“Update on the course of Southeastern Europe towards becoming a regional gas market”

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The role of Greek Energy Forum

• An international energy think tank of Greek energy professionals holding corporate posts abroad and whose expertise spans across the energy industry spectrum (network of approximately 10,000 professionals today)

• Founded and headquartered in London since 2013 and currently featuring branch offices in Brussels, Athens, Nicosia, Dubai and Washington DC.

• Our mission is:
  – To establish an international platform of ideas and dialogue amongst energy professionals to enable Change in the energy setting of SE Europe/East Med
  – To inform investors and public opinion on latest energy developments and “best practice” examples successfully applied abroad respectively
  – To propose and communicate energy policy proposals and reforms to governments and decision makers

Affiliate Organisations:
The 3 Pillars of an efficient regional SEE Gas Market

Supply Diversification

Cross-Border Interconnections

Flexibility
Supply Diversification (=Security of Supply)

Existing active sources:

- **Russia** (via Gazprom Export)
- **Azerbaijan** (via SOCAR and BOTAS)
- **Indigenous production** (Romania, Croatia, Serbia, Bulgaria)
- **LNG** (only arriving in Greece at the moment)
- **Imports from Central Europe** (Hungary, Slovenia)

**Affiliate Organisations:**

- 4%
- 56%
- 97%
- 76%
- 19%
- 25%
- 42%
- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

**Gas Sources in Main SEE Markets**

- Ex-Russia
- Ex-Caspia
- Ex-LNG
- Other
- Indigenous Production
- External Dependency
Supply Diversification (=Security of Supply)

Prospective/possible new volumes originating from:

• **Caspian Sea** (Shah Deniz II)
• **USA** (LNG – planned import terminals Gastrade (GR), Krk Island (CRO), Vassilikos (CYP), AGRI (ROM), Eagle (ALB))
• **New indigenous fields** (Black Sea, Croatia, Albania, Greece)
• **East Med** (Israel, Cyprus, Egypt)
• **Russia** (“New South Stream”)
• **Italy** (via reverse flow capability of TAP)
Flexibility

• Essential for:
  – security of supply
  – seasonal swing
  – trading optimisation

• Region is short of physical flexibility

• Some markets rely fully on “virtual” flex (typical 20% annual flex in typical supply contract)

• LNG storage (existing/planned) can help but region needs underground storage projects

<table>
<thead>
<tr>
<th>Country</th>
<th>Annual Demand (mcm)</th>
<th>Installed UGS (mcm)</th>
<th>Available Flex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>8,200</td>
<td>4,694</td>
<td>57%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>34,200</td>
<td>10,218</td>
<td>30%</td>
</tr>
<tr>
<td>Germany</td>
<td>79,900</td>
<td>21,840</td>
<td>27%</td>
</tr>
<tr>
<td>Italy</td>
<td>66,200</td>
<td>16,623</td>
<td>25%</td>
</tr>
<tr>
<td>SEE</td>
<td>22,300</td>
<td>4,232</td>
<td>19%</td>
</tr>
</tbody>
</table>

SEE additional capacity needed to reach Italian standards: 1,368 6%
Cross-Border Interconnections

- Existing system designed mainly to facilitate the diffusion of Russian gas arriving via Ukraine
- New pipeline projects to enable new “supply visions”:
  - Southern Corridor (TAP, TANAP)
  - Vertical Corridor (IGB, IBR, EAST MED)
  - Ionian Adriatic Pipeline (IAP)
  - “New South Stream”
What does the vision look like in the eye’s of a trader?

ARBITRAGE OPPORTUNITIES
The Way Forward

- Promote **regulatory liberalisation** – establishment of virtual trading points
  - Enable **shift of existing delivery points** of supply contracts to VTP
  - Support **regional interconnections** and alleviate bottlenecks (PCI Projects)
    - Invest in **storage infrastructure** (including LNG)
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Thank you very much for your attention!

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Affiliate Organisations:
Gas sources in main SEE markets

- Romania: 100% (Production), 4% (Imports), 96% (External Dependence)
- Greece: 100% (Production), 58% (Imports), 42% (External Dependence)
- Croatia: 20% (Production), 80% (Imports), 0% (External Dependence)
- Bulgaria: 100% (Production), 100% (Imports), 0% (External Dependence)
- Serbia: 20% (Production), 80% (Imports), 0% (External Dependence)