CALL FOR EXPRESSION OF INTEREST (EOI)

Demonstration of the Innovative Biomethanation Waste-to-Energy Projects in India

The United Nations Industrial Development Organization (UNIDO) and the Ministry of New and Renewable Energy (MNRE) under the **GEF-UNIDO-MNRE project – Organic Waste Streams for Industrial Renewable Energy Applications in India** support the demonstration and scale-up of innovative Industrial Organic Waste-to-Energy (IOWtE) biomethanation technologies and business models. An interest subvention will be made available to limited number of prioritized innovative biomethanation projects.

UNIDO hereby solicits Expression of Interest (EOI), from companies or consortium of companies, to set up biomethanation projects that showcase specific innovation in one or more of areas of innovations.

Priority Industries for Waste-to-Energy

♦Sugar ♦Cattle Farming ♦Fruit, food and vegetable processing ♦Poultry farming

Project Financial Support

The Fund Manager on behalf of UNIDO under the GEF-MNRE-PROJECT may be providing up to 5% subvention in the market interest rate of the project loan obtained from any RBI approved bank.

AREAS OF INNOVATION

- ***Feedstock pre-processing and management.***

  New feedstock pre-treatments designed for the modification of physical and/or chemical properties of organic waste to increase its shelf life and to optimize overall biogas generation; except chemical pre-treatment.

  New models of waste collection, transportation and storage facilitating optimized and sustainable supply of multiple wastes, including seasonal wastes as feedstock to the biogas plant.

- ***Plant equipment and design.***

  Latest developments in the design, construction and installation of anaerobic digesters or reactors enabling use of multiple wastes as feedstocks and improving energy yield and resource efficiency such as recovery of waste heat and water.

- ***Biogas scrubbing/ upgradation technologies.***

  Improvement in the present biogas upgradation technologies such as Pressure Swing Adsorption (PSA), water scrubbing, amine scrubbing and emerging membrane filtration technology to minimize methane slip during upgradation or integrated design of multiple technologies to improve overall performance levels.

- ***Biogas or Bio-CNG applications and innovative business models.***

  Local supply of clean biogas (H_2S scrubbed) or bio-CNG through micro gas grid or any such novel applications in supply-chain and distribution.

- ***Value addition of digestate/manure.***

  Developments in production of different types of solid or liquid organic fertilizers using digestate.

- ***Biochemical / Microbiological processes.***

  Development of microbial culture or inoculum to enhance the biogas production.

To participate in this call of Expression of Interest kindly visit https://xfiles.unido.org/index.php/s/i2mCGJqCGSEw9Zr and send forward completed form along with related documents by email to owte-india@unido.org before **28 February 2021**