COAL: fuel for the 21st century

St. Barbara’s Day 2014
Press Club Brussels Europe
St. Barbara’s Day – Brussels
Fuelling competitiveness, growth & jobs in the 21st century

EURACOAL Vice President, Mr. Nigel Yaxley cordially invites you to the launch of

Coal: fuel for the 21st century

and cartoons by Kim Duchateau who will be present for autographs

&

Poland in the 2030 climate and energy package

Mr. Ryszard Pazdan
Shadow Minister for Environment
Business Centre Club, Warsaw

Press Club Brussels Europe, 95 rue Froissart, 1040 Brussels

Speeches 14.00-15.00
Buffet lunch from 13.00

RSVP: euracoal@euracoal.org Polish beer & sausages after
41% of the world’s electricity comes from coal

Coal is also important for:

- steel making
- district heating and industrial combined heat & power (CHP)
- small- and medium-size enterprises, e.g. food processing companies
- residential heating

27% of the EU’s electricity comes from coal with 24/7 reliability.
What happened in Ukraine in 2014?

Coal mines lost due to the conflict in the East

- WAS as of 1.01.2014: 126
- IS as of 1.10.2014: 60

Shipment of domestic anthracite coal to TPPs has dropped by 99%, ths

- April: 1383
- May: 1309
- June: 1343
- July: 1070
- Aug: 30

Energy Security Gap

-100%
Coal in Europe 2013

lignite production, hard coal production & imports

EU-28 million tonnes

<table>
<thead>
<tr>
<th>Country</th>
<th>Lignite (Mt)</th>
<th>Hard Coal (Mt)</th>
<th>Imports (Mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>407</td>
<td>114</td>
<td>216</td>
</tr>
<tr>
<td>Germany</td>
<td>182.7</td>
<td>40.5</td>
<td>2.7</td>
</tr>
<tr>
<td>Poland</td>
<td>76.5</td>
<td>65.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Slovakia</td>
<td>39.5</td>
<td>22.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>27.5</td>
<td>9.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Austria</td>
<td>16.6</td>
<td>2.1</td>
<td>0.2*</td>
</tr>
<tr>
<td>Italy</td>
<td>22.8</td>
<td>0.7</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>France</td>
<td>18.9</td>
<td>0.3</td>
<td>&lt;0.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>7.5</td>
<td>8.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>12.4</td>
<td>12.8</td>
<td>3.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>49.4</td>
<td>1.9</td>
<td>0.7</td>
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<tr>
<td>Norway</td>
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<tr>
<td>Finland</td>
<td>5.1</td>
<td>2.5</td>
<td></td>
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<tr>
<td>Sweden</td>
<td>2.5</td>
<td>76.5</td>
<td>0.4</td>
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<tr>
<td>Lithuania</td>
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<td>0.1</td>
<td>&lt;0.1</td>
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<tr>
<td>Belarus</td>
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<tr>
<td>Ukraine</td>
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<td>1.9</td>
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<tr>
<td>Turkey</td>
<td>50.5</td>
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</tbody>
</table>

Source: EURACOAL members – * 2012 data

Note: Bars show million tonnes of coal equivalent (Mtce) while figures at top of bars show millions of physical tonnes (Mt)
Share of coal in EU electricity, 2012

- Coal: 28.4%
- Nuclear: 26.8%
- Gas: 17.7%
- Hydro (exc. pumped): 11.1%
- Wind: 6.2%
- Oil: 2.2%
- Solar: 2.2%
- Other: 5.4%

EU average: 28.4%

Source: Eurostat database nrg_105a last update 29.04.2014 (*includes peat)

4 December 2014, St. Barbara’s Day, Brussels – Slide 6
2030 proposals – some good points, some bad

1. A 40% GHG reduction target c.f. 1990 with no further “conditional” targets offered at international negotiations

2. A 27% EU-wide binding target for renewable energy in final energy consumption

3. ETS allowance cap to shrink by 2.2% each year from 2021 (c.f. 1.74% now)

4. A new market stability reserve for the ETS from 2021 (Phase IV)

5. Carbon leakage protection to continue

6. Indicators for energy price competitiveness and energy security

4 December 2014, St. Barbara’s Day, Brussels – Slide 7
EU 2030 climate targets: why less can be more...

Reducing GHG emissions 3x faster, with no international agreement?

At what cost? Fuel switching to expensive gas, driven by a >€50/tCO₂ carbon price!

The coal industry asks that any 2030 target must be realistic and only decided after the 2015 climate summit in Paris.

To balance renewable power, coal-fired power plants are equally as flexible as gas, but coal can do the job more cheaply and more securely.

If a 2030 target is not part of a binding international agreement, it would mean higher energy prices and less competitive industry in Europe.

Marrying the use of coal with climate policy means improving efficiency at older coal power plants: CO₂ emissions can be reduced by 30% or more.

#Euracoal
EURACOAL 3-step clean coal strategy

- TODAY: modernise and replace old power plants
- TOMORROW: R&D for high efficiency and flexibility at new plants
- DAY AFTER TOMORROW: CO₂ capture and storage demonstration + public CO₂ infrastructure

A pragmatic 3-step strategy for a cleaner more prosperous future.
EU response: renewables and efficiency

Since 2000, big growth in capacity, not matched by output.
Brussels, 2015 – Coal balances renewables!

AHH! AT LAST! WHAT KEPT YOU?

Kim
Brussels, 2015 – Coal is widely available from over 40 countries!
Thank you!

Nigel YAXLEY, Vice President
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