



# EBRO PULEVA

# dosbio

Biodiesel & Bioethanol











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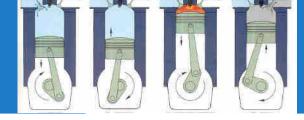
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# Introduction









#### EBRO PULEVA WITH A 4-STROKE ENGINE

- \* At the last General Meeting, held in April of this year, shareholders were informed of a new company, dosbio 2010, wholly-owned by the Ebro Puleva Group, which was to bring all the Group's energy assets under one roof.
- \* Dosbio 2010 has been set up with a dual goal:
  - To ease the Reform of the Sugar Sector deriving from the new CMO Sugar, which offers incentives for abandoning beet-growing. This would reduce the capacity of Spain's sugar industry, with the consequent effects on agriculture, industry and auxiliary services.
  - To give our Energy business shape and visibility, among other options through biofuels.
- \* Dosbio 2010 already encompasses 9 cogeneration plants, which produce some 315,000 MWh of electricity, and we own 50% of the Bioethanol plant of Biocarburantes de Castilla y León.



What are Biofuels?









#### BIOFUELS

#### WHAT ARE BIOFUELS?



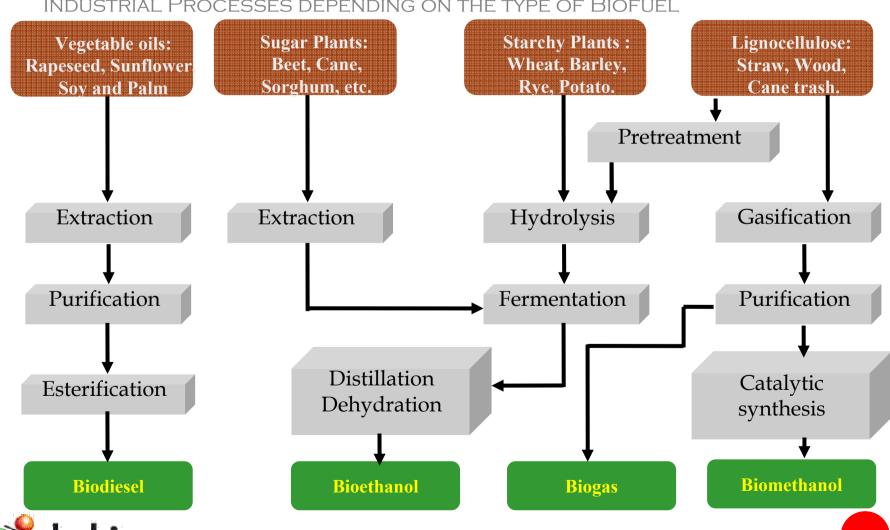
- \* Biocombustibles are liquid, solid or gaseous organic fuels produced from biomass, which can be used to generate primary or secondary energy.
  - Solid fuels: Biomass and fats
  - Liquid fuels: Esters, Ethers and alcohols obtained from biomass
  - Gaseous fuels: Biogas and biohydrogen
- \* Biofuels are liquid or gaseous biocombustibles used mainly in internal combustion, Otto-cycle or diesel engines.
  - Biodiesel: Ester produced from vegetable oils and animal oils.
  - Bioethanol: Alcohol obtained from the fermentable fraction of biomass (1G technology) or lignocellulose (2G technology).
- \* They can be used pure with engine modification or blended with fossil fuels in varying proportions without engine modification.







#### INDUSTRIAL PROCESSES DEPENDING ON THE TYPE OF BIOFUEL



# Biodiesel for Ebro Puleva











#### **BIODIESEL**

\* Biodiesel is a methyl-ester or ethylic-ester produced by the transesterification of fatty acids with methanol or ethanol, respectively

1,000 kg Oil or Fat + 100 kg of Methanol

1,000 kg Biodiesel + 100 kg of Glycerine

- \* The raw material used can be obtained from different sources:
  - Plant Origin: rapeseed, sunflower, soy or palm oils.
  - Animal Origin: cattle, pig and poultry fat.
  - Recycled cooking oils.
- \* Biodiesel can be used as:
  - Lubricating additive for diesel.
  - ► Blended with diesel. B2, B5, B10, B30. (The figure indicates the percentage of biodiesel in the blend).
  - Directly as a single fuel B100.



**BIODIESEL FOR EBRO PULEVA** 





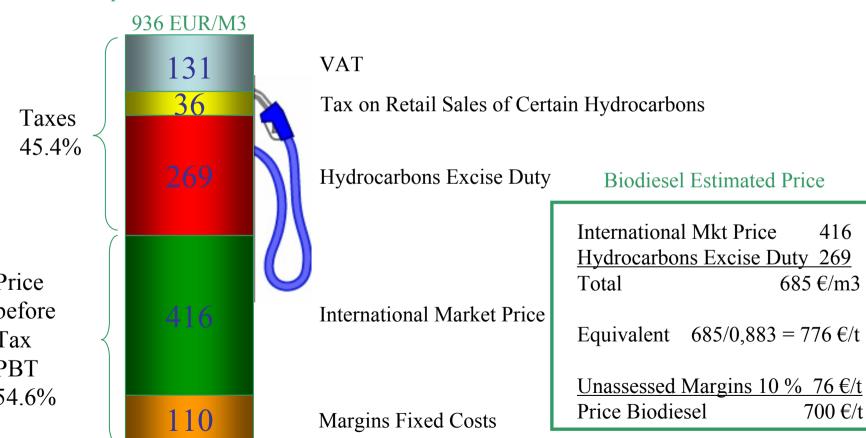


**BIODIESEL** 

416

#### PRICE OF BIODIESEL

#### Composition Price Diesel A



Source: AOP April. Price Barrel 65\$



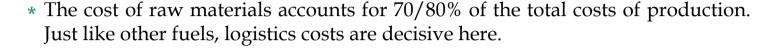


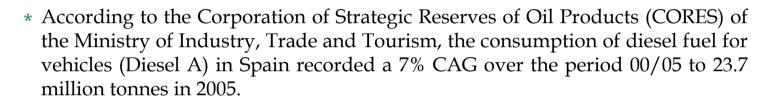




#### **BIODIESEL**

#### **COSTS OF PRODUCTION**





\* Diesel production is smaller than consumption so has to be imported (almost 13.5 mill.t. in 2005). Biodiesel would operate on the diesel A market, helping to reduce this deficit.













#### EXISTING PLANTS, 2010 TARGET AND PROJECTS IN THE PIPELINE

- \* At present there are 9 plants producing biodiesel in Spain, with a production of 154,800 toe (1t biodiesel=0.9toe). The Spanish government has set a substitution target for 2010 of 5.83%, equivalent to 1,750,000 toe on the basis of existing trends. Projects have so far been announced that would take production to 3,330,000 toe (including ours) by 2010.
- \* Biofuels are only viable with heavy subsidisation, either by reducing duty rates or by making its consumption compulsory. Duty reduction is an instrument to promote their production. The obligation to use blends is considered the most efficient way of introducing biodiesel on the market. Other European countries such as Germany, Austria, UK, Belgium and France have already imposed this obligation.
- \* We believe that only those projects that generate wealth in Spain by redistributing income to the farmers, industry, etc. will be successful.

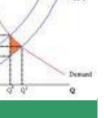


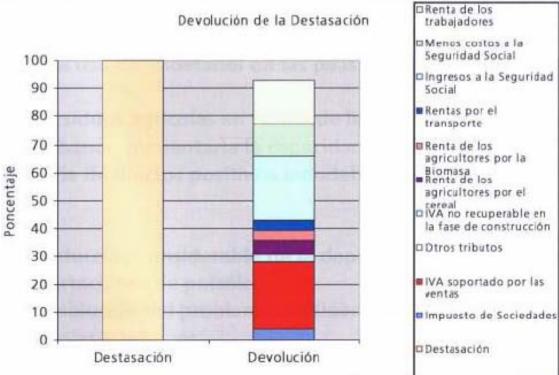




#### **DUTY RATE REDUCTION**

\* The impact on the state coffers of not charging the Hydrocarbons Excise Duty on biofuels is reduced by more than 90% by the creation of new industry and the development of energy crops on land threatened with abandon. These activities generate earnings that are sources of new taxes, while reducing our dependence on oil, bringing down the external energy bill.





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#### **OUR BIODIESEL PROJECT**

\*We recently announced that our Biodiesel plant will be situated in Jédula (Cádiz), converting a former sugar factory. The initial project contemplates the investment of 53m EUR for a production of 200,000 tonnes a year, with 64 permanent employees and an agreement with distributors. This plant is expected to be finished by 2H08.

#### \* Consumption:

H	Rapeseed, Sunflower	179,000 t/year
H	Soy, Palm, rapeseed oils	133,000 t/year

#### \* Production:

<ul><li>Biodiesel</li></ul>	200,000 t/year
- Glycerine	23,700 t/year
<ul><li>Dry rubbers</li></ul>	2,500 t/year
- Electricity	28,800 MWh/year



# Bioethanol for Ebro Puleva









#### **BIOETHANOL**

- \* Bioethanol is anhydrous (low water) alcohol obtained from plants.
- \* The following raw materials can be used for distillation and dehydration:
  - "Sugar-bearing" plants: Beet, Cane, Sorghum, etc.
  - Starchy plants: Wheat, Barley, Corn, Potato, Rye, etc.
  - Lignocellulosoic matter: Straw, Cane trash, Wood, etc.
- \* Bioethanol can be used:
  - To produce ETBE (ethyl t-butyl ether, an explosion protector used in "green" petrols to substitute leaded compounds).
  - Blended with petrol. E5, E10, E15, E20, E85. (The figure indicates the percentage of ethanol in the blend).

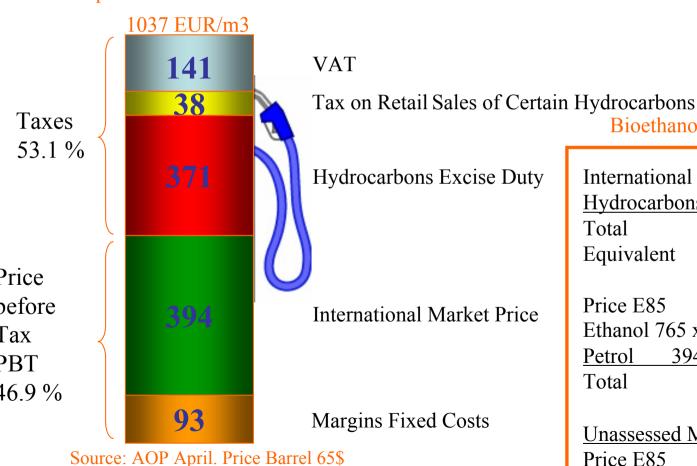




#### BIOETHANC

#### THE PRICE OF BIOETHANOL

#### Composition Price Petrol SP95



International Mkt Price 394

<u>Hydrocarbons Excise Duty 371</u>

Total 765 €/m3

Equivalent 765/0,79 = 968 €/t

**Bioethanol Estimated Price** 

Price E85 Ethanol 765 x 0.85 = 650 €/m3Petrol  $394 \times 0.15 = 60 €/m3$ Total 710 €/m3

Unassessed Margins 10% 71 €/m3
Price E85 639 €/m3

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#### BIOETHANC

#### COSTS OF PRODUCTION OF BIOETHANOL

\*The cost of raw materials accounts for 40/50% of the total costs of production and once again logistics costs are decisive.



- \* Petrol consumption recorded a -5% CAG in Spain over the period 03/05 to 7.3 million tonnes in 2005.
- \*Petrol production exceeds consumption so has to be exported (2.1 mill.t. in 2005) and refineries are more reluctant to add substitutes to their fossil product.







#### EXISTING PLANTS. 2010 TARGET AND PROJECTS IN THE PIPELINE

- \* At present there are 4 bioethanol producing plants in Spain (including Babilafuente), with a production of 234,688 toe (1tn bioethanol=0.64 toe). The Spanish government has set a target of 866,700 toe for 2010.
- \* Projects have been announced that would take production to 816,000 toe by 2010.
- \* Owing to the excess supply of petrol on the market, distributors are less likely to agree to blend bioethanol with their products and will only use it if they are obliged by law.
- \* There are clear signs of support for biofuel manufacturers both in the USA, with its "Advanced Energy Initiative", a plan to boost the use of biofuels in vehicles, and in the EU, which has announced that it will stimulate demand, provide incentives for Member States that promote them and publish a report in 2006 on the possible revision of the Biofuels Directive.





#### **OUR NEW BIOFTHANOL PROJECT**

\* We recently announced that our new beet-based bioethanol plant will be in Miranda del Ebro (Burgos) converting a plant that is currently producing sugar. The initial project contemplates the investment of approximately 70 million EUR for a production of 65/85 million litres a year. It is expected to be ready to take beet from the 09/10 campaign.

#### \* Consumption:

Beet

650,000-1,000,000 t/year

#### \* Production:

Anhydrous alcohol

► E85

- Pellets of vinasses pulp

Electricity sold

66,000/100,000 m3/year 77,650/117,650 m3/year 47,000/72,000 t/year 189,000/290,000 MWh/year



The Babilafuente Factory









#### AN ALTERNATIVE TO SHUTDOWN

- \* We recently opened the bioethanol factory in Babilafuente (Salamanca). This is the largest bioethanol factory in Europe, a project we launched jointly with Abengoa following the shutdown of a sugar factory.
- \* Back in 2002 we envisaged a radical change in the evolution of CMO for agricultural products and set about seeking alternative activities, for both the rural economy and the industry.
- \* At that time beet was protected to such an extent under the CMO Sugar that it was only interesting to use this raw material for sugar production. Consequently, this factory was designed for cereal-based bioethanol production and we sought a technological partner who could help us with its know-how in that area.









#### BIOCARBURANTES DE CASTILLA Y LEÓN, SOURCES AND APPLICATIONS

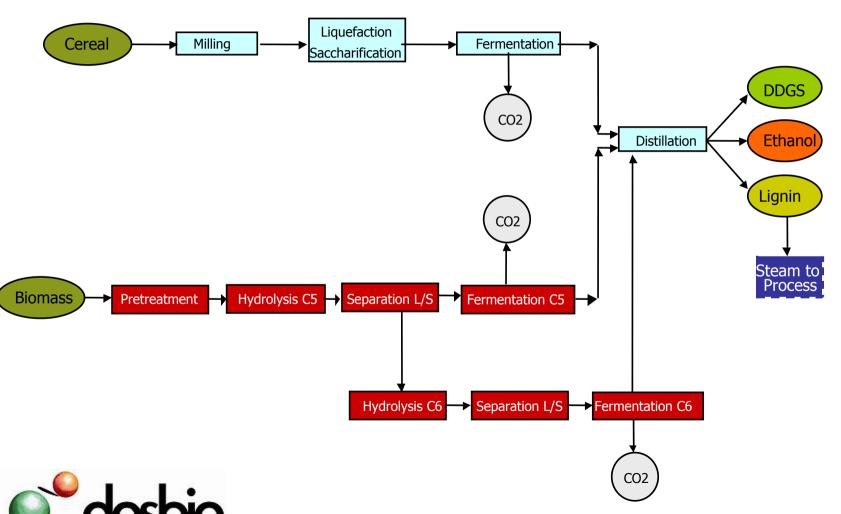
- \*The raw materials used at this factory are:
  - Cereals 581,000 t/year (barley and wheat), mostly produced on set-aside land.
  - ► Biomass 21,000 y/year (straw, agricultural and forestry scrap, energy crops).
  - Beet syrups and alcohols.
- \* Which will be used to produce:
  - ► 175 million litres of Bioethanol from cereal. 15% of this production could be produced from beet syrup (equivalent in sugar =25-30 th.t.).
  - ► 20 million litres of Bioethanol from grape alcohol.
  - 5 million litres of Bioethanol from biomass. First plant in the world able to transform biomass into bioethanol, known as 2G bioethanols.
  - ► 94,000 t/year of DDGS, an animal feed protein supplement.
  - 156,000 t/year of CO2 to produce soft drinks.







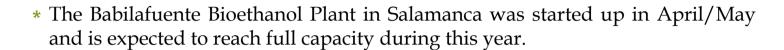
#### INDUSTRIAL PROCESS







#### **BABILAFUENTE**





\* The bioethanol produced is already being exported and will be used to produce ETBE and to blend with petrol. The first cargo of bioethanol for ETBE production was shipped from Santander Port on 27 May with 5,118 m3 of bioethanol.



# Conclusions











#### CONCLUSIONS

#### MOVING FORWARD

\* Ebro Puleva, a Group in the agroindustrial sector, has taken a step forward by branching into biofuels. Our project entails:

	1 )				
	Biodiesel	<b>Bioethanol Beet</b>	<b>Bioethanol Cereal</b>	Cogeneration	Total
Location	Jédula	Castile-Leon	Castile-Leon	9 Plants	
Capacity	200,000 t/year	66,000 m3/year	200,000 m3/year	315,000 MWh	
Supplies					
	66% Oils	100% beet	100% Cereal		
	34% Seeds	(650,000 t)			
<b>Agricultural Developm</b>	ent				
	180,000 t. rape/year	± 10,000 Ha.	± 585,000 Ha.		
	65,000 Ha. Production				
Investment	EUR 53 m.	EUR 70 m.	EUR 160 m.	El	JR 203 m.
Av. Sales/Year	EUR 150 m.	EUR 65 m.	EUR 154 m.	134,000 MWh El	JR 292 m.
EBITDA Av. Year	EUR 17 m.	EUR 14 m.	EUR 35 m.	E	EUR 49 m.
Ebitda Margin Av.Year	11%	22%	23%		17%

- \* Biofuels serve a double purpose:
  - We thus ease the transition from a sugar business about to undergo reform under its CMO.
  - ► We are present in a new, high-yield agroindustrial business.





### Corporate Calendar









# CORPORATE CALENDAR

#### ADECUATE COMMUNICATION

Ebro Puleva will continue to pursue its commitment to transparency and reporting in 2006:

24 February Presentation year-end 2005 results

3 April Dividend payment

5 April Annual General Meeting (2nd Call)

24 April Presentation 1st quarter results

3 July Dividend payment

20 July Presentation 1st half results

2 October Dividend payment

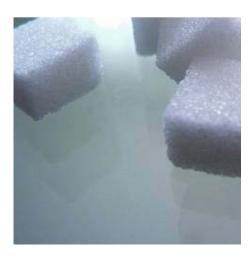
26 October Presentation 3rd quarter results and outlook for 2006

22 December Announcement 2007 dividend against 2006 accounts

27 December Dividend payment

# Disclaimer











#### DISCLAIMER

- \* To the best of our knowledge, the estimates contained in this presentation on the future growth of the different business lines and the overall business, market share, financial results and other aspects of the operations and position of the company are accurate at the date hereof.
- \* All the figures given in this report are calculated according to the International Accounting Standards (IAS).
- \* The contents of this presentation are no guarantee of our future actions and entail certain risks and uncertainties. The real results obtained may differ considerably from those indicated in our estimates, due to the several factors.
- \* Analysts and investors should not rely exclusively on these estimates, which are valid only at the date of this presentation. Ebro Puleva is under no obligation to publish the results of any subsequent review of these estimates made to reflect events and circumstances occurring after the date of this presentation, including, though by no means limited to, changes in the businesses of Ebro Puleva or in its acquisitions strategy, or to reflect unforeseen events. We recommend analysts and investors to consult the company's Annual Report and the documents we submit to the Authorities, especially the National Securities Market Commission (CNMV).