

End User: Savings and Cogen Analysis for Salgenx Salt Water Battery

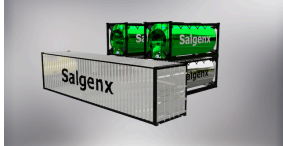
6,000 kW (6 MW) Battery System - Salgex Salt Battery Technology

12/31/2022



S6000: This system uses multiple tanks for electrolytes. One dry container for electrodes, command, and control.

Battery Efficiency	.91					
Energy Efficiency	10	mA/cm2	100	A/m2	9.29	A/ft2



Power Density (Wh/L)	125.7	x	48000	=	6,034	kW
kW loss per round trip	.91	x	6,034	=	543	kW

End User Grid Utility Power Mining and Savings: System Sale Price \$900,000 \$149/kW

Kilowatt Price Difference \$(kW)	Revenue or Savings				Payback (year)	Cogen Battery Thermal Savings (year)	Payback (year)
	Cycle	Day	Month	Year			
\$0.01	1	\$55	\$1,647	\$20,041	44.91	\$40,081	22.45
\$0.02	1	\$110	\$3,294	\$40,081	22.45	\$80,162	11.23
\$0.03	1	\$165	\$4,942	\$60,122	14.97	\$120,244	7.48
\$0.04	1	\$220	\$6,589	\$80,162	11.23	\$160,325	5.61
\$0.05	1	\$275	\$8,236	\$100,203	8.98	\$200,406	4.49
\$0.06	1	\$329	\$9,883	\$120,244	7.48	\$240,487	3.74
\$0.07	1	\$384	\$11,530	\$140,284	6.42	\$280,568	3.21
\$0.08	1	\$439	\$13,177	\$160,325	5.61	\$320,650	2.81
\$0.09	1	\$494	\$14,825	\$180,365	4.99	\$360,731	2.49
\$0.10	1	\$549	\$16,472	\$200,406	4.49	\$400,812	2.25
\$0.15	1	\$824	\$24,708	\$300,609	2.99	\$601,218	1.50
\$0.20	1	\$1,098	\$32,943	\$400,812	2.25	\$801,624	1.12
\$0.30	1	\$1,647	\$49,415	\$601,218	1.50	\$1,202,436	0.75
\$0.40	1	\$2,196	\$65,887	\$801,624	1.12	\$1,603,248	0.56
\$0.50	1	\$2,745	\$82,359	\$1,002,030	0.90	\$2,004,060	0.45

Thermal Savings: If a optional heat pump input with a COP 3 is used during the evening, the heated water (salt water) can be used during the day, without effecting charge. This can result in large savings since a heat pump can produce significant savings while used off-peak, and storing heated liquid for later use.

For illustration purposes only. Your tax situation or project costs may vary.