activities.



International leader in industrial  
waste treatment and environmental  
engineering

## Introduction

2006 has been a very important year for Befesa, both for the excellent results which consolidate the growth from previous years, as well as for the 330 million euro acquisition of the recycling company Bus which has made Befesa the European leader in industrial waste recycling.

During 2006 Befesa has continued to treat higher volumes of industrial waste, totalling more than 2,536,140 tons, representing a 34 percent increase compared to 2005. Furthermore, its seawater desalination capacity has also increased to more than one million cubic metres per day, equivalent to supplying more than 4.8 million people.

This year the Aluminium Waste Recycling Unit has been characterised by the strong revaluation in the prices of raw materials as a result of growing world demand and the increase in energy costs. The unit managed 361,000 tons of aluminium, a 12 percent increase on the previous year. This year has also seen strong growth in the Technology Division at Befesa Aluminio Bilbao which as well as supporting the unit's plants has won important new contracts, including three orders to supply ingot lines to the primary aluminium producers Slovalco, Aluminum Bahrain and Sohar Aluminum.

In addition, the Zinc Waste Recycling unit has successfully completed the Environmental Upgrading and Improvement Project at its Asua-Erandio facility which commenced back in 2004. Of note among the most relevant activities is the substitution of the old Waelz kiln by a new larger and more technologically advanced one. This operation is part of Befesa Zinc's environmental strategy and is a consequence of the Voluntary Agreements signed the Basque Government's Territorial and Environment Development Department and the companies from the ferrous smelting, non-ferrous smelting and non-ferrous metallurgy sector. During the year, this unit managed 226,603 tons of wastes.



Another important event was the signing of the purchase agreement for 100% of the share capital of the Swedish company B.U.S Group AB for €330 million by Aser Recuperación del Zinc, S.L, a wholly owned subsidiary of Befesa Medio Ambiente, S.A. The Swedish company has five operational plants in Europe dedicated to recycling waste from the iron and steel industry generated from the manufacture of common and stainless steel. The agreement became effective on 4 December following the approval of the German antitrust authorities. This acquisition complements Befesa's business carried out by Befesa Zinc Aser in Spain, it strengthens its leadership position in the national environmental sector and it consolidates its presence in the European market through its Zinc Waste Recycling division. The acquisition was financed through a non-recourse loan from Barclays Capital.

It has also been an important year for the Industrial Waste Management business which saw the merger of the cleaning and waste units in September to form a single company called Befesa Gestión de Residuos Industriales. This has allowed Befesa to provide a more comprehensive service to the industry and to maintain its leadership position having treated 1,040,924 tons of hazardous and non-hazardous waste during the year, 10% more than in the previous year.

In 2006 Befesa launched its integral management service for agricultural plastic waste (GIRPA) via its Plásticos subsidiary, which provides the company, a specialist plastic pellet manufacturer, with the raw materials required for its production process.

2006 was also a very strong year for the Environmental Engineering business both nationally and internationally, achieving sales of €285 million and valuing the order book at year end at €413 million. This year the works has continued on the desalination plant at Skikda in Algeria; financing has been finalised and construction has begun on the desalination plant at Benisaf (Algeria); and the capacity of our plants in Algeria has increased to 500,000 m<sup>3</sup>/day. Furthermore, Befesa was awarded the contract for the desalination plant at Bajo Almanzora (Almeria) with a capacity of 60,000 m<sup>3</sup>, which forms part of the Spanish government's A.G.U.A. plan. The company also set up a joint venture with the town of Qingdao to construct and operate a 30,000 m<sup>3</sup> desalination plant which can be increased to 100,000 m<sup>3</sup>.

In relation to Latin America, Befesa has continued to operate well in Argentina, Chile and Peru. Most notably, Mexico has obtained all the licences necessary to construct the industrial waste confinement and treatment centre as well as finalising financing using a project finance scheme. The centre, which is already under construction, is scheduled to come on line in the first half of 2007.

During 2006 we have continued to develop our strategic R&D&I plan which we launched the previous year and which has allowed us to continue driving our strategy in this field. The projects undertaken are designed to maintain our leadership in desalination and waste water treatment; to develop new technologies for managing industrial waste; and to keep Befesa technologically competitive in the aluminium and zinc industry.

Befesa is aware of its responsibility to society and is very conscious of the need for sustainable development. It has to ensure that industrial and financial progress is compatible with environmental stability. This is evidenced by the environmental and quality standards ISO 9001 and ISO 14001 that virtually all companies in the Group already hold. This effort is also reflected in the "Andalucía" environment award presented by the Department of the Environment of the regional government of Andalusia. The award is given to recognise those people, groups or companies in the region who excel in their work to defend environmental values and that have significantly contributed to the preservation, protection and awareness of these values.

Every Befesa company has also achieved certification for occupational risk prevention according to the OHSAS 18001 standard, highlighting the concern and growing interest by the company to stay at the forefront of occupational health for its employees.



## Summary of activities

### Aluminum Waste Recycling

This Business Unit is dedicated to the recycling of Aluminum wastes, recycling of salt slags, sale of machinery, and development of aluminum-related technologies.

#### Aluminum waste recycling

The most important destinations for the aluminum waste recycling activity for the production of alloys are the manufacturing of components for the automobile industry and the construction sector.

The year 2006 was characterized by a strong revalorization of the prices of raw materials, as a consequence of the growing demand worldwide, and the increase in energy costs.

Befesa consolidated medium and long-term agreements with customers and providers which guarantee a stable growth and profitability framework. In addition, Befesa Aluminio concluded the final objectives of its restructuring and investment program, which have endowed it with a costs structure and profitability levels that suit market demands. All the activities undertaken during the year focused on increasing the productivity of the different facilities, the reduction of operating costs, and enhancement of our customer service.

In 2006, almost 140,000 tons of different aluminum wastes were recycled, with record production and sales of 96,000 tons of alloys.

#### Aluminum slag recycling

Salt slag is a hazardous waste generated in secondary aluminum refineries. It is formed by the contaminants contained in the raw materials utilized and by the fluxes added in the casting and refining process.

Befesa possesses two plants for the complete valorization of this waste: Befesa Escorias Salinas, located in Valladolid, with a 130,000 ton/year capacity, which provides services for the entire sector in Spain, and Befesa Salt Slags, located in Whitchurch-Shropshire (United Kingdom), with a



70,000 ton/year capacity, which provides a service for all the secondary aluminum foundries in the United Kingdom. Moreover, these plants are prepared for the management of other solid wastes from the aluminum industry; including aluminum slags and the powders generated in the crushing process, filter powders, etc.

Befesa is leader in Spain and the United Kingdom in the management of these wastes, and treated an overall of 221,000 tons in 2006, which is a 12 percent increase on the previous year's figure, thereby consolidating a two-figure sustained growth rate in the last few years. Of special note is the growth experienced by the United Kingdom plant and its consolidation as a profitable unit within the suite of Befesa companies.

The solvency of the business in Spain and the United Kingdom allows us to consider new challenges to maintain our growth and profitability levels. These include the enlargement of the capacity of our facility in Spain to 150,000 tons/year of salt slags, the development of new processes that allow other wastes from the aluminum industry to be valorized, and the marketing of other aluminum wastes in the United Kingdom.

#### Sale of Machinery and Technology

Befesa Aluminio Bilbao's Technology Division, in addition to providing technical assistance to the Business Unit's plants, carries out the design, construction, assembly and start-up of turnkey



facilities for the aluminum and zinc industries. The Division possesses a large list of references for more than 100 facilities in 40 countries. The Division's main products are:

- Automated lines for the production of 5-25 kg aluminum ingots.
- Running out wheels: these are the links between the kiln and the ingoting line that ensure uniform and foam-free filling of molds. They are part of the ingoting line, but are also designed for existing lines.
- Truck loader: an automatic continuous system for loading trucks with the recently produced ingot stacks has been designed.
- Rotating kilns: these are very productive, low energy consumption kilns, especially suitable for low metallic content materials.
- Slag coolers: for this process, there is an installation whose efficiency has been proven worldwide. It cools the slags and classifies them according to their metal content in accordance with the customer's needs. This process is important to prevent the emission of fumes and combustion of the metal, so that the average value of the resulting slag is increased. In 2002, a new slag cooling system was patented: the compactor, of greater constructive simplicity than the previous system, together with a more compact end product.
- Slag treatment facilities: Befesa has developed a system to enrich slags with a minimum loss of metal. The crushing process respects the metal portion and only pulverizes the non-metallic portion.

The main activities in the 2006 trading year were:

- Construction and sale of a 25 ton rotating kiln for the South African company Goswell, responsible for treating all the slags from the Billiton Group.
- Design and manufacturing of an ingoting line for Nordural, Iceland. This 27 ton/hour capacity production line included the treatment of the cooling water and was brought into operation in May 2006.
- Design and manufacturing of a stripping system that has been implemented in the Asua plant.

- Design and manufacturing of an ingoting line for Svalco, Slovakia. The novelty of this 25 ingot per minute capacity production line was the predefined cooling programs in function of the alloy batch.
- Sale of two pouring lines with trailer loader for Alba, Bahrain, which are under construction and will be brought into operation during the first half of 2007.
- Sale to Hillside, a Billiton Group company, of the project to integrate into its five ingoting lines, supplied in 1996, the main innovations that have been developed since then.

The 2006 trading year was consolidated at exceptional activity levels and the backlog of business guarantees similar levels up to 2008.

#### Zinc Waste Recycling

The Zinc Waste Business Unit, with all its production centers located in Biscay (Spain), is formed by the following companies: Befesa Zinc Aser, S.A., dedicated to the valorization of steel powders from electric arc kilns and foundries at its plant in Asua (Eradio); Befesa Zinc Comercial, S.A., responsible for the marketing and sale of the primary zinc castings from the Waelz Oxide fabricated by the former; Befesa Zinc Sondika, S.A., dedicated to the recycling of zinc wastes, the majority of which are from the galvanizing industry, to obtain high purity zinc oxide; Befesa Zinc Amorebieta, S.A., which does the same with other zinc wastes and scrap to manufacture rough cast zinc ingot and electrolytic zinc ingot, as



well as fine zinc ashes; and Befesa Desulfuración, S.A., whose facilities in Baracaldo produce sulfuric acid and oleum (compound rich in  $\text{SO}_3$ ) from residual sulfur recovered in petrochemical sector plants.

This year, Befesa Zinc Aser treated 95,273 dry tons of steel powders from electric arc kilns and foundries, and 2,930 tons of other wastes with high zinc content, from which it obtained 39,875 dry tons of Purified Waelz Oxide (D.L.W.O.), with average zinc content above 65 percent. Most of the total volume of wastes from the home market was received thanks to the framework agreements signed with Oñeder and Arcelor for Befesa Zinc Aser to manage the powders generated in the main Basque Region steelworks.

Up until now, Befesa Zinc Aser has recycled approximately 1,785,000 moist tons of powders that contained 400,000 tons of zinc and 25,000 moist tons of other wastes rich in this metal, with which 635,000 dry tons of Waelz Oxide with an average of 60 percent zinc, have been produced, which represents some 380,000 tons of recovered zinc metal.

Befesa Zinc Comercial has sold practically all the Purified Waelz Oxide manufactured by Befesa Zinc Aser over the period. Of note is that this product has gone to the traditional customers from the zinc electrolysis sector, such as Asturiana de Zinc and Umicore.

Befesa Zinc Sondika recycled 11,800 tons of different zinc wastes, most of which came from the galvanizing industry; this figure is a 2 percent increase on the previous year.

The increase in treated volume is due to agreements reached with large national producers of this type of waste, which have enabled the supply of zinc mattes for the manufacturing of ZnO to be increased by 30 percent on the previous year. Of the mattes acquired in 2006, some 1,491 tons were supplied by Befesa Zinc Amorebieta and the rest were supplied directly by galvanizers or intermediaries.



The production of zinc oxide (ZnO) reached 11,600 tons, a quantity similar to that registered the previous year, and 2,800 tons of by-products were obtained.

Throughout 2006, Befesa Zinc Sondika strengthened its position in the market with its current customers and with the inclusion of new customers, with great growth potential, in its portfolio. Product sales were 11,023 tons.

In 2006, Befesa Zinc Amorebieta recycled 11,500 tons of zinc wastes, of note among which are 2,412 tons of cast zinc ashes and 2,800 tons of zinc scrap, which represents a 35 percent increase on the previous year; thanks to the penetration in new raw material supply markets abroad.

The total volume of product and by-product manufacturing was 11,300 tons. Of note were the 3,346 tons of cast zinc ingots and 159 tons of electrolytic zinc ingots. The production of fine zinc ashes rose to 2,778 tons.

Befesa Zinc Amorebieta's overall sales rose to 12,600 tons, of which 9,450 tons were finished products.



Befesa desulfuración processed 105,000 tons of sulfur from desulphurization wastes to obtain a production of 321,600 tons of acid equivalent, with an associated generation of electric energy of 82,000 MWh which, following deductions for self-consumption resulted in the sale of 54,000 MWh surplus energy.

As regards the origin of the sulfur, the supply from Repsol Derivados increased from 65 percent in 2005 to the current 77 percent, to the detriment of the supply from France. The supply of sulfur in liquid state also increased to 22 percent of the total.

In 2006, Befesa Zinc Aser successfully concluded the Upgrading and Environmental Enhancement Project for its Asua-Erandio facility that commenced back in 2004. Over this period, the company has invested more than 22 million euro. The most significant activities include the substitution of the old Waelz kiln by another larger-sized and more technologically advanced one, the installation of a new cleaning system for the gases from the Waelz plant with activated carbon injection for the retaining of dioxins and mercury, and the replacement of the Waelz Oxide drying kiln by a radiant product drying system by infrared. The remaining investments were used for relocating and redimensioning the plant's production units to be able to meet the increase in capacity due to the functioning of the new Waelz kiln. This project was developed in harmony with the Company's environmental strategy, the main priorities of which include fulfillment of the Voluntary Agreements signed with the Basque Government's Department of Territorial Planning and Environment and with the main companies from the Ferrous Casting, Non-Ferrous Casting and Non-Ferrous Metallurgy sectors, prior to the coming into force of Act 16/2002, of July 1, on Integrated Pollution Prevention and Control (IPPC).

The investments made by Befesa Desulfuración, in 2006, focused especially on the conditioning of the process and turbo-generator control systems, the reactive power regulation systems for optimizing

electricity billing, and the purchase of spare parts for the process equipment

On December 4, Befesa acquired BUS Group AB, once the German competency authorities gave their authorization for the transaction. This went ahead following the valorization of BUS in 330 million euro.

The BUS Group conducts two activities: recycling of steel powders from electric arc kilns and smelting processes, and recycling of steel powders from the stainless steel industry. The first of these activities coincides with that conducted by Befesa Zinc Aser and consists of the valorization of steel powders from electric arc kilns and the obtaining of a zinc oxide known as Waelz Oxide with from 55 to 65 percent zinc content. Its treatment capacity is 450,000 tons at its three facilities; two of which are in Germany, in Duisburg and Freiburg, and the other in France, in Fouqui re-lez-Lens.

The recycling of steel powders from stainless steel processes is done, basically, under a fee regime with the producers of stainless steel. By treating the stainless steel powders different materials such as nickel are obtained, and these are returned to the steel producers for use in the process. Its treatment capacity is 125,000 tons at two plants, one in Garvelines (France), and the other in Landskrona (Sweden).

BUS's operations were incorporated in Befesa during the course of the last month of the 2006 trading year and, therefore, the contribution in treated tons is not yet significant compared to the Company's total, although, in the 2006 trading year, BUS group treated more than 400,000 tons of steel powders and more than 125,000 tons of steel powders from the stainless steel industry.

With this acquisition, Befesa is now Europe's leader in the treatment of steel powders from electric arc kilns, which allows it to reduce costs and jointly develop new technologies in this field, while also opening up the possibility of new business opportunities in Eastern Europe.



### Industrial Waste Management

In September, the cleaning and waste units were merged and this gave rise to a single company, Befesa Gestión de Residuos Industriales. With this merger a more complete integral service is provided for industry with the objective being to recycle and valorize, and the goal – customer satisfaction while respecting the environment.

### Wastes Division

This Division's activities are related to the treatment of hazardous and non-hazardous wastes, their transportation and treatment, as well as environmental assessment. It works with public and private customers and provides services for both the small and large producer.

Bgri maintained its noteworthy position as a final manager during the year. Its Nerva, Palos, and Cartagena centers managed more than 400,000 tons. The non-hazardous activity was reinforced with urban solid wastes and industrial wastes integral treatment plants in Torija (Guadalajara), Utrera (Seville), Gador (Almeria), and Cevico de la Torre (Palencia), and with the Ajalvir (Madrid) and Alcala de Guadaira sorting plants.

As regards contaminated lands, in 2006, Bgri treated more than 100,000 m<sup>3</sup> with the following operations: Plásticos de Luchana (Bilbao), Former Tussam Bus Depots (Seville), lands in Cartagena for the construction of a hospital, and the former Fertiberia facilities in Seville Port.

Another noteworthy activity is the integral management services. This year, the confidence in, and the "made to measure" service provided by Befesa for its customers resulted in an increase in the number of integral management services.

This year, the Lucena (Cordoba) hazardous waste transfer center, specialized in timber and sister wastes came into operation, and complements the existing Ajalvir (Madrid), Alovera (Guadalajara), Paterna (Valencia) and Puebla de Alfinden (Zaragoza) transfer centers. The Deba (Guipuzcoa) center will provide services for companies in the north of Spain as of from next year.



Following the acquisition of 100 percent of the shares of Albega, the center is now called Palos Center. It is here that the conditioning of organic and inorganic wastes is conducted for the subsequent valorization thereof.

In 2006, Bgri experienced a 24 percent increase in management activities, and reached the figure of 766,000 tons of industrial wastes due to the contribution from the urban solid wastes and non-hazardous industrial wastes integral treatment plants, and to the consolidation and loyalty of its customers.

### Cleaning Division

The Industrial Cleaning Division conducts its activities in the industrial services sector for public and private sector customers, through a wide-ranging offer that includes solids, liquids and sludge suction and blowing operations, high pressure cleaning works, the utilization of water at very high pressures for demolition, cutting and specialized cleaning operations, changing of catalyst beds, tank and pipe cleaning, management and treatment of wastes at the customers' own facilities, and tank cleaning services in refineries and large oil facilities.

The company's customer portfolio includes large companies such as oil companies and multinationals from the chemical and electric sectors, and small companies, individuals and municipalities.

The situation in the company's objective market is characterized by the tendency of companies to





outsource services that are not directly related to production, a stricter legislative and statutory environment, and a production model that seeks to be more agile and flexible. Thus, the Cleaning Division continued to develop a strategy designed to consolidate an enterprise model capable of providing specialized industrial services and of adapting to the needs of the market.

During the past two years the company structuring and operation organization processes were concluded, technical and human resources brought in, and contracting ratios were improved. The position of the company in the market has been consolidated and the company participated in the main stoppage processes in the petrochemical sector in Spain and has established a dynamic organization to satisfy the needs of large customers from the petrochemical, paper, cement, energy and siderurgy sectors. In addition, the bases have been laid to undertake gradual international development which will capitalize on the experience gained on projects executed at home.

Of note, in 2006, was the growth in the mechanical cleaning, tank cleaning, mobile plant, special cutting and chemical cleaning fields of activity.

### Plastics

Befesa Plásticos specializes in the manufacturing of special low density polyethylene pellets by recycling plastic sheeting that has been used as greenhouse covering. The marketed pellets are utilized in different applications, of note among which are the manufacturing of sheeting for the construction sector (waterproofing and protection), large-sized sacks and rubbish bags, signal meshes, irrigation pipes, electric

and telecommunication conduits, articles such as flower pots, large baskets and decanter cases, and to obtain modified asphalts. Its production capacity, together with the constant and homogeneous quality of its pellets, has made the company the leading supplier of recycled pellets in Spain and the European Union, where 80 percent of its total production is exported to.

Befesa has brought a service called Integral Management of Plastic Agricultural Wastes (Girpa, in Spanish) into operation. This provides the company with the raw material required for its production process and an extremely attractive and rigorous integral waste management service (guarantee of traceability, issuing of waste management certificates, organization, etc.) for potential customers.

This service has been implemented in the "Costa Tropical" Association of Towns and Villages, in Granada, in the "Bajo Guadalquivir" Association (Seville), in the Union of Cooperatives of Extremadura "Unexca", in "Axarquía", in Malaga, as well as in certain agricultural companies.

Throughout 2006, Befesa Plásticos recycled 12,780 tons of sheeting and used irrigation pipes, and produced 9,100 tons.

### PCB

Befesa Gestión de PCB, S.A. is specialized in providing efficient collection, transportation and disposal services for PCB-contaminated materials while recovering all the reusable materials and disposing of the contaminated ones, utilizing the most advanced technology.

In 2006, Befesa Gestión de PCB treated more than 2,900 tons of PCB-contaminated devices and materials, an increase on the 2005 figure.

Befesa Gestión de PCB is the reference company in PCB treatment in the electric sector. During the year, it continued operations for its main customers; Iberdrola Distribución Eléctrica, with whom it has renewed the PCBs management contract; and Endesa. Furthermore, HC Energía chose Befesa to manage its contaminated transformers. In addition,



equipment from companies and institutions involved in a wide range of production sectors and from all the Autonomous Regions was treated.

The importing of PCB-contaminated equipment from Argentina was reactivated, an activity that was being carried out in collaboration with Befesa Argentina since the year 2000. During the year, imports from Portugal commenced with the collaboration of Befesa Gestión de Residuos Industriales.

### Environmental Engineering

The Environmental Engineering activities focus on the construction and operation of infrastructures and the providing of services for integral water cycle and waste management.

### Activities and Positioning

The Environmental Engineering unit conducts two lines of activities:

Construction, in which Befesa Construcción y Tecnología Ambiental, Befesa Fluidos and Codesa are integrated.

Befesa Construcción y Tecnología Ambiental covers the international market and the construction of the larger scope hydraulic infrastructures in Spain.

In addition to the contracts awarded on the home market in 2006, Befesa commenced the setting up of international offices and permanent premises, the first phase of which is scheduled for completion in 2007 with a stable presence in the United States, Mexico, Nicaragua, Ecuador, China, India, Algeria and Morocco.

During the year, Befesa consolidated its leading position in the global market, at home and internationally, in the desalination sector, thanks to the contracts that were awarded over the last few years for large desalination plants with reverse osmosis technology.

In the irrigation sector, the different projects executed and new contracts awarded during the year under the National Irrigation Plan confirmed its leadership

in this field. The rest of its activity was conducted in its other lines of operation: hydraulic works and large pipeline systems, water supply and purification, hydroelectric plants, water treatment, automatic data and control systems, and waste plants.

On the other hand, its R&D&I activity was consolidated in the Desalination field with six projects underway and its launching in the wastewater treatment sector commenced.

Codesa is a company that specializes in water treatment, supply, purification, hydraulic and environmental measures activities, mainly for the public administration sector. Of note during the year was the strengthening of its collaboration activities with different Regional Government of Andalusia environmental management companies.

Befesa Fluidos specializes in industrial water treatment for the private sector, input as well as process and wastewaters, and it complements this activity with others such as powder capturing, and the handling of fly-ash and slags in Thermal Power Plants.

Operation. In the water sector, the activity is conducted through Befesa's participation in the company Agua y Gestión, S.A. The companies



Iniciativas Hidroeléctricas, S.A., concessionaire of the operation of the Cerrato (Palencia) fall, and Procesos Ecológicos Vilches, S.A., proprietor of the pig slurry treatment plant in the locality of the same name in Jaen province, also operate in this line of activity.

#### Construction. Main Activities in 2006

A significant event in 2006 was Befesa's consolidation in the international market, which had commenced in previous years, especially in the Desalination sector. The signing of the financing agreement for the second of the three desalination plants contracted for execution in Algeria through the Spanish consortium Geida, the enlargement of the capacity initially foreseen for two of these plants up to a total capacity of 500,000 m<sup>3</sup>/day in the country, together with another project in Morocco – a seawater lead line for industrial use, and the recently awarded contract for Qingdao desalination plant in China, are a clear reflection of the company's aforementioned consolidation and set the foundations for its expected solid sustained growth.

Once the three desalination plants are operating in Algeria, which represent an overall investment of 460 million dollars, the Spanish consortium will be capable of providing drinking water to a population of more than 2,500,000, and expectations are for revenues in excess of 2,850 million dollars for water sales over their 25 years of operation.

#### Desalination

Capacity enlargement and financing agreements for desalination plants in Algeria. The 150,000 m<sup>3</sup>/day Beni Saf project was awarded to the Spanish consortium Geida in 2004. In 2006, negotiations were completed with the Algerian Government to enlarge said plant's capacity to 200,000 m<sup>3</sup>/day and the project contracts and financing agreements for the operation were also signed. In addition, the consortium was also awarded the enlargement contract for the Tlemcen-Hounaine desalination plant, the capacity of which will be increased from 150,000 m<sup>3</sup>/day to 200,000 m<sup>3</sup>/day.



Bajo Almanzora (Almeria) desalination plant. The contract includes its construction, operation and maintenance for 15 years. The plant's desalination process will be reverse osmosis and it will be provided with the most efficient energy recovery technology currently available: isobar chambers. A total of 15 municipalities and more than 12,031 hectares of agricultural land will benefit from the plant's 60,000 cubic meter per day production capacity.

Qingdao (China) desalination plant: During the fourth quarter of 2006, Befesa established a joint venture with Qingdao City Council for the design, construction and operation of a desalination plant to be located in said city. The desalination plant, with reverse osmosis technology, will be capable of producing, in a first phase, 30,000 cubic meters of industrial and drinking water per day. This could be enlarged to 100,000 cubic meters/day in a second phase. Befesa will be solely responsible for the construction and 25-year operation of the plant.

New Cartagena Canal desalination plant: In 2006, with the commissioning of all the reverse osmosis modules following completion of the brine discharge outlet works, the plant reached its 65,000 m<sup>3</sup>/day nominal capacity and it can now contribute to the hydraulic system of the Canales del Taibilla Association, responsible for the primary network water supply to 77 municipalities in Murcia, Alicante and Albacete, a water volume equivalent to the consumption of a population of more than 250,000.



## Irrigation Systems

Canal de Navarra Irrigation Area. Canal de Navarra chose the consortium formed by, among other companies, Caja de Navarra and Befesa, for the construction and operation of the first phase infrastructures of the Navarra canal irrigation area, that is to say, up to the river Aragon, a tributary of the Ebro.

Upgrading of Carlet (Valencia) Irrigation Area. In October 2006, the Ministry of Agriculture inaugurated the upgrading works of the El Carlet irrigation systems constructed by Befesa. These works allowed 714.21 hectares to be changed from traditional irrigation to drop irrigation, from which 1,200 irrigation subscribers are benefiting, and up to 40 percent water saving is being achieved.

Hydraulic Works and Large Pipelines Jorf Lasfar Lead Line (Morocco). The company Maroc Phosphore awarded Befesa the contract for the seawater lead line to feed the cooling system and the rest of the services of the new phosphoric acid production lines at its manufacturing complex in Jorf Lasfar, a locality on the Atlantic coast of Morocco. The work will comprise a canal to transport 75,000 m<sup>3</sup>/h of seawater, connection between tanks, a pumping station with three 7,500 m<sup>3</sup>/h capacity motor pumps (enlargeable to double) and the plate lined concrete pipeline network to distribute 45,000 m<sup>3</sup>/h from the pumping station to the production lines.

Retortillo-Ecija (Seville) pipeline. These works will guarantee the supply to the municipalities of the Ecija Consortium, with 200,000 inhabitants. They consist of the replacement of 34 kilometers of pipeline, mostly 1,200 millimeter diameter, two pumping stations for water circulation and the corresponding offtake. The works were awarded to Befesa in 2006 by Egmasa, a Regional Government of Andalusia company.

Drive pipeline for Segriá Sud (Lerida) irrigation system. In 2006, works were completed on the two flow pumping stations and the drive pipeline for Regs de Catalunya, a public company under the Regional Government of Catalonia. Overall, a flow of 3.2 cubic meters per second is raised to a height of 297 meters.



Ugarte-Kareaga (Biscay) Collector. Aguas de Bilbao Consortium awarded Befesa the construction of the Ugarte-Kareaga wastewater collector and the array of interceptors required to collect the district's wastewaters. It is the first hydraulic works contract for the public water sector to have been awarded to Befesa in this Autonomous Community.

Hydroelectric plants for the Negratin-Almanzora Connection (Almeria). In the last quarter of 2006, Tijol and Los Manueles hydroelectric power plants included within the scope of the Negratin-Almanzora Connection works, which by means of a 120 km pipeline transport up to 50 Hm<sup>3</sup> per year between both basins, were brought into operation.

New Security Reservoir and Elevating Station for Torrealta (Murcia-Alicante) DWTP (Drinking Water Treatment Plant). Towards the end of 2006, the Canales de Taibilla Association, a body under the Ministry of the Environment, awarded Befesa the contract for these works. The objective is to expand the facilities that supply raw water to Torrealta DWTP, so that there is sufficient storage capacity to guarantee the supply of drinking water in the event of 126 to 171-hour maximum duration cut-offs from the supply canal Valmayor and Pedrezuela (Madrid) hydroelectric power plants. Befesa was awarded the contract for these two power plants for Canal de Isabel II de Pedrezuela and Valmayor, to be constructed at their respective dam toes. They are designed for a three cubic meter per second flow with a maximum fall of



36.47 meters for Pedrezuela and 31.40 meters for Valmayor.

#### Supply and potabilization

Enlargement of the El Conquero (Huelva) Drinking Water Treatment Plant (DWTP). With these works, awarded to Befesa by the state-owned company Hidroguadiana, the plant will increase its current treatment capacity from 45,000 m<sup>3</sup>/day to 90,000 m<sup>3</sup>/day. The scope includes, among others, an ozonization and remineralization treatment process. The works respond to the need to meet the demand from the city of Huelva's increasing population and the treatment plant will be conditioned to meet the quality parameters established in current legislation.

Supply to the Ojá-Tirón (La Rioja) system. Befesa will construct the infrastructures required to solve the water supply problems in this area, which will include the water capturing system, drinking water treatment plant, more than 200 kilometers of distribution pipeline network (145 kilometers of which will require new pipes), four pumping stations and all the complementary installations to guarantee system operation to supply a population that is expected to be around 76,000 by the year 2025.

Supply to Sallent, Avinyó and other Barcelona municipalities. Befesa was awarded this contract by the Regional Government of Catalonia's company Agència Catalana del Agua. The objective is to solve the water supply problems of the Barcelona municipalities of Sallent, Avinyó, Artés and Calders and the rural nuclei of the Morisco mountain range, providing a supply service for a population of more than 11,000. The works include water capturing from the river Llobregat, its potabilization and subsequent distribution, with four pumping stations and two reservoirs.

#### Treatment and Reutilization

Tertiary treatment at Alcoy (Alicante) wastewater treatment plant (WWTP). With these works, awarded in 2006 by Entidad Pública de Saneamiento de Aguas Residuales de la Comunidad Valenciana, local industries will be able to reutilize the water treated in this WWTP, some 15,000 m<sup>3</sup>/day, for their production processes.

Almonte, Rociana del Condado and Bollullos (Huelva) WWTPs. The construction of the collectors and treatment plants of Almonte, Rociana del Condado and Bollullos Par del Condado, localities situated in the surrounding areas of Doñana National Park, will guarantee the treatment levels of the discharge waters required for environmentally sensitive areas, from a population that is expected to grow to more than 40,000.

Corral de Almaguer and Cabezamesada (Toledo) WWTPs. These two treatment plants, that will serve a population of 21,000, will be constructed for the Council of Communities of Castilla-La Mancha, through the entity "Aguas de Castilla-La Mancha". The towns involved are characterized by the differences in population in summer and winter seasons, and this conditions the process that is to be developed.

Bornos (Cadiz) WWTP and Durcal y Nigüelas (Granada) WWTP. In 2006, the Regional Government of Andalusia, through Egmasa, awarded Befesa the contract for these two projects. Overall, they will serve a population of around 15,000.

#### Industrial water

Treatment of Leachate at Montalban (Cordoba) Waste Plant. In 2006, Epemasa, the Provincial Company for Wastes and the Environment, awarded Befesa the construction contract for a leachate treatment plant for the Montalban Plant, where the wastes produced in 52 municipalities with a population of more than 450,000 are treated. The capacity of the leachate plant will be 29,000 m<sup>3</sup>/year (11,000 generated in Montalban and the rest in other centers) by means of MBR (Membrane Bio Reactor) aerobic biological process, ultrafiltration and, finally, a reverse osmosis phase that enables the reutilization of the treated leachate in other activities.



La Paloma (Madrid) leachate plant. Also contracted in 2006, it will be located at the La Paloma biomethanization facility in Valdemingomez Environmental Complex, the Autonomous Community of Madrid's current dump. This plant will treat a daily flow of 110 cubic meters.

Leachate plant for the waste sorting plant in Zaragoza. It will treat a daily flow of 200 cubic meters utilizing the same process as indicated above.

Arcelor (Asturias) wastewater treatment plant. Befesa was awarded the works to reform the wastewater treatment plant at the Arcelor complex in Gijón. Befesa will construct a physicochemical type facility that will allow treatment of the different flows from the different steel production processes.

#### Operation. Main activities in 2006

Since the 2003 trading year, Befesa holds a more than 35 percent stake in the company Agua y Gestión de Servicios Ambientales, S.A. Throughout this period, Agua y Gestión has managed the Municipal Services of El Ejido (Elsur), Almería, and the services of Aguas de Baena, in Córdoba, San José del Valle, Barbate and Vejer, in Cadiz, Herrera, in Seville, and Puebla de D. Fadrique and Ugijar, in Granada.

In addition, in 2006, the company was awarded a 73 million euro contract to manage the supply and treatment services for the 17,000 inhabitants of the Extremaduran municipality of Zafra for 20 years. This contract, which is a giant step in Agua y Gestión's strategy, a company whose presence is ever-increasing inside and outside Andalusia and which is now providing services, including this municipality, for a population of more than 200,000. Furthermore, the pig slurry treatment activity continues through the operation of Vilches Treatment Plant (Jaen).

#### Latin America

Befesa is present in the following countries: Argentina, Chile, Peru and Mexico, where it is dedicated to industrial waste management and environmental engineering.

#### Befesa Argentina

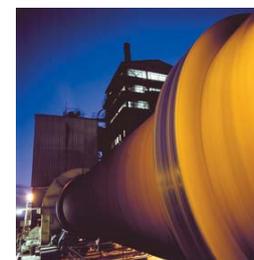
Most significant works:

Conditioning, exportation and final disposal of transformers contaminated with polychlorate biphenyls (PCBs): In 2006, Befesa Argentina managed to reinitiate the exportation of PCB-contaminated transformers, with a first shipment of 22 tons that was sent to Befesa Gestión de PCB's facilities in Cartagena, to be suitably treated.

#### Works in progress:

Oil Company Sector:

1. - Operation of the Alfa Laval Plant and US Filter Plant in Repsol YPF's La Plata Refinery: two horizontal centrifuges owned by Befesa Argentina and installed in the effluent treatment plant (US Filter) are operating, and operation of the Alfa Laval Plant, owned by Repsol YPF, is being conducted. These plants operate 24 hours a day, 365 days a year.
2. - Slop Oil Unit, Tank 265, Repsol YPF's La Plata Refinery: Work continues on the plant installed by Befesa Argentina for the recovery of hydrocarbons by means of the separation into three phases of the product contained in tank 265. This 100,000 m<sup>3</sup> capacity tank functions as a receiver of the slops from the Refinery's other tanks. In the 28 months it has been operating, Befesa has processed 70,034 m<sup>3</sup> of product, and has delivered to Repsol YPF, as by-products, 79 percent of the treated volume as clean water, four percent as solids and the remaining 17 percent as HC leachate under specification. This plant comprises two Horizontal Decanter centrifuges and two vertical centrifugation modules, Alfa Laval make, an Analysis Laboratory and Workshop modules, store, canteen and dressing rooms. 20 people are involved in this project that operates 24 hours a day, 365 days a year.



Transportation, incineration, inerting and final disposal: as regards the transportation and treatment of special wastes, the main customers are:

- Automobile Industry: Daimler Chrysler, Ford, Peugeot-Citroen, Toyota Argentina and Volkswagen, for whom transportation and final disposal services by security dump back landfill of maintenance wastes, paint slurry, cataphoresis sludge, oils, empty containers, etc., are provided.
- Oil Industry: Esso, Repsol YPF and Shell CAPSA, for whom transportation, incineration and final disposal services by security dump back landfill of maintenance wastes, coke carbon, insulators, spent catalysts, contaminated land, etc., are provided.
- Pharmaceutical Laboratories: Bayer Argentina SA, Lanxess SA, Raffo, GlaxoSmithKline Argentina and Cardinal Health, for whom transportation, incineration and final disposal services by security dump back landfill of out-of-date medicines, products outside specification, raw material packings, etc., are provided.
- Chemical Industry: Rohm & Haas, TFL, Procter & Gamble, for whom transportation, incineration and final disposal services by security dump back landfill of maintenance wastes, effluent plant slurry, raw materials outside specification, etc., are provided.

#### Contracted Works

Transportation, treatment and final disposal of foundry waste from the company Acebrag. The contract includes treatment of an important volume of passive and of the uninterrupted generation process slag from the filters.

#### Enlargement of Facilities

During 2006, investments were made in enlarging Befesa Argentina's facilities, mainly its Security Dump, situated in the locality of Campana. Works commenced in June on the enlargement of the second phase of the Security Dump and the same are scheduled for completion prior to the end of the year. On the other hand, the new offices at the Campana facility were inaugurated in November. These improve working conditions with the commodities and equipment required owing to the growth thereof.

#### **Befesa Chile**

The activities of Befesa Chile can be divided into two fields. The first is the providing of Environmental Engineering services, and the development of several projects commenced, of note among which are:

- Elaboration of detailed engineering, economic assessment and profiling of technical specifications for BHP Billiton's Minera Escondida and for Sanitary Backfill and non-hazardous industrial wastes dump.
- Elaboration and presentation to the environmental authorities of the Environmental Impact Statement study for the Minera Escondida Sanitary Backfill and Industrial Wastes Dump project, to obtain the necessary construction and operation permits for the same.
- For BHP Billiton's Cerro Colorado mining company, the basic Engineering Study and elaboration of the Hazardous Waste Treatment Plan pursuant to the new legislation, was carried out.
- The detailed engineering for the Sanitary Backfill and the preparation of the Operating Manual for suitable handling was also done for the same mining company.

The second field of activity focused on General Coordination of activities dedicated to bringing about the execution of Proyecto Soluciones Ambientales del Norte (Northern Region Environmental Solutions Project), the objective of which is the treatment and disposal of hazardous and non-hazardous industrial wastes. The following activities are of note: management of land purchasing with Chile State, consolidation of mining properties, elaboration of terms of reference, tendering, and coordination of the project construction detailed engineering, and development of commercial outlook and deed of incorporation.



### Befesa Peru

Having completed its third year in operation, Befesa Peru continues to increase its customer portfolio, this time by a 40 percent on 2005, and it now carries out operations for 190 customers. This has been reflected in the 37 percent increase in sales for treatment and final disposal of industrial wastes.

Befesa also commenced operations in the field of direct waste collection and transportation services, with the purchase of its first truck – 15 ton capacity – which is being utilized on the La Pampilla Refinery Waste Management project (Repsol). In addition, the intention is, with a view to enhancing the efficiency of this service, to purchase a six-ton trailer to partially free the truck to provide services for other customers.

This year, pursuant to the company's development plan, a conditioning service commenced for PCB-contaminated electric equipment with a view to commencing exportation thereof early in 2007.

The company's main customers include: Repsol, Hunt Oil, Newmont, Xstrata, BHP Billiton, Pluspetrol, Goodyear, Petroperú, Basf and Endesa.

In 2006, the company dedicated more than one percent of its annual billing to an integral support program for the communities in the vicinity of the deposit, focusing mainly on assistance activities, of note among which is the electrification of the water pump for the well of the Papa Leon XIII community.

### Befesa México

Since 2001, Befesa México is promoting the implementation of the industrial waste management activities Befesa carries out in other countries, with the exception of those conducted by Befesa Construcción y Tecnología Ambiental. The reference project is the promotion, construction and operation of a treatment and final disposal center for hazardous industrial wastes and, as complementary activities, the remediation of environmental passives and industrial cleaning operations.



In 2006, Befesa México managed to meet three objectives in the construction project for a hazardous industrial wastes treatment and disposal center in Mexico (called "Sustainable Development Systems"), which were: the obtaining of all the permits required for the construction of the same, the closure of non-recourse financing under the "Project Finance" scheme, and commencement of construction of the center. These positions position Befesa as a reference company for forthcoming years in industrial waste management in the Republic of Mexico.

2006 saw the company enter the fields of remediation and industrial cleaning with the presentation of several bids to Pemex.

In parallel to the aforementioned activities, work commenced on advance studies for the development of a social responsibility project focused on the communities in the vicinity of our project.

