

## **PROJECT PROFILE ON COAL BRIQUETTES MANUFACTURING UNIT**

### **1. INTRODUCTION**

Coal briquettes are made of slack coal powder, washers sink etc. with bentonite, molasses and sodium silicate as bonding materials. These are hard and nut shaped items used as fuel, for burning ovens chullahs in the household kitchens, small restaurants and hotels.

Though there are no specific standards published on coal briquettes, but necessary care should be taken particularly in the process of carbonisation so that the product may not get oxidized or overfeeds. It is also very essential to maintain uniformity in the batch composition, shape and sizes, compactness in the pressing etc. for efficient performance of the product in its end use.

### **2. MARKET DEMAND**

Coal is the cheapest fuel available in the area, the demand of coal and its products always exists in the area. Coal briquette is one of the product, which gives high calorific value with poor class of material too.

These coal briquettes are also substitute for other costly solid fuel like coke briquettes, charcoal, firewood etc. due to their better ignition properties with less smoke evolution.

Due to poverty in the area, the demand of coal briquettes in the area is tremendous and likely to increase with the increase in population of below poverty line.

As per the last census the below poverty line population in the district is around 2-3 lakhs. If we assume 50% of this population is using the coal briquettes with an average demand of about 1 kg per day per family basis, the total demand of the district would be around 40 -60 MT per day.

Beside above household demand small restaurants, dhabas and hotels also use these coal briquettes and have similar demand to households.

### PRODUCTION TARGETS

Basis of estimation: 300 Working Days in a Year  
Single Shift basis  
8 hours per shift

	Coal Briquettes
Quantity (MT)	9000
Value (Rs)	15750000

### 3. MANUFACTURING PROCESS

The raw materials, slack coal powder, washers sink powder is mixed with molasses, bentonite and sodium silicate etc. in suitable proportions. The mixed material is then pressed into briquettes form in the power-operated machine. The briquettes so formed are sun dried. Dried briquettes are packed and sold.

### 4. QUALITY CONTROL STANDARDS

Quality of the product must be as per customers demand and uniform in size and length.

### 5. LAND & BUILDING

1.	Covered area	Sq. Ft.	2000
2.	Uncovered area	Sq. Ft.	8000
3.	Total area	Sq. Ft.	10000
4.	Whether constructed or Rented		Rented
5.	If constructed, constructed value	Rs	N.A.
6.	If Rented, Rental value (per month)	Rs	5000

## 6. MACHINERY AND EQUIPMENT

S.N	Description	Qty.	Value (Rs.)
1.	Coal Briquetting Machine with all accessories	1	500000
2.	Mixture	1	
3.	Weighing Scale	1	
4.	Hand Tools and Electricals	L.S.	
5.	Sales Tax, Freight & Insurance etc.		50000
	Total		550000

## 7. RAW MATERIAL (PER MONTH)

S.N	Particulars	Quantity (MT)	Value (Rs)
1.	Coal Powder	800	800000
2.	Bentonate Powder	L.S.	250000
3.	Packaging & Other Consumables like Husk etc.	L.S.	20000
		Total	1070000

## 8. STAFF & LABOUR (PER MONTH)

S.N	Particulars	Qty	Rate	Value (Rs)
A	Administrative and Supervisory			
(i)	Manager	1	3000	3000
(ii)	Peon/ Chowkidar	2	2000	4000
B	Technical (Skilled-Unskilled)			
(i)	Skilled Worker	1	3000	3000
(ii)	Unskilled Worker	6	2000	12000
	Sub-Total			22000
			Plus perquisites @ 30% of salaries	6600
	TOTAL			28200

**9. OTHER EXPENSES (PER MONTH)**

1.	Rent of Land & Building	5000
2.	Electricity Charges	8000
3.	Fuel Exp.	0
4.	Advertisement & Travelling	1000
5.	Transport	5000
6.	Consumable & stores etc.	2000
7.	Potage expenses/ telephones	1500
8.	Stationery	1500
9.	Repairs & Maintenance's	3000
	Total	27000

**10. WORKING CAPITAL (FOR ONE MONTH)**

SL.NO.	DESCRIPTION	AMOUNT(RS)
1	Raw material	1070000
2	Salaries & Wages	28200
3	Other Expenses	27000
	Total	1125200

**11. TOTAL CAPITAL INVESTMENT**

Building & Other Civil Works	-
Machinery & Equipment	550000
Working capital for one month	1125200
Total	1675200

**12. COST OF PRODUCTION (PER ANNUM)**

Total recurring cost per year	13502400
Depreciation on machinery & equipment	50000
Interest on total investment @ 10%	160000
Total	13712400

### 13. SALES PROCEEDS (PER ANNUM)

S.N.	Item	Qty (MT)	Value (Rs.)
1.	Coal Briquettes	9000	15750000
	Total		15750000

### 14. PROFITABILITY (BEFORE INCOME TAX)

1.	Annual Gross Profit	2037600
2.	% of Profit on Sales	12.94%
3.	Break Even Analysis	
3.1	Annual Fixed Cost	662400
3.2	Annual Sales	15750000
3.3	Annual Variable Cost	12840000
3.4	Break Even Point	22.76%

Break-Even Analysis

(% of Total Production envisaged)

$$\frac{\text{Annual fixed cost} \times 100}{\text{Annual sales} - \text{Annual variable costs}} = \%$$

### 15. Manufactures/ Suppliers of Machinery

1	Gujrat Engineering Enterprises . 31/1, Paigah Estate, Near SBI, Jehangirabad, Bhopal 462 008 Ph. 234672
2.	Sri Logambol Engineering Works. 18, Hot Water Channel Road, Madras 625 010,
3.	Bhaskar Industries 19, Worship Road, Simmakkal, Maduari.

4.	Oriental Machinery Supplying Agency 25, RN Mukherjee Road, Calcutta 700 001
5	Huma Traders Near Shajanabad Thana, Bhopal

#### 16. Suppliers of Raw Materials

From Local traders of coal & other chemicals of the area.

#### 17. IMPLEMENTATION PERIOD

Proposed Project can commence production with in 6-8 weeks after sanction and first disbursement of term loan.

#### 18. ASSUMPTION FOR GENERATING PROJECT PROFITABILITY

1	Number of Working Days in a year	300 Days
2	Number of Shifts in a day	1 One
3	Hours in a Shift	8 hours
4	Plant Capacity	Consider on Average production capacities of plant.
5	Raw material Estimates	Based upon product Mix
6	Raw Material Availability	All districts of MP
7	Depreciation	Straight Line Method
8	Manpower	According to project Requirement
9	Rent estimate	On the basis of current market prize of the area.
10	Potential Area of Marketing the products	Households & related industries\ Service sector units of the area.
11	If project is funded, term loan would be	60-80% of Total investment
12	Moratorium Period	6- 12 months
13	Repayment Period	5-7 years
14	Project may be established under	PMEGP (GOI) / Tribal Self Employment Scheme (NSTFDC) or Rani Durgawati Scheme of MP