



# Industrial Biotech Project

# BULGARIA



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## The Project | Company Status

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- xxxxxxx is a new company established for the development and operation of an ethanol production facility in the industrial part of Shumen (North-eastern Bulgaria).
- The management and highly experienced advisory team of the company have already surpassed the initial planning stage with the key feasibility studies and market analysis being completed and a detailed business plan being approved.
- The total investment amount is estimated at EUR 51,3 mn, of which financing for EUR 49.0 mn is sought.
- A total of EUR 2,5 mn has already been invested in the project. This initial investment was primarily used for the purchase of land in the industrial area of Shumen, building corresponding infrastructure, project design and development of the technical documentation.

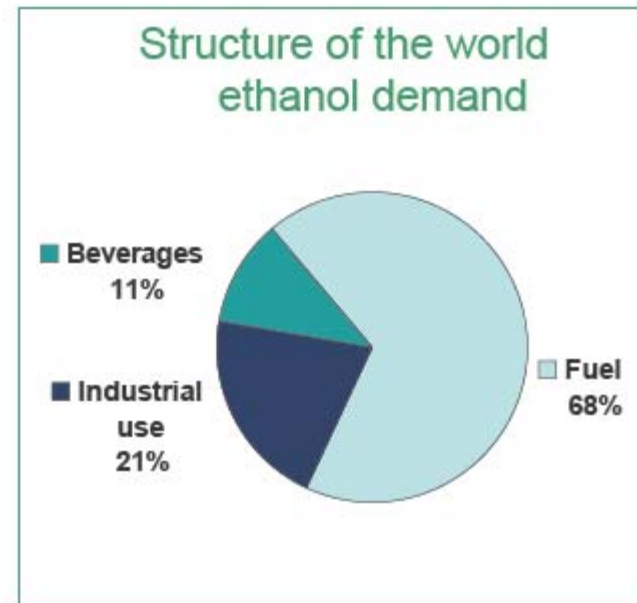
## The Project | The Plant

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- The construction phase is estimated to be completed within a period of 12 months. The production is envisaged to commence in 2009.
- The main products of the facility are:
  - ethanol for blended fuel, and
  - potable ethanol
- Total designed capacity is 300,000 litres per day or 96 mn litres per year.
- In addition to the main output of ethanol, two by-products will be produced:
  - CO<sub>2</sub> (Carbon Dioxide) and
  - DDGS (Distiller's Dried Grains with Soluble)
- Xxxxxxx will use biotechnology that guarantees environment friendly and waste-free production.
- The ethanol (and the by-products) will be produced via a dry milling process technology using as a main raw material wheat grown in substantial quantities in Bulgaria, particularly in Shumen region.

## Market Overview | World Production

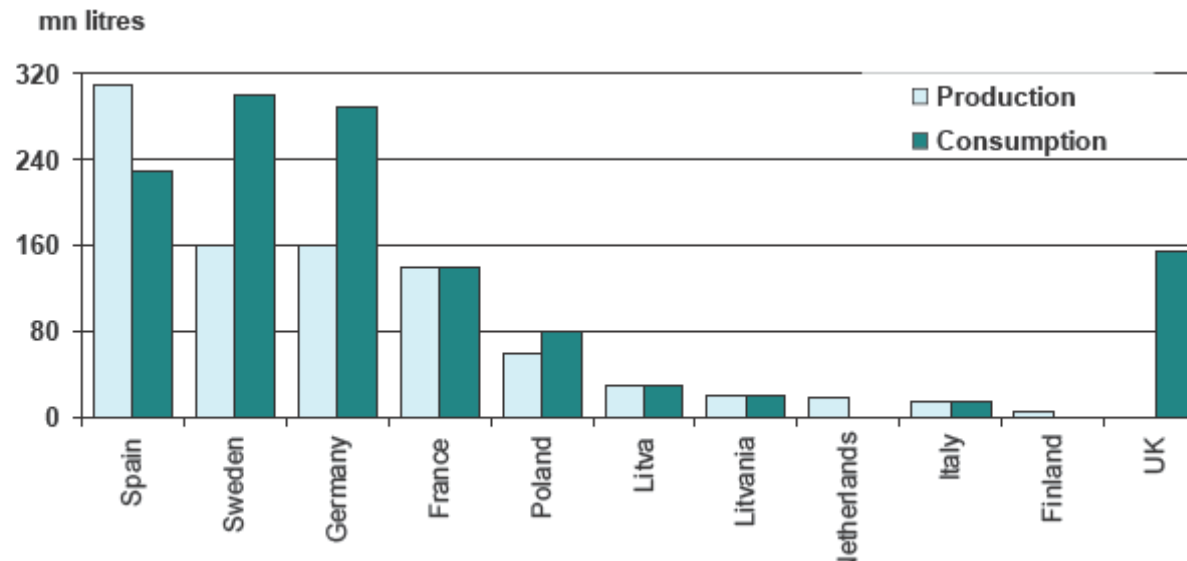
- The ethanol production (fuel, industrial and beverage) was approximately 50.0 bn litres in 2005, up by some 70% from the 30.0 bn litres in 2000.
- The positive trend of “fuel ethanolization” of the world alcohol industry is expected to continue.



## Market Overview | EU Market

- Total EU bio-ethanol consumption for 2005 was 1,260 mn litres and exceeded by some 27% the total EU bio-ethanol production.

### Bio-ethanol production and consumption in EU, 2005



## Market Overview | EU Market

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- The European Union (EU) has declared its long-term goal of achieving a 12% share used as fuel ethanol by 2010.
- The European Commission (EC) published an action plan and directives to encourage increased use of bio-fuel in the transport sector.
- Directive 2003/30/CE from March 8, 2003 of Promotion and Use of Bio-fuels was approved by the European Parliament and European Council. This directive defines a “mandatory blending” of biofuels in the fuels for the transport sector with fixed medium-term targets for the market share of the biofuels as a percentage of fuel sales.
- This is the first time that a European Directive regulates the minimum usage of blended fuels in every Member State from 2% in 2005 to 5.75% in 2010.

## Market Overview | Local Market

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- The expected demand for blended fuels on the local market in 2007 is approx. 575 mn litres. The demand is forecasted to reach more than 730 mn litres in 2008.
- Currently there are no significant local operational production capacities for ethanol.
- The EU Directive 2003/30/ CE will become binding for Bulgaria upon its accession as of 1 Jan 2007.



## Opportunities | Sale of Products

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### Sale of ethanol:

- About 68% of the ethanol production will be sold locally. The main consumer will be xxxxx Bourgas - the largest refinery in South East Europe.
- In addition to meeting the local demand xxxxxx will be exporting to all EU member states and other countries.

### Sale of by-products:

- Carbon Dioxide (CO<sub>2</sub>)
  - Biogroup plans to sell about 26 mn litres locally to beer breweries and soft drinks enterprises.
  - Approximately 12 mn litres will be exported to the neighbouring countries: Turkey (7 mn), and Greece, Serbia and Macedonia (5 mn).
- Dried Distiller Grains with Soluble (DDGS)
  - The animal feed industry is the main customer for DDGS
  - DDGS produced by Biogroup will be sold on the local market and exported to the neighbouring countries and EU.

## Opportunities | Potential Upside

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There are few potential markets and segments that xxxxx plans to explore and not currently included in the business plan:

- Different geographical areas and different types of customers (Russian Federation, Asia).
- Potential segments which might be pursued (Pharmacy and Beverage Industry)

## Financial & Operating Data

Product	Unit	Target market	Price EUR	Quantity mn	Ravenue	
					2008 EUR mn	2009 EUR mn
Ethanol	litre	Local	0,65	65,0	42,3	43,9
	litre	Export	0,53	31,0	16,4	17,1
	<b>litre Total</b>			<b>96,0</b>	<b>58,7</b>	<b>61,0</b>
CO <sub>2</sub>	litre	Local	0,20	25,9	5,2	5,4
	litre	Export	0,20	38,0	7,6	7,9
	<b>litre Total</b>			<b>63,9</b>	<b>12,8</b>	<b>13,3</b>
DDGS	m <sup>3</sup>	Local			-	-
	m <sup>3</sup>	Export	4,07	1,1	4,5	4,7
	<b>m<sup>3</sup> Total</b>			<b>1,1</b>	<b>4,5</b>	<b>4,7</b>
<b>TOTAL</b>					<b>75,9</b>	<b>79,0</b>

## Financial & Operating Data

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- Xxxxx invested EUR 2.5 mn in:
  - purchasing a land plot for building the facility,
  - building the relevant infrastructure,
  - project design, and
  - technical documentation development.

*All amounts in EUR million!*

Item	TOTAL	Year		
		2006	2007	2008
Initial Investments	2.5	2.5	-	-
Equipment	35.3		23.0	12.3
Building and Facilities	13.5		11.0	2.5
<b>Total Investments</b>	<b>51.3</b>	<b>2.5</b>	<b>34.0</b>	<b>14.8</b>

## Financial & Operating Data

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- The project has a positive Net Present Value (NPV) and its Break-Even point is reached in the second year of operations.
- Xxxxxxx assumes an annual growth of 4% in revenues.

*All amounts in EUR million!*

Item	Year				
	2007	2008	2009	2010	2011
GrossProfit (Loss)	-	7.1	52.8	54.9	90.6
Profit Before Tax	(0.8)	(0.2)	45.4	47.3	80.6
Net Profit (Loss)	(0.8)	(0.2)	38.6	40.2	68.5
Net Cash Flow	36.8	21.5	28.9	22.1	58.7

## Summary

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- is a start-up company with a feasible strategy and tangible business plan which the company intends to follow.
- Xxxxxx Ltd intends to profit from the favourable market opportunities and the competitive advantages of the product and the company.
- The dedicated management team and advisors are the success key of the venture.
- We are looking forward to attracting investor interest.
- Additional information can be furnished upon request.

## Appendix

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### Bulgaria – Country Overview

## Bulgaria | Political Overview



Area: 111,002 sq.km  
 Population: 7.7 mn  
 Capital: Sofia (pop. 1.14 mn)  
 Main Towns: Plovdiv (341 ths), Varna (312 ths)  
 Legal System: Parliamentary Republic  
 President: Georgi Parvanov (since January 2002,)  
 candidate of the Bulgarian Socialist Party

- The results of the regular parliamentary elections in June 2005 led to the formation of a tripartite coalition government, with Prime Minister the Socialist leader Sergei Stanishev. The ruling coalition comprises of the Bulgarian Socialist Party, the liberal Movement Simeon II and the mostly ethnic Turkish Movement for Rights and Freedoms.
- Government's priorities are European integration, social responsibility and economic growth. The coalition parties focus on reforms to meet the EU entry conditions.
- Bulgaria signed the EU Accession Treaty on 25 April, 2005 and join EU on 1 January, 2007.
- Bulgaria is a NATO member since March 29th, 2004.



## Bulgaria | Macroeconomic Overview

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- GDP reached EUR 21.45 bn in 2005. The Bulgarian economy has grown by 5.3% as a whole driven by the investments in capital and the private consumption.
- Yet, Bulgaria's EUR 2,771 per capita GDP remains only about 30% of the EU, implying a major growth potential.
- In 2005, Bulgaria's average rate of inflation was 6.5%, higher than the 4.0% in the previous year (NSI).
- FDI in 2005 amounted to EUR 1,876 mn (8.9% of GDP), compared to EUR 2,278 mn (11.7% of GDP) in 2004 (Ministry of Economy, preliminary data). The drop is due mainly with the lack of significant privatization deals with foreign investors.
- Improving sovereign debt ratings:
  - Standard & Poor's upgraded to investment grade BBB+/A2, positive outlook (foreign currency) and confirmed BBB+/A2 stable outlook (local currency) on 26 October 2006.
  - Fitch upgraded to investment grade BBB/F3 (foreign currency) and to BBB+ (local currency) on 17 August 2005.
  - Moody's upgraded to Baa3, stable outlook (foreign currency) and to Baa3 (local currency) on 1 March 2006.
- Stable convertible currency fixed to EUR - Currency Board since July 1997: the Bulgarian Lev (BGN) is pegged to the Euro at BGN 1.95583 : EUR 1. This effectively provides investors with a built-in hedge against exchange rate risk.

## Bulgaria | Macroeconomic Overview

	2002	2003	2004	2005	2006F	2007F
<i>Change from previous year in %</i>						
<b>GDP (real)</b>	4.9	4.5	5.6	5.3	5.5	5.5
<b>Industrial output (real)</b>	4.7	14.1	17.7	8.2	14.1	11.3
<b>Gross fixed capital formation (real)</b>	8.5	13.9	12.0	16.5	14.0	12.5
<b>Consumer prices (yearly average)</b>	5.8	2.3	6.2	5.0	6.0	4.2
<b>Unemployment (yearly average)</b>	17.4	14.3	12.7	11.5	10.5	10.0
<b>Budget balance (central government in % of GDP)</b>	-0.6	0.0	1.7	2.5	1.5	1.0
<i>in EUR mn</i>						
<b>Merchandise exports</b>	6,063	6,668	7,994	9,400	11,000	12,500
<b>Merchandise imports</b>	7,755	8,868	10,712	13,600	16,500	19,000
<b>Current account</b>	-926	-1,630	-1,648	-3,200	-3,600	-3,200
<b>Current account (in % of GDP)</b>	-5.6	-9.2	-8.5	-14.9	-15.0	-12.1
<b>FDI (inflow, net)</b>	951	1,827	1,640	2,000	2,200	2,200
<b>Gross foreign debt (end of period)</b>	10,769	10,641	12,522	14,000	16,000	17,750
<b>Gross foreign debt (in % of GDP)</b>	65.1	60.2	64.4	65.2	66.6	67.2
<b>Import cover (in months)</b>	5.6	5.8	6.1	5.6	5.1	4.8
<b>Average exchange rate: BGN/EUR</b>	1.96	1.96	1.96	1.96	1.96	1.96
<b>Average exchange rate: BGN/USD</b>	2.07	1.73	1.57	1.57	1.61	1.56