



Commercial Boiler Efficiencies

Start saving with heating improvement rebates

Our Minnesota Heating Efficiency program offers prescriptive gas rebates for business customers who maintain or install energy-efficient boiler equipment. With over a dozen rebates, we help you save with boiler improvements in three ways:

1. Our rebates will offset the initial cost of equipment upgrades to energy efficiency boiler models.
2. Numerous rebates for maintenance improvements of your existing boiler equipment.
3. You'll enjoy the energy savings and lower operating costs year after year from your boiler efficiency efforts.

Rebates for efficient boiler system upgrades

Benefit from energy savings and lower operating costs by upgrading to a new high-efficiency boiler system.

Boiler style	Rebate amount
92% efficient replacement hot water boiler Replacement of a functional boiler less than 30 years old and less than 10 million BTUH	\$7,000 per million BTUH
92% efficient new hot water boiler Installation of a new boiler where there was no previous boiler in place or when the current boiler is no longer operational, and is less than 10 million BTUH	\$3,500 per million BTUH
85% efficient new hot water boiler Installation of a new boiler where there was no previous boiler in place or when the current boiler is no longer operational and is less than 10 million BTUH	\$800 per million BTUH
81% efficient steam boiler Installation of a new or replacement steam boiler less than 10 million BTUH	\$500 per million BTUH

Refer to the heating efficiency application for qualifications and requirements.

More ways than one to reduce energy usage

Among boiler maintenance tasks, we have identified focus areas that offer a quick return on your investment as well as rebates to match for boiler tune-ups, pipe insulation and steam trap repairs. With our rebates to offset your investment, and short payback to reap the benefits of energy savings, take into consideration how much boiler improvements can actually make on your bottom line.



How does heating affect your energy bill?

It depends on your business, but according to the U.S. Energy Information Administration, for commercial customers your energy bill breaks down like this:

Industry	Space heating
Schools	34%
Colleges/universities	28%
Grocery stores/supermarkets	17%
Limited-service motels	31%
Restaurants	22%
Office buildings	39%
Hospitals	42%
Hotels	35%
Retail	35%

Boiler tune-ups

If you are noticing your gas consumption is unusually high compared to previous years, this could be a sign your boiler needs a tune-up. Regular tune-ups are one of the most effective ways to increase the efficiency of your boiler.

To offset the cost to perform boiler tune-ups, our rebate will cover 25% of the cost of each boiler tune-up, up to \$250 every two years. New boilers will decline in performance without regular maintenance, so our tune-up rebates qualify 12 months after installation of new equipment.

See rebate application for qualifications.

Pipe insulation

Given that steam is a hot gas that desperately wants to give up its latent heat energy (an amazing 970 BTUs per pound!) to turn back into water, can you afford to let that energy escape? Properly insulating a boiler will keep losses to about 0.3 – 0.5 percent of its energy, which occurs whenever the boiler is operating or in standby mode.

To offset the cost for you to insulate pipes on your existing steam boiler, we offer rebates to make it worth your efforts. As an example, if you have 100 feet of 2" pipe with an R-value of 4.9, you'll receive a rebate back of \$200!



"Insulation of uninsulated boiler pipes can typically reduce energy losses by 90% and help ensure proper steam pressure at plant equipment."

Source: U.S. Department of Energy

Pipe insulation rebates

Pipe diameter	Average fluid temp: 105 – 200 °F Conductivity 0.21 – 0.29 BTU in / (H ft² °F)		Average fluid temp: 201 – 250 °F Conductivity 0.27 – 0.30 BTU in / (H ft² °F)		Average fluid temp: 251 – 350 °F Conductivity 0.29 – 0.32 BTU in / (H ft² °F)	
	Minimum insulation thickness	Rebate \$/ft	Minimum insulation thickness	Rebate \$/ft	Minimum insulation thickness	Rebate \$/ft
0.5" to < 1.0"	1.0"	\$5	1.5"	\$6	2.0"	\$8
1.0" to < 1.5"	1.0"	\$5	1.5"	\$6	3.0"	\$8
1.5" to < 4.0"	2.0"	\$6	2.5"	\$8	4.5"	\$9
> 4.0"	2.0"	\$6	3.0"	\$8	4.5"	\$9

Steam trap repair or replacement

Your boiler's steam traps last approximately 6 to 10 years and can fail in either an open or closed position, causing steam to escape or system performance issues.

If areas of your facility are warmer than other areas, this could be a sign of faulty steam traps. When a leak occurs, there is energy loss, which in turn increases fuel consumption, water treatment costs, and maintenance costs.

Add steam trap maintenance as a habit for a low-cost, high-payback energy efficiency savings opportunity.

Begin with a steam trap audit, and repair or replace faulty steam traps to benefit from our rebates. With our rebates of \$15 per trap tested, and \$30 per trap repaired or replaced, your efforts can really add up.

We'll help you navigate improvement options!

In addition to these efficiency measures, we have even more ways you can save energy costs with equipment add-ons and other ideas. Contact your Xcel Energy account manager or our Business Solutions Center at 855.839.8862 or energyefficiency@xcelenergy.com. We'll help you find the solutions that best fit your facility and your budget.

Program restrictions may apply. Please contact the Business Solutions Center for details or visit xcelenergy.com/Rebates.

"If your steam system has not been maintained in three to five years, 15 to 30 percent of steam traps have likely failed."

Source: U.S. Department of Energy