7.2 Bioenergy

The Bioenergy business unit is spearheaded by the company Abengoa Bioenergy, which produces and develops biofuels for transportation (including bioethanol and biodiesel) that employ biomass (cereal, cellulosic biomass, and oleaginous seeds) as raw material. Biofuels are used for ETBE (a gasoline additive) production, or for direct blending with gasoline or diesel. Being renewable energy sources, biofuels help to lower CO_2 emissions and enhance the security and diversification of the energy supply, while reducing dependency on fossil fuels in the transportation sector, and helping to reach compliance with the Kyoto Protocol.

www.abengoabioenergy.com

International Presence

Bioenergy

Key figures 2009	
Revenue (M€)	1,010
Gross Cash Flows (M€)	188
Installed capacity (Mgal)	496
Investment in R&D (M€)	23.8
Average number of employees	4,224
Hours of training	200,533

Our Business

The price of bioethanol fell away over the first half of 2009 due to lower demand for gasoline and slumping crude oil prices. Yet prices rallied over the second half of the year on the back of strong demand for bioethanol, coupled with reduced imports from third party countries, with the increase amounting to as much as 25 % at year-end in comparison to the market prices seen at the start of the period.

Moreover, gasoline, crude and sugar, the commodities associated with bioethanol, all experienced sharp growth, with forecasts for next year far outstripping those for 2009.

In Brazil, the ethanol market is largely driven by local supply and demand, with a small volume destined for exports and no imports whatsoever. As a result, demand is greatly influenced by the demand of ethanol-powered vehicles for hydrated ethanol. Ethanol consumption by this type of vehicles along with those that use gasoline blended with anhydrous ethanol exceeds domestic production. This is directly driving up prices to new highs. Forecasts for this market are also promising, since estimates show that sales of flex-fuel cars will continue to climb at existing rates over the years to come. To cover this demand, Brazil is facing the major challenge of having to commission 25 production plants in the short to mid-term.

The economic crisis of 2008 dragged down crude oil prices and led to an exodus of speculative investment from the commodities markets and a drop in commodities prices towards the end of 2008. Following the improvements in economic projections and a fresh injection of capital into the commodities exchanges and markets at the start of 2009, grain and crude oil prices started to rally to eventually hit the new highs experienced in the middle of 2009, at which time the arrival on the market of the northern hemisphere's excellent 2009 grain harvests, coupled with the publication of less than favorable macroeconomic data, prompted price adjustments of grain futures. Over the final quarter, prices made back some ground as signs of global economic recovery were finally confirmed.

The DGS market (distiller's grains and solubles) also reported gains over the first half of the year, although by the third quarter, similar factors to those that affected the price of commodities also brought DGS prices slightly down.

Over 2009, Abengoa Bioenergy remained one of the leading biofuel producers in Europe (270 Mgal of annual production capacity), the United States (196 Mgal) and Brazil (30 Mgal). The company will also have a further 316 Mgal in the near future (currently in final construction), thereby bringing its total installed capacity to 812 Mgal from the first quarter of 2010 onward. Abengoa Bioenergy is therefore ideally suited to:

- To contribute to the sustainable development of the vehicle fuels market and the bio-based chemicals products market by utilizing renewable energy (biofuels) and environmentally friendly technologies that reduce carbon emissions.
- To develop innovative technological solutions through continuous investment in research and development, resulting in more efficient production processes and distinctive and high-value feed coproducts.
- To create value for our shareholders.
- To contribute to the professional and personal development of our employees by providing continuous training, and by establishing and monitoring individualized goals and development plans.

With this in mind, Abengoa Bioenergy works on a daily basis to attain the following goals:

- To be recognized as a world-wide leader in the production and commercialization of bioethanol from bio-renewable resources.
- To be recognized as a world leader in research and development, known for technological innovation in the conversion of biomass to bioethanol.
- To provide a superior work environment in order to attract the best possible employees and to maintain excellence in operations.
- To attract the interest and respect of the financial community by means of sustained growth and technological innovation.

In order to reach these lofty targets while honoring the principles of integrity and ethics, Abengoa Bioenergy bases its actions on the following core values:

- Honesty in relationships with clients, shareholders, associates and co-workers.
- Respect for all people under all circumstances.
- Focus on teamwork by utilizing corporate tools that favor the sharing of information.
- Promote flexibility and mental attitude necessary to adapt to continuous change.
- Protection, defense and improvement of the environment.

The company's activities can be grouped into five main areas:

- Procurement of raw materials.
- Bioethanol origination.
- Production.
- Marketing of bioethanol, DGS and sugar.
- New technologies.

Abengoa Bioenergy, with operations in seven countries on three different continents, currently owns ten plants for producing bioethanol and other co-products, along with a biodiesel production plant, distributed as follows:

- Europe: Spain and France.
- North America: United States.
- Brazil.

These plants are able to meet the demands of global bioethanol markets from practically any corner of the world. Most sales stem from current producer countries, as well as Sweden.

Abengoa Bioenergy also has four bioethanol production plant under construction or ramp-up phase projects underway in the United States and the Netherlands, which, due to their location, will enable the company to increase its presence in all markets, wherever they may be.

Abengoa Bioenergy's winning combination of international marketing capacities with cellulosic bioethanol technology, coupled with agricultural, productive and local marketing capacities, gives rise to synergies that will enable the company to post significant growth in the global ethanol market while obtaining the technology to cut the cost per liter of ethanol.

The integrated management systems have highlighted the need to implement mechanisms to gauge customer satisfaction and analyze their needs and expectations. The company therefore conducts periodic satisfaction surveys, which are managed by the plants' quality assurance departments. The analysis ultimately results in specific objectives and action plans to meet expectations and heighten satisfaction.

Abengoa Bioenergy attaches great importance to communication with customers and their privacy. The company considers service excellence to be of paramount importance and has therefore set up direct communication channels between the technical and commercial departments and their customers, the aim being to forge close relations with customers and receive their comments and feedback.

Abengoa Bioenergy adheres to Abengoa criteria and systems when it comes to customer privacy. Abengoa ensures the validity, integrity and security of all the information it handles, particularly the personal data of its customers. In order to guarantee the security measures relating to communications and information systems, there is a security policy statement that extends to all Abengoa companies and organizations. This statement provides information on the implementation of an Information Security Management System as a means of attaining the security objectives, with security encompassing confidentiality, integrity and availability.

One of the most important assets underpinning the reputation and growth of Abengoa Bioenergy is its employees, the cornerstones of the company's dominance. For this reason, the company channels much time and resources into ensuring their professional and personal development. To achieve this, it has implemented ambitious training plans in concordance with the current competency plan.

Furthermore, Abengoa Bioenergy integrates into its working practices, and likewise ensures that the conduct of its employees complies with the United Nations Universal Declaration of Human Rights and associated protocols and with other international treaties and agreements on social rights.

Abengoa Bioenergy strives to stay one step ahead of adverse situations and to anticipate potential risks stemming from the prevailing economic climate and those inherent in the transportation biofuels sector. The Bioenergy business unit ensures that all its business is subject to strict control policies and risk management processes so as to minimize the impact of such risks on company business, Including emung others:

- Market risks: Those arising from fluctuations in the prices of the commodities, i.e. cereal grain, which is directly pegged to the price of crude oil. The company anticipates this risk by managing it sufficiently in advance to guard against possible price variations. The market price of biofuels and co-products depends on a number of variables, such as the price of crude, public awareness and supporting legislation. Geographic diversification in the markets where the company operates ensures demand and the value of the products.
- Legislative risks: The future of the company's business largely depends on the legislation in force in the areas where it operates and on whether the relevant authorities favor and approve laws that foster biofuels and the infrastructures needed to make them more available to society, thereby helping to combat climate change and environmental decay. Abengoa Bioenergy is constantly striving to raise awareness of the sustainability and environmental returns (the resulting reduction in greenhouse gas emissions) of biofuels.
- Financial risks: The gloomy global economic climate has made it difficult to inject any kind of financial security into the markets from which to launch new projects or execute current projects effectively. Corporate procedures ensure that these risks are mitigated to the fullest extent possible.
- Operational risks: As with all industrial activity, there are risks inherent in productive processes that can affect company assets. By following its established procedures, Abengoa Bioenergy has hedged itself against practically all of these risks and similarly has contingency and mitigation plans in place to tackle them should they arise.

Abengoa Bioenergy is fully aware of the important effect that all stakeholders have on its business and growth. For this reason, the company not only offers them continuous, transparent and accurate information on its business activities, but also attempts to encourage dialogue with all of them through different channels of communication tailored to their unique characteristics, while also developing new channels as a response to what must be a dynamic and enriching process for all parties.

Abengoa Bioenergy's main stakeholders sit on the Board of Directors of the business unit, or are otherwise its employees, customers, suppliers, shareholders or the community in general. All their expectations are mirrored in the course of business and in the company's strategic plan, which addresses the trends and challenges of the sector and reflects the company's path towards sustainable development and the fight against climate change. The plan defines the risks and opportunities for each of Abengoa Bioenergy's products and services in all its territories and markets, as well as the expected results. It explores the impact that sustainability can have on the company, based on the information provided by market reports or internal reports.

The economic crisis will continue to linger over 2010, but the recent political changes taken by the world's main economic powers and their willingness to embrace renewable

energies have heralded a change of approach and vision, a change geared towards the sustainability of the energy sectors and the fight against climate change. Abengoa Bioenergy will continue to conduct all its business by following the best practices in terms of cost control and process efficiency, while making sustainability the absolute priority. The company remains optimistic and sees the future as a place full of challenges and opportunities for further growth.

Over 2010, the company will focus on consolidating productive and marketing activities, while continuing to develop production technologies for second generation biofuels (lignocellulosic ethanol). Once the three new production plants currently nearing completion are brought into operation (scheduled for the first quarter of 2010), Abengoa Bioenergy will become one of the world's leading producers, with operations in the most important production and consumption markets worldwide.

Sustainability has underpinned all the activities of Abengoa Bioenergy and one of the company's key priorities is to implement the necessary processes and make the necessary continuous improvements to increase the social and environmental sustainability of all its products and obtain official recognition of this milestone.

2009 in Review

The Bioenergy business unit is currently reporting excellent levels of business, given its consolidation as one of the world's leading bioethanol producers and marketers. Production in existing plants is matching our most optimistic expectations and is being spurred on by an increase in Trading business, resulting in improved control and management in accordance with the company's strategy.

There is now a clear need for a change of practices and policies and various governments have already acted accordingly. Business performance depends largely on favorable legislation that facilitates the development of new technologies while enabling biofuel culture to expand and combat the obvious signs of climate change. 2009 turned out to be a very fruitful year in this respect.

In Europe, the EU approved the Renewable Energies Directive in December 2008, compelling member states to deliver 10 % of renewable energy in the transport sector by 2020. This directive is extremely important and finally provides official confirmation that biofuels are the most effective and economically viable solution for attaining this target. Moreover, the Fuel Quality Directive (2009/30/EC) dictates that oil companies must ensure a 10 % reduction in greenhouse gas emissions from fuels by 2020, while also permitting bioethanol blends in gasoline of up to 10 % in volume. This second directive guarantees the viability of bioethanol as a real and necessary solution for meeting the fuel quality target.

The United States has also witnessed important political changes. Following the 2008 elections, legislative control passed to the Democratic Party in both the Senate and the Congress. The democrats won various key positions in both assemblies and now enjoy their strongest majority since the mid-70s. This has brought about a change in legislative priorities and ushers in a more liberal slant to law-making, including the policies on renewable energies and climate change. Hundreds of millions of dollars have been channeled into subsidies and loans for fostering renewable energies, technologies for producing bioethanol from biomass and new projects to increase the use of bioethanol in the transportation sector.

Surrounded by this wealth of opportunities, Abengoa Bioenergy has successfully overcome the global economic crisis that started in 2008 and will be able to implement

its expansion plans during 2010 by completing the bioethanol and biodiesel projects initiated in previous years in Spain, the Netherlands, the United States and Brazil. In a similar vein, the company has initiated new cogeneration projects in Brazil, which will increase the overall performance of the plants it has in the country.

Over its ten years of existence, the Abengoa Bioenergy Business Unit has advanced from an initial installed production capacity of 40 Mgal to over 800 Mgal in 2010.

For Abengoa Bioenergy, 2009 was a year of consolidation and growth in the United States, Europe and Brazil. In spite of the inevitable constraints imposed by the global crisis, which has been felt in all aspects of group business, 2009 was a year brimming with success stories:

- Start of operations at the biodiesel plant in San Roque, Cádiz (Spain), with a production capacity of 60 Mgal per year.
- Start-up of the Babilafuente biomass plant in Salamanca, with a production capacity of 1.3 Mgal of second generation bioethanol per year.
- Promotion and expansion of the network of biofuel service stations in Spain and Germany, with over 20 directly supplied service points in each country.
- Opening of new corporate offices in São Paulo, Brazil.
- Incorporation of Abengoa Bioenergia Trading Brasil, specifically entrusted with the task of managing the commercialization of the bioethanol and sugar produced in the country.
- Implementation of the Competitiveness Plan within the Brazilian companies.
- Acquisition of the remaining 50 % in the company Biocarburantes de Castilla y León, previously half-owned by the Ebro-Puleva group.
- Staging of the VIII World Biofuels Conference.
- Celebrations to mark the tenth anniversary of the Ecocarburantes Españoles plant in Cartagena.
- Official inauguration of the Abengoa Bioenergy France plant.
- Construction of the Rotterdam plant in the Netherlands, capable of producing 127 Mgal of bioethanol per year.
- Construction of the Madison plant in Illinois, with an annual bioethanol production capacity of 88 Mgal.
- Construction of the Mount Vernon plant in Indiana, with an annual bioethanol production capacity of 88 Mgal.
- Beginning of the execution of the Hugoton project, in Kansas, with an annual cellulosic bioethanol production capacity of 13 Mgal.
- Construction of cogeneration facilities at the company's 70 MW bioethanol plants in Brazil.
- Abengoa Bioenergy Corporation has been awarded the Greater St. Louis Top 50 Award for the third year in a row.
- Abengoa Bioenergy Corporation receives the Top Bioenergy Company Award.
- Abengoa Bioenergy of Nebraska receives the Agriculture Award.
- Abengoa Bioenergy Operations receives the Chemical Safety Excellence Award.
- Abengoa Bioenergia Brasil receives the MasterCana Social Award.
- Abengoa Bioenergy Corporation secures the OHSAS 18001:2007 standard.
- Abengoa Bioenergy France obtains the ISO 9001, ISO 14001 and OHSAS 18001 quality standards.

Our Activities

Abengoa Bioenergy remains a benchmark company in the development of new technologies for the production of biofuels and the sustainability of raw materials, channeling a tremendous amount of resources into research to this end. Its Trading division means that the company is also a service provider capable of offering global solutions, with an impressive capacity for marketing and managing commodities, reliably backed by its global production and raw material procurement capacities and highly efficient operations – cornerstones that afford reliability and critical mass, which are key to optimum business development.

Abengoa Bioenergy contributes to sustainable development by marketing fuel compounds obtained from renewable sources (biofuels) through the use of environmentally-friendly technologies that help to bring about a net reduction in polluting emissions, for use in public transportation and private vehicles.

Abengoa Bioenergy develops innovative technological solutions through continuous R&D investment. These solutions are put into practice in production processes, allowing the company to enjoy the same production costs as for conventional fossil fuels, while affording our DGS co-product a competitive edge.

Abengoa Bioenergy upholds its commitment to shareholders of creating value, and likewise contributes to the personal and professional development of its employees through continuous training and by implementing and following up on personalized plans.

Abengoa Bioenergy creates new opportunities for sustainable rural development as it encourages energy crops and the creation of farming industries, thus helping to maintain employment and income levels in rural areas.

Bioenergy

Bioethanol and biodiesel are renewable and clean energy sources which, for some time now, have proved to be a reliable and effective replacement for gasoline and diesel fuel in vehicle engines, while helping to diversify and improve the security of the energy supply. Their use, either in a pure state or blended with fossil fuels, reduces CO_2 emissions, slows down climate change, and reduces the emission of polluting agents into the environment.

The company's activities can be grouped into five major areas:

- Raw material procurement.
- Bioethanol origination.
- Production.
- Bioethanol, DGS and sugar trading.
- New technologies.

Raw Material Procurement

One of the driving forces behind the positive business results reported by the Bioenergy Business Unit is the procurement of raw materials for producing the biofuels.

The most important grain cereals for the production of bioethanol at Abengoa Bioenergy's plants are currently wheat, barley, corn and sorghum, not only because of their alcohol yield, but also their significant protein yield (DGS), highly valued in the livestock feed sector. As for biodiesel production, the most frequently used oils are soybean and palm.

Since it began operations, Abengoa Bioenergy has managed to build up a wealth of experience in both the supply and logistics of commodities. It has displayed great prowess and versatility on the international stage and when purchasing within the domestic market, and has also secured direct supply agreements with farmers, thus ensuring that the group's plants have the volume of materials they require. Similarly, the company has in-depth knowledge of the applicable regulations for operating in the European Union and the United States.

Abengoa Bioenergia Brasil grows sugarcane while preserving sustainable rural development, biodiversity, and regional economic growth. Its subsidiary company, Abengoa Bioenergia Agrícola, ensures that the company's production plants are properly supplied by signing contracts with landowners, carrying out the necessary tasks for combined use of the land, and with farmers, by providing the necessary resources and advice in order start production.

Bioethanol Origination

In addition to Abengoa Bioenergy's bioethanol production capacity, which is marketed by the trading companies, the latter also carry out bioethanol origination from third-party producers to add this product to the pool, thus allowing for greater flexibility and competitiveness in terms of the customer portfolio.

Production

Bioethanol is produced in plants across Europe, the United States and Brazil. Bioethanol is obtained from cereal grains or sugarcane through chemical processes and treatment, to produce either ETBE (a component of all types of gasoline), or for direct blending with gasoline to obtain biofuels, either e85 (a mixture of 15 % gasoline and 85 % bioethanol) or e10 (90 % gasoline and 10 % bioethanol). The co-product DGS is also obtained

from the bioethanol production process. This high-protein compound results from the extraction of starch from cereal grains and is ideal for producing livestock feed.

The production of bioethanol from sugarcane also returns sugar as a by-product. This sugar is processed to make it suitable for human consumption and for further use in producing other food products.

Bioethanol, DGS and Sugar Trading

Abengoa Bioenergy has operations in key locations for worldwide bioethanol trading and export: In Rotterdam (the Netherlands), with immediate access to Europoort; in St. Louis, Missouri (U.S.), in the heart of the country's main cereal production and cattle breeding region; and in São Paulo (Brazil), the birthplace of bioethanol-from-sugarcane production. Through all these facilities, Abengoa Bioenergy is able to meet the bioethanol, DGS and sugar demand of the European, American, and Brazilian markets.

Market fluctuations, political conditions throughout the different territories and other factors affecting company activities, in terms of acquiring raw materials and producing the products to be commercialized, are all carefully analyzed from a global standpoint in order to afford us a better vision of the global markets. Meticulous analysis and risk management improve the performance of corporate processes, always within the scope of sustainable development, and respect for the environment, human rights and the community remains one of the company's guiding principles. Abengoa Bioenergy is therefore able to offer its customers the option of selecting the solution best tailored to their needs by providing the necessary reliability and flexibility throughout its bioethanol supply process.

New Technologies

Abengoa Bioenergy fully intends to become a leading figure within the bioenergy sector and a worldwide producer of biofuels. Its mission is to develop innovative technological processes for producing bioethanol and associated co-products. To this end, it works to develop production and processing technologies, with unbeatable and highly efficient operational practices.

The human team of engineers and scientists, who coordinate their work with other R&D centers, universities and industrial partners, develops innovative processes in order to increase the performance of grain-based bioethanol, develop new co-products, improve the quality of existing products and develop lignocellulosic biomass technology for bioethanol production. As part of its business strategy, it creates and registers intellectual property to provide technology to third parties under management agreements.

In 2008, the U.S. Department of Energy granted the company a government subsidy to develop, construct and operate North America's first commercial bioethanol from cellulosic biomass plant in the state of Kansas, thereby illustrating the trust the U.S. government places in the company on account of its excellent business performance and unflinching commitment to quality and sustainable development.

Main Projects and Achievements in each Geographical Area

Europe

Abengoa Bioenergy is the European leader in the production of bioethanol for use as a biofuel, and currently operates three plants in Spain: Ecocarburantes Españoles, in Cartagena (Murcia); Bioetanol Galicia, in Teixeiro (A Coruña); and

Biocarburantes Castilla y León, in Babilafuente (Salamanca), with a total installed capacity of 40, 52 and 53 Mgal a year, respectively.

In addition, Abengoa Bioenergy, through Abengoa Bioenergy France, has now consolidated operations in its fourth plant in Europe, with a production capacity of 66 Mgal a year and which utilizes corn and low-quality vegetable alcohols as raw materials.

In September, an agreement was closed to acquire 50 % of the shares in the company Biocarburantes de Castilla y León, S.A. from Ebro Puleva. The full integration of this plant, along with the other plants in Europe, will generate considerable logistic and operational synergies and will position Abengoa Bioenergy as Europe's leading producer, with direct control over an installed production capacity of approximately 210 Mgal a year in Europe alone.

Construction work was completed on a second generation bioethanol demonstration plant, with an annual production capacity of 1.3 Mgal of bioethanol from biomass. The plant was brought into operation in September of 2009 and is the world's first plant to utilize this technology on such a scale. The facility will be used to improve the design of the commercial plants to be constructed in years to come, while assessing operational costs, identifying bottlenecks and streamlining operations.

The biomass plant is located within Biocarburantes de Castilla y León's plant in the municipality of Babilafuente, which produces 53 Mgal of bioethanol a year from grain, effectively meaning that both facilities share services and process chains. The company believes that the quickest way of developing technology for producing second generation biofuels is through "hybrid plants", which combine first and second generation installations to cut the cost of implementing new technologies and harness the advantages offered by economies of scale.

Abengoa Bioenergía San Roque manages the biodiesel production plant of the same name commissioned in February, which supplied its first batch of biodiesel in March 2009. It is designed to operate with different types of vegetable oil - soybean, rapeseed and palm - and does not therefore depend on one sole supply source. At start-up, the plant operated with blends of soybean oil, crude palm oil and refined palm oil, reaching up to 80 % of palmitic acid in the blend. The plant will produce 200,000 t of biodiesel, which will meet the quality parameters prescribed by European biodiesel standard EN 14214. It will also produce 20,000 t of glycerin with 85 % purity. With this new plant now in operation, Abengoa Bioenergy has the necessary biodiesel market knowledge and production technologies, thus confirming its leading role in forging a global biofuel market for the transportation industry.

Construction on a fifth plant in Rotterdam (the Netherlands), which started in 2008 and continued during 2009, is now in its final stage and the plant is expected to begin production in early 2010. It is set to be Europe's largest bioethanol plant and one of the biggest in the world, with a projected bioethanol production capacity of 127 Mgal per year.

Thanks to its marketing initiatives launched across Europe in 2009, coupled with its experience in the sector, the company has become one of Europe's leading bioethanol managers and suppliers.

In addition to marketing bioethanol, Abengoa Bioenergy worked over 2009 to develop a bioethanol supply network in Europe, primarily in Spain and Germany, with over 20 directly supplied points in each country. This network is key to expanding the reach of bioethanol, and although the project is still in its early stages, it promises to

become an undisputed reality within the next few years, capable of supplying biofuels to consumers across Europe.

May witnessed the World Biofuels 2009 8th annual conference in Seville, which, for three days, brought together over 120 representatives of biofuel producing companies and associations, government and official representatives of the European Union and the United States, oil operators, car manufacturers, investment banks, producers of commodities and consultants. The conference tackled, among other subjects, the growth of over 30 % in worldwide demand for biofuels, the new regulations intended to champion biofuels and the need to comply with strict sustainability requirements. The event also included a financial analysis of the prevailing situation affecting the sector and the projected availability of financing for operations and investments within the biofuel industry.

In September, the company held the official opening ceremony for Abengoa Bioenergy France's plant in Lacq. The event, which was attended by leading figures from Abengoa Bioenergy and from the Spanish and French governments, stressed the excellent business opportunities presented by the region and also underscored the positive impact the company's business has already had on the area.

To mark the tenth anniversary of the Ecocarburantes Españoles plant in Cartagena (1999-2009), a ceremony was staged in November to celebrate the milestone. An open doors working day was organized for company workers and their families, along with a range of other activities.

Over 2009, Abengoa Bioenergy France was awarded the corresponding ISO 9001, ISO 14001 and OHSAS 18001 standards of quality following implementation of its Integrated Management System (IMS). The company has therefore reiterated its commitment to quality, the environment and occupational risk prevention. The existence of these certificates not only heightens customer loyalty, but also the loyalty and trust of its employees, thereby improving the working environment and speeding up the flow of information and decision-making throughout all levels of the organization, part of the company's move towards continuous and sustainable improvement of its processes.

Ecocarburantes Españoles

- Owned by Abengoa Bioenergy (95 %) and IDAE (5 %).
- Installed capacity of 40 Mgal of bioethanol per year.
- Annual DGS production capacity of 110,000 t.
- Electrical power production capacity of 135,000 MWh per year.
- Annual grain consumption of 300,000 t.

The company Ecocarburantes Españoles, S.A. owns a bioethanol production plant in the Valle de Escombreras in Cartagena, Spain. Abengoa Bioenergía, S.A. owns 95 % of the company, while the Spanish Institute for Energy Diversification and Savings (Instituto para la Diversificación y Ahorro de la Energía, or IDAE) owns 5 %.

Part of the CO_2 produced during the grain-to-ethanol transformation process is sold to installations close to the plant, thereby eliminating the need for these companies to produce their own additional CO_2 and, therefore, taking even greater advantage of the bioethanol production process and reducing carbon dioxide emissions into the atmosphere. Similarly, electricity is generated during the production process, which provides power for the entire plant, with the surplus being returned to the national power grid.

Bioetanol Galicia

- Owned by Abengoa Bioenergy (90 %) and Xes Galicia (10 %).
- Installed capacity of 52 Mgal of bioethanol per year.
- Annual DGS production capacity of 120,000 t.
- Electrical power production capacity of 165,000 MWh per year.
- Annual grain consumption of 340,000 t.

The plant, which is owned by Bioetanol Galicia, S.A., is currently in operation in Teixeiro (A Coruña) and boasts a yearly bioethanol production capacity of 52 Mgal. The company is 90 % owned by Abengoa Bioenergy and 10 % by Xes Galicia.

The surplus electricity generated during bioethanol production, which greatly outstrips actual plant consumption, is returned to the national power grid and accounts for part of the profits from the process.

Biocarburantes de Castilla y León

- 100 % owned by Abengoa Bioenergy.
- Installed capacity of 53 Mgal of bioethanol per year.
- Annual DGS production capacity of 120,000 t.
- Electrical power production capacity of 139,000 MWh per year.
- Annual grain consumption of 585,000 t.

The plant, owned by the company Biocarburantes de Castilla y León, S. A., is located in Babilafuente, Salamanca, and has a yearly production capacity of 53 Mgal. In September 2009, Abengoa Bioenergy acquired the remaining 50 % of the company Biocarburantes de Castilla y León, previously owned by Ebro Puleva.

As with the other Spanish plants and in accordance with applicable law, plant-generated electricity that is not employed in bioethanol production is returned to the power grid.

Abengoa Bioenergy France

- Owned by Abengoa Bioenergy (69 %) and Oceol (31 %).
- Final installed capacity of 66 Mgal of bioethanol per year.
- Annual DGS production of approximately 145,000 t.
- Estimated cereal (corn) consumption of roughly 500,000 t per year.
- Estimated annual consumption of wine and sundry alcohol of roughly 13 Mgal.

Abengoa Bioenergy France owns the fourth Abengoa Bioenergy plant in Europe (the first outside Spain) for bioethanol production. It is 69 % owned by Abengoa Bioenergy and 31 % by Oceol, an association of the region's main agricultural cooperatives and industries.

This plant employs corn and low-quality vegetable alcohols as raw materials and is located at the Petrochemical Platform of Lacq, Pyrénées-Atlantiques (France). Projected total annual production capacity amounts to 64 Mgal of bioethanol, broken down into 55 Mgal using corn as the raw material, and 13 Mgal produced from the distillation of low-quality vegetable alcohols.

Abengoa Bioenergy Netherlands

- 100 % owned by Abengoa Bioenergy.
- Projected annual bioethanol production capacity of 127 Mgal.
- Projected annual DGS production capacity of 380,000 t.
- Annual grain consumption of 1.2 Mt.

Abengoa Bioenergy Netherlands first started construction on the plant, located in Europoort, Rotterdam, in September 2007 and the company plans to bring the 127 Mgal plant into service during the first quarter of 2010. The plant will generate 75 direct jobs.

Abengoa Bioenergía San Roque

- 100 % owned by Abengoa Bioenergy.
- Annual biodiesel production capacity of 59 Mgal.
- Crude glycerin production capacity of 22,000 t per year.
- Estimated vegetable oil consumption of 205,000 t per year.

The Abengoa Bioenergía San Roque plant is located on a site annexed to the Gibraltar Refinery on the Palmones de San Roque industrial estate (Cádiz, Spain). It was started up in February 2009 and started supplying the refinery in March.

It has been designed to operate with different kinds of vegetable oil - soybean, rapeseed and palm - and does not therefore depend on just one supply source. The plant has a capability of 200,000 t of biodiesel per year, which is utilized in 5 % blends with diesel at the Cepsa refinery. The plant also has a capacity of 20,000 t yearly of glycerin with 85 % purity.

The plant directly employs 45 highly qualified workers.

Biomass Plant

- 100 % owned by Abengoa Bioenergy.
- Bioethanol production capacity of 1.3 Mgal per year.

Managed by Abengoa Bioenergía Nuevas Tecnologías, the biomass plant was completed in December 2008 and has been fully operational since September 2009. It is the world's first plant to utilize this technology on such a scale. It is located within the Biocarburantes de Castilla y León plant, meaning that both facilities share common services and process chains. The ethanol it produces is distilled to 42 % and then concentrated and dehydrated.

This plant will be used to improve the design of the commercial plants to be constructed over the coming years, assess operating costs, identify bottlenecks and streamline operations.

United States

Abengoa Bioenergy is one of the largest bioethanol producers in the United States. After starting production at the Ravenna plant back in 2007, the company currently has an installed annual production capacity of approximately 196 Mgal at four plants in Nebraska, Kansas and New Mexico. Abengoa Bioenergy is similarly one of the

largest traders of ethanol and DGS for animal feed and its customer base includes the likes of Shell, Exxon-Mobil, Total, Valero and BP. Most of the ethanol is marketed in the form of e10, although sales in e85 have been increasing steadily. Over 2009, construction work ended on two major 88 Mgal plants similar in scale to the Ravenna plant, the first in Madison, Illinois, and the other in Mount Vernon, Indiana, which will start the operation early 2010. With these two new facilities, total annual production capacity in the U.S. will climb to over 372 Mgal, boosting the company's ability to meet the demands of the entire American Midwest.

The group's three longest standing plants continue to operate under the control of Abengoa Bioenergy Corporation in Colwich, Kansas; in Portales, New Mexico; and in York, Nebraska. However, different companies have been incorporated for new projects, including the new plants in Indiana and Illinois, the now operational plant in Ravenna, Nebraska, and the future commercial biomass plant in Hugoton, Kansas. Similarly, separate companies have been created for marketing, engineering and construction activities.

The company strives to implement the best practices in order to streamline all its processes, improve performance and minimize risk within the production, marketing and R&D areas. Illustrating the success in this field is the official recognition that the different North American group companies received in 2009.

For the third year in a row, the Regional Chamber of St. Louis included Abengoa Bioenergy Corporation, the parent of the Business Unit's North American companies, within the "Greater St. Louis Top 50" ranking at the start of 2009, in recognition of its leadership in the region, its vocation towards sustainable development, its role in creating new jobs and its start-up of new facilities in the Greater St. Louis area and its head offices in Chesterfield.

Furthermore, the American Society of Agricultural and Biological Engineers (ASABE) and the American Society of Civil Engineers (ASCE), in collaboration with other engineering organizations, awarded the company the first Bioenergy Company of the Year Award on occasion of the multi-disciplinary Bioenergy Engineering Conference 2009, which recognizes companies capable of producing biofuels that are sustainable in terms of energy and the environment, technically efficient and economically profitable.

CSX Transportation, one of the leading U.S. transportation firms, providing rail and intermodal services for the transportation of goods, awarded the company Abengoa Bioenergy Operations the annual Chemical Safety Excellence award for its operating facilities, an accolade that reflects the company's commitment to maintaining and promoting the safety of motor vehicles and its continuous safety processes when loading tank cars.

On a final note, Abengoa Bioenergy of Nebraska, which operates the Ravenna plant, has contributed enormously to the local community and to many of its organizations, in keeping with the company's approach to corporate social responsibility. It is also heavily involved in supporting research and development of alternative energies at local universities and supports the Department of Economic Development in generating business opportunities in the region for cooperatives and local farmers. The company has been awarded the Agriculture Award in recognition of its contributions to the farming industry. The accolade was granted by Ravenna Chamber of Commerce, in collaboration with the City Council, the Office of Economic Development and the local community to promote and increase economic activity in Ravenna and the surrounding area.

All Abengoa Bioenergy plants in North America have integrated OHSAS certification with the ISO 9001:2000, 14001:2004 and 18001:2001 standards, underscoring

the commitment of Abengoa Bioenergy Operations to quality, safety and the environment. This set of rules is a verifiable health and safety system and was sought to reflect the company's desire to have a standardized occupational health and safety system in place that can be used for the purposes of certification and registration.

Abengoa Bioenergy Corporation – Colwich

- 100 % owned by Abengoa Bioenergy Corporation.
- Installed bioethanol production capacity of 25 Mgal per year.
- Installed DGS production capacity of 70,000 t per year.
- Combined annual consumption of corn and sorghum of 240,000 t.

One of the three operational plants fully owned by Abengoa Bioenergy Corporation in North America. The plant currently operates at 100 % capacity and continues to report excellent efficiency and consistent operations. Production capacity amounts to 25 Mgal per year, achieved through continuous batch cooking and fermentation processes. The CO_2 generated is captured and refined by an on-site client and the plant currently employs 48 highly qualified workers.

The plant is one of the oldest dry mill bioethanol facilities in the United States, having been operating non-stop for the last 25 years. The DGS it produces is not dried in the process and 100 % of the co-product is sold in its natural state. The plant can utilize corn and sorghum at the same time and 50 % of its energy requirements are covered with methane from a municipal solid waste landfill.

Abengoa Bioenergy Corporation – Portales

- 100 % owned by Abengoa Bioenergy Corporation.
- Installed bioethanol production capacity of 27 Mgal per year.
- Installed DGS production capacity of 75,000 t per year.
- Annual sorghum consumption of 260,000 t.

Expansion work was completed in 2006 to double production capacity by utilizing batch cooking and fermentation processes, with two separate distillation and dehydration stages. The DGS produced is not dried in the process and 100 % of the co-product is sold in its natural state. The plant can operate with corn and sorghum simultaneously. Bioethanol production capacity stands at 27 Mgal per year and the plant currently employs 48 highly qualified workers.

Abengoa Bioenergy Corporation – York

- 100 % owned by Abengoa Bioenergy Corporation.
- Installed bioethanol production capacity of 56 Mgal per year.
- Installed DGS production capacity of 145,000 t per year.
- Annual corn consumption of 520,000 t.

The plant currently operates at 100 % capacity and continues to report excellent levels of efficiency and consistent operations. Over 50 % of the produced CO_2 is captured and refined by an on-site client. The facilities also provide services and logistical support to Abengoa Bioenergy New Technologies' adjacent pilot biomass plant. Production capacity stands at 56 Mgal per year, achieved through continuous batch cooking and fermentation processes. The plant current employs 48 highly qualified workers.

Abengoa Bioenergy of Nebraska

- 100 % owned by Abengoa Bioenergy.
- Installed bioethanol production capacity of 88 Mgal per year.
- Installed DGS production capacity of 230,000 t per year.
- Annual corn consumption of 825,000 t.

The subsidiary company Abengoa Bioenergy of Nebraska is charged with managing the plant in Ravenna, Nebraska (United States). The company is fully owned by Abengoa Bioenergy. Construction on the plant got underway in 2005 and was completed in 2007. The plant is currently operating at 100 % capacity according to specifications and boasts an installed bioethanol capacity of 88 Mgal per year, achieved through continuous fermentation. It employs 60 highly qualified workers. The facility is Abengoa Bioenergy's largest to date, and is the first in North America to employ continuous fermentation technology. The project includes a double railway circuit for simultaneous loading and shipment of 2,7 Mgal of bioethanol in 95 tank train carriages.

The plant is designed to recycle all process water, which is then treated and made ready for reuse. The plant therefore consumes less water, produces minimal pollution and thus has a minimum possible impact on the ecosystem.

Abengoa Bioenergy of Indiana

- 100 % owned by Abengoa Bioenergy.
- Installed bioethanol production capacity of 88 Mgal per year.

- Installed DGS production capacity of 230,000 t per year.
- Annual corn consumption of 825,000 t.

Construction got underway in 2007. Two Abengoa subsidiaries, Abener and Abencs, designed and constructed the plant, which was commissioned towards the end of 2009 and will begin commercial operations in early 2010. Once operational, the plant will employ 63 workers.

The plant will have the capacity to dry all or part of the DGS it produces and will be located next to the Ohio River, which provides access to practically the entire American Midwest and to export markets worldwide.

The facilities will employ continuous fermentation technology and are a replica of the Nebraska plant.

Abengoa Bioenergy of Illinois

- 100 % owned by Abengoa Bioenergy.
- Installed bioethanol production capacity of 88 Mgal per year.
- Installed DGS production capacity of 230,000 t per year.
- Annual corn consumption of 825,000 t.

Abengoa Bioenergy of Illinois was incorporated in 2007 and started construction on its plant towards the end of the same year. Abener and Abencs designed and constructed the facility, with start of operations provisionally scheduled for early 2010. Once operational, it will employ 63 workers.

The plant will produce bioethanol and DGS from corn. It will likewise have the capacity to dry all or part of the DGS it produces and will be located next to the Mississippi River, providing access to practically the entire American Midwest and to export markets worldwide.

The facilities of Abengoa Bioenergy of Illinois will employ continuous fermentation technology and are a replica of the Nebraska and Indiana plants.

Abengoa Bioenergy Biomass of Kansas.

- 100 % owned by Abengoa Bioenergy.
- Annual bioethanol from biomass production capacity of 13 Mgal.
- Daily biomass consumption of 930 t.

Abengoa Bioenergy Biomass of Kansas is a project to build a production plant of 13 Mgal of cellulosic bioethanol and 120 MW of renewable power from biomass (a mix of agricultural residues, dedicated non-food energy crops, and wood waste). The plant will be located to the west of Hugoton, in the state of Kansas, and will create 170 jobs. It is expected to reduce 1 Mt CO_2 equivalent emissions. The company expects to start the operation at the end of 2011.

Brazil

Brazil is one of the world's largest markets for bioethanol and bioethanol production and is expected to continue growing sharply thanks to the success of flex-fuel vehicles, which currently account for nearly 90 % of vehicles sold in Brazil and which can run on either gasoline or bioethanol.

Abengoa Bioenergy is the only company worldwide that operates in the world's three largest bioethanol markets: Europe, the United States and Brazil. Following its market integration, the company is starting to report significant production growth at its existing plants in Brazil. It is also looking into the possibility of constructing a new plant and is now marketing its Brazilian production abroad more efficiently, based on the commercial networks it has in place. Moreover, the company intends to adapt cellulosic ethanol technology to sugarcane bagasse so as to increase production in the mid-term and cut costs efficiently.

The company, through its subsidiaries in Brazil, operates two sugarcane bioethanol plants with a total annual installed capacity of approximately 30 Mgal and annual sugarcane consumption of 530,000 t.

Following the incorporation of a new company called Abengoa Bioenergia Trading Brasil, 2009 witnessed the start of bioethanol exports from Brazil to both Europe and the United States. Having taken this important step forward, the company is now coordinating efforts with the companies Abengoa Bioenergy Trading Europe and Abengoa Bioenergy Trading US to trade bioethanol on the most important markets worldwide, while also exploring new markets and opportunities. This move strengthens the company's standing worldwide, with production facilities and trading presence in the world's three top bioethanol markets. The new company

was incorporated in the city of São Paulo, close to the production facilities, and new offices have also been opened to centralize operations and other corporate services. As part of its commitment to sustainable development, Abengoa Bioenergia Brasil continued construction work on two state-of-the-art energy cogeneration units in 2009, each with an installed capacity of 70 MW, which can be increased to 140 MW. The plants use sugarcane bagasse as raw material to fuel the boilers, which produce steam to generate electricity and power the production processes. The cogeneration plants are located in the state of São Paulo, one at Abengoa Bioenergia São Luiz, in the city of Pirassununga, and the other at Abengoa Bioenergia São João, in the city of São João da Boa Vista. Both units are expected to be brought into service in April of 2010, to coincide with the start of the harvest season.

In October 2009, Abengoa Bioenergia Brasil was awarded the MasterCana Social accolade in the Environmental category thanks to its project "Abengoa Bioenergia Brasil: Inventário de Gases de Efeito Estufa no setor Sucroenergético", singled out from a total of 40 projects from Brazil's most prominent companies. The prize is awarded by the magazine Jornal Cana, Brazil's leading specialized publication on biofuels, and was awarded in recognition of Abengoa Bioenergia Brasil's leadership in sustainability and the major impact that its Greenhouse Gas Inventory initiative is having on the Brazilian biofuel industry.

One of the agreed measures following the acquisition of the Dedini Agro group was to roll out a Competitiveness Plan, the aim being to transform the company into a reference point in the Brazilian market. The plan got underway in 2009 with the following objectives:

1. Implementation of a Human Resources Development policy.
2. Professionalization of company structure.
3. Outsourcing of services.
4. Restructuring of relations with collaborators and sugarcane suppliers.
5. Standardization of processes.
6. Reduction of costs.
7. Increase in efficiency by adopting best business practices.
8. Investment to extend and modernize the industries of existing plants.
9. Investment to construct two electrical power cogeneration facilities with sugarcane bagasse technology on site at the company's existing plants.

Abengoa Bioenergia São Luiz

- 100 % owned by Abengoa Bioenergy.
- Installed bioethanol production capacity of 18 Mgal per year.
- Annual sugar production of roughly 285,000 t.
- Annual sugarcane consumption of 3 Mt.

Abengoa Bioenergia São João

- 100 % owned by Abengoa Bioenergy.
- Installed bioethanol production capacity of 12.5 Mgal per year.
- Annual sugar production of roughly 245,000 t.
- Annual sugarcane consumption of 2.4 Mt.

In addition to the preceding projects, the company started construction on two 70 MW cogeneration plants in Brazil, which are annexed to existing sugar and bioethanol production facilities in the state of São Paulo.