

Commercial Case Studies

EndoTherm has been installed into a large number of commercial properties. The actual savings obtained by users of EndoTherm, during the study period, have been recorded.. Each installation is surveyed to identify the required volume of EndoTherm and the suitability of a site to run a study. The suitability requires repeatable, accurate meter readings and a constant base load with no significant changes in use/technology over the comparison period.

Where appropriate, the field tests follow the IPMVP protocols using regression analysis to identify historical trends in the building usage. This data can be compared with post-installation consumption to determine savings. Where past data is not sufficient, the usage is directly compared with a suitable historical term (usually year on year). All studies are compensated using heating degree days from a nearby weather station.

US NAVAL AIR STATION - WHIDBEY ISLAND 4 MONTH STUDY

- Freestanding, single story building.
- 396 MBH diesel boiler with radiators.
- EndoTherm was installed in December 2016.
- 4 Month kWh consumption compared with same period during previous year.
- Return on investment (ROI) achieved within 2 months.

12.54

% TOTAL SAVINGS

FINANCIAL SAVINGS

\$679.87

CO₂ SAVINGS

3,337 lbs

MAIN STREET EQUITY CORP. 29 SITES 5 MONTH STUDY

- EndoTherm installed into 29 sites as a second phase roll-out.
- Sites selected are of mixed age and size, reflective of the full housing portfolio.
- EndoTherm was installed in November 2017.
- Study data examined using Regression Analysis and IPMVP protocol.
- Return on investment (ROI) scheduled to be within 14 months.

11.39

% TOTAL SAVINGS

FINANCIAL SAVINGS

\$42,977

CO₂ SAVINGS

602,751 lbs

VANCOUVER INTERNATIONAL AIRPORT (YVR) 3 MONTH STUDY

- Installed into south terminal which services local and corporate flights.
- Terminal heated by a single 1,500MBTU Cleaver Brooks boiler.
- EndoTherm was installed in November 2017.
- Study data examined using Regression Analysis and IPMVP protocol.
- Return on investment (ROI) achieved within 12 months.

17.32

% TOTAL SAVINGS

FINANCIAL SAVINGS

\$1,658.80

CO₂ SAVINGS

22,000 lbs

NOTE: Financial savings calculated using supplied historical energy bills for each case study, price per thm varies.

CITY OF COQUITLAM, BC**7 MONTH STUDY**

- 190,000 ft² sports and leisure complex featuring ice rink and swimming pool.
- 2 x 1951 MBTU/HR Buderus boilers.
- EndoTherm was installed in August 2017.
- Study data examined using Regression Analysis and IPMVP protocol.
- Return on investment (ROI) achieved within 7 month trial period.

13.56**% TOTAL SAVINGS****FINANCIAL SAVINGS****\$7,193.99****CO₂ SAVINGS****63,580 lbs****SPRING CREEK ELEMENTARY, WHISTLER, BC****5 MONTH STUDY**

- Community school ran by Sea to Sky School District in Whistler, Canada.
- 1,500 MBTU boiler.
- EndoTherm was installed in September 2017.
- Study data examined using Regression Analysis and IPMVP protocol.
- Return on investment (ROI) projected within 18 months from installation.

12.75**% TOTAL SAVINGS****FINANCIAL SAVINGS****\$1,319.50****CO₂ SAVINGS****17,661.6 lbs****THE VICTORIAN, BENTALL KENNEDY****7 MONTH STUDY**

- Two storey apartment complex with one level of non-heated parkade.
- Single natural gas 62% AFUE efficiency, 600MBH Superhot brand boiler.
- EndoTherm was installed in September 2017.
- Natural gas consumption (tracked by dashboard) compared to previous years.
- Return on investment (ROI) projected around 12 months from installation.
- Carbon tax savings equates to an addition six-month savings.

21.26**% TOTAL SAVINGS****FINANCIAL SAVINGS****\$882.50****CO₂ SAVINGS****16,695.80 lbs****LONDON HEATHROW AIRPORT, UK****2 MONTH STUDY**

- Engineering compound within airport perimeter.
- 6 x 110kWh boilers serving a district heating scheme of 10 buildings.
- EndoTherm was installed in March 2017.
- Study data examined using Regression Analysis and IPMVP protocol.
- Return on investment (ROI) scheduled to be within 6 months.

20.1**% TOTAL SAVINGS****FINANCIAL SAVINGS****\$1,620.45****CO₂ SAVINGS****17,066 lbs**