Kohlenwasserstoffe – Mehr als Brennstoffe

Wien, 14. November 2013
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OMV Refining & Marketing as European Company is Supplying over 200 mn People with Energy

- 4 Refineries in Austria, Germany, and Romania with total capacity ~22 mn t/a
  - Germany: Burghausen (3.5 mn t), Bayernoil (4.5 mn t, JV, on sale)
  - Austria: Schwechat (9.6 mn t)
  - Romania: Petrobrazi (4.2 mn t)
- 20% market share in the Danube region
- High product quality and environmental standards
- Strong retail brand and high-quality, innovative non-oil business (VIVA)
- Active in 13 countries with around 4,400 filling stations in 2012 (incl. Petrol Ofisi)
- Total ~ 3,300 employees
Our Vision

We are the most valued manufacturer of fuels and petrochemicals and enable society's mobility and economic prosperity in our markets.
### Europes Ambiguous Targets Potentially Plot the Future Oil Demand

#### 2020
- 20% CO₂ reduction
- 20% energy efficiency
- 20% renewables
- 10% renewables in transport

#### 2030
- 40% CO₂ reduction
- 20% CO₂ reduction from transport
- ~40% renewables
- Electrification of urban transport

#### 2050
- 80-95% CO₂ reduction
- 60% CO₂ reduction in transport

### Europes Oil Demand [Mtoe]

<table>
<thead>
<tr>
<th>Year</th>
<th>2009</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>681</td>
<td>654</td>
<td>605</td>
</tr>
</tbody>
</table>

#### 2050 Scenarios

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2050</th>
<th>2050 IEA Blue Map</th>
<th>2050 NPS Extrapol. EUROPIA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2050</td>
<td>474</td>
<td>314</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>63</td>
<td>681</td>
<td></td>
</tr>
<tr>
<td></td>
<td>155</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Source
- European Commission, EUROPIA 2011 based on IEA and CONCAWE data
- IEA Blue Map Extrapolation

#### Notes
- Road & Rail
- Marine
- Industry
- Power
- Buildings
- Non Energy & Other
- Fuel & Losses

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5 | OMV Refining & Marketing, Dr. Alois Virag, Sep. 20th, 2013
US Households energy use distribution in 2012

Heating, cooling, and warm water are the major energy consumers

- Space Heating: > 50%
- Water Heating: 24%
- Space Cooling: 14%
- Refrigeration: 14%
- Cooking: 6%
- Clothes Dryers:
- Freezers:
- Lighting:
- Clothes Washers:
- Dishwashers:
- Televisions and Related Equipment:
- Computers and Related Equipment:
- Furnace Fans and Boiler Circulation Pumps:
- Other Uses:

Source: US Energy Information Administration, 2013
Households energy cost distribution

Share energy costs for all households in Germany

<table>
<thead>
<tr>
<th>Year</th>
<th>Heating &amp; warm water</th>
<th>Cooking</th>
<th>Lighting &amp; others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>59%</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td>2009</td>
<td>61%</td>
<td>14%</td>
<td>25%</td>
</tr>
<tr>
<td>2006</td>
<td>68%</td>
<td>10%</td>
<td>23%</td>
</tr>
<tr>
<td>2003</td>
<td>67%</td>
<td>10%</td>
<td>23%</td>
</tr>
<tr>
<td>2000</td>
<td>67%</td>
<td>9%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Heating & warm water | Cooking | Lighting & others

source: BMWi Energiedaten, 2013
Heating insulations are key to increase energy efficiency – crude oil is the basis for that

- With our petrochemical products benzene, ethylene and C5 blowing agent we supply the complete feedstock portfolio for insulation materials of the latest generation

Comparison of insulated and non-insulated house

Expanded (EPS) and extruded polystyrene (XPS)
High efficiency boilers increase energy savings, delivered by high quality sulphur free heating oil Vitatherm

Potential cost reductions by condensing boilers

- consumption [L]
- old oil boilers
- low temperature technology
- condensing boilers

Energy savings due to new condensing boiler
Results of a survey with 1900 households

- more than 40 %: 29%
- up to 20 %: 20%
- between 20 and 39 %: 51%

Source: www.iwo.at
The decrease in fuel consumption by optimised engines and optimised fuels although vehicle mass is increasing

Average passenger CO2 emissions are decreasing

Vehicle mass is increasing

CO2 Emissions [g/km]

-17%

source: ICCT "European Vehicle Market Statistics Pocketbook 2013"

Vehicle Mass [kg]

As an example, car industry has a strong interest in due to e-mobility and light weighting/downsizing

- Currently, plastics in vehicles are widely used. Commodity, engineering, and performance polymers are applied
- E-mobility and light weight vehicles will increase demand for polymer materials
- Today, plastics contribute 10 to 20% towards cars weight. 50% thereof is bases on ethylene, propylene, and butadiene
Good CEE + Turkey market development for petrochemicals and oil products is underpinned by macro indicators

- >70 mio consumer in total
- Car penetration per 1000 people increasing from 102 in 2010 to 123 in 2014 vs. European average of 500

Source: JBC Energy, April 2011
High purity propylene enables high performance polypropylene, further penetrating the engineered plastics sector.
Refining and petrochemicals deliver the building blocks for high performance, high quality polymers and other chemicals.
Global linear polyolefin demand (PE and PP) is growing continuously
OMV focuses on high value products with growing demand

<table>
<thead>
<tr>
<th>Products</th>
<th>Market growth 1 2012-21</th>
<th>Product Yield 2012 OMV Avg. EU-28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphtha</td>
<td>+19%</td>
<td>18% &gt; 9%</td>
</tr>
<tr>
<td>Jet</td>
<td>+20%</td>
<td>6% = 6%</td>
</tr>
<tr>
<td>Diesel</td>
<td>+7%</td>
<td>33% &gt; 25%</td>
</tr>
<tr>
<td>Gasoline</td>
<td>-20%</td>
<td>15% &lt; 22%</td>
</tr>
<tr>
<td>Heating oil</td>
<td>-21%</td>
<td>14% = 14%</td>
</tr>
</tbody>
</table>

Naphtha as feedstock for petrochemical products

<table>
<thead>
<tr>
<th>Products</th>
<th>Market growth 2 2012-21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene</td>
<td>+5%</td>
</tr>
<tr>
<td>Propylene</td>
<td>+6%</td>
</tr>
<tr>
<td>Butadiene</td>
<td>+13%</td>
</tr>
</tbody>
</table>

1 OMV market growth; diesel and gasoline excl. biofuels.
2 Ethylene and Propylene growth rates based on Regions Western Europe, Central Europe, CIS & Baltic.
Source: JBC Energy (April 2013), IHS CMAI, OMV analysis.
OMV’s petrochemical complex

Schwechat

- naphtha
- FCC plant
  - Propylene/propane
  - Ethylene
  - Propylene
  - Benzene rich gasoline cut
  - Crude C4
  - Petrol / LPG
  - Butadiene plant (Revamp 2014)
  - Butadiene

Burghausen

- naphtha
  - Metathesis
    - Propylene
    - Ethylene/Crude C4
  - Ethylene plant
  - Crude C4
  - Butadiene plant (2015)
  - Butadiene
  - Aromatics Extraction
  - Benzene
Total material usage (Crude Oil & intermediates) in the refinery Burghausen
- Since 2008: 4.4 Mn tons
- Equalizes increase of more than 25%

New, revamped, and changed units
- propylene splitter
- cracker furnaces
- ethylene unit
- tankfarm
- logistics & utilities
- ethylene pipeline
- HDS revamps
- coker revamp
- metathesis

<table>
<thead>
<tr>
<th>Product</th>
<th>Yield Increase [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethylene</td>
<td>33</td>
</tr>
<tr>
<td>propylene</td>
<td>275</td>
</tr>
<tr>
<td>benzene</td>
<td>55</td>
</tr>
<tr>
<td>diesel</td>
<td>229</td>
</tr>
<tr>
<td>jet</td>
<td>35</td>
</tr>
<tr>
<td>pet coke</td>
<td>8</td>
</tr>
</tbody>
</table>
Ethane based crackers yield only minor fraction of high molecular/high value petrochemical feedstock

- **Naphtha**
  - ethylene
  - C2-C6
  - other

- **Gas condensate**
  - ethylene
  - C2-C6
  - other

- **Ethane**
  - ethylene
  - C2-C6
  - other
Unlocking the butadiene potential in Schwechat and Burghausen

- Butadiene extension will go on-stream in mid 2014 and mid 2015, respectively.

- With these capacity additions, OMV will contribute 6% to the total European capacity.
Strong business integration and further increased asset utilization

| E&P | Refining | Retail | Petrochemical |

Own crude oil % of refining capacity

<table>
<thead>
<tr>
<th>Competition 2012</th>
<th>OMV 2012</th>
<th>OMV 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>12%</td>
<td>18%</td>
<td>&gt;25%</td>
</tr>
</tbody>
</table>

Retail sales vol. % of refining capacity

<table>
<thead>
<tr>
<th>Competition 2012</th>
<th>OMV 2012</th>
<th>OMV 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>24%</td>
<td>42%</td>
<td>&gt;47%</td>
</tr>
</tbody>
</table>

Petrochemicals sales vol. % of refining capacity

<table>
<thead>
<tr>
<th>Competition 2012</th>
<th>OMV 2012</th>
<th>OMV 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>10%</td>
<td>&gt;13%</td>
</tr>
</tbody>
</table>

Refinery utilization rate

<table>
<thead>
<tr>
<th>Competition 2012</th>
<th>OMV 2012</th>
<th>OMV 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>79%</td>
<td>88%</td>
<td>~90%</td>
</tr>
</tbody>
</table>

1 OMV’s European competitors: BP Europe, ENI Europe, Exxon Europe, Lotos, MOL, Neste, NIS, Phillips 66 Europe, PKN, Orlen, Repsol Europe, Rompetrol, Shell Europe, Total Europe, Tupras.

Source: Annual reports, OMV analysis.
Our Vision

We are the most valued manufacturer of fuels and petrochemicals and enable society’s mobility and economic prosperity in our markets.
Thank you for your attention