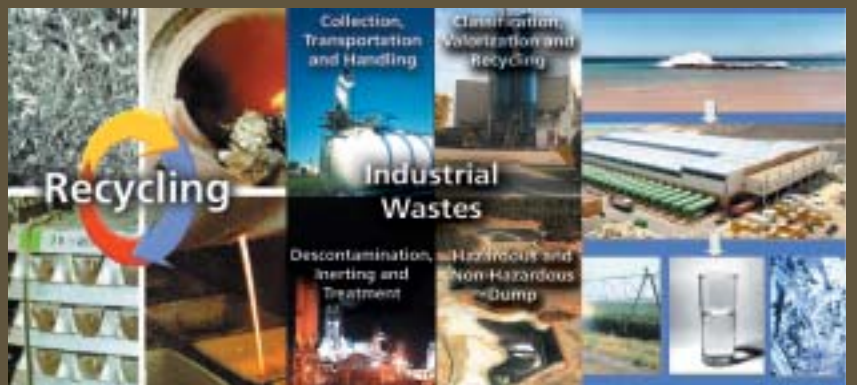


# ABENGOA

# Activity Report 2004



## Your Partner in Resources and Technical Solutions

# ABENGOA

Your Partner in Resources  
and Technical Solutions

**ABENGOA**



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## Geographical Diversification





Summary 2004



## Summary 2004

Over the past decade, our results have increased at an compound annual growth rate (CAGR) of 28% as a consequence of the new Bioenergy, Environmental Services and Information Technologies activities, and also to the internationalization of our traditional activities. Over the same period, our sales abroad have increased at an average annual growth rate of 17%.

- The following strategic strategies adopted over recent years are noteworthy:

### 2000

- A 300 M € investment to acquire Befesa, through a takeover bid.
- Start-up of the first Bioethanol plant in Spain with an initial production capacity of 100 M liters/year (currently 150 M liters/year), which required a 93.8 M € investment.
- Increase of Abengoa's capital which enabled a 75.1 M € increase in shareholders' capital.

### 2001

- Abengoa's Environmental Division (specialized in environmental engineering) was integrated in Befesa, and Befesa's capital was increased by 12.3 M € through Abensur's contribution.
- Sale of the wind power activity for 109 M €.

### 2002

- Acquisition of High Plains Corporation (now called Abengoa Bioenergy Corporation), the fourth largest bioethanol producer in the United States, by means of a 100 M € takeover bid.
- Start-up of the second Bioethanol plant in Spain (Bioethanol Galicia) with a 126 M liters/year production capacity, which required a 92.1 M € investment.

- The Department of Energy (D.O.E.) of the United States awarded an R&D&I project to enhance ethanol production process technology, using biomass, to improve the economy of process and increase energy performance from ethanol production and, thus, reduce the production cost of ethanol and make it more competitive with gasoline. Total investment, co-funded by the D.O.E., is 35.4 M \$US, from 2003 though to 2006.

### 2003

- Acquisition of Metso Corporation's Network Management Solutions Division, through the 100% purchase of its subsidiaries in Canada and the United States. The two companies purchased, currently called Telvent Canada and Telvent USA have put Telvent in a leading position at international level in the Control and Information Systems market for the oil, gas and electric energy sectors, and the water sector as well.

The total investment in both companies was 35 M \$US.

- Construction began on the third Bioethanol plant in Spain (Biocarburantes de Castilla y Leon). It is located in Babila Fuente (Salamanca) and required a 150 M € investment. The plant's bioethanol production capacity is 200 M liters/year, to be directly blended in gasoline. The raw material will be grain, wine alcohol and biomass, the latter in a bioethanol production facility to be the first of its kind in the world.
- Exports of bioethanol to Europe commenced.

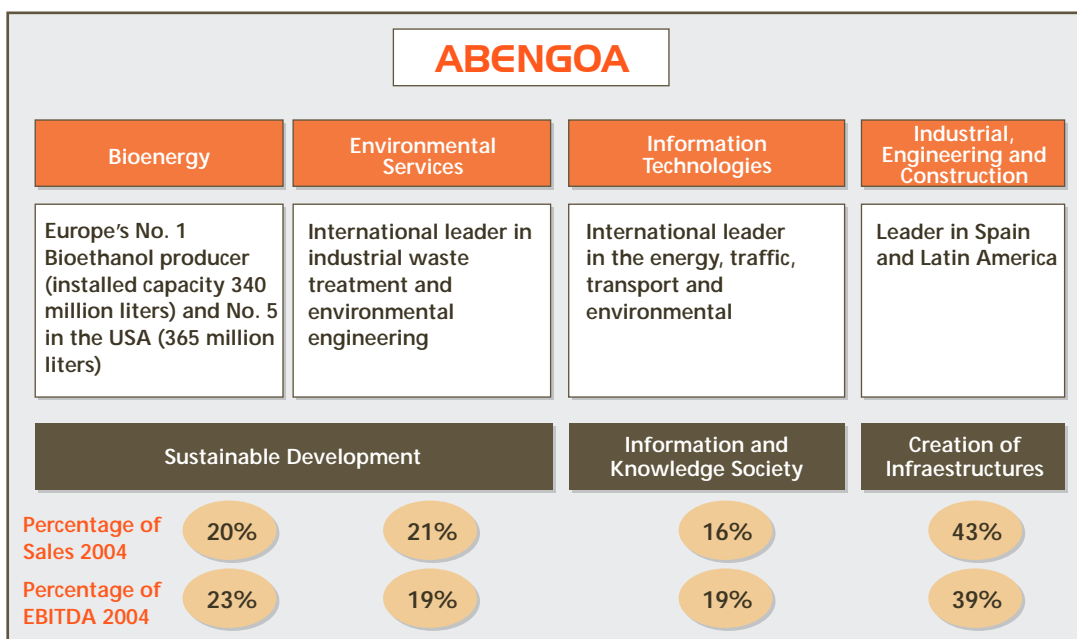
### 2004

- On October 21, 2004, the execution and subscription to an increase of Telvent GIT capital was completed, and Telvent GIT was effectively listed on the American NASDAQ technological market. The total amount of the increase of capital, with paid-in surplus, was 61.2 M €. The company's official listing on the stock exchange implies the continuity of the expansion of the Information Technologies activity through the obtaining of funds to finance the Business Unit's growth, strengthen its financial structure and increase its potential by developing investments in R&D&I.
- Agreement to commence the construction of an 88 million gallon-a-year ethanol production facility in Ravenna, Nebraska. The facility, Nebraska's largest and one of the largest in the United States will make Abengoa Bioenergy one of the largest ethanol producers in the United States.
- Commencement of the construction of the largest solar energy power plant to use tower and heliostat field technology for an 11 MW output, and the construction of a 1.2 MW two-fold concentration photovoltaic power plant.

## Summary 2004

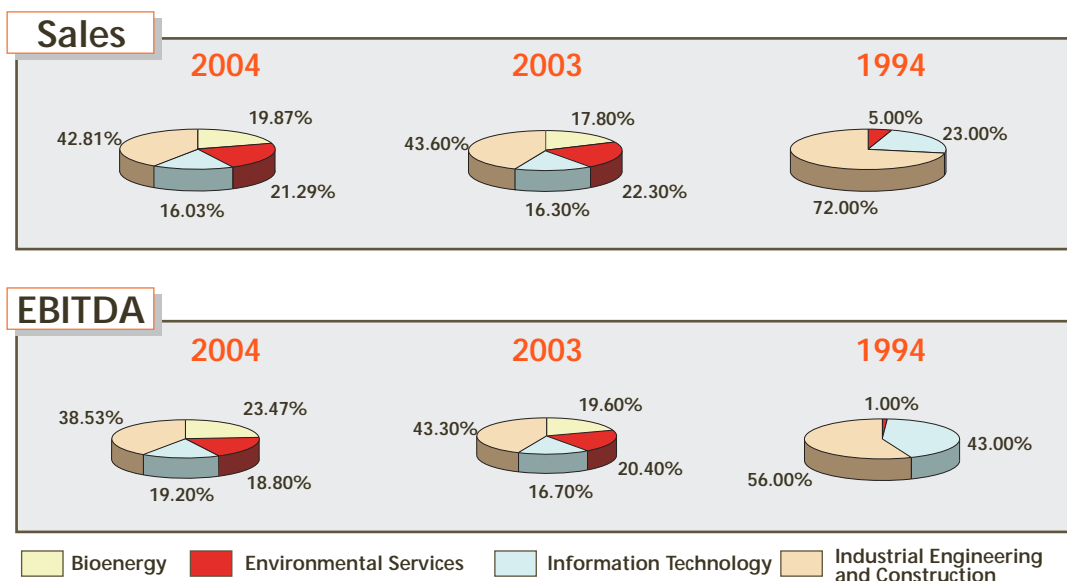
### Abengoa's Current Configuration and the Nature of its Business

- Abengoa is an industrial and technology company that provides solutions for Sustainable Development, the Information and Knowledge Society, and the Creation of Infrastructures. It operates through four Business Units.



The evolution of the Business Units is shown in the diagram here-below:

#### Evolution of Sales and EBITDA by Business Unit



## Summary 2004

### Strategic Orientation

- The aim of Abengoa's strategic development is to generate options for the future through new market penetration and the introduction of new and existing products. Therefore, its growth strategy is based on the introduction of new activities in the six Operational Fields in which Abengoa is present and where its different Business Units complement one another.

Operational Fields					
Business Units	Year of establishment		Operational Fields		
- Industrial Engineering and Construction	1941		Energy		
- Information Technologies	1969		Environment		
- Environmental Services	2000		Transport		
- Bioenergy	2001		Services		
			Industry		
			Telecommunications		

- Abengoa currently offers a combination of activities that represent greater diversification in markets, customer portfolio, and which strengthen its capacities in relation to what was its original Engineering business.

Evolution 1994 - 2004					
Business	Engineering		Diversified Group with 4 different businesses		
	1994	2004	1994	2004	2004
	Sales %	EBITDA %	Sales %	EBITDA %	EBITDA %
Bioenergy	-	-	20	23	
Environmental Services	5	1	21	19	
Info. Technology	23	43	16	19	
Indust. Engin. & Const.	72	56	43	39	
Geography					
	%	%	%	%	%
USA and Canada	-	-	12.9		
Latin America	25.5		16.9		
Europe (Spain excluded)	2.3		6.9		
Africa	1.0		1.9		
Asia	1.3		1.6		
Total Abroad	30.1		40.2		
Total Spain	69.9		59.8		
Consolidated Total	100.0		100.0		

## Summary 2004

### Innovation Strategy in Abengoa

Innovation is results oriented and pursues three groups of tangible objectives:

- Diversification: new products and services.
- Differentiation: enhancement and adaptation of those that already exist.
- Process enhancement.

Intangible objectives include the acquisition of essential competencies and, above all, the generation of options for the future. The latter is closely linked to value through growth prospects and the development of new businesses.

Abengoa implements its innovation policy in several ways; in-house innovation aimed at providing specific solutions for individual customers and in-house developments. There is also outsourced innovation based on collaboration agreements with universities, Research Centers, or third parties, in which case the work is usually shared. On other occasions technology is purchased. Another method employed over recent years is the acquisition of strategic financial interests in technological companies.

#### Investment in R&D&I

	2003		2004		2005 (P)	
Main Projects	M €	% on/ Sales	M €	% on/ Sales	M €	% on/ Sales
Ethanol efficiency enhancement (waste starch)	0.4		1.0		1.2	
Conversion of biomass to ethanol	0.4		3.8		19.6	
Hydrogen Technology. Fuel Cells	2.2		0.6		2.8	
Aluminum efficiency enhancement	0.0		0.6		0.2	
Vitrification	0.0		0.8		2.9	
Electric, environmental, oil and gas control centers	6.2		6.4		6.5	
Road and rail traffic, and ticketing systems	3.4		3.7		3.6	
Public Administration support systems	1.1		1.5		1.6	
Solar Energy	0.0		0.6		32.4	
Other Projects	3.8		4.3		5.8	
<b>Total Investment in R&amp;D&amp;I</b>	<b>17.5</b>	<b>1.1%</b>	<b>23.3</b>	<b>1.4%</b>	<b>76.6</b>	<b>4.1%</b>

## Summary 2004

### Evolution of the 2004 Financial Year Results

	M €		Variation %	% of total		M €	% of total	% C.A.G.R.
	12.04	12.03	04/03	12.04	12.03	12.94	12.94	94/04
Sales	1,687.1	1,635.3	3.2	100.0	100.0	453.0	100.0	14.1
EBITDA	202.3	185.2	9.2	12.0	11.3	15.7	3.5	29.2
R&D&I amortization	-14.9	-13.5	10.4	-0.9	-0.8	-0.1	0.0	67.6
Other amortizations	-59.2	-53.4	10.9	-3.5	-3.3	-7.6	-1.7	22.8
Goodwill depreciation	-19.4	-19.4	0.3	-1.2	-1.2	-2.9	-0.6	21.0
Net financial expenses	-61.2	-47.1	30.0	-3.6	-2.9	-10.1	-2.2	19.7
External partners	-6.5	-0.8	760.2	-0.4	0.0	0.0	0.0	91.2
Result attributable to the parent company	51.8	47.0	10.1	3.1	2.9	4.5	1.0	27.8
Net Cash Flow	155.9	137.5	13.4	9.2	8.4	18.6	4.1	23.7

- Consolidated sales at 31/12/04 were 1,687.1 M €, a 3.2% increase on the previous year. This increase in sales was achieved in spite of the unfavorable evolution of the currencies of countries in which Abengoa does 40.2% of its billing. The 9.1% depreciation of the US dollar in 2004 was especially significant.

All of Abengoa's Business Units increased their sales figure with the exception of the Environmental Services, due mainly to differences in the consolidation perimeter. The Bioenergy Business Unit went from 291.4 M € in 2003 to 335.3 M € in 2004, the Industrial Engineering and Construction Business Unit from 713.0 M € in 2003 to 722.3 M € in 2004 and, the Information Technologies Business Unit from 265.5 M € in 2003 to 270.4 M € in 2004.

- The Ebitda (earnings before interest, tax, depreciation and amortization) was 202.3 M €, which is a 17.1 M € (9.2%) increase on the 2003 figure.

The contribution to the Ebitda by each Business Unit increased, with the exception of the Industrial Engineering and Construction Business Unit, with the contribution from the Bioenergy Business Unit of 47.5 M € (36.3 M € the previous year), a 30.8% increase, being of especially noteworthy, and the contribution from the Information Technologies Business Unit was 38.8 M € (31.0 M € the previous year), a 25.3% increase.

- It is important to mention the increase in the amortization of fixed assets to 59.2 M €, a 10.9% increase, and the effort made to amortize R&D&I, the figures for which went from 13.5 M € in 2003 to 14.9 M € in 2004 (+10.4%).

Moreover, it is important to mention the amortization of the consolidation goodwill which in 2004 amounted to 19.4 M €.

- When comparing the company's financial statement for 2004 to that for 2003, it is important to underline the financial expenses for projects structured under the non-recourse financing scheme.
- The company's Foreign Partners experienced a significant increase (6.5 M € in 2004 and 0.8 M € in 2003), as a consequence, mainly, of the increase in capital of Telvent GIT when it was officially listed on the North American NASDAQ technological market.
- The after tax Result attributable to the parent company is 51.8 M €, a 10.1% increase on the figure for the 2003 (47.0 M €) financial year.

The above result means a profit of 0.57 € per share as against the 0.52 € per share obtained in 2003.

- The net cash flow also increased by 13.4 % to 155.9 M € (137.5 M € in 2003).

## Summary 2004

### International Activity

- In 2004, in spite of the unfavorable impact of the foreign currency exchange rates, especially the US dollar, Abengoa continued to increase its activity abroad, in volume as well as diversification. The ever-increasing contribution from the United States and Canada by the companies in the Information Technologies and Bioenergy Business Units is especially noteworthy. Of the 1,687.1 M € billed in the 2004 financial year, 676.5 M € (40.2%) is from sales abroad. The activity in Spain amounted to 1,010.6 M € (59.8%) compared to 971.2 M € in 2003 (59.3%).

Of the total sales figure abroad, 451.2 M € (27.4%) correspond to **local activity**, that is to say, billing by the local companies established in different countries, and **exportation** by Spanish companies amounted to 225.3 M € (13.7%). In 2003, the local activity and exportation represented **27.1%** and **13.6%** respectively.

We would especially mention the variation in the contribution from the different geographical areas. Latin America has gone from representing 25.5% in 1994 to 16.9% in 2004. Likewise, the contribution from the USA and Canada, non-existent in 1994, is currently 12.9%.

- The geographical distribution of sales is as follows:

Activity Abroad							
Exportation and Local Company Sales	2004		2003		1994		CAGR (94-04)
	M €	%	M €	%	M €	%	%
- USA and Canada	217.5	12.9	209.8	12.8	0.0	0.0	-
- Latin America	285.6	16.9	332.9	20.4	115.3	25.5	9.5
- Europe (Spain excluded)	115.5	6.9	76.7	4.7	10.6	2.3	27.0
- Africa	31.6	1.9	27.8	1.7	4.6	1.0	21.1
- Asia	26.3	1.6	16.9	1.1	5.8	1.3	16.3
Total Abroad	676.5	40.2	664.1	40.7	136.3	30.1	17.4
Total Spain	1,010.6	59.8	971.2	59.3	316.7	69.9	12.3
Consolidated Total	1,687.1	100.0	1,635.3	100.0	453.0	100.0	14.1

CAGR = Compound Annual Growth Rate



## Summary 2004

### Share Performance

According to the data supplied to Abengoa by Sociedad de Gestión de los Sistemas de Registro, Compensación y Liquidación de Valores S.A. (Securities Recording, Clearing and Settlement Management Company) for the last General Meeting held on June 27, 2004 Abengoa, S.A. had 7,450 shareholders (24/06/04).

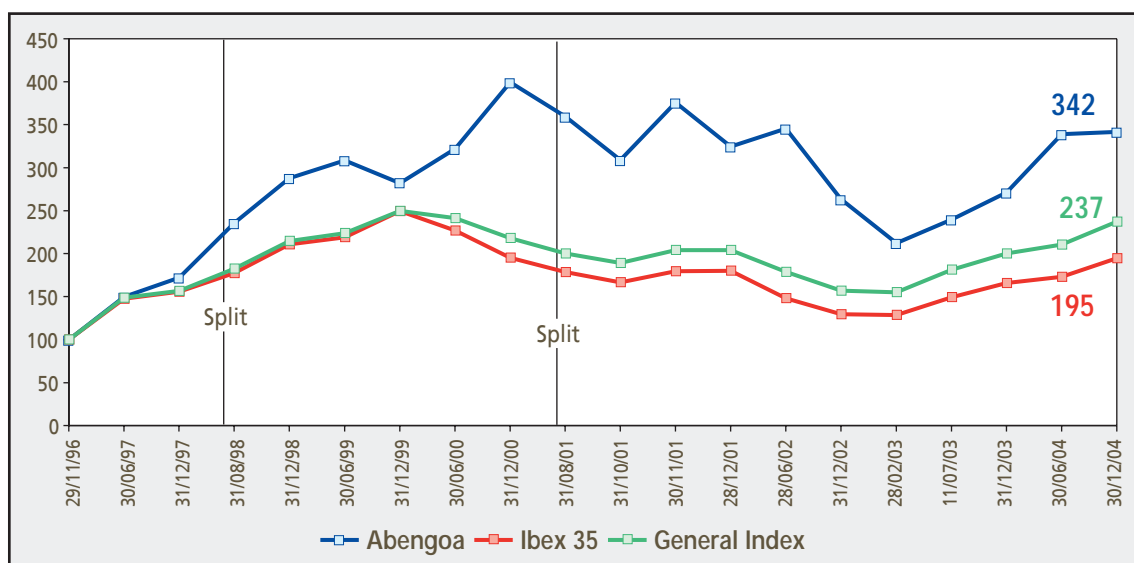
As on December 31, 2004, the company believes the free float to be 43.96% if the shareholding of Inversión Corporativa I.C.S.A. and its subsidiary Finarpisa (56.04%) is deducted.

According to the figures supplied to the company by Sociedad Rectora de la Bolsa de Valores de Madrid (Governing Body of the Madrid Stock Exchange) 34,726,928 shares were traded in 2004. The average volume of daily trading over the year was 138,354

securities. Minimum, maximum and average listed share prices in 2004 were 5.73 €, 7.81 € and 6.98 € respectively. The last closing price quoted for Abengoa shares in 2004 was 7.27 €, 26.0% higher than on December 31, 2003, and 242% higher than the share price established for the Public Offering on November 29, 1996.

### Evolution since its Initial Public Offering in 1996

As a historical reference, since Abengoa's Initial Public Offering on November 29 1996, the company's shares have revalorized 242% which is 3.4 times the initial price. During this same period, the Madrid Stock Exchange has revalorized 137% and the select IBEX 35 has gone up 95%.





# Business Units

In its search for synergies and cross-selling to achieve the creation of value and growth, Abengoa is organized into four business units, Latin America as a stable market as well as a corporate area.

## Sustainable Development

### Bioenergy



### Environmental Services



## Information and Knowledge Society

### Information Technologies



## Creation of Infrastructures

### Industrial Engineering and Construction



# Bioenergy

[www.abengoabioenergy.com](http://www.abengoabioenergy.com)

- Production of ethyl alcohol from vegetable products (cereals, biomass). The resulting alcohol (bioethanol) is used to manufacture ETBE (a petrol additive) or is blended directly with petrol or gas oil. Thus, upon it being a renewable energy, net CO<sub>2</sub> emissions are reduced (greenhouse effect). Production of DDGS (Distillers' Dried Grains with Solubles), a protein complement for animals and CO<sub>2</sub>.







Europe's largest Bioethanol producer  
(installed capacity 340 million liters)  
and No. 5 in the USA  
(365 million liters)





### Organization

During the year 2004, Abengoa Bioenergy completed the integration of the Business Unit initiated in 2002-2003. The most noteworthy advances are the following:

- Management Structure for the Business Unit implemented.
- Leadership position in the market consolidated
- Establish commodities risk management policy
- Integrated Management System implemented
- Corporate Identity established

Focusing on the main items, Abengoa Bioenergy has accomplished the following goals:

#### United States:

- Colwich Expansion (+6 MGPY) and has launched the Portales Expansion (+ 15 MGPY).
- Control of Ravenna Project (80 MGPY) and qualified for the 22 MUUSD state incentives.
- Closed the first phase of the York Operating Lease.
- Implemented the working capital policy.

#### Europe:

- Initiated construction of Biocarburantes Castilla y León (200 MI).
- Exports of 44 MI of Bioethanol
- Successful start up of the ETBE Huelva facility
- Registration ISO 9001, ISO 14001 and OSHA 18001 for Ecocarburantes Españoles and Bioetanol Galicia.



#### Research & Development:

- Complete staffing of R&D group
- Construction of the pilot plant was completed in March of 2003 and commissioning was completed in May.
- Develop and demonstrate Residual Starch technology for corn
- Complete agreement with Novus for Coproduct development and marketing.
- Complete preliminary design for the commercial demonstration of Biomass technology at Biocarburantes Castilla y León.
- Complete Hydrogen Fuel Cell ethanol reforming prototypes at 1 kW and 10 kW
- ISO 9001:2000 obtained

The Business Unit integrates the management of the following companies:

Ecocarburantes Españoles, S.A.  
Ecoagrícola, S.A.  
Bioetanol Galicia, S.A.  
Biocarburantes de Castilla y León, S.A.  
ETBE Huelva, S.A.  
Abengoa Bioenergía, S.A.  
Abengoa Bioenergy Corporation  
Abengoa Bioenergy R&D Incorporation.  
Greencell, S.A.



### Operations in Europe

#### Introduction

Abengoa Bioenergía is the No. 1 producer of fuel bioethanol in Europe. Current operations include two cereal-based bioethanol plants in Spain, Ecocarburantes Españoles, in Cartagena (Murcia) and Bioetanol Galicia, in Teixeiro (Coruña). The first with an installed capacity of 150 million liters annually, and the second with a yearly installed capacity of 176 million liters.

In partnership with Ebro Puleva, Abengoa Bioenergía is developing a third plant in Babilafuente (Salamanca) with a capacity of 200 million liters annually, of which 5 million liters is derived from the conversion of biomass from cereal crops by means of a new technology being developed by Abengoa Bioenergía R&D.

We would also highlight the fact that ETBE Huelva, S.A., participated by Abengoa Bioenergía (90%) and the Spanish oil company Cepsa (10%), started-up a new ETBE production plant, with an installed capacity of 40,000 tm, last June 2004.

This plant has been built at Cepsa's Refinery of La Rábida (Huelva), and the bioethanol used as raw material is produced in the plants of Bioetanol Galicia and Ecocarburantes Españoles.

In addition, Abengoa Bioenergía's business plan calls for the construction of two new cereal-based bioethanol plants in Europe. Following the recent guidelines approved in the European Directives for the Promotion and Taxation of Biofuels, these plants will be built in countries where the demand and legal framework make it possible to quickly and effectively initiate bioethanol production. Feasibility studies and collaboration agreements with local partners are now being developed for both facilities.



Abengoa Bioenergía's production plants in Spain, Ecocarburantes Españoles and Bioetanol Galicia, have ample capacity to produce cereal-based bioethanol for export to European countries, which supply markets more rapidly, less expensively and cheaper than any other source. This will allow for the development of necessary infrastructures for the expansion of biofuels in Europe, prior to the start up of new production plants in those markets with a growing demand.





### Main milestones achieved (market, legislation and internally)

#### Market:

- Bioethanol exports to Sweden (1 MI), Germany (34 MI) and France (11 MI).
- Agreed development for E85 and FFV with BP and Ford.
- Agreements with new EU partners (AGPM, KWST, Roquette, BP Chemical, Lyondell, ...)

#### Legislation:

- New legislation approved in Spain to allow direct blending of bioethanol with gasoline and its use in gas stations.
- Coming into force of Taxation and Promotion of Use of Biofuels Directives, and its transposition to different Members States (Spa, UK, Fr, Ger, Pol, Swe, Che, ...)
- Mercosur-EU negotiations on bioethanol trading with Brazil and other countries.
- New European CAP legislation with regard to energy crops.
- New legislation about CO<sub>2</sub> emissions trading.
- Development of bioethanol standards in the CEN of the EU.

#### Internally:

- Start-up of the ETBE facility in Huelva.
- Construction of the Biocarburantes de Castilla y León plant in Salamanca.
- Signating of the financing agreement for Biocarburantes de Castilla y León project and first layout plan.
- Continuation of wine alcohol bids from the EU, used as a raw material for Ecocarburantes Españoles and Bioethanol Galicia plants.
- Implementation of an Integrated Management System.
- Development of a Risk Management Policy in companies subject to commodity volatility
- Holding of the World Biofuels Conference for the third consecutive year.



### Plant Operation Results (bioethanol, DDGS and electricity production)

Production	Ecocarburantes	Bioethanol Galicia	ETBE Huelva	Total
Bioethanol (m <sup>3</sup> )	119,156	135,000	0	254,156
DDGS (Tm)	85,855	73,384	0	159,239
Electricity exported (Mwh)	145,335	173,661	0	318,996
ETBE (Tm)	0	0	22,516	22,516



## Ethanol contract highlights:

Last 2004, Abengoa Bioenergía has achieved a contract bioethanol supply to PCK, a German refinery owned by BP, Shell, Total and Agip, for 43 million liters .

This supply has been executed jointly with KWST, and the bioethanol, has been used for ETBE production.

Abengoa Bioenergy has recently executed a supply contract with Ruhr-Petrol, a trading company based in Germany, for the delivery of 10 million liters of bioethanol to the Miro refinery in Karlsruhe, Germany. This bioethanol is to be consumed by Exxon and Conoco to produce ETBE.

Another significant contract has been to supply 10.5 million liters to Lyondell for ETBE production at its Fos facility (France).

Finally, last may, Abengoa Bioenergía spot-supplied 1 million liters of bioetanol to Preem oil, a company in Sweden, to be used in direct blending.

## New projects:

The Business Plan for Europe also includes the promotion and construction of two new bioethanol plants to be located in countries in which the demand and legal framework enable a quick and effective development of bioethanol, following the recent guidelines approved in the European Directives for the Promotion and Taxation of Biofuels and its implementation in Member States. Collaboration agreements with local partners and feasibility studies are now being developed for these facilities in key countries such as Germany, France, Holland and Poland.

## US Operations

### Introduction

The focus throughout 2004 was on building for the future. This focus was evident in all company activities from the expansion of the Portales, New Mexico plant, to improvements in internal business systems, to the acquisition of controlling interest in a project company developing an 88 million gallon per year ethanol plant in Ravenna, Nebraska.

Everyone in Abengoa Bioenergy Corp. has focused on their specific activities supporting these building for the future initiatives. Through these collective efforts, Abengoa Bioenergy Corp. has successfully completed the foundation necessary to embark on the aggressive growth strategy developed in the strategic plan. Abengoa Bioenergy Corporation has maintained its position as one of the 5 largest ethanol producers in the United States with an overall annual capacity of more than 95 million gallons. Abengoa Bioenergy Corporation operates three plants in the states of Kansas, Nebraska and New Mexico.



Throughout 2004 the world experienced dramatic increases in all fossil fuel prices. Oil exceeded \$55/ bbl in U.S. futures trading, and gasoline futures also reached record levels. Seven additional states banned MTBE in 2004 bringing the total number of states banning MTBE to 25. All of these factors combined to support strong ethanol prices in 2004. Offsetting the strong ethanol prices was a dramatic increase in corn prices, exceeding \$3.20/bu, for the first 9 months of 2004. As the 2004 corn crop matured, corn prices returned to normal levels in anticipation of the largest corn crop in U.S. history of more than 11.5 billion bushels. These combined external market forces, coupled with steady operational performance led to improved financial performance in 2004 compared to 2003.

### Milestones Achieved

#### Industry:

The U.S. industry continued its rapid expansion, with 81 plants having installed capacity in excess of 3,400 million gallons per year. This represents an increase of 600 million gallons for 2004, compared to 2003. An additional 14 plants with 630 million gallons per year capacity are currently under construction, with expected commissioning in 2005 or early 2006. The farmer owned cooperatives continue to represent the majority of all newly constructed capacity in both the 2004 and 2005 capacity currently under construction.

#### Legislation

For the second consecutive year, the U.S. Congress failed to pass an Energy Bill. On several occasions the Energy Bill appeared to have the necessary



support, only to fail at the last minute. The main issue surrounds MTBE liability limitations for past producers of MTBE. However, with the November elections dramatically increasing the Republican majorities in both the U.S. House of Representatives, and the U.S. Senate, it is now very likely an Energy Bill will be passed immediately after the new Congressional session begins in 2005.

Favorable legislation was passed during 2004 in the form of the Volumetric Ethanol Excise Tax Credit (VEETC), which extends the ethanol tax incentive from 2007 to 2010 and eliminates any impact of the ethanol program on the Highway Trust Fund.

An additional 8 states passed laws prohibiting the use of MTBE in 2004, bringing the total number of states with MTBE bans to 20.



### Internal

Many key internal milestones were achieved in 2004. Most importantly the R&D facility at Ravenna, Nebraska was successfully constructed and operated, qualifying the larger project for the Nebraska Ethanol Production Credit. Engineering was completed for the Portales, New Mexico plant expansion from 15 to 30 million gallons per year.

Many internal management systems were developed or improved in 2004.

Some of these systems include, rail fleet management, customer service, commodity management, and various human resource systems. A

particular company-wide human resource initiative included the development and implementation of a personnel competency program designed to identify opportunities for individual skill improvement and to develop individual career development plans for all employees.

### Plant Operations Results

Production	York, NE	Colwich, KS	Portales, NM	Total
Bioethanol (millions/gallons)	55.8	23.8	16.6	96.2
DDGS (dry, tons)	165,000	71,775	51,235	288,010
CO2 (tons)	58,500	38,000	0	96,500

### Ethanol and Co-Product Market Overview and ABC market share & strategy

#### Ethanol

End of year 2003 robust ethanol market values continued into the first and second quarters of 2004. The third and fourth quarters of 2004 saw even more strengthening as gasoline values reached new all-time highs. These record gasoline values were fueled by an all-time high crude oil value on the heels of continued un-rest in the Middle East, hurricanes in the Southeastern United States, the Russian Yukos Oil Company financial issues and Nigerian Oil Company labor strikes. 2004 saw ethanol values ranging from \$1.45 - \$1.90 in the spot railcar market, with much of the year seeing values above \$1.60.

The spot truck market value reached an all-time high average of \$2.03 during the first week of November.





Abengoa continued its strong presence in the California market with over 70% of our contracted production being delivered into various destination markets. Abengoa was however contracted with every major US Refinery/Marketer for ethanol supply in the year 2004.

## Co-product Marketing Strategy

Abengoa Bioenergy Corporation's Feed Marketing group received high customer satisfaction ratings in recent customer surveys. This commitment to continued customer satisfaction is essential to our business and demonstrates this focus by building strong customer relationships through commitment to improving customer service and through the production and delivery of consistent feed products. In order to guarantee a high level of customer satisfaction, Abengoa Bioenergy Corporation continues to market directly to its customers, rather than using third-party brokers to interact with our customers. This greatly enhances the responsiveness to customer needs and provides more rapid responses to changing customer and market needs. To ensure this commitment to our customers is met, each U.S. facility employs experienced grain and feed merchandisers dedicated to providing customers with the most up-to-date market information and logistics professionals to ensure accurate and timely product delivery, on a plant specific basis.

Abengoa Bioenergy Corporation strives to provide its customers with the highest quality feed products available in the U.S. marketplace. This is accomplished through providing consistent product quality through a consistent commitment to research and development. Abengoa Bioenergy Corporation continued the extensive research and development initiatives from 2003 throughout 2004 through partnerships with the University of Nebraska, Kansas State University, and Texas Tech University. These research initiatives are focused on the development of feed products which will meet the nutritional requirement for various feed markets such as cattle, dairy, swine, poultry, aquaculture and companion animals. These internal and external research projects demonstrate ABC's commitment to livestock nutrition.

## **New Projects**

Several new projects were initiated or continued in 2004.

### Abengoa Bioenergy of Ravenna

Abengoa Bioenergy Corporation completed the acquisition of the controlling interest in a project company developing an 88 million gallon per year dry-mill ethanol plant located in Ravenna, Nebraska. This project included the design, construction and operation of a research and development facility at the plant site, to meet a minimum production requirement and allow qualification for the Nebraska ethanol producer incentive program. The 88 million gallon per year facility is scheduled to be operational by mid-2006.

### Portales, New Mexico Expansion

This project required the design and construction of a 15 million gallon per year expansion of the existing facility in Portales, New Mexico. This expansion included a complete re-engineering of all production processes. The full expansion is scheduled to be operational in mid-2005.

### E-85 Supply

Abengoa Bioenergy Corporation supplied the ethanol for individual E-85 stations in 2004. An overall E-85 supply strategy was also developed with implementation scheduled for 2005. E-85 has a large potential for growth through captive fleet utilization and as a general fuel as the major automobile manufacturers continue to increase production of flexible fuel vehicles. Abengoa Bioenergy Corporation is ready to support the growth of this emerging fuel.



### Research and Development

#### Introduction

The mission of Abengoa Bioenergy R&D, Inc. is to develop and demonstrate new technology solutions through science and innovation to achieve Abengoa Bioenergy's Strategic Business Plan Objectives.

#### Main Strategic Milestones Achieved

In the year 2004, many milestones were achieved.

#### General

- Completed staffing of R&D group
- Maintain an independent oversight committee
- We are maintaining a group of three external advisors to provide independent oversight over our R&D activities.
- Obtain ISO 9001:2000 certification
- Develop Aspen Models
- Completed the development of the initial Aspen models for starch and Biomass hydrolysis, gasification to ethanol and ethanol reforming. These models will be maintained, improved, and validated with relevant experimental results.

#### Residual Starch

- The construction of the pilot plant was completed in March of this year and the commissioning was completed in May.
- Develop and demonstrate Residual Starch technology for corn. The 2.9 gal/bu yield objective was achieved in September 2005. The validation was completed in November 2004. We are initiating the planning for the roll out of the new technology.

Background information on the residual starch project:



In September, 2002 the Department of Energy of the United States (DOE) awarded Abengoa Bioenergy R&D a project of 35.5 million dollars "Advanced Biorefining of Distiller's Grain and Corn Stover Blends: Pre-commercialization of a biomass-derived process technology" the Residual Starch Conversion is the project contemplated in the first phase of the program.

The objective of the first phase of this project is centered on the development of the processes and technologies that allow improvement of the yields in the production of bioethanol and the quality of the DDGS co-product to increase the protein content. A pilot plant has been constructed within Abengoa Bioenergy Corporation's York (Nebraska) facility, with a budget of 2.4 million dollars. The production capacity of the plant is almost 2 million liters (0.53 million gallons) of bioethanol. The plant was designed to test different materials, such as corn, barley, and wheat.

Abengoa Bioenergy R&D's strategic plan for the new technology developed at the pilot plant to be implemented in the United States plants by the end of 2005 and by 2006 in the European plants.

### Co-Products

- Completed agreement with Novus for the development and commercialization of new feed products.
- The University of Nebraska and Kansas State DGS field trials completed.
- Baseline DGS product characterization completed.

### Biomass Enzymatic Hydrolysis

- Complete preliminary design of Biomass pilot plant
- The preliminary design was completed in September 2004.

#### Background project information:

In 2002, the United States Department of Energy (DOE) awarded ABRD a \$35.5 million cost-shared financial assistance agreement for the two-phase project, "Advanced Biorefining of Distiller's Grain and Corn Stover Blends: Pre-Commercialization of a Biomass-Derived Process Technology."

One of the main objectives of the DOE project is to develop cost effective technologies for converting cellulosic biomass to ethanol and co-products and integrate biomass conversion with existing dry grind ethanol plant to improve the overall process economics. ABRD has formed alliances and partnerships with companies and research organizations, who are recognized as leading experts in the biomass conversion field, to ensure the successful development of biomass ethanol technologies. Bench scale research and process evaluation are being carried out at the National Renewable Energy Laboratory, Novozymes North America, SunOpta Inc., and Auburn University.



### Biocarburantes de Castilla y León

- Complete preliminary design of BCyL
- The preliminary design was completed in July 2004. The revision of the BCyL design will be completed in December. As result of these efforts SunOpta had offered a turnkey contract for BCyL for the final design, construction and commissioning of the biomass plant.

#### Background information on the BCyL Project:

The Biocarburantes de Castilla y León S.A. (BCyL) Project includes the design, construction and operation of a 5 million L/year straw-to-ethanol commercial demonstration plant. This plant will be installed next to a 195 million L/yr. cereal ethanol plant to share some of the utilities. Abengoa Bioenergy R&D is charged with providing the process and engineering design, construction supervision, and start-up of this first of its kind turnkey plant.





### Gasification and Catalysis

- Development of an ethanol catalyst initiated
- The ACES catalyst development project launched at ICP.

Background project information:

Under gasification and catalysis research, the Sixth Framework contract has been signed. The ACES Project is progressing with preparation of reactor and laboratory conditioning.

ACES is a research project that is being carried out with the CSIC, in the ICP (Catalysis and Petrochemical Institute) facilities in Madrid, where are being developed other ABRD projects as well. The main objective of ACES is the development of a catalyst ready to produce ethanol from syn-gas, which consists essentially in a mixture of Carbon Monoxide and Hydrogen. This is the key step on the thermo-chemical pathway to ethanol synthesis from biomass.

source to feed fuel cells; and turn bioethanol into a hydrogen vector.

The EOS Project has been developed in collaboration with the Catalysis and Petrochemical Institute (ICP) of the CSIC (Superior Council of Scientific Research). All the project's experimental activities have been carried out at their facilities. The project has received financial support from the CDTI, the Centre for Industrial Technological Development of the Ministry of Science and Technology.



### Energy Crops (Profit)

- Initiate development of energy crops
- Initiated the development of sweet sorghum and Jerusalem artichoke under the profit award in collaboration with the Escuela Superior de Ingenieros Agrónomos of the Universidad Politécnica de Madrid, and the Instituto Tecnológico Agrario of Castilla y Leon.

### E-Diesel/ FFV/ E95

- Agreement established to initiate e-diesel viability evaluation
- Profit agreement signed and viability evaluation initiated in collaboration with Cidaut, and additive suppliers.

The clone selection study by sugar content is completed in the energy crops arena.

### Fuel Cell

- Complete ethanol reforming prototypes (1kW and 10kW)
- The milestones were met and the deliverables to the Spanish Navy have been accepted. We are in negotiations to sign a new contract for a 300 KW reformer.

Background information on the fuel cell research project:

Abengoa Bioenergy initiated the EOS Project three years ago. The goal of this Project is to demonstrate the viability of the bioethanol process as a hydrogen





### New Projects

#### USC grant for wheat and barley:

Abengoa Bioenergy through its subsidiary Bioetanol Galicia has been awarded, by the Headquarter of Investigation and Development of the Xunta of Galicia, an R&D project for the study and optimization of the production of bioethanol from cereals, such as wheat and barley.

The applied research activities will be developed at the Technological Research Center belonging to the group of Chemical Biotechnology and Bioprocesses of the Engineering Department of the University of Santiago de Compostela (IIT-USC).

#### Agrobiol Project (Profit):

The Spanish government awarded Abengoa Bioenergy S.A. the Profit project to study the viability of producing bioethanol from sorghum and artichoke crops.

The project will also demonstrate the suitability of bioethanol as an alternative fuel, in both ethanol/gasoline and ethanol/diesel blends for conventional vehicles, and to produce hydrogen for fuel cells.

#### Renew Project

The RENEW Project was awarded under the 6th Framework Programme of the European Commission to develop, compare, (partially) demonstrate and train on a range of fuel production chains for motor vehicles. This project is coordinated by Volkswagen AG (Germany) and Abengoa Bioenergy is one of the key participating partners.



### Alliances and Partnerships

#### Alliances

ABRD entered into two strategic alliances this year:

- (1) SunOpta for pretreatment, fractionation, and engineering services.
- (2) Novus for product characterization, proof-of-concept, field validation and commercialization of new feed products.

#### Partnerships

ABRD has entered into collaborations with the following partners to develop and demonstrate biomass technology:

- Novozymes Enzyme application
- Genencor Enzyme supplier
- Auburn University Analytical support
- NREL Pretreatment, AspenPlus Model, NIR Rapid Analysis
- Harris Group Engineering design.



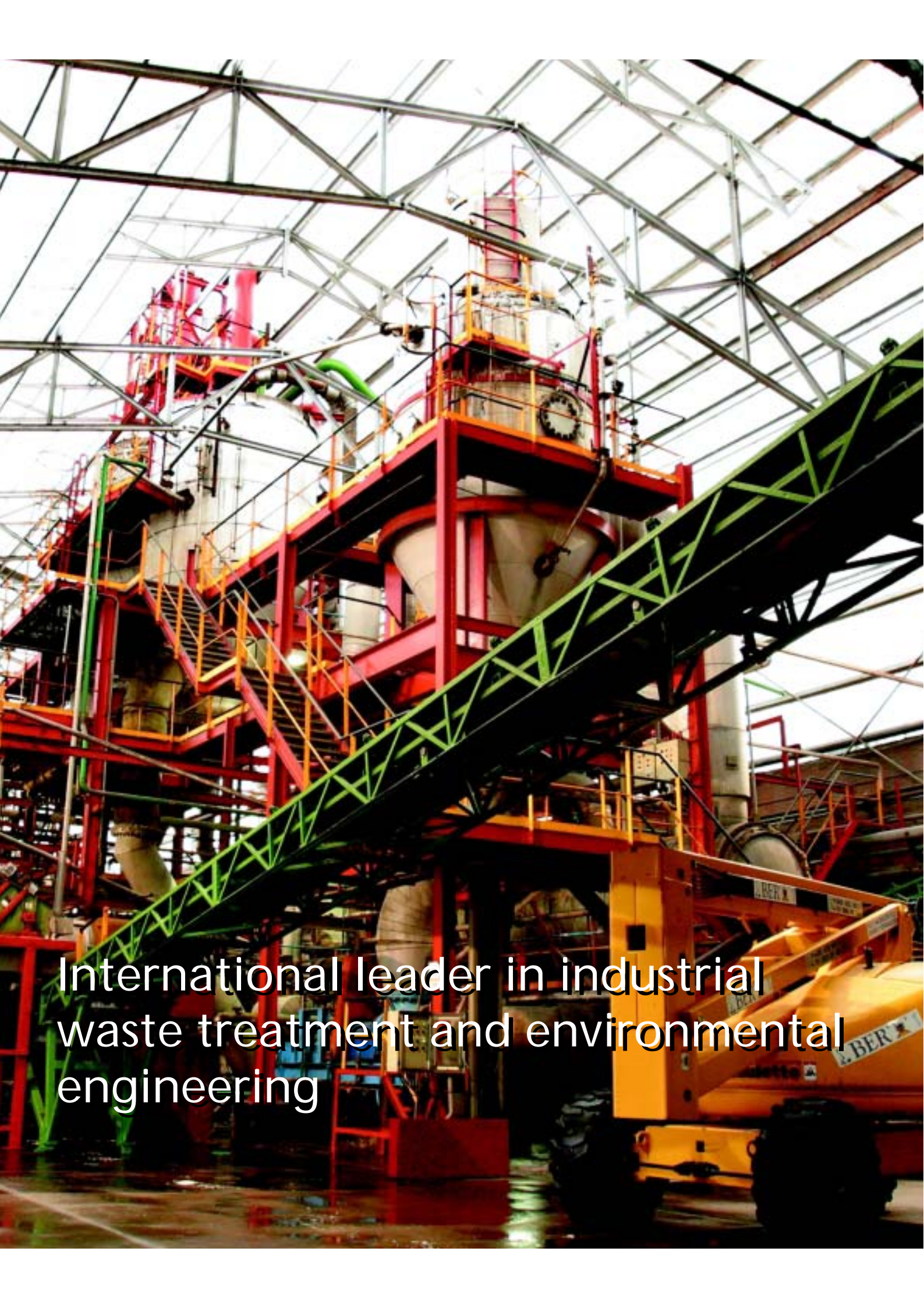
# Environmental Services

[www.befesa.es](http://www.befesa.es)

- Aluminum, salt slags and zinc waste recycling. Industrial Waste Management, Industrial and Hydrocarbon Cleaning. Environmental Engineering (engineering and construction for water treatment and waste management).







International leader in industrial  
waste treatment and environmental  
engineering

The 2004 financial provided clear evidence of Befesa's commitment to the strategic plan it drew up a few years ago. It was a year in which new projects were undertaken, especially organic growth and the consolidation of restructuring processes undertaken in previous years. The former is intended to create a project portfolio that will enable Befesa to maintain its historic growth levels in the future. The latter is to strengthen and add value to Befesa's position in some of the activity fields it operates in.

The last three years have been intense as regards investment, divestment and restructuring operations. Once this significant effort had been made the company had to arrange, restructure and optimize its position in the market. And this is precisely what Befesa undertook to do this year, responding to the commitments established in its Strategic Plan and at the beginning of the 2004 financial year itself.

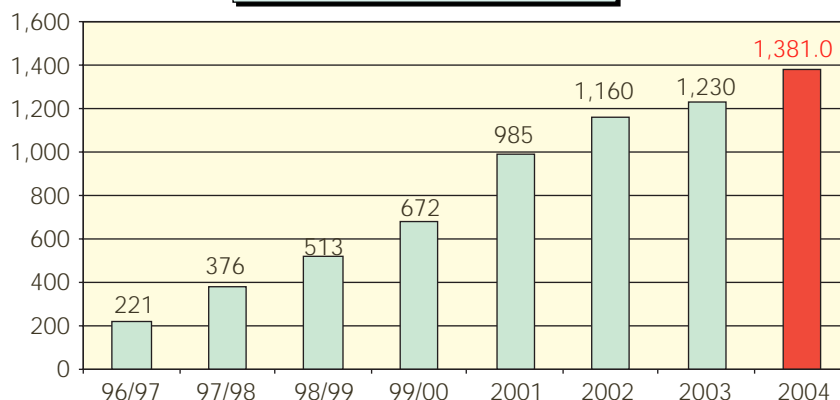
The activity structure launched in the 2003 financial year was consolidated in 2004, and to this end several mergers were made in the Industrial Waste Management, Environmental Engineering, and Industrial and Hydrocarbon Cleaning business units. This merging process went beyond a simple judicial restructuring of the companies and affected all their areas. New commercial, industrial, logistics, and information system management models were implemented, and at the same time, the management teams of the different units were strengthened.

In addition to the above, 2004 was witness once again to Befesa's undertaking to increase its presence abroad. Being aware of the potentiality of our activity for under-developed markets, Befesa continued, either with the launching of new activities in countries in which it already operated, be it on a small scale, or with the setting up of new companies in areas where Befesa had not yet begun to provide its services.

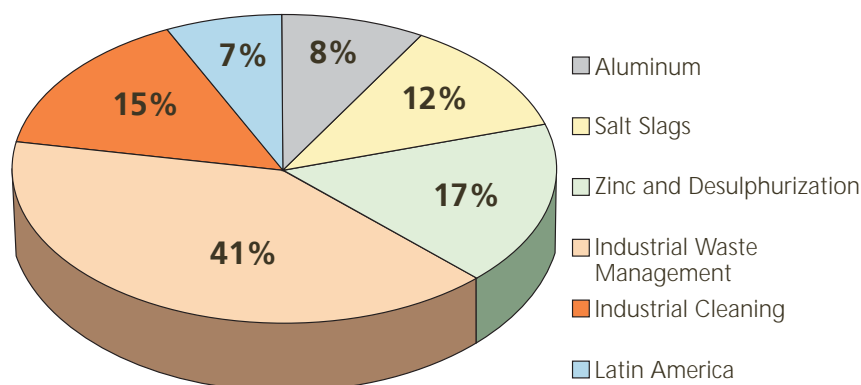
Once again, Befesa increased the number of treated tons and, in 2004, treated almost 1.4 million tons of industrial wastes, a 16% increase on the previous year, and since its establishment approximately 7 million tons. It has therefore contributed greatly to

environmental protection and the efficient reuse of resources in which nature is lacking. Of the 1.4 million tons treated in 2004, more than 567 thousand tons were returned to the production cycle by recycling processes.

**Treated Wastes (thous. Tm.)**



**% by Line of Business 2004**





As was the case last year, Befesa made a significant effort in terms of R&D&I investment, focusing on the processes at the top of the pyramid with established hierarchies between minimization, reuse, recycling, valorization and disposal of wastes. The well-made investments were particularly important in enabling the wastes delivered to our facilities to be recycled and valorized.

From a Quality and Environment point of view, Befesa promoted the progressive implementation of environmental management systems standardized and certified according to standard ISO 14001, and the progressive implementation of quality management systems certified in accordance with standard ISO 9000 in all its main activities. It is of the opinion that the strict requirements derived from these systems are the surest guarantee the company can offer its shareholders, customers and the Public Administration, as well as to society as a whole, in relation to its commitment to the sustainable development of its activities. Thus, in 2004, the companies that already had their Environmental Management Systems implemented in accordance with ISO 14000 were responsible for 87% of the billing and those with ISO 9000-certified Quality Management Systems represented, at the same time, 97% of these sales.

In 2004, Befesa's sales were 363 million euro, a 2 percent increase on the 2003 figure. Ebitda for 2004 was 38 million euro, almost the same as the previous year and this, in spite of the divestments made towards year-end 2003. Earnings before tax at the close of the 2004 financial year were 11.4 million euro, a 6.5 percent increase on the previous year, while the earnings after tax were 20.5 million euro as a consequence of the activation of the tax deductions that were pending application. All the magnitudes of Befesa's profit-and-loss account for the 2004 financial year indicate a clear recovery, especially in the aluminum recycling activity. All the above allows us to conclude by stating that, in spite of the divestments, Befesa has not only managed to maintain practically the same magnitudes, but also to reposition those for whom the market conditions were less favorable.

Befesa's consolidated balance sheet for the 2004 financial year show assets of 518 million euro, which is a 10 percent increase on the previous year as a consequence of the investments Befesa has been making in almost all its business units.

### Business Units

#### Aluminum Waste Recycling

Befesa's Aluminum Waste Recycling business unit's mission is the treatment of any kind of aluminum-content waste or scrap without generating solid wastes during the treatment process. Our objective is zero dumping.

This unit is responsible for all the activities related to the providing of collection and treatment services for the abovementioned wastes, the manufacturing and marketing of aluminum alloys, and the design, construction and installation of aluminum and zinc recycling equipment.

Befesa, through Befesa Aluminio Bilbao, Befesa Aluminio Valladolid and Galdan is the undeniable leader in the Spanish market and one of the main players at European level.



During the past year, this unit underwent a successful reorganization process, under which non-profitable activities unrelated to the recycling activity were abandoned, which enabled us to improve the competitiveness of the unit's companies. In spite of there not having been any significant improvement in market margins – large drop in prices and a significant reduction in demand -, and as a consequence of the abovementioned restructuring, the Aluminum Recycling business unit improved its figures quite considerably, in relation to treated waste volume, manufactured alloys and results achieved.

The pool of Befesa companies in this business unit treated close to 115,000 tons of waste, 17% more than in the previous year.

Within the unit's activities, we would mention the Trading activity which has commercialized and acted as intermediary for 17,400 tons.

Likewise, the Technology division, dedicated to the design, construction, installation and commissioning of turnkey facilities for the aluminum and zinc industry, this year passed the figure of 100 facilities executed in 40 countries since it commenced activities.

The main activities in 2004 by the Technology division were:

- Design of a new transportable waste compactor model for it to be demonstrated to potential customers.
- Modification of Aluminium Dunkerque's ingot conveyor belt, adaptation of the "Remetal" running out wheel and enhancement of the cooling system.
- Design and manufacturing of two zinc tapping lines (one for 25 kg ingots and the other, semiautomatic, for jumbo-sized 1,000 kg ingots), which were sold to the Indian primary zinc manufacturer, Hindustan Zinc.
- Design and manufacturing of three ingot mold belts to be brought into operation in 2005 with a stack-loader, for Balco, in India.



- Completion of the contract for the supply of a zinc ingot mold line for Skorpion, in Namibia. This was the first time for us to apply our know-how to the zinc sector. The line is in operation with production levels never before achieved with this material.

### Salt Slag Recycling

Salt slag is a hazardous toxic waste generated during the aluminum waste recycling process. The recovery of salt slag is the alternative to dumping and the



object is to separate the metallic aluminum, the salt and aluminum oxide to enable reuse of all the components. This activity, together with that developed by the Aluminum Waste Recycling business unit, enables us to close the recycling cycle completely and integrally exploit the aluminum-content wastes, with the activity being considered one of zero dumping.

The company possesses the only in-house technology salt slag recycling facility that currently exists in Spain, in Valladolid, which, with an installed capacity in excess of 110,000 tons/year, provides a service for almost all the secondary aluminum foundries in Spain and, during the process, recovers a small quantity of powder produced during the aluminum waste crushing process.

Likewise, Befesa Salts Slags, based in Whitchurch – Shropshire, United Kingdom, with a 70,000-ton/year treatment capacity, can treat the entire volume of salt slag generated in the United Kingdom and is the only facility of its kind in the country. The facility treats all the salt slags produced in the United Kingdom; from 50,000 to 60,000 tons/year.

During the year, Befesa Salt Slags signed long-term agreements with all the British producers. Furthermore, the facility manages aluminum waste it removes from different aluminum works throughout the United Kingdom. Some of this waste is commercialized directly and some is grinded at its facilities to recover the aluminum content. The powders generated during the grinding process are valorized together with the salt slag.

During the year, some 146,000 tons of waste were treated (salt slag and aluminum waste grinding powders), a five percent increase on the previous year. In addition, around 29,000 tons of aluminum waste was treated at the United Kingdom facility compared to the 24,000 tons treated the previous year.

From a commercial point of view, investments were made in both companies to optimize processes and maintain the facilities. Thus, at Befesa Escorias Salinas, the main cooling tower was renovated as was the roof of the warehouse, and new collectors were



installed to improve gas extraction during the oxide washing phase. On the other hand, at Befesa Salt Slags, a new screen was installed in the grinding plant to increase the salt slag powder production capacity and a new dehydration and salt extraction system to cope with the increase in salt production as a consequence of the increase in the number of tons of treated waste.

Likewise, the contacts made in previous years have been kept up with companies from other European countries to contract aluminum salt slags and grinding powders with the objective of, whenever the case arose, fully covering the treatment capacity of both facilities. At the present time, some contracts have been signed for 2005 and the intention is to continue with these negotiations so that, in the medium term, they may be used in a business unit expansion process.





### Zinc and Desulphurization Waste Recycling

Befesa's Zinc and Desulphurization waste recycling activity is carried out by Befesa Zinc Aser, Befesa Zinc Sondika, Befesa Zinc Amorebieta and Befesa Desulfuración.

During the year, Befesa Zinc Aser's facilities received approximately 110,000 dry tons of powder from electric-arc steel mills and from foundries, and 2,950 dry tons of other wastes with high zinc content. This meant that, for the second consecutive year since the company commenced activities, one hundred percent of the raw materials supply was procured on the home market.

In this respect, we would underline the satisfactory meeting of the tons covered by the long-term agreements signed with Oñeder and Arcelor for Befesa Zinc Aser to manage the powders collected from the smoke filters installed at all the main Basque steel mills.

Taking into account the above figures, throughout its sixteen and a half year existence, Befesa Zinc Aser has already recycled something over 1,570,000 tons of damp powders that contained some 350,000 tons of zinc, and about 18,500 damp tons of other wastes rich in this metal, with which close to 557,000 dry tons of Waelz Oxide have been produced with an average of 59.1 percent of zinc, equivalent to almost 330,000 tons of recovered zinc metal.

The commercialization and sale to end customers of the Befesa Zinc Aser manufactured product has been entirely the responsibility of Befesa Zinc Comercial, the company that has found an outlet for a total of 42,500 tons of Waelz Oxide over the period.



Thanks to the radical change made by Befesa Zinc Aser, in 2001, to its raw materials capturing commercial strategy, centered on substituting steel powders from abroad with waste from the home market, these last three years have seen a progressive recovery of the mean unitary margin generated by the treatment and elimination service for these materials, which, in the period in question, increased spectacularly (reaching 15.9% compared to the 3% rise registered in 2003) as a consequence of the disappearance, in this case, of the shipping and logistics costs involved to supply powders from other countries.

In 2004, Befesa Zinc Sondika recycled 9,450 tons of different zinc wastes at its facility, most of which came from the galvanizing industry. This represents a 47 percent increase on the 6,419 tons recycled the previous year.





Moreover, Befesa Zinc Amorebieta recycled 11,000 tons of different zinc wastes, a quantity similar to that of the previous year. We would stress the 2,200 tons of raw zinc ashes and the 1,450 tons of zinc scrap; with a stable recycled quantity being maintained in the case of the former, and a 12% increase achieved in the latter compared to the same period the previous year. Furthermore, 2,000 tons of high-purity zinc wastes were treated, an amount similar to that of the previous year.

Befesa Desulfuración's facility, located in Barakaldo, Biscay, initially conceived as an industrial plant for the production of sulfuric acid from pyrites, is now another example of Befesa's commitment to the environment. Since 1995, subsequent to its re-conversion, Befesa Desulfuración recycles waste sulfur retained by oil refinery filters.

Befesa Desulfuración is now a recycling facility capable of solving one of the oil companies' environmental problems, applying the cleanest and safest process for waste sulfur exploitation. At the same time, the products obtained – sulfuric acid and oleum (a composite with a high  $\text{SO}_3$  concentration level), are of very high quality and are readily accepted by customers in the chemical, paper, pharmacy, food, manure and fertilizer, and water treatment industries.

In 2004, some 104,000 tons of sulfur from desulphurization waste were processed to obtain a production of 320,000 tons of acid equivalent, with an associated generation of electric energy of 79,000 MWh which, once in-house consumption is taken into account resulted in sales of 51,000 MWh of excess energy. Both figures, that of production and excess electric energy, are absolute records in the pyrites phase, and sulfur phase.

### Industrial Waste Management

Befesa Gestión de Residuos Industriales provides specialized hazardous and non-hazardous industrial waste collection, transportation and management services to companies and public bodies in Spain

and Portugal. For this purpose, it has strategically-based technical-commercial regional offices and production facilities throughout the peninsula. These enable the company to provide an integral service for industrial waste producers, employing a treatment hierarchy in which priority is given to the minimization, reuse, recycling, valorization and disposal of wastes.

During 2004, the new structure of Befesa Gestión de Residuos Industriales was consolidated. This is the fruit of the merging of all the companies previously involved in the business unit of the same name. This new company has a highly-qualified and experienced human team and the most advanced and complete facilities in Spain, among which we would mention, an extensive network of transfer centers, as well as final management facilities dedicated to waste inerting and physicochemical treatment and disposal. Likewise, the company's market in the northern area, in Cantabria and the Basque Country, is being strengthened through agreements with other authorized waste management companies and the contracting of new commercial agents.

Moreover, 2004 saw the opening of the first of a series of non-hazardous waste management facilities. This was the non-hazardous waste transfer and classifying center in the municipal district of Ajalvir (Madrid) to reinforce the integral waste service for our customers. This inauguration is to be followed by that of the center in Alcalá de Guadaira, Seville.



Likewise, GRC, the company in Palencia that manages the deposit for the Cerrato district Pool of Villages, was acquired. This will enable Bgri to develop its non-hazardous waste activity in this region's market in forthcoming years.

From a commercial point of view, the treatment possibilities for our customers were broadened upon the Nerva center in Huelva incorporating a new non-hazardous waste disposal line and widening the typology of the wastes that can be managed at the center. We thus anticipated the requirements legislation will impose for deposits in 2005. Moreover, the size of the deposit basins at Nerva and Cartagena was enlarged and their waste handling and conditioning and laboratory facilities and equipment improved. An evaporation-condensation facility for lixiviate treatment was also installed at the Cartagena center.

Befesa Gestión de Residuos Industriales managed a total of 586,062 tons of industrial wastes, a 22 percent increase on the previous year's figures.

### Industrial and Hydrocarbon Cleaning

The Industrial and Hydrocarbon business unit is formed by Befesa Tratamientos y Limpiezas Industriales; Befesa Gestión de PCB, Befesa Plásticos and Befesa Técnicas del Suelo.

Befesa Tratamientos y Limpiezas Industriales was established in 2003 following the merging of four companies. The company carries out its activities in the industrial services sector for customers from the public and private sectors through a wide-ranging offer of services that includes solid, liquid and sludge suction and blowing, high-pressure cleaning works, extremely high pressure water applications for demolition, cutting and specialized cleaning operations, waste management and treatment at the customers' own facilities, and tank cleaning services at refineries and large oil-producing facilities, chemical cleaning services,

charging, loading, unloading and management of used catalysts, as well as the contaminated lands management and remediation activity.

The company's customer portfolio comprises large companies, among which we would especially mention oil companies and multinational companies from the chemical and electrical sectors, small and medium-sized companies, private individuals and municipal districts.

The situation of the market on which the company is focusing is characterized by the tendency in companies towards the outsourcing of services not directly related to production, stricter legislation and standardization, and a productive model that is seeking to be more agile and flexible. Thus, in 2004, Befesa Tratamientos y Limpiezas Industriales continued to develop a strategy designed to consolidate a type of company capable of providing specialized industrial services and of adapting to market needs.

In 2004, the structuring of the company and operations organization on the basis of three geographical regions (Asturias, Basque Country in the north; Catalonia, Aragon and Levant in the east; and Andalusia-Levant in the south), and five fields of activity with their corresponding technical managers, was completed. Furthermore, the





integral management service for large-size customers was consolidated and the investment plan initiated in 2003 was completed. The company now has unique capacities for the handling of pulverulent materials and has consolidated its tank cleaning and mobile unit capacities.

In relation to production, we would mention the more than 120,000 tons processed by the facility Befesa operates for CEPSA at its refinery in Algeciras, the more than 10,000 tons processed by the mobile units for different customers, and the contracts awarded to clean five large diameter tanks, in Spain, and two tanks, in France. The awarding of the contracts in France has definitively consolidated the launching of these operations at European level, through the participated company ET2C, which was set up with SODI, from the Veolia group.

At another type of facility, the Industrial Cleaning and Hydrocarbon business unit also recycles most of the country's greenhouse plastic sheeting through Befesa Plásticos, and Befesa Gestión de PCB offers an efficient solution for PCB-contaminated equipment.

Befesa Gestión PCB specializes in providing efficient collection, transportation and disposal solutions for PCB-contaminated transformers, condensers and materials. In 2004, it confirmed its leading position against the rest of the national managers by increasing its market share by more than 55 percent, of the total number of PCB-contaminated items treated, according to figures published by the

Asociación de Empresas Gestoras de Residuos y Recursos Especiales (Asegre).

Some 2,700 tons of PCB-contaminated equipment and materials were treated at the Company's facilities, a volume that confirms the strength of the company in a year in which the Spanish market as a whole experienced a significant drop in the number of tons treated.

On the other hand, Befesa Plásticos specializes in the manufacturing of special low-density polyethylene plastic grain by recycling the sheeting used as greenhouse covering. In 2004, over 13,000 tons of sheeting and used irrigation piping were recycled at its facility and production in excess of 10,500 tons was achieved.

In addition, last year, the Industrial and Hydrocarbon Cleaning business unit undertook a new activity through Befesa Técnicas del Suelo, dedicated to the remediation of contaminated land.

### Environmental Engineering

Befesa's Environmental Engineering activities are focused on the construction and operation of infrastructure, and the providing of services for the integral water cycle, and waste management.

The acquisition of Codesa was a relevant event in 2004 in this field. It is a company specialized in water treatment, supply, purification, and in hydraulic and environmental activities oriented towards public administration and the private sector.







Together with the integration of its management team, an in-depth reorganization of the Environmental Engineering business unit was carried out, resulting in it being structured into two lines of activity:

- A. Construction, where Befesa Construcción y Tecnología Ambiental, Befesa Fluidos and the recently acquired Codesa have been integrated. To develop growth and better exploitation of the synergies between the three companies, seven regional branch offices were set up (central, southwest, southeast, Murcia, Autonomous Region of Valencia, Catalonia, north and abroad). They are all common for the three companies.
- B. Operation. In the water sector, the activity is developed through Befesa's participation in the company Agua y Gestión. In the waste sector, through Befesa's participation in several Joint Ventures with waste treatment center operation contracts and in the company called Procesos Ecológicos Vilches, proprietor of the pig slurry treatment facility in the province of Jaen. The company Iniciativas Hidroeléctricas, concessionaire of the operation of the Cerrato working fall in Palencia, is also active in this sector.

Befesa Construcción y Tecnología Ambiental maintained its leading position on the home desalination market and is an ever-growing reference abroad. In 2004, it was awarded two important contracts with Codesa that will require a 230-million euro investment, in Algeria, one in Skikda and the other in the town of Beni Saf, close to Oran. Befesa

has a fifty percent shareholding in the consortium through Befesa Construcción y Tecnología Ambiental, and Codesa.

The plants at Skikda and Beni Saf will have a 100,000 and 150,000 cubic meter/day desalination capacity, respectively, and will provide a water supply for some 500,000 inhabitants in Skikda, and 750,000 in Beni Saf. Reverse osmosis technology will be employed at both plants.

In the Hydraulic Works sector, with the company having been awarded several new contracts during the year under the National Irrigation Plan, it consolidated its traditional leading position in this activity. The rest of the activity included water supply and purification works, hydroelectric power plants, water treatment, automatic information and control systems, and waste facilities.

On the other hand, Befesa Fluidos specializes in industrial water treatment for the private sector, in incoming, process and wastewaters, and complements its activity with others such as powder capturing, and the handling of fly-ash and slag in Thermal Power Plants.

Continuing with the tendency in previous years in the water market, there was an increase in the number of calls for bids from the Ministry of the Environment itself and its State-owned Catchment Basin Companies, and from the Ministry of Agriculture, Food and Fisheries through the State-owned Agricultural Infrastructure Companies, responsible for the investments being made in the modernization of



irrigation systems under the National Irrigation Plan, and from the rest of the public sector in general.

The re-directing of the National Hydrological Plan, with the elimination of the Ebro Transfer System, not only did not seriously weaken the activity in the hydraulic market, but opened up enormous perspectives for Environmental Engineering through trust being put in desalination. The Autonomous Regions and local authorities responsible for urban wastewater purification and treatment works continued to invest strongly to have them completed in 2005, as specified in regulation 91/271.

On the foreign market, the company's presence in international calls for bids increased, which resulted in the awarding of contracts that will enable the sustained growth of the business unit.

Other relevant contracts:

Befesa Construcción y Tecnología Ambiental:

Irrigation modernization:

- Irrigation system Modernization and Consolidation works for the User Community of the Carlet Common Irrigation Ditch, in Valencia.
- Irrigation system Modernization for Guiamets reservoir users' community, in Tarragona.
- Phase I of the Irrigation System Improvement and Modernization project for the Babilafuente Canal User Community, in Salamanca.
- Two captured water pumping stations and the first section of the drive pipeline for the Segriá Sud irrigation project, in Lerida.
- Enlargement modernization and consolidation of the Sur-Andévalo User Community's irrigation area.

Hydraulic works:

- The connection of Villanueva de Cordoba to the north of the province's water supply system.
- Supply works for the new urban districts of Malaga.
- Itoiz dam-toe power station, in Navarra.



Information and Control Systems

- The Automatic Hydrographic Information System (SAIH) in the river Duero catchment basin, for its Hydrographic Confederation, which will enable management and operation of the basin's hydraulic resources to be implemented, and improvement of the meteorological information required for flood forecasting and tracking with the aim of minimizing them and gaining maximum control over possible damages.
- Regulation Improvement and Automation of the Villoria Canal Irrigation Area.

Waste treatment and management

- Four waste transfer centers in Guadalajara: Sigüenza, Molina de Aragon, Cifuentes, and Yedra.



### Befesa Fluidos:

- Treatment plant for effluent from the slag extinguishing area and B.O.F. water treatment plant for dumping into a public waterway through the Steel Mill's perimetric canal, complying with the legislation in force, for Aceralia, at its facility in Aviles.
- Maintenance of Abengoa Bioenergy's bioethanol production facility effluent treatment plant, in Teixeira, Galicia.
- Bioethanol production facility effluent treatment plant, for Biocarburantes Castilla-Leon.
- River Tormes water draw-off settlement tank for the bioethanol production process at Babilafuente, Salamanca.
- Supply of spare parts for the main air-conditioning units at IEC's thermal power plant, in Israel.
- Emptying of the scarfing circuit's rectangular settlement tank, at Aceralia's factory, in Aviles.
- Effluent treatment plant for Ecoinsa, in Barcelona.

### Codesa:

- Management contracts for the Catalonia Water Board, under the service operation, conservation, maintenance and improvements modality, for the treatment systems of: Avinyó, Bâscara, Ventalló, Vilamallà, Sauscamallera, Sant Miquel de Fluvià, Cervià de Ter i Vilajuïga, in Gerona, and L'Espluga de Francolí, in Tarragona.
- Benamahoma, Grazalema collector and STW, in Cadiz.
- Improvement works on recreation areas of several nature parks in southern Alicante.

### Main construction activities in 2004

#### Befesa Construcción y Tecnología Ambiental:

- Abroad, El Carigán Potable Water Treatment Plant was brought into service. The works were executed under the Loja Potable Water Master Plan.
- In desalination, completion of the works and testing of Almeria seawater desalination plant and El Atabal de-brining plant.
- Completion of the works to change the Villarreal (Castellon) Irrigation Area's traditional system to a localized system.



- Works continued on the modernization, automation and remote control monitoring of the hydraulic infrastructure of Sector B-XII of the Lower Guadalquivir, in Iebrija, Seville.
- Completion of the Negratin-Almanzora water transfer works, in Granada/Almeria.
- Works continued on Section I, Cortes Drive (Valencia) on the Júcar-Vinalopo water transfer pipeline.
- Completion of the works on the general collectors, discharge outlet and the Teulada-Moraira Sewage Treatment Plant.
- Completion of the construction and bringing into operation of the Guadalajara Urban Waste Treatment Center.
- Providing, in 2004, of operation, conservation and maintenance services at the STWs of the Eastern Sector, in Barcelona.
- Providing of operation, conservation and maintenance services for the Collectors and STW of Activity XIII of the Autonomous Region of Madrid's 100% Treatment Plan.
- Providing of Automatic Hydrological Information System maintenance and operation services for the Guadalquivir's Catchment Basin.

### Befesa Fluidos:

- Completion of the Lixivate Treatment Plant at the Talarrubias Urban Solid Waste Plant, in Badajoz.
- Completion of the construction of the





seawater draw-off and demineralization chain for the Barranco de Tirajana Combined-Cycle Thermal Power Station on the island of Gran Canaria.

- Cooling tower for the secondary circuit of the blast furnace for Aceralia's factory at Veriña, in Gijón.
- Lixiviate atmospheric evaporation plant for Trademed's waste treatment facility, in Cartagena.
- Completion of the contracts for Aceralia's factory, in Aviles:
  - Enlargement of the LDA steel cooling circuits.
  - New GCK compressor room.
  - Enlargement of the B.O.F. Gas Scrubbing and Sludge Treatment System.
  - Wastewater Treatment and Recycling at Cok Batteries Sulfates Plant.
  - New location for Sulfuric Acid and P.S.A. storage and supply on East-Lamination.
- With only testing pending, the Effluent Treatment Unit for the Primary Stage of the urban waste deposit was completed.
- The Lixiviate Treatment Plant for the Los Ruices-Limasa Environmental Center, in Malaga, is in an identical situation as the above.

Codesa:

- Completion of Ence's (National Cellulose Company) effluent treatment plant, in San Juan del Puerto, Huelva.
- Completion of the enlargement of the Sewage Treatment Works (STW) at Baena, in Cordoba, put out for tender by Giasa.
- Works continued on the construction of Ence's effluent treatment plant, in Pontevedra.
- Montemayor STW in Cordoba is under construction for Gestión de Infraestructuras de Andalucía.
- Treatment works and services for the affected areas of the Aznalcóllar Environmental Activities Park, in Seville. .
- Work is being carried out on the Facinas (Municipal District of Tarifa) collector and STW project, the spills from which affect the Los Alcornocales Nature Park, in Cadiz.
- In Tarifa (Cadiz), the Wastewater Treatment Facility for the urbanization is being built for Atlanterra Inmobiliaria.

- The Arcas del Villar and Villar de Olalla STWs are under construction in Cuenca, for the Department of Public Works of Castilla La Mancha.
- Enlargement of the Paterna de Rivera (Cadiz) potable water treatment plant.
- Wastewater pumping stations at Lubet are under construction for Aguas de Cádiz.
- Improvement of Poble Tornesa STW for Castellon County Council.



## Main Operation activities in 2004

Since the 2003 financial year, Befesa holds, through Befesa Construction y Tecnología Ambiental and Codesa, a 36% shareholding in the company Agua y Gestión de Servicios Ambientales, S.A., established jointly with the Ayesa Group, Codesa and Itsmo94, vastly experienced companies in the water sector and in providing public services. It also has strong financial backing upon the savings bank El Monte de Piedad y Caja de Ahorros de Sevilla y Huelva holding a financial interest as well. Over this period, Agua y Gestión has managed the Municipal Services of El Ejido (Elsur), Almería, and the Water Services of Baena, in Cordoba, of Barbate and Vejer, in Cadiz, Herrera, in Seville, and Puebla D. Fabrique and Ugijar, in Granada. In this way, Agua y Gestión manages the water supply for 150,000 inhabitants in Andalusia.

In the waste plant management activity, in 2004, operation services continued to be provided for the Urban Waste Selection and Composting Plant in Utrera, Seville, with a population of 100,000, for the Pool of Municipal Districts of the Lower Guadalquivir area, and for the waste deposit owned by Consorcio del Poniente Almeriense, in El Ejido (Almería), capacity 140,000 inhabitants. Upon completion of the works in 2004, operation of the Guadalajara Urban Waste Treatment Center commenced. Its treatment capacity is for 200,000 inhabitants, 80,000 tons/year and it was built for the Castilla La Mancha Regional Government.

In addition, the pig slurry treatment activity continues through the operation of the Vilches treatment plant, in Jaen.



# Information Technologies

[www.telvent.com](http://www.telvent.com)

Telvent, the Global RealTime IT Company, is specialized in operation and solutions with high technological added value, in the sectors of Energy, Traffic, Transport and Environment in Europe, North America, Latin America and Asia.

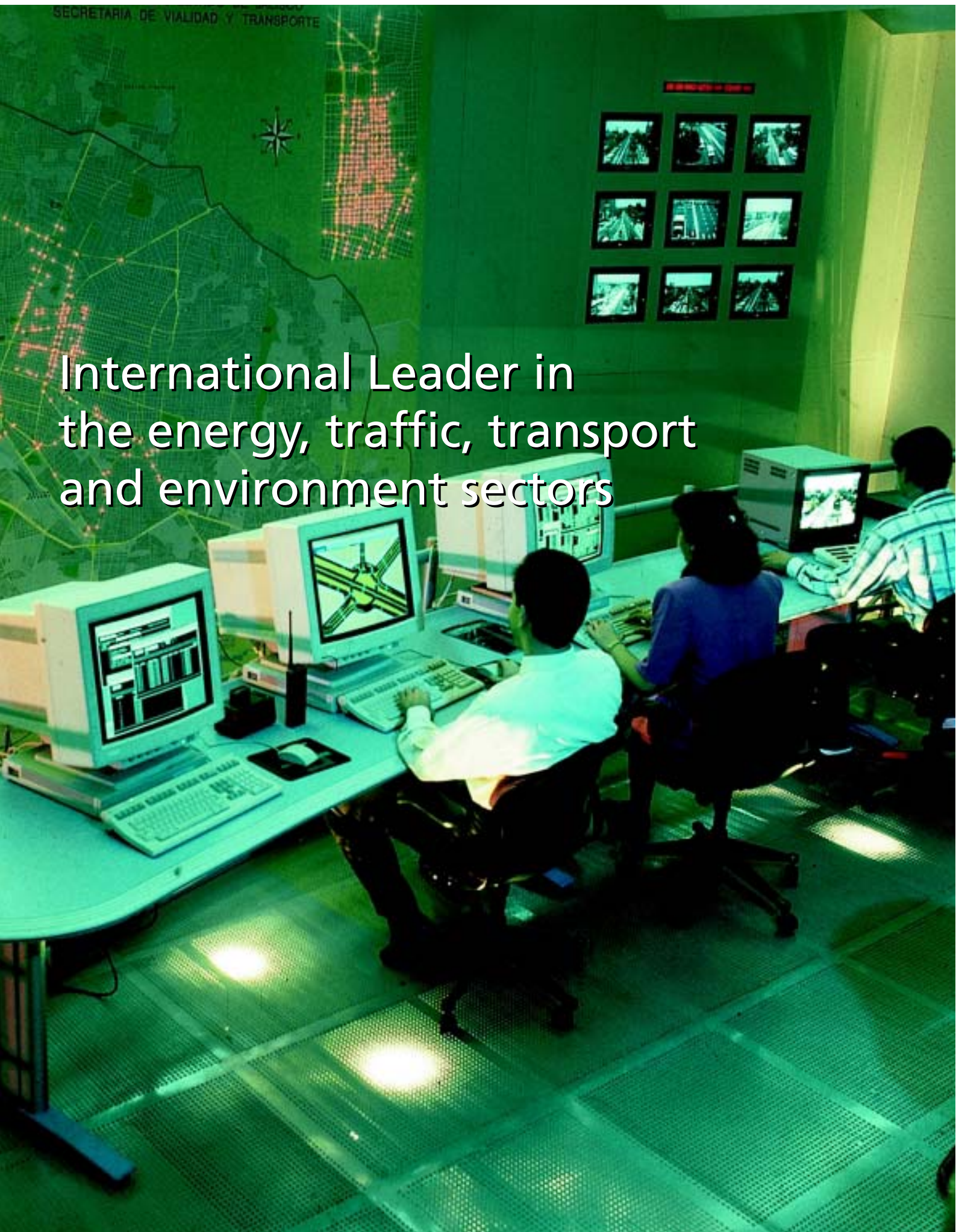
With over 40 years experience in industrial supervisory control and business process management systems, Telvent executes projects and provides technical services in the field of mission-critical, real-time control and information management, complemented by a complete offer of outsourcing and consulting services, as a result of this manages technological and IT infrastructures for an extensive international client base.





SECRETARIA DE VIALIDAD Y TRANSPORTE

International Leader in  
the energy, traffic, transport  
and environment sectors





### Executive Summary

In the year 2004, the continued recovery of the Information Technologies industry, which started in the second half of 2003, was clearly evident, although it was more moderate than expected. This is reflected, for example, in the small annual progress registered by the Nasdaq index. It is clear that the geopolitical situation was more uncertain than expected at the beginning of the year, and that the unexpected rise in oil prices, approximately 34% by year's end, has slowed the growth of many economies, which have revised their growth expectations downwards for the last quarter of 2004.

The continuing weakness of the American dollar against the euro, with a devaluation of approximately 8% over the year, has negatively impacted the competitiveness of those companies operating their businesses in the euro zone, resulting in a reduction of growth in those activities conducted in American dollars, as was the case with Telvent.

It is important to point out that during this past year, changes have occurred in the political and government processes in two of the main geographical areas in which Telvent operates: specifically in Spain and United States. These processes of change, although they took place under normal conditions, have resulted in the typical uncertainty that accompanies any major change in the environments in which companies conduct business.

In reference to the RealTime Information Technologies sector of those industries where Telvent operates, a series of trends were confirmed during 2004 that had been become evident at the end of 2003:

- A greater interest expressed by customers in understanding the return on technology investment, giving greater importance to functionality and less to the technology itself.
- A continuous growing demand for solutions fully integrated with the set of business systems.
- A growing interest in the advantages of shared management, or "co-sourcing", of technological solutions.



In this environment, during 2004 Telvent reached an important benchmark in its history on 21 October after placing 32% of its capital on the Nasdaq technology stock market at a price of 9 American dollars per share. This very important step in the development of Telvent's Strategic Plan represents a significant accomplishment and will help facilitate future financing channels for acquisitions and investments in BOT integrated projects, since it provides Telvent with a solid balance sheet and a very low leveraging level.

This achievement has been even more extraordinary considering the fact that the placement was made in the prestigious North American Nasdaq market, which represents a challenge for any public company, since the Nasdaq is regarded as the most demanding and competitive of the existing stock markets. It is also important to note that Telvent is the first Spanish company to be quoted on the Nasdaq through the issue of ordinary shares, as would be the case for a US-based company. This successful initial public offering has resulted in a substantial increase in requests for information on the company and also requires the fulfillment of the rules established by the North American securities market regulator, the Securities and Exchange Commission (SEC).



The entry onto the Nasdaq Exchange also points to the company's success achieved since the 2003 acquisition of the NMS division of Metso, which signifies much more than a simple consolidation of financial figures. Instead, it represents Telvent's new strategic direction and its increased focus on the North American marketplace.

As at the end of 2004, Telvent is a company in which 25% of its approximate 2,400 professionals are now based in North America, with offices in the Houston, Baltimore, Fort Collins, Philadelphia and Athens in the United States and in Calgary in Canada, a position it has achieved in just two years, which began with the acquisition of Metso NMS.

Today, Telvent systems and solutions help to safely and efficiently manage the technology infrastructure for a variety of enterprises operating in the energy, traffic, transport and environmental sectors. The industry statistics corresponding to Telvent's participation include:

- Transportation more than 10,300 million barrels/year of crude and derivatives through more than 280,000 km of oil pipelines.
- Distribution of more than 12 billion cubic feet of natural gas, supplying more than 94 million people.
- Generation of more than 12,500 Gigawatt hours of electrical energy.
- Transportation and distribution of more than 140,000 Gigawatt hours of electrical energy, providing electricity to more than 80 million people.
- Monitoring and controlling of vehicular traffic in more than 6,600 intersections through which 170 million people pass through each day.
- Managing the daily movement of more than five million people through more than 8,700 kilometers of motorways, expressways and tunnels.
- Transportation of more than two billion passengers a year in train and subway networks.
- Ensuring the safe and efficient departure and arrival of more than 60 million passengers a year in more than 70 airports.

During 2004, three acquisitions were completed that were tremendously strategic for Telvent. Each of these acquisitions, which were considered very carefully beforehand, have the potential to make different contributions that will enrich the overall organization.

The first of these acquisitions, carried out in the month of May, involved the Spanish company ICX, which is specialized in Information Technology solutions for the health industry, a sector in which Telvent has had significant interest in recent years. With this acquisition, Telvent is now provided with a more comprehensive solution for this sector. The acquisition also brings with it, important references in the Andalusian Health Service, as well as a team of professionals specialized in this sector.

In the month of August, the acquisition was completed for the Western Region division of xwave, an IT services enterprise based in Calgary with experience in the development of management solutions for technology infrastructures, focusing in particular on the energy sector. With the addition of this company, Telvent's service offering for the energy sector has been reinforced and complemented.

Finally, in the month of November, the purchase of the majority equity stake in the American company Miner & Miner was successfully completed. This company, which is based in Fort Collins, Colorado, is specialized in the development of GIS (Geographical Information Systems) solutions. Miner & Miner, one of the principal technological partners of ESRI, the leading company in Geographical Information Systems, is the developer of the ArcFM systems that help to efficiently manage energy companies' assets, including geospatial information. Another product in Miner & Miner's solutions suite, Responder, which is an Outage Management System,, helps electric utilities to quickly resolve any potential outage situations that might occur in their networks.

There remains as a challenge for 2005 the successful completion of the integration of these three companies, however, based on the experience accumulated with the integration of Metso NMS, and the prior knowledge that existed of these company's personnel expertise and technological solutions, a successful integration outcome is almost guaranteed.



With the goal of improving the profitability of our activities and becoming more efficient in our operations, during 2004 we have continued with the unification process of the general services departments, which provide management services in Human Resources, Administration, Finance, Operations, Systems and Quality from a central unit to all the business units. This structural change follows along with our firm determination to continue maintaining a strict general expense policy, despite the growth in business volume.

In 2004 we continued with the development of specific projects to improve the processes under the 6 Sigma methodology, the success of which has already impacted Telvent's income statement based on the eight projects that were completed during the past year.

This year the trend towards increased activity volume in Outsourcing and Technological Infrastructure Outsourcing has continued, due in large part to the multi-year contracts that Telvent has signed with more than 253 customers, among which are included the following new clients: EnCana, Talisman Energy, Alsa and Merrill Lynch. This activity permits us to be prepared to continue offering solutions of increasing added value in the industries in which we operate. Examples of these value-added offerings include the establishment of Emergency Recovery Centers in our installations, as well as the total or partial outsourcing of the real-time business processes in which our solutions are integrated.

The past financial year also included the awarding to Telvent GIT of the global certificates of Quality Management and Environmental Management that include all the activities and all the work centers of all the Telvent companies previously certified by AENOR in accordance with the ISO 9001:2000 and ISO 14001:1996 standards.

Regarding the EFQM Excellence Model, Telvent achieved the "Seal of European Excellence", Silver



Level, which recognizes surpassing the threshold of 400 points in an official EFQM evaluation.

It is also of interest to mention the granting to Telvent of the "V Andalusian Award for Excellence". This award, presented by the regional government of Andalusia, recognizes those companies that have contributed the most to the economic and social development of Andalusia through management systems based on the EFQM Model.



With regards to Human Resources management, Telvent has continued to make significant improvements in the work environment, including projects such as a childcare center for the children of Telvent staff in the Madrid center. During the past year, it is also important to note that Telvent has gain been chosen, for the fifth consecutive year, as one of the best companies in which to work in Canada.





### Energy

#### Electric

In the Electrical Sector, it is possible to mention that the exercise of the year 2004 has been an exercise of transition in which symptoms of recovery in the information technologies market have begun to show, specially, in the generation sector due to the influence of the taking into effect the requirements that the Kyoto's protocol marks. From this point of view, Telvent is confronting an important development effort for its solutions focused on the plants with solar and wind technology, and in the Control Offices that will govern these facilities with a few functioning parameters quite different from the rest generation points in the system.

As for the transmission market, Telvent has supported its positioning as leader of in Mexico, Brazil and Spain, emphasising the important growth on the last one, thanks to the ambitious plan of investments designed by Electrical Network of Spain (REE) to extend its transmission network with High voltage assets acquired to the distribution companies.

In Distribution, Telvent has also continued with the development of integrated applications for network management, sector in which there have been awarded two important projects that will constitute very important worldwide references like Ande in Paraguay and Steg in Tunis. The acquisition of companies with own consolidated solutions in the electrical applications market like Miner and Miner consolidates this strategic line in Telvent with a view to the future of this market in which there is expected a great demand of high value added solutions in the short and half term.

On the Electrical Traction market has been perceived a reduction in the investments of the Spanish government in High Speed as a consequence of the rethinking about the network extension plans, due to the change of the Ministry team. In the same way, Telvent has supported its position of leadership from where it expects to accede to important business opportunities in the next years.

Some of the important milestones for this past year include the following:

In Spain:

- Contract to supply 160 Medium Voltage Distribution Network Tele-control Units for Endesa Distribución.
- Completion of the project to supply Iberdrola with an Integrated Optic Cable System (SICOID). This contract will enable more efficient management of Iberdrola's optic fiber network and, as a consequence, will increase the quality of the service it offers its customers.
- Contract for two new Substation Control Systems for Red Electrica Española (Spanish Electrica Network of Spain), enabling the upgrading of its installation network.
- Contract for the supply of remote monitoring and control systems for Endesa in Andalusia (Sevillana-Endesa), Balearics (Gesa-Endesa), Aragon (Erz-Endesa) and Catalonia (Fecsa-Endesa), including more than 40 integrated control and protection systems for substations and more than 300 remote-control systems for the automation of the half tension infrastructure.



- Engineering and installation contract for the first cell of broadband access for the electric red project from Iberdrola. Telvent has been selected as one of the companies to help expand access in order to assist Iberdrola with its distribution plans for Spain.
- System for the Control of Burners in the Thermal Power Plant of Narcea for Unión Fenosa Generación. This System is responsible for executing the monitoring and control algorithms for the burners of the Plant's Group III's liquid fuel.

### In North America:

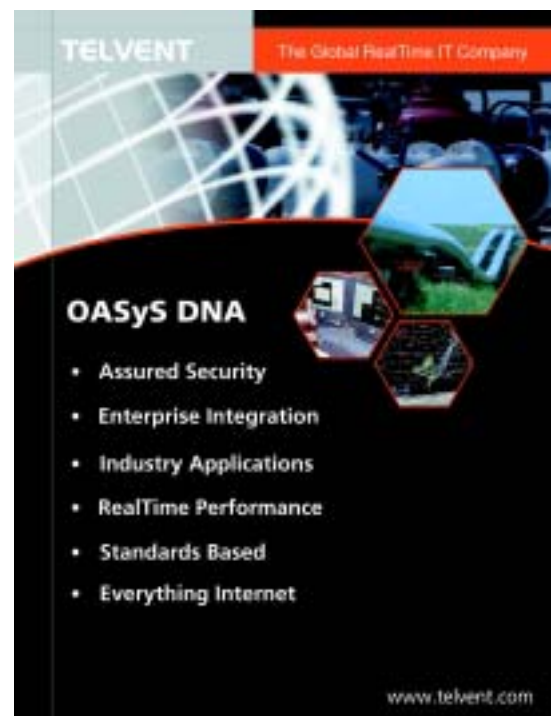
- Contract to supply the Substation Automation and RTU equipment to Oncor (the regulated energy delivery subsidiary of TXU Corp). Oncor delivers electricity to residential and business consumers and supports one of the largest energy infrastructures in the world.
- Contract to automate Zone 15 of the New York City Transit Authority's (NYCTA) system. NYCTA carries over 3.5 million passengers per day along 800 miles of track and has over 400 stations. The transit system has three main rail lines to serve the needs of one of the most populated areas of the United States - the Bronx, Brooklyn, Queens, and Manhattan.
- Contract to upgrade the OASys DMS SCADA system for the Chattanooga Electric Power Board (CEPB), which is the 15<sup>th</sup> largest municipal utility in the U.S., supplying 156,000 commercial, household and industrial customers in the southeast portion of Tennessee and the northwest area of Georgia.
- Contract to supply several units of the new SAGE 2200 RTU field device to the following companies: Conectiv Power Delivery in USA, Electricity Commission in Trinity and Tobago, Wabash Valley Power (WVPA) in USA, Hydro Ottawa Limited in Canada, Alabama Electric Company in USA, Niagara Mohawk in USA, Illinois Municipal Electricity Agency (IMEA) in USA, Oncor in EEUU, Sho-me Power in USA, and Exelon in USA.
- Supply of nine RTU units for Georgia Power Company (GPC). GPC has a network of underground substations that supply and control electric power to the downtown area of Atlanta.
- Contract for NSTAR to upgrade its outdated RTUs. NSTAR is Massachusetts' largest investor-owned electric and gas utility. NSTAR has been transmitting and delivering electricity and natural gas for more

than 100 years, and is currently servicing nearly 1.4 million residential customers.

- The North Georgia Electric Membership Corporation (NGEMC) has awarded a contract for the improvement of its electrical distribution systems. NGEMC is located in the heart of the Georgia textile region, and supplies energy to over 93,000 clients.
- The Southwest Louisiana Electric Corporation (SLEMCO), an existing client since 1982, has awarded Telvent the project for the improvement of its electric distribution system. SLEMCO provides energy in Louisiana to over 80,000 clients.

### Latin America:

- Contract for the supply, installation and start-up of the Distributed Control System (DCS) for the Cycle Combined plant for CFE's Hermosillo property in Mexico.
- Contract for the supply, installation and start-up of eleven RTU remote stations for the Electric Energy Distributor Company Electrocosta/ Electricaribe in Colombia.
- Maintenance contract for Light's Distribution Control System (SGD) in Rio de Janeiro, including three years of 24x7 maintenance covering the coordination of all SGD equipped subsystems.



- Control and protection system for Coxipó and Rondonópolis de Areva T&D substations within the Aneel concession for the 230 kV line of Coxipó-Cuibá-Rondonópolis, which was awarded to the Amazonian Consortium.
- Contract for supplying and commissioning of 20 "OCRIS" (telecontrolled post switches) units for the Distribution Control System for the Regional Electricity Co-operative (Cooperativa Regional de Electricidad, CRE) in Santa Cruz de la Sierra, Bolivia.
- Contract for the control and supervision of 20 substations belonging to the electric energy transport system operated by the ONS company in Brasil. The 20 field installation sites are located in Rio de Janeiro, São Paulo, Brasília, Goiás, Mines Gerais and Paraná.

Others:

- Contract for the modernization and improvement of the Distribution Network of Tunis for the Société Tunisienne de l'Electricité et du Gaz (Steg) company.
- Contract for the supply of an integrated, turnkey OASyS DNA SCADA system to the Electric, Gas and Bus Authority (EGO) in the Turkish capital city of Ankara, together with its in-country consortium partners. EGO is responsible for the municipal transport network (buses, subways, light rail) and the city's gas distribution.

## Oil and Gas

During 2004, Telvent has launched its new product suite, gasCAT, for remote control of Oil and Gas facilities. With this suite the portfolio of solutions is completed for the complete management of transport and distribution facilities on this market. Other significant facts in this exercise have been the completion of important projects specially in the area of Latin America that continues positioning Telvent as one of the leaders on this market and the beginning of the commercial activities in China that is one of the areas in which a major investment is expected for the following years.

In spite of the reduction of new investments, in the Latin America market, within the Oil and Gas sector,



Telvent has maintained its strong position in the attainment of new projects, principally in Mexico, USA and Canada. In addition important projects have been completed in Peru, and in Ecuador. Some of them are:

In North America:

- Contract for the gas line administration system for PECO Energy Company of Pennsylvania (USA). The system will control an infrastructure consisting of 10,620 kilometers of natural gas transmission and distribution mains, and 29 natural gas gate stations, serving a customer base of 450,000 people.
- Agreement with ChevronTexaco to use Telvent's SimSuite Pipeline High Fidelity Leak Detection System on several of ChevronTexaco's North American pipelines. ChevronTexaco and Telvent will work cooperatively to examine more than 48,280 kilometers of company pipeline to determine the best use of high fidelity leak detection.
- Completed the West Texas Pipeline OASyS SCADA Upgrade Project for Kinder Morgan Energy Partners - L.P (KMP).
- Contract to upgrade the Pembina Quindar SCADA system for the Drayton Valley pipeline system in Alberta, Canada.





- Contract to upgrade BP Cochin's OASyS 5.2.2 SCADA System with the latest OASyS platform technology. The project will include a primary control center, an offsite backup center, 47 Station OASyS sites and a remote operations center. In Canada, BP is a premier producer of natural gas and natural gas liquids.
- Contract with Trojan Pipeline L.P. based in Houston, Texas to provide a new SCADA system and advanced Liquids applications.
- Contract from the Piedmont Natural Gas Company to consolidate its pipeline distribution and transportation systems. Piedmont distributes natural gas to 940,000 clients, including industry clients as well as business and residential consumers.
- Contract from the Portland Pipeline Corporation (PMPL) to replace its pipeline monitoring and control system with an OASyS DNA SCADA system. PMPL operates 375 kilometres of crude oil pipeline, extending from Portland, Maine, in the United States, to Montreal, Quebec, in Canada.
- Contract from Buckeye Pipe Line Company for providing the necessary technology and services for integrating the new acquisitions from Shell Pipeline within the current control system infrastructure.
- Contract with Alyeska Pipeline Services Company to deliver an Integrated Oil Movement System (IOMS) in support of the Trans Alaska Pipeline System.
- Awarding of a contract to supply a new OASyS SCADA system for Great Lakes Gas Transmission (GLGT) company. Great lakes is a major gas distribution company that transports Canadian gas to the Great Lakes region.
- Awarding (adjudication) of the project to replace the Nederland Terminal Sunoco Logistics's SCADA Partners L.P system. Nederland is a major marine terminal that provides inventory management, and storage and distribution services to refineries and other important end users of crude oil.



- Final acceptance for the SEMPRA/SoCal Field SCADA system. SoCal Gas, a division of Semptra Energy is responsible for managing natural gas storage, transmission and distribution.

### In Latin America:

- Definitive receipt of the project for the Applications Management and Control System for the Crude Oil Pipeline (OCP) constructed by Techint in Ecuador.
- Definitive receipt of the project for the Automation of the Camisea Pipeline constructed by Techint in Peru.
- Completed the LMS & GMS Backup Projects at Petrobras, Brazil's state-owned Oil and Gas Company.
- Supply of the iSCADA Control and Communication System for Comgas, the Gas Distribution Company of São Paulo's State in Brazil.
- Awarded the contract for the automation of 11 Storage and Distribution Terminals for Pemex Refinacion. The contract was awarded in three public tenders, which add an additional 17 terminals to the number of installations that have already been automated by Telvent in Mexico.



## In China:

- Contract for the Zhongxian-Wuhan Gas Pipeline project awarded by the PetroChina Pipeline Company Limited. The project scope includes the management of a 1,347 kilometer pipeline linking Sichuan-Chongqing gas fields with the Hubei and Hunan provinces in South Central China.
- Delivered to CPPE (China Petroleum Pipeline Engineering Corporation) an OASYS SCADA and Station Control System that will administer the petroleum pipeline transmission network of TieDa. CPPE is a subsidiary of the China National Petroleum Corporation (CNPC).
- Contract with China Petroleum Chemical (Petrochemical) Corporation (Sinopec) company to design, install and start-up a control and information management system for the new Luwan products pipeline. Sinopec is the major producer and distributor of refined liquid products China and in the rest of Asia.

## In other countries:

- Contract to deliver a control and monitoring system for Pakistan's new products pipeline. The scope of this project includes the supply of OASYS SCADA and information management systems for the Pakistan Arab Pipeline Company's (PAPCO) White Oil Pipeline.
- Gas Management System contract for the Gas Authority of India Limited (GAIL). Telvent will supply its web-based Pipeline Operations Logistics, and Revenue Information System (Polaris) to manage contracts, nominations, gas scheduling, allocations and billing.
- Supply of a Windows-based OASYS DNA SCADA system for the safe operation of the Trans Thailand Malaysia (TTM) pipeline and related facilities. The project involves onshore and offshore pipelines that transport gas from the Malaysian-Thai Joint Development Area (offshore) to the Peninsular Gas Utilization pipeline at Changlun in Kedah, Malaysia.
- Contract with «EGO Ankara Gas Distribution» (EGO) for the design and installation of an OASYS DNA control, measurement, and



information management system for the regional distribution stations.

- Contract for the project to improve the SCADA system for the Public Corporation of Gas in Greece (DEPA) S.A. DEPA is now responsible for the import, transport, and storage of natural gas; the construction and administration of the Transport System; and the sale of natural gas on a national level.
- Factory Acceptance Testing for Telvent's Istanbul Gas Distribution Corporation (IGDAS) project, located in Istanbul, Turkey has been completed. Telvent's systems will supervise and monitor the gas distribution network for the city of Istanbul, consisting of over 2,270,000 clients.
- Telvent received the Final Acceptance Certificate for the BOTAS Project (Turkey). The project included the construction of a new Control Center building, replacement of the current SCADA System, supply and integration of RTUs, and installation of the pipeline management software.



### Traffic

During 2004, Telvent has continued to strengthen its position as a national and international leader in products, applications and services for the Intelligent Traffic Systems (ITS) sector, both in urban and interurban settings, offering global solutions for traffic control problems in cities and for the control, surveillance and management of highways. The installed systems are designed to provide enhanced optimisation of the level of traffic service conditions, while contributing to the overall safety of highway infrastructure.

The level of technological evolution and the consolidation of the national market after 30 years in the sector have been the key factors that have boosted national growth through our own network, with over 20 regional installations in Spain, and seven subsidiaries in various European, South American and Asian countries, the largest being China and Brazil. In this way, Telvent is continuing to reinforce our level client service, one of the most important factors in our growth strategy.

In 2004 we also experienced massive development opportunities in the China market, with a product portfolio of almost 50 million euros estimated for 2005. Telvent has continued to offer support for new business models, linked to City Digital Service and the Operation and Concession of infrastructures with important technological installations.

At Telvent, we have also successfully begun to penetrate the US traffic market, being selected for several interurban traffic control projects in Florida and Texas.

The most important projects during 2004 in traffic sector have been:

In Spain:

- Completion of the Centralization Project for the City of Pontevedra's General Traffic Department.
- Award of the contract to maintain, develop and operate the high capacity network of Vizcaya for a two-year period (which can be extended for a further two years)
- Completion of the ITS (Intelligent Traffic System) Facilities on the Radial-4 Toll Highway, along with



the signalling, safety and control systems for the M-50 false tunnel, which are part of the Concesionaria Madrid R-4.

- Award of the contract to expand the Cañiza tunnel safety and control systems.
- Award of the maintenance contract for the ITS facilities on Autopista del Sol for the Concessionaire, Ausol covering a 20 month period (with a one-year extension option).
- Subsequent to the inauguration of the Forum, in 2004 Telvent achieved the completion of the upgrade and replacement components for CCTV's Infrastructures and optical fiber network, traffic access control system, and the enclosure and the equipment for the Municipal Coordination Center.
- Awarded the project for the signalling and control equipment installation on the M-50 motorway, between the A-1 and A-2 (Madrid).
- Maintenance contract for the traffic light facilities and management of the traffic control center of the City of Lugo, for an additional two years.
- Contract for providing technical assistance for Traffic Safety for the national highway network of western Andalusia.
- Technical Assistance to support different sanction units of the Provincial Traffic Headquarters of the State Traffic Office (Dirección General de Tráfico, DGT).





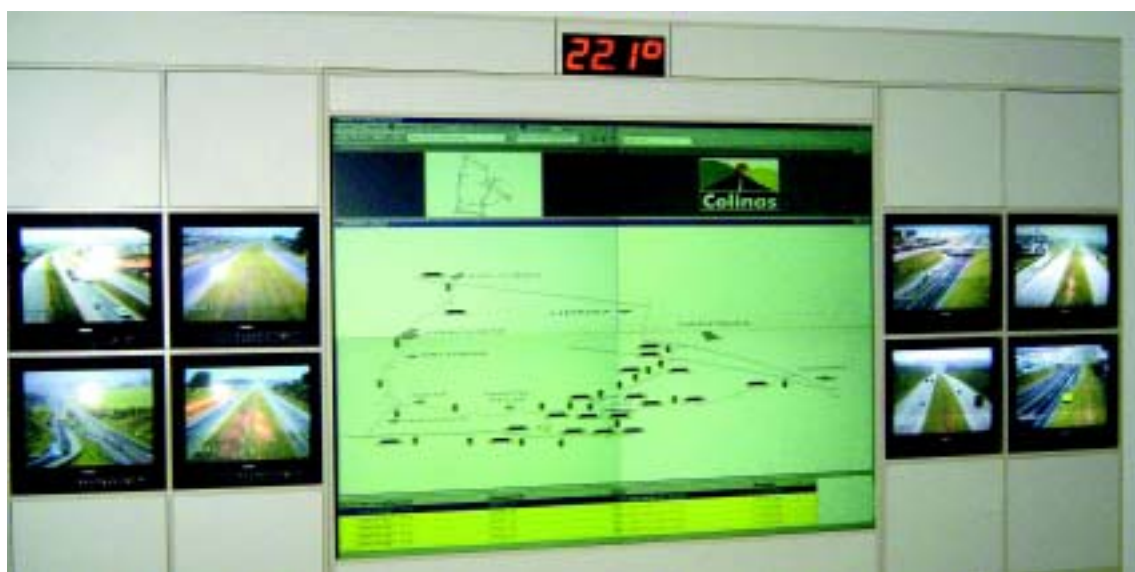
- Two-year extension of the integral conservation of Piedrafita, providing a 24-hour road assistance and vigilance service throughout the year.
- Awarding of the Dynamic Signaling and Traffic Management Project in the A-8, routes: Santander-Castro Urdiales and Torrelavega-Pésues; in the A-67, route: Polanco-Torrelavega-Los Corrales de Buelna; and in the S-20, circumvolution North Santander, for the General Traffic Division.
- Awarding of the Traffic Diversion Works in Avenida Meridiana, Barcelona, aimed at the building of the Metro Interchange in La Sagrera, for the Barcelona Town Council.
- Contract for hardware and software conservation, and for assistance with the Network Gigabit exploitation and Multitunnel Systems of Tunnels from Basic Network of Barcelona 2004-2005, for Council County of Barcelona.
- Awarded the contract to supply and install the systems detailed in the project for the Traffic Management Center in the city of Ceuta.
- Within the Digital City of Almeria project. Telvent will install intelligent management systems for urban traffic, accesses control and systems to help the exploitation of the urban transport. For this project we will be implementing our most advanced of traffic control and road safety systems.

In Latin America:

- Contract for the Anchieta – Inmigrantes Highway Tunnels project (for Ecovías), in Brazil.
- Contract for the ITS system (Intelligent Traffic System) project for the Centrovías Highway in Brazil.
- Supply of an ITS System for Intervías Concessionaire in Brazil that will be used for the management of several roads in the Brazilian state of São Paulo.
- Contract for the extension of the Renovías toll in the state of São Paulo, Brazil.
- Contract for the installation of the Motorway Management System for the Intervías Concessionaire in the state of São Paulo, Brazil.

In China:

- Contract in China (Beijing SuperCenter). The scope of this project includes the installation of retroprojectors in the management control centre in Beijing. This contract for Beijing Capital Highway Development Co. Ltd, also includes the installation of a management system for the motorway access networks and ring roads of the city of Beijing.
- The awarding of the Traffic Centralisation project for the city of Xin Xian, in the Chinese province of Henan, to carry out the centralization of the urban traffic for that city.



- Awarded the contract for Urumqi UTC, for the supply, installation and start-up of an urban traffic management and control system in the Chinese city of Urumqi.
- Awarded the contract for Er Dos UTC, for the traffic centralization project in the city of Er Dos, in China.

In other countries:

- Contract to design, supply, install and commission the Traffic, Toll and Communications System for the Bucharest-Constanza Highway in Romania.
- Contract for the Urban Traffic Centralisation project for the city of Haiphon in Vietnam.
- Renovation of the toll system installed in the Concession of the Envalira Tunnel (Andorra).

As a complement to the Traffic activity, the contracts and important milestones for the systems that have been awarded, include the following:

- Contract for Extension and Modification System of Location of Noses by Satellite of the General Secretariat of Maritime Fishing for General Direction of Patrimony.
- Contract to extend Bermeo's Navigation and Fishing Simulator.
- Provisional receipt of Tactical Malingerer to Naval Military School for the Spanish Navy.
- Contracting of two Malingerers of Liquid Charges to Central Finance Office and Contracts of the General Secretary Community matters, Turkey.
- Contract with the Spanish Navy for the manufacture and supply of a Navigation and Manoeuvring Simulator for Marin's Naval Military School
- Contract to extend Bermeo's Navigation and Fishing Simulator for the Social Maritime Institute of Vizcaya.
- Contract with the Social Maritime Institute of Gijon to extend its Navigation and Fishing Simulator.
- Contract with the Social Maritime Institute of Huelva to extend the Navigation and Fishing Simulator of Isla Cristina.



## Transport

Telvent also successfully finalised our Smart TOLL technological project, launching a whole new range of products on the market, based on Tags and Antennae for the Motorway Teletoll System. These products have been internationally authorized in their use by the European PISTA project, and by German laboratory TUV.

In the sector of railway control and signalling, Telvent has advanced in the development of a new line of applications for automatic train regulation (the REGULA Project), which will mean an important advance in and complement to our current line of products for Traffic Control Centres (TCC) and the Telecontrol of equipment and stations. We have also finalized the installation of a traveller systems in the 10 stations of the Cadiz Commuter network, a totally integrated system which is an innovation in the operation of railway stations.

The most important targets in the national and international area include:

In Spain:

- Contract for the Supply and installation of the Toll system in South Bergara for the AP-1 Vitoria-Eibar Motorway.
- Increase of Centralized Railway Traffic Control System of Barcelona to Maintenance RENFE.
- Strategic partnership between Telvent and Buscom Oy, the first company in the world to introduce contactless-cards within the Public Transport applications.
- Completion of the supply, installation and start-up of the Plaza de España parking project in the Ferrol Northeast parkings (Masaveu Group).
- Awarded the supply and installation of the toll system for Tabasa's System in «Túnel de Vallvidrera».
- Telvent was awarded the Control and Management System of Parking Areas for Trucks that the company Guitrans-Sinragi is proposing in Urnieta (San Sebastian).
- The awarding of the Maintenance of the Ticket Sales and Cancellation System for Bilbao for a one-year period, with an optional extension for a further two years.



- The supply, installation, and maintenance of new Ticketing equipment for the most significant stations of the EuskoTren.
- Contracting to supply the infrastructure, deployment and operation of transactional system for Alsa, through the Movelia Passenger Transport Operator Association.
- The awarding of the contract for supplying and implementing Toll Equipment for Traveller Access Control on Line 3 of the Madrid Underground.
- Contracted to supply and install software for the accomplishment of the "Pilot Test with Technologie Without Contact" to underground from Madrid in the Zone A (Fuenlabrada Area).

In Latin American

- Multiservice network for Valparaiso underground in Viña del Mar, Chile. All of the control data, video-phone and corporate data will be transported through fiber optic for the management and exploitation of the underground.
- Awarded the toll system expansion project for eight additional routes for the Renovation Concessionary in the region of Sao Paulo, Brazil.

In China

- Contract signed with the Chinese authorities to supply the automatic ticketing system and radio communications system for Tianjin Metro.





### Environment

During 2004, Telvent's Environment business area has undergone significant growth, expanding its international customer base, while maintaining a very strong national presence. As a result, more than 50% of sales now come from the international marketplace. Despite this global success, however, Telvent continues its leadership position in Spain in the Meteorology, Water and Environmental Protection industry sectors. The overall success achieved by this business area has resulted in a 60% sales increase for the fiscal year, compared to the previous year, reaching a total of 20 million Euros.

In Meteorology, it is important to recognize the value of Telvent's relationship with the INM (National Meteorology Institute) and the AENA (Spanish Airport and Air Navigation Authority), which has allowed the company to obtain a privileged position in Latin America as the preferred technological solutions supplier for modernizing that region's HydroMeteorology Observation and Prediction Services. Evidence of this success is illustrated by the Senamhi (Bolivia) reference project.

Telvent's leadership position in Environmental Protection has been reaffirmed both in Spain through the contract award for the Maintenance of the Air Quality Network in Valencia, and in Mexico, with the execution of several Emission Control projects for CFE (Comisión Federal de Electricidad).

In the Water sector, the contract awarded to Telvent and Befesa by the Ministry of Environment, for the high-profile Saih Hydrological Information Automatic System project in the basin of the Duero river, restores Telvent's leadership position in this market in Spain. This project will allow Telvent to deploy its high value-added technology solutions enabling improved resource management and more responsive decision making in the event of potential hydrological alert situations.

Both the international and the national markets have provided important milestones, which are summarized below:

In Spain:

- Contract with the National Meteorology Institute to supply and install Automatic Weather Observation

Systems (AWOS) for the Pamplona and Sabadell airports.

- Contract for the emissions control system for the Arcos de la Frontera Combined Cycle Power Station (Cadiz).
- ATIS (Airport Terminal Information System) Systems for Madrid and Barcelona airports, for AENA.
- Supply for the Air Quality Surveillance Stations (RVCA) in the Madrid-Barajas Airport enlargement.
- Contract with Aena for the supply, installation and subsequent management of the analytical equipment utilized for zone emission monitoring for the Airport System of Madrid, for a two year period.
- Maintenance and preservation contract for the Air Quality Monitoring and Surveillance Network for the Autonomus Community of Valencia (Spain), for a period of one year.
- Renewal of the maintenance contract of the Environmental Vigilance Network of the Los Barrios Thermal Power Station in the Campo de Gibraltar (Cadiz) for Endesa Generación and Endesa Ciclos Combinados.
- The contracting of the Geographical Information System (GIS) for the administration of the Water Framework Directive in the Hydrographical Confederation of the Guadalquivir (Ministry of Environment).
- Contract awarded for the Automatic Water Information System (SAIH) for the basin of the Duero river for the Ministry of Environment. Telvent will fulfil this project together with Befesa (Abengoa's subsidiary for Environmental Services).





- Supply and installation of meteorological equipment to Vitoria Airport, as requested by the National Institute of Meteorology.
- Supply and installation contract for Meteorological equipment for the Santander Airport.
- Project for the supply and installation of Detection of Beams System in Canaries, for the National Institute of Meteorology
- Successfully concluded the installation of the ATIS (Automatic Service of Information of Terminal Area) System for the Barcelona airport. This system will allow data acquisition and processing, in real time, of the meteorological and operational information for the airport, and its broadcasting to aircraft.



### In North America:

- Contract for the OASys DNA project for the water industry was implemented for Southwest Florida Water Management District (SFWMD). SFWMD is the world's largest water control system, with 1,728 kilometers of canals, 1,160 kilometers of dykes, 200 principal ports and water regulation structures, and 27 main pumping stations.
- Water distribution project in the City of Columbus in USA.
- Contract to supply an Emergency Control Center for the City of Houston, which will include a SCADA system that will allow the city to collect and analyze realtime information for all surface water resources, enabling efficient management of the overall system.

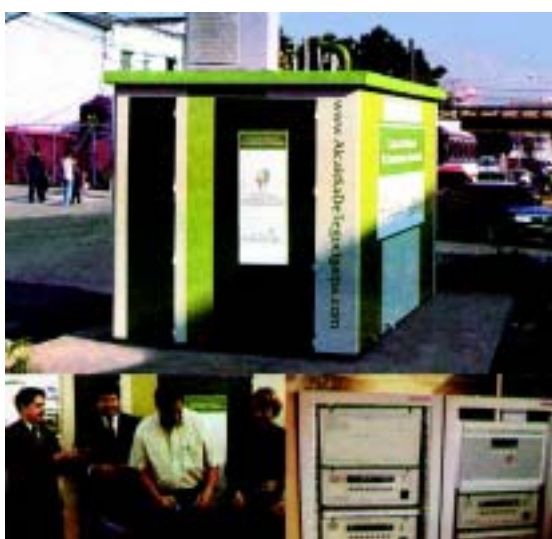
- Contract for an Air Quality Monitoring Network for the cities of Tegucigalpa and S. Pedro Sula (Honduras).

### In other countries:

- Contract for the Control System project for managing the potable water supply of Gran Amman (Jordan). The district of Gran Amman has a surface area of approximately 700 km<sup>2</sup> and supplies a population of almost two million.
- Provisional receipt of the first three of six AWOS installations, in Meknes, Errachidia and Ouarzazate Airports, for National Meteorology Direction (DMN) of Morocco.

### In Latin America:

- Contract for the installation of a network of hydro-climatologic stations for the State Water Commission (CEA) of Querétaro (Mexico)
- Emissions Control System for Guaymas State TPP (Mexico), for CFE (Electrical Federal Commission).
- Delivery of the Emissions Control System for El Sauz TPP (Mexico), for Abener.
- The Emissions Control System was completed for Guerrero Negro TPP (Mexico) for CFE (Electrical Federal Commission).
- Contract for the supply and installation of the meteorological enhancements for the Air Navigation Integrated Systems in A. Gelabert and Tocumen in Panama airports.



### Public Administration, Health, Outsourcing and Technologies Infrastructure Management.

There is a small percentage of our business that historically has provided opportunities to open new business lines that we believe will satisfy one of the following two requirements: potential to transform into a strong sector in the future; possibility to provide access to new technologies or services that can be applied to areas in which we operate (or are conducting research and development activities).

Telvent's strategic plan includes a number of different opportunities in the Public Administration and Health sector.

The most important targets during 2004 include the following:

- Contract for the Regional Government of Andalusia's Backup Center.
- Contracting from Almeria's Excmo Council, for the administrative concession for the design, construction and exploitation development of a Digital Services Advanced Center for the urbanization of "El Toyo" and Almeria's City.
- Completion of the implementation of a CRM solution for the Public Service for the Ministry of Innovation, Science and Enterprise for the Andalusian Government.
- A contract for the platform implementation of Electronic Administration services developed by the Andalusian government.
- The awarding of the Consultancy and Technical Assistance tender for the Maintenance of the Andalusian Public Shows and Games Information System (Sistema de Información de Juegos y Espectáculos Públicos de Andalucía, SISJUEP).
- The completion of the installation of the application servers and the user terminals, together with the adaptation and structured wiring and network electronics for the municipal offices of the La Línea de la Concepción Town Hall.
- Contract renewed with The Andalusian Health Service for its Information Systems Maintenance and Technical Support for seven hospitals in a one-year period.
- Contract for the creation of the corporate SIG of the Health Council of the Castilla León Local Government



- Contract for the Territorial Information System of the Delegation of Almería.
- Contract for the Integration of radiological image generating modes (Ultrasounds, TAC, Magnetic Resonance and Conventional Radiology) with the Image Archiving System (PACS), enabling consultation from any point in the hospital network, for the Hospitals Juan Ramón Jiménez and Infanta Elena

In reference to the Outsourcing Area and Technologies Infrastructures Management, during 2004, we have consolidated products and contracts, which include the following:

- Completed outsourcing of Metrovacesa's central information systems, including upgrading the platform and system support, including the SAP platform on which all the corporate tools operate.
- Telvent has inaugurated in Seville its fifth Data Center within the Iberian Peninsula. This center is provided with the same technical first level characteristic as all the other centers, and, as with the previous Telvent installations, it has become a Neutral Data Center reference in the south of Spain.
- Contracting with Hewlett Packard (HP) to provide the infrastructure for housing in both the main data centre (Alcobendas) and the backup data centre (Fuencarral) inside the Outsourcing



process of the Uralita information systems ( client of HP).

- Renovation of Red.es contract for housing its information systems and services for Housing, Moving and Administered Services.
- Contracting with Twenty4help to install all of its technological platforma, as well as the Call Center to support operations activity (approximately 40 persons) in the Data Center from Valgrande. Twenty4help it is a company dedicated to the technical support of large companies within the IT sector companies such as Microsoft and Sony Ericcson.
- Contracting with ISP that will embed its technological platform in Valgrande's Data Center, that is currently being hosted in the Data Center of a competitor company.
- Contracting with Selgam Tower for its Call Center supporting its clients in Valgrande. They will start by giving service to its client TPI utilizing a 15 person staff.
- Project of the Tetra Network for the Electricity Federal Commission (CFE) in Monterrey. This project provides private mobile communication for CFE's staff
- Contract with Pimec (Small to Medium Company in Catalunya) to house its systems which will have Internet connectivity in the Barcelona Data Center.
- Contract signed for the in Housing and Internet Access in the Valgrande Data Center in Madrid with

Mundo Social, client of Brújula Telecom. Mundo Social is a Travel wholesaler, whose partners are Marsáns, Viajes Iberia, Halcón and Barceló.

- Awarded the contract for the hosting of the new esmadrid.com web portal. The Madrid Town Council of promotion, belonging to Madrid city council, has awarded Telvent with the hosting of its new web portal esmadrid.com.



# Industrial Engineering and Construction

[www.abeinsa.com](http://www.abeinsa.com)

- Engineering, construction and maintenance of electrical, mechanical and instrumentation infrastructures for the energy, industrial, transport and services sectors. Development, construction and operation of industrial plants, conventional power plants (cogeneration and combined cycle) and renewable energy facilities (bioethanol, biomass, wind, solar, geothermal), as well as those based on hydrogen and fuel cells. Turnkey telecommunications networks and projects. Merchandising of products related to aforementioned activities as well as manufacturing of auxiliary elements for energy and telecommunications.





A low-angle, upward-looking shot of a large solar panel array. The panels are arranged in a grid, supported by a metal frame. A bright sun is visible in the upper right, creating a strong lens flare. The panels are tilted towards the sun. In the background, there is a grassy field, some trees, and a clear blue sky. A small white sign with the word "SOLUCIA" is visible on the pole supporting the panels.

Leader in Spain  
and Latin America



In spite of the difficult year and the more competitive market situation, the Industrial Engineering and Construction Business Unit has maintained its leading position in Spain and Latin America, having registered higher-than-expected results in 2004. Sales for the year exceeded 725 million euro, an 8.2% increase on 2003 and the value of the service orders reached 1,000 million euro.

This increase of activity has enabled our consolidation as one of the major groups of companies at world level in our fields of activity: Energy, Installations, Telecommunications and Commercialization, and Ancillary Manufacturing.

In 2004, we have put enormous effort into the internationalization of our activities by expanding to new markets, Eastern Europe and the Mediterranean Area, which has enabled us to establish a solid growth base for forthcoming years.

This growth is based on the basic pillars of our strategic plan: customer satisfaction, internationalization, profitability, innovation, human resource development and social involvement, which ensure balanced and profitable growth with solid environmental commitment.

This commitment has led us to widen our responsibility towards the environment through the development of innovative projects (R&D&i) in both the solar energy and hydrogen and fuel cells sectors.

In the solar energy sector, work has commenced on the erection of the largest solar power plant built with tower technology and heliostat field to produce 11 MW, and the construction of a 1.2 MW two-fold concentration photovoltaic power plant.

In the hydrogen and fuel cells sector our subsidiary, Hynergreen Technologies S.A., which is focused on the production of electricity through fuel cells and the use of hydrogen, is on the Advisory Board of the European Hydrogen and Fuel Cell Platform, recently launched by the European Commission. This platform's main objective is to facilitate and accelerate the development and use of European fuel cell and hydrogen-based energy systems. One of the main projects of Hynergreen is the development of a power plant of energy of 300 kW based on that technology.



During the year, the Industrial Engineering and Construction Business Unit has achieved major undertakings that have enabled us to increase our prestige and capacity for performing major infrastructure works worldwide, among which the following are noteworthy:

Successful completion of the year-long continuous operative availability of the combined-cycle enlargement to 450 MW of El Sauz thermoelectric power plant, in Mexico.

Completion of the turnkey construction, for Iberdrola Generación, of the balance of plant (BOP) and ancillary services for units 1 and 2 (800 MW) of the combined-cycle plant at Arcos de la Frontera-Cádiz (Spain).

Delivery of the ETBE (composite currently used in gasoline as a detonation suppressant in place of lead) production plant, built at Cepsa's refinery in La Rabida – Huelva (Spain).

Completion of the turnkey construction of the oil-products storage plant at Nouakchott (Mauritania).

The correct execution of our undertakings has fully met our customers' expectations, upon us having provided integrated solutions, adapted to their needs.



The enormous confidence shown by our customers has enabled us to achieve a high contracting volume; with us having being awarded important projects in our activity sectors, among which we would mention:

The Comisión Federal de Electricidad of Mexico awarded us two new construction projects; the turnkey construction of the Baja California Sur II internal combustion motor power plant, to be located in the municipal district of La Paz, in the State of Baja California Sur, and the modernization of the Portes Gil thermal power plant, in the city of Rio Bravo, in the State of Tamaulipas.

Execution of the works included in the electric system project for the new air terminal at Barcelona airport.

Several rural medium voltage (MV) / low voltage (LV) contracts were forthcoming from the Office National de L'Électricité (ONE), in Morocco. These contracts are to be executed, mainly, in the provinces of Taroudant, Chichaoua and Agadir (southern area), Boulemane (central area), and Chefchaouen and Nador (northern area).

Our strategy for the future is based on the development of integrated products and significant growth in the infrastructures, concessions, singular projects and higher added value installations activities, to enable us to continue to offer our customers high-quality projects that meet their needs.

A more detailed account is provided here-below, of our main achievements in 2004, in our fields of activity: Energy, Installations, Telecommunications and Commercialization, and Ancillary Manufacturing.

### Energy

Our activity in this area is focused mainly on the promotion, construction and operation of industrial and conventional energy (cogeneration and combined-cycle), and renewable energy (bioethanol, biomass, solar and geothermal) plants; and on the exploitation of businesses and activities related to electric energy production using fuel cells. As we have already mentioned, 2004 was a year that saw the completion and/or commencement of

significant projects to a high degree of satisfaction of our customers.

On the other hand, intense activity continued in R&D&i in several fields, such as solar energy, which enabled our development as providers of specific services and components for solar power plants. Likewise, there were important achievements in the hydrogen and fuel cell sector, with work being performed in 4 areas: the search for new different technology fuel cell applications, the development of new fuel cells (reversible, compact and direct), the production of pure hydrogen from renewable energy sources, and renewable energy integration projects.

### Abener Energía

2004 was a year of market consolidation for Abener. In addition to the definitive handing over of the combined-cycle enlargement to 450 MW of El Sauz thermoelectric power plant (Queretaro, Mexico), and continuing with the construction of the combined-cycle enlargement to 230 MW of Hermosillo thermal power plant (Sonora, Mexico), two new contracts were obtained in the country; the construction, for the Comisión Federal de Electricidad, of the 37.5 MW Baja California Sur II (Baja California Sur, Mexico) internal combustion power plant, and the remodeling of the 187.5 MW Emilio Portes Gil (Tamaulipas, Mexico) thermal power plant.

On the home market, the execution of two significant contracts was completed: BOP and ancillary systems



for the 800 MW Arcos de la Frontera (Cadiz) combined-cycle power plant, units I and II, for Iberdrola Generación; and the ETBE 34,028 ton/year production plant at Cepsa's refinery in Huelva (Spain). Moreover, work continued on the construction of the bioethanol (alcohol, produced by cereal fermentation and subsequent distilling, to be used as fuel) plant at Babilafuente (Salamanca, Spain), which, with an annual production capacity of 200 liters will be the largest in Europe and the third to be constructed by Abener in Spain. Finally, a contract was awarded to construct Europe's largest tower technology thermo-solar power plant. Its total installed output will be 11 MW and it will be located in Sanlúcar la Mayor (Seville, Spain). This plant will be the first of its kind to be built in Europe for commercial exploitation and is Abener's first project in the solar power plant market, a market with enormous growth perspectives worldwide over forthcoming years.

### Main Contracts

#### **37.5 MW internal combustion motor power plant in Baja California Sur (Mexico)**

Abener was awarded, in December 2004, by the Comisión Federal de Electricidad (CFE) of Mexico, the turnkey construction contract for the Baja California Sur II internal combustion motor power plant. The plant will be located in the municipal district of La Paz, in the State of Baja California Sur (Mexico).

The project comprises the design, supply, installation, tests and commissioning of a net total capacity 37.5 MW ( $\pm 15\%$ ) internal combustion motor power plant, as well as the 230 kV substation and fuel and water supply systems. The process will consist of the burning of liquid fuel in an internal combustion motor, generating exhaust gases that will be delivered to a heat recovery boiler where steam will be generated to heat the fuel system. The power plant will have a seawater evaporation system to produce distilled water to supply the heat recovery units, closed cooling water circuits, fire-extinguishing system and utilities.

Execution commenced in December 2004 and provisional acceptance is scheduled for January 2007.

#### **Remodeling of the 187.5 MW Emilio Portes Gil thermal power plant (Mexico)**

Likewise, in December 2004, Abener was awarded, under an open call for bids by the Comisión Federal de Electricidad (CFE), the contract to modernize the Emilio Portes Gil thermal power plant. The plant is located in the city of Rio Bravo, Tamaulipas State (Mexico).

The contract consists of the modernization, supply, installation and construction of a heat recovery unit and its combined-cycle integration, together with its equipment and ancillary systems, as well as all the adaptations required to the current facilities and systems so that the plant's existing 150 MW gas turbine and 27.5 MW steam turbine may operate, in an integral and reliable manner, in combined-cycle. Work on the project commenced in December 2004 and the estimation for the plant to be brought into operation is July 2006.

#### **Combined-cycle enlargement to 450 MW of El Sauz thermoelectric power plant (Mexico) (México)**

Abener achieved Final Acceptance of the facility in December 2004, subsequent to the successful year-long continuous operative availability test. The plant was constructed under the lump sum public funding modality for the Comisión Federal de Electricidad (CFE) of Mexico.

The project consisted of converting the two existing turbo-gas units to combined-cycle, adding a 143 MW net output.

#### **Combined-cycle enlargement to 230 MW of Hermosillo thermoelectric power plant (Mexico)**

In July 2003, the Comisión Federal de Electricidad of Mexico awarded Abener the lump sum public funding modality contract to convert the existing turbo-gas unit to combined-cycle, adding an 80 MW net output.

Construction of the power plant is at a very advanced stage, the commissioning and start-up activities having already commenced. Its connection to the network and commencement of commercial operation is scheduled for around mid-May 2005.

#### **BOP and Ancillary Systems for Units I and II of the 800 MW combined-cycle power plant at Arcos de la Frontera, in Cadiz (Spain)**

During the year, the turnkey construction was completed, for Iberdrola Generación, of the BOP and ancillary services systems (cooling tower, water and





effluent treatment, regulation and metering station (RMS), compressed air, auxiliary boiler, 6 kV cabinets and LV and MV boards) of units 1 and 2 (800 MW) of the combined-cycle plant at Arcos de la Frontera (Cadiz, Spain).

### **34 MK ETBE production plant in Huelva (Spain)**

Abener successfully completed, in mid-2004, the turnkey construction of an ETBE (composite currently used as a detonation suppressant in place of lead) plant at Cepsa's refinery in Huelva (Spain), the production capacity of which is 34,028 tons/year. The plant commenced commercial operation after having successfully passed the production, capacity and availability tests in accordance with the project specifications and requirements.

### **200 MI bioethanol production plant in Salamanca (Spain)**

The construction of this plant, on which work commenced in November 2003, is at a very advanced stage, with the commencement of commissioning and start-up scheduled for the first quarter of 2005, and commercial operation for December that year. It is the third bioethanol (alcohol produced by cereal fermentation and subsequent distillation for use as fuel) plant to be turnkey constructed by Abener in Spain. It is Europe's largest with an annual production capacity of 200,000 m<sup>3</sup>, and will be the first in the world to incorporate bioethanol production technology using biomass.

### **Thermosolar power plant with capacity up to 11 MW with tower technology in Seville (Spain)**

Abener was awarded in July 2004 with the project for the construction of a turn key central receiver solar collector, with an installed power of 11 MW. The central receiver solar collector is expected to commence its commercial operation in June of year 2006. This power station is the first of its type that is built in Europe with a commercial operation purpose.

The power station will consist of 624 heliostats that have, each one of them, a surface of 121 square meters and are organized suitably in a surface called "solar field". These heliostats automatically follow the sun and will concentrate their reflected ray in a acuatubular receptor located in a 120 meters of height collector/tower, in which the steam that is formed is lead to a turbine-type alternating current generator, in which the steam expands, giving a power of 11 MW to the transport network.



### **Operation and Maintenance**

The Operation and Maintenance (O&M) line of business, applied to power plants, includes facility equipment and systems preventive, scheduled and corrective maintenance, as well as plant operation to achieve reliability of the functioning of the facility and ensure the fulfillment of design parameters, in terms of rating, availability and load factor.

The O&M Division is carrying out this activity at seven different facilities (four cogeneration and three gas strata based plants), and is also providing O&M technical assistance at another cogeneration plant. In addition to performing the O&M tasks at the different plants, Abener is also responsible for their operation.

These plants are in seven different provinces in three Autonomous Regions. Their total installed output is 165 MW. In 2004, their combined electric energy generation was 1,117 GWh.

We must emphasize that three of these facilities sell their surplus energy in the electric energy production market (the so-called electric "pool"). Management of the sale of this energy, to maximize earnings in accordance with the market rules, has been undertaken as another task to be performed by the O&M Division. It also provides these same services for two of the Bioenergy Business Unit's facilities. The total annual energy managed for these five facilities is 1,225 GWh.



### Solúcar Energía

Solúcar continued to consolidate its presence in the solar energy product development sector and maintained its leading, national and international, position as a provider of specific services and components for solar power plants. The year's most noteworthy references include the works carried out on the development of saturated steam direct generation technologies in parabolic-cylinder concentrator absorber pipes and in tower and heliostat power plant receivers; the development of photovoltaic concentration technologies from values of less than 2x to limits in excess of 1,000x; solar applications promotion activities in the framework of the Aznalcollar TH project for economic and social recovery of the mining lands; tasks related to the construction of the Sevilla PV plants – photovoltaic 1.2 MW output and two-fold concentration -, and PS10 – 11 MW thermoelectric tower type plant -; and activities related to the promotion of PS20, Aznalcollar 20 and Solnova 50 thermo-solar power plants, which are included in the 200 MW strategic framework for the Sanlúcar la Mayor area. Moreover, the Copero photovoltaic projects were launched in conjunction with Emasesa, the water company of Seville, with a total 800 kW electric output to be installed.

### PS10 Project

On June 28, 2004, the foundation stone of the PS10 plant was laid. It is to be Europe's largest electricity production solar facility. The solar facilities are located on the lands of the Casaquemada estate, in the municipal district of Sanlúcar la Mayor, Seville. The 11.0 MW rated PS10 plant is being promoted by Sanlúcar Solar, S.A., and has been designed to produce 23,000,000 kWh of electricity a year, sufficient energy to supply a population of 10,000. PS10 comprises a large heliostat field, mobile mirrors that reflect and concentrate the solar radiation they capture on the receiver on top of a 100 m tower. Thus, 624 units, each with 120 m<sup>2</sup> of reflective surface area, throw the thermal energy required to produce steam onto the receiver, a cavity of approximately 200 m<sup>2</sup> of water-cooled energy exchange surfaces. This is sent to the turbine where it is expanded to generate the electricity by means of

the opportune connection to an alternator. Year-end 2004 was when the facility's most significant orders were placed for the receiver and the turbo-generator unit.

This project is the launching pad, following several years' research and development by Solúcar, for the so-called "tower and heliostat field" renewable solar resource electric exploitation technology. The PS10's main contribution to the development of this technology is the fact that it is the first tower type thermal solar power plant anywhere in the world that will produce electricity in a stable and commercial manner.

### Sevilla PV Project

The company Fotovoltaica Solar Sevilla, S.A., 80% Solúcar-owned and 20% Instituto para la Diversificación y Ahorro de la Energía (IDAE), is constructing the 1.2 MW Sevilla PV photovoltaic solar power plant. The plant, which uses two-fold concentration and 2-axis sun tracking concepts, will generate, as a Special Regime production facility, about 2.4 GWh of electricity a year that will be evacuated to the electric network. The Sevilla PV plant has 170 tracking devices with an opening of about 100 m<sup>2</sup> that combine, in almost equal proportions, the photovoltaic modules capturing area and the mirrors area. The facility is on the Casaquemada estate in the municipal district of Sanlúcar la Mayor. Year-end 2004 coincided with the completion of the engineering works and the issuing of the project's most significant purchase orders for the photovoltaic modules, inverters, mirrors and trackers.



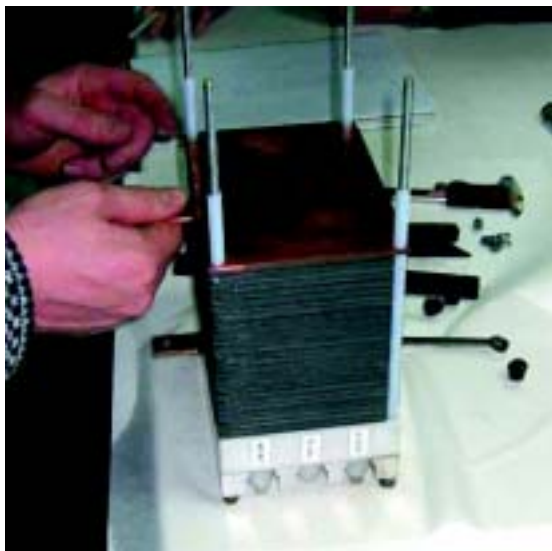
### Hynergreen

The objective of Hynergreen Technologies, S.A. (Hynergreen) is to organize and operate businesses and activities related to different technology fuel cell electric energy production, as well as the production of hydrogen from renewable sources, and its clean and efficient use.

It has two divisions: Research, Development and Technological Innovation (R&D&TI), and Projects.

Hynergreen carries out research, development and innovation work in four major areas of activity:

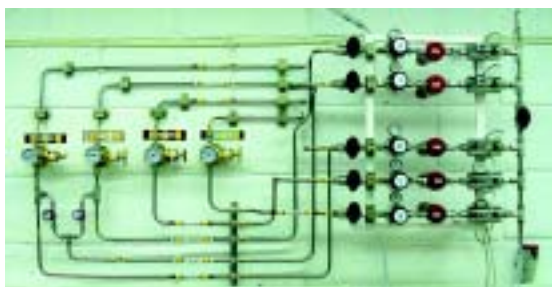
- 1.- The search for new applications for different technology fuel cells. Systems for telecommunications, domestic and transport applications. In this sense, Hynergreen is analyzing the "market niches" that will most benefit in the short, medium and long term, from the introduction of fuel cells and which, due to their interest, will contribute to the development of this technology.
- 2.- The development of new reversible, compact and direct fuel cells. We would emphasize here, both the collaboration with different fuel cell manufacturers to define parameters and assess prototypes, and its work on the Fuel Cell Standardization Committee, defining national and international standards for these devices.
- 3.- The production of pure hydrogen from renewable energy sources. The hydrogen and fuel cells themselves are not clean or sustainable. This aspect depends on the origin of the fuel (hydrogen); thus, the achieving of clean, sustainable and local hydrogen production, which contributes to the development of the renewable energy sources is, a priori, an important task.
- 4.- Renewable energy integration projects in which, through the use of solar, wind or biomass energy, hydrogen is produced; the renewable energies can greatly benefit from their relationship with the "Hydrogen Vector", upon it being a means of storage that would prevent their intermittent nature, or that would resolve the difficulty of their use in mobile applications, such as transport.



National or international-scale projects are currently being developed in each of the four lines in order to achieve the maximum possibility of success in each of the activities.

Therefore, Hynergreen is a company strongly focused on R&D with the clear objective of electric energy production using clean and renewable sources, as the basis for sustainable development for the future.

Its facilities in Seville include a fuel cell and hydrogen advanced technologies testing and characterization laboratory. At the expansion phase, it is currently equipped with different gas installations, different technology hydrogen storage systems, electronic and computer-controlled control and metering equipment, and a long etcetera that will place it, upon completion, in an outstanding position at national level.





### Installations

The activity in the installations sector is mainly focused on engineering, construction and maintenance of electric and mechanical infrastructures, and instrumentation for the energy, industry, transport and services sectors; installation of insulating, refractory and passive fire-proofing materials.

This activity is carried out by the Instalaciones Inabensa, S.A. (Inabensa) Business Unit and by its subsidiaries abroad.

### Inabensa

The close of the 2004 financial year saw Inabensa continue to grow. This is Inabensa's tenth anniversary and the Company management result for the period has greatly exceeded the objectives set down in its strategy plan, with the company having reached significant registers that endorse its leading position in the general industrial installations, the very high voltage energy conveyance, the high-speed railway electrification, and the electric and electronic ancillary manufacturing markets.

The Company's average annual sales have increased by more than 11% over this same period. Under its decided internationalization strategy, Inabensa has executed significant projects in more than 30 countries, with 27% of its sales coming from abroad where it has a stable presence through permanent offices in Rumania, Costa Rica and Libya, or through subsidiaries in Portugal, France, Morocco and India. Inabensa's sales figure for 2004 is more than 12% up on the 2003 figure and its contracting portfolio registered a 17% increase during the year.

Quality management, which has been one of the basic pillars of the success accumulated over the years, was strengthened during the year upon Inabensa adapting its quality system to the requirements of the PECAL 2120:2000 standard, and the incorporation of the system's technical regulations and legislation management in the computerized system

The results of the application of its quality and environmental management systems can be seen in its customers' continuous acknowledgements, with Inabensa having been awarded, in 2004, the Iberdrola Prize for Excellence in the Services category for Large Companies.

As regards occupational accident safety and prevention, the certifying process of the Prevention System, to OHSAS 18001:1999 specifications, commenced towards the end of the year.

The progressive tendency towards a reduction in accident statistical indexes continued, with a 6% and 17% drop in the incident and seriousness indexes, respectively, compared to the figures for 2003. Inabensa has played a leading role in matters related to occupational risk prevention, upon General Electric Plastic achieving one million accident-free hours in 2004 (where a worker had to go on sick-leave), at its facilities in Cartagena. We would especially mention the following among the works that commenced, continued, or were completed by Inabensa in its different activity sectors, in 2004:

### Electric Installations

In 2004, in the energy generation, conveyance and distribution sector, we would especially mention singular projects such as the civil works and assembly of the 220/66 kV Puerto Santa Maria substation (SS), for Endesa; the remodeling of the 66/15 kV Inca SS, for Gesa; the construction of the 132/20 kV Burela SS in Lugo, for Electra de Vigo; the underground laying of 12 km of 400 kV line for REE, at Barajas airport; and the 132 kV Ardoz-Torote line, for Fecsa; the civil work, elevation and stringing of the 132 kV Valdemono-Warner Transmission Line (T.L.), for Unión Fenosa; the elevation and stringing of the 400 kV Palos-Guillena T.L., for Solucionar, and the construction of the 220 kV Vilanova-Gandia T.L., for Iberdrola.

The execution of the pluri-annual electric distribution contracts for Fecsa-Enher (Catalonia), Iberdrola (east coast and north) and Gesa (Balearic Isles), and the 400 kV live-line insulator cleaning works for REE, were also noteworthy in this sector.

In the environmental sector, special consideration must be given to the MV connection works, the supply and assembly of the T.C. and LV distribution network, for the Aguas de María de la Salud Water Consortium, on Majorca, and the changing of polychlorinated biphenyl (PCB) insulated transformers for dry transformers in Ford's factory at Almusafes.







In the industrial sector, we would mention the civil, electric and services works, in general, for the food industry with customers such as Sola Ricca, Frunexa, Harinera Villafranquina and El Pozo; for the automobile industry, with customers such as Ford, Peugeot, Citroen and Renault; for the electric energy industry with MV works and TCs at Pirelli's factory, in Villanova for the paper industry, with supplies and installations for Torraspapel; and for the oil industry, with customers such as Repsol and Cepsa.

In the transport sector, we would mention the works executed for AENA on the construction of the Gavá air-traffic control center's training, simulation and contingencies center, the commencement of the electric system works of the new terminal at Barcelona airport, and the enlargement of the powerhouse at Gran Canaria airport. In relation to high-speed, we would especially mention the commencement of the traction substation construction works on the Segovia-Valladolid section of track.

In the services sector, special mention must be made of the MV and LV electric and lighting installations on the Boadilla financial campus, for BSCH; the completion of the reformation works in the Larios shopping center, in Malaga; the electromechanical installations in Asepeyo's care center, in Seville; the new geriatric center in Espartinas, for Econivel; and the installation of the 1.3 MW photovoltaic plant for the Forum 2004 in Barcelona, and the Bilbao and Badajoz exhibition centers and the installations for Repsol headquarters at Tres Cantos (Madrid).

Likewise, the execution of large projects for different Public Administrations were noteworthy, those that

are still being executed, such as the Health Campus in Granada, the Malaga City of Justice and the Almanjayar Building for the Regional Government of Andalusia, or new projects such as the design, construction and operation of an advanced digital services center for the El Toyo urbanization, and the city of Almeria, for the city's corporation under a 20-year concession modality.

### Railways

In the railway electrification sector, 1,500 and 3,000 V dc, and 25,000 V ac works were executed for the GIF high-speed network, for Renfe, as were electrification works on line 3 of Metro de Madrid, and electrification, communications and signaling works commenced on line 9 of Metro de Barcelona. Of special note are the contact-wire stringing works on the northwestern corridor of the Segovia-Valdestillas high-speed line; the installation of control and energy measuring equipment on the Madrid-Seville line; the suiting of the Zaragoza-Lerida high-speed line tunnels to European legislation, for the GIF; and the completion of the electrification works on the northwestern corridor Zaragoza-Huesca line, for the Ministry of Development.

Catenary modernization works were executed for Renfe in relation to the renovation of contact wires, hangers, energy supply and compensations on multiple sections of rail line and in many train stations.

### Mechanical Installations

In 2004, work was completed on the construction and commissioning of the bioalcohol storage, delivery



and supply system to the ETBE plant at Cepsa's refinery in Huelva, for Abener; the installation of equipment and piping for the cooling water system of Iberdrola's Arcos III CCPP and the utility air system at the same power plant.

We would also underline the mechanical assembly works carried out on the enlargement of Almendralejo compression station, for Enagas, and the mechanical assemblies and systems to enhance the gas oil blending process on project AFI 302 Ptº A, at Cepsa's La Rabida refinery.

Towards year-end, work commenced on the mechanical installation of pipes, the main process and ancillary services pipe racks, at Biocarburantes Castilla-Leon's bioethanol production plant, in Salamanca.

### Refractory / Insulating / Passive Fire-proofing Materials

The refractory activity continues to be very active in the petrochemical industry with different works being executed at Repsol's plants at La Coruña, Puertollano, Tarragona and Cartagena. We would underline the refractory lining of a cracking furnace for Technip, at Dow Chemical's plant, in Tarragona.

The most significant works in the insulating activity were the insulation of equipment and piping for the 900,000 Nm<sup>3</sup>/h enlargement of the liquid natural gas (LNG) plant at Palos de la Frontera, for Enagas, and at Lurgi's biodiesel plant in Caparrosa, for EHN, as well as the insulation of piping in the ETBE production plant, at Cepsa's refinery, in Huelva.

As regards passive fire-proofing, we would mention the completion of the fire-proofing of the new generation fuel plant at BP Oil's refinery, in Castellon and, the manufacturing, supply and installation of sectoring curtains for smoke evacuation in the event of fire, in BSCH's head office building, in Madrid.

### Instrumentation and Maintenance

In the energy sector, instrumentation works were performed for the 400 MW generating units for Iberdrola Generación, at its Arcos de la Frontera CCPP, in Cadiz, and the instrumentation of the BOP of the Aceca thermal power plant, in Toledo. Likewise, maintenance works were executed on power transmission lines in the southeast area, for Iberdrola, and electric and instrumentation works at Almaraz and Trillo nuclear power plants.



Of note in the industrial sector, the instrumentation works at the Sabiñánigo production plant, for Aragonesas, and the antibiotics plant in Leon, for Vitatene, as well as the maintenance works at Gepesa's Lexan 1 and Lexan 2 compounding plants, in Cartagena, at Cepsa's refinery in La Rabida, Enagas's plant in Huelva, and electrical installations at Ford España's factory and at the bioethanol production plant in Teixeira, for Bioetanol Galicia.

In the services sector, works continued on the integral maintenance of the Torre Triana installations for the Regional Government of Andalusia, and in the banking sector, mainly for Caja Madrid and Banco Santander.

### Manufacturing Workshop

In relation to the manufacturing of ancillary equipment for the electric industry, we would mention the manufacturing of 20 kV cabinets for the La Celaya wind farm, for Neg-Micon; the 6.6 kV cabinets, power panels and MCC for Unión Fenosa's Aceca combined-cycle power plant, supplied through Socoin; the 6.6 kV cabinets for Iberdrola's Arcos III combined-cycle; and the 6.6 kV / 40 kA cabinets, certified against internal arc in containers, for Alstom's three generating units at Gas Natural's Escombreras CCPP; and the 17 kV cabinets for the Peaker plant at Escatron, for Técnicas Reunidas.

As regards the manufacturing of MCCs, those for Enagas and Solar Turbine, to be installed at their gas compression stations in Cordoba, Alicante and Seville, and for the enlargement of CLH's I.A., in Barcelona, are noteworthy.

In the electronic manufacturing activity, we



mention the Metro de Bilbao automatic cashiers, validating and vending machines, for Euskotren; the Camu & Radio Rack equipment and pneumatic and electric test benches, for Eads-Casa; the manufacturing of tags and radio-frequency antennae for dynamic toll systems; the manufacturing of electronic cards for combat vehicles; and the manufacturing of electrocardiographs and city and intercity traffic control equipment.

### Abroad

In 2004, Inabensa's presence and activity increased abroad in accordance with the activities programmed in the Company's strategic plan.

Among the most important activities carried out abroad during the year, we mention:

Work continued on the laying of the distribution network in San Jose, for the CNFL, and construction works commenced on Tabarca, Poas, Palmar, Cobano and Cahuita substations, for the Costa Rican ICE.

The construction and strengthening of the 225 kV TL for energy evacuation from the step, for the ONE, in Morocco; the construction of the 800 kV Sipat-Seoni TL, in India; works commenced on the construction of the 400 kV TL for Gecol, in Libya; the execution of the replacement of 3,000 km of guard cable with OPGW in Rumania, for Transelétrica; completion of the 90 kV Matam-Kaedi-Boghe TL works for Sogem, in Mauritania; and the completion of phase II and commencement of phase III of rural electrification works in Kenya, for the KPLC.

In the railway sector, we would mention the supply of a track polishing machine for the Tianjin Binhai Mass Transit Development of China; and the completion of the Basmane-Menemen-Aliaga and Alzacak-Cumaovasi electrification works in Turkey, for the TCDD, and commencement of the two-year maintenance period for these lines.

As regards mechanical installations activities, the successful completion and start-up of the 60,000 m<sup>3</sup> capacity oil product storage terminal at Nouakchott, in Mauritania, is of special relevance. In relation to electrical ancillary manufacturing, we especially mention the main control panels, remote shutdown panels, neutron monitoring panels and the sample-taking system for unit 2 of Lungmen



nuclear power plant, in Taiwan, for General Electric (GE); and the manufacturing of remote RTVs for the Steg project, in Tunisia; the LV board and MCC for the combined-cycle enlargement of Hermosillo Thermoelectric power plant at Mexico; and the equipping and supply of containers for GE gas turbine control in generating plants in Bangladesh, USA and China.

### Inabensa Maroc

In 2004, Inabensa's subsidiary in Morocco has grown significantly as a consequence of it having become the undeniable leader of the works being executed under the Rural Electrification Plan (PERG), for Oficina Nacional de Electricité (ONE), for which, at the close of the financial year, it was carrying out electrification works in more than 450 villages; upon it having greatly increased its participation in Meditel's mobile communications stations deployment plan, through it being awarded the turnkey construction of 81 sites; and on it becoming the main contractor for the Saidia tourist complex, for Fadesa, to execute the complex's electric and communications installations, and water treatment and pumping networks.

To successfully carry out all these projects, Inabensa has added new regional offices in Agadir to its head offices in Casablanca and





regional offices in Tangiers, and invested in the construction of two concrete post manufacturing plants for rural electrification purposes, in Taourit (north) and Chicaoua (south).

### **Inabensa France**

During 2004, Inabensa France successfully carried out the works corresponding to the biannual 2003-2004 contract with RTE.

Under the framework of said contract, Inabensa France executed a total of 11 service orders on 63, 90 and 225 kV TLs, throughout the entire country. The works included the disassembly of supports, construction of new supports, changing of conductors and strengthening of towers.

Likewise, for Alcatel, it replaced 9 km of conductor cables and strung en-roulé cable on the 90 kV La Cobière-Juigne TL.

At year-end, RTE extended the 2003-2004 biannual framework contract to Inabensa France for the whole of 2005.

### **Inabensa Bharat**

In 2004, Inabensa Bharat, Inabensa's subsidiary in India, in addition to continuing with the objective of Indian electric installations market management for Inabensa, gained direct entry to the same with Power Grid Co.

The works contracted directly by Power Grid Co. on the 400 kV Korba-Raipur TL were completed. Works also commenced on the construction of the 800 kV Sipat-Seoni TL for Power Grid Co., as an Inabensa works subcontractor.

For forthcoming years, Inabensa Bharat is Inabensa's strategic key to participation in new Asian markets, for which important commercial activities are already under way.

### **Inabensa Portugal**

A lot of commercial activity was undertaken in 2004, which led to the company being qualified as an authorized contractor for both REFER and REN, in the national railways and electric sectors. The year was brought to a successful end with ONI awarding the contract to install the PLC system on EDP's distribution network. The contract works will be executed in 2005.



### **Telecommunications**

Activities in the telecommunications sector are mainly focused on network integration and turnkey telecommunications projects.

In 2004, activity restructuring within the Business Unit was completed, with Abentel having concentrated this year on its classic external plant construction and maintenance activity, as well as on providing and maintaining loops and customer equipment. Under the latter activity, new products such as ADSL + PC and imagery (TV through ADSL) were developed.

On the other hand, Inabensa's telecommunications division focused on the integration of telecommunications networks and the development of new products, such as the implementation of the PLC system on electricity distribution networks.

### **Abentel**

In the execution of the global contract (for 2002 to 2006) with Telefónica de España S.A.U., the volume of works carried out for the customer was greater than in the previous year, with increases in Barcelona and Alicante. This consolidated its leading position as regards contracted volume and implementation in provinces, with the company being active in a total of 10 (Alicante, Badajoz, Barcelona, Cadiz, Las Palmas, Jaen, Madrid, Seville, Tenerife and Valencia).



Furthermore, it kept its place among the best as regards quality levels throughout the year, scoring more than 6 points of the mean global contract. This was a consequence of the policy employed in the two previous years, developed and expanded this year, in relation to the achieving of high quality levels to the customers' satisfaction.

In this sense, we would emphasize the following activities:

Consolidation of the Integra Project, having been pioneers in the dispatching and fulfillment of work order activities, by mobile phone with GPRS technology. The system was perfected through the use of a GIA dispatch tool developed by Telefónica. Its use was not limited to the maintenance activity this year, but was extended to the entire DSL activity. Continuation of improvement teams, formed by people from different levels and specialties who analyze the processes and improvement opportunities. As a consequence of these activities, improvement actions are implemented, objectives established and their results followed up on. During the year, these groups were introduced to 6 Sigma technology, with a total of twelve projects being executed in all of Abentel's regional offices, and a considerable number of persons in its organization structure were trained to "Green Belt" level. Thanks to these projects, almost 70 improvement actions were proposed.

Fault dispatch centralization and globalization, with a single work distribution center (WDC) for all the activities and entire country. The WDC has been given responsibility for supervising and diagnosing the tests carried out on the works performed by the experts. Our call center was also kept in operation. This is where the calls from the experts are attended to and the customers' opinions sought in relation to the works carried out.

The consolidation and extension of the Plan Optima to all the regional offices and activities. This commenced the previous year with its customer and has produced higher levels of efficiency – productivity and quality – in the ADSL activity, taken as a reference.



Collaboration, again with its customer, on some pilot plans in relation to quality, such as the one it is currently participating in, on the testing of RDSI lines.

More than 100 people contracted to increase the number of in-house technicians and management personnel, mainly in Madrid, Barcelona and DCA.

The number of scheduled training hours tripled, for technical personnel, as well as for employees and management personnel.

Likewise, in 2004, the cable operator department continued to execute supply works for Auna, in Madrid and Andalusia, and commenced the same activity in Catalonia towards year-end.

During the year, the Quality Certificates were kept updated in accordance with Standard UNE-EN ISO 9001:2000, and the Environmental Management Certificate in accordance with Standard UNE-EN ISO 14001:1996, which includes all the regional offices. Moreover, the process to certify the Occupational Risk Prevention Management System in accordance with the OHSAS 18001:1999, commenced.

### Inabensa's Telecommunications Division

We especially mention, for the railways sector, the installations for the GSMR system on the GIF's Lerida-Barcelona and Madrid-Seville high-speed lines, for Siemens España, and the construction of operator sites on the GIF's Madrid-Lerida line.

Likewise, of special note are the works carried out on the implementation of the PLC system on Endesa Net Factory's and Iberdrola's distribution networks; the development of Vodafone's management system software; the mobile-phone site mimetization works for Amena-Auna; and the supply, installation and commissioning of Nueva Generadora del Sur's communications system in Gibraltar, for Siemens AG Alemania.

### Commercialization and Ancillary Manufacturing

In 2004, the company maintained its leading position on the home market as a supplier of electric, instrumentation and communications equipment in the chemical, energy, telecommunications and industry sectors.

The business structure, based on its vocation for service and the providing of the highest possible quality, has enabled us to maintain a stable presence in our normal markets and to identify and exploit the opportunities offered us.

Under our growth strategy, we strengthened our presence on international markets, and our subsidiaries in the United States, Mexico and Argentina more than met the planned objectives.

Moreover, we are promoting the execution of turnkey projects and developing new services such as purchase logistics and storehouse outsourcing. In relation to the latter, we would mention the management of stores for Endesa, REE and Repsol Butano.

### Nicsa

Nicsa exceeded its established objectives for 2004, and maintained its leadership in Spain as a supplier of electric, instrumentation and communications equipment for the chemical, petrochemical,

refineries, combined-cycle, nuclear and thermal power plant sectors, and the heavy industry in general.

As regards growth strategy, a definitive drive was given to the internationalization of the activity, with two new subsidiaries being established, one in Mexico - Nicsamex S.A. de CV, and the other in Argentina - Nicsa Suministros Industriales S.A.

Among this year's most important references, we mention the following:

Signing of a framework agreement with Repsol for the supply of medium and low voltage electric cables for all its production centers.

Supply for Repsol Ypf, hydro-treatment plant (HDT) for loading to FCC at La Coruña, of grounding material, conduits, electric cables, direct current panels, lighting material and bus-bar conduits.

Supplies for Enagas on its main projects: enlargements of the plants at Cartagena, Barcelona and Palos (Huelva).

Framework agreement with Cepsa to supply electric and instrumentation material. Participation in, among others, the following projects: Nafta HDT Unit of FCC, in Huelva; Nafta SHU in Algeciras; HDS 1 in Huelva and Algeciras; and Revamping of H3, AZ3 Sulfur Plant, and LPG amines plant on Tenerife. The materials included under the framework agreement are: medium and low voltage electric cables, instrumentation cables, lighting equipment, handling stations, conduit boxes, trays, junction boxes and glands.



Supply of cables, bar pipes, trays and conduits for the combined-cycle plant AES (AES Joint Venture) is constructing at Cartagena.

Supply of cables to Intecsa Uhde for its olefins and derivatives plant project, for Pars Petrochemical Co., in Iran.

Of the subsidiary-executed contracts, we mention that carried out by the subsidiary in Mexico for Dragados Offshore and Sice, EPC 60 project, to adapt and modernize the Akal G and Akal GR platforms and the construction of the new Akal G1 four-legged platform, for Pemex, where the following materials were supplied: lighting, navigation support system, intercommunication and public address system, grounding equipment, conduits and accessories, cable, junction boxes, glands and lighting boards.

The promotion of turnkey project execution continued, with the following being the most significant:

Communications systems and structured cabling: for Técnicas Reunidas at Granadilla de Abona CCPP and for Enagas at the compression station in Cordoba.

Lighting: for Técnicas Reunidas at Granadilla de Abona CCPP, and for CHL/ Diseprosa at Monzalbarba TPP.

Bus-bar conducts: for Solucionera at Palos CCPP, and Repsol Ypf at the hydro-treatment plant (HDT) for loading on FCC at La Coruña.

During the year, the quality certificates were renewed in accordance with standard UNE-EN ISO 9001:2000, and the certifying process of the Occupational Risk Prevention System, in accordance with OHSAS 18.001:1999 specification, commenced.

### Abencor

During 2004, Abencor consolidated its presence in the sectors in which it traditionally carries out its activities: energy, transport, railways and telecommunications.

The energy market was the basis for the year's sales, especially through the supply of power transformers (dry and oil insulated), meters, automatic valves, glass and polymer insulators, and naked and insulated cables. In the railway transport market, the supply of catenary contact wire and of transformers was developed and, in the telecommunications sector, the

basis was the supply of cables for network deployment. Different installer companies were our direct customers for some of these supplies, and they so purchased some cable laying/stringing equipment.

The following are the main supplies made or contracts executed in 2004:

Oil-insulated power transformers for Fecsa – Enher – Endesa.

Auto-transformers for ERZ – Endesa.

Aluminum alloy cable for Sevillana – Endesa.

Supply of a 12 MVA encapsulated transformer, for Viesgo Generación.

Supply of meters for Iberdrola.

Supply of meters for Unión Fenosa.

Replacement of oil-insulated transformers with other encapsulated ones, for Telefónica.

Supply of power and communications cables for the deployment of Auna's network.

Supply of cable for the contact wire and supporting wire to Elecnor, for several works for RENFE.

Supply of 120 Cu Ag contact wire for the Atocha – Chamartin Tunnel joint venture formed by Elecnor and Electrén.

Supply of cable laying/stringing equipment for Inabensa, Semi and Elecnor.

Supply of luminaries to Inabensa for the El Pozo factory, in Murcia.

On the other hand, the outsourcing process was





consolidated for Endesa's stores on the Canary Isles, at Santa Cruz on Tenerife as well as Las Palmas on Gran Canaria, which had commenced activities in the second half of the previous year.

Abencor is directing its activities towards new markets, especially in the renewable energies sector. In the development of new lines of activity, it supplied photovoltaic solutions in Extremadura and the Canaries.

Quality and environmental commitment are fundamental objectives of its activity. Abencor's quality system is certified according to standard UNE-EN ISO 9001:2000, and it covers all its work centers, its head offices as well as main stores, in Seville, and its regional offices in Madrid, Barcelona and Bilbao. Likewise, it holds the Environmental Management Certificate in accordance with standard UNE-EN ISO 14001:1996 for all the aforementioned centers.

Furthermore, work has commenced on obtaining the Occupational Risk Prevention Certificate (workplace safety and health assessment) in accordance with the OHSAS 18.001:1999 specification.

Towards the end of 2004, the company undertook a new customer group organization process, which will come into operation in 2005. The commercial activity is being organized into four divisions: energy, installers, communications and, finally, environment, industries and alternative energies, each one specialized in attending to the corresponding market. The aim is to mold the company's structure to the sectors in which it operates to specialize in what its customers demand and adjust the functions of each work station to meet objectives, through customer service. Moreover, the aim is to specifically develop, providing the necessary means, certain lines of product with important perspectives for the future.

#### Eucomsa

During the year, Eucomsa was affected in the export market by the continued devaluation of the dollar which reduced the exporting activity. In spite of this, towers were supplied to different customers and countries, such as the exports to Ireland, Nigeria, Portugal, Sweden and Argentina, among others.

In the structures division, the company maintained its leading position on the home market with the country's main customer (REE) for the products it is



specialized in – structures for electric energy transmission lines and substations. Towers were supplied for the 400 kV Balboa-Portuguese Border, Almaraz-Guillena and Escombreras lines, as well as substations such as Torrearenillas, Nueva Escombreras, Guillena, Olmedo and Olmedilla. The plate division continued its policy of signaling market penetration. Manufacturing and sale of





aluminum signals is operative and the luminous signals activity is being further developed. Likewise, optic fiber divider cabinets continued to be manufactured for Telefónica, in Spain as well as Argentina, and for different national operators. An important milestone in the year was the completion and start-up of the tower testing station that employs state-of-the-art technology. Towers of heights up to approximately 70 m can be tested in the station. Test control and the recording of each of the stresses applied to the tower are computerized. The station is at the vanguard of the few existing stations worldwide for the carrying out of these types of tests. Towers from the standardized catalogue have been tested; a tower for mobile-telephones and two towers for Abemex, destination Mexico, and additional tests are to be carried out on towers for REE, destined for Morocco.

In addition, Eucomsa adapted its Quality System to version ISO 9001:2000 and also commenced the Occupational Risk Prevention Certifying process in accordance with the OHSAS 18.001:1999 specification.





Latin America





## Latin America

In 2004, the crisis-hit economies in the region began to recover and, therefore, it is only to be expected that 2005 will be the year of their definitive consolidation, leading to new infrastructure projects in the markets in which Abengoa is active through its local companies.

During the year, the Latin America Business Unit continued to consolidate its presence in Latin America by applying its policy of diversification by countries and products, which enabled the setting up of new companies, entry into new markets, and the manufacturing of new products to meet market demands.

The objectives set for 2004, by the Latin America Business Unit, were met, and have contributed significantly to Abengoa's consolidated Balance Sheet.

### **Teyma Abengoa** (Argentina)

The company maintained its presence in the Argentinean Market, and achieved greater diversification and expanded its customer base.

Customers and executed works:

- Yaciretá Binational Body: design, construction and industrial installations.
- Compañía de Teléfonos del Interior (CTI): property management, detailed engineering, civil works and erection of 600 radio-link sites.
- Telefónica de Argentina: public telephone works.
- Other customers: Transener, Repsol YPF, Transba, Nortel.



The Quality Management System was re-certified in accordance with standard ISO 9001:2000, and implementation of the Environmental Management System according to standard ISO 14001 advanced. Its certification is scheduled for during the first quarter of 2005.

### **Befesa Argentina**

Plants in Pacheco and Campana. Industrial wastes carrier and handler.

Customers and executed works:

- Edesur, Dupont, Daimler Chrysler, PBB Polisor-Dow Chemical, Dana Argentina, Monsanto and Unilever: PCB conditioning and exportation. New contracts with Coca-Cola, FEMSA of Buenos Aires, Pilkington Automotive Argentina, Edesur, Metrovías.
- Operation Alfa Laval Plant and US Filter Plant: hydrocarbon recovery plant Slop Oil unit, tank 265. Catre area waste collection and treatment, al La Plata refinery, for Repsol YPF.
- Government of the city of Buenos Aires: conditioning of thallium sulfate and lindane waste.
- Daimler Chrysler, Ford, Peugeot-Citroen, Toyota Argentina and Volkswagen (Automobile





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Industry), Esso, Repsol YPF and Shell CAPSA (Oil Industry), Bayer Argentina, Lanxess, Raffo, GlaxoSmithKline Argentina, Cardinal Health (Pharmaceutical Laboratories), Rohm & Hass, TFL, Procter&Gamble (Chemical Industry): collection, incineration, inerting and final disposal at a security deposit.

Befesa Argentina continued to work on improving its Integral Management System, based on standards ISO 9001 and ISO 14001, which were re-audited by TÜV Rheinland on December 2 and 3, during the 1<sup>st</sup> Follow-up Audit.

Licenses and authorizations obtained and/or renewed during the year:

- Pacheco Facility: annual environmental certificate.
- Campana Facility: special authorization certificate and annual environmental certificate.
- Handler/exporter: annual certificate.
- Carrier: annual environmental certificate, industrial and hazardous waste carrier, and special authorization certificate, non-hazardous industrial waste carrier.

### Abengoa Chile

Important projects were completed and others commenced, while the recurrent telephone network and high-voltage line maintenance works continued.

Customers and executed works:

- HQI Transelec: transformation to 500 kV high voltage line of the 2 x 220 kV Charrúa-Ancoa 1-2 lines, and terminations of the 1 x 220 kV

Charrúa-Ancoa 3 high voltage line, and replacing of conductors at SET Antuco.

- Chilectra: route modification of the 110 kV Cerro Navia-Renca line.
- Minera Collahuasi: construction of the filter yard, belts sector.
- Aguas Andinas: El Monte sewage system.

In progress:

- Endesa Chile: Optic fiber links for Maule power plants.
- Codelco Norte Chuquicamata: relocation of 100 kV electric feeders, line 4 Tocopilla-km 6, and the Chuquicamata-Calama Line, and contract no. 25064-TK-04 electric substation, 13.8 kV distribution and mine loop.
- Minera Collahuasi: southern distribution system.
- HQI Transelec: 1 x 220 kV Charrúa-Chillán line and repair of the 2 x 220 kV Tarapacá- Lagunas line.
- Codelco División el Teniente: assembly and commissioning of the Diablo Regimiento project ventilation system.
- BDS: Pichincha freshwater well system, Inca and Coposa pavilion at Collahuasi Mine.
- Codelco Norte Chuquicamata: installation of the third 220/110 kV auto-transformer in consortium with Siemens Chile, Siemens Brazil and Siemens AG.
- Esval: Héroes del Mar drinking water networks.



## Latin America

### Recurrent activities:

- Chilectra: maintenance and minor works on high-voltage lines. Contract SOT-SOC 2004/08.
- Telefónica CTC Chile: external plant and service order works. Contract PRI 47.

### Certifications:

Renewal of the ISO 9001:2000 Quality Management certificate and ISO 14001 Environmental management certificate.

Risk Prevention Management (OHSAS 18000) certifying process under way.

### R&D activities:

Activities continued within the framework of the bioethanol development project, study of key variables of the hydrolysis and fermentation process, in collaboration with Universidad de Concepción and CORFO.

### Befesa Chile

An industrial waste treatment plant at study stage. Integral waste treatment for mining companies. Contract with Minera Noronda for waste management and treatment.

### Teyma Uruguay

Subsequent to the crisis the country went through, Teyma Uruguay met the objectives established for 2004, doubling 2003's billing figures, and the workforce returned to an average of one thousand employees.

### Customers and executed works:

- Montevideo City Corporation (IMM):
  1. Sewage network rehabilitation and recovery works, strengthening of collectors and piping replacement on the Arteaga network.
  2. Road repair and paving works in Montevideo.
  3. Pumping stations, Cañada Jesús María, Colón and Pantanoso pressurized pipelines and Pantanoso main collector.
  4. Rehabilitation of the Teatro Solís prior to contracted dates.
  5. Through Consorcio Ambiental del Plata (CAP), in a 1,210 ha area with a population of 150,000,



household refuse collection service, street cleaning and removal of material to final destination. Innovative collection system employed.

- Obras Sanitarias del Estado (OSE): liquid waste treatment plants in the city of José Pedro Varela, with three pumping stations and their respective pressurized pipelines. Enlargement of the city of Florida's sewage network. Treatment of the Arroyo Carrasco catchment basin.
- Banco Hipotecario del Uruguay: design, project and construction of the "curtain wall" for head offices façade change, including the disassembly of more than 3,000 pieces of reinforced concrete (1,000 kg each).
- Gaseba Uruguay: project and installation of polyethylene pipes, household connections with their respective regulating systems.
- Hospital de Clínicas: hanging of the "curtain wall" on the main façade.
- Administración Nacional de Usinas-UTE: improvements to the low, medium and high voltage distribution network in the Central Distribution Sector's management area.
- Corporación Vial del Uruguay: construction of the new bridge of the Arroyo las Espinas on route 10.
- MVOTMA: housing construction for passives.
- Administración Nacional de Puertos: Montevideo port infrastructure maintenance works and replacement of the water network in its northern sector.
- Chipper S.A.: chipboard stockyard at La Tablada.
- Ence-Eufores: construction of the new chipboard



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stockyard in the Peñarol district of Montevideo. Construction of workshop and changing-room building at the logistics terminal of M'Bopicua, in Fray Bentos. Enlargement of the chipboard plant at Young.

- Ambev: construction of a new brewery and a liquid waste treatment plant (partnership with Abengoa Peru).
- Servicios Forestales: through its subsidiary Pandelco, with a 10% market share, crop services for the country's main operators.

Teyma Uruguay and its subsidiaries Pandelco and CAP are the only companies in Uruguay to simultaneously hold the ISO 9001 Quality, ISO 14000 Environmental and UNIT 18001 Occupational Health and Safety certificates.

### Abengoa Mexico

23 years after its arrival in Mexico, Abengoa maintains its position as one of the main transmission line and electric substation electromechanical installations integrator companies for the Comisión Federal de Electricidad (CFE).

Abengoa México also participates in infrastructure projects for Petróleos Mexicanos (Pemex), and in the water treatment and management market.

Customers and executed works:

- Comisión Federal de Electricidad (CFE): 55 TL transmission network for the Baja California Sur I CCPP (contract: PIF 001/2003), execution of the works required for the construction and installation of two transmission lines, 230 kV and 115 kV, length 49.6 km-C; two substations, 230 kV and 115 kV with total capacity of 133.3 MVA; ten high voltage feeders in the State of Baja California Sur (consortium formed by Abengoa México, Elecnor, S.A. e Isolux de México).
- Comisión Federal de Electricidad (CFE): 28 TL network associated with Altamira II, III y IV (3<sup>rd</sup>



phase) (contract: PIF 018/2002), execution of the works required to construct and install three 400 kV transmission lines, total length almost 291 km, in the states of San Luis Potosí, Zacatecas, Jalisco and Aguascalientes (Abengoa México and Elecnor, S.A. consortium).

In progress:

- Comisión Federal de Electricidad (CFE): 104 SLT 706 Sistemas Norte (1<sup>st</sup> phase), execution of the works required for the construction and installation of eleven transmission lines – 230 kV, 138 kV and 115 kV, total length almost 432.8 km, and ten transformation substations – 400, 230, 138 and 115 kV, with a total capacity of 1,533.33 MVA, 18.0 MVAR, of the inductive type, and thirty feeders, in the states of Coahuila, Chihuahua, Durango and Baja California Norte. Contracted value: US\$ 78,249,980.25.
- Mitsui de México: substation for a combined cycle in Valladolid (Yucatan). For the 500 MW combined-cycle plant being constructed by Mitsui-Toshiba-ICV for the CFE, in the city of Valladolid (Yucatan), construction of the electric substation that links the power plant and CFE's electric substation.





## Latin America

### Befesa Mexico

Its establishment process in the country continues through the development of all its business activities.

It has presented a contaminated land remediation bid to Petróleos Mexicanos (Pemex).

### Comemsa (Mexico)

Its factory is at full production capacity and it has greatly improved on the expected performance ratios. Its main objective for 2005 is to consolidate its entry on the North American market.

Customers and executed works:

- Actividades Industriales y de Servicios, S.A. (Cobra): transmission towers for Project 70 TL Rivera Maya, supply of five 400 kV dc types and three types of towers for 115 kV dc, for a total of 7,600 tons.
- Abengoa México, S.A. de C.V.: transmission towers for Project 104 TL 706 Sistemas Norte 1<sup>st</sup> phase. Design and manufacturing of towers for 230 and 400 kV, for a total of 2,900 tons.
- Elecnor, S.A.: transmission towers for Project 104 TL 706 Sistemas Norte 1<sup>st</sup> phase. Design and manufacturing of towers for 400 kV, for a total of 1,500 tons.
- Control y Montajes Industriales CYMI, S.A.: transmission towers for TL 614 and 615. Supply of fifteen types of ac and dc towers for 230 kV, for a total of 2,300 tons.
- Abengoa México, S.A. de C.V.: substation structures for Project 104 TL 706 Sistemas Norte, Herradura, Quevedo, Menonita, Durango and Cautlan substations. Design, manufacturing and supply of high and low voltage structures, for a total of 500 tons.
- Elecnor, S.A.: Valladolid substation structures – supply of high and low voltage structures, for a total of 500 tons, and Piedras Negras substation – supply of 150 tons of high voltage structures.
- Euroinsta México, S.A. de C.V.: 1,150 tons of telecommunication towers for the development of the telephone network of Telefónica Móviles de México.
- Mexsemi, S.A. de C.V.: 800 tons of telecommunication towers, for the development



of the telephone network of Telefónica Móviles de México.

- Swecomex, S.A. de C.V.: manufacturing and supply of a total of 400 tons of steel structures.

In progress:

- Control y Montajes Industriales CYMI, S.A.: TL 709, supply of seven types of dc towers for 230 kV, coming to a total of 2,000 tons.
- Control y Montajes Industriales CYMI, S.A.: TL 615 b supply of four types of towers for 230 kV, coming to a total of 100 tons.
- Inabensa, S.A.: Cóbano, Palmar and Cahuita substations (Costa Rica). Supply of a total of 270 tons of high and low voltage structures.

### Abengoa Peru

In a small and highly competitive market, Abengoa Peru increased its customer portfolio and expanded its activities, increasing its capacity to offer and executing projects under alliances with other local companies and Abengoa. This situation allows it to look to a very promising 2005.





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### Customers and executed works:

- Red de Energía del Perú S.A.: changing of the Lima Zapallal-Chimbote 1 conductor to 220 kV.
- Electronorte S.A.: remodeling of distribution networks and rehabilitation of low voltage networks in the business units of Chiclayo and branches.
- Hidrandina S.A.: expansion of the primary and secondary distribution networks, and household connections at three settlement areas. El Porvenir, three populated centers. Libertad Noroeste, two populated centers. Huanchao, province of Libertad, for 5,172 beneficiaries.
- Electrocentro S.A.: enlargement of the distribution networks in the city of Tingo María. 400 beneficiaries.
- Asociación Cultural Peruano Alemana de Promoción Educativa "Alexander Von Humboldt": construction of the youth center.

### In progress:

- Lima Airport Partners: electric substation civil works at Jorge Chávez International Airport.
- Ambev Perú: civil works at Ambev Peru's brewery, executed jointly with Teyma Uruguay.
- Codistil Dedini: effluent treatment plant at Ambev Peru's brewery.
- Banco de Materiales: edification of 1,512 single family dwellings, conditioning and paving works for the El Mirador de Pachacutec pilot project.
- Electronorte S.A.: rehabilitation of medium voltage feeders at the business units of Chiclayo, Cajamarca and branches – 2<sup>nd</sup> phase.
- Electronoroeste S.A.: 60 kV Piura-Sullana transmission line.
- Electronoroeste S.A.: remodeling of the 33 kV Zorritos-Cabeza de Vaca transmission line.
- Hidrandina S.A.: Unit VI: feeders and links at Chimbote, Casma, Huaraz, Caraz, Paiján and Chapén.
- Minera Barrick Misquichilca S.A.: electric and instrumentation works for the Alto Chicama mining project.
- Ministry of Energy and Mines: Unit I of the electric frontier expansion program, consisting of the construction of an 80 km, 60 kV transmission line and four small electric systems



in the Province of Piura which includes 855.4 km of primary lines plus primary and secondary networks and household connections for 26,268 beneficiaries.

### Quality:

Once the training, environmental evaluation and definitive documentation stages for the system had been completed, the implementation of the ISO 14001 Environmental Management System commenced for the activities at head office.

### Human Resources:

The implementation of the HHRR Management System commenced back in September 2003. It is based on the competences the work station description and classification must cover, recruiting and selection and training. The first stage was completed in 2004.

### Befesa Perú S.A.

Chilca Environmental Complex

In 2004, Befesa Peru increased its customer portfolio by more than 50% compared to the previous year and also expects to increase it again in 2005. It currently has more than 120 customers.



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During the last year, it gained important customers in the mining (Yanacocha and Antamina), oil (Repsol, Exxon Mobil, Shell, Petroperú) and electric (Edelnor, Edegel, Eletroandes, Etevensa) sectors, and, although in lesser numbers but by no means of less importance, in the pharmaceutical laboratory and analysis sector which is arranging for the management of its wastes in accordance with the legislation in force.

An important milestone in the wastes sector was the recent approval of the Regulations of the General Law on Solid Wastes No. 057-2004/SA, which enables the first steps to be taken towards putting the sector in order and also puts a stop to excessive informality, something that adds value to Befesa Peru's treatment facility. In 2005, Befesa Peru will try to capture a share of the generators sector that continues to dispose of its waste at land refill sites and dumps.

The Environmental Management System was standard UNE EN: ISO 14001 certified in June. This was an objective that had been established for 2004. Likewise, for 2005, the objective is to implement the ISO 9001 Quality Management System.

It is expected that Befesa will obtain the definitive authorization to export PCB and PCB-contaminated transformers by year-end.

### Quality:

The Environmental Management System was standard ISO 14001:1996 certified for the activities at the safety deposit located in Chilca.

The National Industries Society awarded us, through its quality management committee, the "ISO Acknowledgement" prize for having obtained the ISO 14001 certificate in 2004.

### Human Resources:

A Citizen Assistance Plan was put into practice, and is reflected through collaboration in providing breakfasts at state-run colleges, participation in school competition activities, collaboration in festivity organization in the provinces in which the company is active, and in activities as auspicious as the "Adopt an Athlete" aid program, through which the participation of an athlete in the Special Olympics of Japan 2005 was assured.



**Bargoa** (Brazil) (Manufacturer of components for the telecommunications, automobile and ancillary industries)

Bargoa continued to grow and increased its volume of business by more than 150% compared to the previous year.

Its traditional customers are Brazil's main stationary telephone operators, in particular Telemar.

On the foreign market, Telefónica de Argentina's activity was important. Our traditional USA, Japanese, Latin American and Central American countries' markets continued to be active, and the commencement of activities in the Spanish and Egyptian markets is noteworthy.

The Fundación Instituto Miguel Calmon de Estudios Sociales y Económicos awarded the company the prize for the sector's best company of Rio de Janeiro in 2003.

Important improvement works have been undertaken at our Camorim and Lagoas facilities, some of which will be completed in 2005.

Bargoa was extremely active in the development of new products, which enabled it to attend to the new needs of the market. An ambitious Product Development program has also been established for 2005.



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### Abengoa Brazil

It continues to occupy a leading position among the companies involved in Brazil's high voltage transmission lines market. Of a total of 2,869 km of contracted lines, 1,562 km are in operation (Expansión, ETIM, NTE and STE), 370 km under construction (ATE) and 937 km (awarded under competition-auction at Sao Paulo Stock Exchange are awaiting signing of the concession contract in March 2005.

Customers and executed works:

- Nordeste Transmissora de Energia (NTE) (concessionaire)-Agencia Nacional de Energia Elétrica (ANEEL): construction and operation of the 500 kV, 200 km Xingó/Angelim transmission line, and the 230 kV, 186 km Angelim/Campina Grande transmission line. In operation since January 2004.
- Sul Transmissora de Energia (STE) (concessionaire)-Agencia Nacional de Energia Elétrica (ANEEL): construction and operation of the 389 km, 230 kV Uruguaiana/Maçambará/Santo Ângelo/Santa Rosa transmission line. In operation since July 2004.
- Expansión Transmissora Itumbiara (ETIM)-Marimbondo (concessionaire)-Agencia Nacional de Energia Elétrica (ANEEL): construction and operation of the 212 km, 500 kV Itumbiara/Marimbondo transmission line. In operation since June 2004.

In progress:

- ATE Transmissora de Energia (concessionaire)-Agencia Nacional de Energia Elétrica (ANEEL): construction and operation of the 370 km, 525 kV Londrina/Assis/Araraquara transmission line.

New contracts:

- Lot A- Leilão 002/2004 (concessionaire): Agencia Nacional de Energia Elétrica (ANEEL): construction and operation of the 937 km, 500 kV Colinas/Ribeiro Gonçalves/São João do Piauí - Sobradinho/Ribeiro Gonçalves Substation transmission line. The concession contract is to be signed in March 2005.



### Befesa Brazil

Projects and documents are in the process of being studied. Its field of activity will be established in 2005.





## Management Structure



## Management Structure

		Address		Telephone - e-mail	Fax
<b>Chairman:</b> <b>Chairman:</b> <b>Corporate Services:</b> <ul style="list-style-type: none"> <li><u>Financial Manager</u> <ul style="list-style-type: none"> <li>- Structured Financing</li> <li>- Corporate Financing</li> </ul> </li> <li><u>Appointments and Remunerations Manager</u></li> <li><u>Investor Relations Manager</u></li> <li><u>Controller</u></li> <li><u>General Secretary</u> <ul style="list-style-type: none"> <li>- Legal Department</li> <li>- Risk Management</li> <li>- Communication Department</li> </ul> </li> <li><u>Organisation, Quality and Budgeting Manager</u></li> <li><u>Technical Secretary Manager</u></li> <li>Human Resources Management</li> <li>Computer Systems Management</li> </ul>	Felipe Benjumea Llorente Javier Benjumea Llorente	41018 Seville	Avda. de la Buhaira, 2	954.937.111 abengoa@abengoa.com	954.937.002
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	Jesús Viciara Cuatara	41018 Seville	Avda. de la Buhaira, 2	954.937.111	954.937.015 954.937.019
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# Management Structure

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<b>Environmental Services</b> <b>Befesa Medio Ambiente, S.A.</b> • Chairman • Vice-Chairman  <b>Corporate Services</b> • Legal Adviser • Consolidation and Auditing • Financial • Management Control • Human Resources  <b>Aluminium Waste Recycling</b> • Aluminium • Commercial • Production • Trading • Technology and Machinery Sale • Economic-Financial • Quality, Security and Environment  <b>Befesa Aluminio Bilbao, S.L.</b>  <b>Befesa Aluminio Valladolid, S.A.</b>  <b>Galdán, S.A.</b>	Javier Molina Montes Manuel Barrenechea Guimón	 48903 Luchana- Baracaldo (Biscay)	Buen Pastor s/n	944.970.533 befesa@befesa.abengoa.com	944.970.240
	Antonio Marín Hita Juan Albizu Etxebarria Eduardo Martín Onorato Ignacio García Hernández Elías de los Ríos Mora	 28010 - Madrid	Fortuny, 18	913.084.044 befesa@befesa.abengoa.com	913.105.039
	Federico Barredo Ardanza Manuel Barrenechea del Arenal Álvaro Aguirre Lipperheide José Ángel Corral Ruiz Fernando Zufía Sustacha Francisco Sáez de Tejada Picornell Juan Carlos Torres Romero Oskar de Diego Rodríguez	 48950 - Erandio (Biscay)	Ctra. Luchana-Asúa, 13	944.530.200 aluminio.bilbao@befesa. abengoa.com	944.530.097
	Federico Barredo Ardanza	 48950 - Erandio (Biscay)	Ctra. Luchana-Asúa, 13	944.530.200 aluminio.bilbao@befesa. abengoa.com	944.530.097
	Pablo Núñez Ortega	 47011 - Valladolid	Ctra. de Cabezón, s/n	983.250.600 aluminio.valladolid@befesa. abengoa.com	983.256.499
	Pedro Ugartemendía Merino	 31800 - Alsasua (Navarra)	Polig. Ind. Ibarrea	948.563.675 galdan@ctv.es	948.563.111



## Management Structure

		Address		Telephone - e-mail	Fax
<b>Deydesa, 2000, S.L.</b>	Ion Olaeta Bolinaga	01170 - Legutiano (Villarreal de Álava)	Pol.Ind. Gojain - San Antolín, 6	945.465.412 olaeta@deydesa2000.com	945.465.455
<b>Intersplav</b>	Victor Ivanovich Boldenkov	94800 Sverdlovsk (Ukraine)	Luganskaya Oblast	380.643.47.53.55 is@intersplav.com.ua	380.642.50.13.40
<b>Donsplav</b>	Alexander Shevelev	83008 Donetsk (Ukraine)	Yugoslavskaya Str. nº 28	380.622.53.47.69 donsplav@donsplav.dn.ua	380.622.53.30.63
<b>Salt Slag Recycling</b> • Deputy Manager • Economic-Financial	Manuel Barrenechea Guimón Carlos Ruiz de Veye Lourdes Núñez Abad	48950 Asúa-Erandio (Biscay)	Ctra. Luchana-Asúa, 13	944.530.200 aluminio.bilbao@befesa.abengoa.com	944.530.097
<b>Befesa Escorias Salinas, S.A.</b>	Rubén Calderón Alonso	47011 - Valladolid	Ctra. de Cabezón, s/n	983.264.008 escorias.salinas@befesa.abengoa.com	983.264.077
<b>Befesa Salt Slags, Ltd.</b>	Adrian Platt	Shropshire SY13 3PA (United Kingdom)	Fenns Bank Whitchurch	44.1948.78.04.41 enquiries@remetaltrp.com	44.1948.78.05.09
<b>Zinc and Desulphuration Waste Recycling</b> • Commercial • Supplies and Factory Administration • Economic-Financial • Technical	Manuel Barrenechea Guimón Ana Martínez de Urbina Íñigo Urcelay González Isabel Herrero Sangrador Javier Vallejo Ochoa de Alda	48950 Asúa-Erandio (Biscay)	Ctra. Bilbao-Plencia, 21	944.535.030 zinc.aser@befesa.abengoa.com	944.533.380
<b>Befesa Zinc Aser, S.A.</b>	Manuel Barrenechea Guimón	48950 Asúa-Erandio (Biscay)	Ctra. Bilbao-Plencia, 21	944.535.030 zinc.aser@befesa.abengoa.com	944.533.380
<b>Befesa Zinc Sondika, S.A.</b>	Joseba Arráspide Ercoreca	48150 - Sondika (Biscay)	Sangroniz Bidea, 24	944.711.445 zinc.sondika@befesa.abengoa.com	944.532.853
<b>Befesa Zinc Amorebieta, S.A.</b>	Joseba Arráspide Ercoreca	48340 - Amorebieta (Biscay)	Barrio Euba, s/n	946.730.930 zinc.amorebieta@befesa.abengoa.com	946.730.800
<b>Befesa Desulfuración, S.A.</b>	Manuel Barrenechea Guimón	48903 - Luchana-Baracaldo (Biscay)	Buen Pastor, s/n	944.970.066 desulfuracion@befesa.abengoa.com	944.970.240
<b>Industrial Waste Management</b> • Commercial • Marketing & Systems • Quality & Environment • Financial • Industrial	Santiago Ortiz Domínguez Antonio Rodríguez Mendiola Ana García Zamarreño Ana Yáñez Gutiérrez Alberto Carmona Bosch Leopoldo Sánchez del Río Castiello	41018 - Seville 28010 Madrid 28864 - Ajalvir (Madrid)	Avda. de la Buhaira, 2 Fortuny, 18 - bajo Pol. Ind. Los Olivos - Atlántico, 23	954.937.000 bgri@befesa.abengoa.com 913.084.044 bgri@befesa.abengoa.com 918.844.672 bgri-ajalvir@befesa.abengoa.com	954.937.024 913.105.039 918.844.973
• Business Development • Operations & Logistic • Engineering	Daniel González Martín Jacobo del Barco Galán Íñigo Molina Montes Javier González del Valle	28010 Madrid	Fortuny, 18 - bajo	913.084.044 bgri@befesa.abengoa.com	913.105.039
<b>Industrial Cleaning and Hydrocarbons</b>	Alfredo Velasco Erquicia	28010 - Madrid	Fortuny, 18 - bajo	913.084.044 befesa@befesa.abengoa.com	913.105.039





# Management Structure

		Address		Telephone - e-mail	Fax
<b>Befesa Tratamientos y Limpiezas Industriales, S.L.</b> • General Manager  • Main Clients  • Production • Financial • North Area Delegate  • Catalonia-Levant Area Delegate  • Center-South Area Delegate	Sergio Nusimovich Kolodny	08820 El Prat de Llobregat (Barcelona)	Av. Apel-les Mestres, 105	933.773.134	933.775.104
	Ignacio Muñoz Donat	46988 Paterna (Valencia)	Villa de Madrid, 26 - A Pol. Ind. Fuente del Jarro	961.345.033	961.341.650
	Ponciano Ibarreche Atube Marta Deprit García Beatriz López Gómez	48510 Trapagarán (Biscay)	Pol. Ind. Ibarzaharra - Pabellones 9 y 10	944.967.300	944.950.015
	Jauma Mir Martínez	08820 El Prat de Llobregat (Barcelona)	Av. Apel-les Mestres, 105	933.773.134	933.775.104
	Apolinar Abascal Montes	11500 Puerto de Santa María (Cadiz)	Pol. Ind. Las Salinas de Levante Av. Ing. Marcos Seguin, Parcela 22	956.543.776	956.543.681
<b>Befesa Plásticos, S.A.</b>	Luis Luengo Morales	30840 - Alhama de Murcia (Murcia)	Polig. Ind. Las Salinas c/Salinas, s/n	968.632.221 befesaplasticos@befesaplasticos.com	968.632.233
<b>Befesa Gestión PCB, S.A.</b>	Manuel Roca Blanco	30395-Cartagena (Murcia)	Polig. Ind. Cabezo Beaza Avda. de Bruselas, 148-149	968.320.621 befesa.pcb@befesa.abengoa.com	968.122.161
<b>Environmental Engineering</b>	Guillermo Bravo Mancheño	41018 Seville	Avda. de la Buhaira, 2	954.937.111 befesa.cta@befesa.abengoa.com	954.937.018
<b>Befesa Construcción y Tecnología Ambiental, S.A.</b> • Managing Director • General Manager • Production • National Trade • International Trade • Economic-Financial • Technical	Guillermo Bravo Mancheño	41018 - Seville	Avda. de la Buhaira, 2	954.937.111 befesa.cta@befesa.abengoa.com	954.937.018
	José Marañón Martín				
	Salvador Soler Salcedo				
	Miguel Ángel Mohino				
	Joaquín Fernández de Piérola				
<b>Befesa Fluidos, S.A.</b>	Rafael González García	33204 - Gijón (Asturias)	Ctra. Villaviciosa, 40	985.131.718 ffluidos@felguerafluidos.es	985.131.987
<b>Construcciones y Depuraciones, S.A.</b>	Juan Peña López Pazo	41700 Dos Hermanas (Seville)	Bda. Fuente del Rey - Prolongación c/ D. Remondo, s/n	954.692.654 codesa@codesa.com	954.690.941
<b>Latin America</b>	Juan Abaurre Llorente	41018 - Seville	Avda. de la Buhaira, 2	954.937.111	954.937.018
<b>Befesa Argentina, S.A.</b>	José Giménez Burló	C1063ACU Buenos Aires (Argentina)	Paseo de Colón, 728 - piso 10	5411.40.00.79.00 info@borg.abengoa.com.ar	5411.40.00.79.77
<b>Befesa Perú, S.A.</b>	Ignacio Baena Blázquez Percy Iribarren Ibáñez	San Isidro - Lima (Peru)	Canaval y Moreyra, 654, piso 7	511.224.54.89 befesa@abengoaperu.com.pe	511.225.20.66
<b>Befesa México, S.A. de C.V.</b>	Norberto del Barrio Brun	11300 Mexico F.D. (Mexico) Col. Verónica Anzures	Bahía de Santa Bárbara, 174	52.55.52.62.71.00 abengoa@abengoamexico.com.mx	52.55.52.62.71.40
<b>Befesa Brasil, S.A.</b>	Rogério Ribeiro Abreu dos Santos Antono Frías Pecellín	20020-080 Rio de Janeiro (Brazil)	Av. Marechal Câmara, 160, salas 1833/1834	5521.2217.3300 befesabrasil@abengoa.brasil.com	5521.2217.3337
<b>Befesa Chile Gestión Ambiental Limitada</b>	Alejandro Conget Inchausti Miguel Murua Saavedra	Santiago (Chile)	Las Araucarias, 9130	56.2.461.49.00	56.2.461.49.90

# Management Structure

			Address	Telephone - e-mail	Fax						
<b>Information Technologies</b>											
<b>Telvent</b> <ul style="list-style-type: none"><li>Chairman</li><li>C.F.O</li><li>Business Development &amp; Investor Relations</li><li>Internal Auditing</li><li>Legal Dept.</li><li>Communication</li><li>Human Resources</li><li>Operations, Quality and I.S.</li><li>C.T.O.</li></ul> <b>Telvent North America</b> <ul style="list-style-type: none"><li>Chairman</li><li>General Manager</li></ul> <b>Telvent Energía y Medio Ambiente</b> <ul style="list-style-type: none"><li>General Manager</li></ul> <b>Telvent Tráfico y Transporte</b> <ul style="list-style-type: none"><li>C.E.O</li><li>General Manager</li></ul> <b>Telvent Housing</b> <ul style="list-style-type: none"><li>C.E.O</li><li>General Manager</li></ul> <b>Telvent México</b> <ul style="list-style-type: none"><li>Chairman</li><li>General Manager</li></ul> <b>Telvent Brasil</b> <ul style="list-style-type: none"><li>General Manager</li></ul> <b>Sainsel</b> <ul style="list-style-type: none"><li>General Manager</li></ul> <b>Telvent China</b> <ul style="list-style-type: none"><li>General Manager</li></ul> <b>Telvent Interactiva</b> <ul style="list-style-type: none"><li>General Manager</li></ul> <b>Telvent Outsourcing</b> <ul style="list-style-type: none"><li>General Manager</li></ul>	Manuel Sánchez Ortega Ana Plaza Arregui		28108-Alcobendas (Madrid)	Valgrande, 6	902.335.599	917.147.001					
	José Ignacio del Barrio Carmen Rodríguez Carrión Carrión Ana Isabel Morales Rodríguez Cristina Poole Quintana Javier Ramos Robledo Enrique Rodríguez Izquierdo Larry Stack		Calgary, Alberta, Canadá T2W 3X6	10333 Southport Road SW	1.403.253.8848	1.403.259.2926					
	Ignacio González Domínguez					917.147.007					
	José Montoya Pérez Luis Fernández Mateo		28108-Alcobendas (Madrid)	Valgrande, 6	902.335.599	917.147.008					
	José Ignacio del Barrio Isidoro Costillo					917.147.005					
	Luis Rancé Comes Enrique Barreiro Nogaiedo		11300-Mexico F.D. (Mexico)	Bahía de Santa Bárbara, 176 Col. Verónica Anzures	+52.55.52.60.34.64 Gral. Sainco Méx.	+52.55.52.60.70.37					
	Marcio Leonardo		Jacarepaguá CEP 22780-070 Rio de Janeiro (Brazil)	Estrada do Camorim, 633	+55.212.441.30.15	+55.212.441.30.15					
	Victor Hidalgo Vega		41006-Seville	Tamarguillo, 29	902.335.599	954.935.309					
	Carlos Dai		100176 Beijing Development Area (China)	4th Floor of no2 plant no 8 North Hongda Rd.	(+86.10) 678.851.07	(+86.10) 678.851.12					
	Adolfo Borrero Villalón					954.926.424					
	Emilio Martín Rodríguez		41006-Seville	Tamarguillo, 29	902.335.599	954.660.852					
	<b>Abeinsa</b> <ul style="list-style-type: none"><li>Chairman</li><li>-Consolidation and Auditing Manager</li></ul> <b>Industrial Engineering and Construction</b> <ul style="list-style-type: none"><li>Manager</li></ul> <b>Energy</b> <b>Abener</b> <ul style="list-style-type: none"><li>General Manager</li><li>-Construction Manager</li><li>-Project Control Manager</li><li>-Financial and Economic Manager</li><li>-Draft Project and Bids Manager</li></ul>						Alfonso González Domínguez José Fernando Giraldez Ortiz		41018-Seville	Avda. de la Buhaira, 2	954.937.111 abeinsa@abengoa.com
Alfonso González Domínguez											
Manuel J.Valverde Delgado José Luis Burgos de la Maza Antonio González Casas Natalia Cebolla Zarzuela Emilio Rodríguez-Izquierdo Serrano			abener@abengoa.com	954.937.009							

## Management Structure

		Address		Telephone - e-mail	Fax	
<b>Shareholding</b> • Manager	Pedro Rodríguez Ramos		41018-Seville	Avda. de la Buhaira, 2	954.937.111 abener@abengoa.com	954.937.367
<b>Aprovechamientos Energéticos Furesa</b>						
<b>Cogeneración Villaricos</b>						
<b>Enernova Ayamonte</b>						
<b>Puerto Real Cogeneración</b>						
<b>Sniace Cogeneración</b>						
<b>Abroad</b>						
<b>Abener México</b> • Manager	Jaime I. García Muñoz		11520 Mexico F.D. (Mexico)	Bahía de Santa Bárbara, 173 Col. Verónica Anzures	(52) 52.5.531.48.24 abener@abengoa.com	(52) 52.5.203.27.31
<b>Abener Hermosillo</b> • Project Manager	Javier Pariente López					
<b>Solúcar Energía</b> • Managing Director • Manager -Project Development Manager -R&D Manager -Construction Manager -Financial and Economic Manager	Pedro Robles Sánchez Rafael Osuna González-Aguilar Antonio Esteban Garmendia Valerio Fernández Quero Teodoro López del Cerro Ricardo Abaurre Llorente		41018 Seville	Avda. de la Buhaira, 2	954.937.111 solucar@solucar.abengoa.com	954.937.008
<b>Shareholding</b> • Manager	Rafael Osuna González-Aguilar					
<b>Sanlúcar Solar</b>						
<b>Fotovoltaica Solar Seville</b>						
<b>Solar Processes</b>						
<b>Aznalcollar Solar</b>			41018 Seville	Avda. de la Buhaira, 2	954.937.111 solucar@solucar.abengoa.com	954.937.008
<b>Solnova Electricidad</b>						
<b>Copero Solar</b>						
<b>Copero Solar Huerta Uno</b>						
<b>Copero Solar Huerta Dos</b>						
<b>Copero Solar Huerta Tres</b>						
<b>Hynergreen Technologies</b> • General Manager	José Javier Brey Sánchez		41018 Seville	Avda. de la Buhaira, 2	954.937.111 hynergreen@hynergreen.abengoa.com	954.937.008



# Management Structure

			Address	Telephone - e-mail	Fax
<b>• Installations</b>					
<b>Inabensa</b>					
• General Manager	Eduardo Duque García				954.936.006
-Deputy General Manager	Jorge Santamaria Mifsut				
-Bids and Sales Manager	Javier Valerio Palacio				954.936.016
-Exports Manager	Emiliano García Sanz				
-Operations and Logistics Manager	M <sup>a</sup> José Esteruelas Aguirre			954.936.111	954.936.015
-Strategic Development Manager	Fernando Medina Contreras			inabensa@abengoa.com	954.936.010
-Finance Manager	Juan Carlos Deán García Adámez				954.936.009
<b>Installations 1</b>					
• Manager	Francisco Galván Gómez				
-Maintenance, Electricity and Instrumentation Manager	Francisco Galván Gómez				
-Regional Manager Southern Spain	Antonio Núñez García				
-Regional Manager Central Spain	Vicente Castiñeira García				
-Regional Manager Galicia	José Macías Camacho				
-Regional Manager Canaries	Fernando Celis Bautista				
-Railways Manager	José Luis Álvarez Sancho				
<b>Installations 2</b>					
• Manager	Rafael González Reiné				
-Regional Manager Levant	Antonio Baos Fernández				
-Regional Manager Catalonia	Pedro Clares del Moral				
-Regional Manager Balearic Islands	Francisco Pérez-Roldán Oller				
-Major Power Lines Manager	Alberto Pizá Granados				
-Regional Manager Northern Spain	Íñigo Astigarraga Aguirre				
<b>Installations 3</b>					
• Manager	Eduardo Dantas Lamas				
-Mechanical Installations Manager	Eduardo Dantas Lamas				
-Protisa Manager	Isaac Criado Montero				
<b>Workshop</b>					
• Manager	Gonzalo Gómez García				
-Seville Workshop Manager	Antonio Jiménez Rodríguez				
-Alcalá de Henares Workshop Manager	Felipe Collado Yoldi				
<b>Communications</b>					
• Manager	José Luis Montells García				
<b>Abroad</b>					
<b>Inabensa France</b>					
• Manager	Alberto Pizá Granados				

# Management Structure

		Address		Telephone - e-mail	Fax
<b>Inabensa Maroc</b>					
• Manager	Juan Manuel Valladolid Moro	20000 Casablanca (Morocco)	179, Av. Moulay Hassan I - 1 <sup>o</sup> étage	(212.2) 227.43.46 (212.2) 227.50.66 abengoa@casanet.net.ma	(212.2) 222.97.36
-Tangiers Manager	Abdelouahed Amahjour	90000 Tangiers	Angle Avenue Mohamed V & Rue Ibn Katir Residence Dos Mares Appart. 44 - 4 <sup>eme</sup> étage	(212.3) 932.20.52	(212.3) 932.20.58
-Agadir Manager	Mounir Lahmani	80000 Agadir	Avenue Hassan II Immeuble Oumlil - 1 <sup>er</sup> étage	(212.4) 882.23.60	(212.4) 884.83.62
<b>Inabensa Bharat</b>					
• Manager	G.C. Tather	110019 New Delhi (India)	1302-03 Ansal Tower 38 Nehru Place	(91.11) 641.40.93 inabensa@de13.vsnl.net.in	(91.11) 641.40.93
<b>Inabensa Costa Rica</b>					
• Manager	José Marset Rams	San José (Costa Rica)	Avda.nº1 entrecalles 21 y 23 Edificio Sasso- Pta. 2ª	(506) 223.57.25 inabensa@abengoa.com	(506) 223.66.04
<b>Inabensa Portugal</b>					
• Manager	Crispim Manuel Ramos	2685 Prior Velho-Lisbon (Portugal)	Rua Profesor Henrique de Barros, 4 Edificio Sagres, 6ºC	(351) 21.941.11.82 inabensa@abengoa.com	(351) 21.941.11.69
<b>Servicios Integrales de Mantenimiento y Operación, S.A. (Simosa)</b>					
• Manager	Ignacio Sabido Castillo	41018 Seville	Avda. de la Buhaira, 2	954.937.000 simosa@simosa.abengoa.com	954.937.006
<b>CT Palmas Altas S.A.</b>					
• Manager	Manuel Molina Trujillo	41018 Seville	Avda. de la Buhaira, 2	954.937.111	954.937.010
<b>• Communications</b>					
<b>Abentel Telecomunicaciones, S.A.</b>					
• General Manager	Vicente Chiralt Siles	28108 Alcobendas (Madrid)	Valgrande,6	902.335.599 abentel@abengoa.com	917.147.004
-Deputy Manager	Cristóbal Cuberos Vidal	41006- Seville	Tamarguillo, 29-4ª planta	902.335.599	954.935.520
-Deputy Manager	Alfonso Benjumea Alarcón				
-Finance Manager	José Ignacio Santiago Jover				
-Quality and Env. Management	Luis Giráldez González				
-Information Systems Manager	Alberto Benjamin Hernández				
-Manager Andalusia I, Extremadura and Levant	Diego Leal del Ojo González				
-Manager Central Spain and Catalonia	Eduardo González Pinelo				
-Manager Andalusia II and Canaries	Manuel Torres Moral				
<b>• Marketing and Manufacturing</b>					
<b>Abencor Suministros, S.A.</b>					
• General Manager	Rafael Gómez Amores	41006- Seville	Tamarguillo, 29-4ª planta	954.933.030 abencor@abencor.com	954.653.282
<b>Nicsa</b>					
• General Manager	José Carlos Gómez García	28010-Madrid	Gral. Martinez Campos, 15	914.464.050 nicsa@nicsa.abengoa.com	914.483.768
<b>Abroad</b>					
<b>Nicsa Industrial Supplies</b>					
	Santiago Rubin de Celis Rodriguez	Florida 33326 (USA)	1786 North commerce Parkway Weston	(1.954) 389.34.34 nicsa@nicsa.abengoa.com	(1.954) 389.34.35
<b>Nicsamex</b>					
	Manuel Díaz Sanz	11300 Mexico F.D. (Mexico)	Bahía de Santa Bárbara, 174 Col. Verónica Anzures	(52) 55.52.62.71.11 nicsa@nicsa.abengoa.com	(52) 55.52.62.71.62

# Management Structure

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<b>Nicsa Suministros Industriales</b>	Sergio Vicario Pérez	C1063ACU Buenos Aires (Argentina)	Paseo de Colón, 728, piso 10	(5411) 40007920 nicsa@nicsa.abengoa.com	(5411) 40007998
<b>Eucomsa</b> • Manager -Structures Manager -Tin Manager -Financial and Economic Manager	Luis Garrido Delgado Félix Muñoz Gilabert José Esteban del Corral Sánchez Rafael Lecaroz Muñoz	41710 Utrera (Seville)	Ctra. A-376 Km 22 Apartado 39	955.867.900 eucomsa@abengoa.com	954.860.693
<b>Abecomsa</b> • Manager	José Jerez Valero	41007-Seville	Carlos Serra,2- Nave 2H Polg. Industrial Ctra. Amarilla	954.513.736 abecomsa@terra.es	954.525.362
<b>Latin America</b> • Manager	Salvador Martos Hinojosa	41018-Seville	Avda. de la Buhaira, 2	954.937.111 abeinsa@abengoa.com	954.937.016
<b>Latin America</b>	Salvador Martos Hinojosa	41018-Seville	Avda. de la Buhaira, 2	954.937.111 abengoa@abengoa.com	954.937.016
<b>Southern Cone</b>	Antonio Frías Pecellín	C1063ACU-Buenos Aires (Argentina)	Paseo de Colón, 728, piso 10	(5411) 4000.79.00 info@teyma.abengoa.com.ar	(54 11) 4000.79.77
<b>Teyma Abengoa</b> (Argentina)	Alejandro Conget	Santiago (Chile) Quilicura	Las Araucarias, 9130	(56.2) 461.49.00 abengoa@abengoa-chile.cl	(56.2) 461.49.90
<b>Abengoa Chile</b>	Alejandro Conget	11100 Montevideo (Uruguay)	Avda. Uruguay, 1283	(598.2) 902.21.20 teyma@teyma.com.uy	(598.2) 902.09.19
<b>Teyma Uruguay/Teyma Paraguay</b>	Brandon Kaufman	CEP-20020-80 Rio de Janeiro (Brazil)	Avda.Marechal Câmara, 160, Salas 1833-1834	(55.21) 2217.33.00 abengoabrasil@abengoabrasil.com	(55.21) 2217.33.37
<b>Abengoa Brasil</b>	Antonio Frías Pecellín	CEP-20020-80 Rio de Janeiro (Brazil)	Avda.Marechal Câmara, 160, Salas 1833-1834	(55.21) 2217.33.00 befesabrasil@abengoabrasil.com	(55.21) 2217.33.37
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