



Commercial Boiler Incentive Program

If it saves gas energy we're interested!

What Commercial Boiler Incentive Measures does VGS Support?

- **Steam systems to hot water conversions.**
- **Lower steam system pressures.**
- **Higher efficiency boilers (for example, higher AFUE, TE, condensing).**
- **Burner controls: Lo-Hi-Lo, modulating.**
- **Lower return water temps to force condensation.**
- **O₂ trim & EGA.**
- **Boiler staging control.**

Approach to Commercial DSM Projects.

- **Prescriptive heating boiler incentives:**
 1. Boilers, >87% AFUE, ≤175 MBH \$550/boiler
 2. Boilers, >92% AFUE, w/multistage burner \$1,000/boiler

- **All other technologies/equipment treated as custom.**

- **Will offer incentives for measures/equipment the exceed Vermont Energy Code (ASHRAE 90.1 – 2004)**

Who does the VGS DSM program target?

- Small commercial up to large industrial.
- New construction.
- Retrofit projects.
- Equipment Replacement.
- Multifamily residential.
- Project measures must screen:
 1. $(\text{Gas system benefit})/(\text{Measure cost}) \geq 1.0$
 2. SPB including VGS incentive ≥ 3.0

VGS evaluation tools

- Spreadsheet approach:
 1. Compares various heating unit efficiency on a Bin-hr basis.
 2. Compares burner control method on a Bin-hr. basis.
 3. Combustion efficiency comparison, O₂ trim, EGA
 4. Custom spreadsheets (ex. Boilers serving an industrial load).

- Building energy simulation analysis
 1. eQuest® (DOE 2.2)
 2. Trane System Analyzer™
 3. Trane Trace™
 4. Helps with new construction.
 5. Useful for measures with interactive effects, WSHP, high internal loads, ect.

How does VGS measure success?

- Commercial program Stats:

Year	2005	2006	2007	2008(FYTD)
MCF Saved	46,200	33,900	53,000	47,000

- Continued persistence in saving gas energy since 1992
- Value-added tool for VGS' marketing department
- Participating customers are saving natural gas and reducing greenhouse gas emissions (Lowest State C footprint)