ENERGY EFFICIENCY IN THE INDUSTRIAL SECTOR: PRACTICAL SOLUTIONS
Summary

- Energy Efficiency in Russia: New law to make History
- FENICE RUS: Business Model for the Russian market of Energy Efficiency
- Specificity of the Russian Market for an ESCO operating in the field of Energy Efficiency
- Main issues in the development of Energy Efficiency activity in Russia

The new law:
- regulates energy saving and energy efficiency issues
- imposes restrictions on the use of energy wasting products in general and incandescent light bulbs in particular
- requires the marking of goods according to their energy efficiency class
- introduces energy efficiency standards for new buildings and installations
Energy Efficiency in Russia: Federal Law as a start-up

2 sectors of realization

- civil
- industrial

Civil sector:
- highly receptive to new energy efficiency and energy saving standards
- huge advertising campaign in public places and mass media
⇒ First results expected in “short period”
Energy Efficiency in Russia: Federal Law as a start-up

Industrial sector: abundant and more challenging

Client-related difficulties:

- Ownership factor (State owned VS private)
- Money factor (financing capability for Investment)
- Time factor (modernization period VS payback)
- Russia’s geographical dispersal factor

Possible solutions:

- Partnership with major Russian Energy Market players
- Target clients: Foreign companies or Russian Companies with Foreign shareholders
FENICE RUS: Company Profile

**FENICE RUS:**
- Created in November 2009
- 100% subsidiary of Fenice Spa (100% EDF Group subsidiary),

**Specialized in Identification and Implementation of Energy Efficiency Projects for Industrial sector:**
- Energy Audit,
- Identification of sustainable projects,
- Financing and Implementation of EE Projects,
- Operation and Maintenance of modernized assets for the duration of the contract,

**Wide experience and references in several countries (Fenice Spa)**
- Italy,
- Poland,
- Spain,
- Russia
Through its internal resources, Fenice applies an integrated Value Chain business model to all of its operations:

- **Audit & Study**: Fulfilment of an energy audit: analyses done on specific technologies (compressed air, cold production) are carried out with the collaboration of specialised constructors;
- **Design & Financing**: Fenice guarantees the study, fulfilment and financing of projects accepted by the client;
- **Construction & Installation**: The new assets are the property of Fenice until the end of the contract, at which time they are managed by the client;
- **Operation & Maintenance**: The Savings realized are shared with the client;
- **Energy Efficiency Service**: Methods used to calculate energy efficiency are transparent and shared with the client;
- **Medium / long-term contracts (>7 years)**

Utilities: main fluids or energy used in an industry (Compressed air, steam, hot water, cooled water, electricity, gas...)

- **Two possibilities**: assets owned by Fenice or assets owned by the client but managed by Fenice;
- **The services offered by Fenice consist essentially of Operation and maintenance (O&M)**
- **Definition of a Service Level that foresees the application of penalties in the case of interruption of service**;
- **Financial Risk Management on the part of Fenice.**
Energy Efficiency Service Contracts

FENICE RUS has signed with Avtovaz two 10-year Service Contracts for the optimization of the Energy Efficiency of the Factory:

**Compressed Air Modernization Contract:**
- Signed in November 2009,
- Commercial Operation started in December 2010,
⇒ Total Electricity Saving: 40% for Compressed air production

**Heating Optimization Contract:**
- Signed in June 2010,
- Commercial Operation Started in February 2011
⇒ Total Heat Energy Saving: 20%,

Under these contracts, FENICE RUS is responsible for Engineering, Installation, Financing, Start-up, Operation and Maintenance of the new assets.
History of the Compressed Air Project... in photos
Situation “BEFORE” (June 2010)
Situation “AFTER” (November 2010)
Energy Efficiency in Russia: Opportunities and Difficulties

Opportunities:
- Energy Efficiency is a new concept that Main Industrial Companies will include in their strategy thanks to Federal Law on Energy Efficiency.
- Increase of Energy Cost => increase of the impact and sensibility,
- Huge potential:
  - in western Europe countries: 10 Energy Audits (FENICE RUS Model) gives about 2 to 3 potential projects,
  - In Russia: 10 Energy Audits gives about 20 to 30 sustainable projects

Difficulties:
- New Concept, not yet fully integrated in the mentality of the decision making managers,
- Human Resources: Few Professionals with E.E. related Education,
- Legal: no appropriate legislation to characterize Energy Service Contract
Thank you for your attention!

FENICE RUS LLC Zemlianoy Val str., 8 105064 Moscow Russia
Tel. +7 495 781 93 35      Fax +7 495 781 93 36
www.fenicespa.com