

Energy Efficiency in Colorado's Communities

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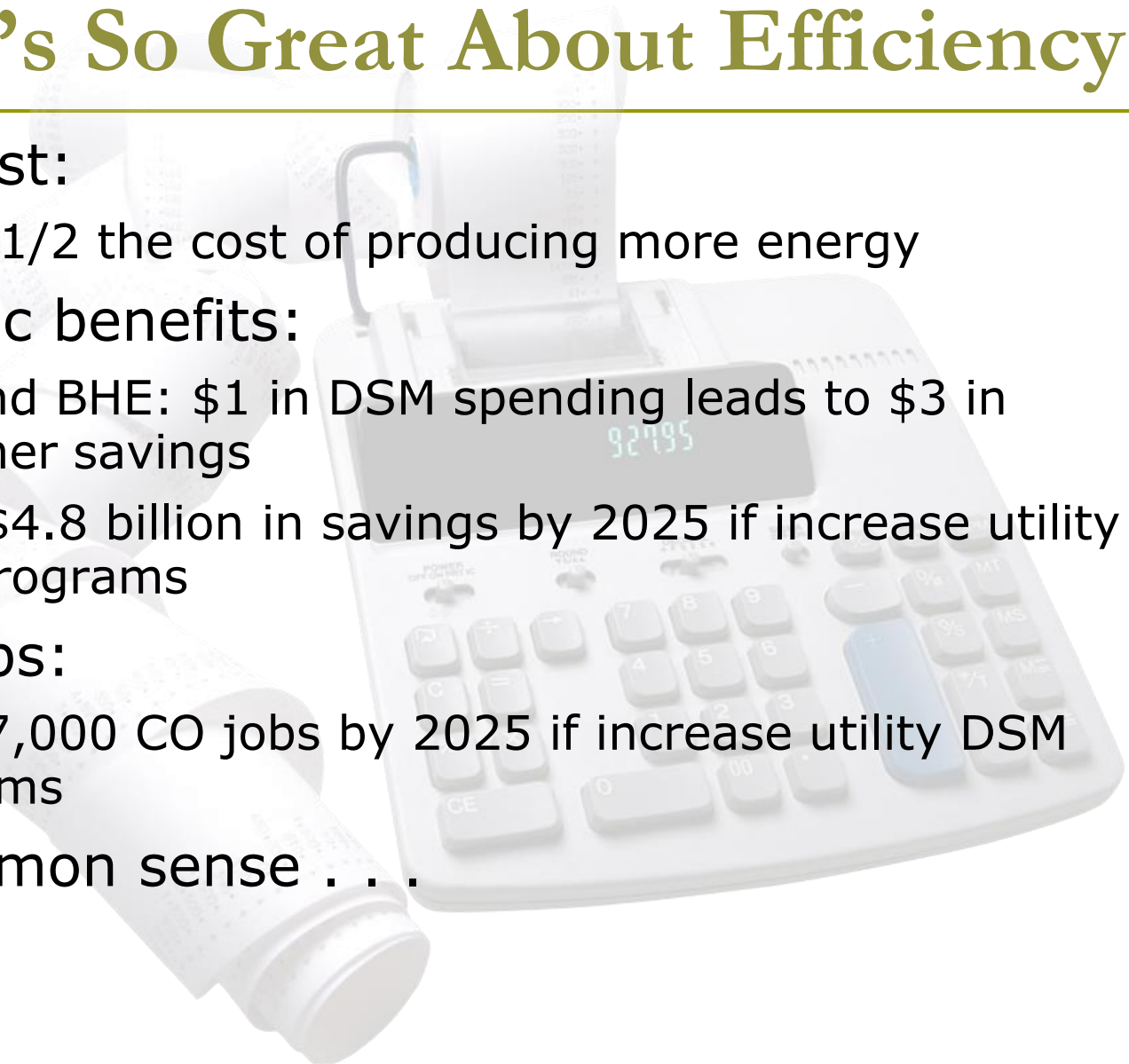
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The Southwest Energy Efficiency Project (SWEET)

- ❑ Non-profit organization with a 13+ year track record
- ❑ Main office located in Boulder, CO
- ❑ Advances energy efficiency efforts in AZ, CO, NM, NV, UT, and WY
- ❑ Works on utility, building efficiency, transportation and industrial policy and programs
- ❑ Works closely with state and local government, energy efficiency businesses, utility companies, and other clean energy advocates

What's So Great About Efficiency?

- ❑ Least cost:
 - 1/3 to 1/2 the cost of producing more energy
- ❑ Economic benefits:
 - Xcel and BHE: \$1 in DSM spending leads to \$3 in customer savings
 - Up to \$4.8 billion in savings by 2025 if increase utility DSM programs
- ❑ Local jobs:
 - Up to 7,000 CO jobs by 2025 if increase utility DSM programs
- ❑ It's common sense . . .



Many Paths to Efficiency



Policies/Programs That Support EE

- A wide array of non-utility policies & programs:
 - State or local building energy codes or retrofit ordinances
 - Tax incentives or financing programs
 - Public sector efficiency programs
 - State-based industrial efficiency and CHP support
 - State appliance efficiency standards
 - Regional market transformation programs



Residential Buildings

- ❑ Building codes
 - Denver adopting 2015 IECC
 - City of Boulder 30% below 2012 IECC
- ❑ Rental license ordinances (e.g., City of Boulder)
- ❑ RECO
- ❑ Density considerations
- ❑ Outreach and mobilization
- ❑ Financing options

Commercial Buildings

- ❑ Building codes
- ❑ Benchmarking ordinances
 - City of Boulder
- ❑ Opt in to C-PACE
- ❑ Campuses and zones
- ❑ Recognition for successes



Public Sector Operations

□ Buildings:

- New construction and renovation standards
- Upgrades
- Benchmarking (and data access/utilization)
- IT
- Culture
- RE

□ Outdoor lighting:

- Streetlights up to 60% of total muni electricity bills
- LEDs can save 40-80% over HPS and Metal Halide
- New opportunities . . .

Electric Vehicles

- ❑ EVs increase electricity use and electric sector emissions, but reduce total CO₂ emissions across sectors
- ❑ Consider:
 - Charging stations
 - Preferred parking
 - Municipal fleets
 - Building codes (e.g., EV ready)

Overview of EPA Proposal

- ❑ EPA has issued a proposed rulemaking, entitled the Clean Power Plan—these regulations fall under the authority of §111(d) of the Clean Air Act
- ❑ The Clean Power Plan is intended to reduce CO₂ emissions from existing power plants (EGUs)
- ❑ EPA has proposed CO₂ reduction targets for the states in the 2020-2030 time period
- ❑ States will prepare state-specific plans to meet the targets once the final Rules are issued

Overview of Targets in Proposal

- ❑ States have option of meeting emissions rate (CO₂/MWh) or mass-based (tons of CO₂) targets
- ❑ State targets are based on existing emissions (2012 baseline) and estimated reductions based on four “building blocks”
 - Increased efficiency of coal-fired power plants
 - Increased utilization of certain gas units
 - Increased utilization of renewable energy
 - Implementation of energy efficiency policies/programs

Overview of Efficiency in Proposal

- Building Block 4 reduces emissions rates, on average nationally, by 13%--with a range of impacts between 4% and 37%
- In Colorado, EE is anticipated to account for a 10% reduction of emissions (all 4 blocks equal 35%)
- Many details related to which savings measures can count, how savings get measured, when savings credits start, etc.

What's At Stake?

- ❑ Potential to achieve ~20% electricity savings by 2030 from EE policies and programs implemented during 2020-2030
- ❑ Saving ~800 TWh/yr in 2030 – equivalent to electricity supply of 300 large power plants
- ❑ Over \$1 trillion in net economic benefits for consumers and businesses
- ❑ Reduction of pollutant emissions and improved public health



Collaboration



- ❑ Public/public partnerships:
 - PACE
 - Grants
 - EPC
- ❑ Private sector partnerships:
 - Chambers of Commerce and similar
 - CGBG
- ❑ Utilities:
 - Advocate and intervene
 - Co-market programs
 - PIE

SWEEP Resources

- ❑ State and Local Engagement
 - Local Government Working Group
 - LED Outdoor Lighting
 - Data Access and Utilization
 - Financing Programs
 - Clean Power Plan
- ❑ Buildings
- ❑ Transportation
- ❑ CHP and Industrial
- ❑ Research and Policy Support
- ❑ Outreach and Communications



SWEEP:

Dedicated to More Efficient Energy Use in the Southwest

Resources available online at:

www.swenergy.org

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CHP TAP Technical Assistance

