



ENERGY COOPERATION BETWEEN THE EU, THE LITTORAL STATES OF THE BLACK & CASPIAN SEAS AND THEIR NEIGHBOURING COUNTRIES



# REPORT: AHEF TASK BY.85 WORKSHOP, CAPACITY BUILDING for FINANCING of EE/RES PROJECTS

9-13 December 2013,  
Minsk, Belarus

*by the Sustainable Energy Component of the New ITS Project*

**“INOGATE Technical Secretariat & Integrated  
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All training materials are electronic and can be found at the INOGATE web-site:

[http://www.inogate.org/index.php?option=com\\_inogate&view=activity&layout=documents&pid=72&cid=318&Itemid=75&lang=en](http://www.inogate.org/index.php?option=com_inogate&view=activity&layout=documents&pid=72&cid=318&Itemid=75&lang=en)

## 1. EXECUTIVE SUMMARY

To increase investments in sustainable energy (SE), the expert team of the INOGATE New ITS Project held a workshop in Minsk in December, 2013, on SE financing for loan officers and credit analysts of the BelVEB Bank. This workshop increased the bankers' awareness of new, European style, SE financing methods. Eighteen participants from the bank's regional offices in 12 cities around Belarus attended the workshop. Also, one representative of KPMG, which administers EBRD credit lines in Belarus, attended. Seventeen participants met all requirements and received certificates.

This workshop achieved its objective of enhancing one bank's capacity to capitalize the EE/RES sector in Belarus. Instructors introduced bank officers to skills specific for evaluating EE/RES projects by applying international standards: a) how to identify and mitigate risks through support and guarantee mechanisms, b) how to perform a sensitivity analysis, and c) how to create optimal financing tools, conditions and monitoring plans.



*E/RES financing workshop participants*

Credit analyst	12 (63%)
Loan officer	1 ( 5%)
Management	4 (21%)
KPMG	1 ( 5%)
Other	1 ( 5%)
Total	19 (100%)

*Breakdown*

The workshop included four half days and one full day of lectures with group exercises. The team of instructors, experienced in EE/RES projects in the EU and INOGATE PCs, intentionally designed the group work to encourage internal exchange of ideas. Each workshop exercise included a hidden pitfall (erroneous assumption or gap in information), which groups had to identify and propose a solution for. The presentation of the solution to the audience by each group led to fruitful discussions on the subtleties of EE/RES financing. Thus, bank officers became familiar with the EU experience. Now they can apply their improved evaluation skills to EE/RES projects.

ITS also delivered a presentation with a participant exercise on effective communication and awareness raising of sustainable energy. This session improved the bankers' awareness (with ITS information materials) and highlighted the potential role and engagement of banks in building their own market. Spreading SE awareness to customers improves business.

All training materials, including spreadsheet tools, appear on the INOGATE website:

[http://www.inogate.org/index.php?option=com\\_inogate&view=activity&layout=documents&pid=72&cid=318&Itemid=75&lang=en](http://www.inogate.org/index.php?option=com_inogate&view=activity&layout=documents&pid=72&cid=318&Itemid=75&lang=en)

The following table shows the beneficiary's commitment to achieve SE investment results in terms of ITS aggregated indices.

TASK RESULTS	RESULTS	COMPONENT INDICATORS	AGGREGATED INDICES
<b>Component C - Sustainable Energy</b>			
<b>The Bank expects to finance 5 to 10 projects out of EBRD funds or in syndication with it through 2014 and utilize around 10 mln EURO in 2013 and around 30 mln EURO through 2014</b>	Increased local and EU investments in the field of RES/EE	<ul style="list-style-type: none"> <li>No. of EE/RES investment projects</li> <li>€ invested</li> <li>Fossil energy consumption decreased (EE)</li> <li>Increase of RES energy produced</li> </ul>	Tonnes GHG reduction/abated
	Further approximation with EU legislation	<ul style="list-style-type: none"> <li>Primary legislation proposed for adoption</li> <li>Secondary legislation proposed for adoption</li> </ul>	No. of acts and regulations
	Political commitments towards the promotion of RES/EE	<ul style="list-style-type: none"> <li>RES and EE policies (laws, strategies and action plans) proposed</li> </ul>	No. of acts and policies
<b>Capacities of 19 bankers, including 12 credit officers; 2 Risk Specialists 1 Corporate loan Manager 4 Head of Units, Sectors increased</b>	Strengthened capacity of institutions in the field of SE	<ul style="list-style-type: none"> <li>SE curricula developed and implemented</li> <li>SE programs established</li> </ul>	No. of professionals trained in the field of SE

## 2. METHODOLOGY

The broad objectives were to improve the EE/RES investment climate and increase capitalization of EE/RES sector in Belarus. Following the experience of the ITS combined banking workshop and study tour earlier this year in Vienna, this event made participants actively work to find solutions, not just listen. The Deputy Director of International Department of the BelVEB Bank, Vladimir Matul, who participated in the Vienna event, submitted the application for this workshop in Belarus. The Bank's goals are twofold: a) to apply the training material for further training of more bank officers, and b) to introduce international standards of evaluating EE/RES projects, so loan officers will be better prepared to finance with EBRD credit lines (agreement signed 3 months ago with BelSEEF).

Most of all, participants appreciated the workshop's practical assignments. Class discussions showed these bankers what to do under various conditions. Michael Plechaty's discussions especially drew active participation. He showed how SE business is done in the EU and how to find practical, alternative solutions to Byelorussian problems. During the train-the-trainer (TTT) session, participants intently sought possible solutions in the financial model to make a hydropower plant (HPP) project feasible.

## 3. ACTIVITIES

The most important activities of each day follow:

### 1<sup>st</sup> day

- Short quiz
- Lecture topics: Corporate vs. project financing, bankability criteria, risks and mitigation, project structure, feasibility study, due diligence, financial engineering, financial modelling, key ratios, mandatory project documents, EE/RES technologies & business



*EE/RES technologies & business,  
Vahan Babajanyan*

### 2<sup>nd</sup> day

- Lecture topics: Main risks in construction and operational phases, risk mitigation options, financial modelling in practice
- Tools: Feasibility assessment of EE/RES projects via life cycle cost analysis, risk identification and evaluation, extensive data base of crucial project parameters, benchmarking



*SE risk mitigation . Michael Plechaty*

3<sup>rd</sup> day

- Lecture topics: EU experience, how to structure projects, how to foresee and mitigate risks, project LCC short analysis, sensitivity analysis with practical exercise to apply it to real RES projects, monitoring projects



*Project LCC Short Analysis,  
Larry Good*



*Participants following lectures*

- Group presentations and discussions  
Group 1 – lighting (EE)  
Group 2 – biogas (RES)  
Group 3 – pumps (EE)  
Group 4 – pre-insulated pipes (EE)
- Group work: preparing financing schemes, lending conditions and monitoring plans



*Participant groups working on financial calculations*



*Vahan Babajananyan  
helping participants with group work*



*ITS instructors and participants  
calculating financial indicators*

#### 4<sup>th</sup> day

- Group presentations and discussions
  - Group 1 – wind park (RES) lending terms and conditions
  - Group 2 – IT Centre (EE) lending terms and conditions



*Participants presenting group exercise results*

- Interview by BelVEB PR specialist with ITS KE3
- Final quiz
- Awarding of certificates

#### 5<sup>th</sup> day

- Training the trainers



*How to make an RES project feasible  
Michael Plechaty*



*SE awareness raising for banks  
Khatuna Didbaridze,*

## **4. PARTICIPANTS**

The training was planned for the BelVEB Bank to improve their capacity so that they could evaluate EE/RES projects, especially for EBRD credit lines. The Bank's focus was on training credit officers and risk analysts, both from its head office and from the regional offices. Most participants were credit officers. One represented KPMG, which handles EBRD SE credit lines for BelVEB and three other banks.



*Instructors Michael Plechaty and Larry Good awarding certificates to participants*

## 5. INSTRUCTORS

The key instructor was Michael Plechaty, Senior Vice-President of VA TECH Finance, Austria. He has significant experience in EE/RES projects in Central and Eastern Europe as well as in some INOGATE Partner Countries. ITS banking expert Vahan Babajanyan and key expert for sustainable energy, Larry Good, also instructed.

## 6. TESTING

ITS tested participants twice to find out what they knew before and after the workshop. The preliminary quiz and final quiz included the same 6 core questions. The final quiz also contained 4 additional questions, including two rather difficult calculation problems to solve. They required proposals on ways to deal with problems. The four new questions evaluated the effectiveness of the seminar's new information. Participants applied their knowledge in practical exercises.

Scores:

6 CORE QUIZ QUESTIONS	% correct answers
Correct answers at start of workshop	48%
Correct answers at end of workshop	87%

4 ADDITIONAL QUIZ QUESTIONS	% correct answers
Correct answers at end of workshop	80%

## 7. TRAIN the TRAINERS SESSION

On the last day, ITS conducted a train-the-trainers (TTT) session to work with future instructors. Five out of 19 (the Minsk participants) stayed for TTT. The majority of participants had to return to their regional offices. The session focused extra attention on

1. Importance of public awareness on EE/RES potential for banks
2. Typical mistakes in financing EE/RES projects
3. Checking possible financial solutions to make RES projects feasible
4. Mitigating technological risks
5. Mitigating financial risks in in EE/RES projects

## 8. PARTICIPANT QUESTIONNAIRE

At the end, participants answered a questionnaire (see appendix). The consensus was positive, averaging over 90% approval. The following tables summarize seminar quality:

A. Event content (ITS)

Lectures	90%
Exercises	93%
Experts	96%
Help & guidance	94%
Discussions	93%
Translation	96%

B. Event organisation(beneficiary)

Venue	95%
Meals	91%
Equipment	87%
Organization	89%

## 9. CONCLUSIONS

### GENERAL

Most important is that participants plan to apply the new knowledge to their work in the future (Q 7) and that they intend to continue learning the subject (Q 9). Further, based on the pre- and final quiz scores, the bankers greatly improved their capacity to mitigate risks in SE.

### SPECIFIC

- 1) Participants said they will use what they learned to develop risk management skills, and to convince clients to invest in SE (question 8). One way is to apply the newly acquired practical skills in feasibility evaluation and alternative solutions (question 3). ITS will follow up every 6 months by asking participants exactly how they have done this. Benefits of the workshop will be measured by the number of new SE deals or money invested in SE projects.

- 2) Participants put a high value on solving problems in the group work (question 6). It led participants to find workable solutions to developing EE/RES projects. Exercises with hidden pitfalls and traps stimulated discussion of lending conditions and led to flexible, alternative solutions. ITS will continue to apply this approach in future training.

Interest in practical exercises (Q 10) and their discussions proved their value. Participants would like to see more exercises and more examples of financial solutions in EE/RES projects in different areas of SE.

#### NEXT STEPS

- 1) As a result of participant demand from all recent audiences, ITS will generate more group exercises and increase time spent doing them in future banking workshops.
- 2) ITS will encourage the participant from KPMG to solicit AHEF applications for this workshop from the other three Belarussian banks with EBRD credit lines: MTBank, Belgasprombank and BPS-Sberbank.