Biofuels – Implementation of Article 16 of the Oil Stocks Directive (Slovenian Experience)

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To meet their commitments on climate change the EU Member States on a field of transportation are obliged to:

- Increase the share of renewable energy
- Reduce greenhouse gas (GHG) emissions
Legal basis - Emergency Oil Stocks & Biofuels:

- Article 16 of Emergency Oil Stocks Directive:
  Biofuels and additives shall be taken into account when:
  - calculating stockholding obligation:
    • only where biofuels and additives are blended with petroleum products;
  - calculating the stock levels maintained:
    • when biofuels and additives are blended with petroleum products;
    • when they are to be blended with petroleum products and are to be used in transportation.
- Competent authority in the EU - DG Energy.
Legal basis – Biofuels:

  - Target: to use 10% of renewable energy sources in transportation by the end of 2020;
  - Competent authority in the EU - DG Energy.

- Directive relating to the quality of petrol and diesel fuels (98/70/EC):
  - Target: to gradually reduce GHG emissions by 6% by the end of 2020;
  - Competent authority in the EU - DG Clima.
Future development of biofuels use in transportation as proposed by the European Commission:

- 14% renewable energy sources by 2030
  - with a share of 3.5% of advanced biofuels and biogas;

- 7% cap on the share of the first-generation biofuels.
Biofuel obligation for 2020 in some EU countries:

- Croatia: 10 % in energy content;
- Estonia: 10 % in energy content;
- Finland: 20 % in energy content;
- Germany: 6 % of energy content (GHG reduction);
- Hungary: 8.2 % and min. 6.1 % bioethanol in RON 95;
- Italy: 9 % energy content;
- The Netherlands: 8.5 % and min. 6.5 % energy content/product type energy content.
Biofuel obligation in Slovenia for 2020: 7
Reporting of Emergency Oil Stocks and Biofuels in the EU countries:

- Biofuels are taken into consideration when calculating emergency stocks *obligation*.
- Trading numbers are to be reported in MOS.
- The EU countries are not obliged to maintain the biofuels as emergency stocks, but they are allowed to store and count them towards their obligation.
- They can be reported in MOS.
Table 1: SUPPLY OF CRUDE OIL, NGL, REFINERY FEEDSTOCKS, ADDITIVES AND OTHER HYDROCARBONS

<table>
<thead>
<tr>
<th></th>
<th>Crude oil</th>
<th>Natural gas liquids</th>
<th>Refinery feedstocks</th>
<th>Additives / oxygenates</th>
<th>Of which Biofuels</th>
<th>Other hydrocarbons</th>
<th>Total (A to F, excl. E)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>+ Indigenous production</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>+ Receipts from other sources</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>+ Backflows(^1)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>+ Products transferred(^2)</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>+ Imports (Balance)(^3)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>- Exports (Balance)(^4)</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>- Direct use(^5)</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>- Stock changes(^6)</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>= Refinery intake (Calculated)</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Statistical difference</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>= Refinery intake (Observed)</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Memo Item: Refinery losses: 12

Unit: Thousand metric tons

MOS (Monthly Oil Stocks) Reporting:
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- Table 2: under „Primary product receipts“(1) in column P and S (calculated also in R) in a case of B100.

Mixed products (already blended) are allocated between bio and non-bio and reported in:
- columns H and I (for E5), S and T (for B7).
MOS (Monthly Oil Stocks) Reporting:

- Table 5: under "(h) Stocks held by stock holding 'organisation on national territory "(15 and 16) in columns K,L,M in a case of gasoline E5 and T,V,W,X in a case of B0.

Mixed products (already blended) are allocated between bio and non-bio and reported in:
- columns L and M (for E5), W and X (for B>0).
Emergency Oil Stocks and Biofuels in EU countries:
Emergency Oil Stocks and Biofuels in EU countries:

- The CSE’s avoid biofuels in their stocks because of:
  - difficult storage;
  - difficult handling;
  - price.

- Only small portion of emergency stocks are with biofuels:
  - in some cases of commingled storage:
    - gasoline with bioethanol;
    - blended diesel;
  - in some cases of segregated storage:
    - gasoline with ETBE (Slovenia – E5);
    - BOB (blendstocks for Oxygenate Blending) – need to be blended into gasoline.
Slovenian Oil Market:

- Specific, small market.
- Fuels are 100% imported.
- No production and no refinery.
- Three major suppliers in retail (95% of mkt share).
- Limited storage terminals with blending possibilities.
- Poor logistical conditions (no product pipelines...).
- Achievements in the Biofuel obligation:
  - GHG emissions from transport:
    - target 2013: 2%, fulfillment: 1.43% (one of the reasons: up to 2013 biofuels were excise duty exempt);
    - target 2016: 4%, fulfillment: 0.13%;
    - target 2017: 4%, fulfillment: 0.71%;
    - target 2018: 5%, fulfillment: 1.9%.
Slovenia achievements in the Biofuel obligation:

- share of renewable energy and reduction of GHG emissions

![Graph showing energy from renewable sources and GHG emissions reduction from 2008 to 2020.]
Emergency Oil Stocks and Biofuels in Slovenia:
Biofuels in the Agency day-to-day business:
Emergency Oil Stocks Fee:

- Oil companies report the amount of net import of oil products to Slovenia on a monthly basis.
- They pay the emergency oil stocks fee according to the reported amounts (0.01222 EUR/l light products, 0.01166 EUR/l medium products).
- If the biofuel is already blended into the oil product, it is reported together with the oil product considered (e.g. gasoline with ethanol / ETBE).
- If the biofuel to be blended with other products is brought to Slovenia, it has to be reported separately (use of B100 not to be reported).
Emergency Oil Stocks and Biofuels in case of crisis in Slovenia:
Our new system for blending for fossil gasoline and diesel with biodiesel, additives and coloring in terminal Ortnék:

Some facts about the Project:

- designing and getting of building permission in 2017;
- first unsuccessful public procurment tender was in 2018, second in the begining of this year;
- construction period from May to September 2019;
- testings, certifications, obtaining permits from October till Mid of November 2019;
- planned start of regular operation in the second half of November 2019; (due to the exchange of 40.000 m³ of fossil diesel);
- Project value is 1,1 mio EUR.
Truck filling station:
New system for blending consists of:

- 2 x reception of B100 units (measuring line with pump);
- 2 x 55 m³ B100 tanks;
- B100 pumping station;
- 3 x blending units for B100 (each filling space);
- 4 x additive dosing units (2 different additives for gasoline and 2 for diesel);
- 1 x colouring unit (for colouring diesel for use as heating oil).
The reception of B100 unit:
2 x tanks (each 55 m$^3$) for biodiesel (B100):
B100 pumping station:
Filling units for blended products

Blending unit for biodiesel
Additives unit:

Additives for gasoline

Additives for diesel
One colouring unit (filling space 3):

- for a case that we need to deliver heating oil, we colour diesel.
Thank you for your attention!