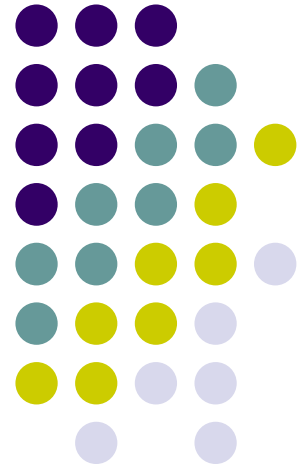


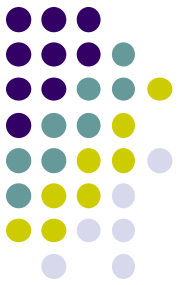
# Residential Rebates and Incentives

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Boulder Green Building Guild  
Conference

July 18, 2009





# NON-XCEL UTILITY REBATES

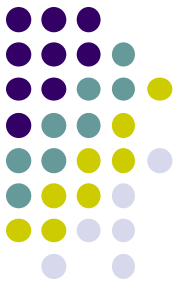
# PVREA Rebates



## Space Heating & Cooling

- \$125/ton for central air source with electric backup
- \$100/unit additional incentive for central air source with integrated controlled ETS back up
- \$275/ton for “dual fuel” central air source with non-electric back up (\$150/ton from Tri-State, \$125/ton from PVREA)
- \$400/ton for central ground or water source (\$150/ton from Tri-State, \$250/ton from PVREA)
- \$85/unit for terminal units
- Controlled Off-Peak - baseboards, radiant, electric thermal storage (ETS), etc.:- \$20/kW for ETS units controlled by timers, etc. (\$16 from Tri-State, \$4 from PVREA) - \$16/kW for controlled thermal slab units (\$12 from Tri-State, \$4 from PVREA)

# PVREA Rebates (continued):



## Water Heating (non-tankless)

- \$70 per unit (\$50 from Tri-State G&T, \$20 from PVREA)
- \$25 additional incentive for units controlled by timers OR 3000 watt, or less, elements - \$25 additional incentive for lifetime tank warranty

## Insulation

- Up to \$300

## Ground Source Heat Pump

- **Super Efficient:** \$120 per unit for direct exchange ground source or air source heat pump (\$100 from Tri-State G&T, \$20 from PVREA) - \$25 additional incentive for lifetime tank warranty

## Appliances

- Full-size refrigerators and freezers \$40, Clothes Washers \$40, Dishwashers \$30



# Longmont Power Rebates



## **Solar PV**

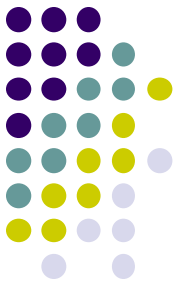
- \$3.00/watt, up to \$9000  
(Limited Availability)

## **Appliances**

- \$50 for ENERGY STAR® dishwashers
- \$50 for ENERGY STAR® clothes washers
- \$50 for ultra-low volume toilets and \$100 for dual-flush toilets.



# United Power Rebates



## **Solar PV:**

\$3.00/watt up to \$9,000

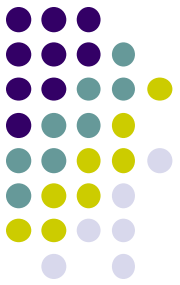
## **Ground source heat pump:**

\$2,500

## **Appliances**

- \$35 Refrigerator/Freeze Recycling Credit
- \*\$50 for ENERGY STAR® clothes washers





# **LOCAL GOVERNMENT/GEO REBATES**

# Local Government/GEO Rebates



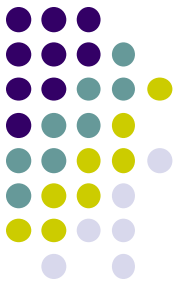
## **Air Sealing & Insulation**

- Air Sealing: 20%, up to \$300
- Attic Insulation: 20%, up to \$300
- Wall Insulation: 20%, up to \$300

## **Solar Thermal**

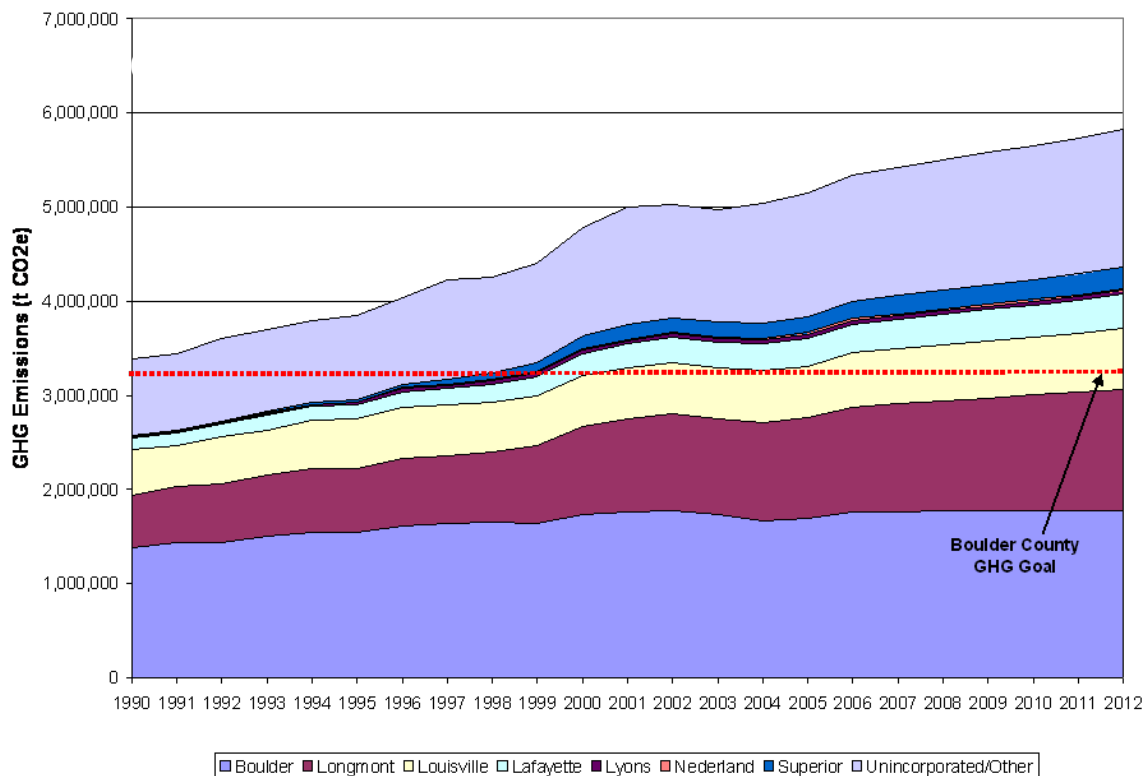
- \$750-\$1500



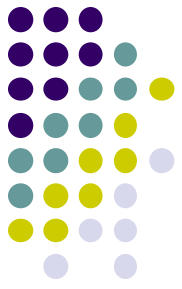


**ClimateSmart**<sup>TM</sup>  
**LOAN PROGRAM**

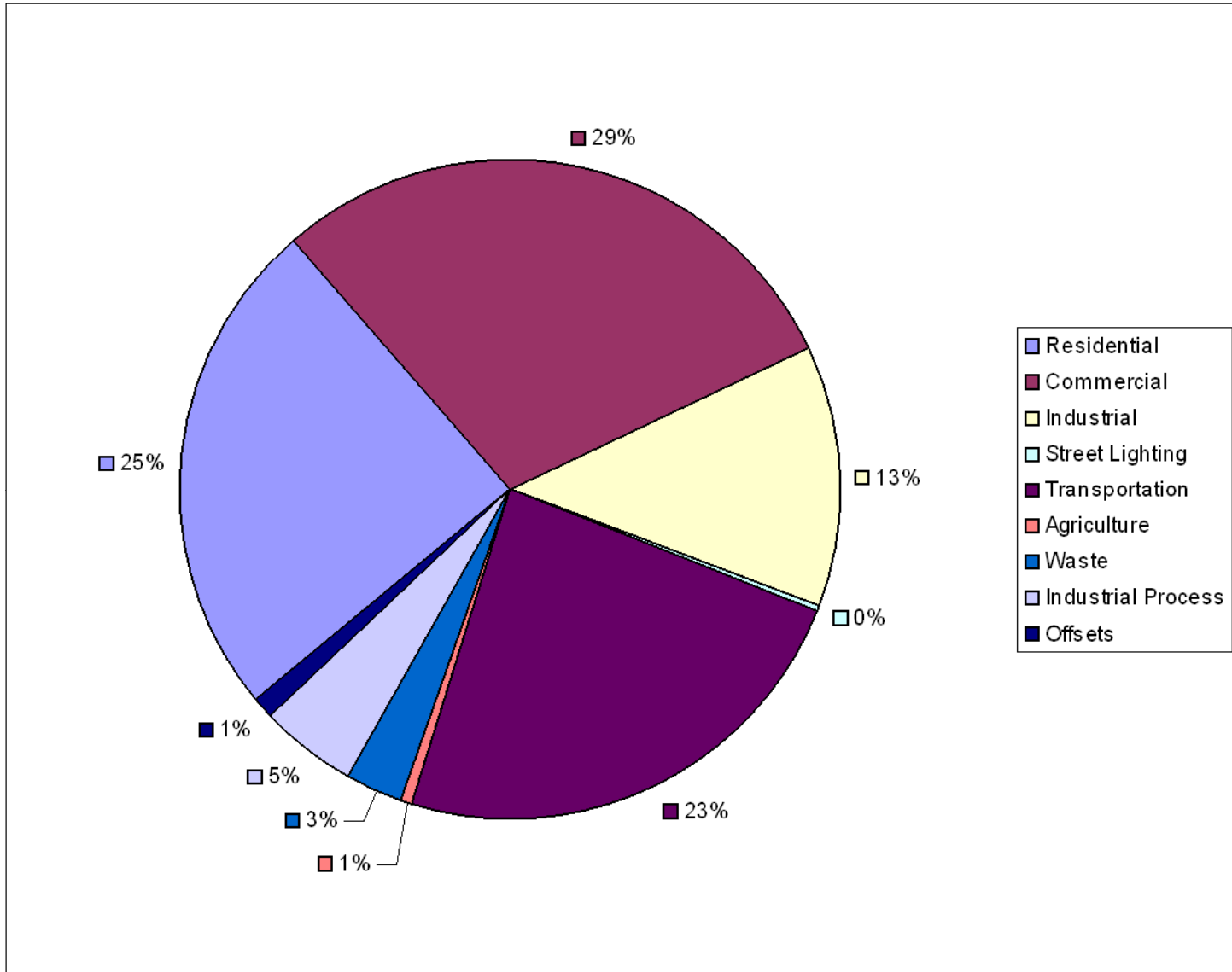
# GHG Inventory Results:



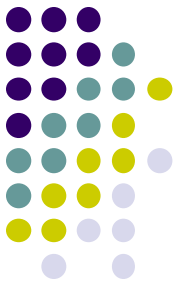
- Large increase in GHG emissions across the county.
- 2012 trajectory = **85% above** 1990 Kyoto target.
- Long term carbon neutrality goal.



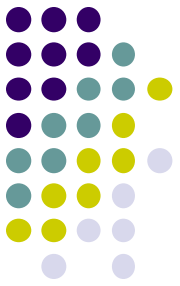
# Boulder County's Emissions by Sector



# Sustainable Energy Plan



- Countywide CAP—adopted by county and 9 of 10 municipalities
- Criteria
  - Emissions reductions potential
  - Cost effectiveness
  - Equitable distribution across the main GHG sectors
  - Social equity – distribution of cost and benefits
  - Persistence
- Strategies include
  - Voluntary and support actions – public education/awareness
  - Statewide action
  - Local regulatory programs



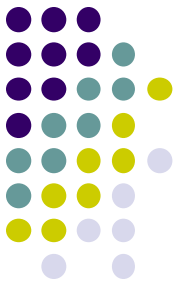
# Program Basics



# Program Purpose

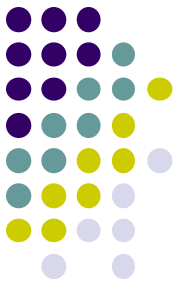
- To help residential and commercial property owners reduce their environmental impact and likely save money by providing full financing for energy efficiency improvements and installation of renewable energy technologies.
- Key strategy in Sustainable Energy Plan
- Authority: HB 08-1350 and County Ballot Measure 1A

# Program Basics



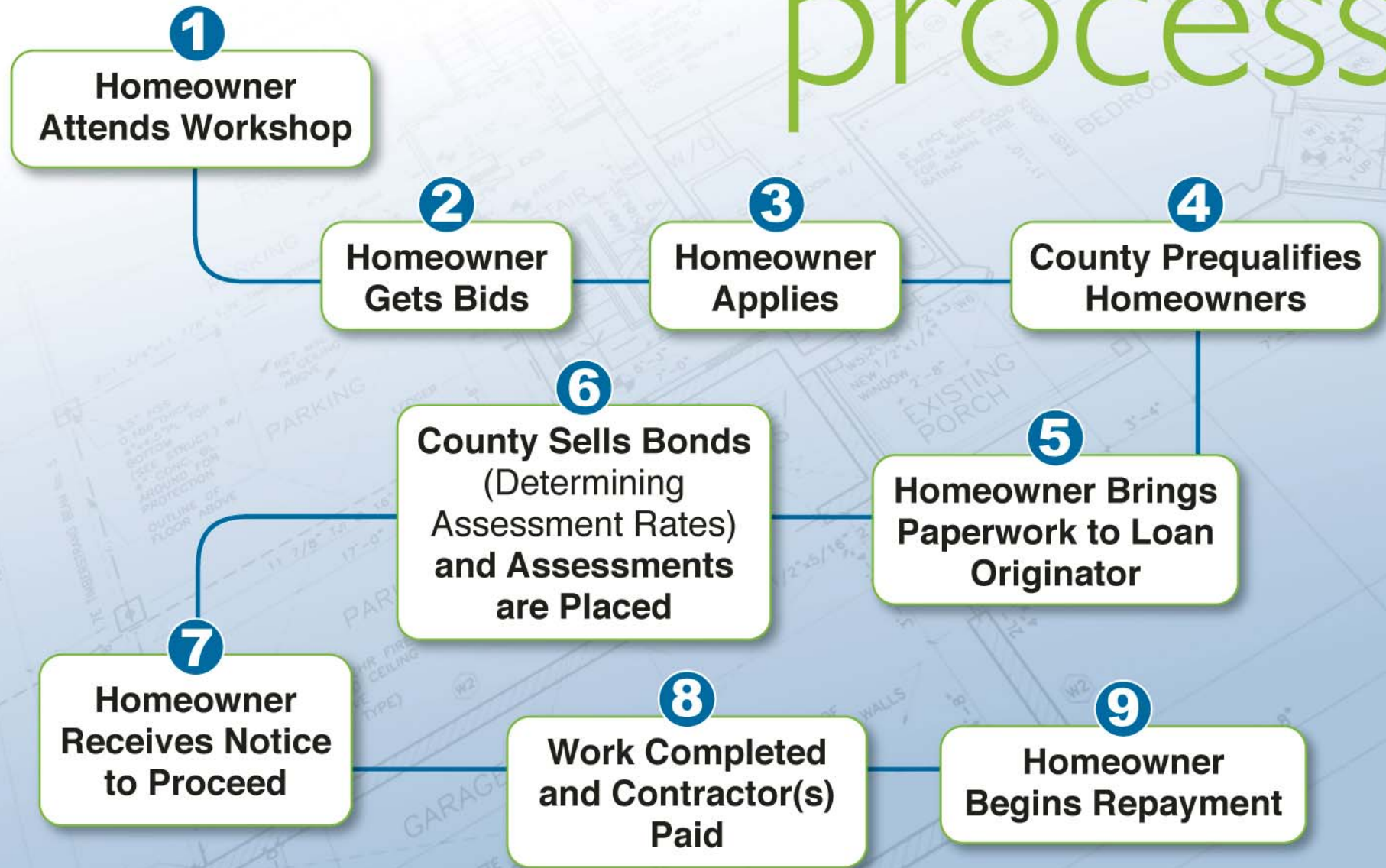
- Energy efficiency and renewable energy measures
- Special assessment placed on property—easy payment via property tax statement – repayment responsibility remains with the benefitted property
- Countywide pool of funds obtained through sale of bonds
- 15 year term
- Up to the full upfront cost of improvements is loaned
- Property owners opt in (minimized general fund impact)
- Complements rebate and incentive programs
- Property owner workshops and contractor briefings
- Utility bill release and program tracking

# County Level Administration



- Allows us to generate enough in loans to be cost effective (relatively small population county)
- Three elected offices: BOCC, Assessor, and Treasurer
- Opt in by municipalities
- Centralized staffing and messaging
- 6 electricity providers, 1 gas provider, and 11 building divisions (10 municipal and 1 county)

# ClimateSmart loan program application & financing process

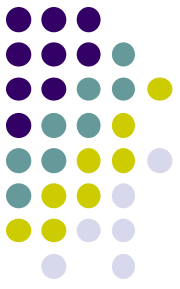




# Eligible Measures

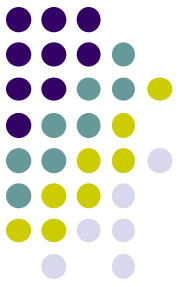
- Fixtures to property
- 40 measures allowed to meet different needs and desires
- Useful life must average 15 years or more under normal conditions (by traunch, not property)
- Minimum standards (on eligible measures list)
  - Attic example: upgrade to R-38 is the minimum value we will cover--R-50 is ok as well, but R-24 is not
  - Some items must be part of a package or may only be replacements

# Eligible Measures: Energy Efficiency

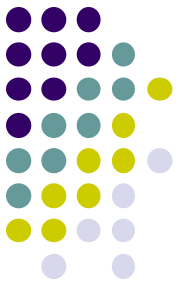


- Air Sealing and Ventilation
- Insulation
- Space Heating and Cooling
- Water Heating
- Lighting
- Daylighting
- Windows, Doors, and Skylights
- Reflective Roof
- Pool equipment and landscaping (open only)

# Eligible Measures: Renewable Energy



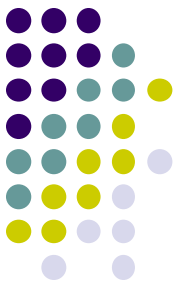
- Solar Hot Water
- Solar Electric (PV)
- Small Wind
- Wood or Pellet Stoves



# Residential Loan Sizes

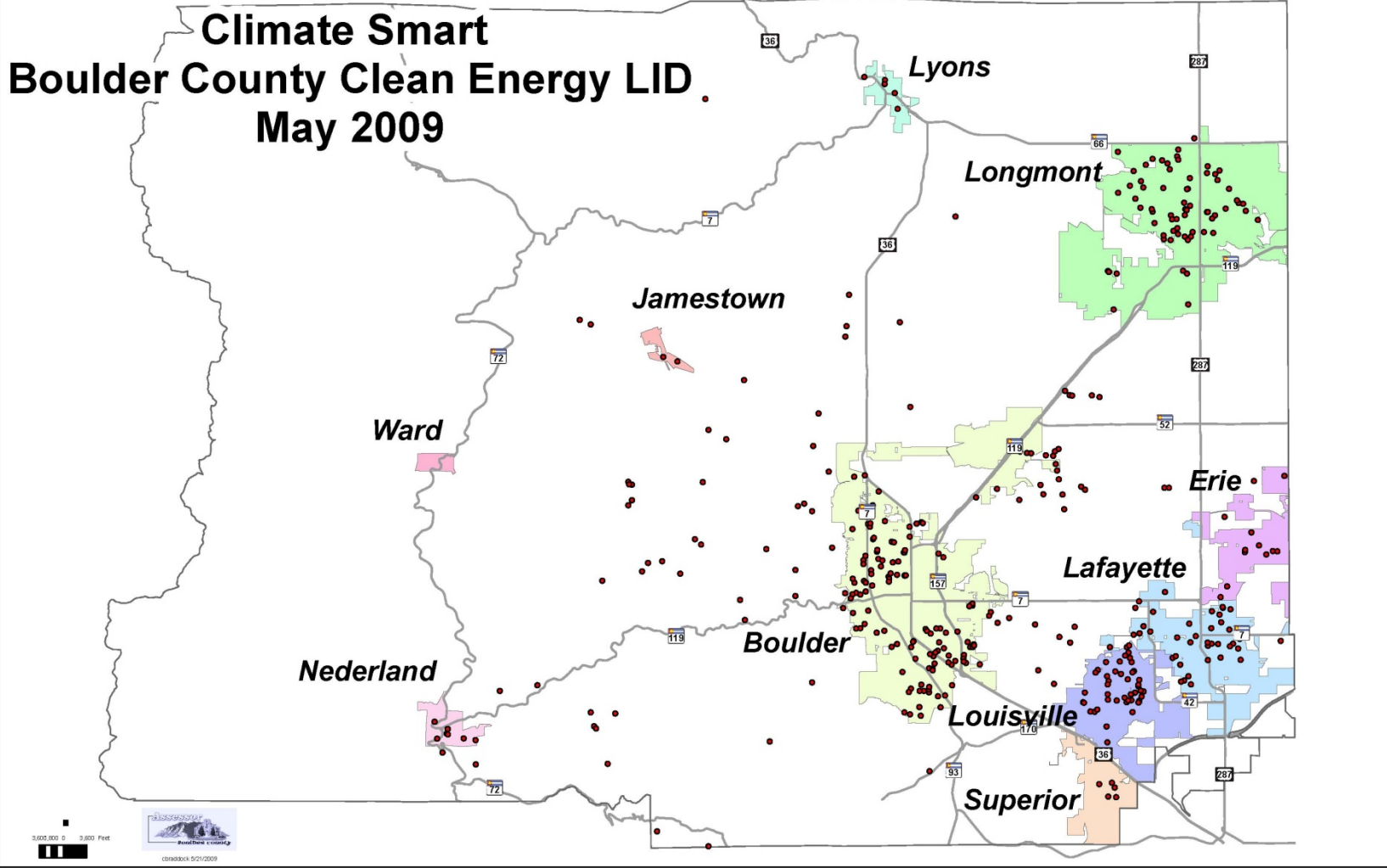
- Minimum: \$3,000 per home
- Maximum:
  - Open Loans (funded by taxable bonds): 20% of statutory actual value of property or \$50,000, whichever is less
  - Income Qualified Loans (funded by tax-exempt bonds): \$15,000, as per federal law
  - Income Qualified Loans may be combined with Open Loans up to the Open Loan maximum

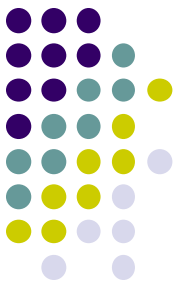
# Loan Types and Assessment Rates



- **Open Loans** – can be applied to primary or rental properties (*funded by taxable bonds*)
- **Income Qualified Loans** – lower interest  
– primary residences only (*funded by tax-exempt bonds*)

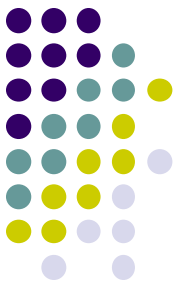
Term	Open (taxable)	Income Qualified (tax-exempt)
15 year	6.68%	5.2%





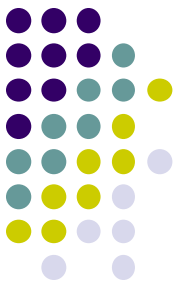
# Program Capacity

- \$40 million already approved by voters through Ballot Measure 1A
- The County has apportioned \$28 million for residential properties and \$12 million for commercial properties
- Round One:
  - About 400 properties
  - \$6.6+ million
  - May 20 bond sale (assessment rates of 5.2% and 6.68%)



# Round Two and Beyond

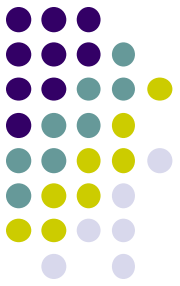
- Round two of residential will take place this fall
  - Workshops: July 28-Sept 1
  - Application period closes Sept 7
  - Origination Sept 11-21
- Stimulus funds were under consideration for marketing and workshops, but are insufficient for meaningful impact on rates
- Second ballot measure under consideration



# Lessons Learned

- Lack of ability to guarantee a rate (or exact amount of fees) in advance makes borrowers uneasy
- New types of programs require significant amount of contact with participants and staff time
- Can impact local companies between program announcement and loan approval
- Can generate interest in EE measures, harder to manage than RE
- Program creates a ripple effect
- Local economic stimulus
- Need to keep working at the state and federal levels

# Contact Information



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303.441.3517

