

Wind River Biomass Utility
Stabilized Year

Item		Total	
Revenue			
Electricity			
ORC power output	470 kWh		
Daily operation	24 hours		
Annual operation (10% down time)	330 days		
Power produced	3,722,000 kWh per year		
Electricity price	\$0.07 per kWh		
		Subtotal	\$ 260,540 14%
Bochar			
Bochar	0.19 tons per hour		Reduced from 0.20 tons per hour
Daily operation	24 hours		
Annual operation	330 days		
Ton per year	1,188 tons per year		
Retail biochar price	\$ 3,000 per ton	0%	of sales initially
Wholesale biochar price	\$ 600 per ton	100%	of sales
		Subtotal	\$ 712,800 39%
Heat			
Heat produced	40,000 MMBtu per year		
Heat price	\$ 11.00 per MMBtu		
		Subtotal	\$ 440,000 24%
Firewood			
Bundles (1 cubic foot)	128,000 Bundles per year		
	2.75 \$ per bundle	Total \$	\$ 352,000
Half cords on pallet	100 1/2 cords per year		
	125 \$ per half cord	Total \$	\$ 12,500
Full cords	200 Cords per year		
	200 \$ per cord	Total \$	\$ 40,000
		Subtotal	\$ 404,500 22%
Revenue, Total			\$ 1,817,840
Proposed System Operating and Maintenance Cost			
Biomass Cost			
Wood use for boiler	10,000 BDTs per year		
Wood use for firewood	2,000 BDTs per year		
Wood cost	\$ 40 per BDT		
		Subtotal	\$ 480,000
Electricity to Facility (Purchased)			
Total electrical consumption	230,000 kWh		
Total electrical use charge	\$ 0.08 kWh		
Total electrical demand charge	\$ - per year		
		Subtotal	\$ 20,000
Fuel for Rolling Stock			
Total propane fuel consumption	6 gal/hr		
Fuel cost	\$ 2.00 gal		
Rolling stock operating time	8 hrs/day		
		Subtotal	\$ 31,680
New Biomass System Fuel Cost, Total			\$ 531,680
Ash Disposal			
Ash container removal	50 intervals		
Labor for ash container removal	\$ 200 per interval		
Ash disposal fee	\$ 200 per interval		
		Subtotal	\$ 20,000
Weekly Maintenance			
Weekly boiler checklist	40 weeks		
Labor cost	400 per week		
		Subtotal	\$ 16,000
Monthly Maintenance			
Monthly boiler checklist	12 months		
Labor cost	\$ 600 per month		
Boiler water treatment	\$ 200 per month		
		Subtotal	\$ 9,600
Remote Monitoring			
Remote Monitoring	12 months per year		
Static IP and internet connection	\$ 60 per month		
		Subtotal	\$ 720
Wood Fuel Handling & Delivery			
Handling and transportation	12,000 tons per year		
Tons per delivery container	25 tons per load		
Fuel deliveries needed	480 loads per year		
Cost to weigh and unload container	\$ 50 per load		
		Subtotal	\$ 24,000.00
Replacement Reserves			
Annual repairs/reserves budget	2.0% of Project Cost		
		Subtotal	\$ 62,740
Maintenance Parts and Labor, Total			\$ 133,060
Employee Wages			
Employees	10 People		
Annual Salary	\$ 45,000 per year (start up)		
		Subtotal	\$ 450,000
Administration			
Legal	\$ 10,000 per year		
Accounting	\$ 5,000 per year		
Insurance	0.40% of Project Cost		
		Subtotal	\$ 27,548
Total Proposed Costs			\$ 1,142,288
Gross Profit			\$ 675,552