

Energy efficiency of buildings as a competitive factor



*2018 EIA Energy Conference
June 4, 2018 / Washington DC*

*Erin Boedecker, Team Leader
Buildings Energy Consumption & Efficiency Analysis*

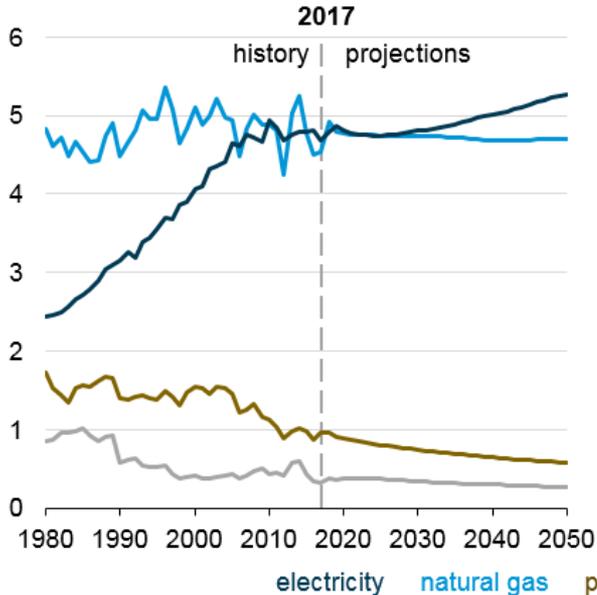
What is energy efficiency?

- Energy efficiency
 - service provided per unit of energy consumption (e.g., MPG or lumens per watt)
 - using technology that requires less energy to perform the same function or service
- Energy conservation
 - behavior that results in the use of less energy
- Energy intensity
 - energy consumption per unit (household, unit of floorspace, GDP, etc.)
 - improvements can include efficiency and conservation as well as structural changes

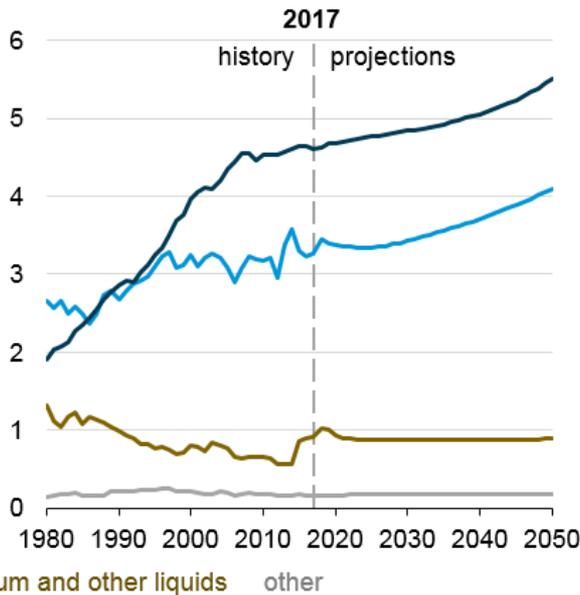
Source: www.eia.gov/energyexplained/ and www.eia.gov/tools/glossary

Energy efficiency plays an important role in EIA estimates and projections of energy use in buildings

Residential sector energy consumption
quadrillion British thermal units



Commercial sector energy consumption
quadrillion British thermal units



- Residential Energy Consumption Survey
- Commercial Buildings Energy Consumption Survey
- *Annual Energy Outlook* long-term energy demand projections

Source: U.S. EIA Annual Energy Outlook 2018, <https://www.eia.gov/outlooks/aeo/pdf/AEO2018.pdf>

Different approaches to achieving energy efficiency goals

- 3 speaker panel
 - ~15 minutes for each speaker; time for questions and discussion at the end of the session
- Michael Barancewicz, Loudoun County Public Schools
 - effective energy efficiency strategies for a large school system
- Duane Desiderio, The Real Estate Roundtable
 - what drives energy efficiency investment in U.S. commercial real estate
- Karen Galindo-White, Energy Systems Group
 - making room for energy efficiency in public buildings