

# SAFER PA



## Collaborative Science for Sound Decisions



# Shale — A Transformative Opportunity for PA...

- Creating Thousands of Good, High-Paying Jobs and Supporting the Growth of Associated Businesses
- Providing Clean, Reasonably Priced Energy
  - Lowering Energy Costs for Consumers
  - Leading To Industrial Expansion
- Improving Regional and National Energy Security by Increasing the Availability of Domestic Fuels
- Protecting Our Health and Environment must be an Integral Component of Economic and Security Advantage

# SAFER PA

## Focused Mission & Momentum

*The **Shale Alliance for Energy Research, Pennsylvania (SAFER PA)** mission is to work collaboratively with government, the natural gas industry, environmental organizations, academia and other stakeholders to advance technology, analysis and education that support safe and sustainable development of the Commonwealth's shale resources.*

- Recommendation: SAFER PA was cited as a recommendation in the Governor's Marcellus Shale Commission findings
- Differentiation: Independent; balanced board; tactical technology development; singular focus on generating needed science for safe PA shale development
- Leverage: Substantial time and funding leverage for greater research and participation impact

# **SAFER PA**

## Current Status

- Third Board Meeting
- Established Leadership
- Securing Funding
- Establishing R&D Agenda
- Conducting Membership Campaign

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## 2013 Funding Strategy

- Building an \$8 – 10 million/yr. shale research program funded by the Commonwealth, supplemental funding and membership
- Approximately 6 projects on critical topics per year through a disciplined RFP process
- Seasoned Team conducting PA appropriation efforts
- Supplemental funding: PA Sponsored Projects; DOE; NETL; RPSEA; Foundations; Tailored Collaboration

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## 2013 R&D Agenda

- Shallow Subsurface Environmental Issues Characterization & Management
- Water & Solid Waste Management
- Emissions Characterization & Mitigation
- Long-term Strategic Management of Environmental Issues
- Efficiency Improvements to Lower Costs & Minimize Environmental Impacts
- Natural Gas Use for Economic & Environmental Improvement
- Outreach & Workforce Development

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## Example Research Projects

- Shallow Subsurface Issues – Methane and Pollution Occurrence and Migration
- Abandoned Wells – Location, Data Base, Mapping, and Risk Management
- Mine Water Treatment – Impacted Stream Remediation and Hydraulic Fracturing Use (non-fresh water source)
- Life-cycle Analysis – Characterization and Strategic, Long-term Management of Impacts, Water and Wastes
- Naturally Occurring Radioactive Materials (NORM) – Characterization and Analysis



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## Contact



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