

**Wind River Biomass Utility**

Stabilized Year

Item		Total	
<b>Revenue</b>			
<b>Electricity</b>			
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%
<b>Biochar</b>			
Biochar	0.15 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%
<b>Heat</b>			
Heat produced	40,000 MMBtu per year		
Heat price	\$ 11.00 per MMBtu		
		Subtotal:	\$ 440,000 24%
<b>Firewood</b>			
Bundles (1 cubic foot)	128000 Bundles per year		
	2.75 \$ per bundle	Total \$	\$ 352,000
Half cords on pallet	100 1/2 cords per year	Total \$	\$ 12,500
Full cords	200 Cords per year	Total \$	\$ 40,000
	200 \$ per cord	Subtotal:	\$ 404,500 22%
<b>Revenue, Total</b>		<b>\$ 1,817,840</b>	
<b>Proposed System Operating and Maintenance Cost</b>			
<b>Biomass Cost</b>			
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
<b>Electricity to Facility (Purchased)</b>			
Total electrical consumption	250,000 kWh		
Total electrical use charge	\$ 0.08 /kWh		
Total electrical demand charge	\$ - per year		
		Subtotal:	\$ 20,000
<b>Fuel for Rolling Stock</b>			
Total propane fuel consumption	6 gal/hr		
Fuel cost	\$ 2.00 /gal		
Rolling stock operating time	0 hrs/day		
		Subtotal:	\$ 31,680
<b>New Biomass System Fuel Cost, Total</b>		<b>\$ 531,680</b>	
<b>Ash Disposal</b>			
Ash container removal	50 intervals		
Labor for ash container removal	\$ 200 per interval		
Ash disposal fee	\$ 200 per interval		
		Subtotal:	\$ 20,000
<b>Weekly Maintenance</b>			
Weekly boiler checklist	40 weeks		
Labor cost	\$ 400 per week		
		Subtotal:	\$ 16,000
<b>Monthly Maintenance</b>			
Monthly boiler checklist	12 months		
Labor cost	\$ 800 per month		
Boiler water treatment	\$ 200 per month		
		Subtotal:	\$ 9,600
<b>Remote Monitoring</b>			
Remote Monitoring	12 months per year		
Static IP and Internet connection	\$ 60 per month		
		Subtotal:	\$ 720
<b>Wood Fuel Handling &amp; Delivery</b>			
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
<b>Replacement Reserves</b>			
Annual repairs/reserves budget	2.0% of Project Cost		
		Subtotal:	\$ 62,740
<b>Maintenance Parts and Labor, Total</b>		<b>\$ 133,060</b>	
<b>Employee Wages</b>			
Employees	10 People		
Annual Salary	\$ 45,000 per year (start up)		
		Subtotal:	\$ 450,000
<b>Administration</b>			
Legal	\$ 10,000 per year		
Accounting	\$ 5,000 per year		
Insurance	0.40% of Project Cost		
		Subtotal:	\$ 27,548
<b>Total Proposed Costs</b>		<b>\$ 1,142,238</b>	
<b>Gross Profit</b>		<b>\$ 675,602</b>	