2015 GHG Reduction Goals Update 1/10/2017 PDC Taud Hoopingarner Operations Management Director

Background

- September 2009 Energy Efficiency and Greenhouse Gas Emissions Report
 - Eight strategies identified to achieve results
- October 20, 2009 County Board Goal Established (Res. #09-526):
 - Reduce County operational GHG Emissions 15 percent by 2015
 - Reduction measured against 2005 baseline data

GHG Reduction Strategies

Increase employee recycling by 15%

Increase Annual Fuel Efficiency by 10% per Vehicle Class

Promote employee transit use

Harvest 40-acres of Biomass production for cellulosic biofuel

Implement an Environmentally Preferred Purchasing Policy

Implement Energy Efficiency Conservation Block Grant (EECBG) Projects

Improve total building energy efficiency by 10% (non-parks buildings)

Build a 1 megawatt wind turbine

10 Year County GHG Reduction

	2005 CO ₂	2015 CO ₂	Percent
	Emissions	Emissions	Reducti
	(metric	(metric	on
	tons)	tons)	
Vehicles	2,687	1,770	34.1%
Buildings	12,525	11,617	7.3%
TOTALS	15,212	13,387	12.0%

Other Factors impacting results:

- Building square feet increased 10.8% over past 10 years
- Added emissions reduction equipment
- Added electric and hybrid vehicles
- County has added 160Kw of solar panels
- County is purchasing electricity from Solar Gardens
- Increased source reduction, compostable utensils and paper

GHG Reduction Strategy Results

- 19% increase in employee recycling
- Up to 40.5 % increase in annual vehicle fuel efficiency
- Purchasing policy improvements
- Five EECBG projects completed
- 16% increase in facilities energy efficiency (Kbtu/sf)
- No action on employee transit, biomass production, or 1 MW wind turbine

Future Opportunities for GHG Reduction

- Electrification of County Fleet
- Byllesby Dam Hydro production/wheeling
- Expansion of EV Charging Stations
- Expansion of Bio-fuels usage
- Solar, Wind
- Geothermal
- Microturbines, Off-peak Thermal storage
- LED lighting
- Low Impact Design (LID) standards
- MetroPass

Future Energy Reduction/GHG Goals

- Does the County Board desire to continue efforts to reduce GHG through development of new strategies?
- If yes, staff will establish internal workgroup to propose new goals, strategies, and measures for County Board consideration and direction.