

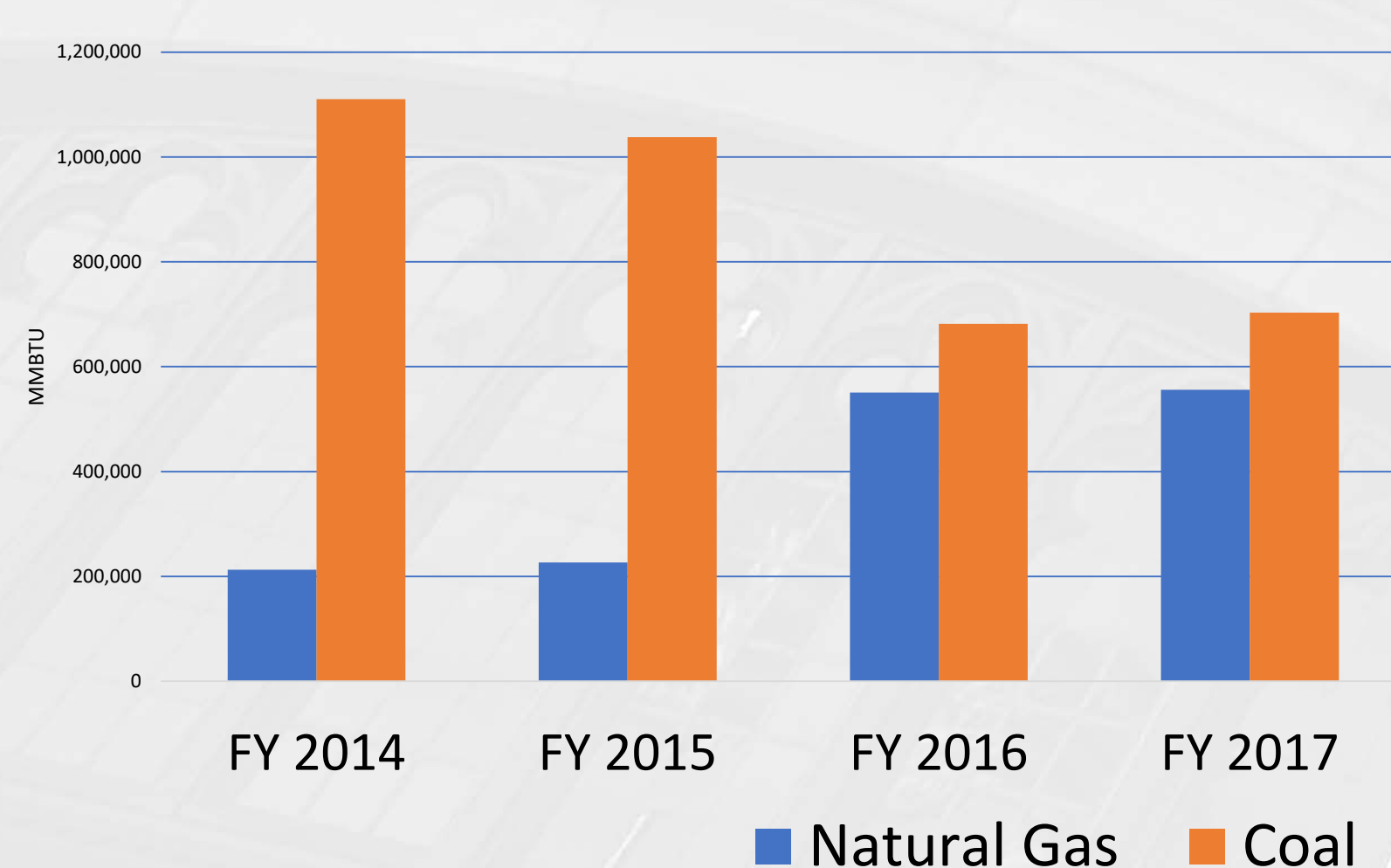
## Opportunity Statement

- ▶ Nationwide reduction of natural gas cost due to fracking provides opportunity for increased gas utilization and transitioning of on-campus power plant from coal to natural gas
- ▶ Energy intensive research and academic facilities provide opportunity for energy savings and utility cost reduction

## Changes Made

- ▶ A new high-pressure gas line has been established to enable transition of the university from coal to natural gas
- ▶ Performance of campus-wide energy audits and energy benchmarking
- ▶ Establishment of a 5-Year Energy Action Plan with focus on 50 most energy intensive buildings on campus
- ▶ Implementation of energy conservation projects aligning with the established 5-Year Energy Action Plan

POWER PLANT FUEL CONSUMPTION



# Energy Cost and Carbon Footprint Reduction Efforts at Virginia Tech

The Facilities Department at Virginia Tech is committed to conducting operations in the most economic and environmentally friendly way



## Program Goals

1. Monetary savings by reducing energy use
2. Lower greenhouse gas emissions
3. Increase efficiency of utilities around campus

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## Next Steps & Results

- ▶ \$50,000 estimated annual savings on coal conveying equipment replacement – March 2017
- ▶ 36% reduction in coal use from FY 2014 to FY 2017 – March 2017
- ▶ Annual energy savings of \$455,000 after phase I of energy action plan. – July 2016
- ▶ Annual energy savings of \$732,000 after phase II of energy action plan. – July 2017

## Future Development

- ▶ The Virginia Tech Facilities Department continues to find and pursue new ways of lowering the greenhouse gas emission and energy cost on campus
- ▶ Phase III of the energy action plan is currently underway
- ▶ Continuing to pursue LEED certified buildings

GHG EMISSIONS BREAKOUT FY 2017

