

410kVA Hybrid Case Study

Replacement of 410kVA by QAS 410 + ZBC 250-575

Energy Storage Systems used alongside generators have proven their sustainability with rapid Return on Investment (ROI), and low Total Cost of Ownership (TCO), typically paying back initial costs within two years. Using an Energy Storage System with a generator in hybrid mode extends the generators lifespan, optimizes performance levels avoiding low loads on the generators, reduces fuel consumption, and enhances on-site sustainability and resiliency. Additional benefits include reduced emissions, fewer service intervals, and lower logistics costs for service, maintenance, and refueling.

APPLICATIONS



TELECOM



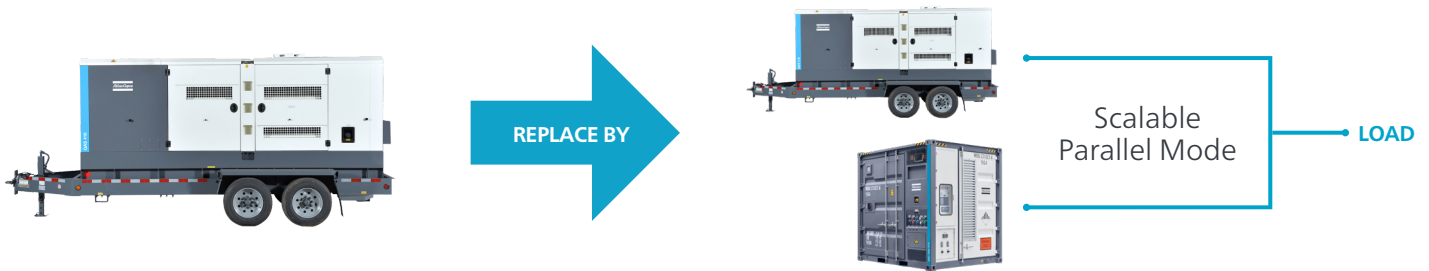
EVENTS



CONSTRUCTION



CRANES



END USER BENEFITS

9X Longer Life

-89% Noise & Runtime

-56% Fuel & CO₂

Load Conditions:

Voltage 480V 3ph
Average Load 9%
Max Power 328kW

8 HOURS	Unit	Genset	Hybrid	Savings
	🕒 Hours	8	0.88	7
	🛢️ Gallon	41	18	23
	💰 Dollar*	287	126	161
	☁️ lbs CO ₂	919	403	515

1 DAY	Unit	Genset	Hybrid	Savings
	🕒 Hours	24	3	21
	🛢️ Gallon	123	54	69
	💰 Dollar*	861	378	483
	☁️ lbs CO ₂	2,757	1,210	1,546

28 DAYS	Unit	Genset	Hybrid	Savings
	🕒 Hours	672	74	598
	🛢️ Gallon	3,444	1,512	1,932
	💰 Dollar*	24,108	10,584	13,524
	☁️ lbs CO ₂	77,190	33,888	43,301

1 YEAR (365 DAYS)	Unit	Genset	Hybrid	Savings
	🕒 Hours	8,760	964	7,796
	🛢️ Gallon	44,895	19,710	25,185
	💰 Dollar*	31,4265	137,970	176,295
	☁️ lbs CO ₂	1,006,232	441,760	564,471

*7\$/Gallon delivered to site

DEF and generator maintenance savings will bring additional operational cost savings