



### SITE INFO



#### **PIRANHA T10**

**HOSPITALITY & LAUNDRY 247 ROOMS SEPTEMBER 2018** 

#### **PRODUCT INSTALLED**

**PROJECT TYPE PROJECT SIZE** COMMISSIONED

# **Commercial Laundry** in Beautiful Banff

Lake Louise Inn (LLI) is a 247 room resort nestled within the breathtaking Rocky Mountains in Banff National Park, part of a UNESCO World Heritage Site.

Utilizing a PIRANHA T10 to collect the hot wastewater discharge from their laundry systems, Lake Louise reduced their laundry water heating energy demand by as much as 45%.

Their **PIRANHA T10** wastewater heat recovery system intercepts laundry room wastewater, extracts heat from it and uses that heat to offset the energy required by the hotel to heat water for the laundry.





## **QUICK FACTS**

137 MWh/year heat output

**Alberta** 

**PIRANHA** significantly reduced load and runtime of boilers

32,000 litres of propane saved per year

Lake Louise Inn's laundry room hot water is propane heated



# ake Louise Inn.

### **SPECS & PERFORMANCE**



PROJECT TYPE HOSPITALITY & LAUNDRY

PROJECT SIZE 247 ROOMS

APPLICATION DHW

MAX. DHW TEMP. APPROX. % DHW LOAD

DESIGN ENERGY OUTPUT (MBH) AVERAGE EFFICIENCY (COP)

BASELINE

BASELINE EFFICIENCY

120°F/ 49°C **50%** 

120

5.25

**PROPANE** 

60%

### **IMPACT**

IAOI		APPROXIMATE
GHG REDUCTION (metric t CO₂e/year)	AVOIDED FOSSIL FUELS (therm/year)	CARS OFF ROAD
35	7,730	7.6
NET ENERGY REDUCTION (MMBTU/year)	ENERGY REDUCTION VS BASELINE	TREE OFFSETTING CO <sub>2</sub> e
685	44%	1,591

# **GLOSSARY**

**DHW** • DOMESTIC HOT WATER

**COP** • COEFFICIENT OF PERFORMANCE
AVERAGE EFFICIENCY (i.e. 3.7=370%)

#### **HEATING ASSUMPTIONS**

BOILER AT OPTIMUM CONDENSING

# RESULTS

#### FROM 2 WEEK AUDITED TRIAL (2018)

- ✓ Ran an average of 10.7 hours per day
- ✓ PIRANHA **output 375 kWh of heat per day** (1.28 million BTU) the equivalent of heating nearly 6,500 litres (1,700 US gallons) of water from 10 to 60°C (50 − 140°F)
- ✓ PIRANHA reduced propane requirement by 1,240 litres (327 gallons) the equivalent of 1.93 tonnes of CO₂e

