

ENERGY EFFICIENCY FOR APARTMENTS

Presented by Andy Wildenberg of e3 Power

Quadruple Bottom Line

Energy efficiency leads to:

- Resident retention through resident comfort
- Lower operating expenses
- Higher income
- Greater building value

Resident Comfort

- Comfortable apartments:
 - Plenty of heat in the winter
 - Abundant hot water for bathing
 - Comfortable lighting
 - Toilets that work and save water
 - Ceiling fans in living room and bedroom
 - Building Safety

Heat and Hot Water

- Hot Water (hydronic) boilers up to 96%+AFUE condensing boilers. Older boilers are 70% 80% efficient. Consider condensing vs. standard boilers. Steam systems are a little different. Rebates may be available from Xcel.
- Separate DHW from heating plant when possible. Your boiler will be off for 6 months a year.
- Install control systems
- Maintain your system

Water Use

- Keep water temperature at 120 degrees at the furthest point.
- Great Showers with low flow shower head
- Ultra low flush toilets
- Check for leaks often, (listen for that water whistle). Fix those leaks!
- Your yearly sewer charge is set during the winter months. Fix those leaks!
- Strive for 50! 50 gallons per day per person.

Efficient Lighting

- LED wall packs outside
- Ample lighting contributes to building safety
- CFL's for interior hallways
 - Reflective surfaces and colors
 - Kelvin , CRI, foot-candles
 - Life expectance of lamps
 - Maintenance costs as part of payback

100 and under

- Case study on how a resident can use under 100 Kwh / month.
 - Encourage the use of CFL's or LED's
 - Use power strips
 - Keep refrigerator full
 - Phantom electrical loads
 - Turn off your lights
 - Ceiling fans

Xcel Rebates

- Residential energy audits 60% rebates
 - Own or rent
 - Converted homes with 4 apartments and a central heating system are eligible.
 - Insulation and air sealing for 4 units or less.
- High efficiency boilers for multi-family assets
- Lighting retrofits for commercial buildings, (sorry no multi-family)

Thank you and Good Luck



Andy Wildenberg www.e3power.net 303-520-5152 andy@e3power.net

"Use what you need not what your can. Save Money! Save Energy!"