

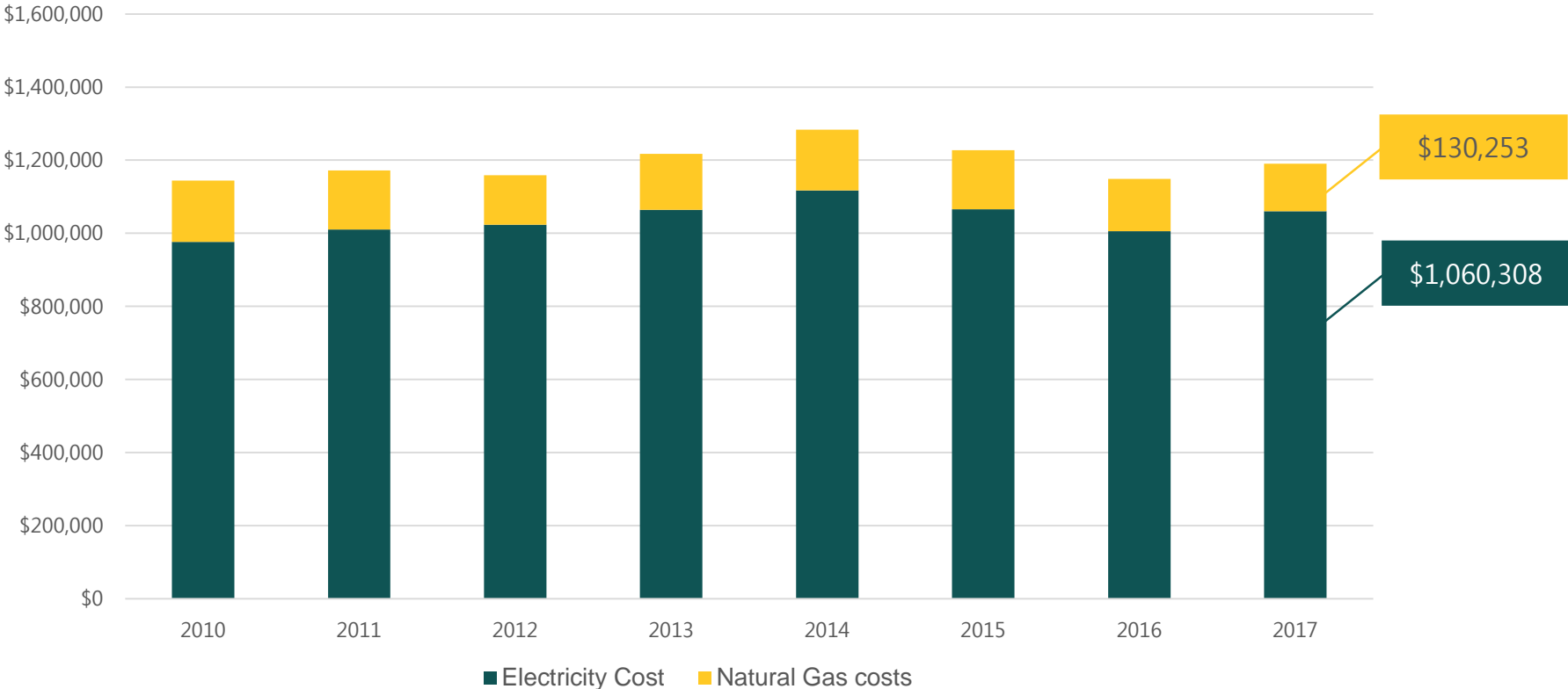
# Emissions & Energy: City of Fayetteville's 2017 Report

City Council Agenda Session  
March 28, 2018

# 2017 Utility Summary

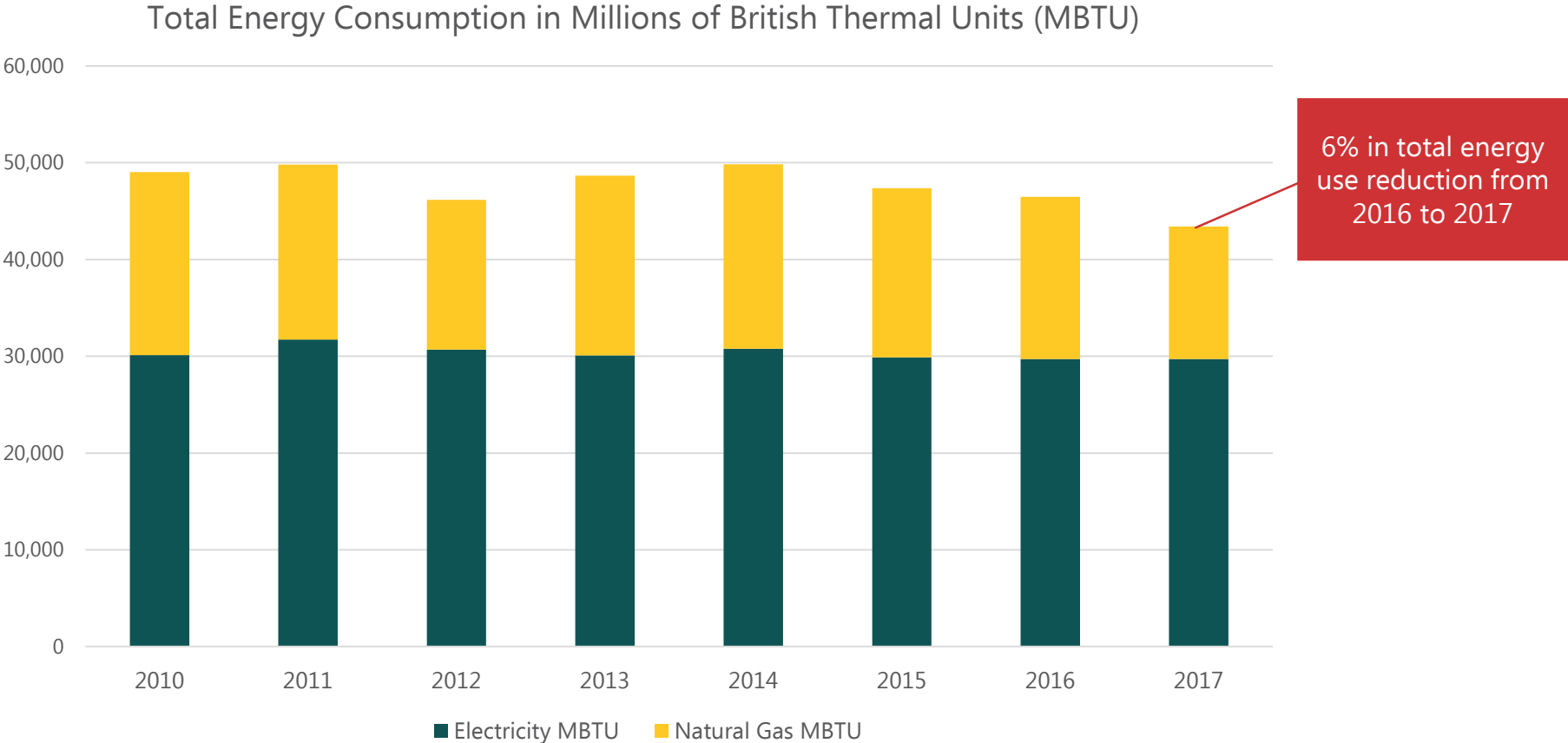
- In 2017, the City of Fayetteville spent \$1.19 million on natural gas and electricity
- Increase of \$55,000 over 2016, due primarily to electricity rate increase (from \$.115 to \$.122 per kwh)

Total Utility Cost



# Annual Utility Summary

- In 2017, the City of Fayetteville consumed 43,421 MBTU of energy
- The City achieved a 6% decrease in overall energy use due to a reduction in natural gas consumption



# Change Factors

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- Energy efficiency efforts at City facilities contributed to natural gas reduction and a minimal increase in electricity consumption
  - Recycling & Trash Facilities brought up to **LEED Silver** standards
  - **Indoor LED retrofits** in Animal Shelter, City gym, Media Services, HR Offices, Development Services, Communications Office, Fire Stations,
  - **Outdoor LED retrofits** at Facilities Maintenance, Animal Services, and along trail
  - **Point Source water heaters** in Fire Training Center, Development Services
  - **HVAC upgrades** at Parks, Animal Services, Senior Center, Fire Marshalls office, Fire Training Center, Data Center

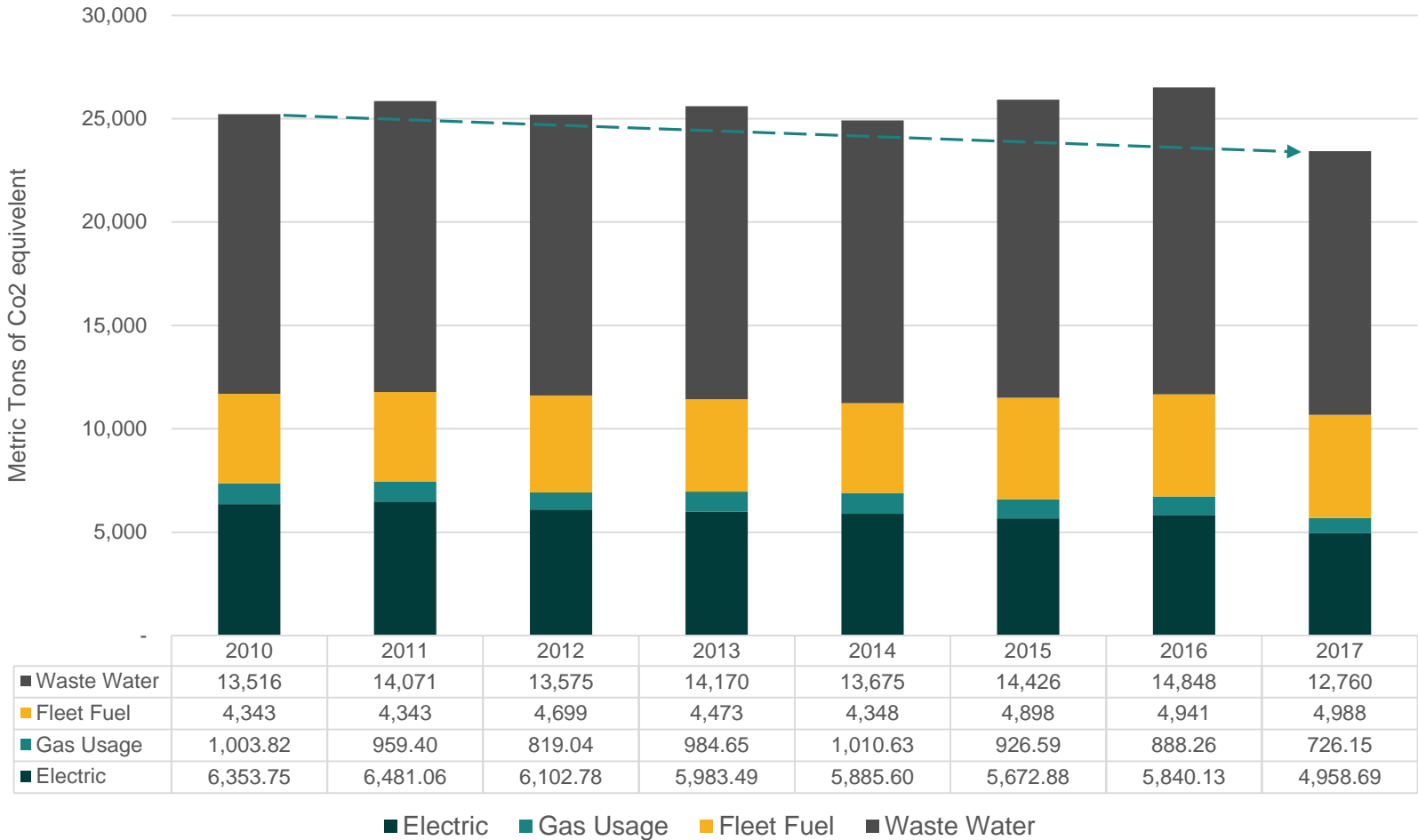
- Warmer than average winter temperatures contributed to natural gas reduction in 2017

Month	Average Temp	Deviation from Historic Norms	Notes
January	45.2	+5.9	10 <sup>th</sup> warmest
February	52.4	+9.3	Warmest ever
March	55.7	+4.4	18 <sup>th</sup> Warmest
November	53.6	+3.8	19 <sup>th</sup> Warmest
December	41.9	+ .4	Average

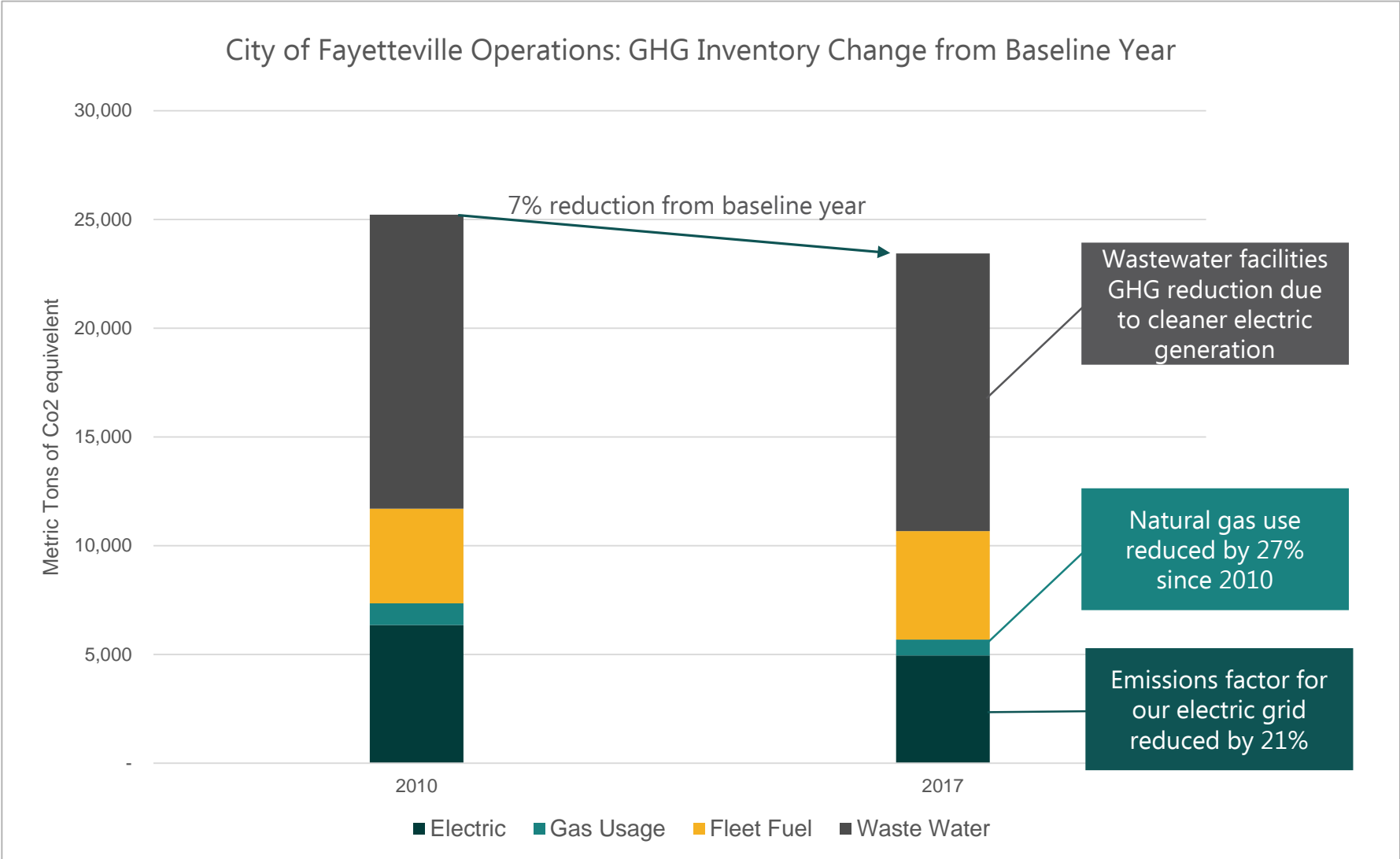
\*National Weather Service, National Oceanic and Atmospheric Association

# 2017 City Operations GHG Inventory

City Operations: Annual GHG Emissions (MTCO2E)



# 2017 City Operations GHG Inventory



# Progress towards Energy Action Plan Goals

## City Operations Goals

1. Achieve **40%** reduction in GHG emissions by 2030
  - In 7 years, the City has reduced emissions by **7%**
2. Achieve **100% clean energy by 2030**
  - Our grid (SPSO) is providing **22%** from renewable energy sources
  - Additional **.5%** solar energy from Ozarks Electric Community Solar
3. Achieve **3%** annual energy use reduction in City facilities
  - **6%** reduction in total energy use (MBTU) 2016-2017

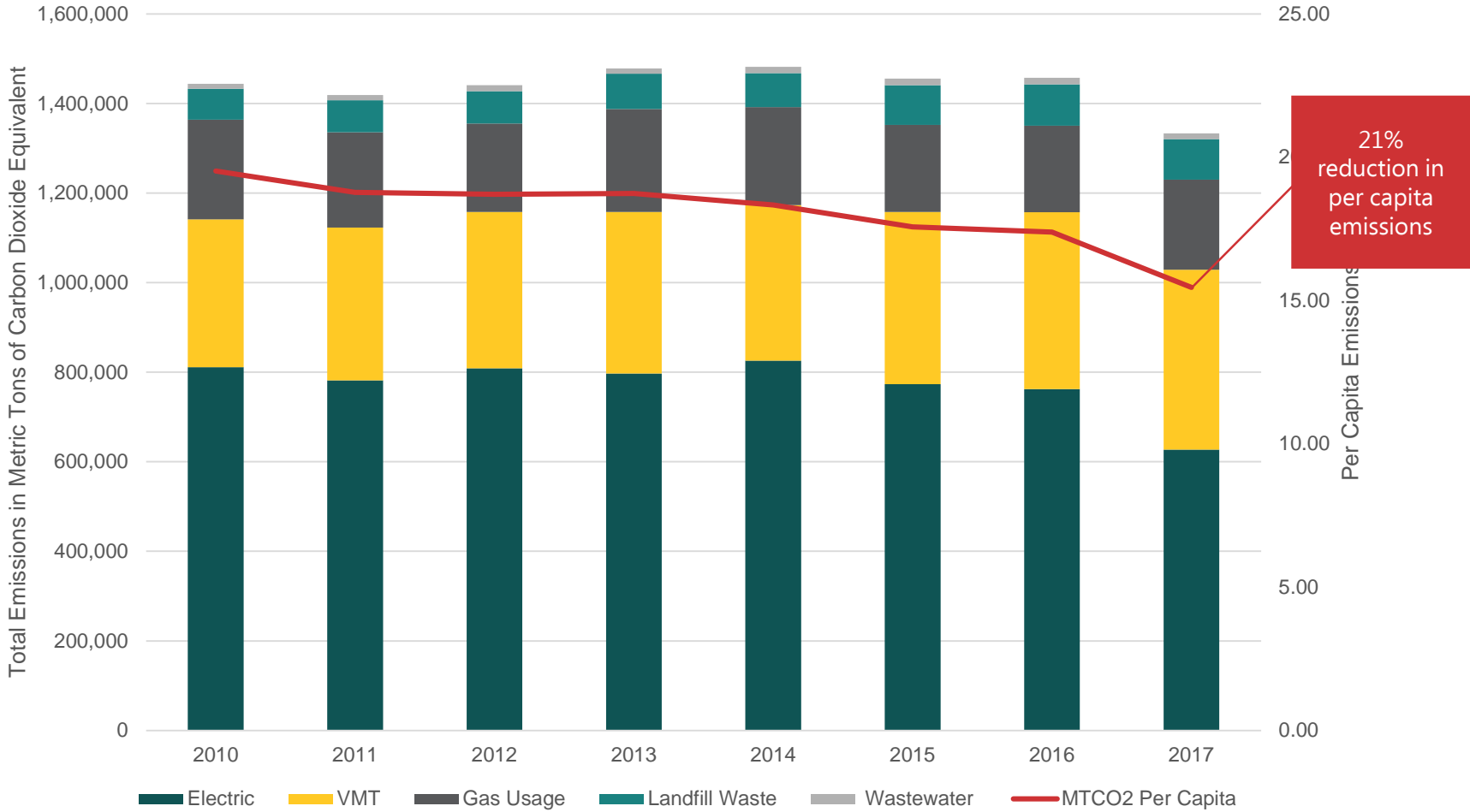


## 2018 action items

1. Explore opportunities for energy savings at Wastewater treatment plants
2. Explore clean energy generation at City facilities
3. Airport HVAC and boiler improvements
4. LED lighting projects include the Noland Plant, Square, Inclement Weather Center, Police Offices, Development Services, Senior Center, trail lighting, & Parking Lots
5. Continue to support the Windcatcher project

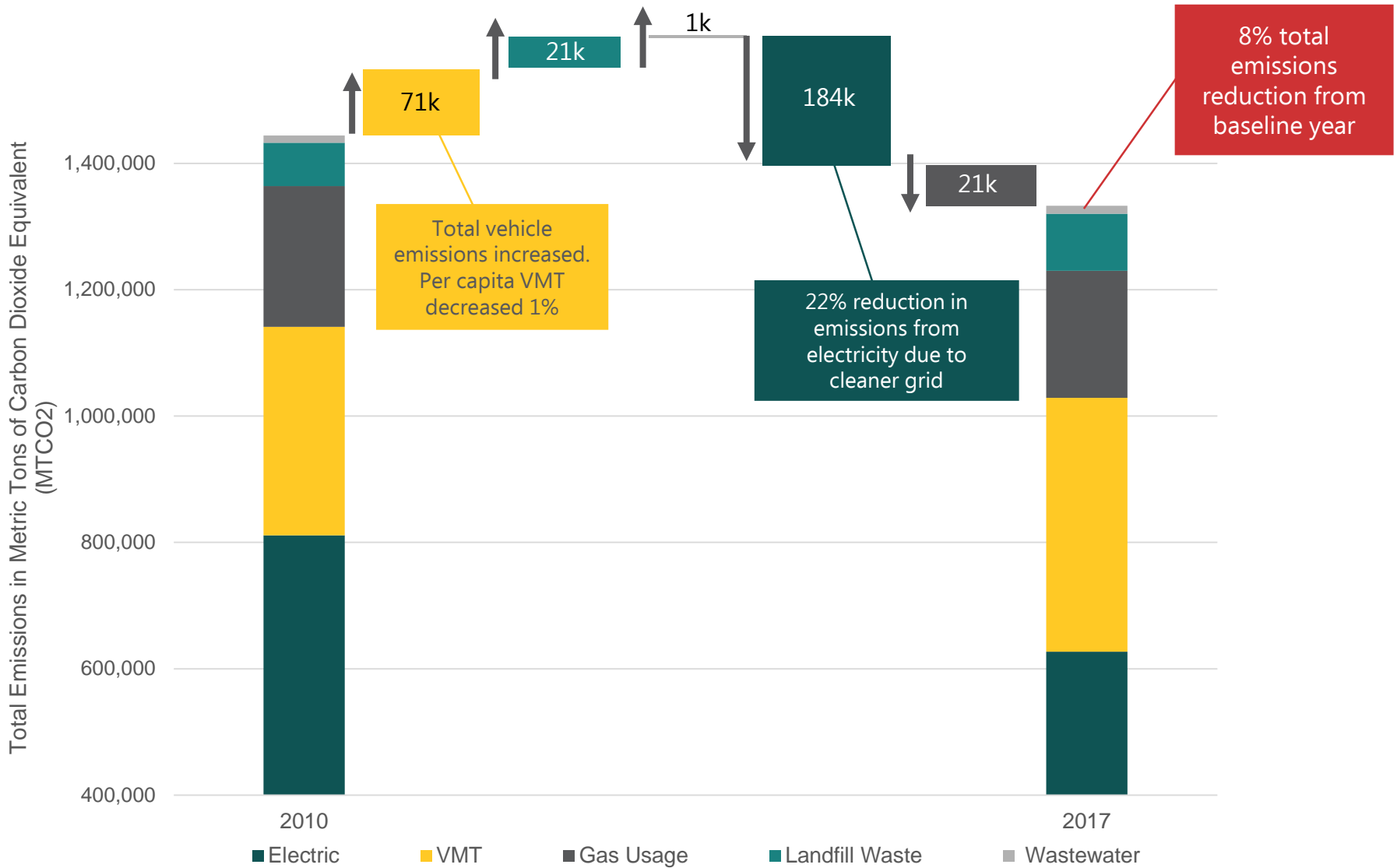
# 2017 Community GHG Inventory

## 2010-2017 Community-wide Greenhouse Gas Inventory





# 2017 Community GHG Inventory



# Progress towards Energy Action Plan Goals

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## Sector-specific goals

1. Achieve **100% clean energy by 2050**
  - Our electric grid is currently providing **22%** electricity from clean energy sources
2. Achieve **3% reduction annually** in building energy use
  - **1% increase over 2016** energy use
3. By 2030, reduce our per capita daily vehicle miles traveled to 24.9 miles per day (2010 DVMT)
  - In 2017, DVMT was 26.06, a **1% reduction** from 2016
4. Achieve **40%** total waste diversion from landfill by 2027
  - **19%** diversion rate in 2017

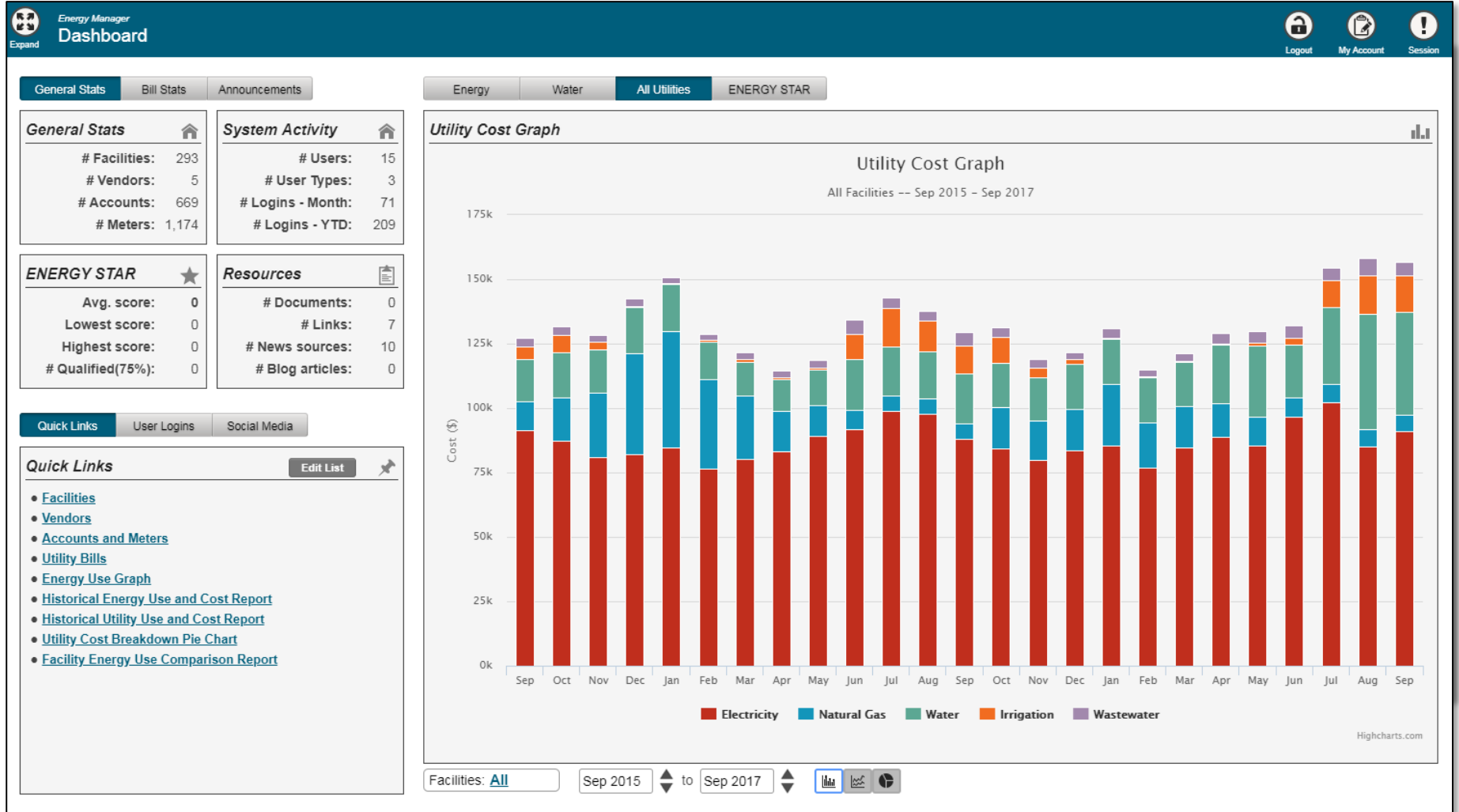


## High Level GHG reduction goals:

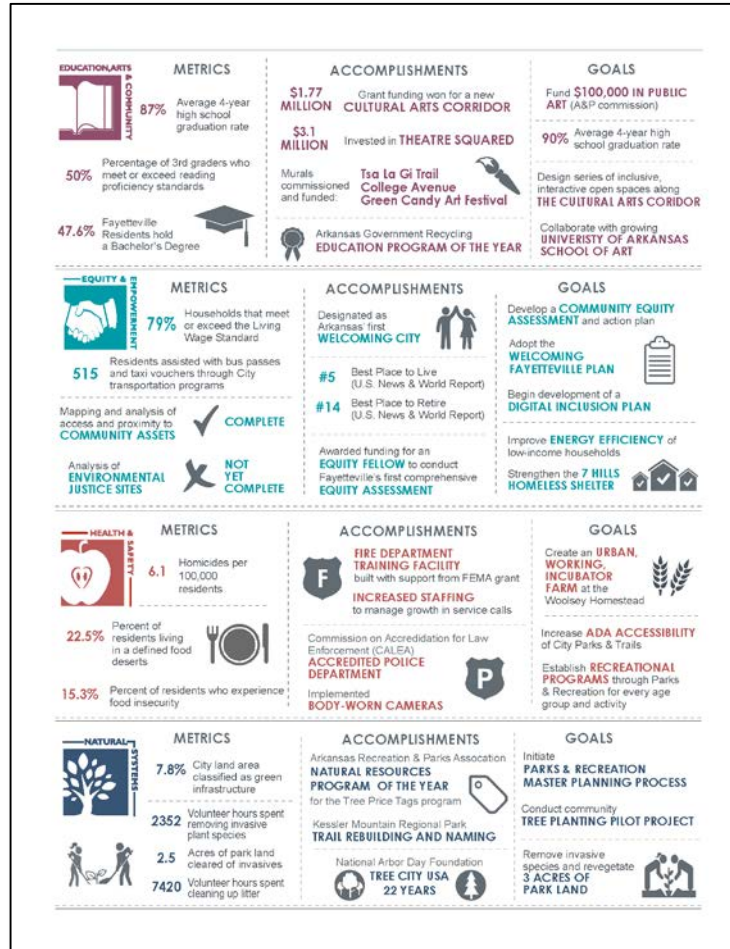
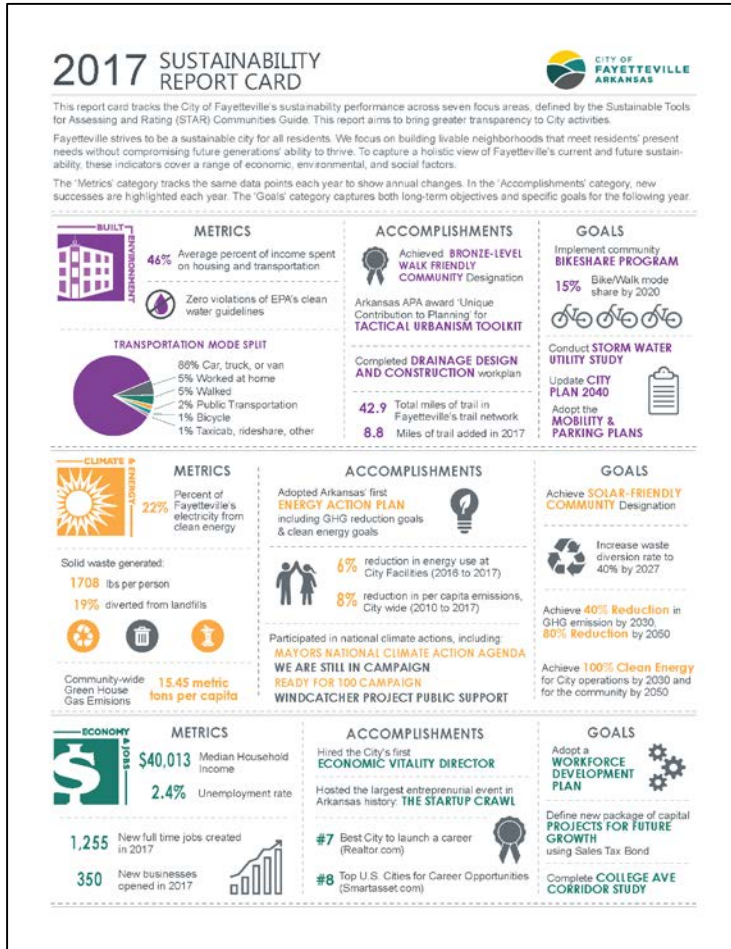
Achieve **80%** reduction in GHG emissions by 2050

- Since 2010, Fayetteville has reduced emissions **8%**
- **We are 4% ahead of necessary rate of reduction to meet 2050 goals**

# NEW Energy Management Dashboard : Energy Manager



# Sustainability Scorecard Updates



[www.Fayetteville-ar.gov/Sustainability](http://www.Fayetteville-ar.gov/Sustainability)