Mineral Resources in the Usti region

Exploitation | Reclamation | Partnership
Mineral Resources in the Ústí region

- Non-metallic minerals
- Metallic minerals
- Energy minerals
Non-metallic mineral deposits
Mined in the past
Non-metallic mineral deposits
Currently mined
Non-metallic mineral deposits
Unmined in the past
Non-metallic minerals

**Reserves**

- Sufficient deposits of common industrial and construction minerals, such as crushed stone, sand and gravel, brick clays, and limestone
- Nationally important deposits of bentonite and kaolin
- Regionally specific minerals (the only exploited deposits in the Czech Republic): pyrope-bearing rock, oxyhumolite, and feldspar substitutes

**Mining prospects**

- Long-term sustainability
- No serious environmental conflicts
Metallic mineral deposits
Metallic mineral deposits

Legend
- Pink: Tungsten ores
- Red: Iron ores
Metallic mineral deposits
Metallic minerals

Reserves
- Krušné Hory Mountains can be considered as a lithium province
- Around 300 million tonnes of ore with elevated lithium contents were identified in Cínovec and its surroundings alone
- In addition, occurrence of rubidium and cesium

Mining prospects
- Currently no mining operations
- Cínovec odkaliště Deposit
  - Planned extraction at a former tailings pond (excavated materials)
  - 2014 to 2015 – EIA assessment
  - 2016 – licence from the mining authority in Most
Energy mineral deposits

Legend
- ⛏️ mines in operation
- 🕵️ Most Brown Coal Basin

Energy Mineral Deposits
- Green: Unmined in the past
- Yellow: Mined in the past
- Orange: Currently mined
Brown Coal Production

- **1950** – 29 underground mines, 22 open pit mines
- **1984** – 6 underground mines, 12 open pit mines
- **2016** – 0 underground mines, 4 open pit mines
## Brown Coal Mining

<table>
<thead>
<tr>
<th>mine</th>
<th>mining company</th>
<th>average annual production (mil. t)</th>
<th>workable reserves within mining limits (mil. t)</th>
<th>licence for mining acquired in</th>
<th>estimated lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>ČSA</td>
<td>Severní energetická</td>
<td>3</td>
<td>27,7</td>
<td>2000</td>
<td>2024</td>
</tr>
<tr>
<td>Vršany</td>
<td>Vršanská uhelná</td>
<td>6</td>
<td>277</td>
<td>2010</td>
<td>&gt;2050</td>
</tr>
<tr>
<td>Libouš</td>
<td>Severočeské doly</td>
<td>13,5</td>
<td>252</td>
<td>2013</td>
<td>2040</td>
</tr>
<tr>
<td>Bílina</td>
<td>Severočeské doly</td>
<td>10</td>
<td>255</td>
<td>2011</td>
<td>&gt;2050</td>
</tr>
</tbody>
</table>

1) as of January 1, 2015
Energy minerals

Reserves
- Relatively large reserves of brown coal in Northern Bohemia (Most Brown Coal Basin) are blocked by “Regional environmental limits” set by the Czech government in 1991
- Limits shifted at Bílina Mine in 2015, not at ČSA Mine (750 mil. t)

Mining prospects
- Lifetime up to 2050 within limits, but annual coal production can be expected to decrease gradually
- Further mining (up to 2120) is feasible only at ČSA Mine only if the limits are broken
Land reclamation

- Land reclamation after brown coal mining started in 1950-ties
- Since 1993 mining companies are obliged to generate financial reserves for remediation and reclamation
- The determination of anticipated expenses for remediation and reclamation is part of the plan for opening, preparation and exploitation of reserved deposits
- Moreover, in 2002 the Czech government approved a programme dealing with ecological damage caused prior to privatisation of brown coal mining companies in the Ústí nad Labem Region and Karlovy Vary Region
Land reclamation

Finished reclamations in hectares

- Water bodies
- Others
- Agricultural land
- Forestry
Land reclamation
Usti Region and mineral mining

The regional authority of the Usti Region

- Decisions and regulations are issued in compliance with environmental legislation (executing delegated competences by the state)
- However, licence for mining is issued by the District Mining Authority in Most

Usti Region

- Self-governing unit
- Promoting cooperation and partnership among regional partners
- Participating in national/international projects
Usti Region has changed!

Usti Region - a place where you can spend a wonderful holiday. It is rich not only for raw materials, but also for its history. You can find there many interesting places and tourist attractions which can be seen due to a dense network of bicycle paths or by walking tours.

Let yourself be surprised by a varied landscape and clean nature, which adorn our region again, thanks to recultivations. We believe that the places which you will discover, you will remember it as a place that is needed to protect.

Come and experience the change for yourself.

Experience the change – beauty of Usti Region!
Thanks for your attention!

Mgr. Martin Kabrna, Ph.D.
Ing. Jaroslava Kuszniruková

Krajský úřad Ústeckého kraje
Velká Hradební 3118/48
400 02 Ústí nad Labem
Tel.: +420 475 657 614
gsm: +420 603 192 615
e-mail: kusznirukova.j@kr-ustecky.cz
www.kr-ustecky.cz