

**Table 1.1 : Recommendation of Energy Savings Measures**

NO	MEASURES	ENERGY SAVING		COST SAVING (IDR/year)	INVESTMENT (IDR)	PAYBACK PERIOD (Year)
		Unit/year	kWh/year			
STEAM PRODUCTION FACILITY						
1	Using Low Ash Content of Coal	887 ton of coal	5,536	798,535,157	-	
2	Optimization of Boiler Load	4,448 ton of coal	27,753	4,003,560,000	-	
3	Reduce Excess Air of Boiler-1 , 2 and 3	597 ton of coal	3,725	537,049,847	26,419,500	0.05
4	Installed Over-fire Fan to Supply Secondary Air Boiler -1 ; 2 and 3	819 ton of coal	5,110	736,817,105	93,600,488	0.13
STEAM DISTRIBUTION AND CONSUMERS						
1	Installation of valves and pipes insulation	622 ton of coal	3,881	560,077,432	31,350,000	0.06
POWER QUALITY						
1	Harmonics Reduction by Installing Harmonics filter	83,726 kWh of electricity	83,726	52,205,851	95,000,000	1.82
2	Replacement of Damaged Standard Motors with Right Size High Efficient Motor (HEM )	1,783,763 kWh of electricity	1,783,763	1,870,196,308	4,370,133,000	2.34

**Note :**

1. Low Cost : Investment less than or equal to IDR 30,000,000
2. Medium Cost : Investment greater than 30,000,000 and less than IDR 100,000,000
3. High Cost : Investment greater than IDR 100,000,000