

**OFFICE OF THE MUNICIPAL COUNCIL, SIDDIPET
(SIDDIPET DISTRICT)**

Establishment of BIO CNG plant in Siddipet Municipality under SBM funds 2021.

Sl. No.	Description	Qty.
1	Pre-Digester using Shipping Containers Design, supply and Commission of Pre-Digester with 60 Cum tank built in used in 20'/40' shipping container in leakproof condition, FRP lining with MS reinforcement with I/O provision and Agitators for effective mixing.	1 Set
2	Plug & Play Digester using Shipping Containers Design, supply and Commission of Digester with 60 Cum tank built in used in 20'/40' shipping container in leakproof condition, FRP lining with MS reinforcement with I/O provision and Agitators for effective mixing.	1 No
3	CSTR RCC Digester Design, supply, installation, testing and commissioning of 600 cum primary CSTR digester (above ground) in RCC with double membrane covering and 2 agitators for effective mixing in anaerobic condition with all associated civil and electro mechanicals with consumables to treat domestic/ commercial, kitchen wet waste and food waste from Siddipet town.	1 No
4	Plug & Play Slurry Tank using Shipping Containers Design, supply and Commission of Slurry collection tank with 60 Cum tank built in used in 20'/40' shipping container in leakproof condition, FRP lining with MS reinforcement with I/O provision and Agitators for effective mixing.	1 No
5	Organic Waste Crusher Design, supply and commission of 2 tons/Hr nominal capacity of organic segregated MSW, built with 12MM MS plate with Blade of AR600/SS304 with 25HP Motor of a ISI Approved and 250MM screw conveyor with 1.5 HP motor of ISI Approved	1 No
6	Plug & Play RAW gas storage in Shipping Container Raw bio-gas storage fabric balloon with PVC coating with capacity of 65m ³ . Minimum thickness of 0.8mm with minimum GSM of 950+-50GMS(IS 7016 PART I), maximum pressure handling of 160MMWC, Breaking strength 400Kgf(IS 7016 PART II) and to be housed inside 40' shipping container	1 No
7	Bio-CNG Purification Unit Design, supply and commission of Gas Purification unit of 800m ³ I/P capacity per day with O/P parameters of CH ₄ >92%,CO ₂ <4%,H ₂ S<50PPM(+5PPM), with recovery system to improve efficiency.	1 No
8	High Pressure Bio-CNG Compressor Design, supply and commission of High Pressure Bio-CNG compressor with 40 m ³ /Hr, reciprocating type, 4 stage with O/P pressure of 200 bar with maximum 30 HP motor of reputed make.	1 No
9	Bio-CNG storage cascades Design, supply and Commission of cumulative capacity of 3000Ltr water capacity for Bio-CNG storage cylinder pallets, Cylinders make from Reputed manufacturer either EKC, RAMA or PESO approved with IS-7284 PARTII, with rotary valves of IS-3224 with maximum working pressure of 200 bar with swage lok/Parker fittings with MS structure.of capacity 3000 lts	1 Job
10	Organic Manure Seiving Machine Design, supply and commission of seiving machine with rotary screen trommel with O/P of 1-1.5tons of sieved material of 4mm as per FCO , and belt conveyor for I/P and screen material SS304, with maximum power I/P of 7HP.	1 No

11	Analysers & Lab Equipment Supply of analyser and lab equipment to analyse the GAS parameters. Gas Range 1. CH4- 0-100%, 2 . O2-0-25%, 3.H2S- 0-100 PPM, 4. CO2- 0-5%, with electrochemical sensor for O2, CO, H2S,CH4 From a reputed manufacturer.	1 Set
12	Electrical & Plumbing Design, supply and comissioning of electrical and plumbing works for the whole plant as per Industry standards and safety	1 Job
13	Back hoe Loader Supply of Backhoe loader with 3mtr digging capability, 0.6 m3 shovel capacity and 0.18 m3 bucket capacity for transfer & mixing of material inside the plant	1 No
14	Delivery Truck Bio-CNG delivery truck for delivering By-products Mahindra Load King, Vehicle Weight -6255 kg, Fuel Type -CNG, Brand -Mahindra, Model Name/Number - Loading Optimo CNG 4 tyre, Max. Power-70 hp@3600 rpm (or) Any equivalent make	1 No
15	Backup Bio-CNG Genset Providing, Installation & Commissioning of 125 KVA bio-CNG genset for Backup power for the plant. Number Of Cylinder 6, Rated Speed (RPM) 1500, Rated Current Capacity (A) 174, Number Of Phase 3 phase, Engine Model mPower61565GC, Governing Class G2 as per ISO 8528 part V	1 No
16	Boundary walls	
a.	Precast compound wall Design ,Supply and Installation - Erecting of precast panels and precast post with 1.8m height as per IS 4996-1984, at 3m c/c including excavation of pits, fixing in position, compaction of ground, painting the poles with one coat of cement primer and two coats of cement paint as per specification etc. all complete. Entrance and Exit MS gates along with Signage's including electrical fittings	1 Job
b.	Design, Providing and erecting 4.8 m GI sheet barricading works including excavation of pits, fixing in position, compaction of ground, Fabrication works, Sheet fixing ,painting the poles etc.	1 Job
	Total Rs.	