

CHP BUSINESS IMPACT SCENARIO

The Radio Hotel* New York, NY USA

Guest Rooms:	221	Kilowatt Hours Intensity per SF: 14.2 ¹
Estimated Square Feet:	89,188 (Hotel Only)	Cubic Feet NG Intensity per SF: 44.6 ²

	“As-Is” Utility-Sourced Electricity	“To-Be” Combined Heat & Power
Electricity Kilowatt Hours (KWH)		
Total KWH Consumption	1,266,470	1,266,470
Cost per KWH ³	\$0.181	-
Utility Service Charges ³	\$45,745	\$1,200
Total Electricity Costs	285,906	\$1,200
Natural Gas Dekatherms (DTH)		
Electricity Generation (DTH)	-	13,538
CHP Recapture (DTH)	-	(10,592)
Space & Water Heating (DTH) ⁴	3,381	10,592
Cooking & Other (DTH)	597	1,869
Net DTH Consumption	3,978	4,4918
Cost per DTH ⁵	\$9.72	\$8.26
Total Natural Gas Costs	\$38,664	\$40,633
Total Energy Costs	\$1,017,002	\$128,494
Impact on Year 1 EBITDA (Cash Flow)		\$282,737
Ten-Year Cash Flows from EBITDA, including maintenance costs		\$3,021,383
Impact on Sell Price in Year 11 @ EBITDA Selling Multiple x 12		\$4,165,316
Total Value Created from Ten-Year Cash Flows + Sell Price		\$7,186,698
Internal Rate of Return (IRR), not including incentives		70%
Metric Tons of Carbon Dioxide (CO2) Reduced Annually⁶		270 (75%)

*Disclaimer: The CHP Business Impact Scenarios are hypothetical examples based on publicly available data, primarily from the U.S. Energy Information Administration (EIA). Findings and calculations are independently derived without direct input from property owners. Actual results may vary.

1. Source: US Energy Information Administration kWh intensity for lodging facilities in mild climates
 2. Source: US Energy Information Administration Natural Gas intensity for lodging facilities in mild climates
 3. Source: US Energy Information Administration kWh average commercial prices 2023 in NY, plus estimated utility service charge
 4. Source: US Energy Information Administration; Space & Water Heating composes 86% of a hotel's NG use
 5. Source: US Energy Information Administration DTH average commercial prices 2023 in NY; "To-Be" scenario assumes 15% discount from hedging
 6. Source: US Environmental Protection Agency Greenhouse Equivalencies Calculator