



# NM GA

## **Gas Management in New Mexico**

Revenue Stabilization & Tax Policy Committee  
November 20, 2017

# Shared Goal

Oil & gas operators share the goal to **reduce emissions** and are constantly advancing technologies to **improve capture success**.

# Methane emissions decreasing

United States Methane Emissions (1990-2015)<sup>1</sup>

 **19% reduction**

San Juan Basin Methane Emissions (2011-2016)<sup>2</sup>

 **47% reduction**

Permian Basin Methane Emissions (2011-2016)<sup>2</sup>

 **6% reduction**

<sup>1</sup>EPA Greenhouse Gas Inventory, natural gas and petroleum system methane emissions, 1990-2015

<sup>2</sup>EPA Greenhouse Gas Emissions from Onshore Petroleum and Natural Gas Production, 2011-2016

# Production increasing

New Mexico Oil Production (2011-2016)<sup>1</sup>

 **104% increase**  
to 146,025,000 bbl per year

New Mexico Natural Gas Production (2011-2016)<sup>2</sup>

 **1% increase**  
to 1,251,013 mmcf per year

<sup>1</sup>Energy Information Agency, New Mexico Field Production of Crude Oil, 2011-2016

<sup>2</sup>Energy Information Agency, New Mexico Natural Gas Marketed Production, 2011-2016

# Greenhouse Gas emissions decreasing

United States Greenhouse Gas Emissions (1990-2015)<sup>1</sup>

 **11.5% reduction**

New Mexico Greenhouse Gas Emissions (2011-2017)<sup>2</sup>

 **33% reduction**

<sup>1</sup>EPA Greenhouse Gas Inventory, natural gas and petroleum system methane emissions, 1990-2015

<sup>2</sup>New Mexico Environment Department, 2011-2017

# Benefits of natural gas

Increases in natural gas electricity generation are the **largest drivers of a 14% reduction** in overall US energy-related emissions, accounting for **33% of the total emissions reductions** in 2016<sup>1</sup>.

<sup>1</sup>Carbon Brief: Emissions Analysis: Why US Carbon Emission have fallen by 14% since 2005 <sub>6</sub>

# Bipartisan support for natural gas



“The natural gas boom has led to **cleaner power** and greater **energy independence.**”

*-President Barack Obama, 2013 State of the Union Address*

“Natural gas provides the **easiest path forward** and has the **cleanest potential.**”

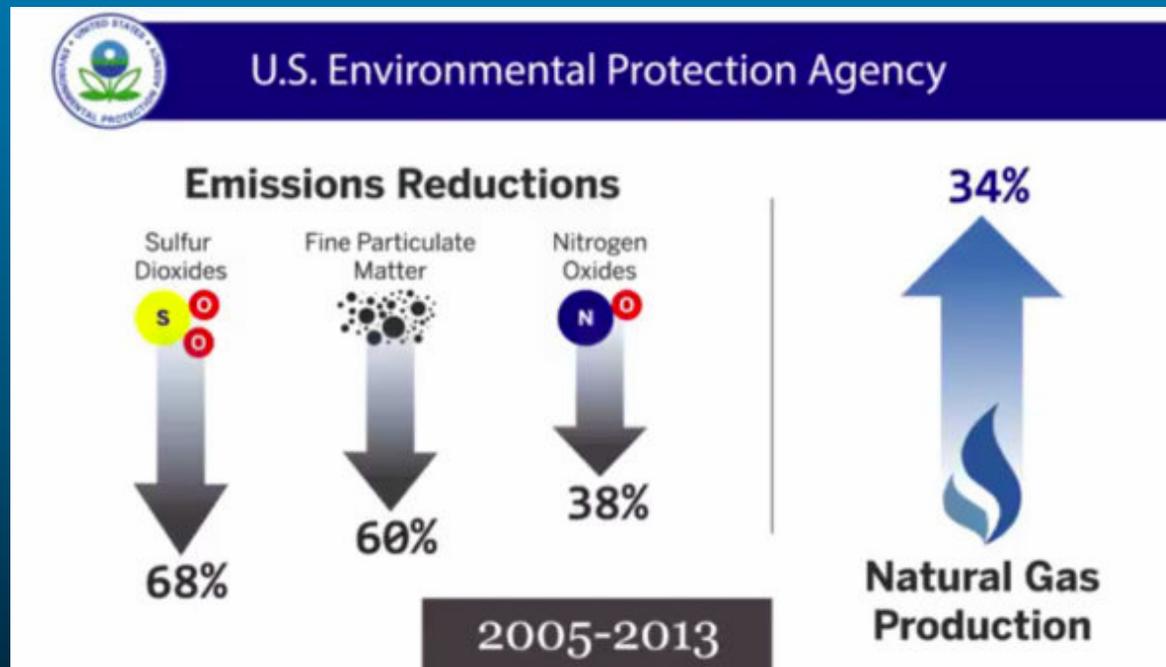
*-Interior Secretary Ryan Zinke, Bozeman Daily Chronicle*



“Natural gas in the U.S. has been a **game changer....** It's been a **significant benefit to air quality.**”

*-EPA Administrator Gina McCarthy, Forbes Magazine*

# Air quality improving with transition to natural gas



<sup>1</sup> United States Environmental Protection Agency analysis of criteria pollutants, 2005-2013 <sup>8</sup>

# Current Regulations

- **United States Environmental Protection Agency**
  - 40 CFR
  - 40 CFR 600a
- **United States Bureau of Land Management**
  - Methane and Waste Prevention Rule
- **New Mexico Oil Conservation Division**
  - Limitations on venting and flaring
  - Mandatory reporting of vented and flared volumes
  - Gas capture plans

# Proactive Industry Approach

- Many historical pneumatic devices that automatically expelled excess gas pressure have been replaced, and **new regulations require the use of alternative equipment for new wells.**
- Even with a significant increase in production, **methane emissions have drastically decreased** over the past several decades.
- Many operators consider **reducing emissions an industry best practice and a top fiscal priority.**
- Single-pad development allows operators to **consolidate equipment and thereby drastically reduce emissions potential**

# Impact to Operators

- The royalty value of flared gas has generated headlines, **yet it only accounts for 12.5%-20% of value.**
- Product has required a significant investment to acquire and **operators lose 80%-87.5% of the value of a product.**
- A segmented natural gas supply chain **ensures accountability for stakeholder interests.**

# Cost of Additional Regulations

- Marginal oil wells:  
**\$500 million** in lost revenue<sup>1</sup>
- Marginal gas wells:  
**\$250 million** in lost revenue<sup>1</sup>
- Direct Jobs:  
**2,200 full-time jobs** eliminated<sup>2</sup>

<sup>1</sup>Interstate Oil & Gas Compact Commission, Marginal Wells: Fuel for Economic Growth, Pages 31-33

<sup>2</sup>Interstate Oil & Gas Compact Commission, Marginal Wells: Fuel for Economic Growth, Table 5a

# Impediments to Gas Capture

- Lack of pipeline
- Lack of pipeline capacity
- Gas that does not meet minimum pipeline requirements
- Disruptions in the gas-processing chain

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