Missouri’s Rural Energy Opportunities and Challenges

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About Craig and DE

• Became director in April; rural and legislative background
• DE transferred to MO Dept. of Natural Resources
• Concentration on affordable, reliable, made-in-MO resources to help lower our carbon footprint in a common-sense, feasible way
MO Energy and Rural Areas

- 97.4% of land area is rural
- 30.6% of population lives in rural areas
- Agriculture contributes about $88.4 billion to state economy
- Little coal, oil, or natural gas produced – mostly imported from out-of-state
- Have other rich resources gaining ground (e.g., wind and solar)
- “All of the above” state for electricity generation resources

2018 Generation
(Source: EIA)
Ethanol and Biodiesel in MO

• Ethanol
  – Significant portion of state corn crop used
  – 276.0 million gal/yr nameplate capacity (13th in nation)
  – Widely available at gas stations

• Biodiesel
  – 8-10 plants; about 252 million gal/yr annual production capacity (3rd in nation)
  – 19 distributors
  – 15 retailers with B20+ blends
Biogas

• Smithfield and Roeslein Alternative Energy
  – Albany, MO farm sending biogas to pipeline since 2016
  – RNG partnership under “Monarch Energy”
  – Aim for all finishing farms to be able to produce RNG (1.3 million dekatherms/year)

• Gess International
  – 500 billion Btu biogas project in Chariton County
  – Developing 550 billion Btu of biogas plants in
Other MO Bioenergy

• Wood Energy Tax Credit
• Co-firing potential
Opportunities and Challenges

• Ethanol market troubled
• Biodiesel has not caught on, but good option
• Interest in expanding biogas production
• Potential for use of bioenergy with CHP
  – Significant progress in supporting CHP in MO
  – Martin energy
• Rural solar applications