

REDUCE

- ↘ Treatment Costs to Net Zero
- ↘ Energy Use by 15%

LOWER

- ↘ Carbon Tax Payments
- ↘ Carbon Emissions

 **PACE**  **ECO**
P R O G R A M

Making Sustainability Affordable

 **PACE**
CHEMICALS LTD.

Have conventional energy retrofits fallen short of carbon reduction targets?

Do deep retrofits have an unacceptable return on investment?



PACE
CHEMICALS LTD.

Making Sustainability Affordable

HVAC systems in buildings account for 25% of all greenhouse gas emissions in North America. The PACE Eco Program is proven to lower energy consumption and emissions from your existing water-based HVAC system by up to 15% without any equipment changes or upfront investment.

Many HVAC systems use water to deliver or remove heat from a building because water is readily available and cost effective. Unfortunately, water's surface tension restricts heat transfer efficiency and its corrosive properties can lead to major system damage if left untreated.

What's included in the PACE Eco Program?

- ▶ Regularly scheduled site service
- ▶ EndoTherm® treatment
- ▶ Filter changes and equipment checks
- ▶ Water testing and reporting
- ▶ Water treatment top-ups

How does the PACE Eco Program work?

- ▶ Reduces energy consumption by improving heat transfer efficiency
- ▶ Water treatment extends equipment life by protecting system metallurgy
- ▶ Regular service to monitor and maintain optimal protection and performance
- ▶ Reduces equipment runtime
- ▶ Fixed Monthly Cost

Results

Reduced...

- ▶ Utility bills
- ▶ Carbon emissions
- ▶ Operational budget
- ▶ Equipment downtime

How do **PACE²ECO PROGRAM** energy savings work?

Scenario #1

Building with one closed heating loop system (5,000L) treated with **EndoTherm[®]**

Annual Building Data	Before Program	With Program
Gas cost for boilers	\$45,000	\$39,375 *
Water treatment	\$1,000	\$4,000
Carbon emissions (tonnes)	75	67
Carbon tax (@ \$30/tonne)	\$2,250	\$1,950
TOTAL ANNUAL COST	\$48,250	\$45,325

This cost savings example not only offsets all annual water treatment costs, it also results in the following savings and reductions over three years:

1 year



- ▶ **\$2,925 Savings**
- ▶ **10,000kg carbon emissions reduction**

3 years



- ▶ **\$8,775 Savings**
- ▶ **30,000kg carbon emissions reduction**

**Based on 2275 Heating Degree Days (HDD) per year and an estimated 12.5% energy savings with program.*

Scenario #2

- Building consists of:
- ▶ 200-ton cooling tower operating 12 months/year
 - ▶ One closed heating loop system (5,000L) treated with **EndoTherm[®]**
 - ▶ One closed chilled loop system (5,000L) treated with **EndoTherm[®]**

Annual Building Data	Before Program	With Program
Gas cost for boilers	\$45,000	\$39,375 *
Electricity cost for chillers	\$60,000	\$52,500 *
Water treatment	\$5,000	\$11,000
Carbon emissions (tonnes)	150	130
Carbon tax (@ \$30/tonne)	\$4,500	\$3,900
TOTAL ANNUAL COST	\$114,500	\$106,775

This cost savings example not only offsets all annual water treatment costs, it also results in the following savings and reductions over three years:

1 year



- ▶ **\$7,725 Savings**
- ▶ **20,000kg carbon emissions reduction**

3 years



- ▶ **\$23,175 Savings**
- ▶ **60,000kg carbon emissions reduction**

**Based on 2275 Heating Degree Days (HDD) per year, 230 Cooling Degree Days (CDD), and an estimated 12.5% energy savings with program.*

PACE **eco** P R O G R A M

 **PACE**
CHEMICALS LTD.

Western Canada's Water Treatment Leader
in Water & Energy Conservation

Vancouver
Edmonton
Calgary
Regina
Saskatoon

Contact us to assist with your sustainability goals

pacechem.com/eco
eco@pacechem.com
(800) 799-6211

Follow Us

