

Reports & Studies - Oil & Natural Gas Development

The production of oil and natural gas from deep shale formations and other “tight” reservoirs, as well as the use of hydraulic fracturing, have been closely regulated and extensively studied for many years by the federal government, state governments and academia. The ongoing effort to closely monitor these activities has yielded many studies and reports, ranging from economic impact to water quality. Below is a collection of studies on oil & natural gas development.

GENERAL

[Short-Term Energy Outlook: Natural Gas](#)

EIA (July 2016)

[U.S. Energy Security Risk Index](#)

Institute for 21st Century Energy (January, 2016)

[A Geologic Play Book for Utica Shale Appalachian Basin Exploration](#)

West Virginia University (July 2015)

[Step on the Gas! How to Extend America's Energy Advantage](#)

Manhattan Institute (July 2015)

[U.S. Crude Oil and Natural Gas Proved Reserves](#)

EIA (December 2014)

[Framework for U.S. Natural Gas Production](#)

Morningstar (March 2014)

[Hydraulic Fracturing Study: PXP Inglewood Oil Field](#)

Cardno ENTRIX (October 2012)

[The Future of Natural Gas](#)

Massachusetts Institute of Technology Energy Initiative (June 2011)

[Shale Gas Production Subcommittee Second Ninety Day Report](#)

U.S. Secretary of Energy Advisory Board (November 2011)

[A Comparative Study of the Mississippian Barnett Shale, Fort Worth Basin, and Devonian Marcellus Shale, Appalachian Basin](#)

U.S. National Energy Technology Laboratory (April 2011)

[Realizing the Potential of U.S. Unconventional Natural Gas](#)

Center for Strategic and International Studies (February 2013)

[Natural Gas Liquids](#)

Brookings Institution (March 2013)

[Energy Rush: Shale Production and U.S. National Security](#)

Center for a New American Security (February 2014)

[Fueling the Future with Natural Gas: Bringing It Home](#)

IHS (January 2014)

[Realizing the Potential of North America's Abundant Natural Gas and Oil Resources](#)

National Petroleum Council (February 2012)

[States' experience with hydraulic fracturing](#)
Interstate Oil and Gas Commission (July 2002)

MANUFACTURING/ECONOMY

[Most local government budgets gain from oil, gas development](#)
Duke University Energy Initiative (May 2016)

[Energizing Manufacturing: Natural Gas and Economic Growth](#)
National Association of Manufacturers (May 2016)

[U.S. Chemical Industry Investment Linked to Shale Gas Tops \\$164 Billion](#)
American Chemistry Council (April 2016)

[A Pipeline for Growth: Fueling Economic Revitalization with Marcellus and Utica Shale Gas](#)
Greater Philadelphia Energy Action Team (March 2016)

[Fossil Fuel Energy and Economic Wellbeing](#)
George C. Marshall Institute (August 2015)

[America's Unconventional Energy Opportunity](#)
Harvard Business School (June 2015)

[The Rising Competitive Advantage of U.S. Plastics](#)
American Chemistry Council (May 2015)

[Welfare and Distributional Implications of Shale Gas](#)
National Bureau of Economic Research (April 2015)

[An analysis of the economic impact of unconventional shale development in Washington County, PA.](#)
Washington & Jefferson College's Center for Energy Policy and Management (March 2015)

[Shale Gas: Still a boon to US manufacturing?](#)
PriceWaterhouseCoopers (December 2014)

[The Economic and Budgetary Effects of Producing Oil and Natural Gas From Shale](#)
Congressional Budget Office (December 2014)

[Small Business Growth from Natural Gas Production and Exports](#)
SBE Council (November 2014)

[The Effect of Shale Based Feedstocks on the Global Petrochemical Industry](#)
IHS (November 2014)

[Oil and gas revenue allocation to local governments in eight states](#)
Duke University Energy Institute (October 2014)

[US Shale: A game of choices](#)
Deloitte (September 2014)

[Supplying the Unconventional Revolution: Sizing the Unconventional Oil and Gas Supply Chain](#)
IHS (September 2014)

[Study of Construction Employment in Marcellus Shale Related Oil and Gas Industry](#)
University of Illinois (August 2014)

[The Unconventional Energy Revolution: Estimated Energy Savings for Public School Districts and State and Local Governments](#)
IHS (June 2014)

[Impact of the Manufacturing Renaissance from Energy Intensive Sectors](#)
IHS (March 2014)

[The Marcellus Shale gas boom in Pennsylvania: employment and wage trends](#)
United States Department of Labor (February 2014)

[Nearly Every Manufacturer in the U.S. Will Benefit from Low-Cost Natural Gas](#)
Boston Consulting Group (February 2014)

[The Pennsylvania Marcellus Natural Gas Industry: Status, Economic Impacts and Future Potential](#)
Penn State (July 2011)

[The Economic Impacts of the Pennsylvania Marcellus Shale Natural Gas Play: An Update](#)
Penn State (May 2010)

[An Emerging Giant: Prospects and Economic Impacts of Developing the Marcellus Shale Natural Gas Play](#)
Penn State (July 2009)

[U.S. Supply Forecast and Potential Jobs and Economic Impacts \(2012-2030\)](#)
Wood Mackenzie (September 2011)

[Shale Gas: A Game Changer for U.S. and Global Gas Markets](#)
U.S. EIA (March 2010)

[The Natural Gas Subcommittee Report on Energy and Job Creation](#)
Michigan House of Representatives (March 2011)

[Potential Economic and Fiscal Impacts from Natural Gas Production in Broome County, New York](#)
Bernard L. Weinstein, Ph.D. and Terry L. Clower, Ph.D. (September 2009)

[Economic Considerations Associated with Regulating the American Oil and Natural Gas Industry](#)
Advanced Resources International, Inc. (April 2009)

[Environmental and Regulatory Considerations Associated with the American Oil and Natural Gas Industry](#)
Advanced Resources International, Inc. (April 2009)

[The Economic Impact of the Haynesville Shale on the Louisiana Economy](#)
Louisiana DNR (April 2009)

[Strengthening Our Economy: The Untapped U.S. Oil and Gas Resources](#)
ICF International (December 2008)

[The Local Impact of Oil and Gas Production and Drilling in Oklahoma](#)
Oklahoma State University (October 2008)

[The Economic Impact of the Natural Gas Industry in West Virginia](#)
Marshall University (August 2008)

[Barnett Shale supports over 83,000 jobs per year](#)
The Perryman Group (August 2011)

[The technology behind natural gas supplies](#)
American Exploration and Production Council (February 2010)

[Economic Impact of the Eagle Ford Shale](#)
Center for Community and Business Research (May 2012)

[Identifying Key Economic Impacts of Recent Increases in U.S. Natural Gas Production](#)
American Gas Association (May 2012)

[Energy for Economic Growth](#)

World Economic Forum (May 2012)

[Marcellus Royalty Payments Rising Rapidly](#)

Allegheny Institute for Public Policy (May 2013)

[The Economic and Employment Contributions of Unconventional Gas Development in State Economies](#)

IHS (June 2012)

[New Dynamics of the U.S. Natural Gas Market](#)

Bipartisan Policy Center (May 2013)

[Shale Gas, Competitiveness, and New US Chemical Industry Investment](#)

American Chemistry Council (May 2013)

[Understanding the Marcellus Supply Chain](#)

University of Pittsburgh (June 2012)

[The Benefits of Natural Gas Production and Exports for Pa. Small Businesses](#)

Small Business & Entrepreneurship Council (May 2013)

[Benefits of Hydraulic Fracturing](#)

American Enterprise Institute (April 2013)

[The Financial Returns from Oil and Natural Gas Company Stocks Held by American College and University Endowments](#)

Sonecon (January 2013)

[Low-Cost Shale Gas Gives North American Petrochemical Producers Advantages Over Europe](#)

Standard & Poor's (April 2013)

[The Role of Oil and Gas and Amenities in County Economic Development](#)

Liberty Source (August 2013)

[Economic Impacts of the Oil and Natural Gas Industry on the U.S. Economy in 2011](#)

PricewaterhouseCoopers (July 2013)

[Shale Energy: A Potential Game-Changer | Implications for the U.S. Transportation & Logistics Industry](#)

PricewaterhouseCoopers (November 2013)

[Shale Gas: Reshaping the US Chemicals Industry](#)

PricewaterhouseCoopers (October 2012)

[Shale Gas: A Renaissance in US Manufacturing?](#)

PricewaterhouseCoopers (December 2011)

[Local Collection of State Taxes Rises in Marcellus Shale Counties](#)

Penn State (May 2012)

[The US Energy Revolution: How Shale Energy Could Ignite the US Growth Engine](#)

Goldman Sachs (September 2012)

[Age of Gas](#)

General Electric Company (October 2013)

[The Arithmetic of Shale Gas](#)

Yale University (June 2012)

[Energy in Pennsylvania: Past, Present, and Future](#)

Commonwealth Economics, LLC (October 2013)

[Impact of the Manufacturing Renaissance from Energy Intensive Sectors](#)

The United States Conference of Mayors (March 2014)

[Identifying Key Economic Impacts of Recent Increases in U.S. Natural Gas Production](#)

AGA (May 2012)

[North America Midstream Infrastructure through 2035: Capitalizing on Our Energy Abundance](#)

ICF International (March 2014)

[How the Marcellus Shale Transformed the Domestic Natural Gas Landscape](#)

Morningstar, Inc. (February 2014)

[The Shale Shift: Exploring the impact of shale gas on the U.S. economy](#)

TD Economics (November 2012)

[The Petroleum Industry and the Monterey Shale: Current Economic Impact and the Economic Future of the San Joaquin Valley](#)

Craig School of Business, California State University, Fresno (August 2013)

[Small Businesses Unleash America's Energy Employment Boom](#)

Manhattan Institute (February 2014)

[The Economic Effects of Hydrofracturing on Local Economies: A Comparison of NY and PA](#)

Manhattan Institute (May 2013)

[Shale Gas and New Petrochemicals Investment: Benefits for the Economy, Jobs, and US Manufacturing](#)

American Chemistry Council (March 2011)

[Potential Economic & Fiscal Impacts of Natural Gas Production in Western Maryland](#)

MD Petroleum Council (March 2012)

[Game changers: Five opportunities for US growth and renewal](#)

McKinsey & Company (July 2013)

[Drilling for Jobs – What the Marcellus Shale could mean for New York](#)

Public Policy Institute of New York State (July 2011)

WATER QUALITY & USE

[Elevated levels of diesel range organic compounds in groundwater near Marcellus gas operations are derived from surface activities](#)

Yale University (October 2015)

[Water Footprint of Hydraulic Fracturing](#)

Duke University (September 2015)

[The Depths of Hydraulic Fracturing and Accompanying Water Use Across the United States](#)

Stanford University (July 2015)

[Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources](#)

EPA (June 2015)

[Data Report of Baseline Conditions for 2010 - 2013](#)

Susquehanna River Basin Commission (June 2015)

[Water Quality of Groundwater & Stream Base Flow in the Marcellus Shale Gas Field of the Monongahela River Basin, West Virginia](#)

USGS (May 2015)

[2014 Pennsylvania Integrated Water Quality Monitoring and Assessment Report](#)
PA DEP (December 2014)

[Baseline Groundwater Quality Studies Find Naturally Occurring Methane in Northeastern Pennsylvania](#)
USGS (November 2014)

[State Oil & Gas Regulations Designed to Protect Water Resources: 2014 Edition](#)
Ground Water Protection Council (October 2014)

[An Evaluation of Fracture Growth and Gas/Fluid Migration as Horizontal Marcellus Shale Gas Wells are Hydraulically Fractured in Greene County, Pennsylvania](#)
Department of Energy, NETL (September 2014)

[A geochemical context for stray gas investigations in the northern Appalachian Basin: Implications of analyses of natural gases from Neogene-through Devonian-age strata](#)
Fred J. Baldassare, Mark A. McCaffrey, John A. Harper (March 2014)

[Water-Quality Characteristics and Trend Analyses for the Tongue, Powder, Cheyenne, and Belle Fourche River Drainage Basins, Wyoming and Montana, for Selected Periods, Water Years 1991 through 2010](#)
U.S. Geological Survey (April 2012)

[Prudent and Sustainable Water Management and Disposal Alternatives Applicable to Shale Gas Development](#)
ALL Consulting (January 2009)

[Inventory and Extent Of Hydraulic Fracturing In Coalbed Methane Wells In The Producing States](#)
Ground Water Protection Council (December 1998)

[Potential Impacts of Hydraulic Fracturing of Coalbed Methane Wells on Underground Sources of Drinking Water](#)
U.S. Environmental Protection Agency (June 2004, accessed December 2006)

[Evaluation of Methane Sources in Groundwater in Northeastern Pa.](#)
NGWA's Groundwater (June 2013)

[Modern Shale Gas Development in the United States: A Primer](#)
U.S. Department of Energy and Ground Water Protection Council (April 2009)

[Section 999 Report to Congress](#)
U.S. Department of Energy (April 2012)

[Modern Shale Gas Development in the United States: An Update](#)
NETL (September 2013)

[Impact of Shale Gas Development on Regional Water Quality](#)
University of Pittsburgh & Pennsylvania State University (May 2013)

[U-M technical reports examine hydraulic fracturing in Michigan](#)
University of Michigan (September 2013)

[America's New Energy Future: The Unconventional Oil & Gas Revolution and the US Economy](#)
IHS CERA (September 2013)

[Constraints on Upward Migration of Hydraulic Fracturing Fluid and Brine](#)
Gradient (July 2013)

[Baseline Groundwater Quality from 20 Domestic Wells in Sullivan County, Pennsylvania, 2012](#)
U.S. Geological Survey (June 2013)

[National Human Health Risk Evaluation for Hydraulic Fracturing Fluid Additives Gradient](#) (May 2013)

[Trace Elements and Radon in Groundwater Across the United States, 1992-2003](#)
U.S. Geological Survey (August, 2011)

[Shallow Groundwater Quality and Geochemistry in the Fayetteville Shale Gas-Production Area, North-Central Arkansas, 2011](#)
U.S. Geological Survey (January 2013)

[State Oil and Gas Agency Groundwater Investigations](#)
Ground Water Protection Council (August, 2011)

[Estimated Use of Water in the United States in 2005](#)
U.S. Geological Survey (October 2009)

[Water Sources & Demand for the Hydraulic Fracturing of Oil & Gas Wells in Colorado from 2010 - 2015](#)
Colorado Division of Water Resources, the Colorado Water Conservation Board, Colorado Oil and Gas Conservation Commission (January 2012)

[Life Cycle Analysis of Water Use and Intensity of Oil and Gas Recovery In Wattenberg Field, Colo.](#)
Colorado State University, Noble Energy Inc. (May 2012)

[State Oil and Natural Gas Regulations Designed to Protect Water Resources](#)
U.S. Department of Energy and Ground Water Protection Council (May 2009)

[Response of the U.S. Environmental Protection Agency to Petition for Promulgation of Rule Withdrawing Approval of Alabama's Underground Injection Control Program](#)
U.S. Environmental Protection Agency (May 1995)

[Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs Study](#)
U.S. Environmental Protection Agency (June 2004)

[Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources: Progress Report](#)
U.S. Environmental Protection Agency (December 2012)

[Water Consumption of Energy Resource Extraction, Processing, and Conversion](#)
Belfer Center for Science and International Affairs, Harvard University (October 2010)

[The Impact of Marcellus Gas Drilling on Rural Drinking Water Supplies](#)
Center for Rural Pennsylvania (November 2011)

PUBLIC HEALTH/ENVIRONMENT

[Fort Cherry Hydraulic Fracturing Air Monitoring](#)
Cardno ChemRisk (June 2016)

[U.S. energy-related carbon dioxide emissions in 2015 are 12% below their 2005 levels](#)
EIA (May 2016)

[Data Indicate that Massive Improvements in Air Quality, Health a Direct Function of Shale Energy In Depth](#) (September 2015)

[Atmospheric Emission Characterization of Marcellus Shale Natural Gas Development Sites](#)
Drexel University (May 2015)

[Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013](#)

U.S. Environmental Protection Agency (April 2015)

[2013 air emissions inventory for the natural gas drilling industry](#)

PA DEP (April 2015)

[Life cycle greenhouse gas emissions from U.S. liquefied natural gas exports: implications for end uses.](#)

Carnegie Mellon University (March 2015)

[Detailed Human Health Risk Assessment of Oil and Gas Activities in Northeastern British Columbia](#)

Ministry of Health in British Columbia (April 2015)

[Technologically Enhanced Naturally Occurring Radioactive Materials \(TENORM\) Study Report](#)

Pennsylvania Department of Environmental Protection (January 2015)

[The Impact of Marcellus Shale Development on Health and Health Care](#)

The Center for Rural Pennsylvania (January 2015)

[Methane Emissions Decline in Top Oil and Gas Basins](#)

Energy In Depth (December 2014)

[Air Monitoring Results for the Fracking and Flaring Phases of Gas Extraction Operations at the Chiarelli Well Pad](#)

ChemRisk (February 2012)

[Methane Emissions from Process Equipment at Natural Gas Production Sites in the United States,](#)

University of Texas at Austin (December 2014)

[Shale Gas Monitoring Report](#)

Department of Conservation and Natural Resources (April 2014)

[Measurements of methane emissions at natural gas production sites in the United States](#)

University of Texas and the Environmental Defense Fund (September 2013)

[Assessing the greenhouse impact of natural gas](#)

Geochemistry, Geophysics, Geosystems (G3) (June 2012)

[Supplemental Generic Environmental Impact Statement On The Oil, Gas and Solution Mining Regulatory Program](#)

New York State Department of Environmental Conservation (September 2009)

[Fact-Based Regulation for Environmental Protection in Shale Gas Development](#)

Energy Institute, Univ. of Texas at Austin (February 2012)

[Hydraulic Fracturing Operations—Well Construction and Integrity Guidelines](#)

American Petroleum Institute (October 2009)

[Cornell professor finds Howarth GHG study critically flawed](#)

Climate Change Journal (July 2012)

[Leveraging Natural Gas to Reduce Greenhouse Gas Emissions](#)

Center for Climate and Energy Solutions (June 2013)

[Pennsylvania Follow-up State Review](#)

STRONGER (September 2013)

[Benefits of Hydraulic Fracturing](#)

American Enterprise Institute (April 2013)

[Measurements of Methane Emissions at Natural Gas Production Sites in the U.S.](#)
Environmental Defense Fund, UT-Austin (October 2013)

[Changing the Game? Emissions and Market Implications of New Natural Gas Supplies](#)
Stanford University (September 2013)

[Life Cycle Greenhouse Gas Emissions and Freshwater Consumption of Marcellus Shale Gas](#)
ExxonMobil Research and Engineering Co. (April 2013)

[Shale Gas Production: Potential Versus Actual Greenhouse Gas Emissions](#)
MIT (November 2012)

[Why Every Serious Environmentalist Should Favor Fracking](#)
Centre for Policy Studies (December 2013)

[Reduced Emissions from U.S. Power Plants Due to the Switch to Natural Gas](#)
NOAA (January 2014)

[Environmental Impacts During Shale Gas Drilling: Causes, Impacts and Remedies](#)
University at Buffalo (May 2012)

[Review of the Potential Public Health Impacts of Exposures to Chemical and Radioactive Pollutants as a Result of Shale Gas Extraction](#)
Public Health England (October 2013)

[The Next Frontier in United States Unconventional Shale Gas and Tight Oil Extraction: Strategic Reduction of Environmental Impact](#)
Belfer Center (March 2013)

[Evaluating the Environmental Implications of Hydraulic Fracturing in Shale Gas Reservoirs](#)
ALL Consulting (2008)

[Evaluation of impact of shale gas operations in the Barnett Shale region on volatile organic compounds in air and potential human health risks](#)
ToxStrategies, Austin (September 2013)

[Characterizing Pivotal Sources of Methane Emissions from Unconventional Natural Gas Production](#)
API, ANGA (June 2012)

[The Economic Impacts of the Marcellus Shale: Implications for NY, PA, and WV](#)
API (July 2010)

[Measurements of methane emissions at natural gas production sites in the United States](#)
David T. Allena, Center for Energy and Environmental Resources, University of Texas, Austin, Vincent M. Torresa URS Corporation, et al. (September 2013)

[A Commitment to Air Quality in the Barnett Shale](#)
Texas Commission on Environmental Quality

[Air Quality Impacts from Horizontal Well Drilling and Related Activities](#)
West Virginia Department of Environmental Protection (June 2013)

[Northeastern Pennsylvania Marcellus Shale Short-Term Ambient Air Sampling Report](#)
Pennsylvania Department of Environmental Protection (January 2011)

[Southwestern Pennsylvania Marcellus Shale Short-Term Ambient Air Sampling Report](#)
Pennsylvania Department of Environmental Protection (November 2010)

[Data Show Public Health Impacts from Natural Gas Production Overstated](#)
Sue Mickley, M.P.H., and Uni Blake, M.S., Toxicology (October 2011)

[Shale Gas Production: Potential Versus Actual Greenhouse Gas Emissions](#)

Massachusetts Institute of Technology (November 2012)

[Life Cycle Greenhouse Gas Emissions of Marcellus Shale Gas](#)

Carnegie Mellon University (August 2011)

[Characterizing Pivotal Sources of Methane Emissions from Natural Gas Production](#)

URS Corp., LEVON Group, American Petroleum Institute, America's Natural Gas Alliance
(September 2012)

[Comment on "Hydrocarbon Emissions Characterization in the Colorado Front Range – A Pilot Study"](#)

Council on Foreign Relations (October 2012)

[Climate Impact of Potential Shale Gas Production in the EU](#)

European Commission (July 2012)

[Life Cycle Greenhouse Gas Inventory of Natural Gas Extraction, Delivery and Electricity Production](#)

U.S. National Energy Technology Laboratory (October 2011)

[The Greenhouse Impact of Unconventional Gas for Electricity Generation](#)

University of Maryland (October 2011)

[Assessing the Greenhouse Impact of Natural Gas](#)

Cornell University (June 2012)

[Mismeasuring Methane: Estimating Greenhouse Gas Emissions from Upstream Natural Gas Development](#)

IHS CERA (August 2011)

[City of Fort Worth Natural Gas Air Quality Study](#)

Eastern Research Group, Sage Environmental Consulting

[DISH, Texas Exposure Investigation](#)

Texas Dept. of State Health Services (May 2010)

SEISMICITY

[Myths and Facts on Wastewater Injection, Hydraulic Fracturing, Enhanced Oil Recovery, and Induced Seismicity"](#)

Seismological Society of America (2015)

[Induced Seismicity and Hydraulic Fracturing for the Recovery of Hydrocarbons](#)

Durham Energy Institute, Department of Earth Sciences, Durham University (April 2013)

[Induced Seismicity Potential in Energy Technologies](#)

National Research Council (June 2012)

[Revised Draft Supplemental Generic Environmental Impact Statement: Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing to Develop the Marcellus Shale and Other Low-Permeability Gas Reservoirs](#)

New York Department of Environmental Conservation (September 2011)

OTHER TOPICS

[LNG Opportunities for Marine and Rail](#)

ANGA (October 2014)

[Setting the Record Straight on LNG Exports](#)

American Council for Capital Information (October 2014)

[Drilling Productivity Report](#)

U.S. EIA (April 2014)

[Marcellus Shale Drilling Productivity Report](#)

U.S. EIA (April 2014)

[U.S. LNG Exports: State-Level Impacts on Energy Markets and the Economy](#)

ICF (November 2013)

[The Geopolitics of Natural Gas](#)

Harvard & Rice University Experts (July 2012)

[Assessment of New York City Natural Gas Market Fundamentals and Life Cycle Fuel Emissions](#)

ICF International (August 2012)

[Shale & Renewables: A Symbiotic Relationship](#)

Citigroup (September 2012)

[Why Rapid Approval of LNG Applications is Important for U.S. Prosperity](#)

American Council for Capital Formation (July 2013)

[Exporting the American Renaissance: Global Impacts of LNG Exports from the United States](#)

Deloitte (June 2013)

[Driving on Natural Gas: Fuel Price and Demand Scenarios for Natural Gas Vehicles to 2025](#)

Clean Skies Foundation (April 2013)

[Natural Gas Vehicles: Driving America to a More Prosperous, Secure, and Sustainable Future](#)

Progressive Policy Institute (April 2013)

[Innovation in Oil and Natural Gas Production Assures Future Supplies](#)

Manhattan Institute (April 2013)

[2014 Sustainable Energy in America Factbook](#)

The Business Council for Sustainable Energy (February 2014)

[Oil & Natural Gas Transportation & Storage Infrastructure: Status, Trends, & Economic Benefits](#)

IHS (December 2013)

[NGV Road Map For Pennsylvania Jobs, Energy Security and Clean Air](#)

MSC (April 2011)

[Natural Gas and the Transformation of the U.S. Energy Sector: Electricity](#)

U.S. National Renewable Energy Laboratory (November, 2012)

[Marcellus Workshop in NY: Best Practices for Ensuring Safe, Efficient Deployment of HF](#)

API (November 2009)

[Shale Gas](#)

U.K. House of Commons, Energy and Climate Change Committee (May, 2011)

STUDIES – Debunked

[Association Between Unconventional Natural Gas Development in the Marcellus Shale and Asthma Exacerbations](#), Johns Hopkins University (July 2016)

- Energy In Depth debunk: [Despite Provocative Headlines, New Pa. Study Fails to Link Fracking to Asthma](#)

[Endocrine-Disrupting Activity of Hydraulic Fracturing Chemicals and Adverse Health Outcomes After Prenatal Exposure in Male Mice](#), University of Missouri (October 2015)

- Energy In Depth debunk: [Four Reasons – Beyond the Obvious One – Why a New Report on Fracking and Sperm Counts in Mice is Very Silly](#)

[Fracking Industry Wells Associated With Premature Birth](#), Johns Hopkins University (October 2015)

- Energy In Depth debunk: [Researchers’ Own Data Contradict Conclusion Linking HF to Premature Births](#)

[Endocrine-Disrupting Chemicals and Oil and Natural Gas Operations: Potential Environmental Contamination and Recommendations to Assess Complex Environmental Mixtures](#), University of Missouri (October 2015)

- Energy In Depth debunk: [New Endocrine Disruption Study a Compilation of Debunked Anti-Fracking “Research”](#)

[The Potential Environmental Impact from Fracking in the Delaware River Basin](#), Delaware River Keeper (August 2015)

- Energy In Depth debunk: [Four Facts to Know About a New Delaware Riverkeeper Commissioned Study](#)

[Unconventional Gas and Oil Drilling Is Associated with Increased Hospital Utilization Rates](#), University of Pennsylvania and Columbia University (August 2015)

- Energy In Depth debunk: [Five Facts to Know About a New Pennsylvania Fracking and Health Study](#)

[Perinatal Outcomes and Unconventional Natural Gas Operations in Southwest Pennsylvania](#), University of Pittsburgh (August 2015)

- Energy In Depth debunk: [Top Seven Facts on a New Univ. of Pitt. Infant Birth Weight Study](#)
- Magee-Womens Research Institute Foundation statement: [Unconventional Gas Drilling in Western Pennsylvania and Pregnancy Health](#)

[A Comprehensive Analysis of Groundwater Quality in The Barnett Shale Region](#), University of Texas – Arlington (June 2015)

- Energy In Depth debunk: [UTA Groundwater Study: Four Key Facts](#)

[Health worries pervade North Texas fracking zone](#), Center for Public Integrity (December 2014)

- Energy In Depth debunk: [Errors from Start to Finish in Center for Public Integrity’s Barnett Shale ‘Investigation’](#)

[Proximity to Natural Gas Wells and Reported Health Status: Results of a Household Survey in Washington County, Pennsylvania](#), Yale University

- Energy In Depth debunk: [Yale Health Study Misses the Mark on Fracking](#)

[Noble gases identify the mechanisms of fugitive gas contamination in drinking-water wells overlying the Marcellus and Barnett Shales](#) (August 2014)

- Energy In Depth debunk: [Four Key Facts on a New Well Integrity Study](#)

[Toward a better understanding and quantification of methane emissions from shale gas development](#), Proceedings of the National Academy of Sciences (April 2014)

- Energy In Depth debunk: [New Ingraffea Report: Same Old Tactics](#)

[Water Resource Reporting and Water Footprint from Marcellus Shale Development in West Virginia and Pennsylvania](#), *Earthworks* (October 2013)

- Energy In Depth debunk: [Earthworks Report Chooses Old Data Over New Data over-new-data/](#)

[Impacts of Shale Gas Wastewater Disposal on Water Quality in Western Pennsylvania](#), *Duke University* (October 2013)

- Energy In Depth debunk: [Five Facts About Duke's Latest Anti-Shale Study shale-study/](#)
- Marcellus Shale Coalition response: [Just The Facts: A Closer Look at Duke's Methane Study look-at-dukes-methane-study/](#)

[A Critical Review of the Risks to Water Resources from Unconventional Shale Gas Development and Hydraulic Fracturing in the United States](#), *Duke University* (March 2014)

- Energy In Depth debunk: [New Duke Paper a Rehash of Previous \(Debunked\) Studies debunked-studies/](#)

[Toxic and Dirty Secrets: The Truth about Fracking and Your Family's Health](#), *Center for Environmental Health* (June 2013)

- Energy In Depth debunk: [New Activist Report Targets Women and Children and-children-2/](#)

[Potential Contaminant Pathways from Hydraulically Fractured Shale to Aquifers](#), *Tom Myers* (May 2013)

- Energy In Depth debunk: [Currying Favor with Natural Gas Opponents, Myers "Defies Theories of Hydrogeology"](#)

[Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations](#), *Robert W. Howarth, Renee Santoro, and Anthony Ingraffea, Cornell University* (May 2011)

- Energy In Depth debunk: [Five Things to Know about the Cornell Shale Study](#)
 - [Lights Out: Sierra Club-Funded Study Finally Puts Discredited Cornell Paper to Bed](#)
 - [New Study Debunks Cornell GHG Paper. Again.](#)
 - [MIT Report Takes Square Aim at Howarth's "Unreasonable" Inputs](#)

[Venting and leaking of methane from shale gas development: response to Cathles et al.](#), *Robert W. Howarth, Renee Santoro, and Anthony Ingraffea, Cornell University* (January 2012)

- Energy In Depth debunk: [There They Go Again: Latest Cornell Paper Just More of the Same](#)

[Estrogen and Androgen Receptor Activities of Hydraulic Fracturing Chemicals and Surface and Ground Water in a Drilling-Dense Region](#), Posted on *Endocrine Society* (December 2013)

- Energy In Depth debunk: [New Inflammatory Study on Fracking and Endocrine Disruption: Five Key Facts endocrine-key-facts/](#)

[Why Fracking for Oil and Natural Gas Is a False Solution](#), *Food and Water Watch* (November 2012)

- Energy In Depth debunk: [Another Reality Check for Food & Water Watch watch/](#)

[Fracking by the Numbers](#), *Environment America* (October 2013)

- Energy In Depth debunk: [By the Numbers: Counting Down the Ways Environment America's Report Comes Up Short](#)

[Natural Gas Extraction: An Interstate Tax Comparison](#), *Independent Fiscal Office (IFO)*, (March 2014)

- Marcellus Shale Coalition response: [Independent Fiscal Office \(IFO\) Study Overview](#)