









EnergizeNepal Program (ENEP) Monthly Bulletin

Project Status Sharing meeting

On December 2, 2022 a project status sharing meeting was conducted with the project titled " Optimization of Resources Recovery from waste Biomass via Dark, Photo fermentation and Anaerobic Digestion" which is a recently started project with support of EnergizeNepal.



The project is operational with the following objectives:

- 1. Demonstrate and established dark and photo fermentative H2 production in a continuously stirred tank reactor (CSTR) utilizing carbohydrate-waste biomass and develop guidelines for the optimal feeding strategies supplemented by trace elements additions,
- 2. Study the potential of photo fermentation (PF) as second stage conversion technology for the by-products of DF for concomitant H2 and bacterial single cell (SCP) and Polyhydroxy butyrate (PHP) production using artificially illuminated photo bioreactor,
- 3. Conversion of residues of integrated DF-PF in anaerobic digestion to bio methane with trace elements supplementation, prepare guidelines for optimal feeding and operation and assess the energy balance, technicalities, and economics of the integrated systems for scaling up, and

- 4. Enhance the research activities on resource recycling and circular bio economy and support the establishment of a research lab for Resource Recovery Circular and Economy at Kathmandu University.
- 5. To perform technical analysis of the INPS in the status quo by developing simulation models.

Dr. Anish Ghimire, Principal Investigator shared the current progress status of the project.

Discussion Possible on **Collaborations**



EnergizeNepal, IRDP/NTIC and Idea action of Kathmandu University discussed with **PUM** representatives and experts (Netherlands) and Antraprerana on possible collaborations in incubation of business ideas and supporting startups at Kathmandu University and beyond.

Project Status Sharing Meeting

On December 7, 2022 project status sharing meeting of the project titled "Research, Development, and Commercialization of Lowcost Metallic Tier-3 Stove for Cooking and Space Heating" was conducted.











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- 1. The project is being supported by EnergizeNepal and is ongoing with the following objectives.
- 2. To build commercial prototype of hybrid cooking and space heating metallic stove with the potential of Tier- combustion
- 3. To expand and revive the existing stove market in Nepal through new design innovations of Tire-3 combustion
- 4. To penetrate stove market, ensure justified profit generation and improve the quality of life of people living in rural area of hilly and Himalayan regions of Nepal.
- 5. To collaborate the business enterprise for continuous R & D for product improvement ensuring research fund and providing royalty

Ms. Shirapa Shrestha, Activity Leader shared the progress status of the project.

EnergizeNepal participated in **Agri-business Entrepreneurs Meet 2022**

EnergizeNepal participated in Agri-business Entrepreneurs Meet 2022 (Innovation for strengthening agri-business startups in vegetable value chain) on 9th December, 2022 organized by Antarprerana Pvt. Ltd. in joint collaboration with CIMMYT (Nepal Seed And Fertilizer-NSAF)



This meet aimed to provide a common platform for agri-entrepreneurs, key stakeholders of agrientrepreneurial ecosystem to discuss on prospective agri-businesses ideas.

Project Status Sharing Meeting



On December 14, 2022 project status sharing meeting of the project titled "Clean Energy generation using Duckweed" was conducted at Institute of Engineering (IOE), Pulchowk Campus.

The project is being supported by EnergizeNepal Program and the objectives of the project are as follow:

1. Extraction of biofuel form duckweed













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- 2. Generation of biogas from the residue of duckweed
- 3. Dewatering of slurry for the use as organic fertilizer

Dr. Ajay Kumar Jha, Principal Investigator of the project shared the progress status.

Project Status Sharing Meeting



On December 22, 2022 project status sharing meeting of the project titled "Strategic planning for facilitating development of Environment friendly vehicle mobility in Kathmandu Valley, Nepal" was conducted at NEA Engineering Company Ltd Office, Imadol, Lalitpur, Nepal. project is being supported EnergizeNepal Program and the objectives of the project are as follow:

- 1. Detailed design of Charging Infrastructure for Electric Vehicles in Kathmandu Valley.
- 2. Policy recommendation for Tariff determination and Loan Security Determination for public or privatepublic partnership charging stations to be developed in Kathmandu Valley.
- 3. Study of Impact of installation of Charging multiplex in a particular location to the Electric Power supply of the Kathmandu Valley.

Mr. Ravi Raj Shrestha, Principal Investigator and Binay Paudyal, Research Staff of the project shared the progress status.

Contact Us

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