



# ORGANIC RECYCLING SYSTEMS LIMITED

CLEANTECH | INNOVATION | ENGINEERING

25<sup>th</sup> June 2024

BSE Limited  
Department of Corporate Services  
Listing Department  
P J Towers,  
Dalal Street,  
Mumbai - 400001  
Scrip Code: 543997

Dear Sir/Madam,

**Sub: Press Release.**

In accordance with Regulation 30 of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, please find enclosed herewith Press Release in respect of Technology Transfer Agreement between Organic Recycling Systems Limited (the Company) and CSIR-IIP for compressed biogas purification system based on CSIR-IIP's Vacuum Swing Adsorption (VSA) Technology.

We request you to take the same on record.

Thanking you,

Yours faithfully,

**For Organic Recycling Systems Limited**

Seema Gawas  
**(Company Secretary & Compliance Officer)**

**Organic Recycling Systems Ltd**

Registered / Corporate Address : 1003, The Affaires, Plot No.19, Sector-17, Sanpada, Navi Mumbai – 400705.

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## **Organic Recycling Systems Limited and CSIR-IIP Enter into Technology Transfer Agreement for CSIR-IIP's Vacuum Swing Adsorption (VSA) Technology.**

### *Innovative Collaboration to Deploy Cutting-Edge Biogas Upgrading Technology and Promote Sustainable Energy Solutions*

In a significant move towards advancing production of Compressed Biogas, the Council of Scientific & Industrial Research-Indian Institute of Petroleum (CSIR-IIP) and Organic Recycling Systems Limited (ORSL) have entered into an Agreement to license and implement the cutting-edge Vacuum Swing Adsorption (VSA) Technology for upgrading raw biogas to compressed biogas (CBG). The agreement is signed on June 24, 2024 at the Indian Habitat Centre, New Delhi during the curtain raiser ceremony of the One Week One Theme program of CSIR in the presence of the Hon'ble Union Minister of Science and Technology (S&T) and Vice President of CSIR, Dr. Jitendra Singh Ji and Director General CSIR and Secretary DSIR, Dr N Kalaiselvi ji.

Under this agreement, CSIR-IIP, a premier institute renowned for its expertise in petroleum refining and biofuels, will transfer its indigenously developed VSA Technology to ORSL. This technology is designed to process 350 m<sup>3</sup>/h of raw biogas, converting it into pipeline-quality bio-methane. The resulting bio-methane not only meets the stringent BIS 16087: 2016 specifications ensuring compliance with regulatory standards but can also be further tailored to achieve higher specifications based on the specific needs and requirements of different projects and clients.

This flexibility ensures that the technology can cater to a wide range of applications, providing a reliable and customizable solution for biogas upgradation. The CBG produced through this technology can be used as a fuel for industrial applications and as an alternative to compressed natural gas (CNG) in vehicular applications.

ORSL, an engineering company committed to clean technology and innovative waste management solutions, operates a mixed municipal waste segregation, processing and biogas production facility for the Solapur Municipal Corporation through its Special Purpose Vehicle (SPV) and 100% owned subsidiary, Solapur Bio-Energy Systems Private Limited. This facility currently converts mixed municipal solid waste into biogas and compost, reflecting ORSL's dedication to sustainable practices.

This collaboration between ORSL and CSIR-IIP is at the forefront of research and development in the biogas sector, providing strong foundation and access to cutting-edge innovation in optimizing biogas processing.

As a reputable government organization, CSIR-IIP brings a significant level of credibility and trust to the collaboration, which helps instill confidence among project developers addressing concerns regarding the efficiency of such

technologies. Partnering with such a renowned institution with robust research capabilities and track record of successful projects adds a layer of assurance about the quality and reliability of the technology.

The agreement outlines the modalities for the grant of a non-exclusive license to ORSL, allowing the company to utilize the VSA Technology for the said biogas processing, encouraging the utilization and application of indigenized technologies, fostering self-reliance and boosting the domestic capabilities within the biogas sector.

Dr. Harender Singh Bisht., Director of CSIR-IIP, stated, "the transfer of CSIR-IIP developed vacuum swing adsorption technology for biogas upgradation to ORSL will pave the way for the market penetration of a robust CBG technology that will help to realize Government of India's grand vision of producing 15 million tons per annum of CBG by 2025 which is equivalent to about 35% of the current consumption of CNG in the country."

Mr. Yashas Bhand, CEO of ORSL, added, "We are excited to integrate CSIR-IIP's VSA Technology into our offerings complementing the technologies for operations of biogas plants. Through this collaboration, we aim to set new benchmarks in biogas processing efficiency and quality, contributing to our commitment of bringing innovative and dependable solutions for the biogas sector among the other technologies available in our portfolio for purification of biogas for a sustainable renewable energy production."

As part of the agreement, CSIR-IIP will provide comprehensive technical support to ORSL, including technology transfer documents, training, and assistance in setting up the biogas plants. ORSL will also be responsible for complying with all procedural and legal requirements for commercial implementation. This focus on homegrown solutions not only enhances technological sovereignty but also supports local innovation and job creation, further strengthening the sector's growth and sustainability.

This collaboration underscores both organizations' commitment to fostering innovation and sustainability in the energy sector. By combining CSIR-IIP's technological expertise with ORSL's operational experience, the partnership aims to create a robust framework for the large-scale production and utilization of CBG, driving positive impact in the biogas sector.