



## Environmental Services

**Befesa is an international company specialized in the integral management of industrial waste and the generation, transportation and management of water. Befesa is strongly committed to society and to helping forge a sustainable world.**





International presence





## Our business

Befesa manages more than 2.6 Mt of waste and recycles more than 1.3 Mt to create new materials, thereby cutting yearly CO<sub>2</sub> emissions by over 1 Mt. It has the capacity to desalinate more than 1 M of m<sup>3</sup> of water a day, which is equivalent to the water supply required by 5 M people. Befesa's main activities are the following:

- Aluminum waste recycling. This business line provides services involving the collection and processing of waste with aluminum content, the manufacture and marketing of aluminum alloys, and also the design, construction and assembly of equipment related to aluminum recycling. The production and sale of aluminum alloys is intended primarily for the automobile industry and the construction sector. This activity plays a special role in reducing CO<sub>2</sub> emissions when compared with the primary aluminum sector. It also allows us to recycle salt slag, the toxic waste produced by the aluminum waste recycling process. Recycling salt slag is an attractive alternative to dumping it and the aim is to separate the metallic aluminum, the salt and the aluminum oxide in order to reuse them. The business enables us to complete a full recycling cycle and to ensure the integral use of waste with aluminum content.
- Steel and galvanization waste recycling. This particular field involves processing and recycling waste stemming from the production of common and stainless steel, as well as waste produced from the steel galvanization process. Befesa boasts eight production plants in Europe to carry out these activities. Befesa's recycling activities play a fundamental role in the zinc recovery cycle, thereby avoiding the pointless loss of tons of this material by cutting down on dumping and helping to reduce the need to mine zinc, nickel and chromite from our natural surroundings. Befesa is the European leader in the treatment and valorization of steel powder and the only company in Spain able to offer an integral service of collecting and processing steel powder for valorization.
- Industrial waste management. This line of business carries out integral industrial waste management and has an active role to play in all stages of the industrial waste management cycle, ranging from transportation, temporary storage, processing and valorization up to the final recovery and deposit of the waste in a controlled and secure manner, in accordance with both Spanish and European environmental law. This division also offers a broad range of industrial cleaning services with extra added value for most industrial sectors. Another of our business lines is furnishing effective solutions for the collection, transportation and elimination of transformers, condensers and materials contaminated with PCB, as well as the recycling of film used to



cover greenhouses. This unit also performs desulfurization work by producing sulfuric acid from residual sulfur while generating electricity, which is sold and returned to the grid. To conclude its portfolio of services, it also provides integral soil contamination solutions.

- **Water.** The activities of Befesa Agua include the production, management and transportation of water using new technologies and by designing, constructing and operating infrastructures. Befesa Agua boasts extensive expertise in the construction of large desalination plants using reverse osmosis and is widely considered one of the leaders within this field on the international stage. Other product lines include the following: processing of waste waters and industrial waters, hydraulic works and hydraulic infrastructure management. Befesa is therefore able to operate throughout the entire integral water cycle.

Befesa provides innovative and feasible solutions for industrial waste processing and management and water production and transportation as it continues along its path to becoming an international benchmark company within its chosen sectors and helping to forge a more sustainable world. This commitment is mirrored in its activities:

- Recycling aluminum waste without generating new waste during the process, thereby successfully concluding the entire recovery cycle.
- Managing waste stemming from the production of common steel and stainless steel, and waste produced from the galvanization process, and also recycling different metals, thus doing away with the need for dumping. It also curbs the need to mine the world's natural resources.
- Designing and constructing infrastructures in order to manage waste in a safe, efficient and environmentally friendly manner.
- Managing, transporting, treating and temporarily storing hazardous and non-hazardous industrial waste for valorization, recovery, reuse and final controlled deposit.
- Generating water via seawater desalination technologies, reusing urban waste water and modernizing irrigation systems to reduce their water consumption.
- Protecting rivers and coastlines by purifying urban and industrial waste water.
- Contributing to economic and social development, making water drinkable and furnishing rural and agricultural environments with irrigation systems.
- Developing technologies that improve the efficiency of the integral water cycle.



Befesa aspires to be a world leader in terms of integral industrial waste management and the generation, management and transportation of water, thereby contributing to sustainable development.

In order to achieve this goal, the main pillar on which Befesa leans is investigation, development and innovation. As the company operates in areas where technology plays an important role, the strategic plan for R&D&i aims to coordinate and guide corporate action within this realm, which focuses on the ability of our investments to create value and returns, With this objective in mind. Befesa collaborates with a range of different external collaborators, including universities, institutions and research centers, which enables the company to ensure its resources are used efficiently at all times.



### Summary of 2008

2008 has been a very good year for Befesa, despite the gloomy economic outlook and the uncertainty facing international markets. In 2008, Befesa continued to experience sustained growth in all its fields at a similar rate to that recorded in previous years. This has allowed Befesa to turn in excellent financial results for all its business lines. From a strategic point of view, 2008 has seen the company consolidate its position of leadership in Europe in the recycling of steel waste, with a total of 690,000 t of recycled waste. Alcasa has been successfully integrated into the aluminum waste recycling sector and Befesa has turned out to be one of the European leaders in the recycling of aluminum waste and salt slag, and the only one capable of carrying out the integral recycling of waste with aluminum content. The Water Division has strengthened its standing as one of the leading figures on the international stage, having experienced considerable growth in the field of large seawater desalination plants.

In 2007, Befesa signed an agreement with the Qualitas Investment Fund in order to integrate the respective aluminum waste recycling business (Befesa Aluminio and Aluminio Catalán). This integration process was successfully completed over the course of the year. In 2008, Befesa was awarded a project to design, finance, construct and operate the seawater desalination plant at Tenes (Chlef) in Algeria, which represents an investment of more than \$232 M, with total revenue from the sale of water exceeding the \$1,400 M. Construction has also been completed on the Skikda desalination plant in Algeria, which has begun to operate.

In line with its strategic plan, 2008 saw Befesa carry out different initiatives geared towards continued growth and expansion not only in new countries, but also within new markets and new lines of business. We would highlight the acquisition of the company NRS Consulting Engineers, one of the leading engineering firms from the US water



desalination industry. This marks our arrival into a highly promising market through a very specialized company. Befesa's Water Division has also been set up as a local company by opening offices in key countries such as India, China and Australia. The acquisition of companies like Tracel and L.I.R.S.A. has opened the door to new markets and services pertaining to industrial waste management. This has enabled Befesa to further strengthen its leadership in this area on the Iberian Peninsula. Befesa has also experienced significant growth in Latin America, where it has started construction on several industrial waste processing plants, thus remaining one step ahead of the competition in the countries in which it operates. In addition, 2008 witnessed the consolidation of business concerns in Chile



and Mexico through the affiliates of Befesa, namely Soluciones Ambientales del Norte in Chile and Sistemas de Desarrollo Sustentable (SDS) in Mexico.

**Our activities**

**Aluminum waste recycling**

**Aluminium content waste recycling**

The aluminum waste recycling business unit recovers aluminum content from different forms of waste and scrap. Within this particular field, Befesa's fully comprehensive services include the collection, transportation and recovery of waste and aluminum scrap, and the production of secondary aluminum alloys, as well as their marketing. The primary uses of the aluminum waste recycling process are the production and sale of alloys for the automobile industry and the construction sector. In order to carry out these recycling activities, Befesa has three plants set up in Biscay, Valladolid and Barcelona (Spain).

The production of recycled aluminum alloys has a very important role to play in reducing CO<sub>2</sub> emissions when compared with the production of primary aluminum, and therefore contributes to sustainable development.

The integration of Aluminio Catalán and Befesa Aluminio, which was initiated in 2007 with the Qualitas Investment Fund, was completed successfully in 2008. The resulting company has become the leader in Spain and one of the leaders in Europe in the recycling of aluminum.

During 2008, Befesa Aluminio recycled close to 190,000 t of diverse aluminum waste and produced 128,000 t



of aluminum alloys, thereby avoiding direct CO<sub>2</sub> emissions of 1,400,000 t as produced by the primary aluminum industry.

### Recycling of salt slag

Befesa boasts an integral aluminum waste recycling model: on one hand it develops technologies to improve the management and processing of waste and, on the other, it is the only operator worldwide without solid waste in its production process. Befesa recycles aluminum without producing new waste in the recycling process and is therefore able to close the cycle perfectly. Its salt slag recycling plant is a fine example of efficiency and sustainability.

Throughout the aluminum production value chain, oxides and other impurities are incorporated into the process, the valorization of which is costly from both a technical and financial standpoint. The aluminum valorization process is carried out in rotary ovens with the help of salt fluxes. The final waste from this process has little aluminum content and is made up of impurities accumulated and mixed with the fluxes used in the final stage. This waste is called salt slag and is classified as hazardous because of its high reactivity with water, due to the resulting production of hazardous and potentially inflammable gases. It is valorized entirely at the Befesa plants in Valladolid (Spain) and in Whitechurch (United Kingdom). In addition, the company manages smaller amounts of other waste from the primary and secondary aluminum industry, such as aluminum sludge and fine particles produced from the crushing of aluminum sludge.

During 2008, we treated a total of 230,600 t of hazardous waste, which has been turned entirely into useful raw materials for industry (aluminum, salt fluxes and aluminum oxide), thereby rendering extraction unnecessary. These processes fit in perfectly with the aluminum industry's mid-term commitment to eliminate the dumping of solid waste, which this industry produces both directly and indirectly.

### Sale of machinery and technology

The Technology Division provides technical support to the aluminum waste recycling plants and is also engaged in the design, construction, assembly and start-up of "turnkey" installations for the aluminum and zinc industries.



The division boasts an extensive portfolio of more than 100 installations in 40 countries. Its main products, for which it is an international leader, are automated lines used for the production of 5-25 kg aluminum ingots, casting wheels, truck loaders, rotary ovens, sludge coolers and installations for processing the sludge.

Over the course of 2008, contracts have been rolled out to design and construct molding and ingot casting lines for clients such as Alba (in Bahrain), Nordural (in Iceland), Sohar (in Oman), Vedanta (in India) and Rusal (in Russia).

Befesa is currently the European leader when it comes to recycling aluminum waste and one of the leaders in the recycling of salt slag. In addition, Befesa is the only recycler that integrates both sides of the aluminum waste recycling process.

Befesa's current strategy for growth in this area includes organic growth in Central Europe and in the aluminum recycling business, as well as international expansion in the salt slag business. It has progressed from being the European leader to being a global benchmark.

The main competitive edges on which Befesa relies in order to continue enjoying sustainable growth include a profound knowledge of the processes and technologies involved in aluminum waste recycling, a broad range of products derived from secondary aluminum and excellent commercial ties with clients and suppliers of raw materials.

Within the aluminum waste recycling unit, Befesa has global clients such as Renault, SEAT, Cie Automotive and Fagor Ederlan.

#### Steel and Galvanization waste recycling

Befesa manages common steel and stainless steel waste, as well as waste produced from galvanization processes, while respecting the environment. These activities prevent the pointless loss of tons of these metals, curb dumping and help to reduce the need to mine zinc and other metals from our natural surroundings. Befesa owns eight production plants in Europe, which are involved in the valorization of steel powders from electric arc and casting furnaces, the recovery and processing of stainless steel waste, the recycling of zinc waste and its alloys from the galvanization industry, metal injections and construction. It also has two companies that provide commercial and logistics services for moving this kind of waste.

In 2008, a total of 538,500 t of residual powder from the production of common steel were recycled, thereby doing away with the need to extract approximately 230,000 t of zinc from the environment. This means we are able to channel a grand total of 126,360 t of this metal back into the productive cycle. The company has also valorized a further 150,128 t of powder obtained from stainless steel production processes, and its contents have been recovered to form expensive and sought-after metals, such as nickel and chrome. In both cases, our secondary processes entailed huge savings in terms of both energy and CO<sub>2</sub> emissions (greenhouse gas) when we compare the equivalent cost of obtaining these products via primary treatments.

This represents 7.4% year-on-year growth in regard to 2007, due to the enhancements and increased capacity of some of the plants, as well as the improvements made to the operating processes for most of them.

By the close of FY2008, the Biscay plants of Sondika and Amorebieta had recycled a total of 18,996 t of assorted zinc waste, and produced a total of 19,756 t, 8,305 t of which correspond to zinc oxide (ZnO) manufactured in Sondika, with the remainder mainly comprising ingots of zinc ore, ingots of electrolytic zinc and the fine zinc ashes obtained in Amorebieta. In turn, overall sales for the period proved considerably higher (11.5%) than the production volume of the two plants, which reached a total of 22,025 t.

In July 2008, the new production facilities of Befesa Zinc Aser were unveiled in Erandio (Biscay). These fall against the backdrop of the plan to modernize and improve the plant as initiated in 2004 and which has entailed an investment of 35 M€.

On a final note, and with a view to adapting our organizational structure to a new model from which to lay the foundations for growth throughout the different business lines and to transform that growth into a broader offer of premium services, capable of exceeding market expectations, the R&D&i and Corporate Development Unit of Befesa Zinc was created towards the middle of 2008, and will become fully operational in 2009.

Befesa is currently the Spanish and European leader in the recycling of steel waste, with a market share far above that of its competitors within the sector.

Befesa boasts a strategic distribution of its plants, which enables it to be close to clients and suppliers alike, and this represents one of its main competitive edges. Other characteristics which differentiate Befesa from its competitors are its extensive knowledge of the recycling processes and the different technologies used, as well as its commercial relations with clients based on long-term collaboration agreements.

The primary areas of growth in the steel recycling business encompass organic growth in Europe, as well as inorganic growth in other strategic locations.

The steel waste recycling market on a worldwide level continues to grow as the authorities continue to step up regulatory pressure to protect the environment. This environmental pressure has reached different levels in the different territories throughout the world, with Europe being the region in which it is most felt.

Befesa's steel waste recycling unit has clients worldwide, including the likes of Arcelor Mittal, Acerinox, Thyssen, Boliden and Nystar.

### Industrial waste

Befesa manages, recycles, valorizes and reuses waste, incorporating the latest technologies under the rule of the three Rs: "Reduction, Reuse and Recycling", based on the premise that the best waste is no waste. Waste is used to recover materials that can be put to subsequent use and the consumption of new raw materials is therefore avoided. Its business concerns also encompass transportation, processing and the temporary storage of hazardous





and non-hazardous industrial waste for its valorization and final controlled deposit, as well as environmental consultancy services. The company has more than 15 centers located throughout Spain, in order to provide services to clients, most of which are private companies from the pharmaceutical, chemical and petrochemical industries.

During 2008, Befesa managed to maintain its excellent standing in the sector. At the beginning of the year, it acquired the Tracel plant, located in Guarromán (Jaén), which has an evaporator and a physicochemical and biological processing plant, thus reinforcing its management services for hazardous waste. In all, Befesa has managed 1,291,000 t of industrial waste, 40% of which corresponds to hazardous industrial waste, representing a 10% year-on-year increase over figures for 2007.

**Industrial cleaning**



The industrial cleaning division contributes to the sustainable development of the industries in which it renders its services, combining the goal of minimizing production and recovery of waste with the reuse of raw materials, coupled with more efficient equipment and, therefore, lower energy consumption. Its wide range of services includes mechanical and high pressure hydrodynamic cleaning processes, such as ultra-pressure hydrodemolitions and hydrocutting; chemical cleanings and steam blowers; air through circuits and boilers; change of catalyst beds; cleaning of refinery tanks and oil installations, both manually and via automated systems; on-site waste treatment by means of mobile and fixed plants, and the cleaning of interchangers.

Befesa follows a strategy enabling it to provide specialized industrial services and to adapt to the needs of the market, which is governed by strict legislative and regulatory provisions. Over the course of 2008, Befesa acquired the company Limpiezas Industriales Robotizadas, L.I.R.S.A., which specializes in cleaning interchangers and operates out of Spain, France, Italy, Switzerland, Portugal and the United Kingdom. It also invested in the purchase and development of the latest available processes and technologies in order to tailor them to the specific needs of its clients. Over the year, the division participated in the main shutdowns within the

petrochemical sector in Spain. Its chemical cleaning services and the “turnkey” projects for centrifuge plants and reservoir cleanings have all experienced significant growth. In addition, the division has begun to expand internationally, which will allow it to capitalize on the experience obtained from local projects.

### Plastics

Befesa Plastics manufactures special pellets of low density polyethylene by recycling the film used as covering for greenhouses. The resulting pellets are intended for a range of different applications, such as the manufacture of films for the construction industry (water-proofing and protections), sacks and bags, irrigation pipes and electrical and telecommunications ducts. It can also be injected to create pots and vessels and used to obtain modified asphalts. As Befesa Plastics is the only company capable of carrying out the complete recycling cycle, ranging from collection to the manufacture of the product, it stands at the forefront of the European market.

During 2008, Befesa recycled 13,653 t of film and used irrigation pipes, and produced 10,240 t of polyethylene pellets, thereby consolidating its position as market leader within the low density polyethylene recycling industry, where it operates in all the major areas of cultivation under plastic in Spain: Alicante, Murcia, Andalucía and Extremadura.

### PCB

Befesa Gestión de PCB, located in Cartagena (Spain) is an expert in providing effective solutions for the collection, transportation and elimination of transformers, condensers and materials contaminated with PCB. Using cutting-edge technology, the company is able to recover all reusable materials while eliminating all contaminated material for good.

More than 4,200 t of PCB-contaminated apparatus and materials were processed over 2008, representing a year-on-year increase of 15% and helping the company to maintain its position of leadership in Spain within this market. Due to these impressive figures, Befesa Gestión de PCB has become the benchmark company for PCB treatment in the electrical sector, with clients such as Iberdrola, Endesa and HC Energía, to name but a few.

### Soil decontamination

This Division offers integral technical solutions to the problem of soil contamination. Over the course of the year, the company has rolled out numerous investigation and diagnostic projects into contaminated soil for blue ribbon clients within the petrochemicals, steel, real estate construction, energy and chemical industries, among others, as well as different soil decontamination initiatives, such as bioremediation treatments, on-site treatments, excavation and management.

The firm treated over 100,000 m<sup>3</sup> of contaminated soil over 2008. Worthy of particular note is the work carried out for EDP at the Sines thermoelectric plant (Portugal), for Repsol YPF Cartagena (Murcia), for Fertiberia, the former installations in the Escombreras Valley (Murcia), and the Algeciras thermoelectric plant (Andalucía) owned by Enel Viesgo. These initiatives have enabled the company to recover the soil for other uses, thereby helping to improve the local environment.

### Desulfurization

Befesa Desulfuración produces sulfuric acid and oleum (a compound rich in SO<sub>3</sub>) from the residual sulfur recovered from petrochemical plants. The company owns a plant that enables it to overcome the environmental problems associated with oil plants by applying the cleanest and safest processes.





During 2008, 285,720 t of equivalent acid were produced, with a corresponding generation of 69,612 MWh of electricity, which, after deducting self-consumption, has led to sales of 43,962 MWh of surplus electricity.

It's worth noting that in May, the land on which this desulfurization plant is located was sold against the backdrop of the Sefanitro Special Interior Reform Plan (Plan Especial de Reforma Interior Sefanitro) of the town of Baracaldo (Biscay). The plant is currently operating and the land will be turned over within a term that will guarantee the transfer of the activity to the new location.

In terms of sheer volume treated under the heading of industrial waste management, Befesa leads the way not only in Spain, but also in those Latin American countries in which it operates (Argentina, Chile, Mexico and Peru).

Befesa's main competitive edge lies in the fact that it is present throughout the entire industrial waste management cycle. This allows it to create important synergies between the different links in the chain.

Befesa has centers and offices distributed throughout Spain in order to offer its clients an integral waste management service, while minimizing and reducing any possible environmental impact with suitable management techniques.

Befesa's strategy for growth in the field of industrial waste management is based on achieving organic growth in the management of non-hazardous waste in the countries in which it operates, as well as on penetrating into new and highly promising territories.

The industrial waste recycling market will continue to grow, spurred on by ever-increasing legislative and environmental pressure not only on producer companies, but also on required treatments and processing. Befesa's competition in industrial waste management comprises small and medium-sized companies with a strong local presence, as well as the environmental divisions of large industrial companies generally associated with the construction sector.

## Water

Befesa Agua specializes in the generation, transportation and management of water by designing, constructing and operating infrastructures to ensure an integral water cycle, and also by developing technologies capable of providing innovative and sustainable solutions.

Throughout 2008, Befesa Agua continued to expand on the international stage by constructing desalination plants and carrying out water treatment, transportation and distribution, thereby helping to promote the notion of sustainable development. To achieve this, it has established itself as a local company in China, India and the United States and has opened commercial offices and branches in the Persian Gulf and Australia. Lastly, Befesa has

consolidated and homogenized its presence throughout Spain by participating in the national plans and programs currently underway.

Listed below are the most relevant milestones for 2008.

- Contract awarded for the Tenes desalination plant (Algeria). The Algerian Energy Company (AEC), an Algerian state-owned company, has awarded Befesa a project to design, construct, finance and operate the seawater desalination plant at Tenes (Chlef) for 25 years. The investment exceeds \$232 M and total revenue from water sales will represent more than \$1,400 M. The desalination plant will have a water production capacity of 200,000 m<sup>3</sup>/day, enabling it to supply a population of 800,000 people through the use of reverse osmosis technology.
- Contract awarded for the Baix Llobregat water desalination and treatment plant (Barcelona, Spain). Depurbaix has entrusted Befesa, under a joint venture with ACSA, to draw up the plans and carry out the construction work on the water desalination and treatment plant for part of the effluent processed at the Baix Llobregat waste water treatment plant, entailing an investment of over 13 M€ . The plant will produce 57,024 m<sup>3</sup>/day of water through the EDR system (electrodialysis reversal) and is set to become the world's largest waste water reuse installation of its kind and the second largest EDR with any type of water.
- Contract awarded to modernize the WWTP at Jerez de la Frontera (Cádiz, Spain). Empresa Gestión Medioambiental, S.A (Egmasa) has awarded Befesa a contract to execute expansion and modernization work on the Waste Water Treatment Plant (WWTP) at Jerez de la Frontera for a grand total of more than 9 M€ . The project will benefit a population of 525,000 equivalent inhabitants and will boast an average volume of 70,000 m<sup>3</sup>/day.
- Contract awarded for the Sar river catchment system in Santiago de Compostela (A Coruña, Spain). The Ministry of the Environment and Rural and Marine Affairs, acting through the Directorate-General for Water, has awarded Befesa a contract to start construction on the general interceptor sewer for the stretch of the river Sar between Pontepedriña and the Silvouta treatment plant, representing an investment of over 20 M€ . The project will remodel the current sewer and stormwater control system for the drainage basins that empty into the river Sar, and will likewise incorporate existing direct dumpings into the network of secondary sewers.
- Water management and hydraulic infrastructures (Spain). During 2008, Befesa Water has managed to strengthen its presence in this field. In addition to the construction work currently underway on the Automatic Hydrological Information System (known in Spanish as the Sistema Automático de Información Hidrológica, or SAIH) for the Duero river and the maintenance and expansion work on the Guadalquivir SAIH, the company has also been awarded a contract to maintain, modernize and operate the SAIH for the Andalusian







Mediterranean Basin under a joint venture with Telvent and Page Ibérica, in addition to a remote control agreement for the gauging points of the Ebro Basin.

- Completion of the Skikda desalination plant and commencement of the operating period (Algeria), with the first water production taking place during the last quarter of 2008. The AEC awarded the contract to the Geida consortium of Spanish companies, to which Befesa Agua belongs along with Sadyt. The plant will have a capacity to desalinate 100,000 m<sup>3</sup>/day of water and will supply a population of 500,000 inhabitants by means of reverse osmosis technology. The contract encompasses the possession, exploitation and maintenance of the plant for an initial term of 25 years.
- Completion of the civil engineering work on the Chennai desalination plant (India). During 2008, civil engineering work was completed on the Minjur seawater desalination plant in Chennai. Tamil Nadu province (India). The plant, which was awarded to Befesa by the Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB), will produce 100,000 m<sup>3</sup>/day of drinking water to supply the city using reverse osmosis technology. The contract encompasses the design, financing, construction, possession, operation and maintenance of the installations for an initial term of 25 years, with final commissioning expected to take place in 2009.
- Contract awarded to construct the main pipeline which will connect the branch sections of Sant Celoni and Hostalric (Barcelona, Spain). Aguas del Ter de Llobregat, a public company attached to the Generalitat de Catalunya, has entrusted Befesa, under a joint venture with ACSA, with the task of constructing the mains pipeline to join the Sant Celoni and Hostalric branch sections in the province of Barcelona, for a grand total in excess of 26 M€ . The contract includes the section of pipeline to connect the branch pipeline planned for the town of San Celoni (located in the Catalonian region of Vallés Oriental) with the towns of Hostalric and Sant Feliu de Buixalleu (in the region of La Selva).
- 2008 also saw the company commence construction on major projects awarded in previous periods, such as

the Bajo Almanzora desalination plant (Almería, Spain), which employs technology based on reverse osmosis and which will have a capacity to supply up to 20 hm<sup>3</sup>/year of water; the WWTP in El Campello (Alicante, Spain); the Cenajo drinking water treatment station (DWTS) (Murcia, Spain), which will benefit a population of more than 700,000 inhabitants; and the concession of the irrigation area of the Navarre Canal, Phase One (Navarre, Spain).

- The company also completed a number of other important milestones, such as the modernization of the Sur-Andévalo irrigation area (Huelva, Spain), the seawater catchment work in Jorf Lasfar (Morocco) and the plant at of the Itoiz dam (Navarre, Spain).

During 2008, Befesa acquired a 51% stake in the U.S. water plant engineering and construction companies NRS Consulting Engineers and Water Build. It also acquired a 50% holding in the company Micronet Porous Fiber, S.L., which specializes in the manufacture of hollow porous fiber. The acquisition will enable the R&D&i Department to enhance its technological capacity for this type of material when used in water treatment processes.

Befesa Agua continues to manage municipal services in Spain through its equity holding in Agua y Gestión, providing supply and sewerage services on the Spanish market for more than 200,000 inhabitants.

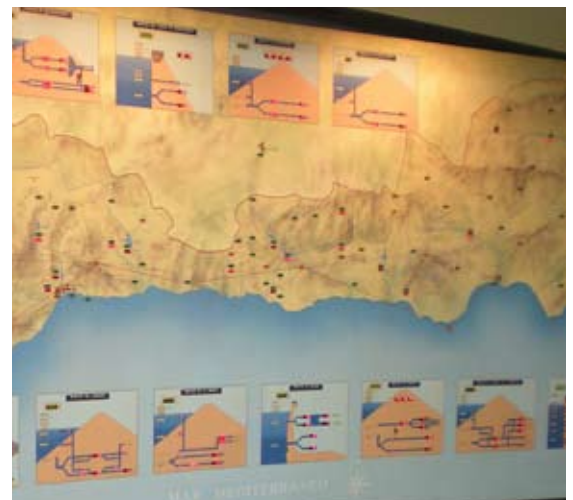
On a final note, Befesa Agua continues to process purine through Procesos Ecológicos Vilches, S.A., a company which owns a treatment plant located in the town of Vilches within the province of Jaén. The plant treated 75,250 m<sup>3</sup> of purine over 2008.

The water generation and transportation market, and particularly the worldwide desalination market, are all currently experiencing significant growth, largely due to two important global events: the increase in the world's population coupled with limited water resources.

Befesa is a market leader in water desalination within Spain and is also one of the most prominent figures on the international stage.

For years now, Befesa has stood at the forefront of seawater desalination plant technology and engineering by investing heavily in R&D&i programs, which have afforded the company the premier status it enjoys today.

Befesa's strategy for continued growth within the desalination market involves organic growth in the main regions





and markets in which it operates (mainly China, the United States, India and Algeria), whilst also tapping into previously unexplored markets.

The leading competitors of Befesa in the water sector are primarily large international companies that form part of major industrial groups.

The regulatory framework within Spain consists of a series of plans, such as the A.G.U.A. program, the Reuse Plan and the National Water Quality Plan, all of which regulate the actions to be carried out in the years to come. We would also highlight the approval of Royal Decree 1620, dated 7<sup>th</sup> December 2007, which enacted the legal system governing the reuse of treated water.

At present, between 400 and 450 hm<sup>3</sup> of 3,400 hm<sup>3</sup> of purified water are reused. Following the initiatives that the Ministry of the Environment and Rural and Marine Environments intends to roll out, this amount will be tripled by the year 2015, when 1,200 hm<sup>3</sup> will be reused, a figure which will really open up the market. In accordance with the goals of the A.G.U.A. Program (Actuaciones para la Gestión y la Utilización del Agua) unveiled by the Ministry of the Environment and Rural and Marine Affairs, this Decree has laid the foundations for a new water policy based on a more modern and efficient management of resources.

**Latin America**

**Befesa Argentina**

Befesa Argentina is involved in the handling, transportation, recycling, recovery, processing, incineration and final disposal at secure waste storage facilities of non-hazardous industrial waste and special or hazardous waste. It also provides the oil industry with cleanup services. These environmental management services are carried out under the strictest international environmental standards through the use of state-of-the-art technology, combining experience, technology and responsible handling of resources. The company is therefore able to promote sustainable industrial development by offering a suitable treatment for each type of waste. In order to attain this goal, the company has two plants: Campana, which provides inertization and final disposal services, and Pacheco, which serves as an incineration plant. Both facilities have undergone improvements to their infrastructure in order to increase their operational capacity and the quality of their services.





During 2008, the company has provided integral waste management services to the pharmaceutical, chemical, automobile and oil industries, where it operates centrifuges that work 24 hours a day, 365 days a year. It also offers refineries cleanup, treatment and sludge suitability services.

### **Befesa Chile**

Befesa Chile, through its company Soluciones Ambientales del Norte, is involved in the integral management of solid hazardous and non-hazardous industrial waste, through temporary storage and final disposal systems. The company provides treatments to valorize and minimize the hazardous nature of the waste, giving priority to recycling whenever possible. The waste, which is mainly produced from mining operations and industry, is managed in a safe and responsible manner, thereby contributing to the country's sustainable development.

In May 2008, Chile's regional health authority granted Soluciones Ambientales del Norte the start-up license for its hazardous and non-hazardous waste processing plant, which occupies a 40 ha site in the Atacama desert, 120 km inland from the city of Antofagasta and 1,600 km from the capital of Santiago. The plant commenced operations following the authorization and has already managed 5,000 t of waste, a figure which will increase over the years to come, along with the company's market share.

### **Befesa Peru**

Befesa Peru is primarily involved in rendering integral environmental services to industry, including the collection, transportation, processing and final disposal of industrial and hazardous waste; the environmental management of industrial installations; the recycling of metallic containers and the exporting of PCB. These activities are

carried out by means of tried and tested techniques pursuant to national and international regulations that guarantee the utmost respect for the environment. Through the use of cutting-edge technology, the company



helps to protect both the environment and public health by ensuring the waste is kept in strict isolation and removing any trace of risk from the equation by monitoring risk during processing and following the sealing of the waste.

Befesa is the first and only company in Peru authorized by the Directorate-General for Environmental Health (in Spanish, DIGESA), attached to the Ministry of Health, to carry out the treatment and final disposal of hazardous industrial waste, and it also enjoys the approval of the Environmental Impact Study. The company managed over 17,000 t of waste during 2008 and also started up its industrial cleanup service.

**Befesa Mexico**

Befesa Mexico and its subsidiary, Sistemas de Desarrollo Sustentable (SDS), are involved in the management, processing and final disposal of hazardous industrial waste. Their activities help to foster sustainable development in two ways: on one hand, they offer the attractive option of managing hazardous waste



responsibly, which would otherwise lead to significant environmental contamination, and on the other, the SDS center is located less than 200 km from the area responsible for creating the greatest amount of hazardous waste in Mexico, meaning the waste producers save more than 800 km of waste transportation costs, which in turn entails a significant reduction in CO<sub>2</sub> emissions.

2008 witnessed completion of the SDA hazardous waste disposal center, located in the State of Hidalgo, which has now become fully operational. The center will be able to process more than 500,000 t during its first phase. The next projects on the horizon will be remediation and industrial cleanup services focusing on the oil industry.