Component B: Electricity and Gas

Objectives:

Improved Trade/Competitive Markets/Execrated Standards/Infrastructure Efficiency

Policy Framework:
- Baku Initiative
- Eastern Partnership
- Energy Security Platform
- Energy Community

REGONAL ACTIVITIES

SPECIFIC ASSISTANCE (AHEF)
Stakeholders Targeted

Cabinets of Ministers
Ministries in charge of Energy
Ministries of Economy

Energy Regulators

Consumer protection Organisations

Electricity Companies (TSOs)
Gas Companies (TSOs)

Commercial System Operators

NSBs (National Standardisation Bodies)
Certification & Accreditation organisation

Research Energy Institutes
Technical Experts Groups (TEG) in PCs

...about 120 specialists in 11 PCs

TEG 1: Energy Markets & Infrastructure

Team 1: Energy Policy
Team 2: Tariffs & Regulation
Team 3: Licensing, Markets and Monitoring
Team 4: Cross-border trade Electricity
Team 5: Cross-border trade Gas
Team 6: Gas infrastructure

TEG 2: Standardisation (Electricity & Gas)

Team 1: Standardisation policy, Technical regulations
Team 2: Gas standards
Team 3: Electricity standards
Regional Activities (completed)

Capacity Building of Gas TSOs, Venice, Milan, May 2013
Regional Seminar/study tour.

Work scope & Key Results:

- latest EU CBT gas platform
- gas markets & prices
- visit to SNAM facilities
- 3rd GIE conference
- access to 350 EU gas stakeholders, exchange of experience
- increased capacity of PCs gas TSOs (high evaluation results)
- PCs gas investment projects promoted (initial negotiations held)
- AHEF ideas initiated (Uzbekistan)
Regional Activities (completed)
Capacity building of National Standardisation Bodies,
London, Loughborough, July 2013
Regional Seminar/study tour.

Work scope & Key Results:

- concept RM & AP presented
- key competences of NSBs discussed
- visit to BSI facilities & laboratories (E & G)
- agreement to go ahead with RM & APs for 6 PCs
- agreement to harmonise Priority standards (Ukraine, etc)
- agreement with EASC, transfer of 112 translated standards to PCs
Regional Activities (completed)

Review of standardisation and technical legislation systems of 11 NOGATE Partner Countries. Regional Study.

Work scope & Key Results:

- review of standardization and technical legislation systems of the PCs.
- recommendations for establishing the new TCs in E & G, and strengthening the existing TCs
- state of play to be used for RM & APs
- gap analysis with EU framework
Upcoming (ongoing) Activities (1)

Tariffs (B1)
- Tariff Study methodologies review for 11 PCs & recommendations (final draft shortly).
  - Market make-up and structure
  - Regulatory environment
  - Wholesale tariff methods for electricity and gas
  - Transmission and distribution tariffs
  - End User tariffs
  - Level of cost recovery
  - Allocation of costs
  - Cross subsidies
  - Comparisons with the EU

Regulatory Issues (B1)
- Capacity building of Regulators, Consumer Protection. Webinar (built on the already performed regional seminars in Vienna & Budapest)

Cross-border Trade (B3)
- AHEF related: Discussions
- The project is open for AHEF in Uzbekistan
Upcoming (ongoing) Activities (2)

Infrastructure (B4)

- EU Gas Technologies & Methodologies for 11 PCs—Study with updated approach (final draft shortly)
- Regional seminar & study tour, show case of methodologies & technologies, optimal programme for each PC. Date & place to be defined.

Standards (B2)

- 11 Road Maps & Action Plans for harmonisation of standards (national meetings, validation)
- Facilitated implementation of the agreement EASC on transfer of 60 translated gas standards to PCs – NSBs will be provided on request
- Study tour to DWGV, Jan 2014 (tbc)
# AHEF: Active Applications

<table>
<thead>
<tr>
<th>Country</th>
<th>Applications</th>
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<tbody>
<tr>
<td>Armenia</td>
<td>6</td>
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<tr>
<td>Azerbaijan</td>
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<td>Georgia</td>
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<td>Turkmenistan</td>
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<td>Ukraine</td>
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<tr>
<td>Uzbekistan</td>
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</tbody>
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**TOTAL: 37**
AHEF: Armenia example

Rules of connection to electricity and gas distribution networks (on-going).

Work scope & Impact:

- analysis of the current legislation framework on connection conditions and charging propose technology on utilisation
- recommendations regarding the rules and connection tariffs
- formulation and adoption by PSRC of proposals and in an improvement of the relevant primary and secondary legislation.
AHEF: Georgia example (1)

1. Support Georgia in Energy Sector Reform process and actions towards full membership of the Energy Community (MoE)
2. Rules Expert Review and Analysis of the Internal Electricity Models (ESCO)

- compliance with 3rd energy package
- development of the market model and associated rules
- functional internal electricity market
- progress towards accession in ECT
- adoption of new legislation
1. Cathodic Protection System Design (on-going)
2. Direct Assessment Techniques of unpiggable pipelines
3. Construction Supervision (Non Destructive Testing-NDT) and Pipeline Testing and Commissioning (completed)

- 3 seminars in Tbilisi & study tour to Greece
- participation open to other PCs
- reduced cost of the construction and maintenance
- reduced gas emissions improving the environment
- optimal design of rehabilitation programmes
- internationally recognized NDT certificates
AHEF: Azerbaijan example

Consultancy services on Advanced Meter Infrastructure (AMI) application at Azerenerji’s distribution networks

Work scope & Impact:

- 2 phases
- Assessment of the current state of the Metering Data Management (MDM) systems
- AMI system design
- Support in procurement AMI systems
- 100% collection rates
- Reduction of technical losses to 5%
- Prevention of illegal access to grid and meters;
- Establishment of a modern and well-functioning customer services.
AHEF: Uzbekistan (1)

Determination of volumes of flared gas (APG) and its utilisation on the deposits of the Republic of Uzbekistan (under evaluation)

- Identification of current volumes of flared gas (pilot areas)
- Propose technology on utilisation
- Economic model
- Training
- Overall impact saving 1 bln m3 over 6 years

Work scope & Impact:
AHEF: Uzbekistan(2)

Technical Assistance for the supply and use of gas pressure regulators for the Gas Distribution Network (ToR under preparation)

- Assessment of existing Gas Distribution Network and existing Pressure regulators
- Technical Evaluation of the international low pressure regulators (to be acquired by Uzbekneftegaz) on adaptability with the recently purchased advanced gas meters.
- Preparation and implementation of one day workshop for the presentation of the evaluation study.
- Overall impact saving 200 m3 annually

Work scope & Impact:
AHEF: Uzbekistan(3)

Conducting trainings aiming at demonstration of a modern system allowing to an optimal compilation of gas balance (daily, monthly) for high, medium and low gas pressure networks using best international practice (ToR under preparation)

Work scope & Impact:

- To perform the training for the personnel of Uzbekneftegaz on modern system allowing optimal compilation of gas balance.
- Increase the personnel capacity in data recording and data management for gas supply/demand.
- Increase the personnel capacity in compilation the physical balance of the network
- Overall impact saving 1 bln m3 annually
First Caucasus INOGATE office is located in the building of the Georgian Oil and Gas Company (GOGC).

### Component B

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Deputy TL/KE - Gas and Electricity</td>
<td>Nikos Tsakalidis</td>
</tr>
<tr>
<td>Electricity regulatory expert (long term)</td>
<td>John Swinscoe</td>
</tr>
<tr>
<td>Gas infrastructure expert (long term)</td>
<td>Achilleas Gekas</td>
</tr>
<tr>
<td>Office Manager</td>
<td>Keti Mirianashvili</td>
</tr>
<tr>
<td>Communications and Event Expert</td>
<td>Rusudan Nonikashvili</td>
</tr>
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### Component B Experts / Project Management - Greece

<table>
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<tr>
<th>Role</th>
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<tbody>
<tr>
<td>Energy Market Governance &amp; Electricity Expert</td>
<td>Sophia Nikolakaki</td>
</tr>
<tr>
<td>Energy Markets Convergence Expert</td>
<td>Nikos Tourlis</td>
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### Component B Expert - Kiev

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<tr>
<th>Role</th>
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<tbody>
<tr>
<td>Standardisation Expert</td>
<td>Viktor Petrenko</td>
</tr>
</tbody>
</table>
Thank You!

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