

First Romanian Big-East course brief

The training course on biogas technology, organized by SC MANGUS SOL SRL, supported by Floyd Advertising Design & Consulting SRL, stipulated in the BiG>East – Biogas for Eastern Europe program, had been held on April 14-15, 2009 at the Floyd Advertising, in Bucharest, by the following program:

Day 1

9.30 – 10.00 Participants receiving and registration (Mangus & Floyd)

- Coffees, soft drinks etc.

10.00 – 10.45 Opening speech (Mangus)

- BiG>East Project: Promoting Biogas in Eastern Europe – Mobilization for the Decision Makers and Training for Farmers (Dr. Augustin Ofițeru);
- Course, students and lecturer presentation.

10.45 – 13.00 Concepts related to biogas production - 2009

- What is biogas, how, from what and why they are producing? (Dr. Augustin Ofițeru);
- Biological processes involved in biogas production (Dr. Augustin Ofițeru);
- Brief introduction on the world and Europe's biogas production state (Dr. Teodorita Al Seadi);
- Agricultural biogas: concepts and technologies in Denmark (Dr. Teodorita Al Seadi);
- Why the biogas production is interesting for farmers and investors: Benefits and opportunities (Dr. Teodorita Al Seadi);
- About Rumanian biogas (Prof. Dr. Nicolici Vasile).

13.00 – 14.30 Lunch break

14.30 – 16.00 How to build and exploit a biogas installation

- Planning stage (Dr. Teodorita Al Seadi);
- Financing stage (Dr. Mihai Adamescu):
 - Financing possibilities in Romania,
 - National and European financing programs;
- Execution state and a pre-calculation of biogas theoretical production exercise using a Danish calculation model (Dr. Teodorita Al Seadi).

16.00 – 16.15 Coffee break

16.15 – 16.45 Practical applications

- Financial aspects of biogas production and a practical example of cost calculation – „Big-East” calculation model (Dr. Mihai Adamescu).

16.45 – 17.15 Day conclusions

Day 2

9.30 – 16.00

Visit to one potential biogas plant – Dulbanu Farm region; discussions on practical aspects described in the theoretical approach from Day 1.

PowerPoint format presentations (that can be accessed from the appropriate links) were exposed by:

1. Dr. Teodorita Al Seadi, Principal Scientist, Centre for Bioenergy, University of Southern Denmark
2. Ing. Nikolić Vasile, Food Research Institute, București
3. Dr. Augustin Ofițeru, Senior Researcher, Mangus Sol, București
4. Dr. Mihai Adamescu, senior Researcher, Mangus Sol, București

Students:

Nr. crt.	Numele și prenumele	Organizația
1.	Albu Florea	3A COMERCIAL COMPANY
2.	Angheluta Daniel	NAVIGAL IMPEX
3.	Bădoiu Octavian	„DULBANU” RESEARCH STATION
4.	Boicu Roxana	EPC PROJECTS
5.	Cirjan Elena	ALLCERT SYSTEMS
6.	Buzdugan Rodica	CHIMINFORM DATA
7.	Deaca Alina	ALLCERT SYSTEMS
8.	Leonard Tudor	TRINERGI GRUP
9.	Lohin Anna	FLOYD AD&C
10.	Marinache Costel	IZOCON MC
11.	Pescaru Monica	ALLCERT SYSTEMS
12.	Rusitoru Alexandra	EPC CONSULTING
13.	Vesteman Ioan	IZOCON MC

Each presentation was followed by debates where the participants requested some additional explanations and details, given by the lecturers who still pointed that those details weren't planned for this stage of the project, following that the interested ones would be committing to consult the materials that had been distributed within the maps and those that had been posted on the BiG>East Project website page on Mangus server.

The content of the maps distributed to participants:

- Training Agenda – print;
- Promoting Biogas in Eastern Europe – Mobilization for the Decision Makers and Training for Farmers (Dr. Augustin Ofițeru) – print of the PowerPoint slides with paragraph spaces for personal comments;
- Biogas technology course: What is biogas, how, from what and why they are producing? Biological processes involved in biogas production (Dr. Augustin Ofițeru) – print of the PowerPoint slides;
- Financial aspects of biogas production and a practical example of cost calculation – „Big-East” calculation model (Dr. Mihai Adamescu) – print of the PowerPoint slides;
- Evaluation questionnaire for the biogas training courses – print;
- CD course – electronic format files: Agenda_of_biogas_training_Bucharest.doc, BigEast_Econo_Check.xls, Biogas Handbook FINAL.pdf, **Biogas Handbook**

FINAL RO.pdf, Deliverable_6_3- Final report-Romania.pdf, Leaflet_BiG-East_20071012.pdf, Pliant Big-East romana.pdf, Task_3_1_Assesment_of_Policies_Romania.pdf, Task_3_2_Report_on_barriers_Romania.pdf, WP2 Task 2.3_Final report.pdf, WP2 Task 2.4_Final report.pdf, WP6_Site_Selection_Strategy_final_20080404.pdf, Aspecte financiare ale productiei de biogaz in Romania.ppt (Dr. Mihai Adamescu), 01 Proiectul Big-East.ppt (Dr. Augustin Ofițeru), 02 Biogazul.ppt (Dr. Augustin Ofițeru), Ppt0000002.ppt, **Ppt0000002RO.ppt** (Dr. Teodorita Al Seadi), Ppt0000003.ppt, **Ppt0000003RO.ppt** (Dr. Teodorita Al Seadi), Ppt0000004.ppt, **Ppt0000004RO.ppt** (Dr. Teodorita Al Seadi), etichete.doc.

Evaluation questionnaires analysis reveals the followings:

- 1) They find about the training by: personal invitation (10), internet (2), at the work (1);
- 2) Reasons for participation: environment protection interest (7), alternative energy interest (6), general interest on biogas field (5), waste management opportunities interest (3), alternative income search (1), complex biodiesel – biogas project achievement (1);
- 3) Quantitative evaluation of the training quality (content, organizing, applicability, materials quality, location quality, general evaluation): excellent (58.33%), good (33.33%), satisfactory (8.33%), adequate (0%), inadequate (0%);
- 4) Assessment of the instructors: excellent (80.65%), good (12.9%), satisfactory (3.22%), adequate (3.22%), inadequate (0%);
- 5) They considered the training length: adequate (8), too small (2);
- 6) They will recommend the training: yes (10), no (0);
- 7) The students were: age segment: 25-40yr (5), 41-65yr (5); profession: engineer (5), economist (2), other professions (3);
- 8) The training reach the expectations (90%) – disapproval comment: high speed
- 9) Suggestion: comparative study on the best biogas technologies.

Each participant received the Course Diploma and expressed their oppinion by completing the special designed Questionnaire. All the Questionares are stored in the archive of Mangus.



Figure 1 – Big>East expert Teodorita al Seadi discussing with the cursants

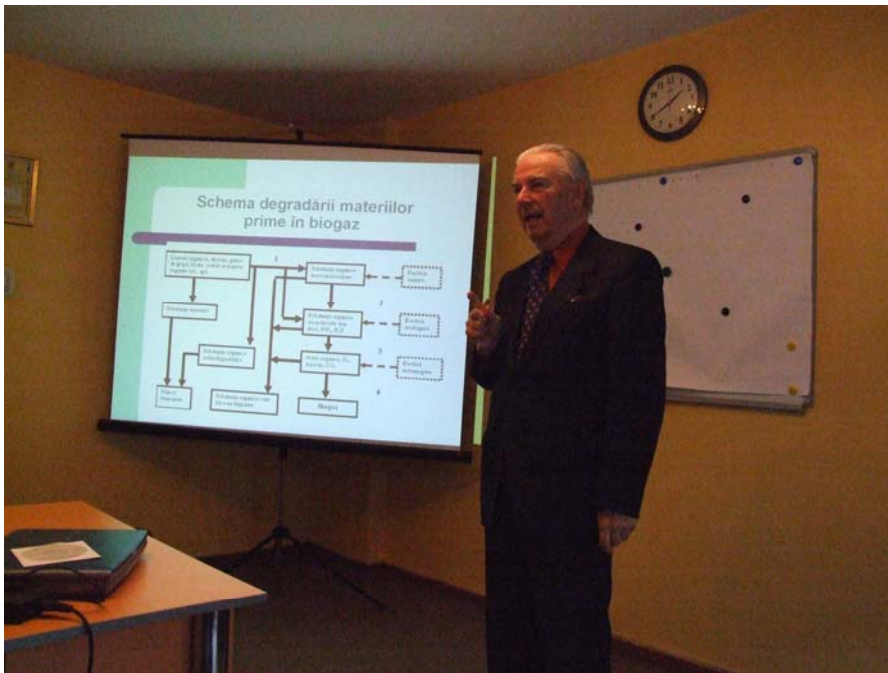


Figure 2 – Prof. Dr. Nicolic Vasile, former chief of 80's Romanian Biogas Program, sustaining a presentation in the course



Figure 3 Coursants completing the Questionnaire



Figure 4 Dimploma model