

LPG Vs Biogas

S.No	Characteristic	LPG	Biogas
1	Source	Fossil fuel	Wet organic waste
2	Renewable nature	Non-renewable	Renewable
3	Effects on Environment	Fossil fuel releases pollutants, including CO ₂ , CO, SO ₂ & NO ₂ increases global warming potential	Reduces the emission CH ₄ , NO ₂ , CO ₂ , SO ₂ & NO ₂ which reduces global warming
4	Pressure	It will be stored at 14 to 17 bar pressure and used in stove at 0.2 bar pressure using a regulator	The biogas generated will be at atmospheric pressure which leads to higher levels of safety
5	Risk factor	Possibility for explosion is more if not used properly or if there is any leakage	Much safer than LPG due to its physical characteristics like low density & pressure
6	Burner efficiency	60 – 65 %	50- 55%
7	Emission	High NO _x & CO emission during combustion	Minimal emission of CO ₂ during combustion in the burner
8	Odorant	Ethyl Mercaptan is additionally added as the odorant to detect any leakage	H ₂ S naturally present in the Biogas is used to detect any leakage
9	Availability	Based on the market demand, the availability may vary. At times, we may even need to wait for more than a month for LPG cylinder after booking.	As long as organic waste is available, you can generate your own cooking gas at the ease of our home any time readily available for us.
10	Cost	It is a monthly expense. Frequent price hike & revision increases the expense	It is a onetime investment and lifetime enjoyment
11	Thermal expansion	Ratio between the volumes of the vaporised gas and the liquefied gas varies depending on composition, pressure and temperature	Expansion is negligible
12	Auto Ignition temperature	405° C	580° C
13	Health Impact	Carbon particle will be emitted during combustion. On repeated exposure, it will cause serious health related problems.	No health hazards at all.