Concept Paper

On-line Capacity Building of SAARC Professionals on Commercial Scale Biogas Plants

Introduction

Energy shortages and pollution problems have continued to accelerate interest in biogas power plants for industry and agriculture sectors. Moreover, in the SAARC Member States, the continuous declining levels of indigenous gas resources have forced them to look for alternate options. As a result, several commercial scale anaerobic-digestion facilities have come on stream. Captive biogas plants are also being installed to supplement energy requirements such as for dairies and farms. These biogas facilities and plants are decentralized energy systems that contributes towards meeting heat and electricity requirements, and at the same time reduce environmental pollution. In order to enhance the expertise of the Member States, SAARC Energy Centre shall conduct an on-line training on Commercial Scale Biogas plants. The training will cover various aspects of commercial scale biogas plants. The training will also focus on issues, challenges and opportunities pertaining to commercial scale biogas plants. The training will be based on presentations and interactive discussion sessions. It will be attended by professionals from each SAARC Member States.

Training Sessions and learning objectives

The aim of this training is to enhance capacities of SAARC professionals on commercial scale biogas plants and various related aspects, such as biogas potential, feedstock, conversion technologies, technoeconomic feasibility, project development/management, construction, operations and maintenance of biogas plants. The training shall be conducted in Five (05) interactive sessions (one on each day). Each session will comprise of two 50 – 55 min lectures and discussion by experts followed by rapid questions, online quizzes, and query session for next 20 -30 min (minimum of 2 hours each day). Following are details of training session and learning objective:

Day	Training Session	Learning objectives
1.	**Introduction to biogas technology**	The participants will learn about the global potential of biogas, its market size and growth, current status in the SAARC Member states as well as the world leaders in biogas production.

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2.	**Biogas production process**	The participants will get acquainted with the processes and modern technologies of biogas production, potential feedstocks (their collection, costing, and utilization) for biogas production at commercial scale.
3.	**Biogas plants and applications of biogas**	The participants will learn about the biogas plants (their components, operation, maintenance, resource requirements, and scalability) and pros/cons of biogas as an energy source relative to other energy sources.
4.	**Feasibility and scalability assessment**	The participants will learn about the approaches to ascertain the scalability and economic feasibility of biogas plants, their impacts on the environment, which shall be crucial in decision-making.
5.	**Policies and challenges**	The participants will learn about the regulations or protocols regarding development of commercial biogas plants and the associated risks.

Target Audience

The sessions are designed for policy and decision makers, prospective biogas plant developers, project managers, researchers, investors, and other stakeholders working with this technology.

Training Dates and Timings

The training will be conducted online from **Monday 23rd August till Friday 27th August, 2021**. The detailed training agenda will be shared with the participants one week before the training.

Training Venue

This on-line training shall be broadcasted from the office of SEC, Islamabad. The participants will be provided with the web link to join the training.

For any Furter details, please contact the following SEC professional:

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