Who pays for fracking?

For years, the gas industry has been seeking to extract natural gas in New York State by a method known as high-volume fracking, but it has been blocked by a groundswell of public opposition and an executive order that has imposed a de facto moratorium since 2008. The health hazards and environmental risks associated with fracking are undeniable, but the industry has attempted to sweep aside these concerns by claiming that gas extraction will benefit ordinary New Yorkers.

Catskill Citizens examines the evidence.

The natural gas industry is spending millions trying to convince New Yorkers that high-volume hydraulic fracking will be an economic godsend for New York.

It’s difficult to put an exact figure on what the industry spends to promote fracking in New York State, but consider these facts:

In 2009, just as the Marcellus Shale gas “boom” was taking off, the newly formed America’s Natural Gas Alliance (ANGA) announced that it would spend $80 million on a national ad campaign. We’ve all seen and heard the ANGA ads—they’re unavoidable; they’re in newspapers, in magazines, and on the radio. In fact, ANGA is one of the largest sponsors of news programming on NPR. Fueled by annual dues of $77 million, ANGA began expanding its campaign onto television in 2013.

ANGA is only one of several industry organizations promoting the gas industry. There’s also Energy in Depth (EID), which Sourcewatch characterizes as a “front group” for the American Petroleum Institute and the Independent Petroleum Association of America. EID spends millions on public relations, as do individual gas corporations like Chesapeake Energy and Exxon, both of which own shale gas leases in New York State.
And of course, the industry buys political clout. Common Cause/NY reports that “pro-fracking interests” spent more than $64 million on lobbying and contributions to the political campaigns of New York politicians between 2007 and July 2013. “Direct fracking interests” ponied up almost $17 million.

1. Exxon purchased the gas giant XTO for Energy for $41 billion in 2009.
2. The Chesapeake Energy TV commercials gallery can be found [here](#).

**Fracking is inherently dangerous. It entails injecting millions of gallons of toxic, chemically laced fluid deep into the ground to develop each gas well.**

The New York State Department of Environmental Conservation estimates that “2.4 million to 7.8 million gallons of water may be used for a multi-stage hydraulic fracturing procedure in a typical 4,000-foot lateral wellbore.” (Revised Draft SGEIS 2011, Executive Summary, Page 8)

The [Endocrine Disruption Exchange](#) lists more than six hundred chemicals, and almost a thousand products, that are used in gas extraction operations. Some of these chemicals are known to cause cancer, some are neurotoxins, and some are endocrine disruptors. The health effects of many of these chemicals are as yet unknown.

In 2010, Catskill Citizens used the Freedom of Information Law (FOIL) to obtain information on chemical products used in thirty-six vertical Marcellus wells that were fracked in New York State prior to 2009. To comply with our request, the New York State Department of Environmental Conservation (DEC) released Material Safety Data Sheets (MSDS’s) for fifty-two products containing scores of different chemicals. These MSDS’s list a bewildering variety of symptoms that may result from exposure—ranging from skin rashes and blindness to nervous disorders and death. Still, the information provided by the DEC was incomplete. The identities and concentrations of some of the most dangerous chemicals used in gas extraction (such as benzene, toluene, and xylene) were not included in the response to our FOIL request and have never been revealed to the public. The industry claims this information is a “trade secret.”

1. Click [here](#), then enter “trade secret” in our Search feature, and you’ll find numerous articles about the gas industry’s refusal to disclose the chemicals used in fracking.

**What makes it even more dangerous is the fact that the gas industry is exempt from key provisions of critical environmental laws, including the Clean Air Act, the Safe Drinking Water Act, and the Superfund Law. These loopholes increase the likelihood of accidents and shift the cost of cleanup onto the public.**

[Loopholes for Polluters](#), a publication by Earthworks, lists seven of the most important industry exemptions from environmental laws. The Natural Resources
Defense Council has compiled a comprehensive spreadsheet listing fifty-five exemptions from federal laws and regulations. Some exemptions threaten public health…

The Energy Policy Act of 2005 amended the Safe Drinking Water Act to exclude hydraulic fracturing:

SEC. 322. HYDRAULIC FRACTURING.
Paragraph (1) of section 1421(d) of the Safe Drinking Water Act (42 U.S.C. 300h(d)) is amended to read as follows:
```
(1) UNDERGROUND INJECTION.—The term ‘underground injection’—
(A) means the subsurface emplacement of fluids by well injection; and
(B) excludes—
(i) the underground injection of natural gas for purposes of storage; and
(ii) the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities.
```

Others expose taxpayers to financial risk…

The Comprehensive Environmental Responsibility, Compensation, and Liability Act (CERCLA), commonly known as the Superfund Act, is meant to ensure that polluters pay to clean up the contamination they cause, but there’s a specific exemption for “natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel.” 42 U.S.C. § 9601(14)

Industry exemptions from federal laws and regulations are frequently mirrored at the state level. For example, the NRDC found that the gas industry is exempt from five federal hazardous waste-disposal laws and regulations:

- Fracking fluid and produced water from natural gas wells are not considered pollutants subject to the National Pollutant Discharge Elimination System permitting process under the Clean Water Act.
- A hazardous-waste exemption to the Resource Conservation and Recovery Act encompasses “drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas.” 42 U.S.C. § 6921(b)(2(a)
- The federal program that governs the underground disposal of waste imposes stricter standards on wells that dispose of hazardous waste, but because toxic waste from oil and gas operations is exempt from the “hazardous” classification, it can be disposed of with fewer regulatory controls. 40 CFR § 146.5
- Wastes from oil and gas drilling and exploration are exempt from regulations known as Subtitle C. The exemption includes “gas and oil drilling muds, oil
production brines, drilling fluids, and produced water. Natural gas plants that process NG to remove water and other impurities prior to entering the sales line are considered to be part of the exempt production operations regardless of their location with respect to the wellhead.” 53 Fed. Reg. 25,445 (1988)

- According to 58 Fed. Reg. 15,284 (1993) “A simple rule of thumb for determining the scope of the exemption is whether the waste in question has come from down-hole (i.e. brought to the surface during oil and gas E&P operations) or has otherwise been generated by contact with the oil and gas production stream during the removal of produced water or other contaminants from the product.... If the answer to either question is yes, the waste is most likely considered exempt.”

And in New York State, drilling waste is categorically exempt from the state’s hazardous waste laws because it is legally classified as “industrial,” not “hazardous,” no matter how dangerous it actually may be. Because wastewater and drill cuttings are not defined as hazardous, they are not metered at the point of production and point of disposal. That makes it impossible to determine if these waste products are legally disposed of or illegally dumped in rivers and streams. A bill that would close New York’s “toxic waste loophole” has been bottled up in the state Senate for years.

**New York State taxpayers could be forced to spend billions to cope with contaminated air, contaminated drinking water, and public health emergencies. Hundreds of millions more will be needed to repair damaged bridges and roads and to prepare our first responders.**

**Air contamination** associated with gas extraction operations is well documented. Cancer-causing volatile organic compounds are released into the atmosphere when a well is developed, and these gases combine with diesel exhaust from the trucks that are used to haul frack fluid and wastewater to and from well sites, producing ozone.

Sublette County, Wyoming, is a case in point. Although the county is the size of Connecticut, it has only ten thousand inhabitants, yet because of extensive gas drilling, it’s one of the “most polluted counties” in the country according to the American Lung Association. A Wyoming Department of Health study released in the spring of 2013 reported that ozone spikes in Sublette County have led to increased visits to doctors, particularly for respiratory complaints. The study, which compared ozone data collected by the Wyoming Department of Environmental Quality to patient data collected in the county, showed that for every 10 parts per billion ozone rose, respiratory-based visits to doctors rose 3 percent.

**Water contamination** due to drilling and fracking is another well-documented occurrence. Reporters and environmental advocates have catalogued more than one thousand instances of contamination linked to drilling and fracking. ProPublica has published some of the best investigative reporting on this subject,
including:

**New Study Finds High Levels of Arsenic in Groundwater Near Fracking Sites**, by Theodoric Meyer, August 8, 2013

**EPA's Abandoned Wyoming Fracking Study One Retreat of Many**, by Abrahm Lustgarten, July 3, 2013

**New Study: Fluids From Marcellus Shale Likely Seeping Into PA Drinking Water**, by Abrahm Lustgarten, July 9, 2012

**So, Is Dimock’s Water Really Safe to Drink?**, by Abrahm Lustgarten, March 20, 2012

**Years After Evidence of Fracking Contamination, EPA to Supply Drinking Water to Homes in Pa. Town**, by Abrahm Lustgarten, January 20, 2012


**Feds Link Water Contamination to Fracking for the First Time**, by Abrahm Lustgarten and Nicholas Kusnetz, December 8, 2011

**EPA Finds Compound Used in Fracking in Wyoming Aquifer**, by Abrahm Lustgarten, November 10, 2011

**Does an Old EPA Fracking Study Provide Proof of Contamination?**, by Abrahm Lustgarten, August 4, 2011

**Gas Drilling Companies Hold Data Needed by Researchers to Assess Risk to Water Quality**, by Abrahm Lustgarten, May 17, 2011

**Scientific Study Links Flammable Drinking Water to Fracking**, by Abrahm Lustgarten, May 9, 2011

**Deteriorating Oil and Gas Wells Threaten Drinking Water, Homes Across the Country**, by Nicholas Kusnetz, April 3, 2011

**Hydrofracked? One Man’s Mystery Leads to a Backlash Against Natural Gas Drilling**, by Abrahm Lustgarten, February 25, 2011

**Drilling Industry Says Diesel Use Was Legal**, by Abrahm Lustgarten, February 2, 2011

**Pennsylvania’s Drilling Wastewater Released to Streams, Some**
Unaccounted For, by Nicholas Kusnetz, January 5, 2011

Residents Divided About PA’s Agreement With Gas Drilling Company Over Water Contamination, by Nicholas Kusnetz, December 21, 2010

Science Says Methane in PA Water Is from Drilling, Not Natural Causes, by Abrahm Lustgarten, November 9, 2010

Feds Warn Residents Near Wyoming Gas Drilling Sites Not to Drink Their Water, by Abrahm Lustgarten, September 1, 2010

A Fracking First in Pennsylvania: Cattle Quarantine, by Nicholas Kusnetz, July 2, 2010

Frack Fluid Spill in Dimock Contaminates Stream, Killing Fish, by Abrahm Lustgarten, September 21, 2009

16 Cattle Drop Dead Near Mysterious Fluid at Gas Drilling Site, by Abrahm Lustgarten, April 30, 2009

Officials in Three States Pin Water Woes on Gas Drilling, by Abrahm Lustgarten, April 26, 2009

Colorado Study Links Methane in Water to Drilling, by Abrahm Lustgarten, April 22, 2009


NYC Wants Consultants to Probe Effect of Gas Drilling on Drinking Water, by Abrahm Lustgarten, November 25, 2008

New Mexico Battles Feds to Stop Gas Drilling Near an Aquifer, by Abrahm Lustgarten, November 20, 2008


The full monetary costs associated with the adverse public health impacts of hydraulic fracturing are unknown because New York State has not undertaken a health impact assessment (HIA) to order to attempt to determine what those impacts will be. Governor Cuomo has repeatedly resisted calls from the medical community to order an HIA; instead he’s asked the state’s Department of Health for a less rigorous “review” of the likely health impacts of fracking.” This review is being conducted in secret.
Hundreds of millions more will be needed to repair damaged bridges and roads and to prepare our first responders.

While New York State has not put an official price tag on the cost of road and bridge repairs that development of the Marcellus Shale will require, a leaked document from the NYS Department of Transportation estimated that road and bridge reconstruction will cost the state and local governments between $211 million and $378 million a year. An excerpt from Executive Summary of the Draft Discussion Paper, Transportation Impacts of Potential Marcellus Shale Gas Development, says:

*The potential transportation impacts are ominous. Assuming current gas drilling technology and a lower level of development than will be experienced in Pennsylvania, the Marcellus region will see a peak year increase of up to 1.5-million heavy truck trips, and induced development may increase peak hour trips by 36,000 trips/hour. While this new traffic will be distributed around the Marcellus region, this Discussion Paper suggests that it will be necessary to reconstruct hundreds of miles of roads and scores of bridges and undertake safety and operational improvements in many areas.*

The annual costs to undertake these transportation projects are estimated to range from $90 to $156 million for State roads and from $121–$222 million for local roads. There is no mechanism in place allowing State and local governments to absorb these additional transportation costs without major impacts to other programs and other municipalities in the State.

Local fire departments and healthcare providers are often unprepared to deal the types of accidents that are associated with gas wells and industrial chemicals that may have unknown effects on human health. The industry is not required to provide first responders with the equipment and training they may need to handle fires and explosions, or to deal with instances of chemical contamination. New York State has not attempted to determine the cost of ensuring that local communities have the resources they may need to assure public safety.

Although New York taxpayers will be exposed to huge financial risks, they won’t share in the profits. Unlike most states, New York does not collect a severance tax when natural gas is extracted.

The National Conference of State Legislatures reports that New York is only one of three gas-producing states without a severance tax.

The only tax imposed by the state is an *ad valorem* tax that goes to local governments. In its 2012 annual report, the New York State Department of Environmental Conservation stated that New York’s 10,611 producing oil and gas wells generated just $3.11 million in *ad valorem* taxes—that works out to just $292 per well. The Tompkins County Council of Governments Gas Drilling Task
Force Assessment and Land Valuation Subcommittee drafted a White Paper on Taxation Issues Related to Gas Drilling, which concluded that New York’s current ad valorem tax is poorly structured and inadequate.

The experiences of other states should serve as a warning.

A December 2012 article in The Journal, a leading West Virginia newspaper, described the alarming findings of a Workforce West Virginia report:

Since 2008 oil and gas employment has risen not by tens of thousands or even by 1,000. Just 916 jobs have been added—less than 10 percent growth in four years. And the severance tax that was expected to produce tens of millions of dollars in new revenue has grown not at all. Despite the huge rise in production, severance taxes in 2012 are no greater than they were in 2008.

But, if the effects on the state’s economy aren’t great, surely the counties where drilling is concentrated must be prospering. The State Journal recently reported that four counties—Marshall, Wetzel, Doddridge and Harrison—account for 87 percent of Marcellus shale gas production in West Virginia. Are they booming?

Since 2005, just before the dawn of the Marcellus shale era, the combined populations of these four counties have grown by 1,001 people—less than 1 percent. The size of their workforces has actually declined by almost a thousand. And the number of jobs has dropped by more than 2,000, causing the combined unemployment rate to rise from 4.4 percent to 6.9 percent.

Yes, but we’re just coming out of recession, so aren’t the Marcellus counties at least doing better than the rest of West Virginia where there is little drilling activity?

No.

The rest of the state has actually experienced slightly more population growth and less job loss. And, while the unemployment rate in these four counties is half a point below the state rate, it was half a point lower before Marcellus drilling began.

In short, by every important metric, West Virginia’s Marcellus shale natural gas boom has failed to produce any measurable benefit for the people of West Virginia.

Like West Virginia, Pennsylvania and Ohio have also permitted Marcellus Shale drilling—and have been disappointed with the results.

Pa. fracking boom goes bust
By Will Bunch, Daily News Staff Writer, September 12, 2013
It was just a couple of years ago that fracking was booming in upstate Pennsylvania’s Bradford County, and Janet Geiger, a retired hospital worker living on a 10-acre spread near the New York border, could count on getting a $300 to $400 check every month from the gas giant Chesapeake Energy Corp., which was drilling under her land.

But both the gas and the checks—with the financially ailing Chesapeake now claiming big deductions—dwindled until finally, in March, a check never showed up. “I thought the mail had gotten lost,” said Geiger, 74, but after a week she finally reached someone with the Oklahoma gas driller who explained “they didn’t have a buyer [for the gas] that month.”

But Geiger said that she’d already seen the signs of a slowdown, that rural streets once clogged with the massive trucks of the drilling firms were mostly empty now, while new motels that had been hastily thrown up or expanded to accommodate a flood of out-of-state workers had only a couple of cars in the parking lots.

It’s been a little more than two years since a then-new Gov. Corbett famously pledged to make Pennsylvania “the Texas of the natural-gas boom”—but already it’s beginning to look as if the governor was all hat and no cattle, at least on this issue.

[Please read the rest of the story online at phillynews.com.]

Ohio shale gas still not creating promised jobs
By John Funk, The Plain Dealer, August 22, 2013

Cleveland, Ohio—Retail sales have steadily increased in Ohio counties where shale gas is being developed, but the number of new jobs created has been small, according to an analysis released Thursday.”

Total employment growth has been much less robust than sales activity in Ohio’s shale country,” notes the Ohio Utica Shale Gas Monitor, produced quarterly by the Maxine Goodman Levin College of Urban Affairs at Cleveland State University.

The analysis, authored by Edward Hill, dean of Levin College and graduate student assistant Kelly Kinahan, found that total employment levels increased by less than 1 percent in 15 eastern Ohio counties where the highest number of horizontal shale wells have been drilled.

[Please read the rest of the story online at Cleveland.com.]

Policy Center reports Marcellus Shale not beneficial
By Damon C. Williams, September 5, 2013
Pennsylvania Budget and Policy Center—a nonpartisan policy research that provides analytical data on a host of statewide initiatives—has waded into the controversial Marcellus Shale drilling in the state, and proponents of the endeavor will not like what the PBPC is reporting.

Marcellus Shale is a rock formation that underlies much of Pennsylvania and portions of New York and West Virginia at a depth of 5,000 to 8,000 feet, and is believed to hold trillions of cubic feet of natural gas.

According to the center, Pennsylvania will enjoy less of a financial boom for shale drilling as compared to neighboring states.

[Please read the rest of the story online at phillytrib.com.]

Fracking: So where’s the economic boom that was promised?
By Spencer Hunt and Dan Gearino, Tuesday January 28, 2014

CADIZ, Ohio—Rich Moore had never heard of fracking or Utica shale until his union posted a job opening in September. But they are the reasons the formerly out-of-work Detroit pipefitter now lives in a trailer in a cold, muddy Harrison County campground.

Moore is one of thousands of transient workers who live in campers, motels and apartments in shale country.

They’re here to drill and frack the Utica shale, as well as build the pipelines and processing plants that connect natural gas to businesses and houses. The demand for skilled labor has brought people from as far away as Texas and Florida to Harrison, Carroll and other eastern Ohio counties.

The influx has helped boost the local economies in small towns that dot the region, and it is straining the housing supply.

But out-of-state workers weren’t among the economic benefits touted by politicians and industry leaders who predicted that shale drilling would create a much-needed infusion of jobs and cash in Appalachian Ohio.

More than three years after the first Utica drilling permit was approved, transient workers are among the most-tangible signs of the shale “boom.”

[Please read the rest of the story online at www.dispatch.com.]

Studies show that investment in renewable energy creates more jobs than investment in a fossil-fuel economy.
A 2009 report titled The Economic Benefit of Investing in a Clean Economy published, by the University of Massachusetts at Amherst, concluded, “clean energy investments generate three times more jobs than an equivalent amount of money spent on carbon-based fuels.”

Another peer-reviewed study, Putting renewables and energy efficiency to work: How many jobs can the clean energy industry generate in the US?, reached a similar conclusion, “that all non- fossil fuel technologies … create more jobs per unit energy than coal and natural gas.”

The authors of The Solutions Project, a plan to power New York State by 100% sustainable energy by 2050, have estimated that transitioning to a renewable energy economy will create 238,900 jobs in construction of the infrastructure, and 107,900 permanent annual jobs for energy production alone. These job creation estimates are conservative because they do not include the jobs that would be created by retrofitting buildings, improving the transmission system, converting to non-fossil-fuel vehicles, electricity-based appliances for home heating and cooling, and electricity and hydrogen use for some heating and high temperature industrial processes.

The Solutions Project also concluded “the number of permanent jobs created by the electric power sector alone is expected to exceed significantly the number of lost jobs in current fossil-fuel industries.” Similarly the above referenced University of Massachusetts study found that “an annual $150 billion clean-energy investment [roughly 1 percent of U. S. GDP] would generate a total of about 2.5 million jobs. By contrast, spending the same $150 billion within the fossil-fuel industry would produce about 800,000 jobs.

Read about how industry-funded studies typically inflate the number of jobs created by shale gas extraction here.

NY’s upstate economy is struggling. Fracking could make it worse. Agriculture and tourism are both vital to the economy of upstate New York. Thousands of jobs and millions in state and local tax revenues could be jeopardized by fracking.

Make no mistake, fracking is a high-impact industrial activity that can utterly transform a rural landscape. Constructing a modern shale gas well can require clear cutting and leveling a five-acre site, building access roads, and laying gathering pipelines. Hundreds of diesel trucks are required to transport chemicals, fracking fluid, and wastewater to and from well pads. Not surprisingly, businesses that depend upon a quiet, attractive landscape and an uncontaminated environment—or even the perception of an uncontaminated environment—can be severely damaged by gas extraction.

Tourism and agriculture are both critically important to the Catskills and Finger Lakes—two regions that are likely to be affected if high-volume fracking gets underway in New York State. In the Catskills, tourism directly or indirectly
employs 16 percent of the workforce and generates more than a billion dollars in annual revenue. In the Finger Lakes, tourism directly or indirectly employs more than 6 percent of the workforce and generates more than $2.6 billion in revenues. Tourism in the Catskills and Finger Lakes generates $220 million in state taxes and $270 million in local taxes on an annual basis. (All the figures cited here are derived from The Economic Impact of Tourism in New York—2012 Calendar Year Catskill Focus and The Economic Impact of Tourism in New York—2012 Calendar Year Finger Lakes Focus.)

Agriculture is a $4.7 billion a year business in New York State. Dairy farmers, wine growers, and organic farmers all depend on uncontaminated air, soil, and water. Even the risk of contamination can adversely affect these businesses. For example, the Park Slope Food Coop, which has more than 15,000 members and purchases millions of dollars of New York State agricultural produce each year, has warned state officials that it will purchase food elsewhere if fracking is permitted in New York.

**Fracking threatens the Hudson River Valley. A massive pipeline expansion will cut across Westchester, Putnam, and Rockland counties, pass under the Hudson River, and cross paths with a proposed high-voltage electric line near the place where the spent fuel rods from the Indian Point nuclear reactor are stored.**

A proposed 42” natural gas pipeline, known as the Spectra Algonquin Incremental Market (AIM) project, would run from Stony Point in Rockland County, through the Westchester Towns of Cortlandt, Yorktown, and Somers, and on into the Town of Southeast in Putnam County.

In addition to the pipeline itself, the project calls for the massive expansion of compressor stations in both Putnam and Rockland counties. These stations are known to emit harmful chemicals, including formaldehyde, carbon monoxide, volatile organic compounds, and greenhouse gases. Compressor station fires and explosions are also a very real concern.

Perhaps the most alarming aspect of the pipeline expansion is that it would intersect with a proposed high-voltage powerline just hundreds of feet away from the pool where the spent fuel rods from the Indian Point nuclear reactor are stored.

AIM has met with widespread opposition from both residents and local elected officials. A grassroots organization, Stop the Algonquin Pipeline Expansion (SAPE), is spearheading efforts to inform the public and block the project. The many objections to the pipeline are neatly summarized in a February 2014 article published in ecoRInews. These include:

An unacceptably dangerous route and convergence of extreme risks.
Proposed high-pressure 42-inch diameter pipeline would go under the Hudson River and intersect with two proposed mega voltage power lines
just a few hundred feet from Indian Point Energy Center nuclear power plant and its 40 years of spent nuclear fuel rods.

Public safety will be put at risk. Explosions have occurred in both compressor stations and gas pipelines. An explosion at or near Indian Point a concern.

Inadequate pipeline regulation and oversight, and Spectra’s history of safety issues increase threat to public health and safety, water and food supplies, and the economy. In 1989, the Environmental Protection Agency (EPA) fined Spectra $15 million for the discharge of toxic polychlorinated biphenyls (PCBs) at 89 sites on a Texas-New Jersey pipeline route—the seventh-highest civil penalty in EPA history. The company was cited for 17 safety violations in 2011, and that same year concern over Spectra’s pipeline safety lead to the shutdown of a Texas elementary school.

Potentially high levels of radon, the leading cause of lung cancer in non-smokers nationwide, will be transported in the pipeline from Pennsylvania’s Marcellus Shale.

Proposed compressor station expansions would expose people, pets, and wildlife to many tons of highly toxic emissions a year. Health effects associated with compressor stations emissions include nosebleeds, headaches, dizziness, skin rashes, respiratory, developmental, neurological and cardiovascular problems, leukemia, and breast, kidney and liver cancer.

Taxpayers would bear the costs of additional emergency response actions, health care and damage to water supplies.

Pipelines and compressor stations emit methane, a greenhouse gas far more potent than carbon dioxide.

Proposed expansion significantly exceeds the volume of natural gas committed for purchase by local distributors. Taxpayers shouldn’t bear steep costs of public health, environmental and economic impacts of natural gas infrastructure for the purpose of facilitating natural gas export.

Expansion and construction of gas infrastructure unwisely direct taxpayer dollars to increased production and use of polluting fossil fuels when both public funds and private investment should be focused on energy efficiency, conservation and non-polluting renewable energy resources.
Spectra Energy officials are fond of talking about how the pipeline will provide New England with natural gas; they say very little about the fact that it will tie into a Canadian pipeline and facilitate exporting American gas through Canada to Europe and Asia.

Read more about AIM in these news articles:

- Natural Gas Pipeline Across Hudson Near Indian Point Proposed
- Gas Pipeline Expansion Would Cut Through N.E.
- County Legislature Could Impose Moratorium on Algonquin Pipeline

**Another new pipeline will run from Albany to New Jersey.**

At this point little is known about the precise route of the proposed Pilgrim Pipeline that would transport fracked oil from Albany to refineries in Linden, New Jersey.

Read more about the Pilgrim Pipeline:

- Oil pipeline proposed in North Jersey through Highlands
- Thruway eyed for crude oil pipeline to New Jersey

**There are hundreds of pipeline leaks and explosions each year.**

Wikipedia maintains a List of pipeline accidents in the United States in the 21st century. While the list includes hundreds of accidents, it is far from complete. The Pipeline & Hazardous Materials Safety Administration reported 292 “significant pipeline incidents” in 2013 alone, including 135 incidents involving gas pipelines. “Significant incidents” are those that involve fatalities, hospitalization, property damage or chemical spills. On average, pipeline accidents kill eighteen people a year.

On May 7, 2014 the Inspector General of the Department of Transportation released a scathing report that criticized the department’s Pipeline and Hazardous Materials Safety Administration (PHMSA) handling of pipeline safety. The summary of the report reads in part:

> In September 2010, an intra-State natural gas pipeline exploded in San Bruno, CA, resulting in eight fatalities, injuries, and destroyed homes. In its investigation of the explosion, the National Transportation Safety Board found weaknesses in PHMSA’s oversight of State programs, and recommended that DOT assess the effectiveness of PHMSA’s oversight of intra-State pipeline safety and whether State programs use Federal grants effectively.
Accordingly, we assessed PHMSA’s (1) policies and procedures for managing its State Pipeline Safety Program, including guidelines to participating States, and (2) oversight of State pipeline safety programs.

PHMSA’s guidelines, policies, and procedures for State pipeline safety programs lack elements to ensure State inspections cover all Federal requirements and pipeline operators maintain safety standards. The staffing formula in the guidelines is outdated. The guidelines also lack sufficient detail on States’ use of risk factors for scheduling inspections and do not require PHMSA evaluators to review the adequacy of States’ inspection procedures. Furthermore, PHMSA lacks formal written procedures to guide its triennial reviews of State programs’ expenditures.

PHMSA’s oversight of State pipeline safety programs also does not ensure that States comply with program evaluation requirements and properly use all grant funds. Lapses in oversight have resulted in undetected safety weaknesses in State programs. Because it has not accounted for these non-compliances, the Agency cannot be sure that States correct program deficiencies. Furthermore, PHMSA has neither provided States sufficient guidance on suspension funds nor completed financial audits of their use.

In a 2013 filing with the Securities and Exchange Commission, Spectra Energy (the company that wants to put a pipeline through Rockland, Westchester, and Putnam counties) stated that there are “numerous risks” associated with pipelines, such as leaks and explosions that can result in “significant injury, loss of life, significant damage to property, environmental pollution and impairment of operations.” Spectra also acknowledged that “we do not maintain insurance coverage against all of these risks and losses.”

Between 2002 and 2012, Spectra pipeline accidents caused tens of millions of dollars in property damage.

Highly flammable fracked oil is already being transported down the Hudson River corridor by barge and train.

In the past two years, New York State has become a major transshipment route for fracked oil from North Dakota. The oil is brought into the state by rail through Buffalo, then routed down the Mohawk Valley to the Port of Albany. In Albany, it’s either offloaded onto barges or shipped down the Hudson valley by rail on DOT-111 tanker cars.

Bakken crude, as the North Dakota oil is called, contains unusually high levels of volatile organic compounds (VOC’s), which make it much more explosive than
conventional oil. When Bakken crude is loaded onto aging DOT-111 tanker cars, it’s an accident that doesn’t always wait to happen.

Last summer, DOT-111s carrying Bakken crude exploded in Quebec, devastating an entire town and killing forty-seven people. In November, a 90-car train carrying Bakken crude exploded in Alabama—flames shot three hundred feet into the air and the fire took days to burn out. The following month, a DOT-111 train loaded with Bakken crude exploded in North Dakota. On April 30 of this year yet another DOT-111 train carrying three million gallons of Bakken crude derailed and caught fire in Lynchburg, Virginia. Area residents were forced to evacuate and downstream cities had to scramble to find other sources of drinking water because the James River became contaminated with oil.

The National Transportation and Safety Board has warned that DOT-111s are dangerous and recommended routing them away from major cities. Despite the string of disasters and the NTSB warning, DOT-111s remain in use along the Hudson.

Read more about the so-called “bomb trains” moving down the Hudson:

Bakken Crude, Rolling Through Albany
Rail shipments of crude oil getting new scrutiny
Shipments of crude oil on Hudson River alarm environmentalists, but oil industry envisions job growth

Soon, new Coast Guard regulations will permit the gas industry to ship toxic, radioactive, fracking wastewater on the river.

In October 2013 the U.S. Coast Guard published draft rules that would permit toxic, radioactive shale gas waste to be transported by barge on navigable waterways, including the Hudson River. Although the proposed rule change met with widespread public opposition, it is widely expected to be adopted.

Fracking has nothing to do with energy independence. India, China, Japan and other countries own American shale gas leases and shale gas reserves.

Despite all the talk about “energy independence,” the gas industry has no intention of using domestic shale gas production to make America less dependent on imported oil. In order to drive up prices, the industry is seeking to sell a huge share of American gas to foreign nations, where it can command prices up to four or five times higher than here at home.

A January 2014 article in Reuters, World buyers line up to buy U.S. natural gas, reported that “up to a dozen long-term deals, each worth billions of dollars, have been penned behind closed doors with companies in China, Japan, Taiwan,
Spain, France and Chile.” The article went on to call China “one of the biggest beneficiaries of cheap American natural gas.”

Foreign corporations, including ones owned in part by foreign governments, have also directly invested in American fossil fuels operations. China, Japan, India, Norway, and France all have interests in American shale gas plays. Often this foreign ownership is obscured by the fact that overseas investors buy minority positions in American companies. For example, in March 2012 the Wall Street Journal reported that China had invested more than $16 billion in American and Canadian oil and gas operations in the preceding twenty-six months, but none of these deals resulted in outright Chinese ownership of drilling operations.

**Massive export terminals are being built to ship almost half of America's fracked gas to foreign countries.**

The gas industry has applied for permission to construct export terminals that could export up to 30 billion cubic feet of gas a day—that’s almost 43 percent of U.S. daily production.

**Some of it may go to France—where fracking is banned because it’s too dangerous.**

In January 2010 Upstream: The International Oil and Gas News Source, reported

> French giant Total has become the latest big-name player to enter the US' unconventional onshore play, shelling out $2.25 billion for a 25% slice of gas player Chesapeake Energy’s Barnett Shale assets.

More recently, France signed long-term contracts to buy American fracked gas. France banned fracking in 2011.

**With our gas going to Europe and Asia, we can expect to pay higher utility bills and more for American-made products.**

Gas prices are known to be volatile, but generally natural gas costs around twice as much in Europe as it does in the States and at least three times as much in Asia as here at home. The stated goal of the industry is to create a “world price” for natural gas similar to that which exists for oil. If the industry can achieve this goal, New York consumers can expect to pay as much for gas as residents of Tokyo—and the price of electricity and American-made consumer goods will go through the roof.

Manufactures such as Dow Chemical and Alcoa recognize the threat that shale gas exports pose to the American economy and have banded together to form an advocacy group known as America’s Energy Advantage.

**There’s a better way. Find out how we can power New York with all renewable energy by 2050 at The Solutions Project.**
The Solutions Project has devised plans for all fifty states that describe strategies for converting to 100 percent renewable energy by 2050 using technology that exists today.

ADDITIONAL RESOURCES:
When the gas industry first targeted New York State for high-volume fracking, there was very little scientific data on the health, environmental, and economic risks associated with shale gas extraction, but over the past four or five years a number of scientific studies have been published that examine the impacts of unconventional gas extraction. Physicians, Scientists and Engineers for Healthy Energy offers an online database of vetted scientific papers on Shale Gas & Tight Oil Development.

Catskill Citizens for Safe Energy has an extensive Learn More section that includes extensive information all of the topics addressed in this brochure.

American Clean Energy Agenda calls for a number of bold steps to move the United States toward a clean, safe energy future.

Economist Jannette Barth is one of the leading authorities on the economic impact of shale gas extraction. Her writings on the subject can be found here.

ABOUT THE PHOTOS:
Marcellus well, Dimock, PA. © Phil Scalia.

Buckeye Creek, contaminated by fracking, Doddridge County, West Virginia. Photo by Louanne McConnell Fatora.

Pastoral scene, New York. Rural Tioga County, where this photo was taken, is located in the Southern Tier. The county actively promotes itself as a tourist destination that offers visitors a wide range of outdoor activities and farm fresh produce. It is also heavily leased. Photo by Susan Heavenrich.

Pipeline construction, Pennsylvania. Photo by John Trallo.


DESIGN: Carla Rozman Graphic Design.

ABOUT CATSKILL CITIZENS FOR SAFE ENERGY
We are an all-volunteer grassroots organization—we don’t have any paid staff, in fact we don’t even maintain an office. All donations we receive are used to provide the public, and our elected officials, with factual information about hydraulic fracturing and sustainable energy choices.
Please consider making a donation to further our efforts.

If you’d like more information, or if you’d like to volunteer, you can contact us at:

Catskill Citizens for Safe Energy                      (845) 468 7063
P.O. Box 103                                           mailto:info@catskillcitizens.org
Fremont Center, NY 12736