**Downstream Oil Value Chain**

2017 figures

**Crude supply**

- Equity crude production: 4.3 mn t
- Crude from third parties: 11.7 mn t

**Refinery production**

- Purchase of semi-finished products: 1.4 mn t
- Crude oil refining: 16 mn t
  (90% utilization rate of 17.8 mt refining capacity)

**Product supply and logistics**

- Purchase of finished products: 4.0 mn t
- Storage
- Rail/truck/ship

**Petrochemical/commercial/retail sales**

- Retail: 6.2 mn t
- Business-to-business: 9.5 mn t
- Aviation: 1.9 mn t
- Petrochemicals: 2.2 mn t

- OMV Petrol Ofisi: 4.0 mn t

47% Captive market

Customer allocation in %

53% Wholesale

---

1 10% internal consumption to be deducted.
2 Volume includes blending components and excludes purchase of products for OMV Petrol Ofisi
3 OMV Petrol Ofisi divested in June 2017
4 Retail and petrochemical sales
OMV Refining & Petrochemicals’ assets are operated as one refinery system

OMV Refining assets
- 17.8 mn t annual crude processing capacity
- 2.5 mn t petrochemical production capacity
- High conversation rate
- High refinery utilization rate, constantly above EU average

Competitive advantages
- Three sites operated as one refinery, maximizing returns
- High flexibility in crude processing
- Favorable product yield structure
- Forward integrated into petrochemicals
- Secure marketing outlets
- Above average net cash margin vs inland peers
Integrated refinery yield

Integrated refinery yield %

- 12% Petrochemicals
- 17% Gasoline
- 9% Jet fuel
- 41% Middle distillates
- 9% Heavy products
- 3% Others
- 9% Internal consumption

- Operated as „3 Sites – 1 Refinery“;
- 50% middle distillates
- 9% heavy products, thereof:
  - 1% low sulfur heavy fuel oil
  - 1% high sulfur heavy fuel oil

Note: LPG and naphta used as feedstock for petrochemicals
² Excluding jet fuel
³ Thereof 1% low sulfur heavy fuel oil and 1% high sulfur heavy fuel oil
Continuous cost & performance programs lead to a top position in European refining benchmarking

Top Solomon ranking for Schwechat and Burghausen

**Fuels**
- Rank in the two top quartiles in most categories
- Above average net cash margin of European inland peers

<table>
<thead>
<tr>
<th>Net Cash Margin</th>
<th>Schwwechat, in USD/bbl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st quartile</td>
<td>x x x x</td>
</tr>
<tr>
<td>2nd quartile</td>
<td></td>
</tr>
<tr>
<td>3rd quartile</td>
<td></td>
</tr>
<tr>
<td>4th quartile</td>
<td></td>
</tr>
</tbody>
</table>

|------|------|------|------|------|

<table>
<thead>
<tr>
<th>Energy Intensity Index</th>
<th>Burghausen, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st quartile</td>
<td>x x x x</td>
</tr>
<tr>
<td>2nd quartile</td>
<td></td>
</tr>
<tr>
<td>3rd quartile</td>
<td></td>
</tr>
<tr>
<td>4th quartile</td>
<td></td>
</tr>
</tbody>
</table>

|------|------|------|------|------|

**Olefins**
- Rank in the two top quartiles in most categories

<table>
<thead>
<tr>
<th>Net Cash Margin</th>
<th>Schwechat &amp; Burghausen, in USD/bbl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st quartile</td>
<td>x x</td>
</tr>
<tr>
<td>2nd quartile</td>
<td>x</td>
</tr>
<tr>
<td>3rd quartile</td>
<td></td>
</tr>
<tr>
<td>4th quartile</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2013</th>
<th>2015</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Energy Intensity Index</th>
<th>Schwechat &amp; Burghausen, in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st quartile</td>
<td>x x x x</td>
</tr>
<tr>
<td>2nd quartile</td>
<td></td>
</tr>
<tr>
<td>3rd quartile</td>
<td></td>
</tr>
<tr>
<td>4th quartile</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2013</th>
<th>2015</th>
</tr>
</thead>
</table>

1 Fuels quartile position considered within Western Europe and olefins within Europe.
Schwechat refinery – Connected to product terminals, crude and product pipelines
Schwechat refinery – In a nutshell

- Sole refinery in Austria
- Flagship OMV refinery with 9.6 mn t annual capacity
- ~ 700 employees
- 10% equity crude intake supplied domestically
- Wide range of crudes (heavy, medium, light) supplied via TAL pipeline from Trieste
- Complex refinery with flexible crude intake
- Product pipelines: e.g. Jet fuel pipeline to Vienna airport
- Low black product yield
- Forward integrated into petrochemicals – Borealis across the fence
- Safety is the basis for success: no occupational injuries in 2017
Refinery Schwechat – Processed crude oil to countries of origin

Processed crude oil quantity 2017

- 17% Others
- 7% Nigeria
- 11% Libya
- 12% Azerbaijan
- 9% Austria
- 30% Kazakhstan
- 14% Irak

8.1 million tons

1 In 2017 Schwechat refinery completed a full-site turnaround
Simplified, crude oil processing can be divided into four essential stages:

- Distillation
- Desulfurization
- Upgrading
- Blending
Therefore numerous technical plants are required.
## Refineries provide the full range of products

<table>
<thead>
<tr>
<th>Petrochemicals</th>
<th>Ethylene</th>
<th>Propylene</th>
<th>Butadiene</th>
<th>Aromatics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic chemical used to produce plastics (polyethylene)</td>
<td>Basic chemical used to produce plastics (polypropylene)</td>
<td>Basic chemical used to produce synthetic rubber</td>
<td>Basic feedstock for Benzene extraction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fuels</th>
<th>Propane/Butane</th>
<th>Gasoline</th>
<th>Jet A1</th>
<th>Diesel</th>
<th>Heating Oil Extra Light</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid gas used as a heating and transportation fuel</td>
<td>95/100 octane unleaded fuel with max. 0.001% sulfur content; contains bio components</td>
<td>Fuel of the highest quality for aircrafts</td>
<td>Fuel with max. 0.001% sulfur content for passenger cars and trucks; contains bio components</td>
<td>Heating fuel with max. 0.001% sulfur content for domestic use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Others</th>
<th>Bitumen</th>
<th>Sulfur</th>
<th>Sulfuric acid</th>
<th>Electrical current</th>
<th>District heating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic material used to make road surfaces (incl. low-noise asphalt and polymer modified bitumen) and for use in construction</td>
<td>Basic material for the chemical and fertilizer industries</td>
<td>Basic material for a variety of applications such as fertilizer industries</td>
<td>Electrical current from combined heat and power generation in the power plants</td>
<td>Heat distribution to the district heating network in Vienna and surrounding areas</td>
</tr>
</tbody>
</table>
Schwechat Refinery – Transportation Quantities

Application of refinery Schwechat and warehouse Lobau – according to shipping figures without internal pumping.