

Pressure Swing Adsorption Technology for Biogas Upgrading

Greenlane is the global leader in biogas upgrading. Number one in global market share, Greenlane has 30+ years of experience including 100+ installations in 18 countries and the two largest biogas upgrading systems in the world. No one else even comes close. Plus, as as the only provider to offer all three upgrading solutions (water wash, PSA and membrane) only Greenlane offers unbiased technology selection and multiple technology solutions.

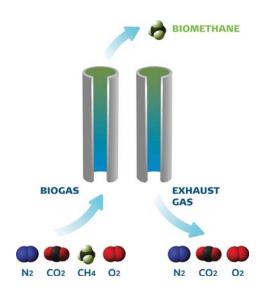
Our PSA technology efficiently removes CO_2 as well as N_2 , O_2 , H_2O , H_2S and siloxanes - making it the optimum choice for upgrading virtually any landfill, wastewater or agricultural digester gas. Using a single, two or three stage process, this simple, dependable and cost effective technology will consistently meet even the toughest pipeline or vehicle fueling gas quality specifications. With guaranteed purity, recovery and uptime, there is no better choice for your upgrading application.





- Removes CO₂₁, N₂₁, O₂₁, H₂O₁, H2S, VOCs & siloxanes
 - Guaranteed purity, recovery & uptime •
 - Perfect for landfill, wastewater or digester gas •
 - Maximum performance at minimal operating cost
 - 24/7/365 on call technical support •

How it works: The gas is compressed and then flows through vessels containing beds of a specialized adsorptive media. The CO₂, N₂, O₂ & H₂O molecules adhere to the surface of the media while the CH₄ passes through, resulting in a continuous uninterrupted stream of high purity biomethane. The media is then regenerated by applying a deep vacuum to the vessel which causes the media to release the collected contaminants. The methane recovered during regeneration is recycled back to the inlet ensuring the highest possible recovery rate. The process is controlled by a PLC on a continuous and fully automated cycle.



Model range: With a wide range of models from 30 to 1000 scfm (50 to 1700 m³/hr) and modular capabilities, no gas flow or contaminant level is too high. With a single, two or three stage process, and the ability to remove CO₂, N₂, and O₂, these systems offer reliable performance for the toughest gas specifications. Also ask us about our CO₂ recovery and O₂ generation systems.







Contact us: There's a good reason why Greenlane is the global leader in biogas upgrading. Contact us today for an unbiased comparison of our PSA, water wash and membrane technologies to see which is the best solution for your application.

