



Texas Metro
Area
Roundtable

CATEE
Conference
December 21, 2016

Energy Initiatives and Ozone Attainment/Maintenance Efforts

AGENDA

- **Welcome/Introductions**
- **Background and SIP Discussion**
Discussion of how energy currently fits into SIP, technical background, and opportunity areas.
- **Best Practices Presentations**
The Mid-America Regional Council and Mid-Ohio Regional Planning Commission will share their current energy initiatives.
- **Roundtable Discussion**
Discuss current initiatives and identify areas for statewide, multi-regional coordination and any necessary resources, etc.

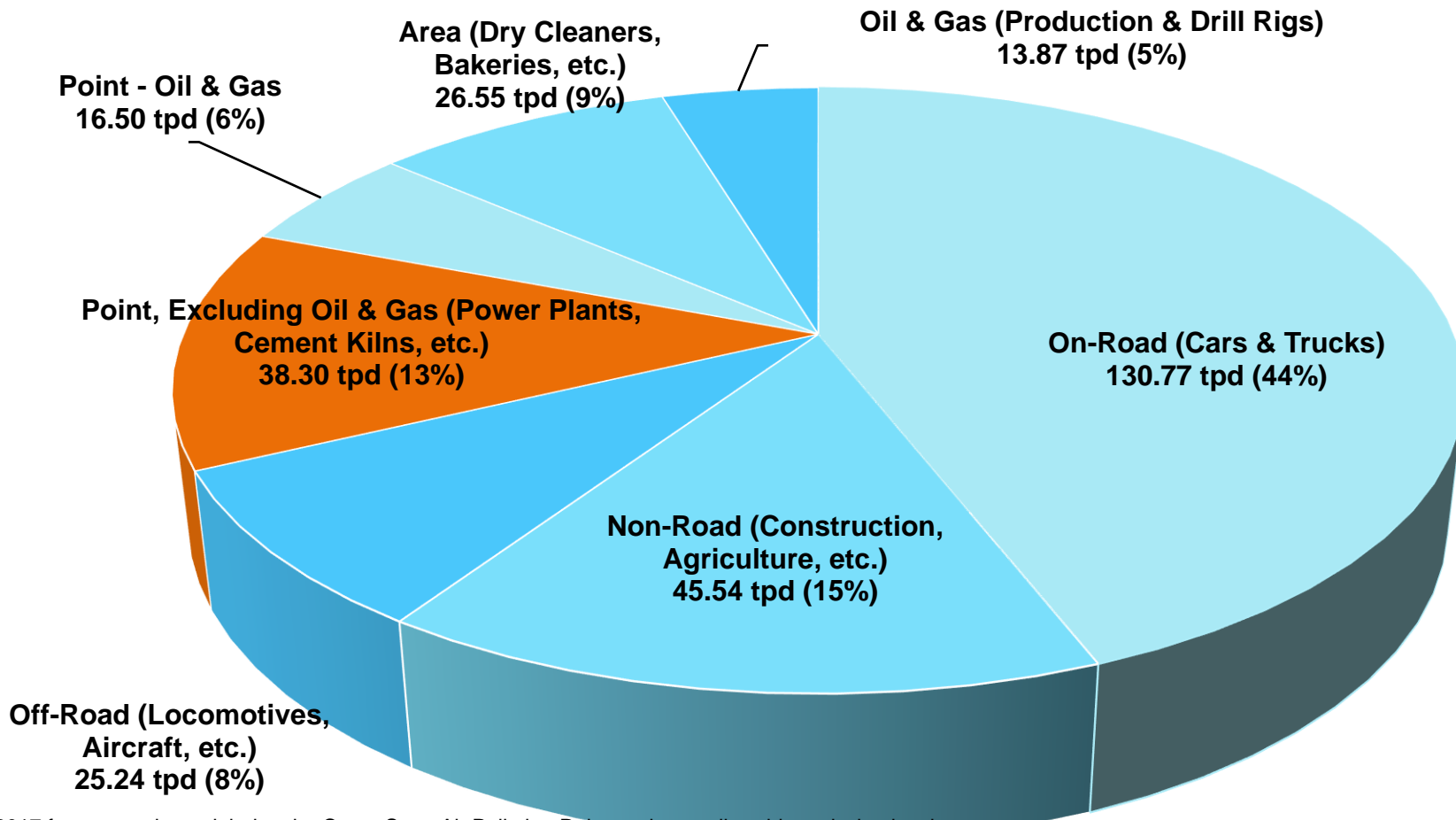


Welcome/ Introductions

- Who you are?
- Why are you here?

Relevance of Energy Efficiency to Ozone Nonattainment

Dallas-Fort Worth Ozone Nonattainment Area
Estimated 2017 Nitrogen Oxides (NO_x) Emissions Inventory
Source Category Estimates = 296.77 tons per day (tpd)



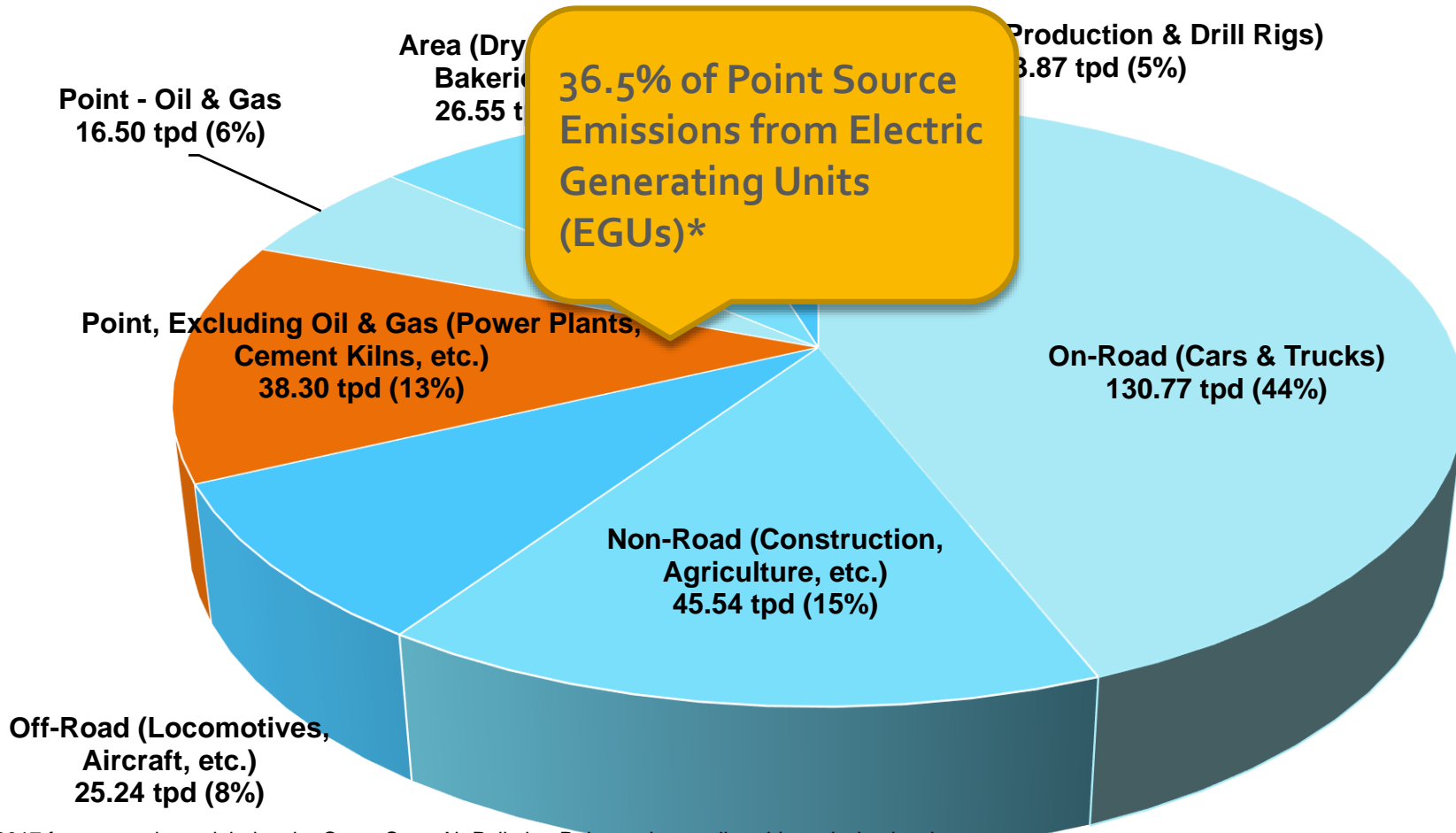
*2017 future year is modeled at the Cross-State Air Pollution Rule maximum allowable emission levels.

Source: Dallas-Fort Worth 2008 Eight-Hour Ozone Standard Nonattainment Area Attainment Demonstration State Implementation Plan for the 2017 Attainment Year,

Source: Texas Commission on Environmental Quality, 2017 Dallas-Fort Worth 8-hour Ozone Attainment Demonstration State Implementation Plan

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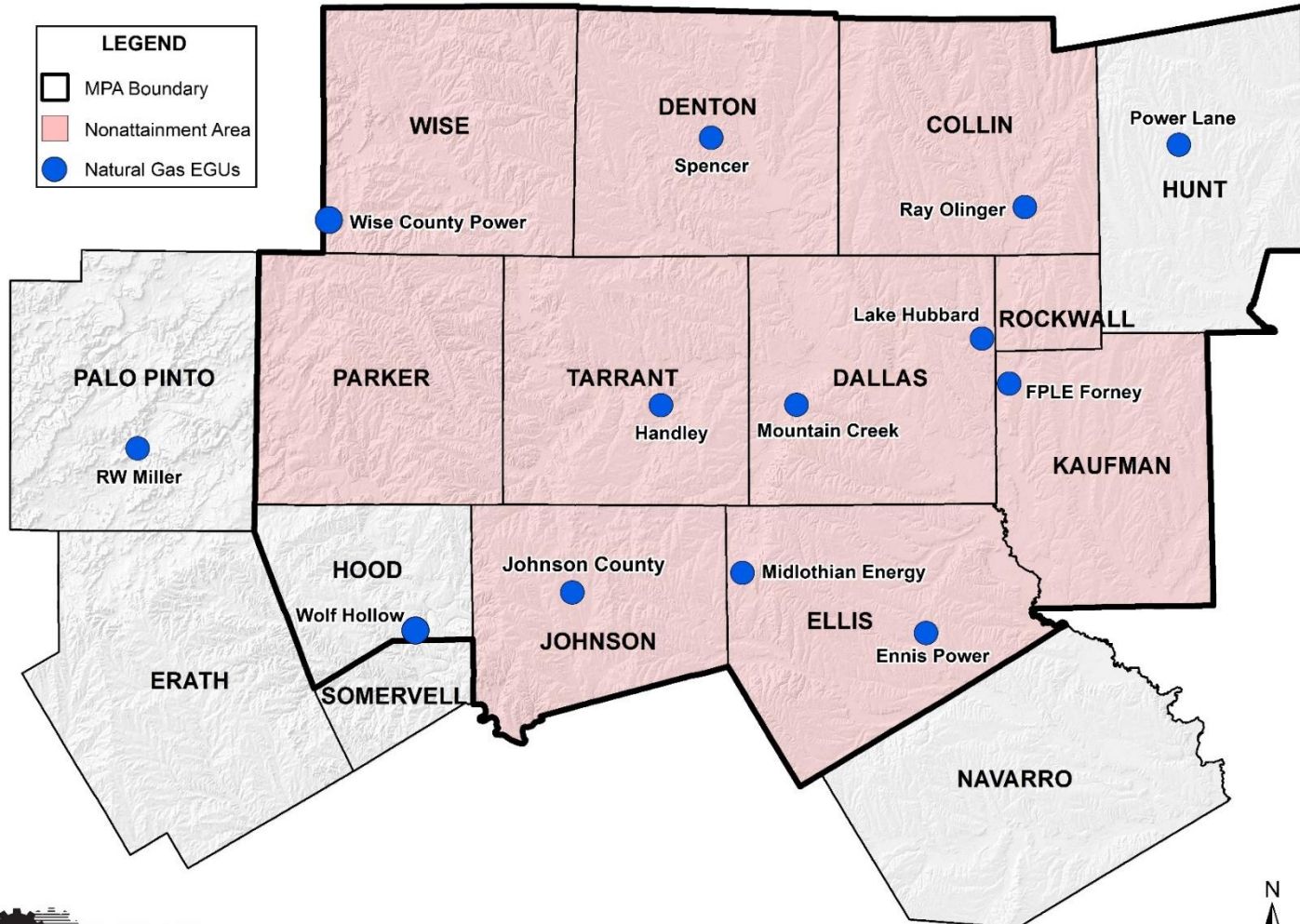


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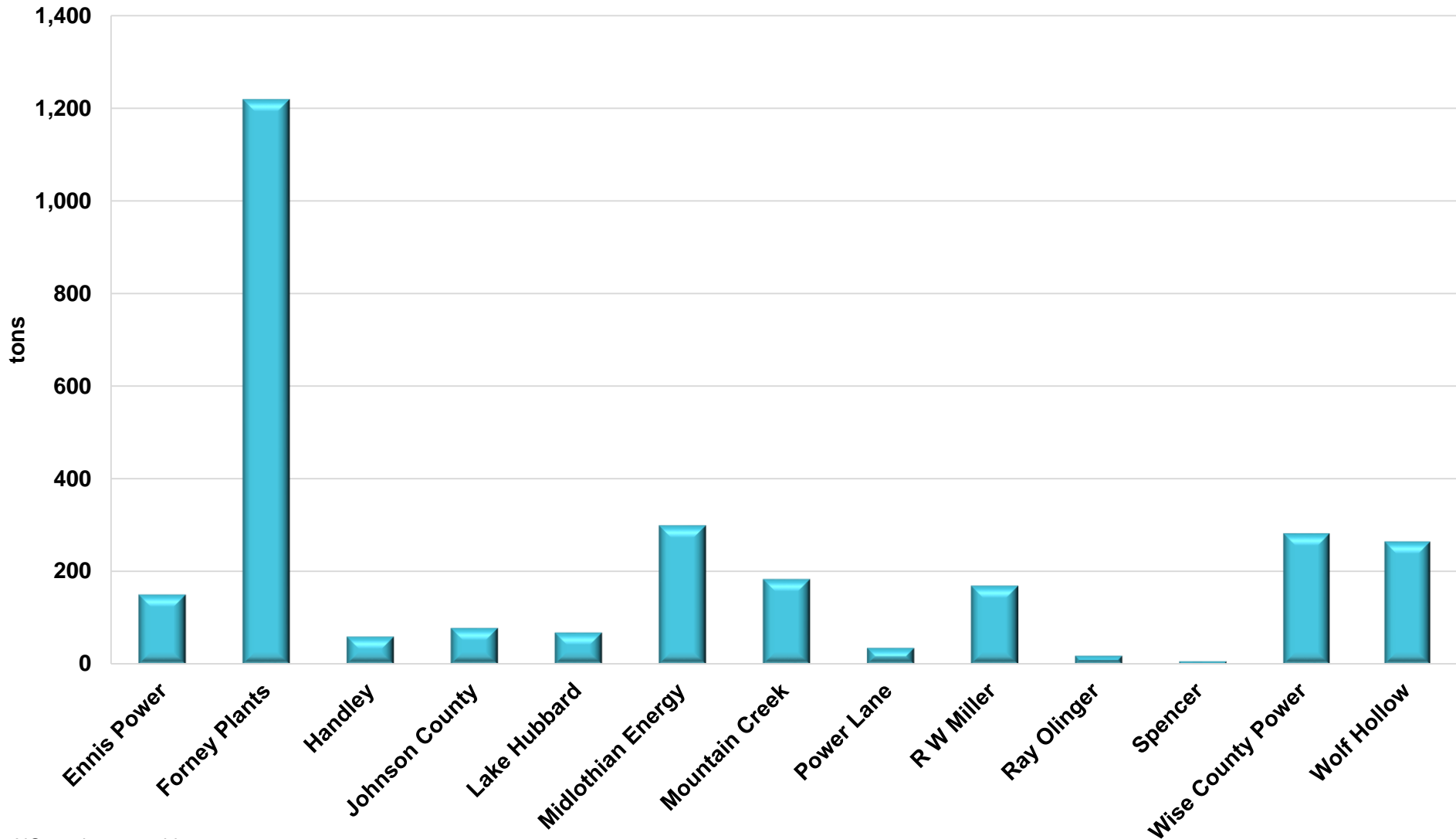
Relevance of Energy Efficiency to Ozone Nonattainment

Natural Gas EGUs 16-County North Central Texas Region



Relevance of Energy Efficiency to Ozone Nonattainment

2015 Annual NO_x Emissions, EGUs in 16-County North Central Texas Region

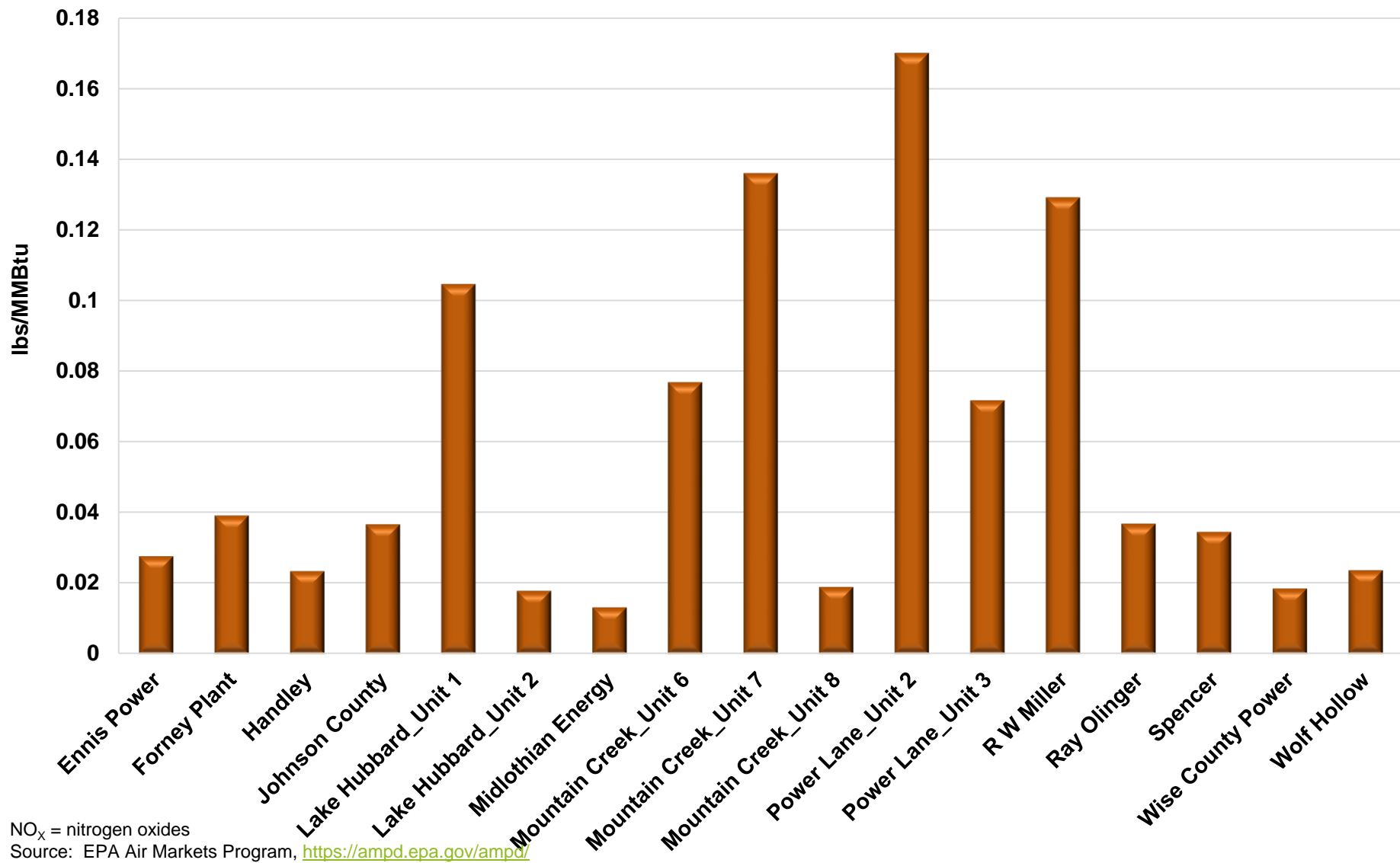


NO_x = nitrogen oxides

Source: Environmental Protection Agency's Air Markets Program, <https://ampd.epa.gov/ampd/>

Relevance of Energy Efficiency to Ozone Nonattainment

2015 Average NO_x Emissions Rate, EGUs in 16-County North Central Texas Region

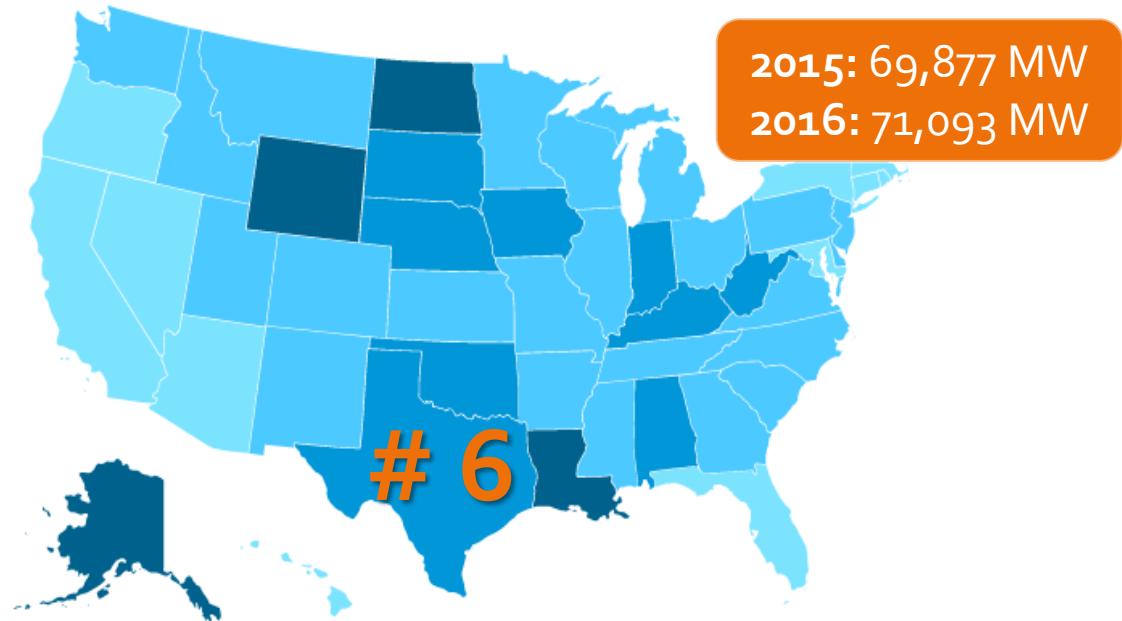


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Source: EPA Air Markets Program, <https://ampd.epa.gov/ampd/>

Growing Texas Energy Demands

New Peak Demand Records Set Each Year



Population Trends

- One of the fastest growing states
- NCTCOG population forecasted to grow by 47% between 2017 and 2040, to over 10.5 million
- Per capita income expected to increase
- Thousands of housing units being developed
- Business relocation to Texas – urban areas in particular

Energy Efficiency & Renewable Energy in the SIP

Chapter 5: Weight of Evidence, DFW Ozone SIP Revision, Section 5.4.1 “Additional Measures”

- Local Government Programs (Solar Ready II)
- Statewide Wind Generation
- Energy Systems Lab
- State Legislation
- Building Codes
- Federal Facility Programs
- Political Subdivisions’ Projects (inc. LoanSTAR)
- Utility Programs

Challenges with SIP Emissions Reductions Credits

- Geographic Uncertainty
- Reductions Offset by Growth in Demand

Energy Initiatives in Other Regions

- **Tom Jacobs**
Environmental Program Director
Mid-America Regional Council
- **Brandi Whetstone**
Senior Program Manager
Mid-Ohio Regional Planning
Commission

Mid-America Regional Council

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Existing Energy Initiatives at Agency/in Region

- Solar readiness and procurement
- Heat island modeling
- IECC building codes
- Energy benchmarking
- Broad community partnerships

Emerging Issues/Hot Topics

- Clean Air Action Plan - update
- Climate resilience
- Integrated regional planning
- Green infrastructure
- SO₂ designations

Challenges/Obstacles

- Interagency, cross-sector collaboration
- Alignment of local, state and federal policy

Mid-Ohio Regional Planning Commission

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Existing Energy Initiatives at Agency/in Region

- Residential Energy Efficiency Program
- Franklin County Energy Baseline Study
- Property Assessed Clean Energy (PACE)

Emerging Issues/Hot Topics

- State energy policy (EE & RE standards)
- Utility Demand Side Management filings
- Local Government Energy Partnership
- SmartColumbus – Electric Vehicle

Challenges/Obstacles

- Political climate
- Resources
- Awareness

Alamo Area Council of Governments (AACOG)

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Existing Energy Initiatives at Agency/in Region

- Low Income Weatherization Assistance Program (AACOG)
- Revolving EE Fund (COSA)
- Save for Tomorrow Energy Plan (CPS Energy)
- Air Quality Stewardship Awards (AACOG)

Emerging Issues/Hot Topics

- Bexar County (& more) adoption of PACE Program
- Volkswagen ZEV Infrastructure Funding - Superchargers
- Smart Meter Roll Out
- Anti-idle and Commuter benefits

Challenges/Obstacles

- Too good to be true?
- Lack of STEM knowledge
- Creating trust

Capital Area Council of Governments (CAPCOG)

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Existing Energy Initiatives at Agency/in Region

- Municipal utilities – Austin, Georgetown, Lockhart, San Marcos
- Co-Op retail utilities – Bluebonnet Electric Co-Op, Pedernales Electric Co-Op
- Other public power –LCRA, UT

Emerging Issues/Hot Topics

- Peak electricity usage & energy storage
- Water conservation = energy conservation
- Homeowner association rules

Challenges/Obstacles

- Funding, messaging, sector fragmentation, threat of de-regulation, reliability considerations

Central Texas Council of Governments

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Existing Energy Initiatives at Agency/in Region

- Central Texas Air, Information, and Research (COG)

Emerging Issues/Hot Topics

- NA

Challenges/Obstacles

- Convincing public (citizens/leaders) that air quality is a topic of concern. Most do not think there is a problem here.
- Funding
- Cooperation between larger (typically pollution generators) and smaller/rural entities.

Houston- Galveston Area Council

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Air Quality Research and
Development

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Existing Energy Initiatives at Agency/in Region

- Houston-Galveston Clean Cities Coalition
- HGACBuy EVSE infrastructure and alternative fuel vehicle purchasing

Emerging Issues/Hot Topics

- Developing demand for auxiliary power units, electrified truck refrigeration units, and other near-zero and zero emission technologies for freight operations
- Promoting anti-idling policies within region

Challenges/Obstacles

- Developing funding and operational incentives



North Central Texas Council of Governments (NCTCOG)

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Existing Energy Initiatives at Agency/in Region

- Go Solar Texas (COG)
- Regional Codes Coordinating Committee (COG)
- Center of Development Excellence (COG)
- Water Resources Council (COG)
- Clean Cities Coalition & Electric Vehicles North Texas (COG)
- North Texas Stewardship Forum (City-Led)
- Conserve North Texas (COG)

Emerging Issues/Hot Topics

- PACE
- Water/Energy Nexus
- Waste to Energy
- Solar, Solar-Ready Building
- Green Code Adoption by Cities
- Dallas District 2030/Fort Worth BBC Partnerships

Challenges/Obstacles

- Funding Sources
- Building New Partnerships

Roundtable Discussion

- Questions?
- Joint Priorities?