



IS NATURAL GAS A BETTER OPTION THAN ELECTRICITY FOR HOT WATER IN HIGH RISE APARTMENTS?

YES. HERE'S THE PROOF.

ATCO recently completed a case study on the hot water requirements of a 119-apartment development.

The study compared both the capital and ongoing energy costs of a centralised natural gas hot water plant with a centralised electric hot water system using grid-based energy.

SAVE UP TO
\$70,500
ON CAPEX COSTS

	CAPITAL COSTS (EX. GST) ¹	RUNNING COSTS (EX. GST) PER ANNUM ²	WEIGHT	SIZE
ELECTRIC HOT WATER SYSTEM	\$138,000	\$18,331	9,703KG	46.77M ²
NATURAL GAS HOT WATER SYSTEM	\$67,500	\$14,000	3,387KG	19.2M ²
BENEFITS OF NATURAL GAS SYSTEM	\$70,500 UPFRONT SAVINGS	\$4,331 ANNUAL SAVINGS	6,316KG LIGHTER	27.57M² LESS SPACE REQUIRED

ATCO conducted this case study which focused on the hot water requirements of a typical 119-apartment complex comprising 15 x Studio Apartments, 28 x 1 Bedroom Apartments, 56 x 2 Bedroom Apartments, 20 x 3 Bedroom Apartments. ATCO compared a natural gas centralised hot water system (Raypak High Efficiency Modulating Vertical Burner model no: 91100BNWK) against an electric centralised hot water system utilising grid-based energy (Rheem Commercial non-ducted Air to Water 16kW heat pump system model no: 95301600). The costs referred to in this case study are based on modelling conducted, and prices obtained, by ATCO. Actual cost savings may differ.



GAS HOT WATER SYSTEMS GENERALLY OCCUPY A SMALLER FOOTPRINT, WEIGH LESS, ARE EASIER TO MAINTAIN AND FUNDAMENTALLY COST LESS TO OPERATE.

– Mike Howard, Principal Director of Hutchinson Associates. Experience on 2000+ projects, spanning a 30 year career.

LIFE'S BETTER WITH NATURAL GAS



**70% LESS
GREENHOUSE GAS³**



**67% OF PEOPLE
SURVEYED
PREFER GAS POWERED HOT WATER SYSTEMS
OVER ELECTRIC SYSTEMS.⁴**

CASE STUDY CONTRIBUTORS:

ATCO



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1. Stated capital costs reflect the upfront costs (ex. GST) of each centralised hot water system, including any required installation and commissioning costs. Prices obtained from Rheem as at May 2021. 2. Stated running costs reflect the total annual running costs of each centralised hot water system for all apartments in the complex (not including common areas). Costs calculated by ATCO using Synergy's Standard Electricity Prices and Charges (1 July, 2021) – Business Prices L1 Tariff (for the electric system) and an average bundled market price per gigajoule \$/GJ obtained from gas retailers (for the natural gas system). 3. Stated decrease in greenhouse gas was determined by comparing the greenhouse gas produced from natural gas (in the Mid-West and South-West Gas Distribution Systems) to grid electricity (in the South West Interconnected System) and calculated based on the National Greenhouse Account Factors (<https://www.industry.gov.au/data-and-publications/national-greenhouse-accounts-factors>). 4. Based on responses received by ATCO from 656 people surveyed as part of ATCO's brand survey conducted in October 2020.