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Befesa and the Environment

We have an environmental commitment to develop our activities while always considering the improvement of environmental conditions and maintaining lasting resources for future generations.

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Policy, commitment and objectives

Befesa maintains a constant concern for the environment in which it conducts its activities, while at the same time seeking sustainable development; that is to say, the rational and sustainable use of the environment and natural resources. This is why Befesa identifies and controls impacts deriving from its activity to minimize their effect on its surroundings, through the use of technologies that enable the prevention thereof or through mitigating or corrective technologies.

This commitment to the environment is reflected in the organizational structure of the company and in the environmental principles on which it bases its environmental policy. The following are the principles of such policy:

- Befesa considers the protection and preservation of the environment a priority objective.
- It complies with the legislation and regulations applicable to the company, as well as any applicable to its processes and activities together with any other obligations to which the company subscribes, whether from clients or stakeholders.
- It promotes a commitment of responsibility among all employees for the execution of all tasks covered by environmental criteria in any activity that is conducted or ordered and in all decisions made.
- It offers an integral waste management service to companies. This process includes prevention, in the first place, to avoid the generation of waste. In the second place, the recycling of any wastes that have already been generated for their subsequent use as an energy source and, in the third place, the shipment of non-recyclable wastes to secure waste disposal facilities centers that are safe and assure the utilization of techniques in accordance with sustainable development.
- It proposes a constant control of the impact of its productive processes on the environment.
- It favors continuous dialog with the authorities and business associations on matters of environmental protection and safety, and fosters good neighbor relations and informative transparency with the population and social organizations.
- It advises and assists customers on all matters related to the handling of their industrial wastes so that this may be done in a hazardless manner and with the maximum safety assurances.

Given the importance of the environment for Befesa, each business unit has a quality and environment manager who coordinates the environmental activity of all work centers. His functions are mainly to manage and develop the documentation of the Systems that are kept updated in accordance with the national and international regulations applicable to it and pursuant to legislation; to propose and develop the annual internal auditing plan. In order to achieve these objectives, quality managers propose indicators and goals for the companies, divisions and departments; see to consultations and the demand for counseling of the divisions and departments; collaborate on training programs; evaluate suppliers; act in the supervision of trouble shooting report (TSR) and improvement action (IA)

applications and collaborate with general management on the annual revision of the systems in order to determine any proposals for improvement.

To achieve success in all of its environmental objectives and in its commitment to sustainability, all members of the organization must be aware of the impact that the activities undertaken from their posts and work have on the environment, and must have diligently pursued suitable training. In Befesa, all training in environmental management aspects forms a part of the general training processes of the group. Each company has an annual training plan based on the competency-based management model of the Company and which involves a systematic evaluation of its efficiency.



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The Befesa policy for environmental management and sustainable use of energy and natural resources establishes, as a strategic objective, the implementation of environmental management systems in accordance with standard ISO 14001 and the European Eco-Management and Audit Scheme EMAS, which facilitate constant control of the possible impacts of its activities on the environment. In this manner, all companies that have attained EMAS certification have their environmental statements validated on the Befesa website (www.befesa.com and www.befesa-gri.com), at the disposal of anyone who accesses it. It is within this framework that the specific objectives for the reduction of negative environmental impacts of the products and services of each company are established. These objectives include the reduced consumption of natural resources and the generation of wastes and emissions.

The environmental management systems implemented in Befesa are very demanding with regard to the monitoring and gauging of environmental impact, as well as the control of associated operations. All activities relating to environmental aspects evaluated as significant should be included in the corresponding monitoring

and gauging plan, and in an operational control program.

Greenhouse Gas Emissions Inventory (GEI)

Befesa manages industrial wastes and water for a sustainable world and therefore, in order to combat the conditions generating climatic change and efficiently contribute toward the control of GEI emissions, Befesa has participated in the development of a project to take an inventory of GEI emissions associated with its activity. This project, which commenced in 2007 with the elaboration of a Standard, began to produce results in 2008 with the taking of the first annual inventory of GEI emissions.

The project consists of the inventory of GEI emissions of the group of Befesa companies, work centers and activities, based on an internal standard prepared on the basis of international systems of renowned solvency auditable by external agencies. It also includes emissions generated by company suppliers and contractors who are collaborating by contributing the emissions generated through the services and supplies rendered to Befesa.

The inventory includes:

1. Direct sources, or those directly associated with the Befesa productive activity like emissions from the combustion of boilers, ovens, machinery or vehicles; emissions from processes, and fugitive emissions from equipment or installations, etc.
2. Indirect sources are those that Befesa generates indirectly, such as the GEI emitted to produce the electrical energy that the company consumes.
3. Other indirect emissions include the emissions associated with the production chain of Befesa goods and services or those generated during employee business trips, etc.

Along general lines, the main objective is to integrate sustainability into the Befesa business strategy and with it:

- Obtain an in-depth knowledge of GEI emissions in each Befesa activity, to evaluate its status compared to the competition and identify options for improvement.
- Assess Befesa suppliers on the basis of the GEI emission associated with the production of products and services acquired by the company (together with specifications against child and forced labor).
- Label all Befesa products and services, identifying

the GEI emissions associated with the production of each product or service.

- Develop plans for the reduction, compensation and neutralization of emissions.

To attain the first inventory of GEI emissions in 2008, a series of activities were developed, among which the following are worthy of mention:

- Collaboration on the elaboration of the internal Standard.
- Contracting of the Standard by the application of test cases.
- Training, with external means, of over 100 people, with an even greater number trained internally.
- Elaboration of internal structures and procedures in each company for the proper extension of the Standard.
- Elaboration of monthly inventories.
- Internal and external audits of a significant part of the Befesa activity centers.

During 2008, new Standard has been implanted in the 27 productive companies of Befesa, analyzing all their activities and work centers. It should be emphasized that the Befesa aluminum and steel waste recycling activities, where metals such as zinc,

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iron, nickel, chrome and molybdenum are recovered and plastic, paper, compost, etc. are recycled, make an important savings of tons of CO₂ possible.

All of the foregoing corresponds to the environmental policy and measures for which Befesa has wagered as part of its commitment to Sustainable Development.

In 2009 Befesa shall continue with the preparation of the inventory of GEI emissions generated by its industrial activity, implementing the Standard in its new centers. Reduction plans shall likewise be established that will make it possible to decrease emissions throughout its entire daily activity.

In addition to the emissions inventory, another instrument is being implemented to boost the strategy and master lines that will enable Befesa to direct its activity toward sustainable development: sustainability indicators. These indicators are a set of measures that make it possible to evaluate the potential impact of the various Befesa activities on sustainability.

This is why work is underway on nine different indicators:

- Energy consumption
- Water consumption
- Biodiversity
- Emissions of atmospheric contaminants (except greenhouse gases)
- Emission of odors
- Dumping of contaminated water
- Contamination of soils and aquifers
- Noise
- Recyclability of materials and products



Main environmental indicators of Befesa

In keeping with the Befesa environmental policy and its Common Management Systems, the implementation and certification of an Environmental Management System is a strategic objective. This is why it is necessary for each one of the companies to establish objectives to reduce the consumption of sustainable resources and reduce the generation of wastes.

Befesa, through its businesses, allows save raw materials and energy, reducing CO₂ emissions and protecting the environment by recycling, eliminating or controlling these emissions. Furthermore the activities it performs through the water cycle and desalination are worthy of mention.

Some examples of these initiatives are as follows:

- Befesa policies are applied to reduce the consumption of paper, toner, water and electricity in offices, and to collect wastes for treatment or recycling.
- To reduce the consumption of water, in some installations and projects the construction of supply networks of raw water as processing

water have been carried out, among other actions. Furthermore, several R&D projects have been started up, such as the development of advanced systems for the treatment of waste water or those centering on the desalination process; the minimization of the possible environmental impact of brine water through the study of the brine water dilution phenomenon; the performance of desalination by means of renewable energies, etc. All these projects are under development, whereby we do not yet have any results.

In order to improve the reliability of the environmental indicators, improvements have been introduced to the process for data collection and compilation. Some values from previous years have been corrected in keeping with revised estimate and calculation criteria.



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For the calculation of the environmental performance indicators included in this report, only work centers, associated activities and projects provided directly by Befesa have been considered. For all other projects, the figures deriving from our actions have been considered, not any raw materials, consumptions or wastes attributable to the suppliers of such projects. Neither have the maintenance or operation activities performed in customer installations been taken into consideration.

All indicators set forth have been defined and calculated in order to be able to verify their evolution in successive years.

The following are the indicators that have been considered and which shall continue to be calculated in forthcoming years.

Aluminum Waste Recycling

Environmental indicator (t)	2006	2007	2008
Metallic aluminum waste	107,166	104,833	85,582
Aluminum slags	27,656	36,709	40,081
Salt slags	176,025	190,733	179,357
Additives (Si, Cu, Mg, Mn) Various zinc wastes	6,392	8,645	6,693

Steel and Galvanization Waste Recycling

Environmental indicator (t)	2006	2007	2008
Steel and casting powders	95,273	277,613	307,115
Various zinc wastes	20,802	317,790	311,542

Industrial Waste Management

Within the Industrial Waste Management division there are companies devoted to the management, treatment of waste and industrial cleaning of tanks, centrifuge equipment. The wastes considered are illustrated on the basis of their classification as hazardous or non-hazardous, and of the treatment they receive.

Wastes

Wastes to management and treatment (t)	2006	2007	2008
Hazardous			
Wastes to physico-chemical treatment	24,442	32,918	39,369
Wastes to energy valorization treatment	42,170	50,555	35,373
Wastes to inertization treatment	260,866	258,924	320,531
Wastes to recovery-regeneration treatment	5,376	32,482	18,519
Wastes to hazardous deposit treatment	64,512	73,649	94,906
Wastes to thermal treatment	897	4,886	7,881
Wastes to evapo-condensation treatment	12,790	8,941	15,843
Wastes to PCB treatment	285	337	296
Wastes to waste segregation treatment	951	721	632
Subtotal	412,288	463,412	533,350
Non-hazardous			
Wastes to non-hazardous deposit treatment	577,804	636,550	645,750
Wastes to inert deposit treatment	1,232	865	371
Wastes to non-hazardous energy valorization treatment	2,869	1,143	2,577
Wastes to physico-chemical treatment	7,363	8,270	3,394
Wastes to reuse/recycling treatment for non-hazardous waste	15,504	21,430	25,163
Subtotal	604,771	668,258	677,255
Total (hazardous and non-hazardous)	1,017,059	1,131,669	1,210,605

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Desulphurization

Environmental indicator (t)	2006	2007	2008
Desulphurization wastes (sulfur)	105,100	98,599	97,251

PCB

One of the activities of Befesa is the management of equipment contaminated with PCB, consisting of the treatment and cleaning of transformers, condensers, solid and liquid, recovering the reusable materials.

Environmental indicator (t)	2006	2007	2008
Electronic equipment contaminated with PCB	4,102	3,765	4,918

Plastics

The major part of the consumption of plastics as a raw material comes from the recycling of the film used as greenhouse covers.

Environmental indicator (t)	2006	2007	2008
Plastic wastes from the agricultural activity	11,739	11,507	12,800

Purines

Environmental indicator (tons)	2006	2007	2008
Purines *	53,196	63,548	75,200

(*) Purines are wastes from the livestock activity

Raw materials

For the development of its activities, Befesa needs to consume raw materials, energy and water, while at the same time generating emissions into the atmosphere, discharges and wastes. However, given the importance to the Company of the protection of the environment in which it operates, the Company deems it necessary to carry out a strict control of all aspects that are affected.

Paper consumption in offices

To reduce paper consumption and therefore the impact deriving from this, Befesa has recently implemented several strategies: use of recycled papers, printing documents on both sides, and above all the use of a corporate network that makes it possible to visualize corporate documents in all countries where Befesa works.

Paper consumption in offices (t)	2006	2007	2008
Total paper consumption	36	46	48
Consumption of recycled paper	19	19	25
Consumption of paper for packaging*	0	0	0

(*) 100% recycled paper

Other materials

Other materials (t)	2006	2007	2008
Cement	14,954	9,966	14,779

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The following is a list of some of the controlled chemical substances of greatest consumption in the productive processes. It should be considered that the number of substances utilized is very broad and that the majority of the quantities are not representative.

Various chemical substances utilized in processes (t)	2006	2007	2008
Sodium bicarbonate	2,569	3,125	3,282
Sulfuric acid	836	1,425	1,164
Hydrochloric acid	0	14	66
Caustic solution (25% solution)	103	159	229
Sodium hypochlorite	380	398	265
Sodium hydroxide	559	524	660
Calcium hydroxide	1,646	295	368
Melting salts	39,631	42,468	34,921
Lime	10,541	55,048	51,415
Antifoam	15	15,602	17,320
Nitrogen	34,127	16,116	19,686
Oxygen	15,155,052	14,625,673	12,524,911



Energy

Data on electrical energy from the grid, gas, gasoline and gas oil correspond to stable work centers.

Energy (GJ)	2006	2007	2008
Electricity from the grid	191,705	6,420,462	6,657,095
Electrical self-consumption	126,672	122,555	118,562
Fossil fuels			
Gasoline	54	167	65
Gas oil	70,295	117,474	139,524
Gas	2,730,486	2,080,612	1,868,666
Other petroleum derivatives	553,776	1,804,868	2,185,075
Total energy	3,119,212	10,546,138	10,968,987

The indirect consumption of energy corresponding to electricity from the grid, in accordance with data from the AIE for the various countries where Befesa operates, is as follows:

Indirect energy consumptions by primary source (GJ)	2007	2008
Coal	1,409	1,466
Natural gas	1,075	1,122
Petroleum products	308	318
Total	2,793	2,906

Befesa has carried out energy-saving activities in those processes that require a greater supply. The efforts undertaken in 2008 were focused on the improvement of storage areas for materials to ensure that they remain dry. This means a reduction by 8% in the consumption of electrical energy in the plant. Without the actions undertaken, the materials would have a water content amounting to 10% of their weight.

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Water

The main sources of catchment are surface waters, underground waters and water supplied by third parties.

Water consumption (m ³)	2007	2008
Catchment sources		
Surface waters	35,075	29,584
Underground waters	489,202	330,194
Rainwater	161,435	153,903
Waters supplied by third parties	1,428,233	1,354,167
Waste waters supplied by third parties	0	27,035
Consumptions		
Consumption Process / Refrigeration	2,045,205	1,843,370
Domestic water	24,894	22,526

None of the sources utilized by Befesa for water catchment is included in the Ramsar list of wetlands, nor can they be considered particularly susceptible. Neither is there any record whatsoever in which the annual consumption involves more than 5% of the volume of the affected source.

Biodiversity

There is no soil owned, managed or leased in a habitat rich in biodiversity. Neither have any significant impacts on biodiversity deriving from the activities of the business units been identified.

Emissions, dumping and wastes generated

For the calculation of greenhouse gas emissions (GEI), direct emissions from all sources held by Befesa (combustion, processing, carriage and fugitive emissions), indirect emissions from electrical and thermal

energy or acquired vapor and indirect emissions from business trips, commuting to work, losses in the distribution and carriage of electrical energy and emissions in the value chain of the fuels consumed for the generation of acquired electrical energy have been taken into consideration.

The calculation of emissions was performed by following the methodologies of the IPCC and GHG Protocol and utilizing, whenever possible, specific emission factors on the fuels; in other cases, values from national inventories of GEI in the countries in which our activities are developed and, lastly, general values published by the IPCC.

The 2007 annual report contained an error in the data on greenhouse gas emissions from taking the emissions of a company without transforming the units in which the data were communicated. This error has been rectified in this annual report, and it may be verified that the data is in line with the data informed in 2006.

Of all the emission measurements, calculations and estimates made to date, no ozone layer depleting substances have been identified.

Emissions of greenhouse gases (t CO ₂ equivalents)		
	2007	2008
Direct emissions	NA	400,601
Direct emissions from the biomass	NA	1,397
Indirect emissions (1)	NA	49,244
Other emissions (2)	NA	9,102
Total emissions		460,344

(1) Includes acquired electrical, thermal and vapor energy emissions

(2) Includes emissions from business trips, commuting to work, losses in carriage of electrical energy and emissions in the value chain of the fuels consumed for the generation of acquired electrical energy.

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NOx and SOx emissions and other atmospheric emissions (t)			
	2006	2007	2008
CO	21	16,788	9,834
COVs	134	294	521
NO _x	1,226	1,358	1,632
Particles	1	829	1,123
SO _x	419	491	575

No significant emissions of ozone layer depleting substances exist.

Without considering the wastes that Befesa manages through its business units, the activity itself also generates a series of wastes, the majority of which are monitored through the various Environmental Management Systems implemented in each company, set forth as follows.

Non-hazardous wastes (t)				
	2006	2007	2008	Destination
Paper and cardboard (rev data)	41	71	73	Recycling
Metallic scrap	5,948	5,925	6,577	Recycling
Plastic	437	1,033	961	Recycling
Wood	375	294	243	Recycling
Debris	1673	11,763	1,954	Treatment/Disposal Site
Excess soil and vegetation	2314	573,270	52,987	Disposal Site
Urban wastes	476	265	347	Treatment



Hazardous waste (t)				
	2006	2007	2008	Destination
Slags	120	271,690	267,248	Recycling
Salt slags	184,304	80,614	60,868	Recycling
Aluminum slags	29,719	2,700	2,100	Treatment
PCB liquid	985	943	1,245	Incineration
Solids contaminated with PCB	329	305	218	Incineration
Hazardous contaminated waste	2,188	2,121	3,321	Treatment
Oils	212	422	230	Treatment
Filter dust	15,444	34,231	34,406	Treatment
Silts	92	404	448	Treatment/Disposal Site
Contaminated waters	24	86	77	Treatment
Lixiviations	10,394	9,372	12,706	Treatment
Aluminum oxide	12,600	35	37	Disposal Site
Other wastes	757	1,143	1,577	Treatment

Of the hazardous wastes referenced in these tables, the salt and aluminum slags generated in the secondary production of this metal are recovered for reuse within the Befesa aluminum waste recycling unit. This activity makes it possible to complete the recycling cycle and make integral use of these wastes.

Discharges

Discharges (m ³)	2006	2007	2008
Public network	83,692	146,114	304,306
Surface waters	830,936	499,864	198,473
Discharges by soil infiltrations	NA	2,403	2,381

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Over the past three years, accidental spills due to the Befesa activity registered by information channels have been irrelevant in terms of magnitude and impact.

No cases regarding the existence of water resources or habitats affected by water spillage from its own activity have been registered in Befesa.

Products and services

Almost all Befesa activities are under some Environmental Management System in accordance

with the ISO 14001 standard, and therefore, as an essential requirement for these systems, all impacts are identified according to the internal procedures of each company.

Compliance

In 2008, two environmental incidents took place in Spain and Argentina, which were resolved with a penalty in an amount of 182,400 €. Befesa, across its system of withdrawal of information, has had no knowledge of any other incident.



