

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

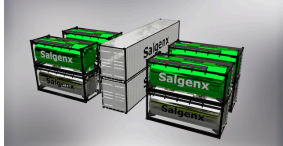
12,000 kW (12 MW) Battery System - Salgenx Salt Battery Technology

12/31/2022



S12MW: This system uses multiple tanks for electrolytes. Two dry containers 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	100000	=	12,570	kW
kW loss per round trip	.91	x	12,570	=	1,131	kW

End User Grid Utility Power Mining and Savings: System Sale Price \$1,600,000 \$127/kW

Kilowatt Price Difference \$(kW)	Revenue or Savings				Payback (year)	Cogen Battery Thermal Savings (year)	Payback (year)
	Cycle	Day	Month	Year			
\$0.01	1	\$114	\$3,432	\$41,751	38.32	\$83,503	19.16
\$0.02	1	\$229	\$6,863	\$83,503	19.16	\$167,005	9.58
\$0.03	1	\$343	\$10,295	\$125,254	12.77	\$250,508	6.39
\$0.04	1	\$458	\$13,726	\$167,005	9.58	\$334,010	4.79
\$0.05	1	\$572	\$17,158	\$208,756	7.66	\$417,513	3.83
\$0.06	1	\$686	\$20,590	\$250,508	6.39	\$501,015	3.19
\$0.07	1	\$801	\$24,021	\$292,259	5.47	\$584,518	2.74
\$0.08	1	\$915	\$27,453	\$334,010	4.79	\$668,020	2.40
\$0.09	1	\$1,029	\$30,884	\$375,761	4.26	\$751,523	2.13
\$0.10	1	\$1,144	\$34,316	\$417,513	3.83	\$835,025	1.92
\$0.15	1	\$1,716	\$51,474	\$626,269	2.55	\$1,252,538	1.28
\$0.20	1	\$2,288	\$68,632	\$835,025	1.92	\$1,670,050	0.96
\$0.30	1	\$3,432	\$102,948	\$1,252,538	1.28	\$2,505,075	0.64
\$0.40	1	\$4,575	\$137,264	\$1,670,050	0.96	\$3,340,100	0.48
\$0.50	1	\$5,719	\$171,581	\$2,087,563	0.77	\$4,175,126	0.38

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.