

A partir del sol... producimos energía eléctrica por via termoeléctrica y fotovoltaica









A partir de las Tecnologias de la Información... transformamos datos en conocimiento, posibilitando la toma de decisiones operativas y de negocio en Tiempo Real para el tráfico, transporte, la energía y el medio ambiente



A partir de la ingenieria... construimos y operamos centrales eléctricas convencionales y renovables, sistemas de transmisión eléctrica e infraestructuras industriales

#### Acquisition of Grupo Dedini Agro (GDA) August 6th , 2007

#### Agenda

• Executive Summary



- Brazil Market Overview
- Sugar, Ethanol and Oil
- The Company: A solid Growth Platform
- Strategic Fit: The Global Ethanol Player
- Financials

Abengoa Bioenergy has agreed the acquisition of Grupo Dedini Agro, subject to closing and competition authorities, a leading sugar and ethanol producer in Brazil for an Equity Value of 297M USD and net debt of 387 MUSD:

- Abengoa becomes the only ethanol player present in the three key markets (US, Europe, Brazil)
- Access to Brazil provides:
  - world's most competitive sugar and ethanol producer, key to supply ethanol to the US and Europe
  - attractive internal growth fueled by FFV
- Marketing and Logistic capabilities in EU and US provides Abengoa an advantage and a hedge for a worst-case scenario of low sugar prices
- Clear opportunities of exchange of know how, leverage of international distribution channels, sharing of new technologies including cellulosic technology with bagasse
- Enormous growth prospects in current facilities by investing in new capacity and in new green field projects
- Attractive financial returns
- Equity portion of 297 MUSD fully funded with new 600 M€ corporate long term debt facility subscribed on July 16th

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- World's largest sugar producer with 30.9 Mt or 19.3% of global production in 2006
- World's largest sugarcane producer with 430 Mt
- World's largest sugar exporter with 19.6 Mt, an impressive 41% share of global exports
- World's lowest cost sugar producer with cost around 9-10c/pound



- Second largest ethanol producer with 17.5 Bl produced in 2006
   60 Bl expected for 2015
- Largest ethanol exporter with 3.5 Bl exported in 2006



25 new plants starting operations in 2007

Exports

- ✓ 2015 ⇒ 60 Bl ⇒ Total Inv. required \$28 B. (+ 187 new plants at 1.5 \$/l) + infrastructure for distribution of exports and imports.
  - High energy prices and FFV will drive internal ethanol demand. Vehicles 21.5 M (70% FFV by 2015). 42% domestic consumption / 58% exports by 2015.
  - Ethanol consumption over fuel consumption will be 53% by 2015 (32% in 2006). We are assuming that FFV will run at 75% ethanol
  - > Strong international needs will demand higher exports (Europe, Japan, U.S.) 34.7 Bl potential
  - Infrastructure needed for further ethanol exports in Brazil and import countries

- Fragmented industry, with more than 100 companies operating over 340 mills. Room for consolidation
- Domestic production accounted for approximately 3,6% of Brazilian GDP in 2006/2007
- Market deregulation and accelerated growth since 2000
- Co-generation becoming a significant competitive factor
- Mills are currently operating at "zero" idle capacity levels
- Potential growth: Reduction in the EU production (reduction in EU's subsidies), increase in Asia's consumption (especially India and China), artificial sweeteners...



#### % Increase 01-02 $\rightarrow$ 06-07

36% Increase Area Planted 31% Increase Area Harvested

**43%** Increase Sugarcane Production

51% Increase Sugar Production 69% Increase Sugar Exports

**70%** Increase ETOH Production



- Historical high growth in both product sectors
- Trend expected to continue
- Brazil is updating its logistical infrastructure to handle expected capacity increases

#### **Brazil Ethanol Feedstocks**

#### **Ethanol Production from Sugar Cane**



Bow much sugar and ethanol is produced?Why 50% sugar and 50% ethanol is produced?Profit margins<br/>of sugarProfit margins<br/>of ethanolTechnical\*<br/>Capacity of the<br/>Factory to switchRisk Control.<br/>Ethanol is a<br/>"new market"

✓ Accordingly, the margins obtained from producing ethanol or sugar influence the proportion of juice directed to manufacture either product within the capacity constraints of each mill. Brazil's capacity to change between ethanol and sugar production is currently limited to approximately 10% of production.





- Brazil is a non-Annex 1 country
- Brazil is considered one of the best locations for CDM project due to its substantial ethanol production
- Over 180 CDM projects are currently at various stages of development in Brazil
- The majority of these projects are in the ethanol sector
- Abengoa has internal capabilities, through its affiliated company ZeroEmissions, to take advantage of all this potential



Sugarcane Feedstock Energy Advantages

- Most economic raw material to produce ethanol
- Produces more than 8 times the energy needed for its cultivation and process
  - Extremely efficient photosynthesis process

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- Sugar and ethanol prices are correlated...
- •...with ethanol lagging a little bit behind sugar

Average NY 11 price				
Average	Nominal	Inflation Adjusted		
5-year	9.2085	9.7821		
10-year	8.8229	10.0284		
15-year	9.5734	11.752		
20-year	9.7546	13.0611		

Sugar NY 11 prices (cUSD/lb) vs ethanol prices in Brazil (USD/litre)



• Sugar will be increasingly linked to oil prices: current decoupling will be short-lived





- •Brazil is the lowest sugar cost producer in the world
- •Long-term average sugar prices to stay above Brazil productions costs - 45% of worldwide sugar production has a cost above 14 c\$/pound



Sources: USDA, Credit Suisse.

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- 12<sup>th</sup> largest producer and seller of sugar in Brazil in 06/07
- One of the largest producers of ethanol in Brazil in 2006 with 103 .5mn liters of ethanol
- Dominant player in its region
- Owns 2 large facilities, leases 1 facility and has service contracts with 3 facilities (Dedini provides sugarcane)
- Crushing Capacity:
  - 6,1 Mton for 07/08 crop
  - 7,2 Mton for 08/09 crop
- Land productivity: 90 tons/ha which is in line with best performers in the region; 15% sugar content in sugarcane
  - Compared to other areas in Brazil yielding in the 80's ton/ha or below
  - > 7.600 hectares under long term (20 years) lease contracts
- Production sugar/ethanol ranging from 75/25 to 68/32 in the last five years. Current equipment allows for up to 50/50 production
  - 460 thousands tons of sugar, and 105 million liters of ethanol produced in 06/07
  - Only 25% of sugar produced in exported to international markets. Logistics allows for obtaining a premium on domestic sales
  - Growing in ethanol sales year after year. Dedini serves directly tier one clients like Petrobras and Esso

- Logistics: Closer to main port of Santos than any comparable competitor in Sao Paulo State, representing an unique competitive advantage

   It allows ~40 usd/m3 logistic savings compared to a project in other developing areas, such as Mato Grosso do Sul or Goias
- Milling facilities: Located within 16miles of plantations allowing for sugar processing within 48h of harvesting
- HR: 7,000 employees (3,000 of them hired for the harvesting, plan to reduce via increase in mechanization)
- Mechanization: 40% in harvest 2007/2008
- 2 x 70 MW cogeneration projects under development (one granted a PPA with Electrobras; the second won 23 MW auction, the balance pending new auctions)
- Professional management team with good management processes
  - Achieved production increase from 4 Mton in 04/05 to 6 Mton in 07/08
  - Management team long experience in sector and company
  - Processes in place (strategic planning, budgeting, scheduled committees, operational,...)
  - ERP

#### DIC – Pirassununga facility (>3 mill ton crush capacity)



DAA – Sao Joao da Boa Vista facility (>2,3 mill ton crush capacity)



#### Joamir Alves – CEO

- •Joined Grupo Dedini Agro in 2003
- •Former experience: Vice-president of Citibank (1979-1986); Vice-president of Cica (1987-1990); consultant at Options; Serviços Financeiros (1991-1998); Managing Director of Bombril (1998-2001) and Managing Director of Usina Santa Elisa (2001-2003)
- •Education: Bachelor and Master Degrees in Business Administration FGV

#### José Ramon Priegue Rey - CFO

- •Joined Grupo Dedini Agro in 2006
- •Former experience: Vice-president of Citibank (1978-1991); Regional Director of Banco Nacional (1991-1994); Administrative and Financial Director of Grupo OK Construções (1995-1996); Regional Managing Director of BIC (1996-2001); Managing Director of Banco Zogbi (2002-2004); Corporate banker focused on the sugar and ethanol sector of Bradesco (2004-2006).
- •Education: Graduation in Business Administration . Mackenzie University

#### José Edson Gomes Trovó - Commercial Director

- •Joined Grupo Dedini Agro in 2003
- •Former experience: Logistics Manager of Dulcini S/A; Mechanical engineer at Grupo Dedini
- •Education: Bachelor in Mechanical Engineering (USP) and Graduation degree in Marketing (FGV)

#### Luis Antonio Carnielli - Industrial Director

- •Joined Grupo Dedini Agro in 2001
- •Former experience: Laboratory analyst of Usina Santa Rita S/A (1981-1982); Plant Coordinator of the Santa Elisa.s mills (1982-1989); Industrial Manager of Usina Delta S/A (1989-2001)
- •Education: Chemical Engineering with a major on Sugar & Ethanol

#### Luis Fernando Ferraz de Siqueira - Technical Director

- •Joined Grupo Dedini Agro in 2003
- •Former experience: Agricultural Supervisor of Usina Santa Alexandra and Agricultural Supervisor of Usina Junqueira
- •Education: Agronomy

#### Márcio Milan de Oliveira - Agricultural Director

- •Joined Grupo Dedini Agro in 1989
- •Former experience: Technical Rep. of Bayer, Mechanical Supervisor of Grupo Dedini Agro and Industrial
- •Manager of Group Dedini Agro
- •Education: Agronomy

• Opportunity for large expansion, at least up to 9 million tons in four years, based on analysis of agricultural activities in the region



•Conversion to ethanol, allowing 100 % flexibility sugar/ethanol with a total investment of 57 M USD

•Mechanization: 25 MUSD for additional mechanization, reaching nearly 100% gradually in 5 years

- Guarantee proper development and execution of cogeneration projects
  - Today, the vast majority of current co-generation capacity is in the State of Sao Paulo, which is also the center of power consumption in Brazil, as the state has no new sources of hydroelectric to supply its continued growth
  - Total 123 MUSD investment for the 2X70 MW projects
  - 520.000 MWh/year sale of electricity plus carbon credits (0,26 tCO2/MWh)
  - 1X70 MW (eq. to 40 MW annualized) project has a PPA with Electrobras, via Proinfa for 20 years, with a sale price of 112 R\$/MWh annually updates
  - 1X70 MW (eq. to 40 MW annualized) project has won an auction to sell 23 MW at 130 R\$/MWh. Balance of 17MW expected to be awarded in future auctions

Cogeneration is a key value driver; Abengoa's experience in the field guarantees succes

Potential upsides not included in the valuation

- Higher NY11 sugar prices
- Lower export costs for ethanol thanks to Abengoa's commercial network in key worldwide markets (U.S., Europe)
- Know-how synergies in several areas between Abengoa Bioenergy and Dedini Agro
- Further expansion of current plants above 9 Mton
- Greenfield development: in 5 years, a 4 million ton project with similar characteristics to existing ones
- Apply Abengoa Bioenergy's R&D technology to produce cellulosic ethanol using the sugar cane bagasse
- Carbon credits for producing ethanol
  - No methodology in place yet
  - Potential additional 2 MUSD/year; ~23 MUSD in NPV, or 3,8 USD/ton

- Current NY 11 sugar prices at 10,3 c\$/lb
- Most experts agree on long term prices at 13-15 c\$/lb levels
  - We consider more conservative projections



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#### Why Sugarcane? Why Brazil?

- Strengthen Abengoa Bioenergy's global presence
- Abengoa Bioenergy becomes a low cost ETOH producer using sugarcane feedstock
- Hedge commodity risk through feedstock diversification
- Brazil's increasing sugarcane feedstock supply
- Enormous ethanol market potential (production expected to grow from 17.5 Bl production in 2006 to 60 Bl in 2015)
- Lowest production costs among sugar producing countries (\$0.09-\$0.10 / pound)
- Apply cellulosic ethanol technology to sugar cane bagasse

Entering in Brasil identified as a priority for Abengoa Bioenergy, waiting until now for the right target

- Dedini Agro is one of the leaders in Brazil, recognized in the market, and has an experienced management team
- Dedini Agro has several competitive advantages: distance to the port, control over an area which translates into access to cane at good prices, and critical mass to exploit economies of scale
- Clear possibilities to grow in its core area
- Opportunity to grow in cogeneration with fully developed projects thanks to its location
- Platform to undertake greenfield projects in other developing areas

In summary, excellent strategic fit



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Main valuation and financial inputs used in our model:

- 10 years projections, then perpetuity
- Debt / Equity: 50/50
- Cost of equity non-leveraged: 12 %
- Cost of debt: 7%
- Taxes: 34%
- Inflation: 1,8% for USD flows; 3,5% for R\$ flows
- Capex: as indicated in hypothesis
- Depreciation:
  - industrial assets: 7 years
  - specific investment for ethanol: 15 years
  - mechanization assets: 5 years (but replaced every 7 yr)
  - cogeneration: 20 years
- Exchange rate: gradual depreciation of R\$ as indicated by macroeconomics studies

#### **Dedini Agro - Income statement**

MUSD		FY07	FY08	FY09	FY10	FY11
		abr-08	abr-09	abr-10	abr-11	abr-12
Net revenues		250	294	344	368	375
EBITDA		75	93	109	138	142
	%	30,0%	31,5%	31,8%	37,5%	37,9%
Net Income		4,1	6,9	19,8	44,2	47,2
	%	1,6%	2,3%	5,8%	12,0%	12,6%

#### Effect in Abengoa consolidated Net Income

MUSD	FY07**	FY08	FY09	FY10	FY11
-	dic-07	dic-08	dic-09	dic-10	dic-11
Net Income of acquired co.	2,2	6,1	15,0	35,8	46,2
Interest cost of equity net of taxes	(4,0)	(12,5)	(12,5)	(12,5)	(12,5)
Fiscal benefit*	1,6	3,3	3,3	3,3	3,3
Incremental NI for Abengoa	(0,2)	(3,2)	5,8	26,6	36,9
Incremental NI for Abengoa (M Euros)	(0,1)	(2,3)	4,2	19,3	26,8
Euros per Abengoa share	(0,0)	(0,0)	0,0	0,2	0,3

Figures in MUSD, except otherwise stated

• Price in EV:	684
<ul> <li>Less Net Debt + contingencies</li> </ul>	387
• Equity value:	297

• Other: up to 30 million USD extra payment in 2009 linked to the company exceeding the agreed business plan

Multiples:

• Of current crop crushing (6,1 M ton for 07/08 crop) : 112 USD/ton

• EBITDA multiples:

x 9,1 EBITDA FY07 (april-08) x 7,3 EBITDA FY08 (april-09) x 6,3 EBITDA FY09 (april-10)

				USD			
Company	Date	Multiple	Crushing	EV	EBITDA	EV/Crushing	EV/EBITDA
Vale do Rosario	feb-07	Transaction	8,00	800,00	96,00	100,00	8,33
Guarani	jul-07	Trading	11,00	1.203,21	131,02	109,38	9,18
Cosan	jul-07	Trading	36,60	4.212,30	496,27	115,09	8,49
Sao Martinho	jul-07	Trading	9,74	1.149,73	118,13	118,04	9,73
Alcidia	jul-07	Transaction	1,30	156,00	15,60	120,00	10,00