



# 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](mailto:andy@e3power.net)

*“Use what you need not what your can. Save Money! Save Energy!”*