



Fowler's Green Initiative

the past, present,
and future of
sustainability

Fowler, Colorado

- Located in Otero county.
- 33 miles east of Pueblo, Colorado.
- 75 miles southeast of Colorado Springs, Colorado.
- 1,206 residents and growing.
- 4,340 feet above sea level.

Where we started...

- **Looking at the past.**
 - Thriving community 1900 – 1950s
- **Analyzing the present. (three years past)**
 - Stagnant with many assets.
- **Planning the future.**
 - Comprehensive land use plan. (Completed 01/09)
 - Sustainability with renewable energy?
 - Wind
 - Solar
 - Geo – Exchange (Ground Source Heat Pumps)
 - Biomass
 - Other

Where we want to go...

Stabilize/Reduce/Eliminate Utility Rates

- **Park school renovation. (constructed in 1905)**
 - Why not utilize current technology?
 - Why not solar? – Installation October 2010
 - Geo Exchange – Installation in 2011
- **Are there other assets?**
 - Feedlots!
 - 2,400 tons of manure per day at a minimum.
 - Potential to produce 1-4MW per feedlot.
 - Waste water lagoons – algae production for biomass



Work History

- Developing working relationships
- Green alternatives:
 - Discussions with national labs, equipment developers, Universities, community, *school district*, utility providers, local Gov't, State Gov't, Federal Gov't and private developers
 - Concept to implementation
- Assessment of energy needs for Fowler and
 - Region
 - County
 - School District
 - Residential Needs
 - Business Needs

Progress to Date (10/10)

- Financing groups established
- Research/Business Plan/Proforma complete
- Public/private partnerships in place
- Bio-solids marketing companies identified
- Local/Regional feedlots committed
- Solar Garden – fall 2011
- Anemometer Data
 - 24 months of data
- Conservation
 - Community Education



The Future of Fowler

- Feedlot project – Beta Site 2011
- GeoExchange power for historic building – 2011
- Solar-powered LED lighting in Park - complete
- LED Street Lights – Installation October 2011
Prototype installed – October 2010
- Solar-powered Town Properties- seven sites
October 2011
- Green House Gas emissions inventory - complete
- Comprehensive Land Use Plan Implementation –
Complete
- Economic Development - ongoing

The Future of Fowler (cont.)

- **Waterless solar powered toilets in park - complete**
- **Solar installation at School District – July 2011**
- **Recycling of residential waste – in process**
- **Conservation through education - ongoing**
- **Reduced/stable utility costs for entire community – 1.6 MW Solar Garden – August 2011**
- **Produce algae in lagoons for harvesting of biomass and meeting stricter water quality requirements – summer 2011**

Value to the Community

- **Named by the Governor as one of four communities to participate in the “Sustainable Main Street Initiative”
04/19/10**

Thank you, questions?

Fowler, Colorado

A great place to grow.

