

American Geosciences Institute Critical Issues Forum

Forth Worth, Texas
November 19-20, 2014

**America's Increasing Reliance on Natural Gas:
Benefits and Risks of a Methane Economy**

**Session 4 – Drivers of and Barriers to Natural
Gas Development in North America**



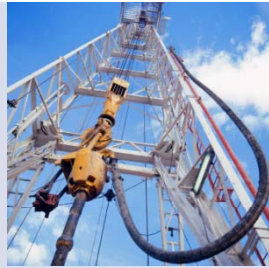
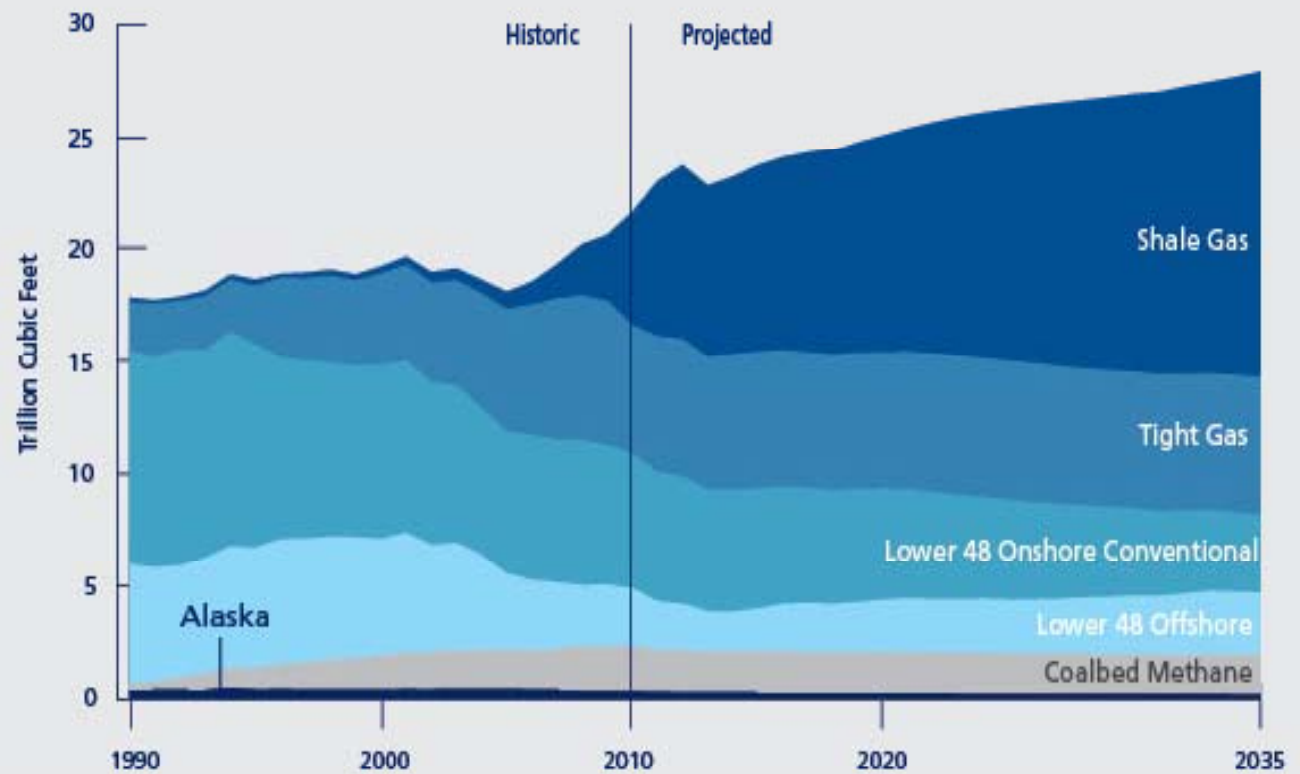
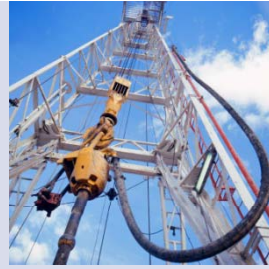


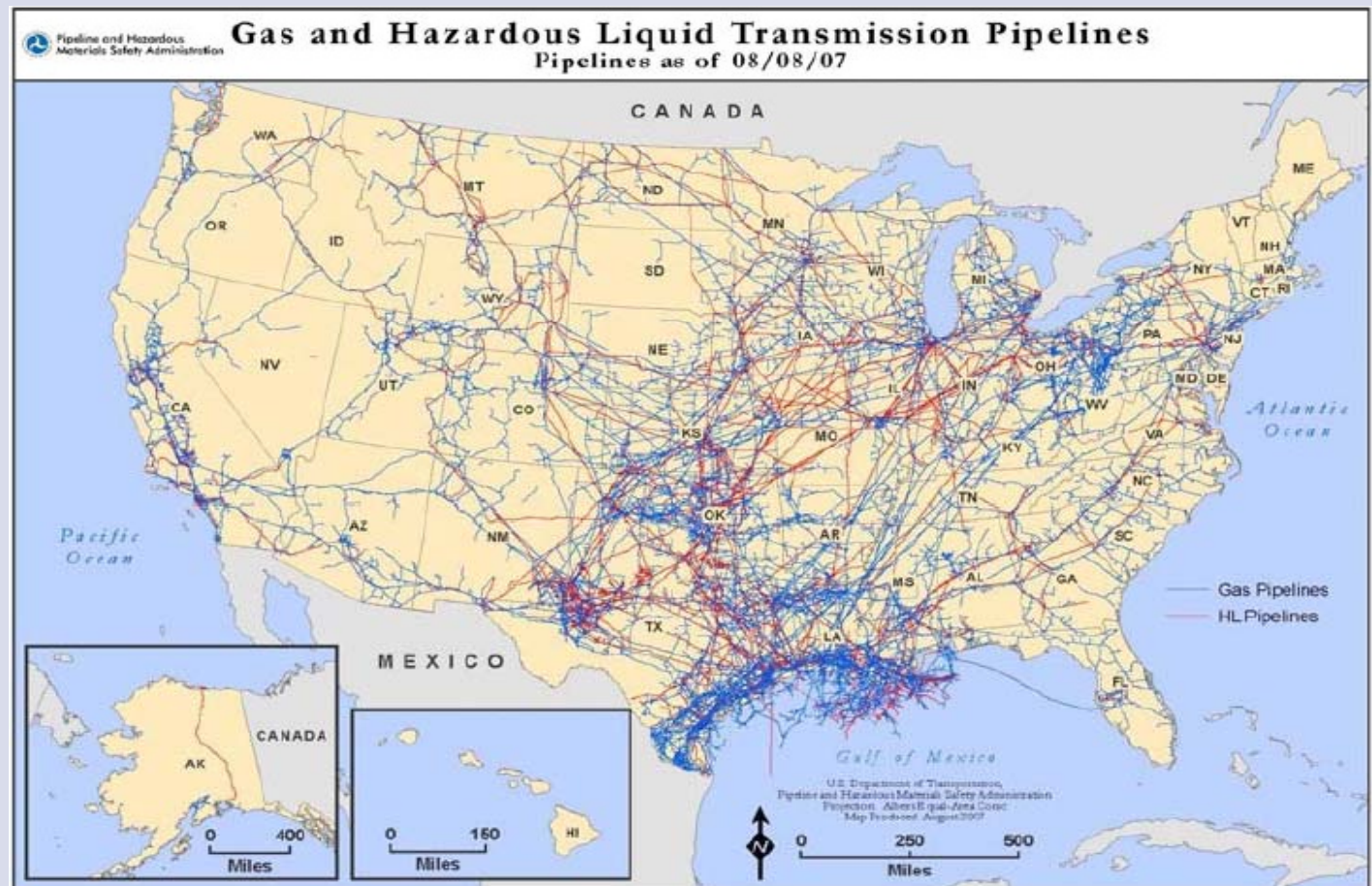
Figure 1. U.S. Natural Gas Production by Source (Historic and Projected)



Source: U.S. Energy Information Administration, 2012 Annual Energy Outlook, [http://www.eia.gov/forecasts/aeo/pdf/0383\(2012\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2012).pdf)

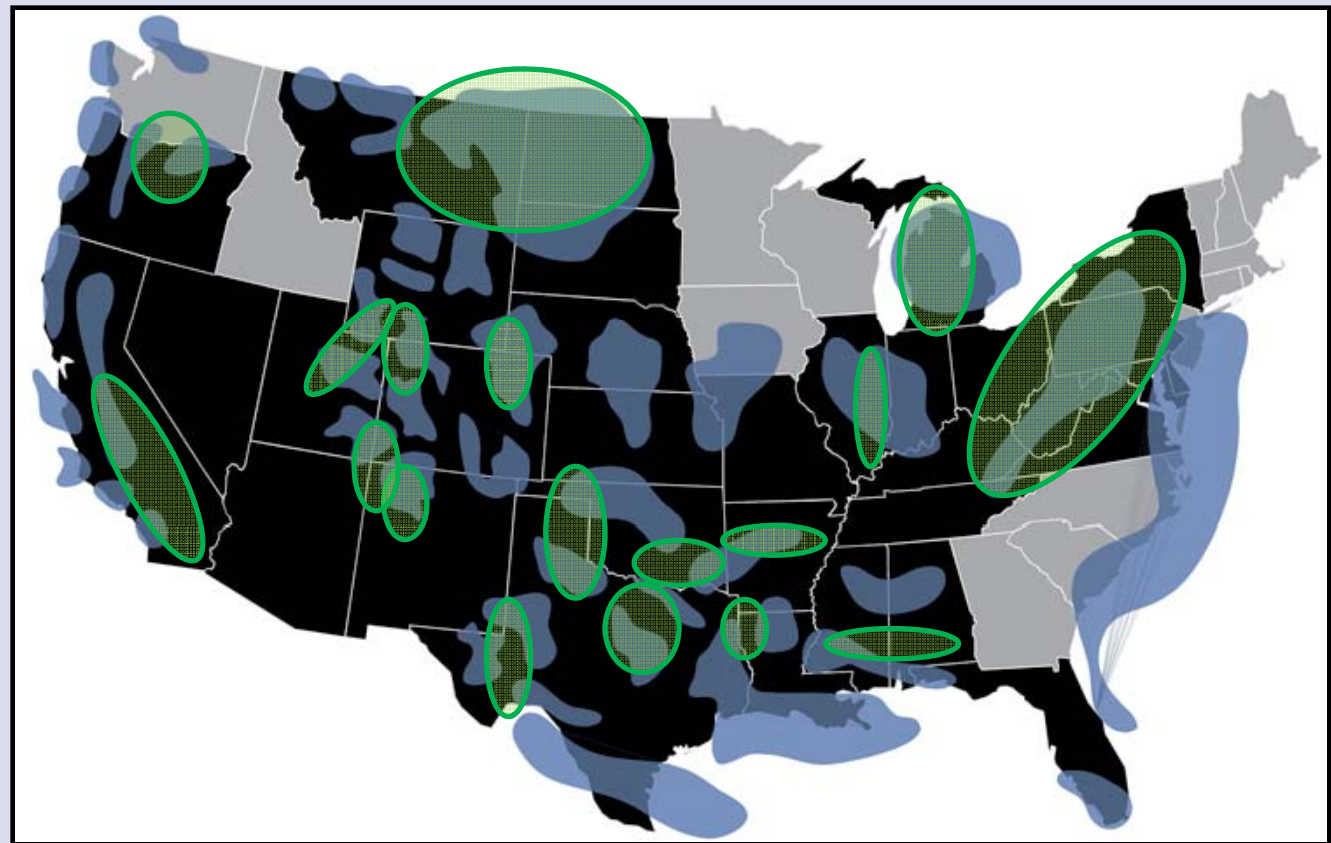


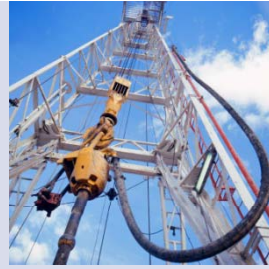
480,000 Miles of Existing Natural Gas and HL Pipelines In-Place Facilitating Shale Production





Most U.S. Unconventional Shale Resources Occurred in States With Existing Conventional Oil and Gas Regulatory Frameworks In-Place





Key Points : State Oil and Gas Regulation

- Diversity of geology, topography, work force, culture make states logical oil and gas regulators
- States have historically been the primary regulators of oil and gas development
- States are innovative, flexible, can rapidly respond to changes in technology
- States work collaboratively as oil and gas resources cross state boundaries



Primary Barriers to and Drivers of Natural Gas Development Challenge States

Public Policy

Regulatory

Technology

Environment

Economic

**States are rising to
these challenges as
laboratories for
creative solutions
and regulatory
innovation**





STATES FIRST INITIATIVE

Governors' letter of support

Robert Bentley
Governor of Alabama
2013 IOGCC Chairman

Gary R. Herbert
Governor of Utah

Sean Parnell
Governor of Alaska

Mary Fallin
Governor of Oklahoma

Tom Corbett
Governor of Pennsylvania

Phil Bryant
Governor of Mississippi

John Hickenlooper
Governor of Colorado

Steve Bullock
Governor of Montana

Partnership between IOGCC and GWPC

States First Initiative

Shaping the STATE of our energy
future together.

*Collaboration, Solutions,
Regulatory Leadership*



Interstate Oil and Gas Compact

- Established by Congress in 1935
- Governors of oil and gas producing states
- Collectively representing the States
- State led, Chaired by governors
 - Governor Robert Bentley (Alabama) 2013
 - Governor Phil Bryant (Mississippi) 2014
 - Governor Gary Herbert (Utah) 2015
- Promote conservation and efficient

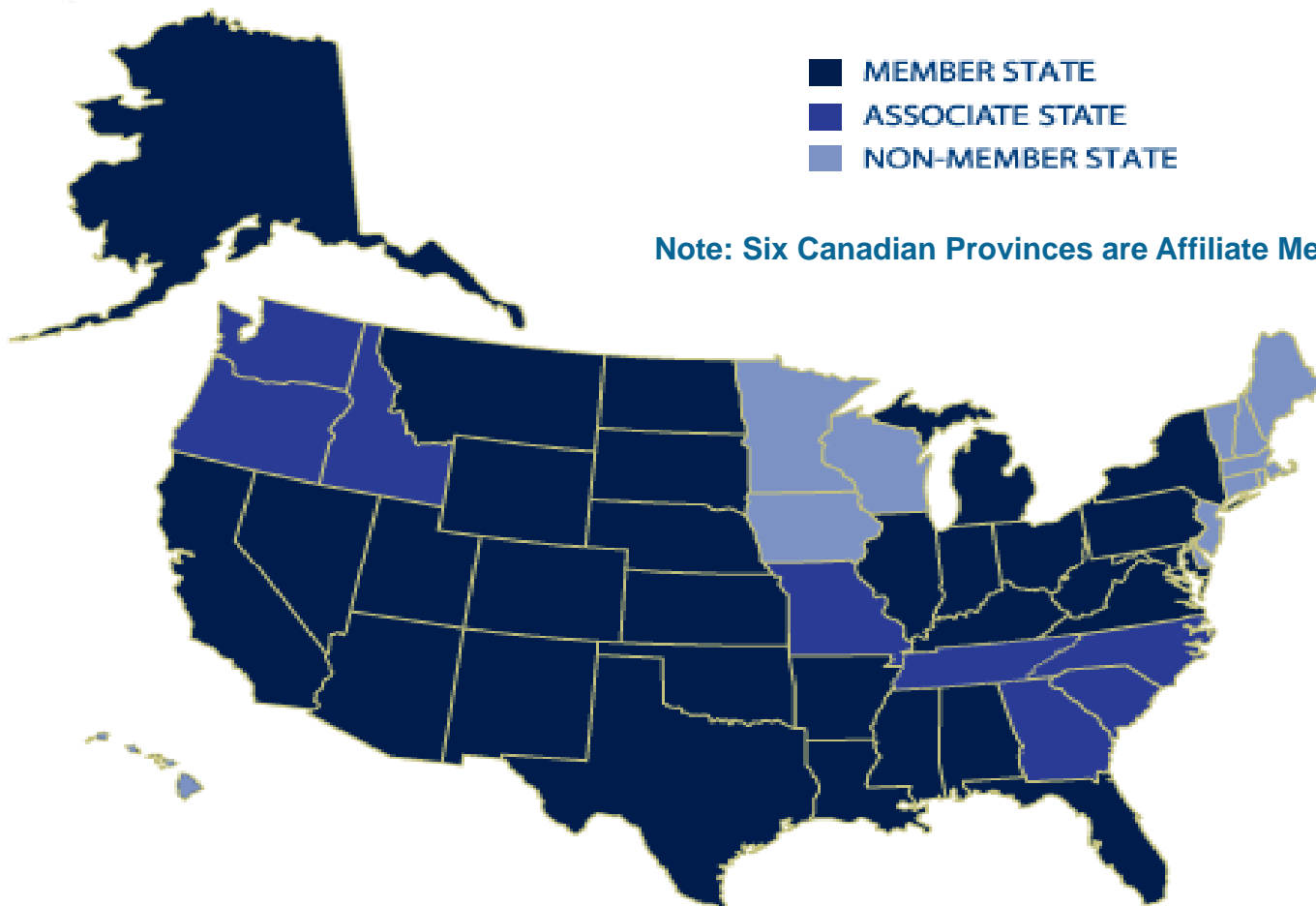


IOGCC 38 Member States



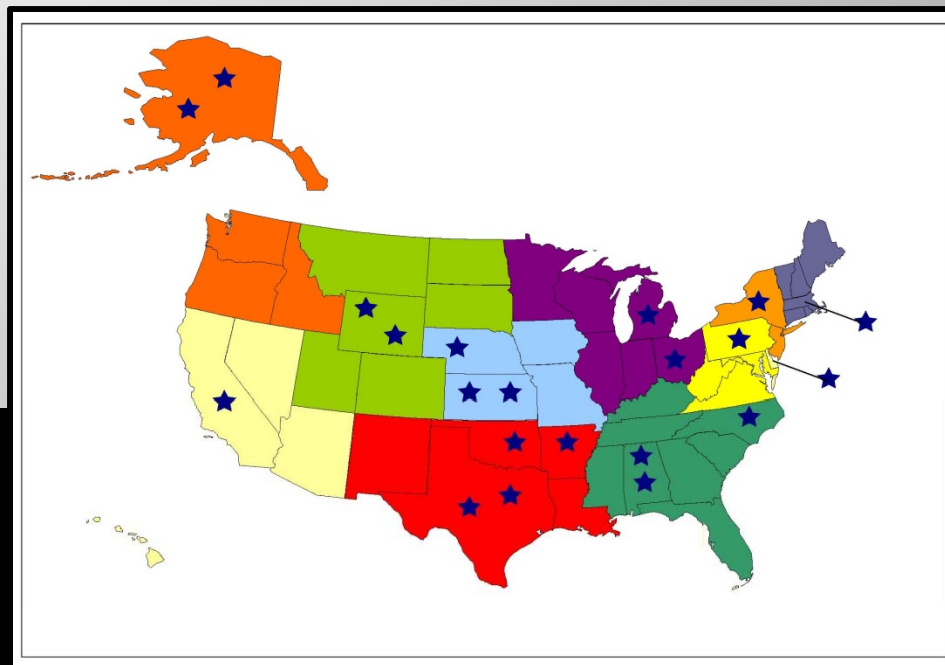
- MEMBER STATE
- ASSOCIATE STATE
- NON-MEMBER STATE

Note: Six Canadian Provinces are Affiliate Members





The national association of state groundwater protection programs





What is States First?

- ***Partnership between IOGCC and GWPC***
- ***Platform demonstrating states continuing regulatory improvements***
- ***Initiated by 14 IOGCC member Governors***
- ***Announced by 2013 IOGCC Chairman
Alabama Governor Bentley***



STATES FIRST INITIATIVE

PURPOSES OF THE INITIATIVE

1. *Recognition of the state's continuing regulatory improvements.*
2. *Provide a platform for open communication and sharing between state's.*
3. *Develop best practices.*
4. *Assist states efficiently develop and implement regulatory solutions.*



STATES FIRST INITIATIVE

Promoting and Documenting Continuous Regulatory Improvement

Underground
Injection
Control

Hydraulic
Fracturing

Inspector
Training &
Certification

Effective
Regulation
through SOGRE

Science,
Technology
and Information
Transfer



STATES FIRST INITIATIVE

UNDERGROUND INJECTION CONTROL

- *Peer Reviews of State Class II Regulatory Programs*
- *Consultation with States on Regulatory Improvements*

EFFECTIVE REGULATION THROUGH SOGRE

- *Peer Reviews and Consultations of Oil and Gas Regulatory Programs*
- *State to State Issue Focused Workshops and
Utah Horizontal Well Spacing Workshop*



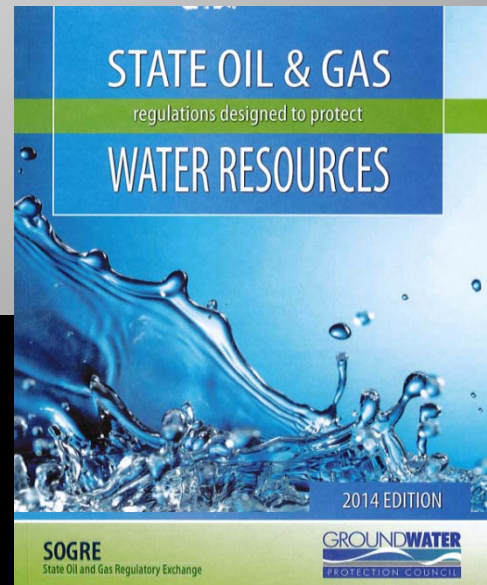
STATES FIRST INITIATIVE

INSPECTOR TRAINING AND CERTIFICATION

- *State Oil and Gas Inspector Training Program (Affiliated With Universities')*
- *State Oil and Gas Inspector Certification Program*

INFORMATION, TECHNOLOGY AND SCIENCE TRANSFER

- *Recently created Seismicity Task Force*
- *New report on state regulations to protect groundwater.*





STATES FIRST INITIATIVE

HYDRAULIC FRACTURING

- *Chemical Disclosure through Frac Focus*

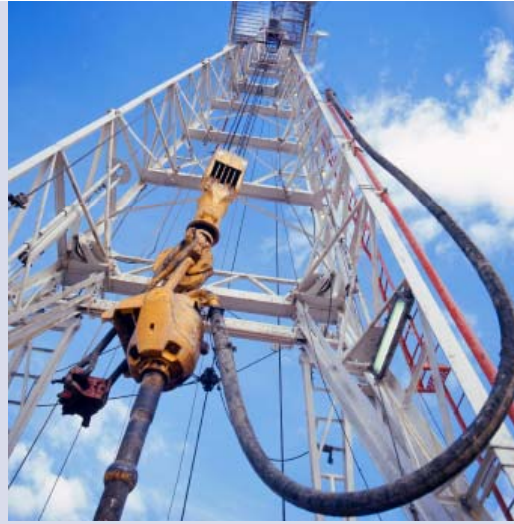




STATES FIRST INITIATIVE

GOALS

- Continuous Improvement
- Build Public Confidence
- Open Communications
For States and Federal
Agencies
- Empower states
- Educate Congress
- Inform Industry



Questions ?