

**REPORT: AHEF GE.49 WORKSHOP:  
CAPACITY BUILDING for FINANCING of EE/RES PROJECTS**

**9-13 July 2013, Tbilisi, Georgia**

*by Component C of the New ITS Project*

**“INOGATE Technical Secretariat & Integrated Programme in  
support of the Baku Initiative and the Eastern Partnership  
energy objectives”**

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Made by	<b>V. Babajanyan</b>
Checked by	<b>L. Good</b>
Approved by	<b>B. Klinke</b>

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## 1. EXECUTIVE SUMMARY

From July 9 through 13, 2013, the sustainable energy expert team of the INOGATE New ITS Project conducted a workshop on sustainable energy (SE) financing for loan officers and credit analysts at the Bank of Georgia (BoG) in Tbilisi, Georgia. This workshop increased the bankers' awareness of new, European style financing methods in SE. Twenty seven participants, chosen by BoG, attended from these departments.

VIP Banking, Corporate Banking Development	10 (37%)
CB Sectors, Corporate Banking Development	8 (30%)
SME Department	3 (11%)
Credit Risk Management	6 (22%)
TOTAL:	27 (100%)

The general objective of this capacity building was to increase capitalization of the EE/RES sector in the PCs. To accomplish this, the INOGATE experts showed loan officers: a) how to identify and mitigate risks by creating support and guarantee mechanisms, and b) how to create optimal financing tools, conditions and plans for EE/RES projects.

*EE/RES financing  
workshop group*



The workshop included four half days and one full day of lectures and group exercises. The primary INOGATE instructor came from Austria with extensive experience in EE/RES projects across Central & Eastern Europe. BoG's officers learned what to look for to reduce risks and to succeed in analysing and preparing EE/RES projects. Instructors chose the group work intentionally to allow exchange of ideas within the groups. Discussions were meant to teach ways to find workable alternative solutions. Audience enthusiasm was high.

Each workshop exercise to evaluate EE/RES projects included a hidden pitfall (mistake or gap in information) which all groups needed to identify and propose a solution for. Then each group presented its solution to the rest, which led to considerable discussion on the subtleties of EE/RES financing. In this manner, the EU experience was introduced, so bank officers can better apply their evaluation skills to EE/RES projects.

All training materials, including spreadsheet tools, appear here on the INOGATE website:  
[http://www.inogate.org/index.php?option=com\\_inogate&view=activity&cid=265&pid=72&Itemid=75&lang=en](http://www.inogate.org/index.php?option=com_inogate&view=activity&cid=265&pid=72&Itemid=75&lang=en)

## 2. METHODOLOGY

The overall objectives of the workshop were to contribute to improving the EE/RES investment climate and increasing capitalization of EE/RES sector in Georgia. Specific objectives of the study tour were:

- Decision making - to equip participants with improved knowledge and skills for making better EE/RES investment decisions
- Best practice - to transfer to participants best practices of EE/RES financing conditions, technologies and methods, including risk management, security activities and monitoring steps, as well as their efficient use.
- Operations - to improve the capacity of participants to develop and carry out effective and profitable operations with EE/RES project development and implementation
- Practical application - to promote effective approaches and systems for EE/RES financing, including a study of proposed investment projects, as well as calculation of EE/RES proposals applying SE financing tools.

These objectives were met by conducting a seminar in a workshop format where participants learned by doing. After introductory lectures, participants performed actual exercises under the direction of the INOGATE instructors.

This workshop built on the experience of the recent ITS Vienna study tour on SE financing. To prepare for Tbilisi, the instructors improved and extended the teaching material suitable for this audience. The lectures (see appendices) covered methodologies to deal with SE project loans and case studies from the European experience.

The event was quite demanding for participants. At the Bank's request, half day sessions lasted only till lunch time on weekdays. The last day of the workshop, Saturday, was a full day. This arrangement was necessary because of participants' job responsibilities at their mid management level. A couple of participants who had to miss a session or two due to their workload compensated by being very proactive during the rest of the seminar. All participants attended the final day to take the final test of skills they learned.

The in-kind contribution of the beneficiary, the Bank of Georgia, was to provide the classroom, meals and technical equipment. The arrangement worked well. The equipment and venue were first class

ITS invited the press. One newspaper came and interviewed the instructors.

### 3. ACTIVITIES

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

- a) Opening
- b) A short quiz
- c) Lecture on climate stabilization
- d) Lecture on making EE/RES financing attractive to banks: sources, tools, methods, forms
- e) Lecture on EE/RES project structures: Risk identification & management, Part I
- f) Guarantees, main evaluation tools & indicators



*Introduction by Ms. Francesca Mazzucco (r.), of the EU Delegation to Georgia*



*SE banking expert Michael Plechaty (r.) delivering lecture on mitigating risk in financing EE/RES projects*



*Financial expert Vahan Babajanyan (r.) delivering lecture*

*Participants following lectures*





Participants: a) asking good questions



b) answering questions (with enthusiasm!)

2<sup>nd</sup> day

- a) Presentation of Georgian EE/RES business environment
- b) Lecture on EE/RES project feasibility assessment by life cycle cost analysis
- c) Lecture on EE/RES project structures: Risk identification & management, Part II; bank guarantees; main evaluation tools and indicators



Country Expert Irakli Vardigoreli (r.) lecturing



3<sup>rd</sup> day

- a) Presentation on EE/RES financing, terms and technologies: European experience, success stories
- b) Presentation on EE/RES project analysis methodologies
- c) Presentation on EE/RES business and technologies
- d) Group exercises presentation
- f) Group work on exercises of LCC project

Participants working in groups, calculating financial indicators of the suggested EE/RES projects

INOGATE Expert V. Babajananyan (l.) helping participants in their group works

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

- a) Presentations by groups of their EE/RES projects, discussion
- b) Presentation on EE/RES financing schemes, lending conditions and monitoring plan
- c) Presentation of assignments for group exercises on the above topic
- d) Group work on the exercises



*INOGATE experts congratulate a group on successful presentation of a biogas project financing scheme*



*Participants working in groups to prepare lending conditions for the proposed EE and RES projects*

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

- a) Group presentations on EE/RES financing schemes, lending conditions and monitoring plan and discussion
- b) Introduction of Denkstatt GmbH, VA Tech Finance GmbH, Erste Bank, EE/RES financing, bank's policy. Portfolio, partners
- c) Presentation of Austria's financial support facilities and projects available for EE/RES
- d) Closing & debriefing
- e) Certificate ceremony
- f) Special session:  
"Train the trainers"



*Instructors Plechaty and Babajanyan explain how to address traps in EE/RES projects*



*Presenting lending plans for EE projects*

#### **4. PARTICIPANTS**

The Bank of Georgia invited 30 of its employees to the workshop. Due to summer vacations and the workload, only 27 could attend. Most of them are mid management bank officers, i.e., credit officers and risk managers, who deal with prospective EE/RES projects. All participants attended the lectures and participated actively in the workshop. At the end of the workshop participants received certificates of completion.

The BoG group was excellent. Instructors report that participants succeeded in solving the workshop assignments and did even more than was required. Participants praised this workshop for making a connection to practical assignments that they have to carry out. The class discussions gave these bankers a good picture of what to do under various conditions. Participants were especially glad about the way Michael Plechaty conveyed an understanding of how SE business is done in the EU in similar situations. The workshop helped to fill gaps in knowledge needed to work with small hydropower plants, an area where BoG is most active.



*Instructor Michael Plechaty awarding certificates to participants*

#### **5. INSTRUCTORS**

The key instructor was Michael Plechaty, senior vice-president at VA Tech Finance. This organisation is an independent financial services company, with long experience in

- Financial advisory services
- Preparing projects to become bankable and to be kept bankable according to

international standards within the “financial project development;” this service includes preparation of the Project Information Memorandum, financial modelling, sensitivity analysis, and more.

- Arranging the search for debt and equity financing or investors for bankable projects.
  - To arrange equity financing/investor search, VA Tech Finance approaches potential international strategic and/or financial investors.
  - To arrange debt financing, VA Tech Finance approaches national and international financing institutions including, among others, Erste Bank.

Erste Bank is a leader in EE/RES financing in Austria. Thus, Mr. Plechaty lectured on making EE/RES financing attractive to banks. Banks need sources, tools, methods and forms; risk identification and management; financing plans, lending conditions, monitoring plans, the country’s financial support facilities, and projects available for EE/RES.

ITS instructors were Vahan Babajanyan, banking & financial expert, and Irakli Vardigoreli, INOGATE Country Expert for Georgia and a banker by profession. Mr. Babajanyan lectured on the OECD’s plan to stabilize the climate and presented a short analysis tool to determine feasibility of SE projects. Mr. Vardigoreli presented a short overview on the Georgian EE/RES business environment for SE.



*A group presenting its preliminary results*

## **6. TESTING**

ITS experts 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, requiring proposals on ways to deal with them. The four new questions evaluated the new information received during the seminar.

The preliminary quiz showed the areas in which the students lack some knowledge. That helped the instructors to identify the areas to highlight in more detail during. The results of the same test at the end showed a significant improvement.

Results of the four additional questions demonstrated what the participants had learned from the EU experience. They applied their knowledge in practical exercises.

The following tables show the scores, question by question.

CORE QUIZ QUESTIONS	1	2	3	4	5	6	Total	% correct answers
Correct answers before workshop	7	10	19	12	23	22	93	57%
Correct answers after workshop	26	26	26	17	26	27	148	91%

ADDITIONAL QUIZ QUESTIONS	7	8	9	10	Total	% correct answers
Correct answers after workshop	6	25	26	19	76	70%

## 7. TRAIN the TRAINERS SESSION

In the afternoon of the last day, the ITS experts conducted a train-the-trainers (TTT) session and worked with future instructors. Eleven out of 27 stayed for TTT. The session focussed on

1. Wider allocation of risks in financing EE/RES projects
2. Combined application of financial tools
3. Parallel evaluation of client solvency
4. Project feasibility and avoiding typical gaps in evaluating EE/RES projects

Participant interest in these issues during the TTT session was high.

## 8. PARTICIPANT QUESTIONNAIRE

At the end, participants answered a questionnaire (see appendix) about the event. All participants responded. The general consensus was generally very positive.

All answers are summarized below. Some participants checked multiple answers.

1. Was the seminar useful?
  - 22 Yes
  - 4 More or less
  - 1 No

2. Reasons for attending were
  - 19 To learn something new and interesting
  - 13 To learn the experience of EU countries
  - 10 To refresh knowledge
  - 8 My management send me to attend
  - 1 To meet with colleagues
  
3. Most relevant features of seminar were
  - 16 Evaluation of financial feasibility of EE/RES projects
  - 13 Feasibility in investments and introduction to case studies
  - 11 International experience
  - 11 New and important information
  - 10 Skills to find alternative solutions
  - 6 Importance of practical skills and discussions
  - 6 Financial calculations
  
4. Is EU experience in this area applicable in your country?
  - 14 Yes
  - 10 Yes, but in the mid-term perspective
  - 6 Not sure
  
5. Would you recommend including this topic in your bank/organisation training?
  - 18 Yes
  - 4 Already used
  - 4 Not sure
  
6. What was the most interesting seminar activity?
  - 19 Group work and presentations
  - 15 Discussions of results and problems
  - 9 Lectures
  - 3 Individual work
  - 0 Tests
  
7. Will you apply the new knowledge to your work in the future?
  - 17 Yes
  - 9 Probably
  - 1 Not sure

8. How will you use the new skills in the future?
- 12 Creating a template/standard approach for evaluating prospective projects
  - 8 Convincing investors and clients
  - 8 Developing a risk management system
  - 3 Working with and training other employees
9. Do you intend to continue learning this topic?
- 14 Yes
  - 10 Probably
  - 3 Not sure
10. Suggested improvements
- 15 More practical exercises
  - 6 More focus on other financial/investment solutions
  - 7 No improvement necessary
  - 4 Shorter seminar
  - 2 Longer seminar
11. Seminar quality

A. Event organisation

Venue	93%
Meals	92%
Equipment	94%
Organization	91%

B. Event content

Lectures	92%
Exercises	91%
Experts	94%
Help & guidance	92%
Discussions	93%
Translation	92%

## 9. CONCLUSIONS

### GENERAL

The most important general findings from the evaluation is that participants declared in writing that they plan to apply the new knowledge to their work in the future (question 7) and that they intend to continue learning the subject (question 9). These are the desired result of any capacity building event. ITS also notes, in general terms, that participating credit officers and risk managers greatly improved their capacity to mitigate risks in SE, but there is still a need to build this capacity further. It is not yet at the desired level.

## SPECIFIC

- 1) Specifically, participants said they will use what they learned to create templates for evaluating future projects and to convince clients to invest in SE (question 8). One of the ways is by obtaining new skills in finding alternative, workable solutions (question 3). ITS will follow up every 6 months by asking each participant exactly how he/she has done this. Ultimately, the benefits of the event can be measured by the number of new SE deals or national currency invested in EE/RES projects.
- 2) ITS was most interested to learn that participants put such a high value on group work, i.e., presentation and discussion of the results of solving problems (question 6). We had assumed that this would be a review of existing knowledge, but it turned out to a perfect opportunity to lead the participants to find workable, alternative solutions in development of EE/RES prospective projects. In parallel, the exercises with hidden “pitfalls/traps” proved to be an effective way to initiate constructive discussions on the lending conditions leading to searching for alternative and flexible solutions. As a result, ITS will continue to apply this approach in future bank staff training.
- 3) The interest of participants in doing more practical exercises (question 10) and the active discussions during the workshop clearly demonstrate the value of the exercises. It is imperative to include in future agendas a lecture and exercise on risk calculations and riskless equivalent as well as the four existing exercises on EE/RES. The EE/RES topics need preliminary agreement with each local beneficiary bank because of unique local SE markets.
- 4) A number of participants (one who attended the Vienna study tour and several other very active students) said that they need to learn what to focus on when evaluating EE/RES projects and require the essential indicators from clients. Different types of RES projects have their own essential indicators. Lectures by Michael Plechaty touched on the theory of these issues. Participants’ questions, comments and remarks led the instructors to understand that conducting a practical activity on due diligence is strongly required. Future ITS bank training will present the methodology of evaluating EE/RES projects by a bank (due diligence) with stress on the key stages and their key indicators.
- 5) For the train-the-trainers session it would benefit participants in the future if ITS expanded the material to include more detailed information on
  - a) the principles of preparing the schedule of risk assessment, securing liquidity at different stages (schedule is project specific);
  - b) the choice of a financing plan, the benefits of each financial tool and the principle of combined financing (also project specific).