

Heating the Midwest

Kevin Vesperman

Administrator Division of Energy Services

Third Annual Conference April 30th, 2014



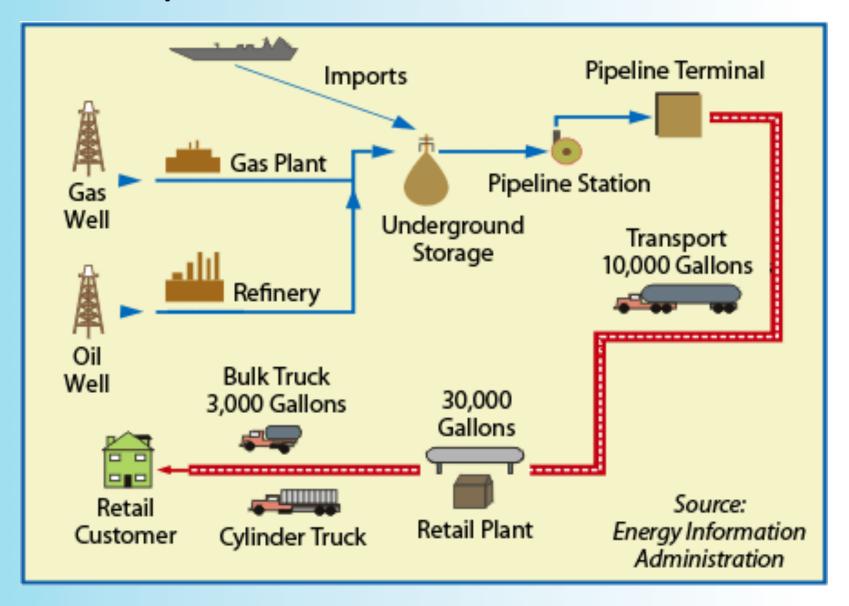
Opening Remarks

- Vision 2025
 - 3% to 10% biomass thermal
 - Replace fuel oil-propane, and electric
- Jobs
- Economy
- Energy Supply
- Environment

Events Since Last Year

- Domtar Commercial Operation
 - 50 MW electric cogeneration
 - Rothschild, WI
- Other Success Stories
- Propane Shortage
- EPA Proposed Rulemaking

Propane: From Well to Customer



Sources and Storage

The United States imports;

- about 10% of the propane
- 70% of that coming from Canada via pipeline and rail.
- The remaining 30% of imported propane via ocean transport.

North American propane is stored in huge salt caverns.

- Fort Saskatchewan, Alberta;
- Mont Belvieu, Texas and
- Conway, Kansas.
- When the propane is needed, much of it is shipped by pipelines to other areas of the United States.

Propane Pipelines

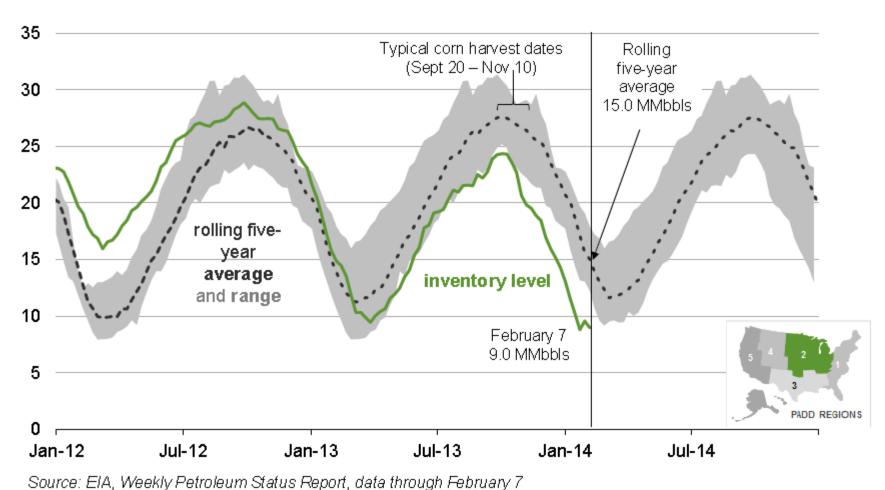


What Happened?

- Bumper corn crop, harvested late and wet
 - Impact: record use of propane in November drawing down inventories
- Cochin pipeline shuts down for 6 weeks in the fall
 - Impact: supply in Minnesota and Iowa eliminated
 - Cochin provides 40% of propane to Minnesota
- Record cold and snowstorms in Upper Midwest
 - Higher use of propane
 - Truck and rail delivery is more difficult
- Conway prices lower that Mt. Belvieu
 - Impact: Pipelines to Texas are running full reducing Conway inventory

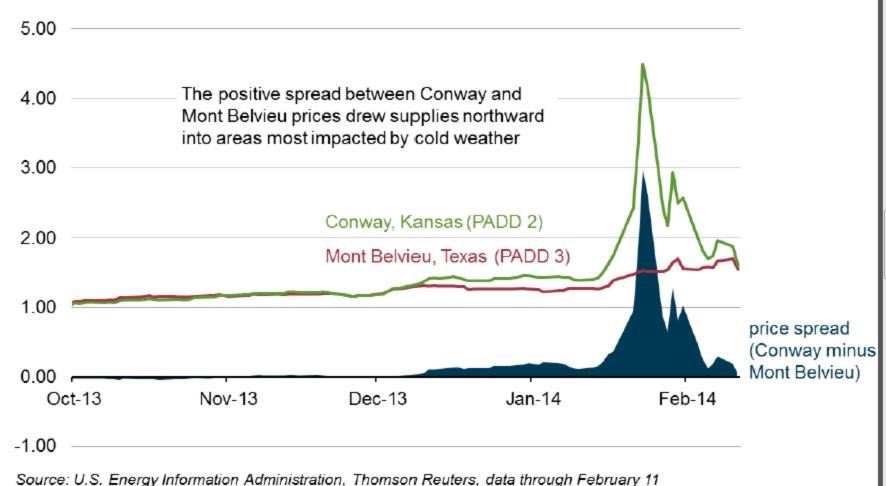
PADD 2 (Midwest) propane inventories have trended lower on strong crop drying and extremely cold temperatures

PADD 2 propane inventories million barrels

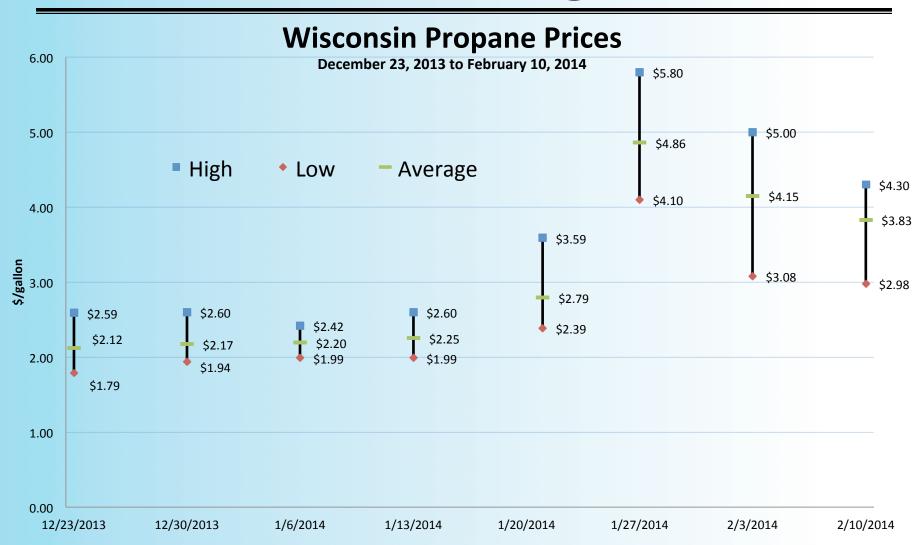


Conway (KS) price premium over Mt. Belvieu (TX) grew rapidly in late January, but has since narrowed

propane and propylene spot prices dollars per gallon

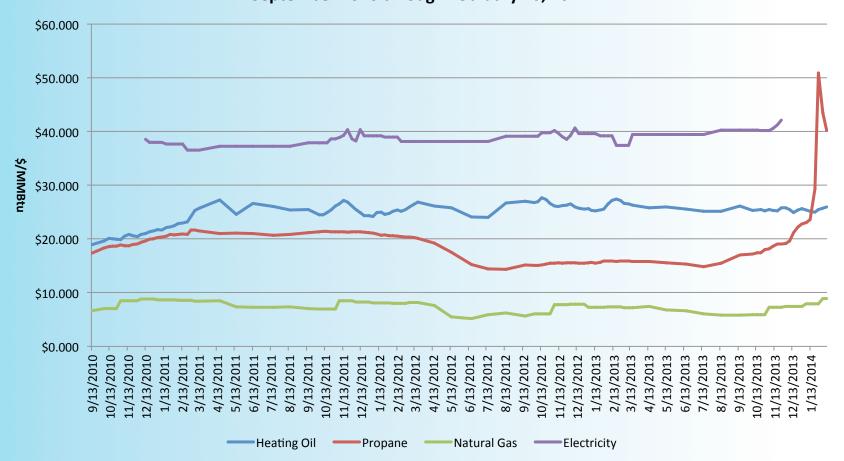


Residential Energy Prices

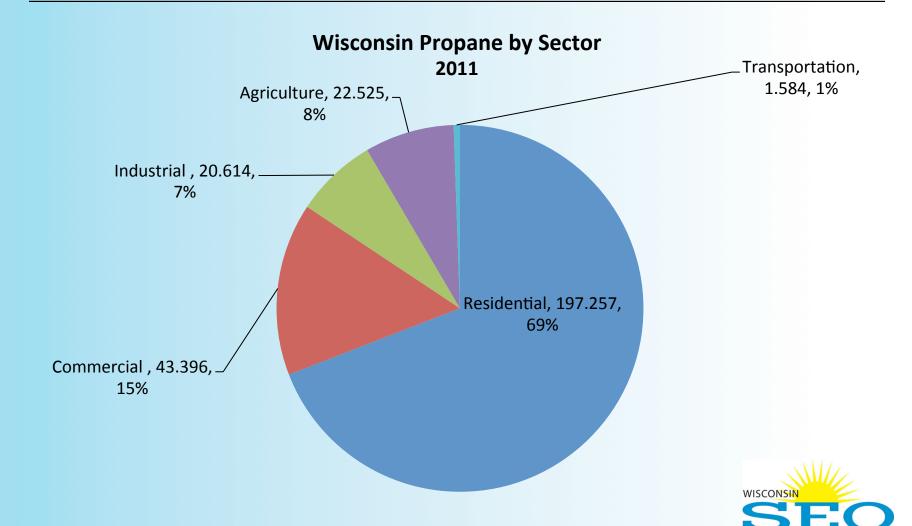


Residential Energy Prices

Residential Energy Prices September 2010 through February 10, 2014



Who Uses Propane?



STATE ENERGY OFFICE

State Of Wisconsin

- Funded biomass boilers:
 - Appleton Coated Papers
 - Gunderson Lutheran
- Propane replacement projects:
 - Three projects
 - Pellet fired systems
- Low income pellet stove demonstration