Key Growth Factors Of The Turkish Autogas Market

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AYGAZ; A Well Diversified Energy Holding

• Leader in its core business: Fully integrated LPG services
  • Rankes Nr. 8th in top industrial enterprises of Turkey
  • $3 billion revenue - 1.6 m tons sales - 1,500 employees
  • #1 in Turkey, #5 in Europe
  • Market leader since foundation 50 years ago - 30% market share
  • $1.7 billion market value – Listed in ISE

• Diversified investments in energy
  • Refinery
  • Power generation
  • Natural gas

AYGAZ; A Well Diversified Energy Holding
Turkey is the 2nd largest autogas market in the world...

- **Turkish Autogas Market:**
  - No.1 in Europe and
  - No.2 in the world after South Korea
Sales volume reached to 2.5 million tons...

- Steady growth since 2003; 9% growth in 2010
- LP Gas consumption has exceeded gasoline consumption for the first time in 2009
Market has been transforming from cylinder gas to autogas

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Only 7% growth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>3.4 million tons</td>
<td></td>
<td>3.65 million tons</td>
</tr>
<tr>
<td>2010 E</td>
<td></td>
<td>Only 7% growth</td>
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</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>1999</th>
<th>2010 E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder</td>
<td>2.15 million tons (%63)</td>
<td>1.03 million tons (%28)</td>
</tr>
<tr>
<td>Bulk</td>
<td>0.90 million tons (%26)</td>
<td>0.12 million tons (%3)</td>
</tr>
<tr>
<td>Autogas</td>
<td>0.35 million tons (%11)</td>
<td>2.5 million tons (%69)</td>
</tr>
</tbody>
</table>

Note: Market has been transforming from cylinder gas to autogas, with only 7% growth.
Number of LPG cars reached to 2,9 million by the end of 2010

Nearly 4 out of 10 passenger cars run on LPG!

Biggest LPG Car Park in the World
Autogas market growth is driven by...

1. Price  
   2. Product Quality  
   3. LPG Conversion Firms  
   4. Filling Station Network  
   5. OEM Support  
   6. Legislation

Uncontrollable

Controllable
Key Growth Factor is the Autogas Price

- Key reason for consumers’ purchase decision
- Depends on crude oil & gas prices and taxation
- Currently 30% economical advantage over gasoline
- VAT and Special Consumption Tax constitute 50% of the end-user price.

PRICE DIFFERENCE BETWEEN GASOLINE AND LPG IS STILL THE CRUCIAL ELEMENT FOR CUSTOMER’S CHOICE
Market Development - Price Relationship

Sales (million tons)

0 0.5 1 1.5 2 2.5 3

2006 2007 2008 2009 2010 E

75 65 50

Stagnation Range
Optimum Range
Booming Range

Autogas Price/ Gasoline Price

Jan-06 Apr-06 Jul-06 Oct-06 Jan-07 Apr-07 Jul-07 Oct-07 Jan-08 Apr-08 Jul-08 Oct-08 Jan-09 Apr-09 Jul-09 Oct-09 Jan-10 Apr-10 Jul-10 Oct-10 Jan-11 Apr-11
Product quality and differentiation are also among the key success factors…

Autogas Product Development History

- **2001** – First product complying with EN 589
- **2004** – First product special to winter conditions
- **2009** – First additized product
- **2010** – Launch of the Enhanced Formula
They also have a positive impact on the market shares...
Another growth factor is the conversion center network

- 1000-2000 small scale private companies installing 60+ LPG kit brands
- The first contact point for LPG with the customer!
- Crucial for success to keep them on your side…
40% of the customers decide on the LP Gas brand through a station-related reason:

- Station and service quality
- Proximity
- Reputation of the dealer

High service quality diminishes inferior product perception...
Another growth factor is OEM support...

- **12 firms** offer factory-approved LPG cars.
- **First factory-fitted LPG car**, Fiat Albea, was launched by Fiat and Aygaz in 2005.

![Car Images]

- **Hyundai** (%9.3)
- **Fiat** (%8.9)
- **Opel** (%7.8)
- **Chevrolet** (%3.5)
- **Dacia** (%2.6)
- **Chery** (%0.5)
- **Mitsubishi** (%0.4)
- **Proton** (%0.2)
- **Subaru** (%0.2)
- **Daihatsu** (%0.1)
- **Lada** (%0.1)
- **IKCO** (%0.1)
OEM Support is increasing...

- In 2010, Dacia announced three factory-fitted LPG car models in Turkey.
Customer perception of autogas has been improved...

Through extensive campaigns, Turkey has managed to change the poor reputation of LPG as an inferior, unsafe and low performance fuel.

### Perception Scores Of Customers (Out of 5)

<table>
<thead>
<tr>
<th>Perception</th>
<th>May-05</th>
<th>Dec-07</th>
<th>Feb-08</th>
<th>Jul-09</th>
<th>Jul-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autogas is safe</td>
<td>2.85</td>
<td>3.93</td>
<td>4.07</td>
<td>3.79</td>
<td>4.40</td>
</tr>
<tr>
<td>Autogas is environment-friendly</td>
<td>3.59</td>
<td>3.90</td>
<td>4.15</td>
<td>4.25</td>
<td>4.44</td>
</tr>
<tr>
<td>Autogas provides high performance</td>
<td>2.47</td>
<td>3.33</td>
<td>3.71</td>
<td>3.57</td>
<td>4.25</td>
</tr>
<tr>
<td>I use it without any doubt</td>
<td>3.69</td>
<td>3.92</td>
<td>4.18</td>
<td>3.77</td>
<td>4.32</td>
</tr>
</tbody>
</table>
Importance of Legislation

Underground Parking and Ferries Restriction

- The key obstacle to reach potential autogas consumers
- LPG cars converted after 2004 (70% of the LPG car park) meet the safety standard (ECE R 67), the rest will be satisfying it by 2014 at the latest.
- We continue lobbying efforts in order to remove this restriction.
In Summary…

The Recipe For Growth is:

- Continuously develop the product
- Keep the conversion specialists by your side
- Provide a good service and product quality
- Cultivate OEM
- Carry on with the lobbying efforts

Increase Public Awareness of Autogas Advantages
And Enjoy The Growth!

Annual Sales (million tons)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales (million tons)</th>
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<tbody>
<tr>
<td>1997</td>
<td>0.00</td>
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<tr>
<td>1998</td>
<td>0.05</td>
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<tr>
<td>1999</td>
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<tr>
<td>2000</td>
<td>1.00</td>
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<td>2007</td>
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<tr>
<td>2008</td>
<td>5.00</td>
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<tr>
<td>2009</td>
<td>5.50</td>
</tr>
<tr>
<td>2010</td>
<td>6.00</td>
</tr>
</tbody>
</table>
THANK YOU...