

SOLAR + BATTERY vs GENERATOR — CARBON FOOTPRINT & FUEL SAVINGS REPORT

Analysis Period: May 12–18, 2025 | 12 Sites | Current telemetry tabs

SHOW A

PARAMETERS & ASSUMPTIONS	
Fuel Cost per Liter (\$):	\$1.31
CO ₂ Emission Factor (kg CO ₂ /L):	2.68
Generator Efficiency (kWh/L):	3.00
Generator Type:	1200 Amp Tier 3 (shared), 10 L/hour at idle (<15% load)



DAILY SUMMARY BY DATE							
Date	Solar+Battery (kWh)	Grid+Generator (kWh)	Total (kWh)	Solar+Battery %	Fuel Saved (L)	Fuel Cost Saved (\$)	CO ₂ Avoided (kg)
May 12	321.5	0.0	321.5	100.0%	107.2	\$140.39	287.2
May 13	186.8	22.6	209.4	89.2%	62.3	\$81.57	166.9
May 14	212.7	24.6	237.3	89.6%	70.9	\$92.88	190.0
May 15	271.0	13.0	284.0	95.4%	90.3	\$118.34	242.1
May 16	314.3	1.6	315.9	99.5%	104.8	\$137.24	280.8
May 17	185.1	0.4	185.5	99.8%	61.7	\$80.83	165.4
May 18	137.3	10.9	148.2	92.6%	45.8	\$59.95	122.7
WEEKLY TOTAL	1,628.7	73.1	1,701.8	95.7%	542.9	\$711.20	1,455.0

KEY ENVIRONMENTAL & FINANCIAL IMPACT			
Metric	Value	Metric	Value
Total Solar+Battery Energy (kWh)	1,628.7	Total CO ₂ Emissions Avoided (kg)	1,455.0
Total Grid+Generator Energy (kWh)	73.1	CO ₂ Avoided (Metric Tons)	1.455
Overall Solar+Battery Utilization	95.7%	Equivalent Trees Planted*	69.3
Total Fuel Saved (Liters)	542.9	Avg Daily Fuel Savings (L)	77.6
Total Cost Savings (\$)	\$711.20	Avg Daily Cost Savings (\$)	\$101.60

* Equivalent to trees absorbing CO₂ for one year (based on ~21 kg CO₂/tree/year)

SITE-BY-SITE WEEKLY PERFORMANCE SUMMARY							
Site	Total Solar+Battery (kWh)	Total Grid+Gen (kWh)	Total Energy (kWh)	Solar+Battery %	Fuel Saved (L)	Cost Saved (\$)	CO ₂ Avoided (kg)
CAST TRAILER 2RM-1	143.9	0.0	143.9	100.0%	48.0	\$62.84	128.6
CAST TRAILER 2RM-2	120.7	0.0	120.7	100.0%	40.2	\$52.71	107.8
CAST TRAILER 2RM-3	85.9	1.4	87.3	98.4%	28.6	\$37.51	76.7
CAST TRAILER 2RM-4	118.0	9.3	127.3	92.7%	39.3	\$51.53	105.4
CAST TRAILER 3RM-1	144.0	0.0	144.0	100.0%	48.0	\$62.88	128.6
CAST TRAILER 3RM-2	120.8	0.0	120.8	100.0%	40.3	\$52.75	107.9
CAST TRAILER 8RM-1	76.0	0.0	76.0	100.0%	25.3	\$33.19	67.9
OFFICE 1	99.8	0.0	99.8	100.0%	33.3	\$43.58	89.2
OFFICE 2	93.2	2.0	95.2	97.9%	31.1	\$40.70	83.3
10ST HAIR & MAKEUP	201.0	13.1	214.1	93.9%	67.0	\$87.77	179.6
COSTUME TRAILER	231.6	22.0	253.6	91.3%	77.2	\$101.13	206.9
CAMERA	193.8	25.3	219.1	88.5%	64.6	\$84.63	173.1
SITE TOTALS	1,628.7	73.1	1,701.8	95.7%	542.9	\$711.20	1,455.0

METHODOLOGY & NOTES
Calculation Methodology:
• Solar+Battery (kWh) = daily maximum PV Today + daily maximum Battery Discharge Today from each current telemetry tab.
• Grid+Generator (kWh) = daily maximum Grid Buy Today + generator energy based on recorded daily runtime × 10 L/hour × 3 kWh/L.
• Fuel Saved (L) = Solar+Battery Energy ÷ Generator Efficiency (3 kWh/L).
• Fuel Cost Saved = Fuel Saved × \$1.31/L.
• CO ₂ Avoided = Fuel Saved × 2.68 kg CO ₂ /L (standard diesel).
• Generator: 1200 Amp Tier 3 shared unit, 10 L/hour at idle (<15% load).

Report recalculated from current tabs: August 13, 2026

GRAPHICAL PERFORMANCE SUMMARY

