Ohio Aggregates & Industrial Minerals Association

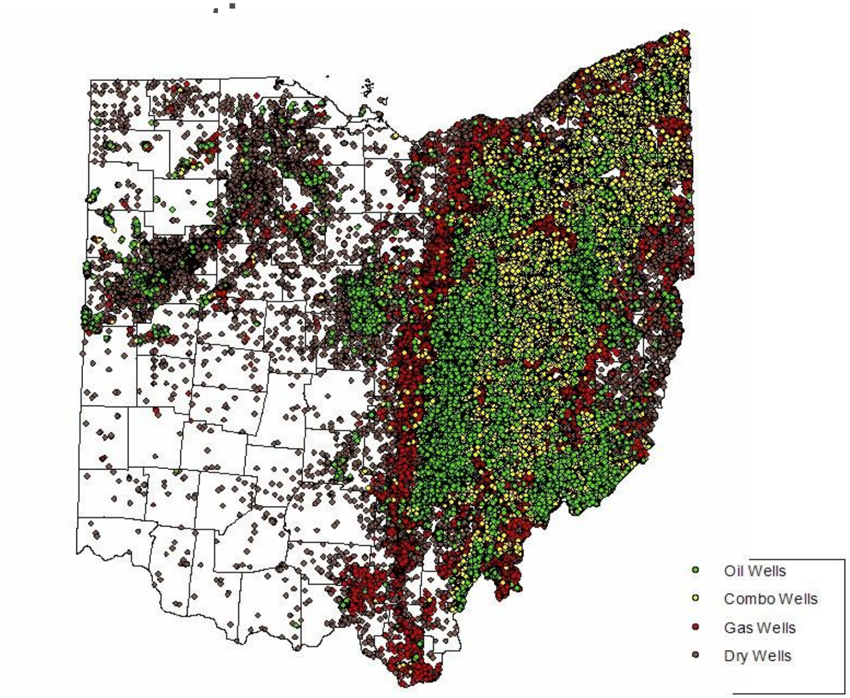
April 27, 2012

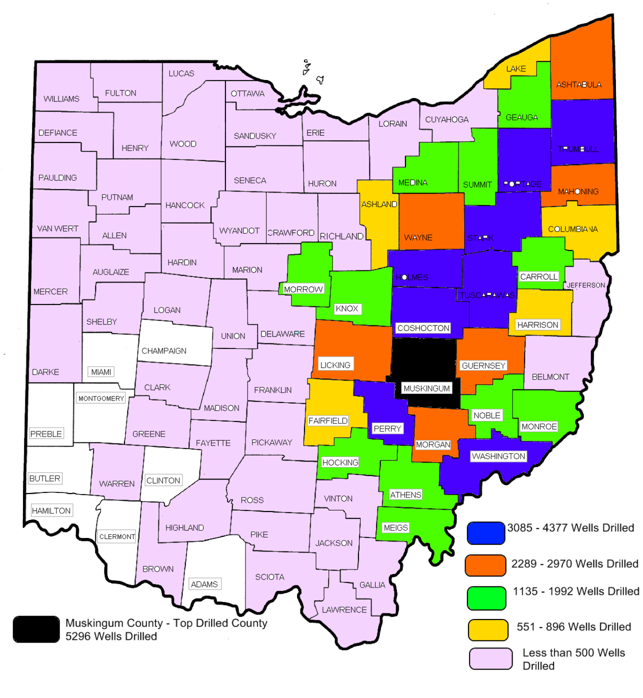
Ohio Oil and Gas Association

Oil & Gas in Ohio

Ohio Oil and Gas Association

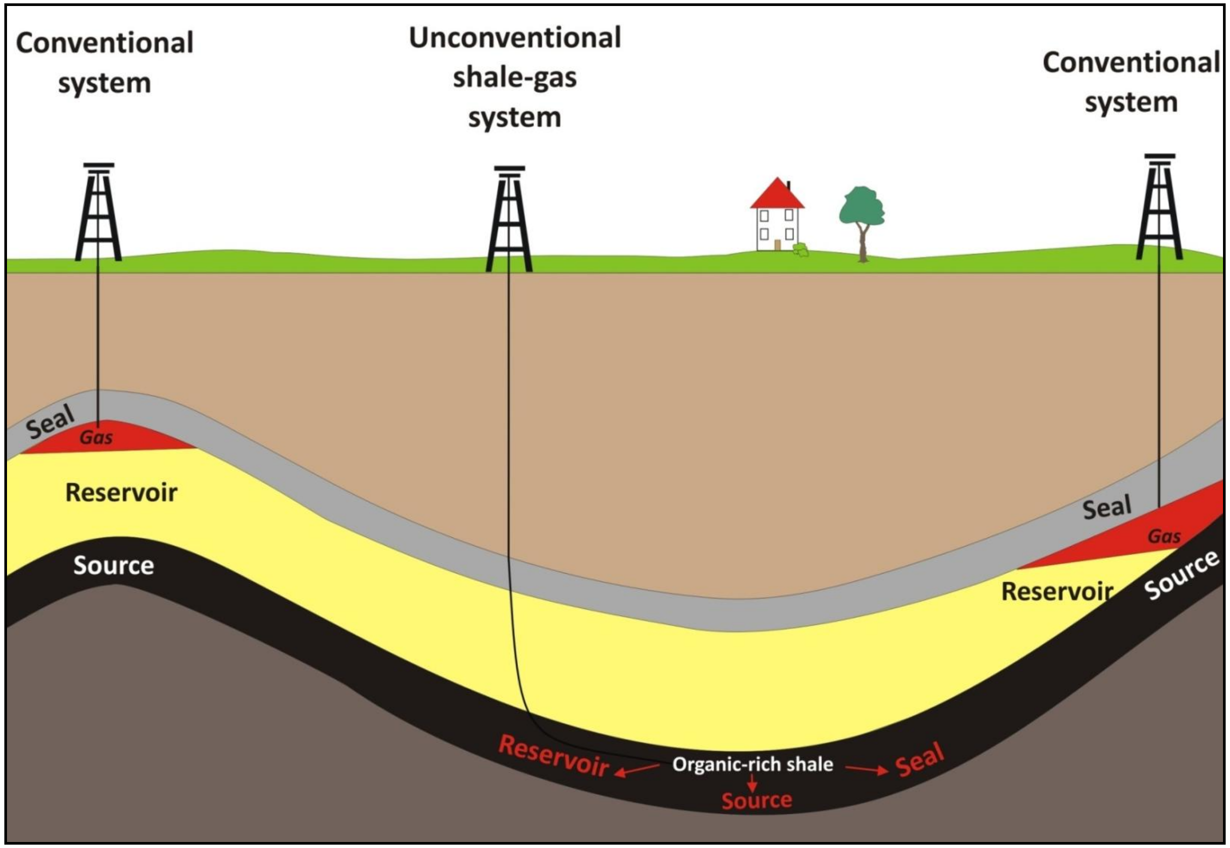
- Ohio well spot map shows significant development in three of four Ohio quadrants.
- And, while geology dictates that eastern Ohio is dominant, in modern times wells have been drilled in 79 of 88





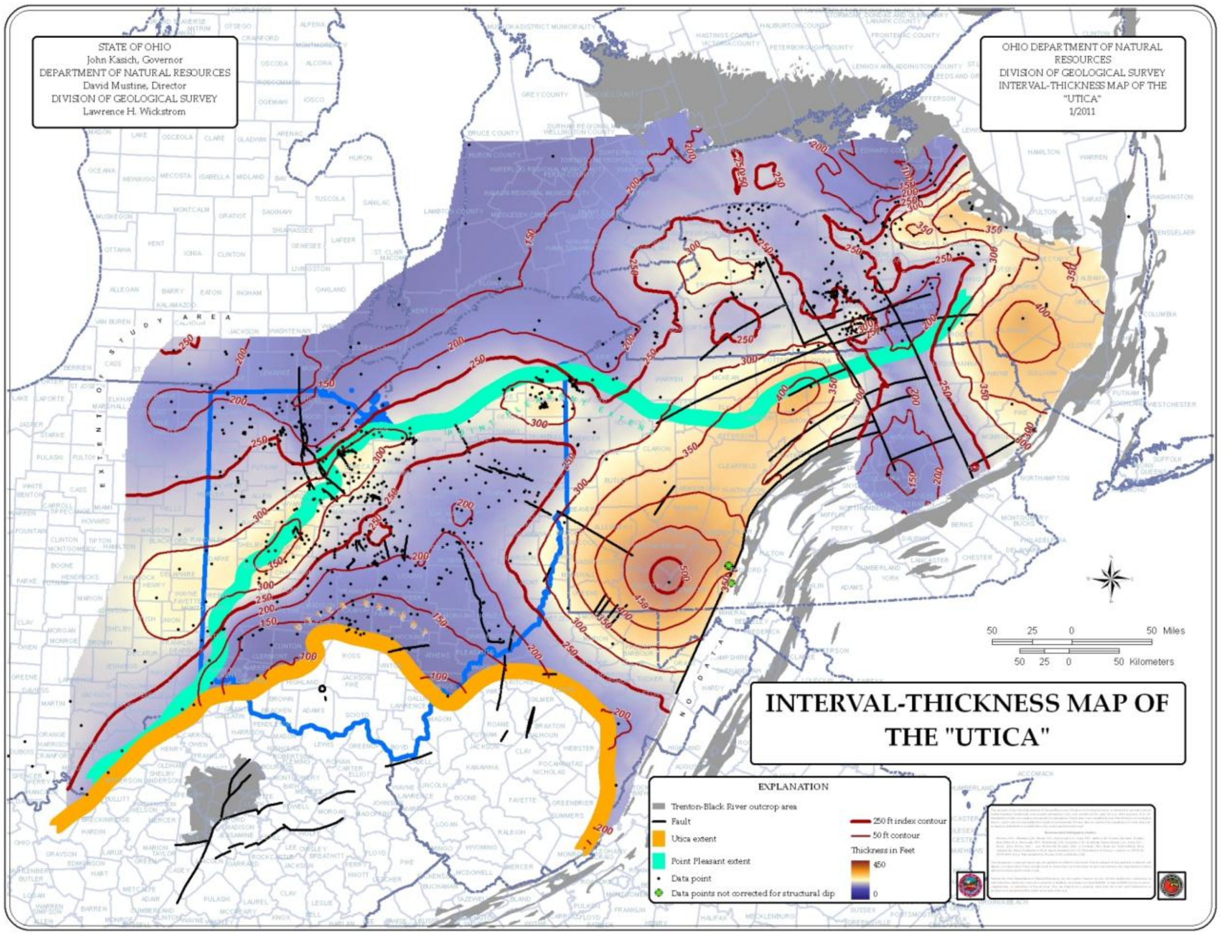
Technology & Source Rocks

Ohio Oil and Gas Association



Prior to the late 1990s these shales were thought of principally as the source of oil and gas that would then migrate slowly over time into "conventional" reservoirs.

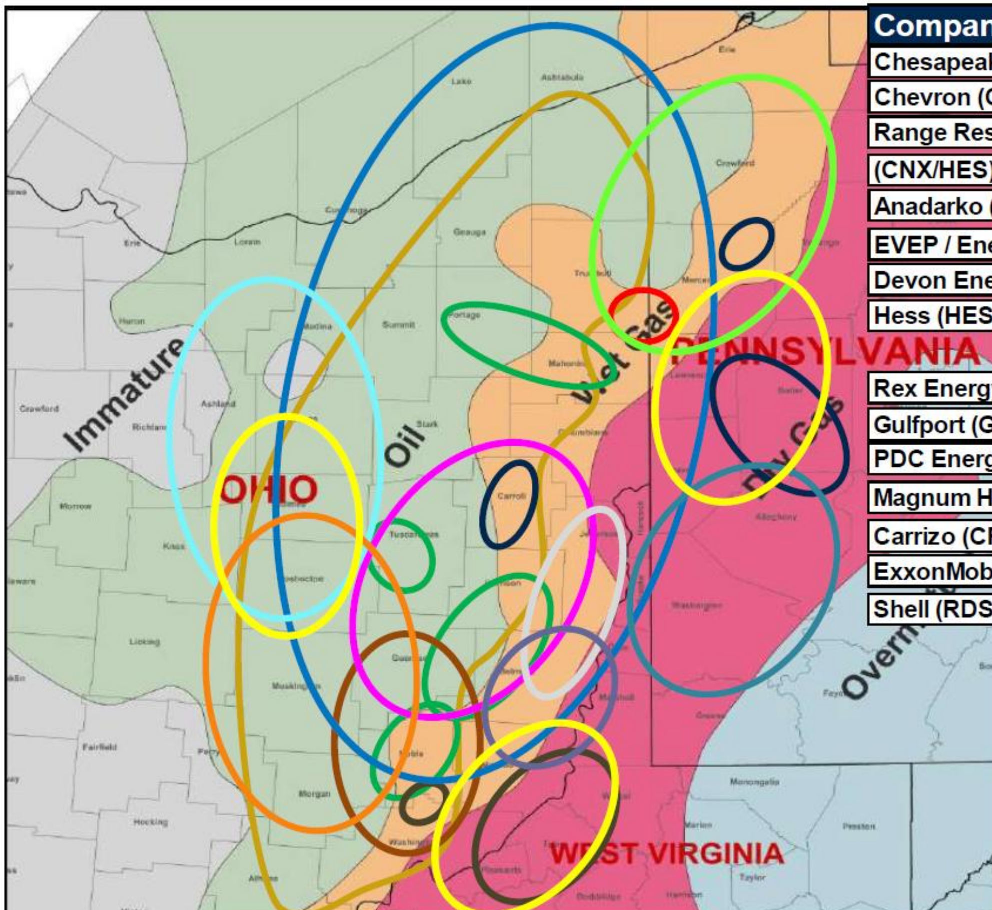
Utica


STATE OF OHIO
John Kasich, Governor
DEPARTMENT OF NATURAL RESOURCES
David Mustine, Director
DIVISION OF GEOLOGICAL SURVEY
Lawrence H. Wickstrom
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF GEOLOGICAL SURVEY
INTERVAL-THICKNESS MAP OF THE "UTICA"
1/2011
INTERVAL-THICKNESS MAP OF THE "UTICA"
EXPLANATION
Trenton-Black River outcrop area
Fault
Utica extent
Point Pleasant extent
Data point
Data points not corrected for structural dip
250 ft index contour
50 ft contour
Thickness in Feet
450
0
50 25 0 50 Miles
50 25 0 50 Kilometers

Ohio Play and Acreage Positions

Ohio Oil and Gas Association

Acreage Positions

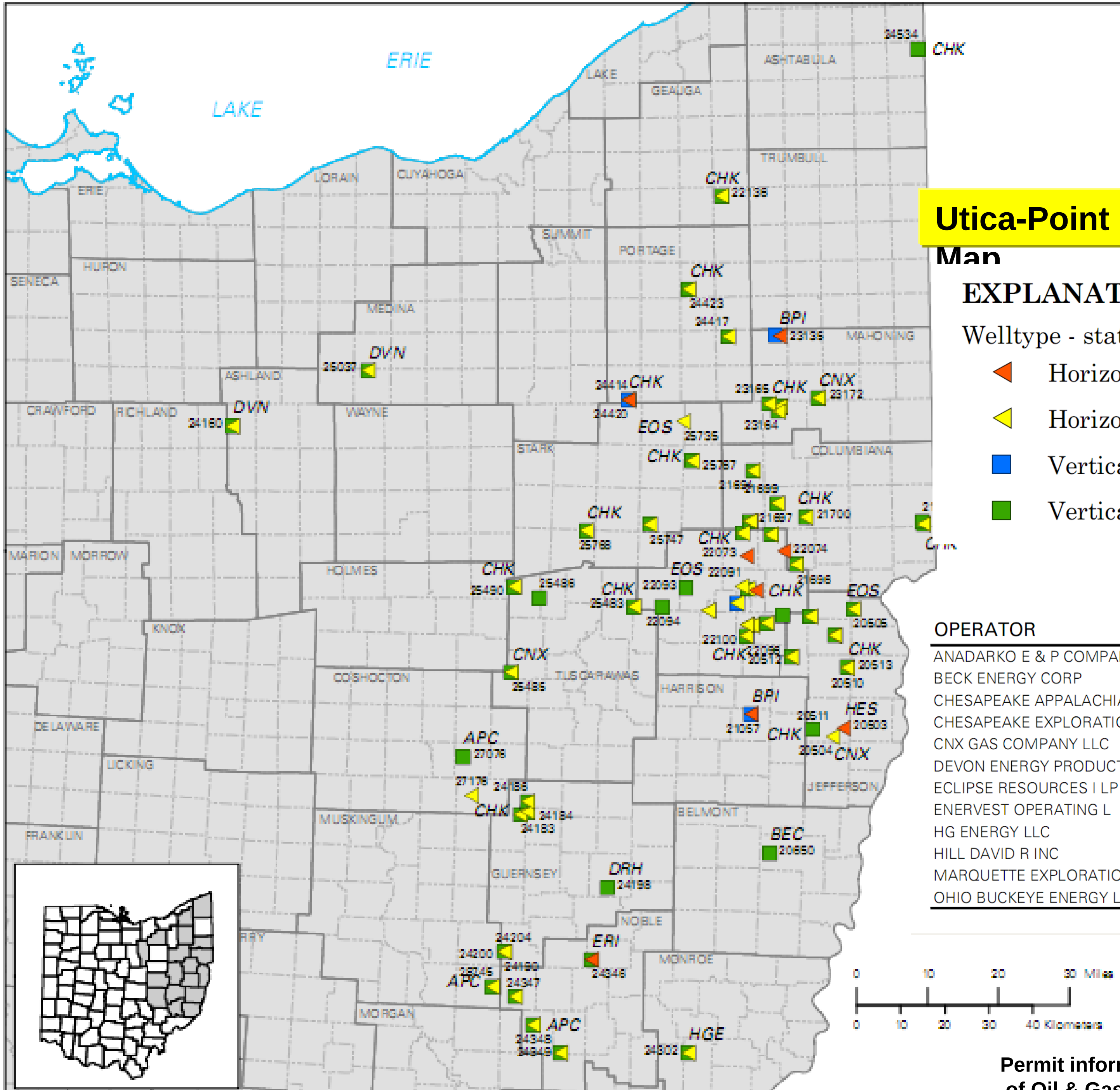


Company	Net Acres
Chesapeake (CHK)	1,360,000
Chevron (CVX)	623,000
Range Res. (RRC)	357,000
(CNX/HES) JV	200,000
Anadarko (APC)	200,000
EVEP / Enervest	159,000
Devon Energy (DVN)	110,000
Hess (HES)	85,000
Rex Energy (REXX)	58,900
Gulfport (GPOR)	62,500
PDC Energy (PETD)	40,000
Magnum Hunter(MHR)	16,000
Carrizo (CRZO)	1,500
ExxonMobil (XOM)	Unknown
Shell (RDS-A)	Unknown

Source: Company Data, modified Gulfport map, GHS Research

Ohio Oil and Gas Association

Utica-Point Pleasant Activity Map



EXPLANATION

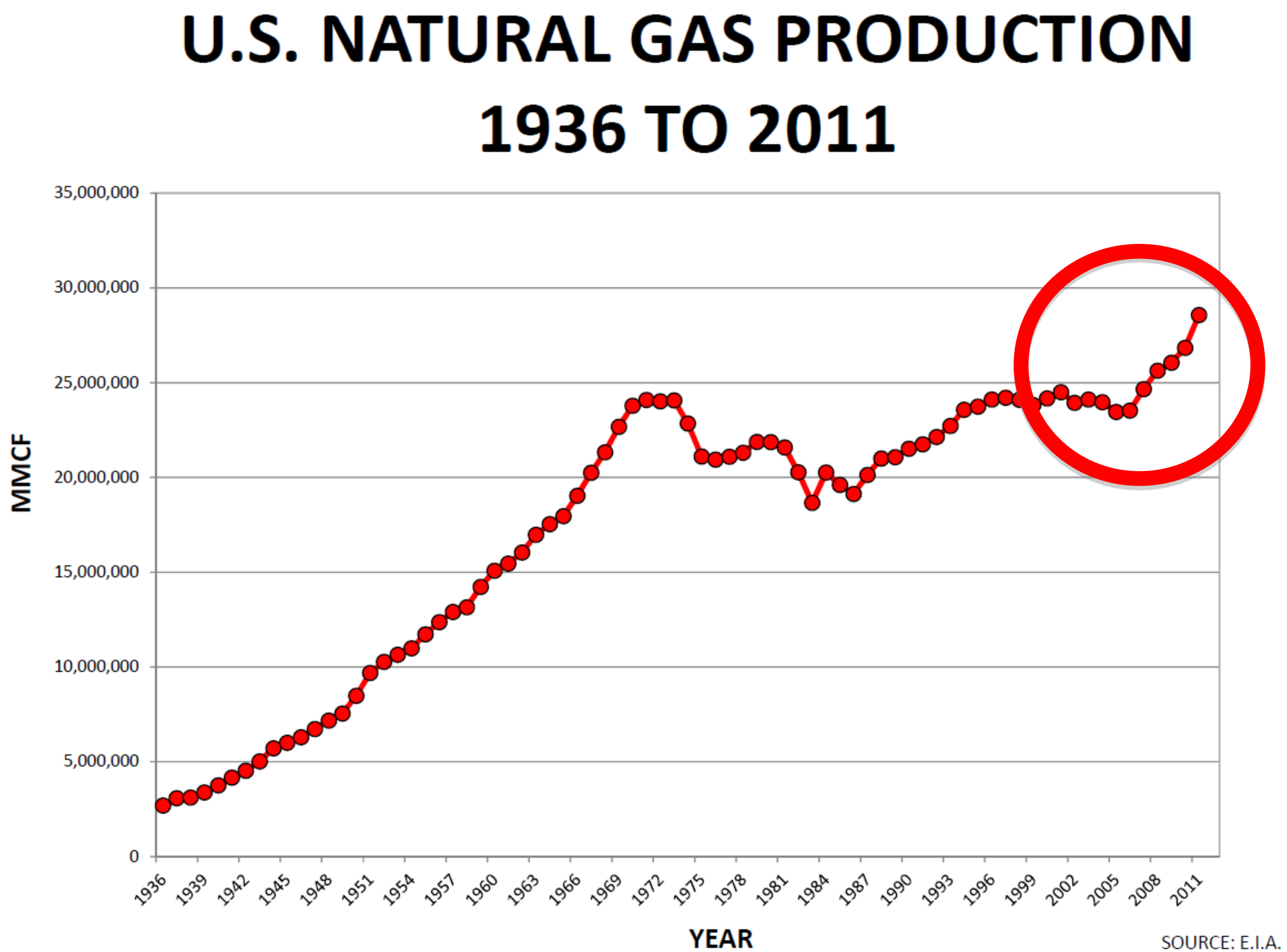
Welltype - status

- Horizontal - drilled or drilling
- Horizontal - permitted
- Vertical - drilled or drilling
- Vertical - permitted

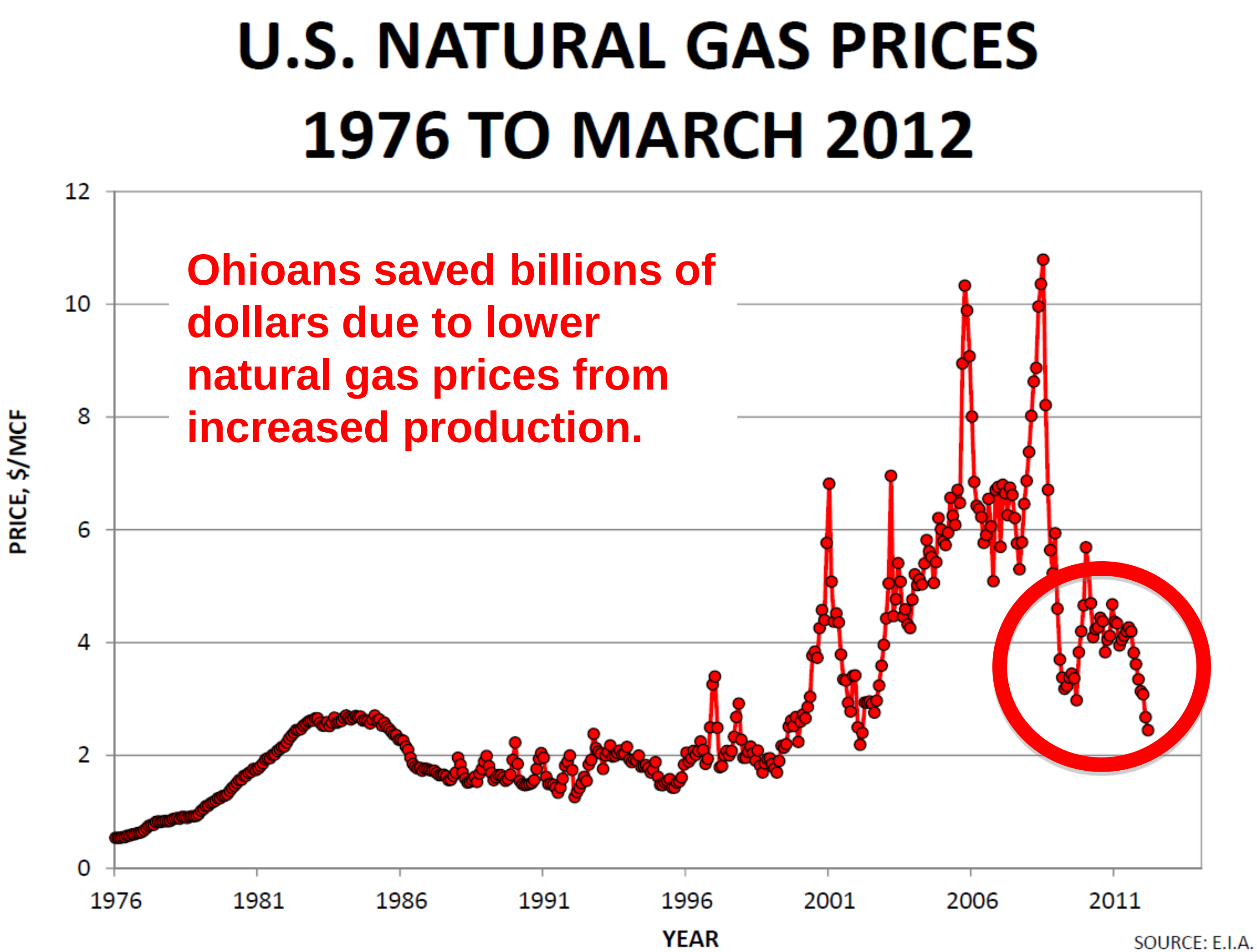
OPERATOR	SYMBOL	COUNT
ANADARKO E & P COMPANY LP	APC	14
BECK ENERGY CORP	BEC	1
CHESAPEAKE APPALACHIA LLC	CHK	9
CHESAPEAKE EXPLORATION LLC	CHK	84
CNX GAS COMPANY LLC	CNX	5
DEVON ENERGY PRODUCTION CO	DVN	4
ECLIPSE RESOURCES I LP	ERI	2
ENERVEST OPERATING L	EOS	5
HG ENERGY LLC	HGE	2
HILL DAVID R INC	DRH	1
MARQUETTE EXPLORATION LLC	HES	1
OHIO BUCKEYE ENERGY LLC	BPI	4
	TOTAL	132

Permit information from the Division of Oil & Gas Resources Management 12-2-11

The Answer

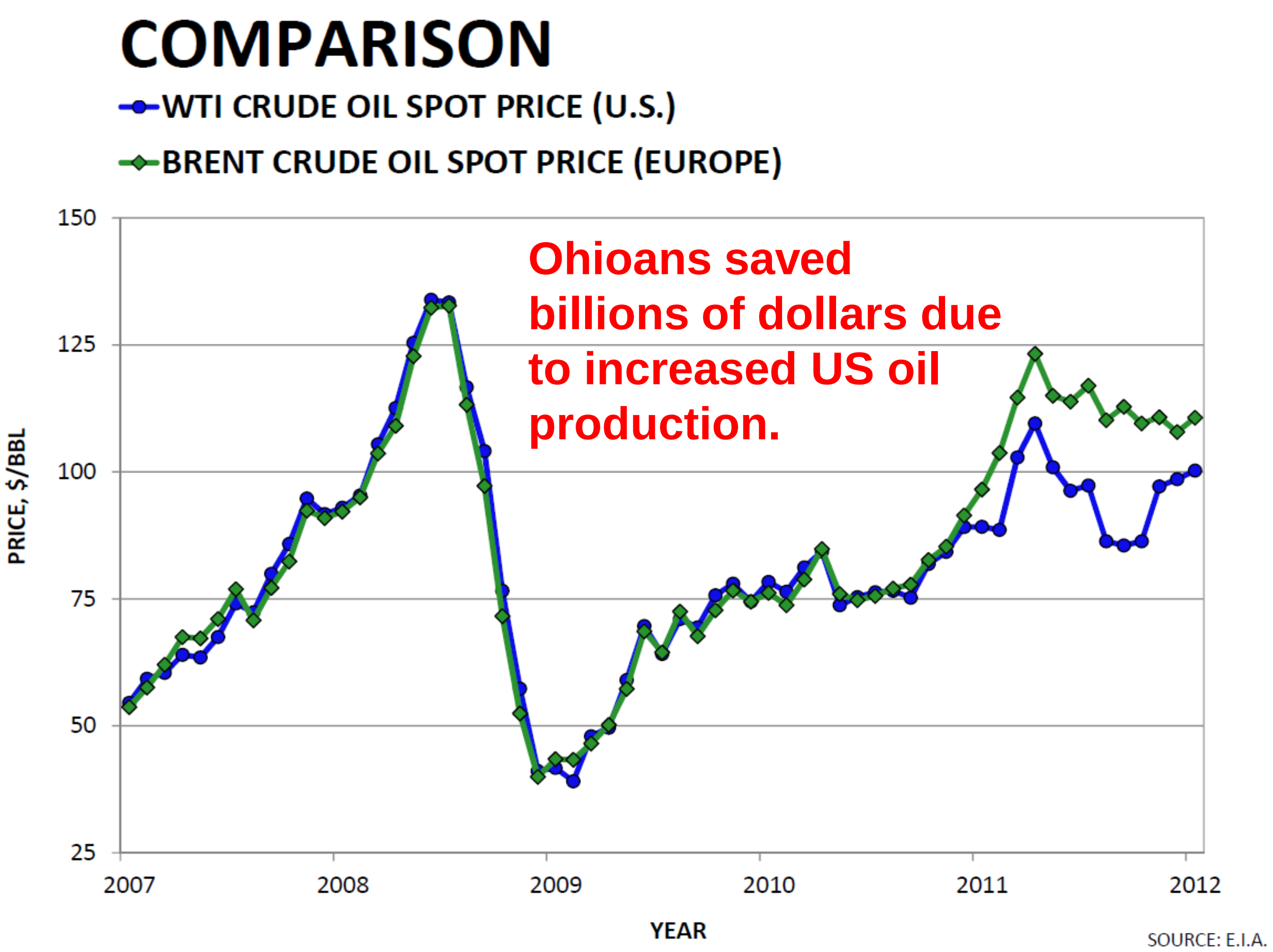

U.S. NATURAL GAS PRODUCTION
1936 TO 2011
MMCF
35,000,000
30,000,000
25,000,000
20,000,000
15,000,000
10,000,000
5,000,000
0
1936
1939
1942
1945
1948
1951
1954
1957
1960
1963
1966
1969
1972
1975
1978
1981
1984
1987
1990
1993
1996
1999
2002
2005
2008
2011
YEAR
SOURCE: E.I.A.

The Answer

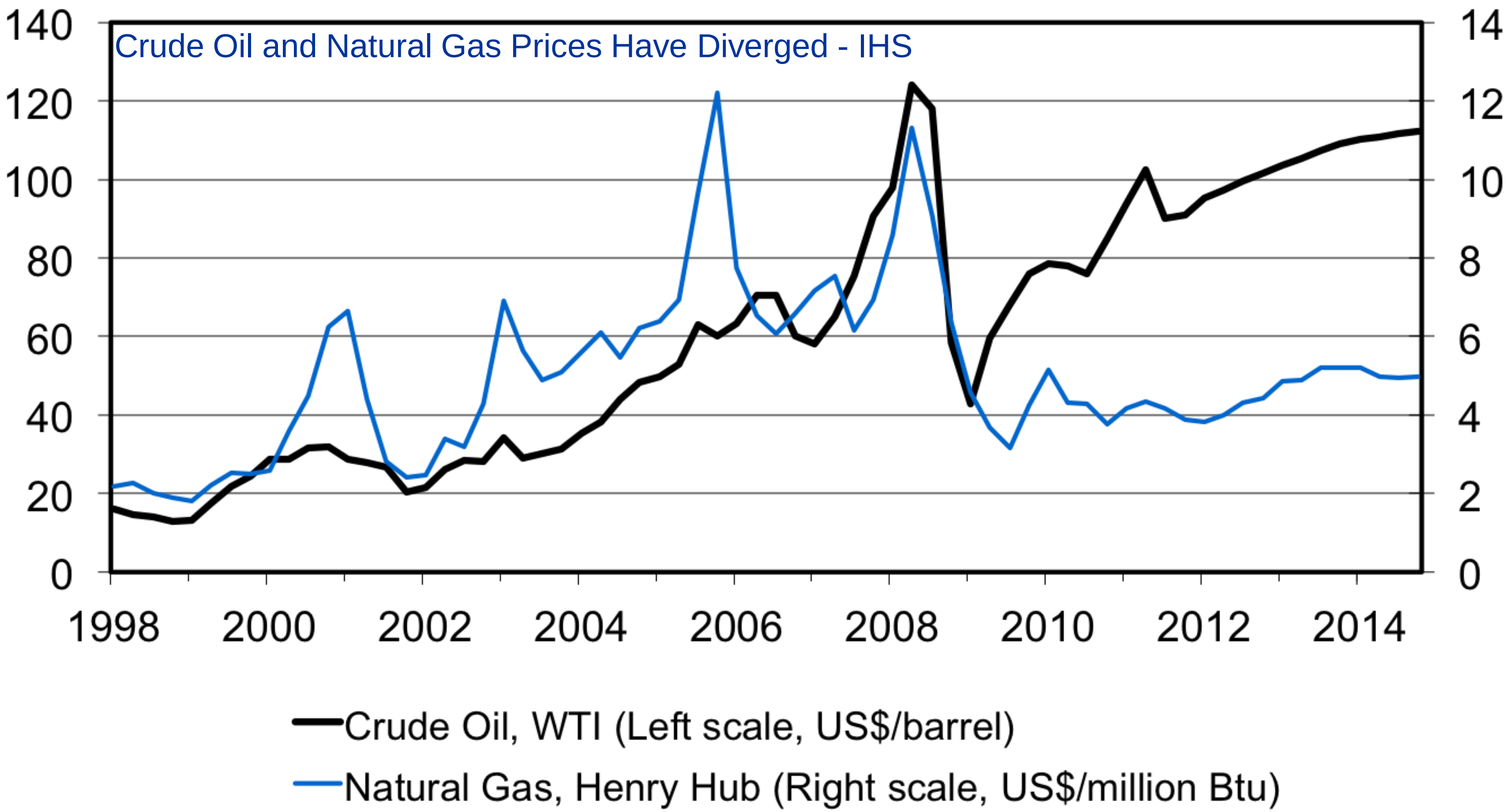

U.S. NATURAL GAS PRICES
1976 TO MARCH 2012
Ohioans saved billions of dollars due to lower natural gas prices from increased production.
PRICE, $/MCF
YEAR
0
2
4
6
8
10
12
1976
1981
1986
1991
1996
2001
2006
2011
SOURCE: E.I.A.

The Answer

Ohio Oil and Gas Association



Does it make a difference?

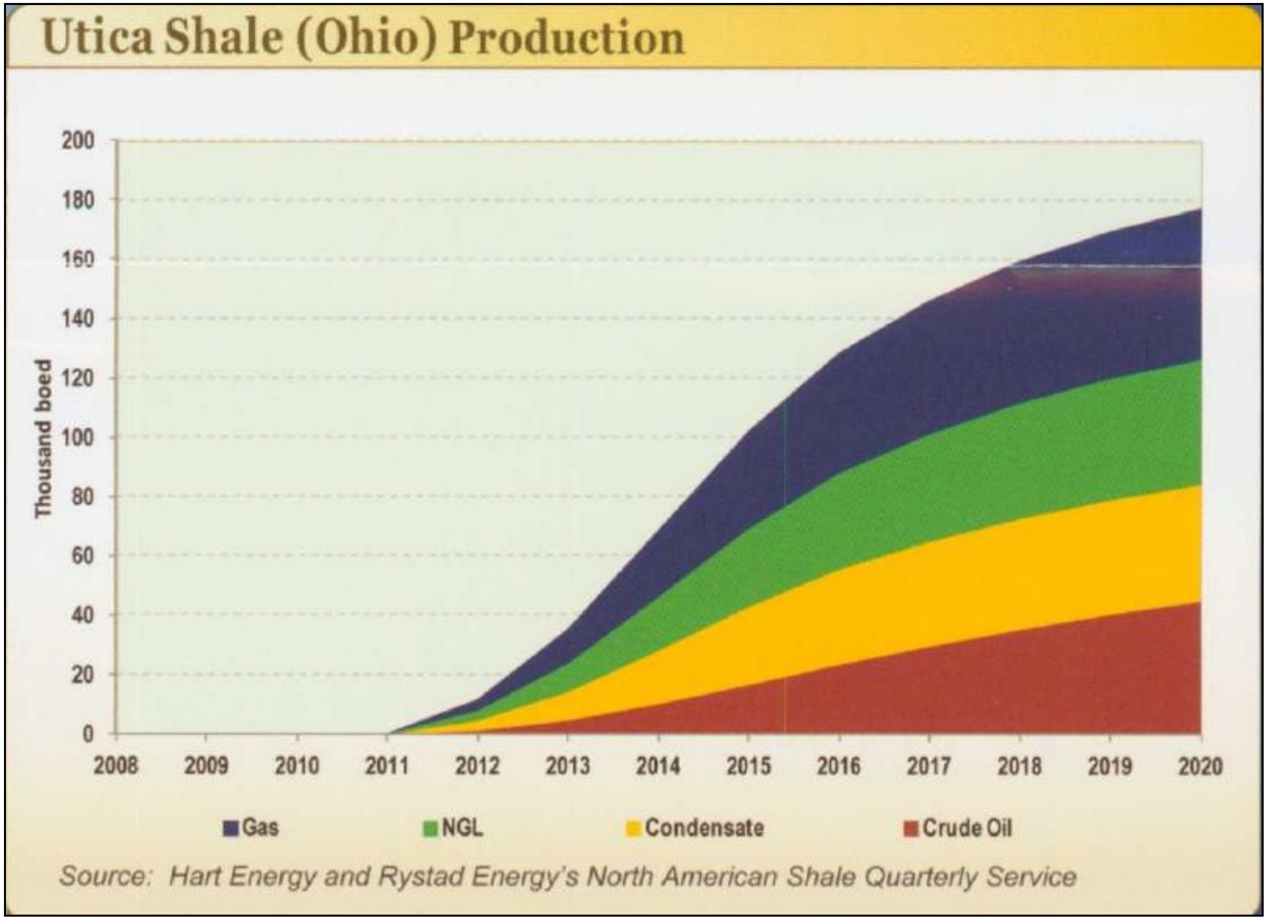


What’s In It for Ohio?

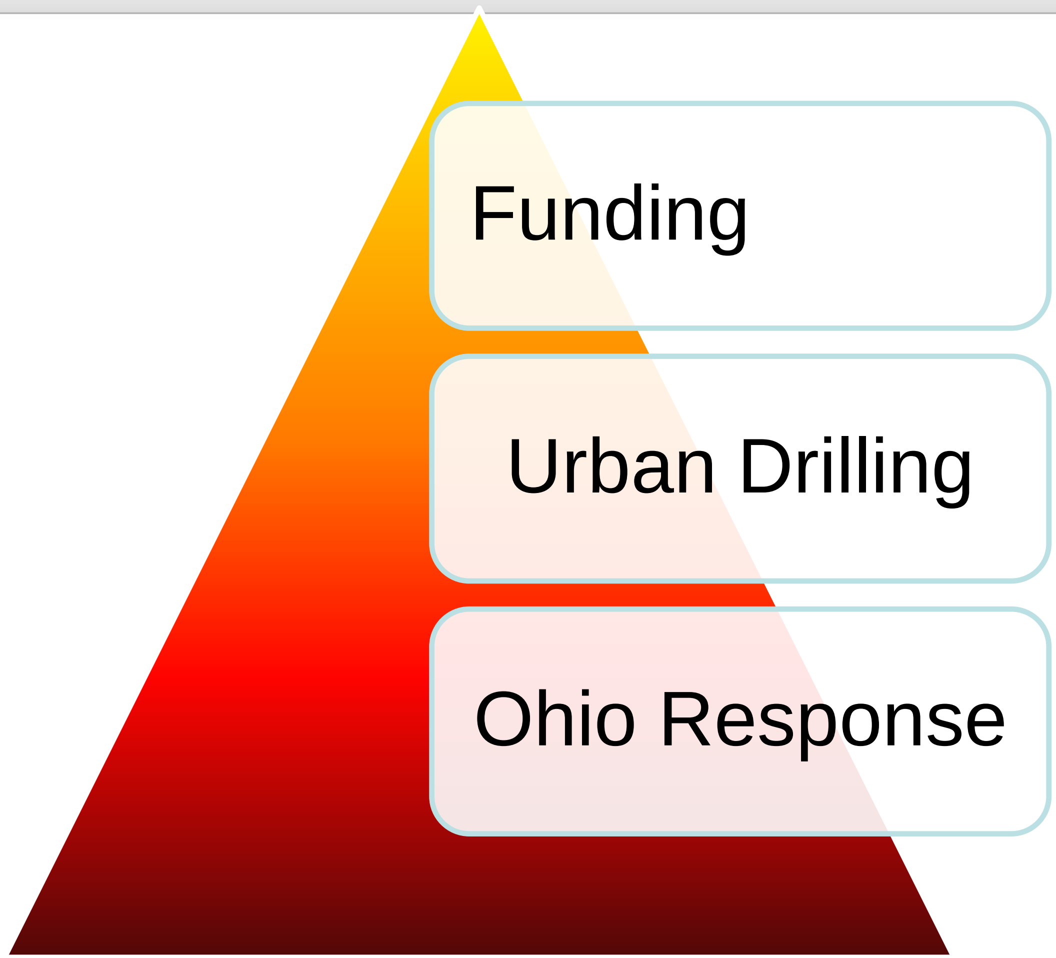
Ohio Oil and Gas Association

- Possibly 5 billion barrels of oil and 15 trillion cubic feet of gas
- Natural gas trading at deep discount of 40:1
- Ohioans saving billions in energy costs
- 200,000 jobs
- $34 billion in investment
- Eastern Ohio economic rejuvenation
- To Date: $2.75 billion industrial investment (excluding leasing, royalties and operations)
- Expansion of Proven Reserves – and that matters

What Proven Reserves May Produce



S.B. 165 – Three Major Components

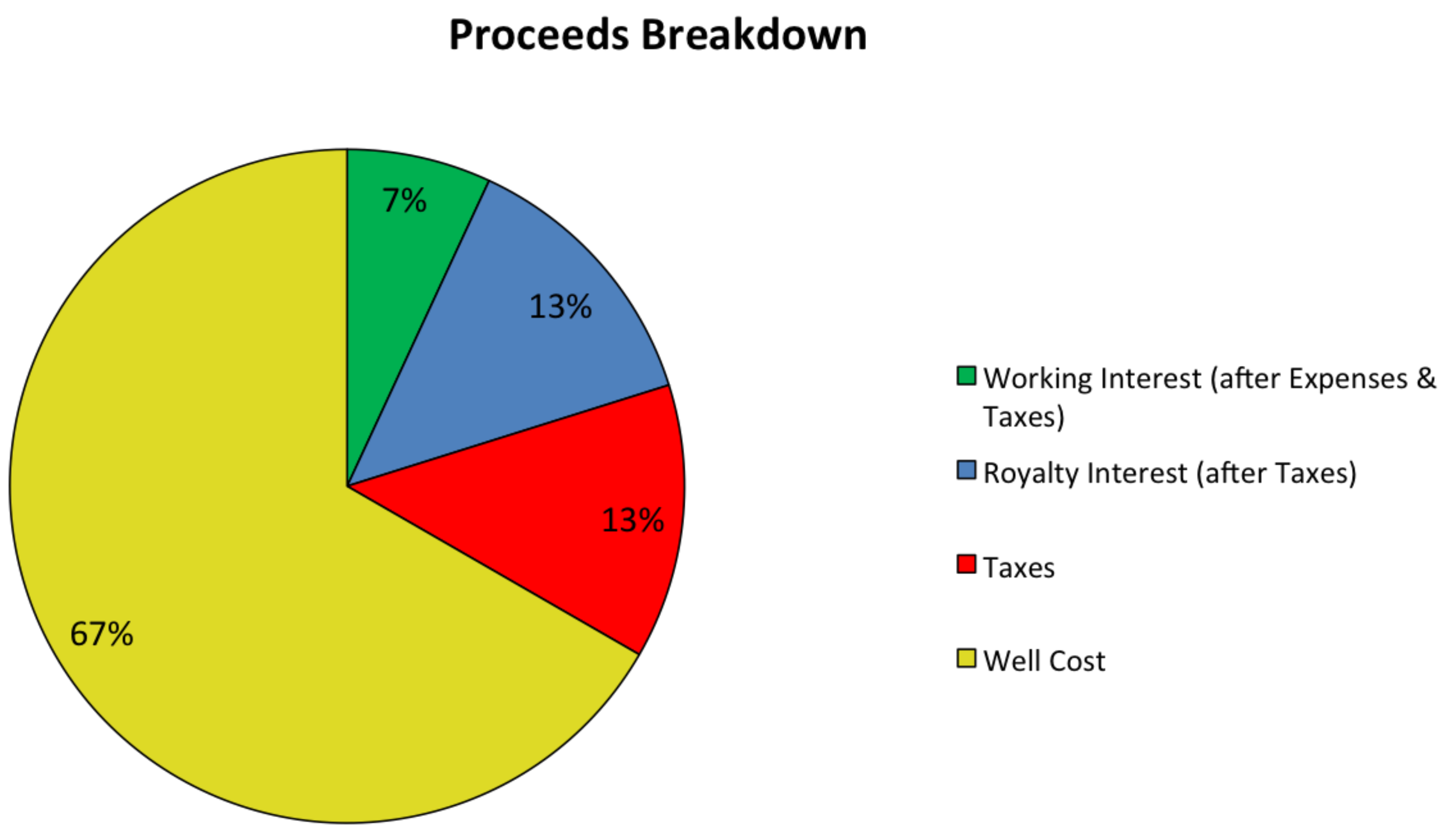


Taxes Paid by Oil and Gas Producers in Ohio

Ohio Oil and Gas Association

- **Income**
  - Personal and corporate (Subchapter S)
- **Commercial Activity (CAT)**
  - 0.26% of gross receipts
- **Sales**
- **Ad Valorem**
- **Severance**
- **Fuel Use**

Natural Gas Well Costs



How Do Oil and Gas Profits Compare to Other Industries?

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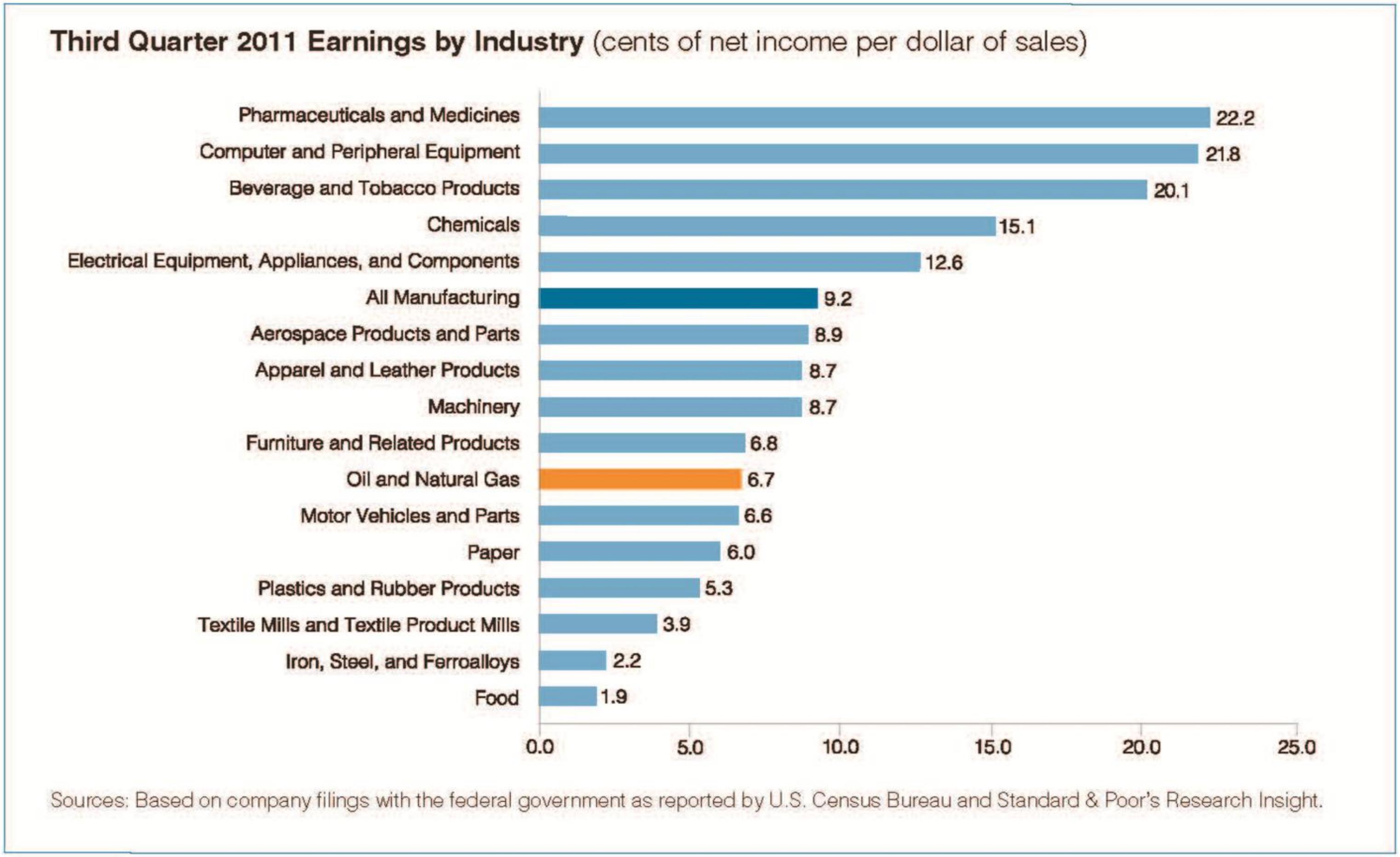


Source: American Petroleum Institute (API)

Projected Increase in Tax Revenue from Utica Shale Production

Ohio Oil and Gas Association

Kleinhenz & Associates analyzed expected tax revenue from oil and gas production in the Utica shale formation in Ohio and estimated the potential increase at the current tax rates.

Conclusion: Utica shale development is projected to result in a **$1.05 billion** increase in tax revenue for state and local governments beginning in 2015.

- $32 million from additional severance taxes will fund the state's oil and gas regulatory agency
- $638 million in additional CAT, income and sales taxes will go to Ohio's general fund
- $129 million will flow to local governments; $50 million to their general funds
- $255 million in additional income-tax revenue will go to municipalities' general funds

State

Type of Tax	2010 Collections: All Ohio Firms *(millions)*	**Additional 2015 Collections due to Utica** ***(millions)***	Percent Growth in Tax Collections due to Utica Development
CAT	$1,342	**$43**	3%
Income	$7,887	**$380**	5%
Sales	$7,254	**$215**	3%
Severance*	$11	**$32**	291%
Total	$16,494	**$670**	4%

*Ohio oil and gas industry paid approx $3 million of Severance tax in 2010.

County

Type of Tax	2010 Collections* *(millions)*	**Additional 2015 Collections due to Utica** ***(millions)***	Percent Growth in Tax Collections due to Utica Development
Sales Paid by All Ohio Industries	$3,151	**$50**	2%
Ad Valorem Paid by Oil and Gas Industry	$6	**$79**	1300%
Total	$3,159	**$129**	4%

*Based upon all 88 Ohio counties. Actual collections will vary by county.

Municipal

Type of Tax	2008 Collections: All Ohio Industries *(millions)*	**Additional 2015 Collections due to Utica** ***(millions)***	Percent Growth in Tax Collections due to Utica Development
Income	$4,165	**$255**	6%

Total All Sources

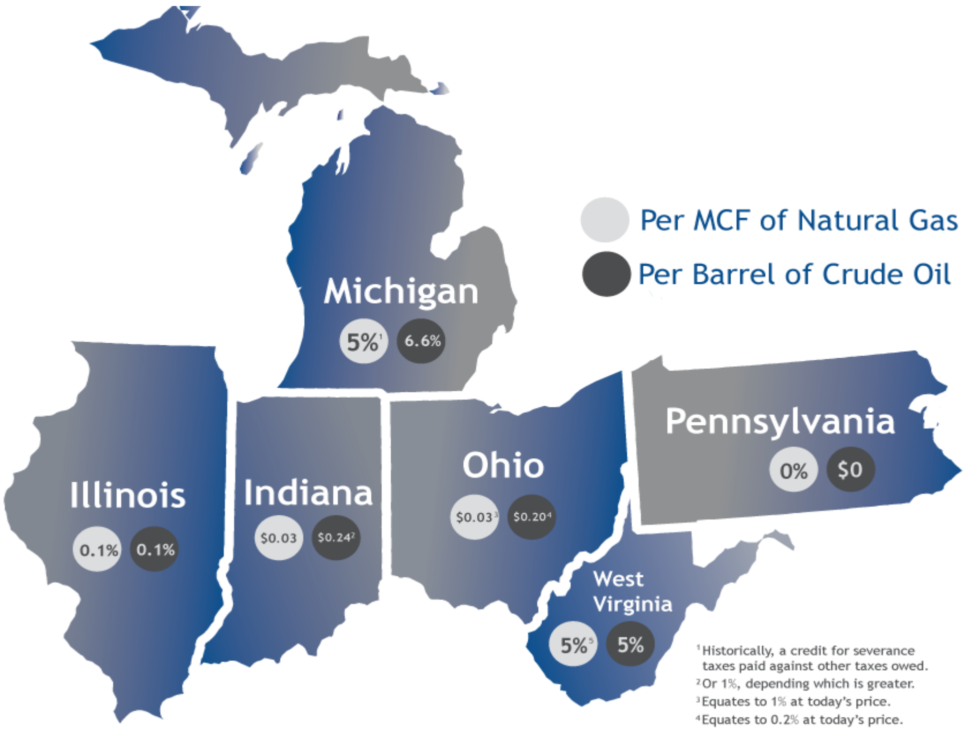
Total Tax Revenues	***$23,818***	***$1,054***	***4%***

Severance Tax

Ohio Oil and Gas Association

- Previously, operators paid a severance tax of 10 cents per barrel of oil or 2.5 cents per thousand cubic feet (MCF) of natural gas produced by a well
- Under Senate Bill 165, operators are now charged 20 cents per barrel of oil and 3 cents MCF of natural gas through a regulatory, cost-recovery assessment that operates like the severance tax (Ohio Revised Code Section 1509.50)

Ohio’s Severance Tax Compared to Neighboring States



[1] Historically, a credit for severance taxes paid against other taxes owed.
[2] Or 1%, depending which is greater.
[3] Equates to 1% at today’s price.
[4] Equates to 0.2% at today’s price.
[5] A 15% discount for gathering costs or actual costs, whichever is greater.

- In addition to a severance tax, Ohio's oil and gas producers pay income, commercial activity, sales and ad valorem (property) taxes.
- West Virginia and Michigan, which have higher severance-tax rates than Ohio, have both experienced decreased oil and gas drilling during the past five years. (Note: Both states have shale plays)
- Pennsylvania, which has no severance tax, has experienced a 600 percent increase in drilling activity during the same five years.

Correlation Between Drilling Activity and Severance Tax in MI, PA and WV

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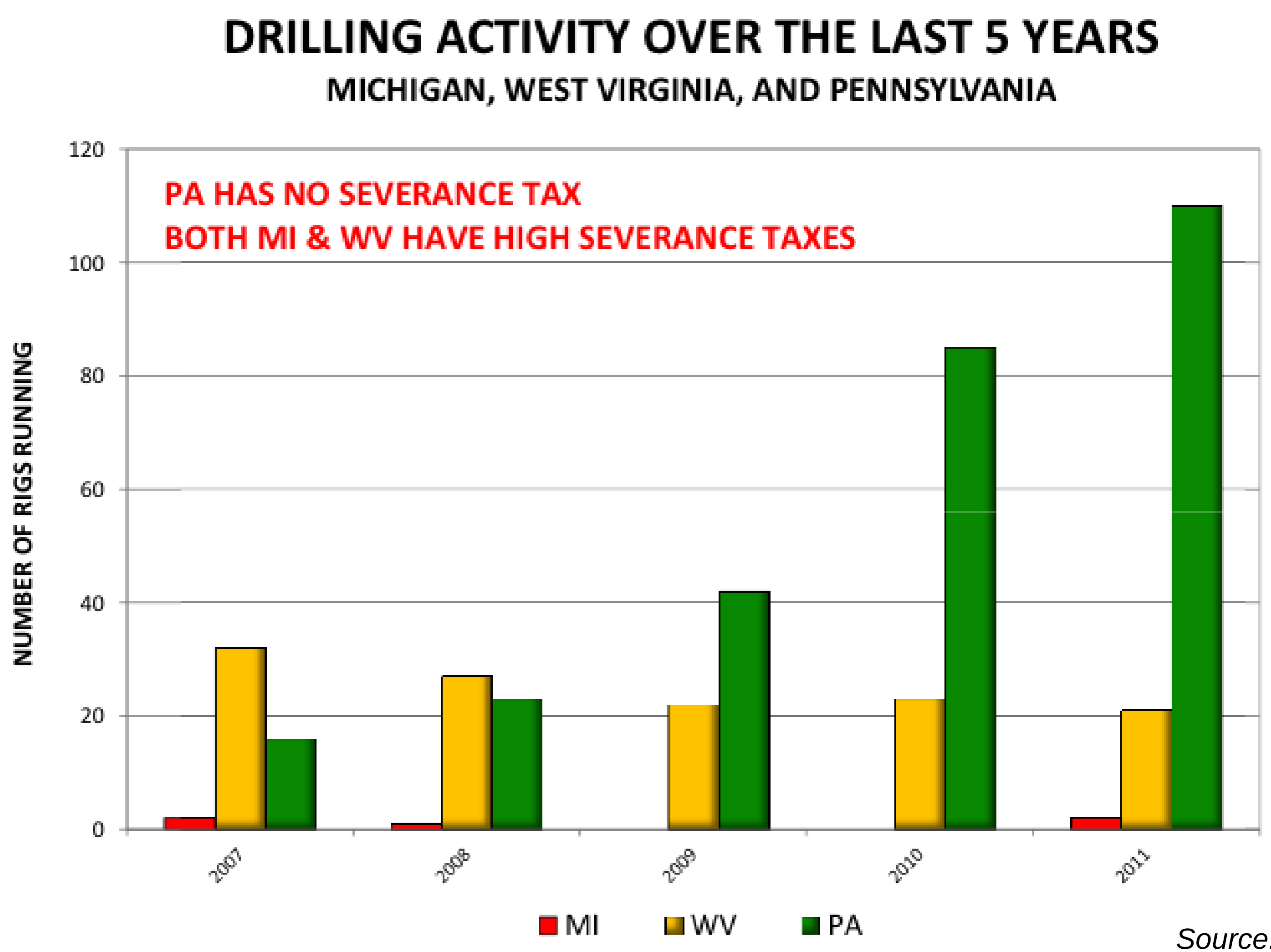
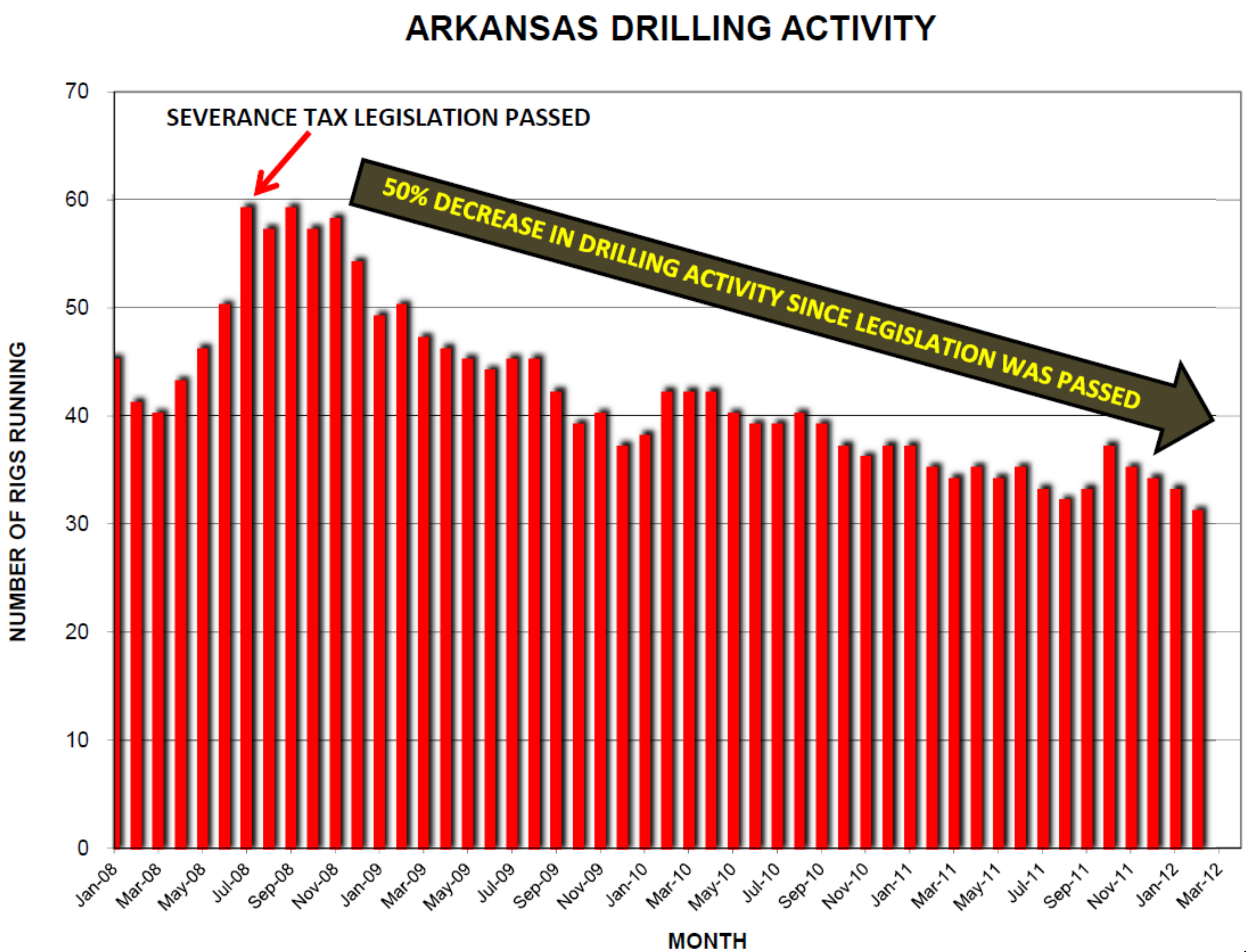


Source: Baker Hughes

Arkansas Drilling Activity Before and After Severance Tax



Source: Baker-Hughes

Texas Severance Tax

Ohio Oil and Gas Association

RAILROAD COMMISSION of TEXAS

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Home > Programs, Services & Assistance > Oil & Gas Programs > **Texas Severance Tax Incentives: Past and Present**

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Texas Severance Tax Incentives: Past and Present

The reduction or elimination of state severance taxes provides an economic incentive to operators to undertake activities that produce oil and gas resources that otherwise might remain unrecovered. Texas recognized back in the late 1980's that incentives to increase the state's oil and gas production were extremely valuable. Economic studies have shown that for each dollar invested in the oil and gas industry and for each dollar of production, there is a positive effect on the state's economy.

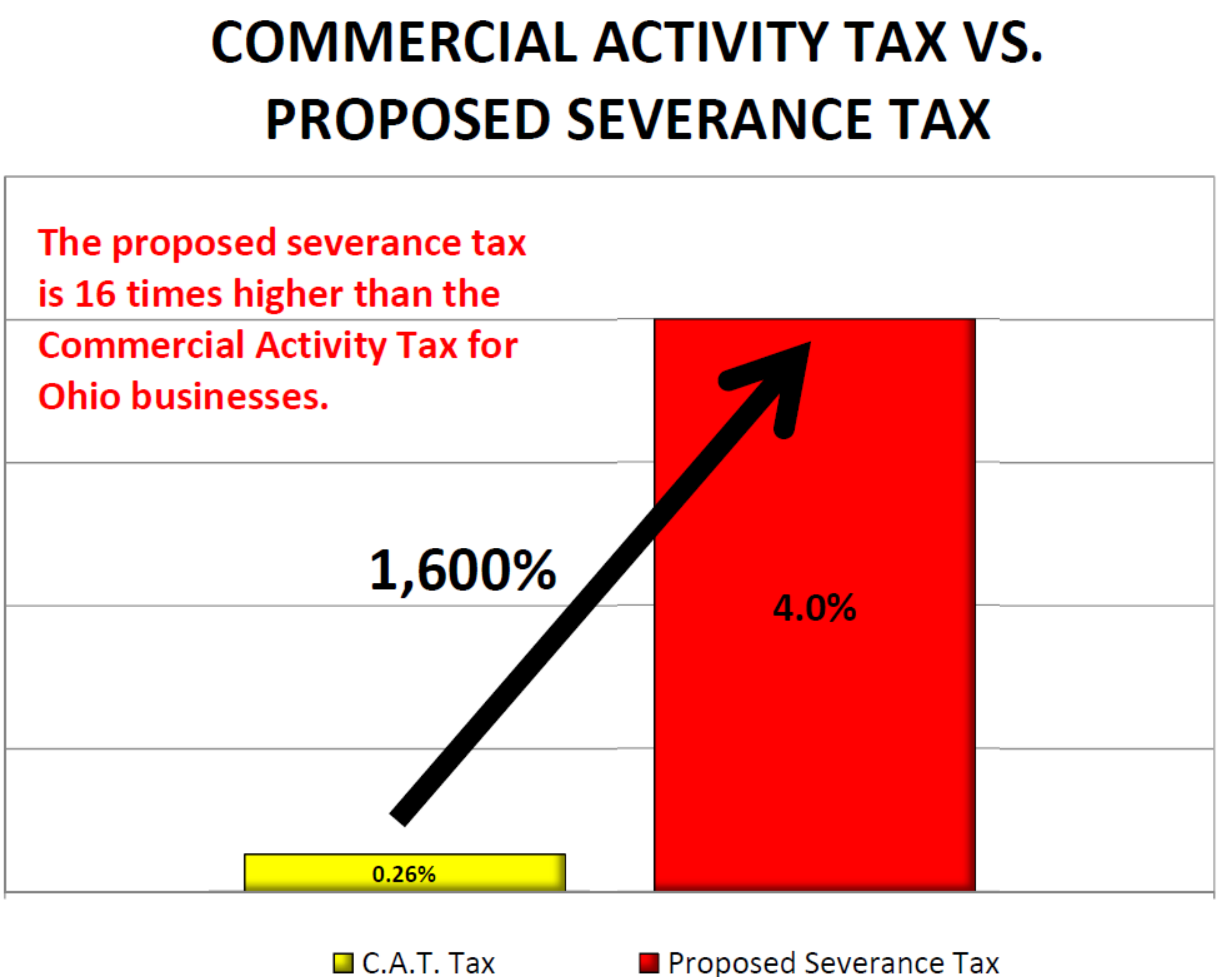
Prior to the oil and gas bust that began in the mid-1980s, the oil and gas sector was among the strongest in the Texas economy. In the late-1980s and early 1990s, the poor health of the industry was reflected in the poor health of the state's economy. The incentive programs are targeted to help strengthen the economy by encouraging investment in exploration and production and to maximize responsible development and efficient recovery of the state's valuable natural resources.

By providing exemptions from or reductions of the severance tax on oil and gas production, these incentive programs in effect lower the cost of production. For marginal operations, in particular, these incentives might mean the difference between shutting in a well, keeping a well in production, or bringing a well back into production. For others, the incentives are factored into decisions of drilling or not drilling a well, initiating an enhanced recovery project, or servicing a well to increase its production.

Texas incentive programs have been so successful that other states have used them as models. **Severance tax incentives continue to be needed in the future to encourage production and expansion of oil and gas operations, and sustain a vital segment of the state's economy.**

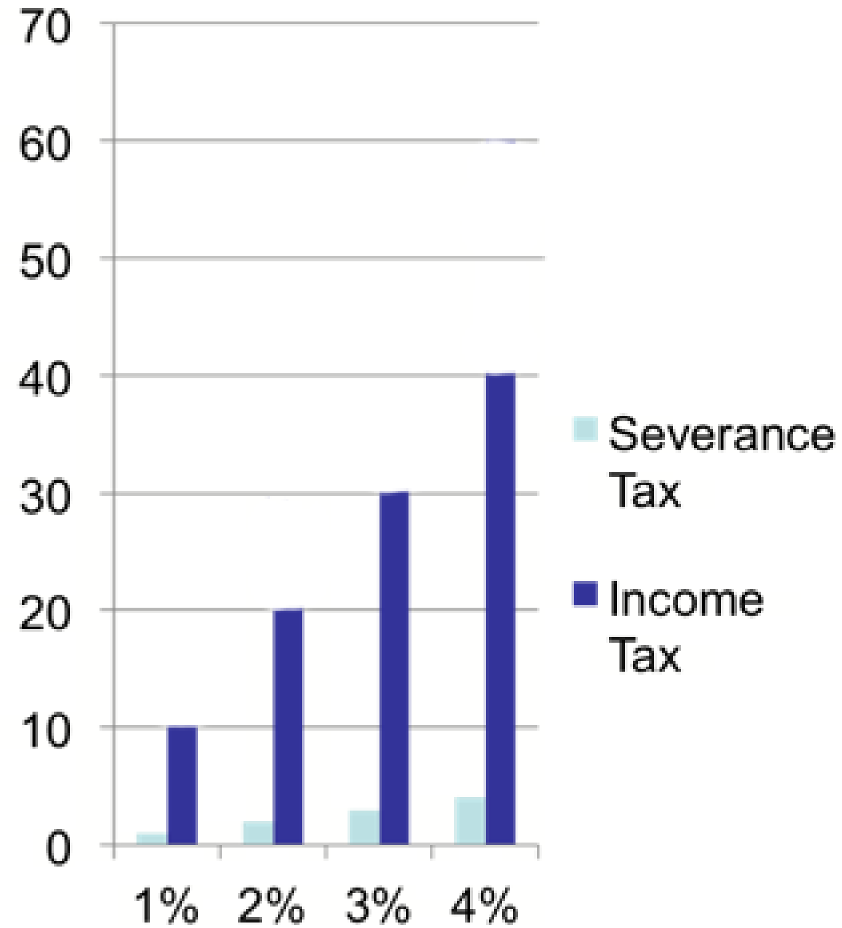
Source: http://www.rrc.state.tx.us/programs/og/severancetax.php

CAT vs. Proposed Severance Tax



Impact of Increased Severance Tax

- With an average profit margin of only 6-7% — an additional 1% tax on gross receipts (severance tax) = 10% income tax increase
- Severance tax is paid despite the profitability of a well
- Damage the state's competitive advantage, resulting in companies taking business to other states or abroad
- Reduction in drilling activity would result in increased energy costs, decreased tax revenue and loss of job opportunities for all Ohioans



Ohio can have an income-tax decrease without jeopardizing investment

OOGA
Ohio Oil and Gas Association

The Kleinhenz study estimates tax revenue will be $1.05 billion beginning in the year 2015 under the existing tax structure. The Kasich administration's proposed severance-tax increase might generate more than $500 million at some future date.

Best Solution for Ohioans:

Use increased revenue generated under the existing tax system to fund income-tax cuts greater than those offered by the Kasich administration without risking Ohio's economic opportunity.