

Energy Initiatives and Ozone Attainment/Maintenance Efforts

AGENDA

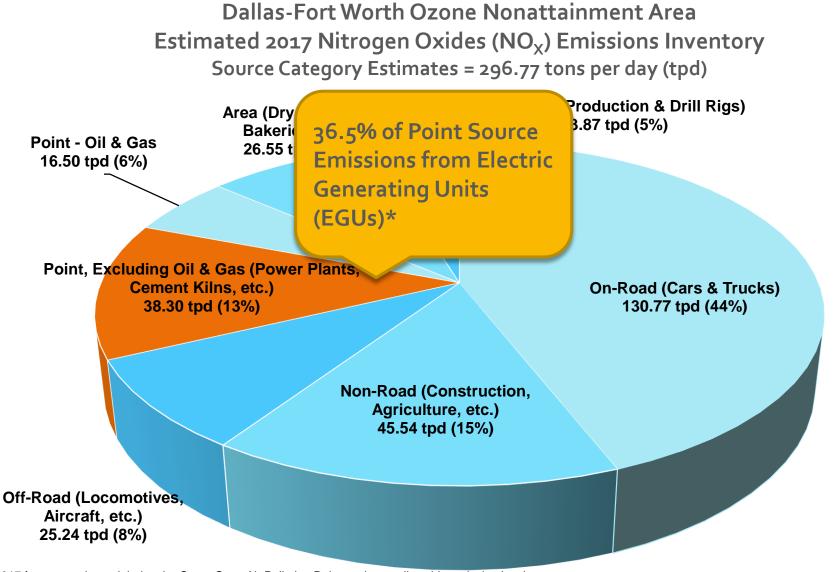
- Welcome/Introductions
- Background and SIP Discussion Discussion of how energy currently fits into SIP, technical background, and opportunity areas.
- Best Practices Presentations The Mid-America Regional Council and Mid-Ohio Regional Planning Commission will share their current energy initiatives.

Roundtable Discussion

Discuss current initiatives and identify areas for statewide, multi-regional coordination and any necessary resources, etc.



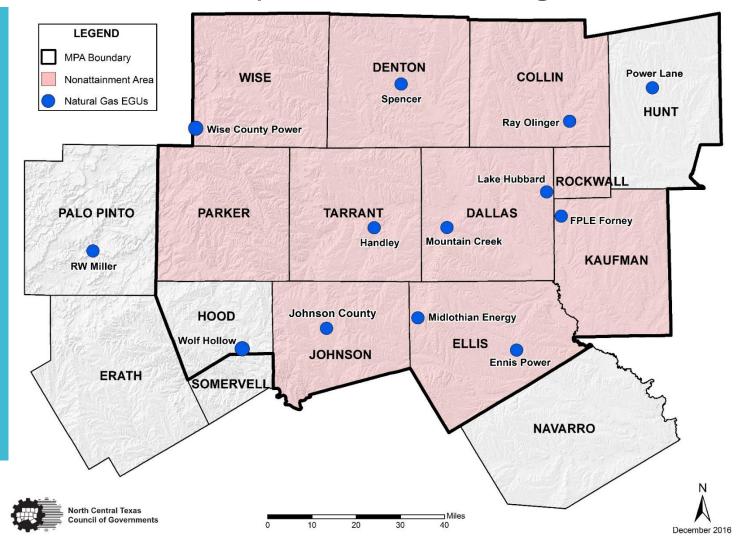
Welcome/ Introductions Who you are?Why are you here?



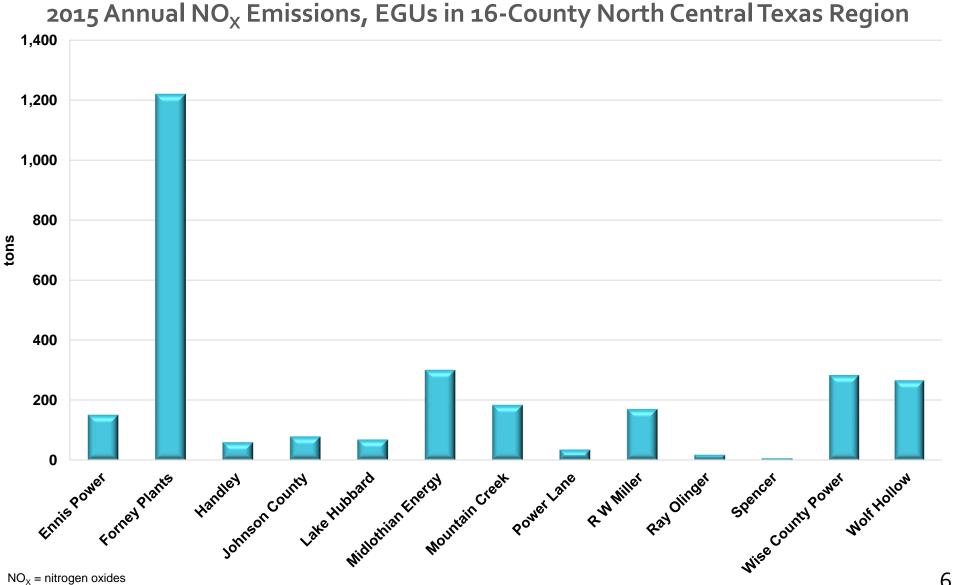
*2017 future year is modeled at the Cross-State Air Pollution Rule maximum allowable emission levels.

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

Natural Gas EGUs 16-County North Central Texas Region

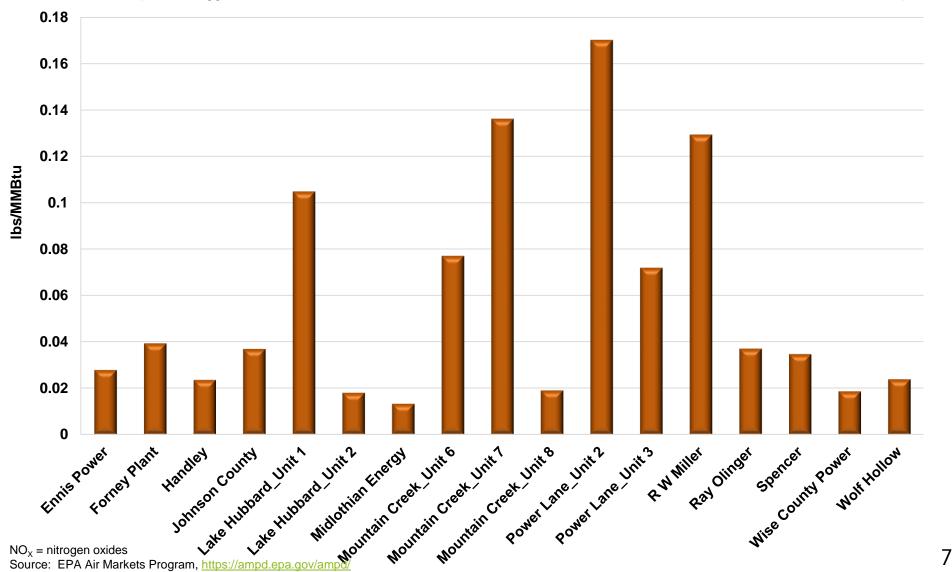


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Source: Environmental Protection Agency's Air Markets Program, https://ampd.epa.gov/ampd/

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



New Peak Demand Records Set Each Year

2015: 69,877 MW **2016:** 71,093 MW 6

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

Growing Texas Energy Demands 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

Best Practices Presentations

• Tom Jacobs Environmental Program Director Mid-America Regional Council

Brandi Whetstone Senior Program Manager Mid-Ohio Regional Planning Commission

Energy Initiatives in Other Regions

Mid-America Regional Council

Tom Jacobs Director, Environmental Programs 816/701-8352 Tjacobs@marc.org

Amanda Graor Air Quality Manager 816/701-8333 Agraor@marc.org

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

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

Mid-Ohio Regional Planning Commission

Brandi Whetstone Sr. Program Manager Energy & Air Quality 614/233-4174 bwhetstone@morpc.org

Christina O'Keeffe Director Energy & Air Quality 614/233-4192 cokeeffe@morpc.org

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

- Political climate
- Resources
 - Awareness

Alamo Area Council of Governments (AACOG)

Nicholas Jones Alamo Area Clean Cities Coordinator 210/918-1299 njones@aacog.com

Scott Storment AACOG Director of Natural Resources sstorment@aacog.com

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

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Capital Area Council of Governments (CAPCOG)

Andrew Hoekzema Director of Regional Services 512/916-6043 ahoekzema@capcog.org

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 deregulation, reliability considerations Central Texas Council of Governments

Jennifer E. Lawyer, Environmental Planner, 254/770-2362, jennifer.lawyer@ctcog.org

Existing Energy Initiatives at Agency/in Region

Central Texas Air, Information, and Research (COG)

Emerging Issues/Hot Topics

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- 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.

El Paso Metropolitan Planning Organization

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Marketa Vavrova, Transportation Planner, 915-212-7106, mvavrova@elpasompo.org

Alexandra Riccillo, Associate Regional Transportation Analyst, 915-212-7114, ariccillo@elpasompo.org

Existing Energy Initiatives at Agency/in Region

- Strategies for reduction of ozone emissions (RIDER 7)
- The Big Jump (People for Bikes)
- Development of a Sustainable Performance Based Methodology for Strategy Metropolitan Planning Based on Map-21
 - Heat Island Effect Mitigation / Infrastructure Working Group

Emerging Issues/Hot Topics

- Heat Island Effect
- Ozone NAAQS 2015

Challenges/Obstacles

Funding Sources



Houston-Galveston Area Council

Shelley Whitworth Program Manager, Air Quality Research and Development 713/499-6695 shelley.whitworth@ h-gac.com

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)

Tamara Cook, Manager of Environment & Development 817/695-9221 tcook@nctcog.org

Lori Clark, Principal Air Quality Planner 817/695-9232 Iclark@nctcog.org

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

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

- Funding Sources
- Building New Partnerships

Roundtable Discussion

• Questions?

• Joint Priorities?