



Implemented by:  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH



Република Србија  
Министарство пољопривреде  
и заштите животне средине

## WORKSHOP: BIOMASS FOR RENEWABLE ENERGY GENERATION

Cooperation between Directorate for Agrarian Payments and GIZ – DKTI Project development component under the programme „Development of a Sustainable Bioenergy Market in Serbia“

Hotel M, Bulevar oslobođenja 56a  
22.02.2017.- 23.02.2017

### AGENDA

#### DAY 1

08:45 -9:00 – Registration

9:00-09:30 – Opening remarks - welcome, introduction to the workshop, objectives and program of the cooperation with GIZ

- Ms. Milica Vukadinović, Component leader, Project Development component under the program Development of a Sustainable Bioenergy Market in Serbia

- Mr. Slobodan Cvetković, Head of Group for the land protection and renewable resources, Ministry for Agriculture and Environmental Protection

- Ms. Dragana Gajić, Head of department for the approval of the projects financing from the international funds, Directorate for Agrarian Payments

09:30 – 10:15 – Introduction to bioenergy (RENAC)

- Introduction of lectures and participants
- Introduction to bioenergy (prons and cons of bioenergy utilization)
- Sustainability aspects
- Bioenergy sources (solid biomass, biogas, biofuels)

10:15 – 11:00 – Technology review solid biomass combustion (RENAC)

- Fields of application with special review in the agriculture sector
- Types of the solid biomass resources
- Solid biomass technologies

11:00-11:15 – Coffee break

11:15-13:00 – Biogas technology review (RENAC)

- Fields of application
- Fundamentals of biogas technology (what is anaerobic digestion, biochemical process, main parameters, required conditions etc.)
- Biogas potential and energy content of different substrates
- Technology level, biogas and digestate utilization
- Elements of the biogas plant
- Main parameters for the biogas plant design



Implemented by:  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH



Република Србија  
Министарство пољопривреде  
и заштите животне средине

13:00 – 14:00 - Lunch

14.00 – 15.30 – Small scale bioenergy projects (RENAC)

- Clasification of small scale bioenergy projects
- Economics and financing models for the small scale bioenergy projects (examples from EU countries)
- Small scale bioenergy projects examples (SUSTAINGAS and BIOGAS3 projects)

DAY 2

08:45 -9:00 – Arrival of participants

09:00 – 09:45 – Case studies (RENAC)

- Case studies on the biogas utilization for the heat generation, small scale biogas CHP, solid biomass utilisation for the heat generation

09:45 – 10:30 – Discussion

- Opportunities on the bioenergy application in Serbia

10:30 – 10:45 – Coffee break

10:45 - 12:00 – Financial analysis I (Local consultant)

- Economic parameters (investment costs, O&M costs, income, payback period etc.)

12:00 - 12:45 – Financial analysis II (Local consultant)

- Business plan assessment

12:45 -14:00 - Lunch

14:00 – 14:45 - Financial analysis II (cont.) (Local consultant)

- Reccomendations for the business plan model

14:45 – 15:30 - Examples of the small scale projects in Serbia (factory for production of organic products in Selenca, slautherhouse for chicken meat) (Local consultant)

15:30 – 15:45 – Discussion and conclusions