



Governor's Energy Office

Ground Source Heat Pump Meeting

April 8th, 2008

Jeff Lyng, Commercial Building and Solar Program Manager

"The Mission of the Governor's Energy Office is to lead Colorado to a New Energy Economy through energy efficiency, renewable and clean energy resources"

The New Energy Economy



A Summary Analysis of Colorado's New Energy Economy Policy

- The Governor and the Legislature partnered to pass 20 energy efficiency and renewable energy bills.
- Implementation of these bills is under way at the state's electric and gas utilities, at the Colorado Public Utilities Commission, and the Governor's Energy Office.





GEO Energy Efficiency and Renewable Energy Programs:

- Commercial & Public Buildings
- Residential Energy
- Income-Based Energy Services
- Solar & Small Wind Programs
- Renewable Energy
- Greening Government
- Electric & Gas Utilities
- Colorado Carbon Fund
- Energy Policy, Legislation, Resources & Funding



COLORADO CLIMATE ACTION PLAN

A STRATEGY TO ADDRESS GLOBAL WARMING

GOVERNOR BILL RITTER, JR.

NOVEMBER 2017

Colorado Climate Action Plan

- 20% Reduction in Greenhouse gas emissions from 2005 baseline by 2020.



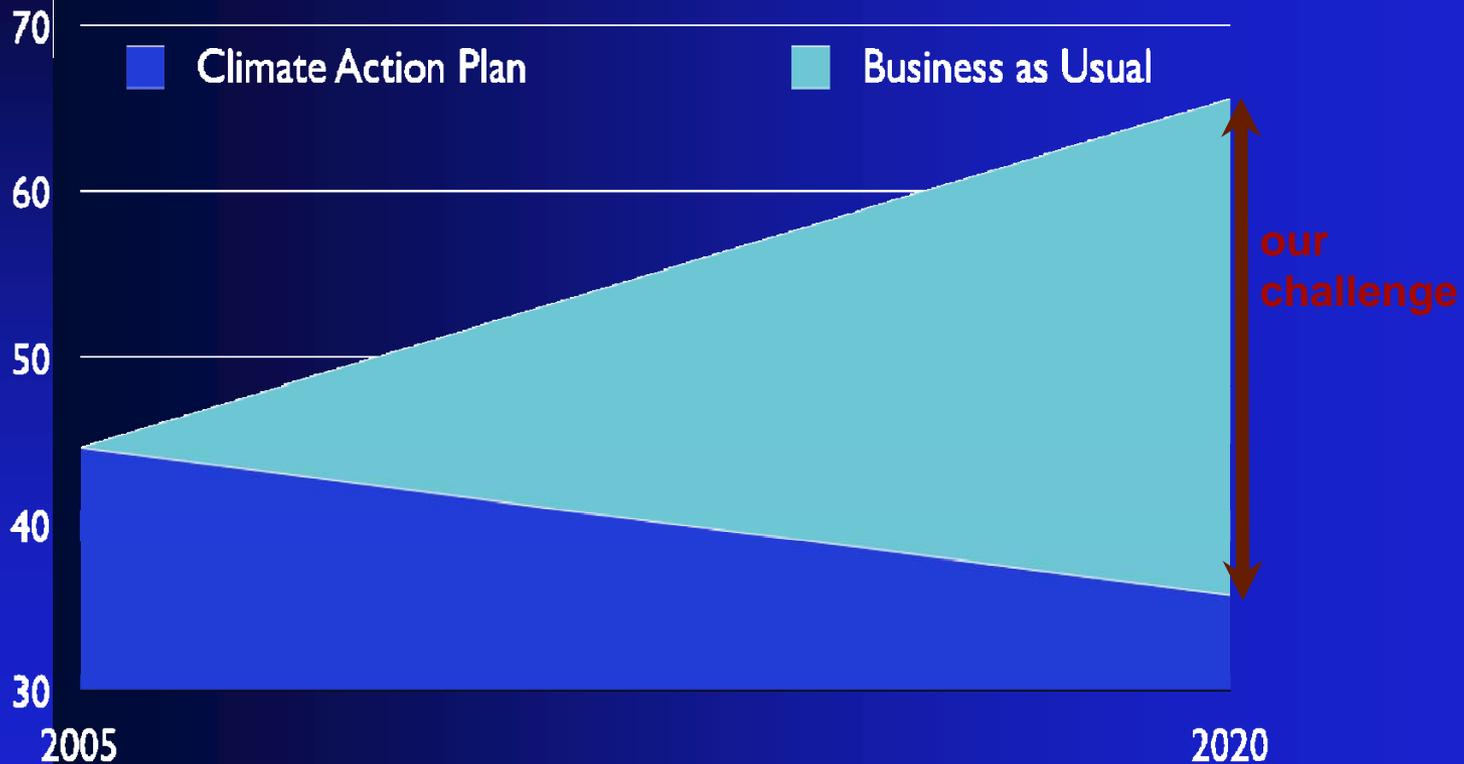


What's the goal?

As Modeled		MMTCO2
2005	48,353 GWh	44.53
2020 Business as Usual	69,008 GWh	63.56
20% below 2005		35.63
Savings needed by 2020		27.94
50% of 2020 Goal		13.97

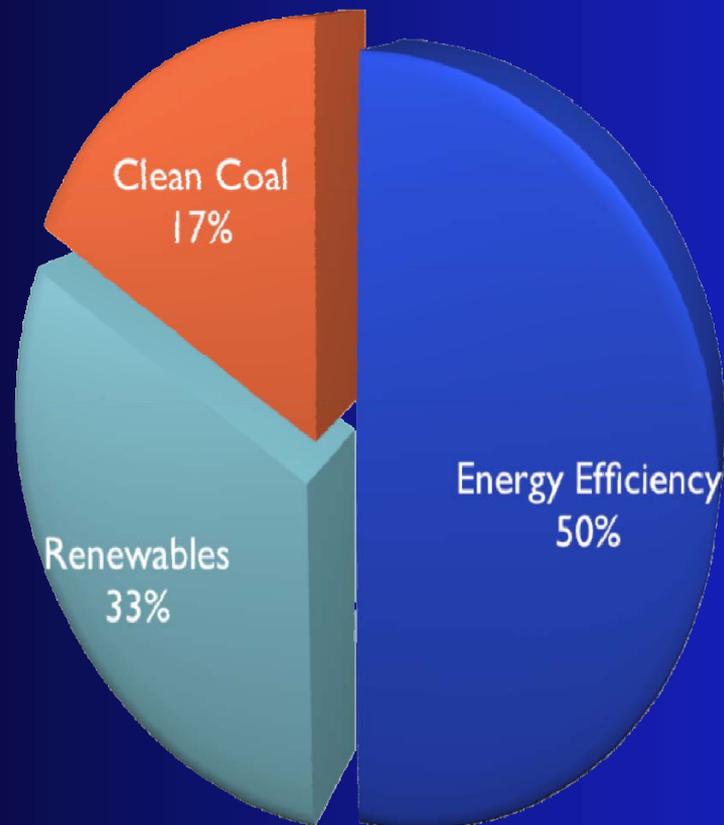


• What's the goal?



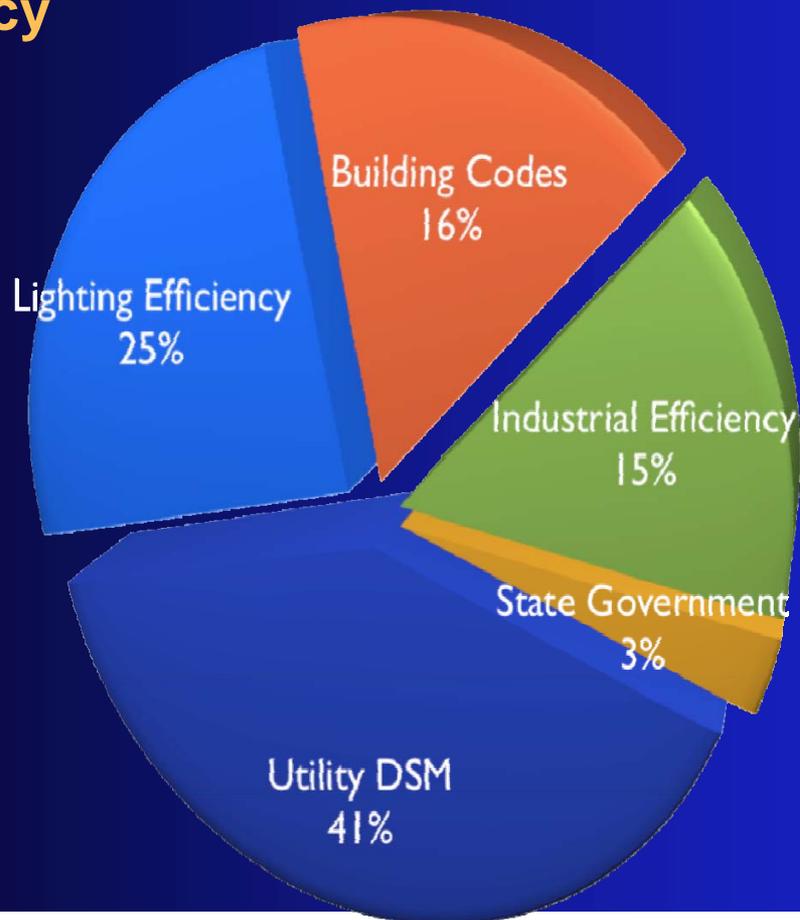


- 20% reduction in CO₂ emissions from the utility sector by 2020





- 50% of utility sector CO₂ reductions will be from efficiency



Greening Government Exec. Order

State Facility Management

- By June 30, 2012
 - ▣ Reduce **energy** consumption in state facilities by 20%
 - ▣ Reduce **water** consumption by 10% from SFY 2005-06 baseline.
 - ▣ 5,600 state buildings
 - 63 million s.f.
 - 517 leased spaces
 - ▣ \$154 million annual utility budget

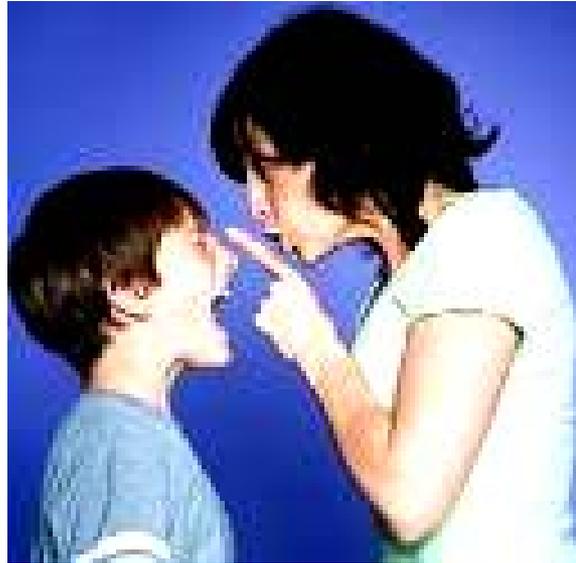


Performance Contracting

- A performance contract is an agreement between the client and an energy service company (ESCO) that allows efficiency upgrades to be paid for with savings achieved through decreased energy consumption and maintenance costs.
- The GEO will work with K-12 schools, state agencies, and municipalities to navigate the performance contracting process.
- To simplify the process and ensure the highest level of quality, the GEO has pre-approved 11 ESCOs to implement performance contracts in Colorado.



Remember what your Mother told you...



“You’ve got to eat your energy efficiency vegetables before you can have your renewable energy dessert.”

Energy Efficiency in K-12 Schools



1. New Schools

- Estimate 10-12 per year in CO

Major *LEED for Schools* push: www.buildgreenschools.org

Blueprint for new schools in CO

- Making the case for energy efficient schools as more productive learning environments

2. Existing Schools

- Utility bills management
- Energy Manager training

3. Emergency Shelters

- Renewable Energy Secure Schools
- Red Cross Emergency Shelters
- FEMA funding



Governor's Energy Office

Please call or email with questions:

Jeff Lyng

Governor's Energy Office

225 East 16th Avenue, Suite 650

Denver, CO 80203

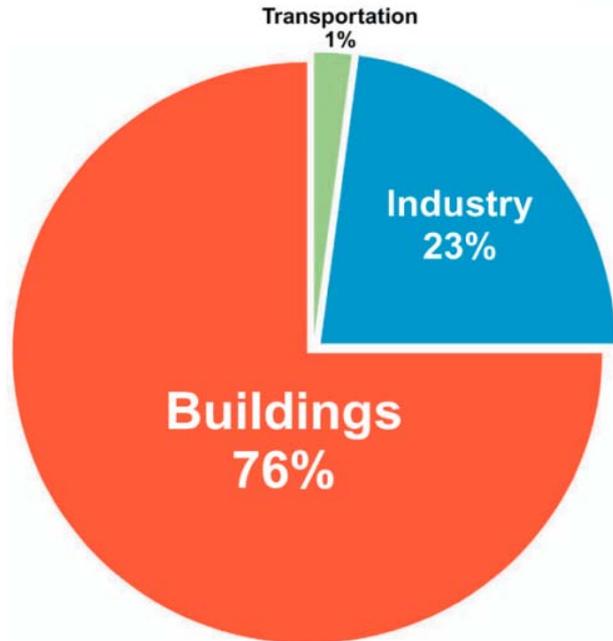
P: (303) 866-2264

F: (303) 866-2930

www.colorado.gov/energy

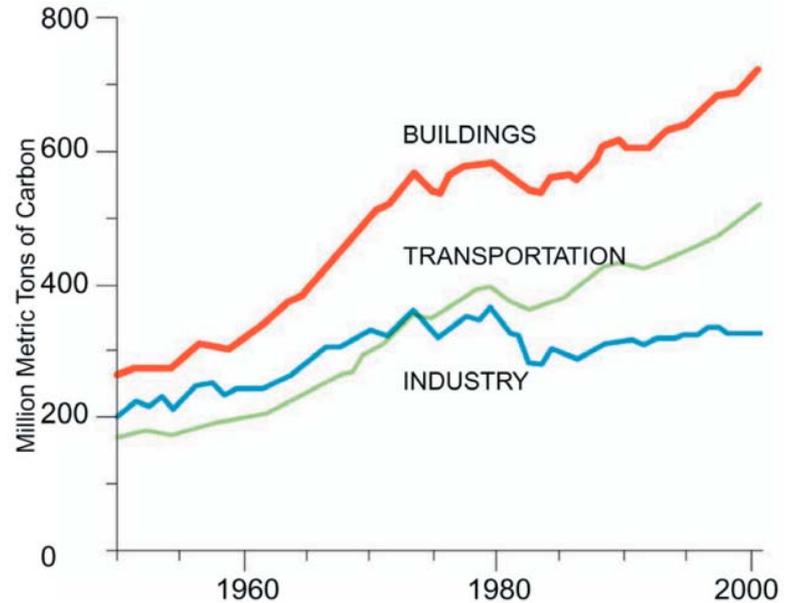
Jeff.lyng@state.co.us

Why Buildings?



U.S. Energy Consumption

76% of all power plant generated electricity is used just to operate buildings.

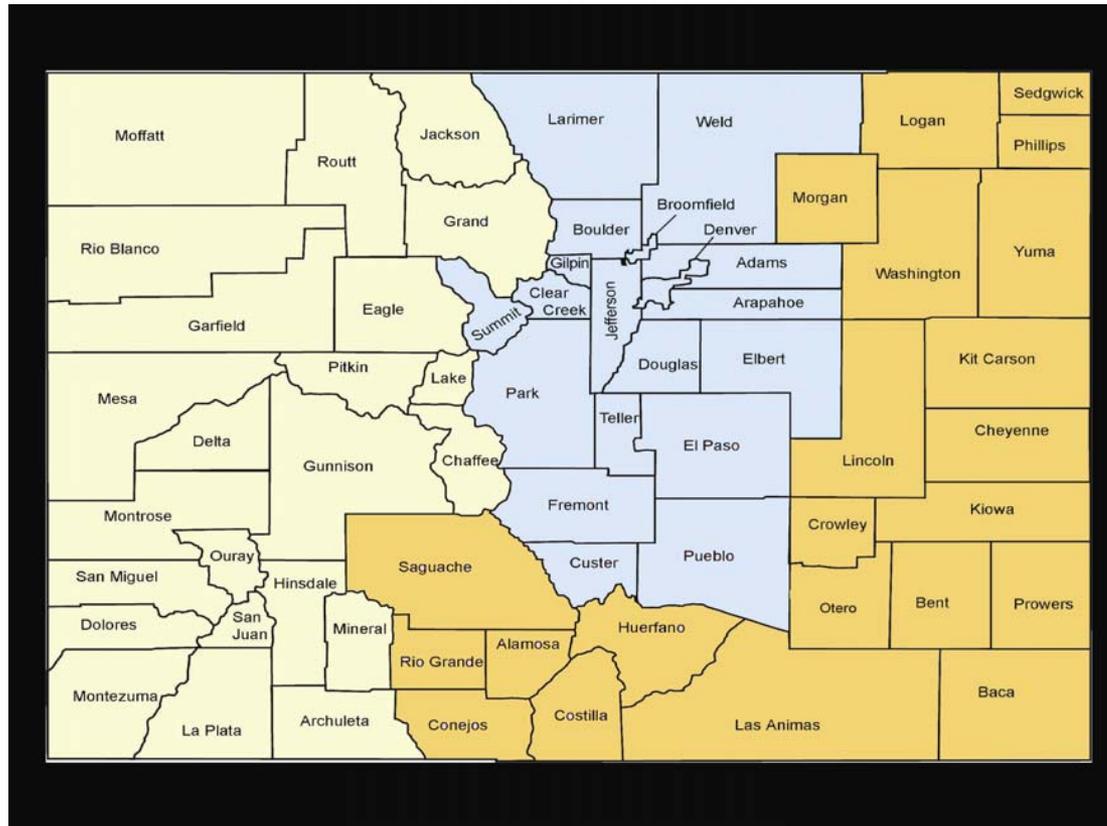


U.S. CO2 EMISSIONS BY SECTOR

Source: U.S. Energy Information Administration statistics

Buildings Account For Half Of All Greenhouse Gas Emissions.

Western, Central & Eastern Regional Representatives for GEO



Western Regional Representative: Joani Matranga, Joani.Matranga@state.co.us

Central Regional Representative: Mona Newton, Mona.Newton@state.co.us

Eastern Regional Representative: Bob Mailander, Robert.Mailander@state.co.us

connecting colorado's

renewable resources to the markets

Report of the
Colorado Senate Bill 07-001
Renewable Resource Generation
Development Area
Task Force

WIND

SOLAR

HYDROELECTRIC

GEOTHERMAL

BIOMASS

ETHANOL

