

2023 Invest in Energy-Saving or Environmentally Sustainable Machinery and Equipment

NO.	Types	Measures	Savings		Amount of Saved Electricity (kWh)	Amount of Saved Energy (GJ)	Carbon Reduction Volume (tCO ₂ e/year)
1	Power saving	R710MIPC process alkaline water energy saving project	12,733	kWh	12,733	46	6.29
2	Power saving	BR cooling water circulation pump energy saving project	54,460	kWh	54,460	195	26.90
3	Power saving	Replace R930 heat exchanger E932 chilled water with ordinary water	83,394	kWh	83,394	299	41.20
4	Power saving	R930 wastewater reuse	154.7	kWh	155	1	0.08
5	Power saving	Adjust process time to save power of the mixing motor	55,800	kWh	55,800	200	27.57
6	Power saving	Inspection of pneumatic valve air connector and two-point combination	8,475	kWh	8,475	30	4.19
7	Power saving	Washing water layer for reuse	1,989	kWh	1,989	7	0.98
8	Power saving	Transfer 200L of toluene from the R640 washing line to mother liquor	5,790	kWh	5,790	21	2.86
9	Power saving	Replace cooling water pump	68,255	kWh	68,255	245	33.72
10	Power saving	Replace the energy-efficient cooling fan	13,198	kWh	13,198	47	6.52
11	Power saving	Improve water softening motor for manufacturing process	14,801	kWh	14,801	53	7.31
12	Power saving	Replace the cooling tower fan blades	147,382	kWh	147,382	528	72.81
13	Power saving	150HP air compressor to replace 300HP air compressor	36,960	kWh	36,960	132	18.26
14	Power saving	Replacement of new-type blower for wastewater treatment equipment TW1	37,580	kWh	14,414	52	7.12
15	Power saving	Recycling of effluents from the water treatment system	3,544	kWh	3,544	13	1.75
16	Power saving	Replace the hydraulic injection molding machine with an all-electric injection molding machine (1)	94,500	kWh	94,500	339	46.68
17	Power saving	Replace the hydraulic injection molding machine with an all-electric injection molding machine (2)	60,750	kWh	60,750	218	30.01
18	Power saving	Adjust boiler steam setting pressure and replace new hot water tank according to process requirements	22,843	kWh	22,843	82	11.28
	Natural gas conservation		122,456	m ³	---	4,594	230.32
Total					699,443	7,101	575.85
Annual Electricity Consumption (kWh)					45,380,995		
Annual Electricity Saving Rate (%)					1.52%		
Amount of Investment					NT\$ 13.55 million		