

OHIO ENERGY POLICY

Midwestern Governor's Association Increasing Midwestern Energy Production and Achieving Low Cost Energy

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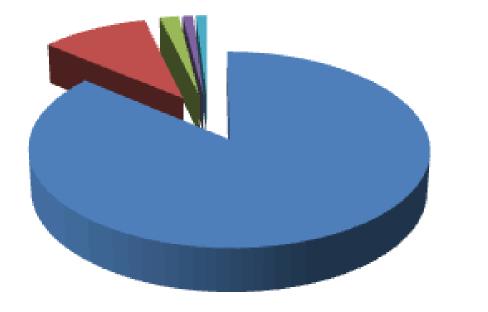


OHIO ENERGY POLICY

- Overview of Ohio's energy portfolio and diverse energy resources
- Why is Ohio leading on Energy Policy
- Developing the Ohio Energy Strategy
- Progress Report
- Work Left To Do

OHIO ENERGY RESOURCES

Ohio Electric Generation by Fuel Source



Coal - 86%

Nuclear - 10%

- Natural gas and other gases - 2%
- Petroleum 1%

 Hydroelectric and renewables - 1%

WHY IS OHIO LEADING ON ENERGY

- Ohio is blessed with abundant and diverse natural resources.
- Energy (low cost and abundant energy supply) Equals Jobs.
- Failure to develop a nation-wide, rational, comprehensive energy strategy.
- Increased federal regulatory pressure on coal and coal burning industries.

DEVELOPING OHIO'S 21ST CENTURY ENERGY POLICY

 Governor Kasich convened a stakeholder meeting in April 2011 that included top energy executives, environmental groups, business executives, cabinet directors and Governor's Office senior staff to discuss the development of an Ohio Energy Summit.

 In September 2011, the Ohio Governor's 21st Century Energy & Economic Summit was held in Columbus. The Summit served as a first step in developing a series of policy recommendations that would begin transforming Ohio's energy economy.

 Built partnerships between government, industry leaders, educators and environmental advocates to use new technologies and apply appropriate regulatory oversight to ensure public safety so Ohio can lead the nation with a complete energy policy while maintaining its position as a steward for the environment.

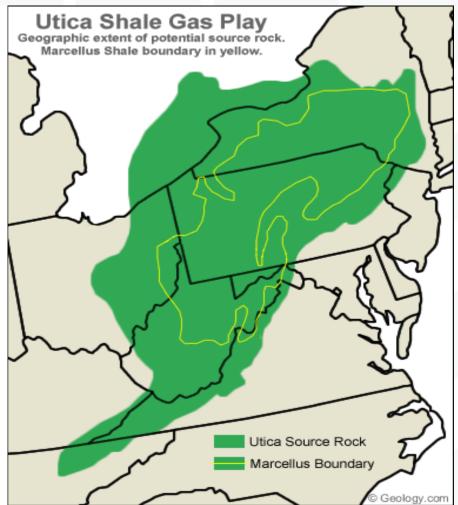
10 PILLARS OF OHIO'S ENERGY POLICY

- 1. Shale
- 2. Generation
- 3. Electricity Transmission and Distribution
- 4. Cogeneration / Waste Heat Recovery
- 5. Workforce Training

- 6. CNG/Alternative Fuels
- 7. Energy Efficiency
- 8. Coal
- 9. Regulatory Reform
- 10. Renewables

OHIO's SHALE PLAY





PILLAR 1: SHALE Industry Growth in Ohio

Exploration and Production

- Permits Issued and Acreage Leased in the Utica Shale
 - September 2011: 41 permits issued, 11 wells drilled, 1 producing well
 - May 2012: 232 permits issued, 70 wells drilled, 10 producing wells
 - Acreage Leased to Date: 3.5M acres leased; estimated \$3B⁺ paid to property owners
- Major Companies: BP, Chesapeake, Anadarko, Exxon, Chevron, Hess/Consol, Devon

Midstream

- MarkWest commitment to build a natural gas processing facility and a fractionation facility (Harrison & Monroe Co.)
- El Paso commitment to build a natural gas processing facility.
- NiSource commitment to build a natural gas processing facility.

Downstream

- Chemicals and polymer products, electric generation, agribusiness opportunities

Industry Services

- V&M Star expanding pipe threading operation (Mahoning Co.)
- Baker Hughes establishing base to service Utica shale wells in OH, PA and WV (Stark Co.)
- Exterran building new facility supplying natural gas production equipment (Mahoning Co.)
- Select Energy Services (Carroll Co.)
- Halliburton (Muskingum Co.)
- Existing Ohio companies strong in shale: Ariel, Gorman Rupp, Miller Supply, Timken, US Steel

PILLAR 1: SHALE Team Effort to Balance Job Creation & Public Safety

Modernizing Regulations

• ODNR

- Well construction standards
- Mandatory chemical disclosure
- Underground injection program
- Work with PUCO to ensure pipeline safety

• EPA

- Encouraging wastewater treatment and recycling technologies
- Issuance of general permits

Commerce

Consolidating and streamlining permitting

Taxation

 Ad Valorem pre-payment to provide money to local governments to manage industry impacts

ODOT

Local impacts/road use agreements

PILLAR 2: GENERATION Ensuring Ohio's Generation Capacity & Investing in New Technologies

- Review and Pilot New Generation and Efficiency Technologies
 - Smart Grid and Smart Metering
- Expand Customer Choice for Renewables
- Advocate for Reforms to Expand the Reliability Pricing Model

PILLAR 3: ELECTRICITY TRANSMISSION & DISTRIBUTION Meeting Needs of Industry and Consumers

- Ensure Transmission and Distribution are adequate for Growing Shale Industry
- Identify interconnection challenges to renewable energy projects

PILLAR 4: COGENERATION/WASTE HEAT Capturing Waste Heat to Make Green Energy

- Allow Waste Energy Recovery projects to Qualify as a Renewable Energy Source
- Allow Ohio Electric Utilities to Use Cogen to Meet Alternative Efficiency Standards
- Revamp Energy Loan Fund
- Require State to Review Cogen as Part of New Construction
 and Major Renovations

PILLAR 5: WORKFORCE DEVELOPMENT Aligning Industry Needs with Worker Training

- Investing in Shale and Energy Industry Training
 - Zane State: \$6M Capital Budget to construct new training space
 - Stark State: \$10M Capital Budget to construct indoor drill training rig
 - Nabors Drilling: State assisting with site selection to build oil and gas training rig
- Create a Statewide Website Linking Ohio Companies
 with a Trained Workforce
- Work with Companies to Develop Training Credentials to Ensure Skills Match Demand
- Link Veterans and Minorities With Jobs Specific to Oil and Gas Industry

PILLAR 6: CNG/ALTERNATIVE FUELS Promoting the Use of Natural Gas

- Sign Agreement with Other States to:
 - Develop regional CNG refueling infrastructure
 - Promote usage of CNG vehicles in Ohio
- Assess Converting All or Part of State Fleet to CNG
- Develop Flexible Revolving Loan Fund for Alternative Fuels
 - CNG, Biodiesel and Ethanol

PILLAR 7: ENERGY EFFICIENCY Promoting Efficiency to Save Resources

- Improve State Building Efficiency and Finance Through Air Quality Development Authority
- Identify New Efficiency Technologies and Programs Available
 to Ohio
- Determine Standards for State Fleet Vehicle Replacement to Increase Efficiency
- Review Utility Green Pricing Programs and Expand Customer Choice

PILLAR 8: COAL New Opportunities for a Critical Resource

Coal Research

 \$30M for coal research projects focused on carbon capture, sequestration, enhanced oil recovery, and new technologies

Permit Streamlining

- Streamlining and simplifying permit process
- Exempt Coal Combustion Waste From Additional Fees and Encourage Solid Waste Landfill Management

PILLAR 9: REGULATORY REFORM Streamline & Expedite Environmental Permits

 Develop and Issue "General Permits" for Business to Minimize Lengthy Permit Review

PILLAR 10: RENEWABLES Promoting Renewables for a Balanced Portfolio

- Retained Renewable and Advanced Energy Technology Requirements in SB 221
- Develop Flexible Revolving Loan Fund for Alternative Fuels
 - CNG, Biodiesel and Ethanol
- Revamp Energy Loan Fund to Help Finance Energy Efficiency and Renewable Energy Projects
- Identify and Address Interconnection Challenges to Renewable Energy Projects
- Review Utility Green Pricing Programs and Expand Customer Choice
 - Enhance current programs and provide new options to consumers for green energy
- Encourage Longer Term Contracts

OHIO'S ENERGY POLICY The Bottom Line

- The road to economic health and job creation is based on lowering taxes and having less regulation. Also critical is developing a policy aimed at having low-cost, abundant, and diverse energy supplies.
- We Are On Our Way to Transforming Ohio's Energy Economy
 - Passed Senate Bill 315
 - Passed House Bill 487
- Work Left To Do
 - Significant Rule Development and Program Re-Development
 - Shale Severance Tax and Funding to Assist Local Governments with Shale Development Impacts



OHIO ENERGY POLICY

Youngstown Sustainable Energy Forum

June 4, 2012

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