

TROPICAL BIOGAS GROUP (TBG)

PROFORMA INVOICE

Construction and installation of 50m³ Biogas Plant at Dogodogo Center

S/N	ITEM	Unit	Quantity 65 m ³	Unit Cost (TZS)	Total Cost (TZS)
A. Plant construction [Material]:					
1	Bricks, size 23 × 11 × 7 cm.	(pc)	6,000	500	3,000,000
2	Cement	(50 kg b	70	22,000	1,540,000
3	Lime	(25 kg.l	15	16,000	240,000
4	Sand	(ton)	21	35,000	735,000
5	Course aggregates	(ton)	14	32,000	448,000
6	Stones	(ton)	21	22,000	462,000
7	PVC – 6” diameter (Digester + sewage system)	(pc)	1	150,000	150,000
8	PVC – 4” diameter (sewage system)	(pc)	1	50,000	50,000
9	PVC – 1.25” diameter (sewage-separation line)	(pc)	1	15,000	15,000
10	Chicken wire (2m.wide)	(m)	70	5,000	350,000
11	Acrylic emulsion paint (white)	(litre)	20	12,000	240,000
12	Round iron bar (12mm)	(pc)	14	20,000	280,000
13	Round iron bar (10mm)	(pc)	8	18,000	144,000
14	Round iron bar (6mm)	(pc)	8	9,500	76,000
15	Binding wire –	(kg)	12	5,000	60,000
16	Welded mesh	(pc)	25	20,000	500,000
17	Nails ~ assorted – 2”, 3”, 4”	(kg)	20	4,500	90,000
18	Form work material [Timber, etc]-1”x8” & 2”x4”-assorted	(rm)	110	6,500	715,000
19	Spade	(pc)	10	15,000	150,000
20	Empty Bucket 10L	(pc)	20	5,000	100,000
21	Hollow section 30x20	(pc)	2	20,000	40,000
22	Turubai	(pc)	3	30,000	90,000
Sub-Total					9,385,000
B. Gas line, Sewage line, Appliances - Stoves & Accessories [Material]:					
23	Dome-Gas outlet pipe - 1” dia. (complete assembly)	(pc)	2	35,000	70,000
24	IPS. pipe, 1”	(pc)	1	40,000	40,000
25	IPS. pipe, ¾”	(pc)	1	30,000	30,000
26	IPS. pipe, ½”	(pc)	2	25,000	50,000
27	Poly-pipe ¾” – class ‘B’ (PU)	(m)	300	2,000	600,000
28	Gas – ball valve 1”	(pc)	1	30,000	30,000
29	Gas – ball valve ¾”	(pc)	2	25,000	50,000
30	Gas – ball valve ½”	(pc)	2	20,000	40,000
31	Pipe fittings/sundries (Poly + IPSD) - assorted	(ls)	1	400,000	400,000
32	Biogas Cooking Stove – 50 ltr galv. + 50ltr s/steel pot	(pc)	1	2,100,000	2,100,000
33	Biogas Cooking Stove – 100 ltr galv. + 100ltr s/steel pot	(pc)	1	3,000,000	3,000,000
34	Pressure gauge (max. 16 KPa)	(pc)	1	30,000	30,000
Sub-Total					6,440,000

C. Labour:					
35	Site preparation (clearing and setting-out)	(m/day)	4	80,000	320,000
36	Excavation of pits - Digester + EC [Earthworks]	(m/day)	15	80,000	1,200,000
37	Soil backfilling and landscaping [Earth works]	(m/day)	8	50,000	400,000
38	Construction of the Digester + Displacement tank	(m/day)	50	100,000	5,000,000
39	Digging of Gas line trench	(rm)	150	2,000	300,000
40	Installation of Gas line	(rm)	150	2,000	300,000
41	Installation of Appliances & Accessories	(m/day)	2	100,000	200,000
42	Supervision + Engineering fee	(Day)	25	150,000	3,750,000
43	Bio-system Operation and maintance+User training	(Day)	15	150,000	2,250,000
Sub-Total					13,720,000
D. Transport:					
44	Transport (Construction material)	(trip)	4	380,000	1,520,000
45	Transport (Supervision)	(trip)	7	150,000	1,050,000
Sub-Total					2,570,000
Sub-total (A + B + C + D)					32,115,000
E. Institutional fee (overheads):					
46	Overheads – (5% of total cost)				1,605,750
47	Feasibility study and project write Up (4% of total cost)				1,284,600
Sub-Total					2,890,350
GRAND TOTAL					35,005,350