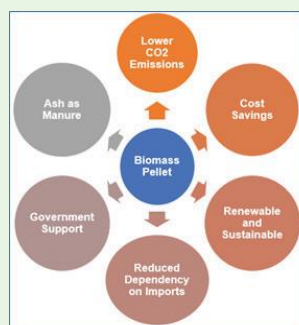


Fuel Switching for MSMEs/Industries (Pellet/Briquette)



Replace your Wood with Briquettes. Why?

	3000	4200-4700
	25-45%	<14%
	120-200°C	Up to 700°C
	Dry Season	All Seasons
	Required	Not Required

Fuel Cost COMPARISON

Particular	Calorific Value (Kcal/kg)	Rate per kg (Rs.)	Equivalent Consumption	Fuel Cost when replaced with Pellet	Savings (%)
Pellet	4400	30			
Briquette	4200	20			
LPG	11500	134.5	2.61	78.41	42%
Diesel	10800	158	2.45	73.64	53%
Petrol	11110	170	2.53	75.75	55%
Furnace Oil	10200	90	2.32	69.55	23%
Rice Husk	2700	11	0.61	18.41	-40%
Firewood	3200	10	0.73	21.82	-54%
Coal	5700	28	1.36	27.14 (briquette)	3%
Burnt Mobil	8500	45	2.02	40.48 (briquette)	11%

Pellet is financially feasible to replace Firewood if available @Rs. >19 and Ricehusk @ Rs. > 16

Sample Financial Analysis of burner size 6,00,000 kcal costing about NRs. 1,500,000

Hours of usage per day	Diesel Consumption per hour (ltr)	Diesel Unit cost (kg)	Diesel Cost per hour	Pellet Consumption per hour (kg)	Pellet Unit cost (kg)	Pellet Cost per hour	Savings per day	Savings per month	Savings %	Investment Cost	Payback Period (months)
8	65	151	9815	159	30	4778	40,300	1,047,800	51%	15,00,000	1.43
10	65	151	9815	159	30	4778	50,375	1,309,750	51%	15,00,001	1.14
16	65	151	9815	159	30	4778	80,600	2,095,600	51%	15,00,002	0.7
20	65	151	9815	159	30	4778	100,750	2,619,500	51%	15,00,003	0.57
24	65	151	9815	159	30	4778	120,900	3,143,400	51%	15,00,004	0.47

Pellet Burner + Your Current Boiler



Pellet/Briquette Stoves/products



List of **PELLET/BRIQUETTE** Manufacturers in Nepal

S.N	Name of Company	Location	Products	Capacity
1	Janda Devi Nepal Energy Pvt Ltd	Sarlahi	Briquette and Pellet	4 Ton/Hr
2	Husk Power Nepal Pvt. Ltd.	Birgunj	6 mm Husk Pellet	1.5 Ton/Hr
3	Green Energy Industries Pvt Ltd.	Simara	Briquette and Pellet	2 Ton/hr
4	Smart Tech Agro and Bio Energy Pvt. Ltd.	Chitawan	Pellet	4 Ton/Hr
5	National Vision Multipurpose Agro & Bio Farm	Dang	Briquette and Pellet	3 Ton/Hr
6	Universal Biomass Pvt. Ltd	Biratnagar	Briquette 70 mm	4 Ton/Hr
7	Shubha Biomass Pvt Ltd	Chitawan	Briquette 90 mm	2 Ton/hr
8	Lumbini Briquette-Koila Industry	Nawalparasi	Briquette 70 mm	3 Ton/Hr
9	Lumbini Bio Coal Industries	Kapilvastu	Briquette 70 mm	3 Ton/Hr
10	Green Biofuel Udhog	Dhalkevar	Briquette 90 mm	3 Ton/Hr
11	Pashupati Agrofuel Industry	Hariwon, Sarlahi	Briquette 70 mm	2 Ton/hr
12	Parajuli Biomass Briquette Industries (P) Ltd.	Jhapa	Briquette 90 mm	10 Ton/Hr
13	Saria Biomass Energy Pvt. Ltd.	Jhapa	6 mm wood Pellet	6 Ton/Hr

Total Production Capacity of these Companies is 54.5 Ton/Hr i.e. (436 Ton/day @8 hr)



Since the establishment of the Renewable Energy Program Support Office (REPSO) in 1997, Winrock International has been actively promoting clean energy access in Nepal through public awareness, capacity building, and innovative energy solutions. Under the Nepal Renewable Energy Programme (NREP), Winrock International Nepal has successfully implemented fuel-switching initiatives in over 66 MSMEs, enterprises, and industries. These initiatives have facilitated the transition from fossil fuels such as diesel, LPG, and burnt engine oil (Mobil) to cleaner and more sustainable biomass pellet burners. This shift has contributed to reducing operational costs, lowering carbon emissions, and enhancing energy security for Nepal's industrial sector.



Winrock International REPSO Nepal | Kha-182, Jhamsikhel-3,
Lalitpur, Nepal.
Tel: (977) 1-5437622, 5437885
Website: <https://www.winrock.org.np/>