

CHP BUSINESS IMPACT SCENARIO

Renaissance St. Pancras Hotel* London, UK

Guest Rooms:	245	Kilowatt Hours Intensity per SF: 14.2 ¹
Estimated Square Feet:	370,000	Cubic Feet NG Intensity per SF: 44.6 ¹

	“As-Is” Utility-Sourced Electricity	“To-Be” Combined Heat & Power
Electricity Kilowatt Hours (kWh)²		
Total kWh Consumption	5,254,000	5,245,000
Cost per kWh	£0.150	-
Utility Service Charges	£275,835	£1,200
Total Electricity Costs	£1,212,462	£1,200
Natural Gas Dekatherms (DTH)		
Electricity Generation (DTH)	-	17,927
CHP Recapture (DTH)	-	(13,920)
Space & Water Heating (DTH) ³	13,920	13,920
Cooking & Other (DTH)	2,456	2,456
Net DTH Consumption	16,376	20,384
Cost per DTH ⁴	£8.00	£8.00
Total Natural Gas Costs	£131,010	£163,071
Total Energy Costs	£1,343,471	£164,271
Impact in Year 1 (Cash Flow)		£1,087,255
Ten-Year Cash Flows from EBITDA, including maintenance costs		£13,608,334
Impact on Sell Price in Year 11 @ EBITDA Selling Multiple x 16		£26,698,364
Total Value Created from Ten-Year Cash Flows + Sell Price		£40,306,698
Internal Rate of Return (IRR), not including incentives/financing		N/A
Metric Tons of Carbon Dioxide (CO2) Reduced Annually⁵		1,120 (75%)

*Disclaimer: The CHP Business Impact Scenarios are hypothetical examples based on publicly available data, primarily from the U.K. Department for Business, Energy & Industrial Strategy (BEIS). Findings and calculations are independently derived without direct input from property owners. Actual results may vary.

1. Source: US Energy Information Administration kWh and NG intensity for lodging facilities in mild climate Zone
 2. UK Department for Business, Energy & Industrial Strategy (BEIS) kWh average commercial prices 2023 in London, plus estimated service charge from utility
 3. Source: US Energy Information Administration average uses of natural gas in hotels
 4. UK Department for Business, Energy & Industrial Strategy (BEIS) DTH average commercial prices 2023
 5. Source: US Environmental Protection Agency Greenhouse Equivalencies Calculator