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By Diana Polson and Stephen Herzenberg **June 27, 2017**

It's Time for a Real Severance Tax in Pennsylvania:

While Gas Production Continues to Rise, Drillers' Impact Fee and Corporate Tax Payments Remain Low

In 2014 Pennsylvania became the second-largest natural gas producer, extracting over four trillion cubic feet in the state.[1] In 2016, gas production exceeded five trillion cubic feet. Despite rising production, however, Pennsylvania remains the only major gas-producing state allowing companies to drill without paying taxes on the value of gas extracted.

Legislators on both sides of the aisle, and Governor Wolf, have all made proposals this year to enact severance taxes that would, together with the existing impact fee, raise the overall effective tax rate on the value of natural gas extracted (in most circumstances) to at least the 5% level that exists in West Virginia. This brief estimates the revenue for three alternative proposals: one that, combined with the impact fee, would raise the effective tax rate to 5%, one from Republican Representative Kate Harper that adds a 3.5% severance tax to the existing impact fee, and Gov. Wolf's proposed 6.5% severance tax that would that allow companies to take the impact fee as a credit.

All three proposals would raise a half billion dollars or more for the 2018-19 budget and $217 million or more in the half of a tax year left that could contribute to the 2017-18 budget. Gov. Wolf's proposal would raise an estimated $1.15 billion by 2021-22. Pennsylvania cannot afford to leave this money on the table any longer given the state's desperate need for revenue to invest in education, critical life-enhancing services, environmental protection and job creation.

This brief also shows that drilling companies are not making up for Pennsylvania's lack of a severance tax by paying more in impact fees or corporate net income taxes (CNIT). Drilling companies paid less in impact fees and CNIT payments in 2016 than in 2011, when gas production was about one fifth the current level. Drillers are projected to pay less in impact fees even in 2018 than in 2011, even though the market value of gas extracted will have tripled. CNIT payments by drillers today and well below one tenth of the revenue lost from not having a real severance tax on the market value of gas extracted.

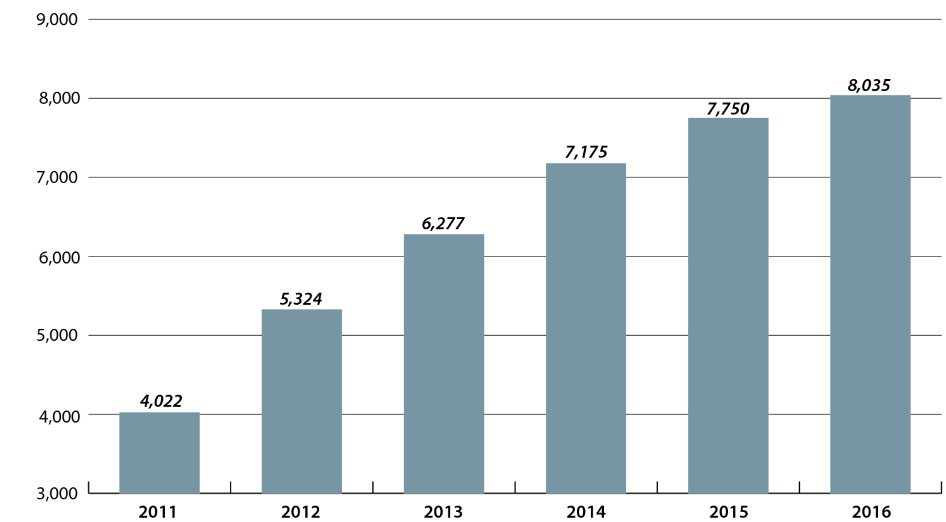
One way gas companies lower their corporate tax payments is by structuring their drilling operations as pass-through entities, some of the income of which is subject to the state's 3.07% personal income tax rate rather than the 9.99% corporate net income tax rate. We estimate that about two thirds of oil and gas companies are pass-through corporations, accounting for two thirds of wells and two thirds of gas production. The one third that are not pass-through entities can lower their Pennsylvania taxable corporate net income using tax loopholes as well as federal and state tax breaks for gas drilling. For example, they can use Delaware holding companies to shift profits to a neighboring state with no corporate income tax.

[1] U.S. Energy Information Administration. "Pennsylvania State Energy Profile: Pennsylvania Quick Facts." Accessed at https://www.eia.gov/state/print.php?sid=PA.

Impact Fee Payments Decline While Gas Production Mushrooms

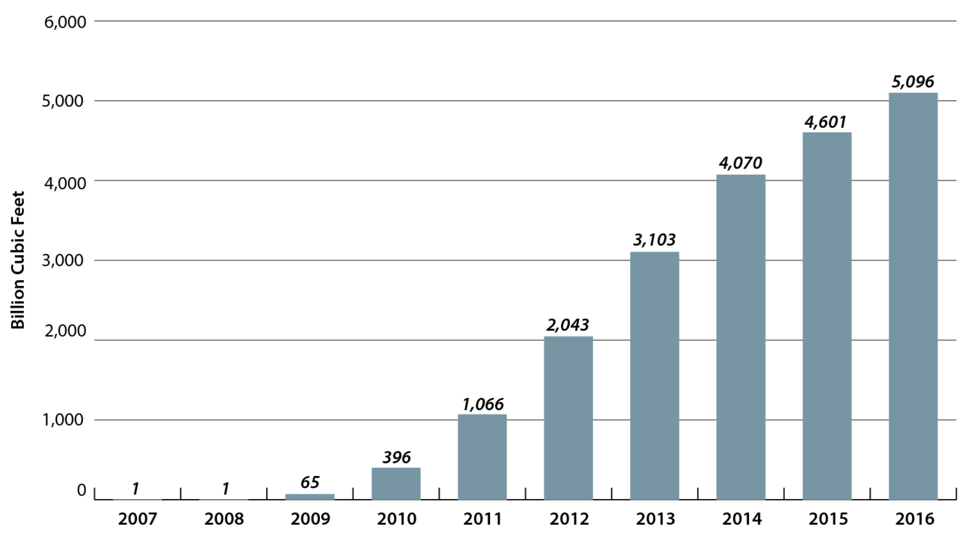
Pennsylvania's impact fee charges companies a fee for each well they drill that is based on the number of years since a well was drilled and the price of natural gas (but not the amount or value of gas extracted). There has been a steady increase in the number of horizontal wells and in gas production since 2011 (Figures 1 and 2). Yet Figure 3 (updated with new Pennsylvania Utility Commission data) shows that more wells and gas production have not meant more revenue for the state. In fact, impact fee revenue declined by 15% since 2011 (22% since 2014), while the volume of gas produced rose nearly five times since 2011.[2]

Figure 1. Number of Horizontal Wells in Pennsylvania, 2011-2016



Source: Pennsylvania Budget and Policy analysis of Pennsylvania Public Utility Commission data, online at https://www.act13-reporting.puc.pa.gov/Modules/Reports/Reports.aspx. To obtain well data, click on "producer impact fee report" (the bottom option in the menu); then on reporting year in the upper left (e.g., 2016); and then on "view report." This pulls up the horizontal well count by company (and other data) in the selected year. Putting the cursor over the small purple floppy disk icon provides the option of downloading the data and aggregating the number of horizontal wells at each company to obtain the total for the state.

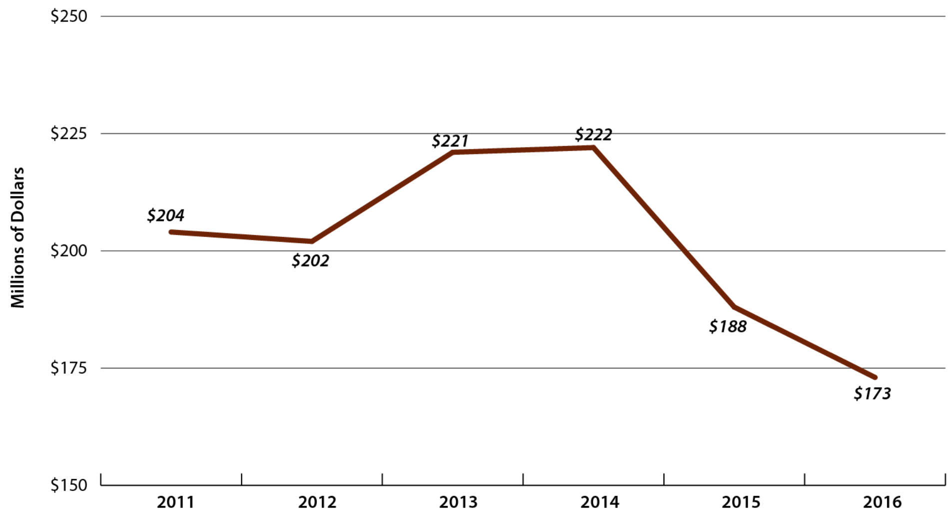
Figure 2. Pennsylvania Gas Production from Unconventional Wells



Source: Pennsylvania Budget and Policy Center analysis of Pennsylvania Department of Environmental Protection data for 2011-16, online at https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/ProdWasteReports.aspx. Click on "Production Report" and then select a combination of reporting periods (e.g., 12 individual months or two six-month periods) for unconventional wells that add up to each of the years from 2011 to 2016. Click "View Report" on the right and production data come up for each well, along with a "Gas Total" figure at the top for the year in question. For 2007 to 2010, we used data on unconventional wells in Michael Wood, "Gas Production Booms, Drillers' Corporate Taxes Plummet," June 9, 2014; http://www.pennbpc.org/gas-production-booms-drillers-corporate-tax-payments-plummet

[2] Adjusted for inflation, impact fee revenue has declined by 21% since 2011 and 23% since 2014.

Figure 3. Total Revenue From Pennsylvania Impact Fee, 2011-2016



Source: Pennsylvania Budget and Policy analysis of Pennsylvania Public Utility Commission data, online at https://www.act13-reporting.puc.pa.gov/Modules/Reports/Reports.aspx. To obtain impact fee amounts, click on "producer impact fee report" (the bottom option in the menu); then on reporting year in the upper left (e.g., 2016); and then on "view report." This pulls up impact fee amounts by company (and other data) in the selected year. Putting the cursor over the small purple floppy disk icon provides the option of downloading the data so that impact fee amounts by company can be summed to provide total impact fee amounts for the state.

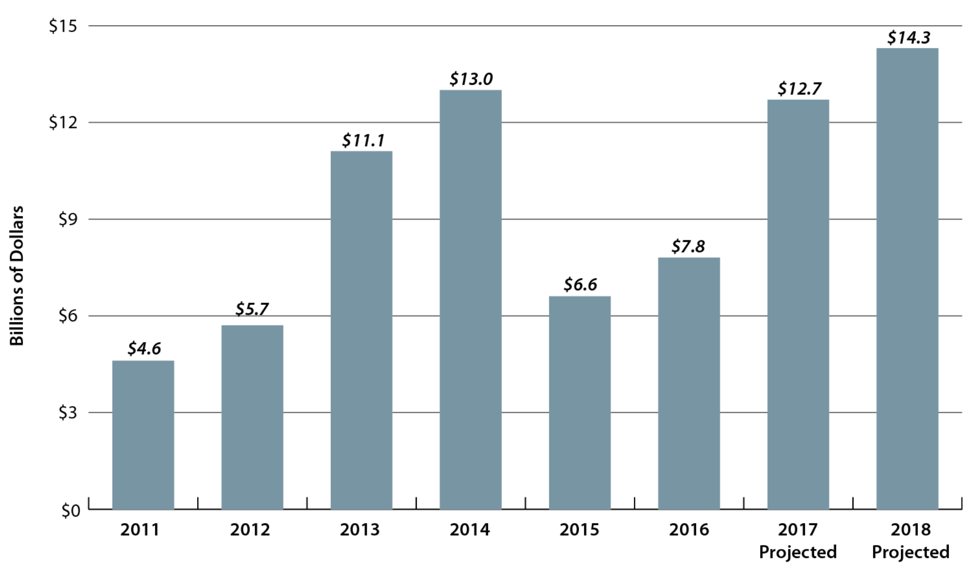
State legislators and Gov. Corbett structured the impact fee as a per-well fee rather than as a severance tax tied to the market value of gas produced in the state in part so that they could label it a "fee" not a tax. As a result, however, the impact fee fails to provide a steady source of revenue that grows with the volume and value of gas produced in the state.

Foregoing a severance tax, and lowering overall taxes on drilling companies, has not led to an increase in drilling or production relative to neighboring states.[3] Instead, Pennsylvania is allowing companies to extract natural gas without a severance tax which would help the state address its budget deficit and pay for essential investments and services such as education, health care and human services.

Impact Fee "Effective Tax Rate" Below 3% Four Years Running, and Expected to Decrease Further

Figure 4 shows that the market value of gas produced in Pennsylvania in 2016 was $7.8 billion. That same year, extraction companies paid $172.8 million in impact fees in the state, for an effective tax rate of 2.2% (see Figure 5 and Table 1). According to Headwaters Economics, Pennsylvania has the lowest effective tax rate on natural gas drilling (from severance

Figure 4. Estimated Sales of Gas from Unconventional Wells in Pennsylvania, 2011-2018



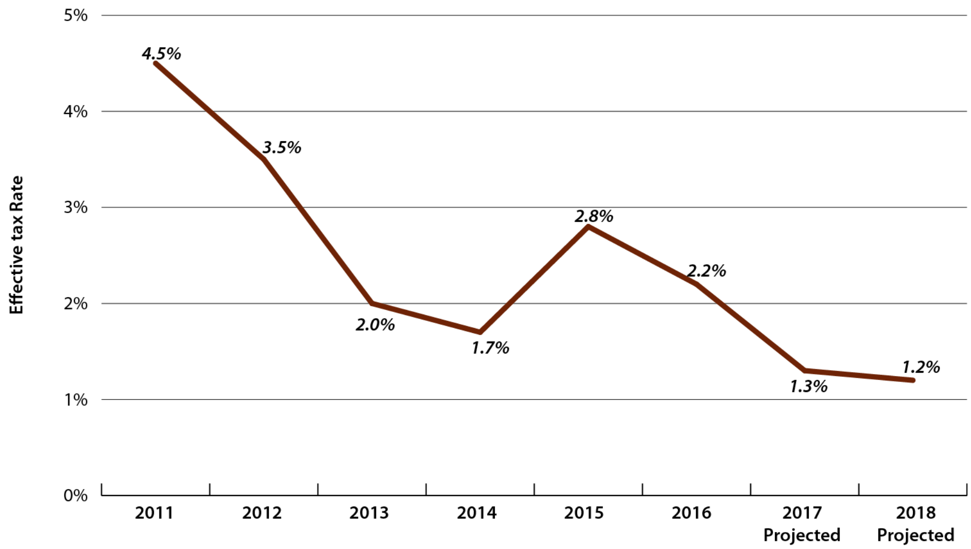
Source: See Table 1 of this report for sourcing information.

[3] Headwaters Economics. "What Do Local Governments Receive from Oil and Gas Production Taxes." December 2016. Accessed at https://headwaterseconomics.org/dataviz/oil-gas-local-governments-production-tax-revenue/

taxes on the value of gas and/or per well fees) of any large natural gas producing states (Wyoming, Arkansas, New Mexico, Colorado, Texas, Oklahoma, Louisiana plus Pennsylvania).[4]

As shown in Table 1, the price of gas in 2015 and 2016 ($1.43 and $1.53 respectively) was less than half the price in 2013 ($3.57) and 2014 ($3.20). As the price of gas fell, the market value or estimated total sales for extraction companies plummeted in the last two years, resulting in an uptick in the effective tax rate. The EIA (U.S. Energy Information Administration), however, projects that the price of gas will increase in 2017 and 2018. Given expected increases in price, production, and sales ("gross receipts"), we project the annual effective tax rate of the current impact fee to decrease to 1.3% of gas sales in 2017 and 1.2% in 2018.[5]

Figure 5. Pennsylvania's Impact Fee Annual Effective Tax Rate, 2011-2018
Impact fee payments as a percent of gas sales from unconventional wells.



Source: See Table 1 of this report for sourcing information.

[4] Headwaters Economics. "What Do Local Governments Receive."
[5] The Independent Fiscal Office projects a similar ETR for the impact fee in 2018 – 1.4%. See IFO, "Analysis of Revenue Proposals," April 2017, Table 1.5, p. 11. Both this and our projection less than a third of the ETR of West Virginia's severance tax.

Table 1.
Pennsylvania's Impact Fee Annual Effective Tax Rate (ETR) for 2011-2016 and 2017-2018 Projected

Calendar Year	Impact Fee Revenues (thousands) (1)	Unconventional Production (MMcf) (MMcf =million cubic feet) (2)	Price of Gas ($/Mcf) (Mcf = thousand cubic feet) (3)	Market Value (thousands)	Annual ETR of the Existing Pennsylvania Impact Fee (4)
2011	$204,210	1,065,824	$4.27	$4,551,069	4.5%
2012	$202,422	2,043,361	$2.80	$5,721,410	3.5%
2013	$220,962	3,102,890	$3.57	$11,077,318	2.0%
2014	$222,437	4,070,390	$3.20	$13,025,249	1.7%
2015	$187,661	4,601,464	$1.43	$6,580,093	2.9%
2016	$172,759	5,095,956	$1.53	$7,796,813	2.2%
2017 (projected) (5)	$169,464	5,201,956	$2.44	$12,692,773	1.3%
2018 (projected) (5)	$172,922	5,440,956	$2.62	$14,255,306	1.2%
Total 2011-16	$1,210,451	19,979,885		$48,751,952	
Total 2017-18	$342,386	10,642,913		$26,948,079	
Total 2011-18	$1,552,837	30,622,798		$75,700,031	

(1) Impact fee revenue numbers from Pennsylvania Public Utility Commission data online at https://www.act13-reporting.puc.pa.gov/Modules/Reports/Reports.aspx. To obtain impact fee amounts, click on "producer impact fee report" (the bottom option in the menu); then on reporting year in the upper left (e.g., 2016); and then on "view report." This pulls up impact fee amounts by company (and other data) in the selected year. Putting the cursor over the small purple floppy disk icon provides the option of downloading the data so that impact fee amounts by company can be summed to provide total impact fee amounts for the state.

(2) Production numbers for 2011-16 from Pennsylvania Department of Environmental Protection data online at https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/ProdWasteReports.aspx. Click on "Production Report" and then select a combination of reporting periods (e.g., 12 individual months or two six-month periods) for unconventional wells that add up to each of the years from 2011 to 2016. Click "View Report" on the right and production data come up for each well, along with a "Gas Total" figure at the top for the year in question. For 2007 to 2010, we used data on unconventional wells in Michael Wood, "Gas Production Booms, Drillers' Corporate Taxes Plummet," June 9, 2014; http://www.pennbpc.org/gas-production-booms-drillers-corporate-tax-payments-plummet. Production in 2017 and 2018 based on Independent Fiscal Office's report "Analysis of Revenue Proposals: FY 2017-18 Executive Budget," April 2017, Table 1.4. We made a minor (less than one tenth of one percent) to the IFO production projections for 2017 and 2018 because actual production for 2016, now available, differed by a tiny amount from IFO's projections in its April report.

(3) Pennsylvania (regional) gas prices for 2015 through 2018 from Table 1.4 in Independent Fiscal Office (IFO), "Analysis of Revenue Proposals: FY 2017-18 Executive Budget," April 2017. Gas prices for 2011-2014 from IFO, "2016 Impact Fee Estimate," IFO Research Brief 2017-1; http://www.ifo.state.pa.us/releases.cfm?id=98. The IFO subtracts $0.87 of post-production costs from this price. We add back the $0.87 for comparability with the prices for 2015-18.

(4) We define the effective tax rate each year as impact fee revenues as a percent of the market value of gas produced by unconventional wells. (Both the Harper and Wolf proposals impose severance tax rates (of 3.5% and 6.5%, respectively) on this unadjusted market value.) In computing ETRs, the IFO adjusts market value downward by post-production costs (estimated at $0.87) times the level of gas production. (See IFO, "Analysis of Revenue Proposals," April 2017.) The IFO's estimated ETR's are thus higher than ours. The difference in our and the IFO's estimates becomes smaller as prices rise.

(5) PBPC projections of impact fee revenues for 2017 and 2018 based on Independent Fiscal Office, "2016 Impact Fee Estimate," Research Brief 2017-1, Table 2. In 2017 and 2018, we aged the 2016 wells reported by the IFO, and the number of exempt wells of each vintage, by one and two years respectively, and assumed no additional exempt wells. We also assumed that there would be the same number of year 1 operating wells in 2017 and 2018 as in 2016 (and the same number of year 2 wells in 2018 as year 1 wells in 2016). Our estimated price of gas for 2017 and 2018 assumes that the Pennsylvania regional price of natural gas rises as much as the Henry Hub price (obtained from https://www.eia.gov/todayinenergy/detail.php?id=29632) in those two years. This maintains the same dollar gap in the Pennsylvania regional price and the Henry Hub price as existed in 2016.

How much revenue has the state lost because of its failure to enact a severance tax? How much would it garner if it enacted a severance tax now? Table 2 answers these questions for three different severance tax proposals. The first column estimates the additional revenue from a severance tax that, combined with the impact fee, would raise the overall Effective Tax Rate (ETR) on the market value of gas extracted to 5%.[6] The second column projects additional revenue by adding a 3.5% severance tax on top of the existing impact fee (Representative Harper's plan). The third column estimates additional revenues using Governor Wolf's severance tax proposal – a tax rate of 6.5% with the impact fee taken as a credit. Rep. Sturla has introduced another severance proposal (House Bill 1054), not shown in Table 2 because we are unable to estimate the revenue it would raise.[7] The Sturla bill has a tax rate that varies from 4% to 9% depending on gas prices and would also allow gas companies to deduct capital costs and post-production costs (up to a cap) as well as take the impact fee as a credit. It would likely raise less than the other proposals when gas prices are low but more when gas prices are high.

Table 2 shows that the state has lost between $1.2 billion and nearly $2 billion since 2011-12 because of its failure to enact a reasonable severance tax – enough to put a significant dent in the state's structural deficit and allow the state to provide more support to underfunded school districts, higher education, environmental protection and human services. This fiscal year and next, the state is losing close to a half billion dollars annually because of its failure to enact a 5% severance tax or Representative Harper's bill. We project that Gov. Wolf's proposal would bring in $754 million in the 2018-19 fiscal year.[8]

[6] While similar to West Virginia's severance tax, West Virginia has a "transportation and transmission allowance" that may lower payments under its severance tax for some gas producers, based either on the actual cost of transportation and transmission or a 15% standard deduction from sales of gas. If all producers took a 15% deduction, the effective tax rate on gross receipts from gas sales would drop from 5% to 4.25%.

[7] The Sturla bill is online at http://www.legis.state.pa.us/cfdocs/billinfo/billinfo.cfm?syear=2017&sind=0&body=H&type=B&bn=1054

[8] Our estimate that the Wolf severance tax proposal would raise $754 million over and above impact fee revenues in 2018-19 is similar to the IFO's April estimate of $712 million. See IFO, "Analysis of Revenue Proposals," April 2017. The IFO estimates impact fee payments in 2018-19 at $240 million compared to our estimate of $173 million and this difference of $67 million more than accounts for the $42 million gap in our projections of increased revenue from the Wolf severance tax proposal. The Wolf Administration's own estimates of revenue from its severance tax proposal are more conservative – $442 million in 2018-19. See *Governor's Executive Budget 2017-18*, p. C1-11.

Table 2. Additional Revenue (over and above Impact Fee revenue) from Three Severance Tax Proposals (in thousands)

Fiscal year	Severance Tax that, with the Impact Fee, Raises the Effective Tax Rate to 5%	Harper Bill: 3.5% Severance Tax on Top of Impact Fee (1)	Wolf Proposal: Severance Tax that, Combined with Impact Fee, Raises ETR to 6.5% (2)
2011/12	$23,343	$159,287	$91,609
2012/13	$83,648	$200,249	$169,470
2013/14	$332,904	$387,706	$499,064
2014/15	$428,826	$455,884	$624,204
2015/16	$141,343	$230,303	$240,045
2016/17	$217,082	$272,888	$334,034
2017/18 (projected)	$465,175	$444,247	$655,566
2018/19 (projected)	$539,843	$498,936	$753,673
Total 2011/12-2016/17	$1,227,146	$1,706,318	$1,958,426
Total 2017/18 - 2018/19	$1,005,018	$943,183	$1,409,239
Total 2011/12-2018/19	$2,232,164	$2,649,501	$3,367,665

(1) Representative Kate Harper's plan, House Bill 113, is online at http://www.legis.state.pa.us/cfdocs/billinfo/billinfo.cfm?syear=2017&sind=0&body=H&type=B&bn=0113

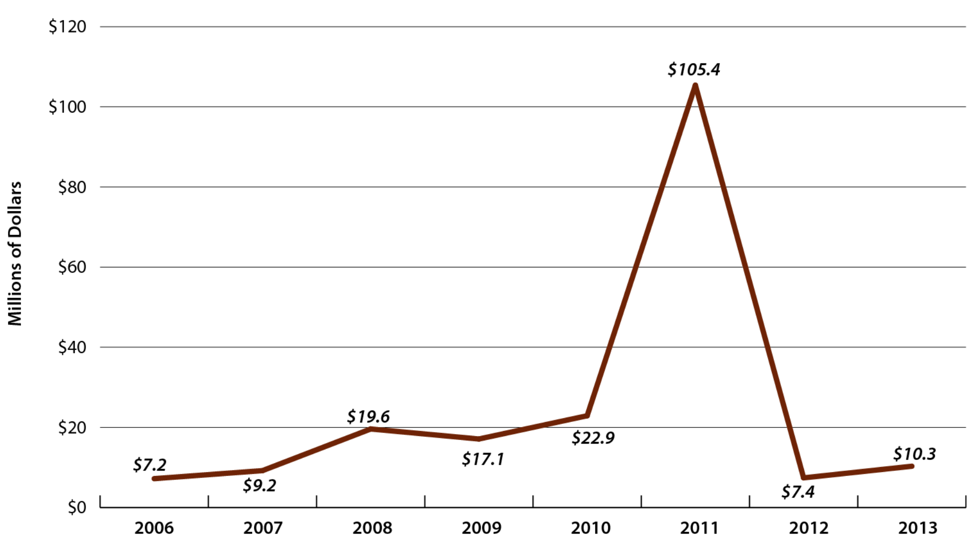
(2) Governor Wolf's plan is described in the *Governor's Executive Budget 2017-18*, p. C1-15: "a new tax on the severance of natural gas within the commonwealth is proposed. The rate is 6.5% of the value of the natural gas. The proposed tax would be effective July 1, 2017. The amount paid in unconventional gas well impact fees can be taken as a credit against the severance tax."

Source: Pennsylvania Budget and Policy Center analysis of data in Table 1

Corporate Net Income Tax Payments from Gas Drillers Plummet after 2011-12

Some opponents of a severance tax justify their position by saying that gas drillers already pay a lot in taxes because of the corporate net income tax (CNIT) as well as the impact fee. This section updates PBPC's earlier analysis of drilling company CNIT payments.[9] Figure 6 shows corporate net income tax payments by gas drillers (the red line, from 2006-07 to 2013-14). After a large spike in payments in 2011, CNIT payments dipped below 2007 payments despite an exponential growth in drilling in 2012 and 2013.

Figure 6. Corporate Net Income Tax Payments by Gas Drillers, 2006-2013



Source: Pennsylvania Budget and Policy Center analysis of Pennsylvania Department of Revenue data.

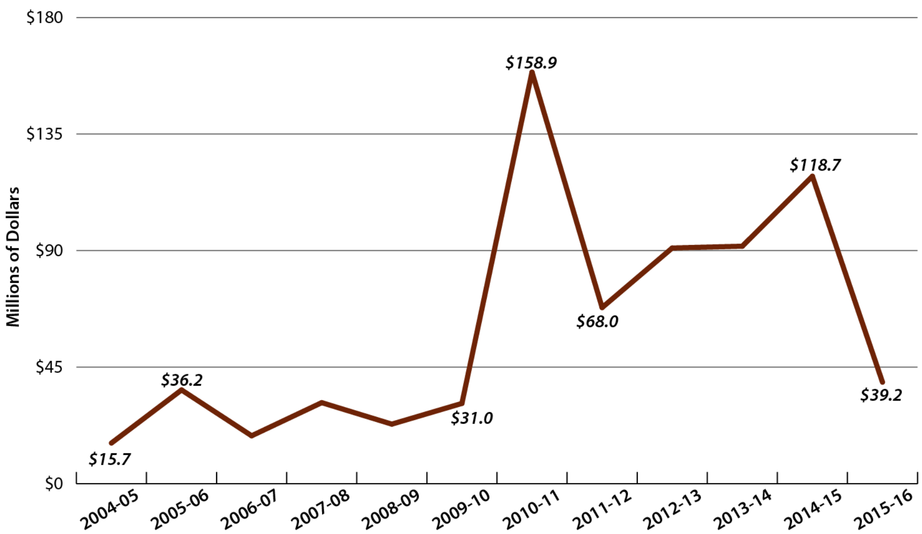
While Figure 6 details CNIT payments for gas drillers alone, the Pennsylvania Department of Revenue (PA DOR) after 2013

[9] See Michael Wood, "Gas Production Booms, Drillers' Corporate Tax Payments Plummet." Pennsylvania Budget and Policy Center (PBPC), June 9, 2014 http://www.pennbpc.org/gas-production-booms-drillers-corporate-tax-payments-plummet. That earlier analysis also has company-specific analysis of how little some major drilling companies pay in taxes.

stopped producing such detailed data. Since 2013, PA DOR provides CNIT payments only for the broader mining industry. Mining includes coal, conventional oil and gas, and natural gas distribution (pipelines) as well as drilling. Figure 7 shows CNIT payments from 2006-07 to 2015-16 (blue line). The data collected here is for fiscal year (as opposed to the drilling data in the chart above which is by calendar year).

Mining CNIT payments in 2015-16 are under half what they were in 2012-13 and 2013-14, the last two fiscal years overlapping the last year in the previous chart (for drillers only). Even if non-drilling companies pay nothing in CNIT and the entire $39.2 million in 2015-16 is CNIT payments by natural gas drillers, the level of gas drilling payments would be 37% the peak in 2011. Assuming the non-drilling CNIT payments within mining equal half the average for the years for which we have both series (i.e., $32 million), drilling CNIT payments today are near their 2012-13 and 2013-14 levels ($7 to $10 million). In sum, drilling companies are making CNIT payments between 7% to 37% of their peak payments -- $7 million to $40 million. Even if all $39.2 million mining company CNIT payments in 2015-16 were made by drilling companies, this is less than one tenth of what the state now loses each year because it does not have a severance like other states. CNIT payments by drilling companies do not make up for the lack of a severance tax.

Figure 7. Corporate Net Income Tax Payments by Drillers and Other Mining Companies*, 2004-05 to 2015-16



*The broader mining category includes unconventional gas drilling and other mining and related extractive industries.
Source: Pennsylvania Budget and Policy Center analysis of data published by the Pennsylvania Department of Revenue in the "Statistical Supplement for the Pennsylvania Tax Compendium." Various years online at http://www.revenue.pa.gov/GeneralTaxInformation/NewsandStatistics/Pages/ReportsandStatistics/Tax-Compendium.aspx#StatSupplement

Oil and Gas Companies Also Use Federal and State Tax Incentives to Lower Their Tax Liability

Oil and gas companies take advantage of many federal and state energy and manufacturing deductions and tax credits to lower their federal and state tax liability. Federal tax incentives include the immediate write-off of intangible drilling costs (which some estimate to be between 60% and 80% of well costs), a deduction for domestic production activities, a yearly well depletion allowance as well as some others. There are also a variety of state tax incentives including job creation and research and development tax credits and sales tax manufacturing exemptions.[10]

[10] Wood, "Gas Production Booms."

Table 2. Natural Gas Producers Operating in Pennsylvania as "Pass-Through" Entities, February 2017			
Rank	Producer	Total gas production (MCF)	Number of Active wells
1	CHESAPEAKE APPALACHIA LLC	62,136,468	779
2	CABOT OIL & GAS CORP	58,588,211	609
3	RANGE RESOURCES APPALACHIA LLC	38,639,582	1133
4	EQT PRODUCTION CO	34,213,672	723
5	SWN PRODUCTION CO LLC	31,648,189	570
6	CHIEF OIL & GAS LLC	22,748,789	274
7	CNX GAS CO LLC	17,166,912	345
8	RICE DRILLING B LLC	16,753,823	203
9	SENECA RESOURCES CORP	16,474,310	381
10	REPSOL OIL & GAS USA LLC	14,355,967	506
11	CHEVRON APPALACHIA LLC	13,207,438	360
12	SWEPI LP	9,549,043	474
13	ANADARKO E&P ONSHORE LLC	9,413,107	336
14	VANTAGE ENERGY APPALACHIA II LLC	7,610,984	90
15	RE GAS DEV LLC	6,084,224	185
16	XTO ENERGY INC	5,828,750	253
17	NOBLE ENERGY INC	5,736,825	103
18	CARRIZO (MARCELLUS) LLC	5,259,522	84
19	PA GEN ENERGY CO LLC	3,832,636	141
20	EXCO RESOURCES PA LLC	3,060,130	124
21	HILCORP ENERGY CO	2,959,793	92
22	PENNENERGY RESOURCES LLC	2,532,676	71
23	ALPHA SHALE RES LP	2,373,479	32
24	INFLECTION ENERGY (PA) LLC	2,363,528	57
25	WARREN E & P INC	2,224,021	34
26	ENERGY CORP OF AMER	1,617,822	123
27	SNYDER BROS INC	1,079,875	107
28	ATLAS RESOURCES LLC	991,793	239
29	EM ENERGY PA LLC	868,913	35
30	EOG RESOURCES INC	859,404	100
31	JKLM ENERGY LLC	813,741	22
32	WPX ENERGY APPALACHIA LLC	811,836	62
33	LPR ENERGY LLC	710,254	30
34	VANTAGE ENERGY APPALACHIA LLC	690,779	26
35	MDS ENERGY DEV LLC	612,052	59
36	TENASKA RES LLC	418,472	13
37	APEX ENERGY (PA) LLC	338,514	15
38	TRAVIS PEAK RESOURCES LLC	258,331	1
39	REDMILL DRILLING	141,734	6
40	NORTHEAST NATURAL ENERGY LLC	140,908	6
41	CAMPBELL OIL & GAS INC	112,266	4
42	FRONTIER NATURAL RESOURCES	100,709	1
43	HUNT MARCELLUS OPERATING CO LLC	97,452	8
44	BURNETT OIL CO INC	53,662	4
45	ALLIANCE PETROLEUM CORP	27,242	11
46	TRIANA ENERGY LLC	19,199	11
47	BLX INC	18,262	12
48	ENDLESS MOUNTAIN ENERGY PARTNERS LLC	11,865	1
49	SAMSON EXPLORATION LLC	10,643	2
50	WEST TEXAS OPERATING CO LLC D/B/A XTREME ENERGY CO	8,327	2
51	HALCON OPR CO INC	2,275	2
52	BAKER GAS INC	1,597	1
53	AMS ENERGY LLC	938	1
54	TRUE OIL LLC	884	2
55	DOMINION TRANS INC	727	2
56	THE PRODUCTION CO LLC	666	1
57	GREAT OAK ENERGY INC	641	1
58	NUCOMER ENERGY LLC	628	0
59	JM BEST INC	555	1
60	AMER OIL & GAS LLC	418	1
61	DL RESOURCES INC	251	1
62	COASTAL PETRO CORP	61	1
63	ANTERO RESOURCES CORP	0	2
64	CARRIZO OIL & GAS INC	0	0
65	WILMOTH INTERESTS INC	0	1
66	LAUREL MOUNTAIN PRODUCTION	0	2
67	T & F EXPLORATION LP	0	0
68	TAFT OPERATING LLC	0	4
	TOTAL	405,585,776	8882
	Total from "Pass-through" operators	275,562,969	6320
	Total from others	130,022,807	2562
	Share from pass-throughs	67.9%	71.2%

Note: Companies highlighted in green are pass-throughs. Pass-throughs were identified by their name (LLC or LP) and by looking at company websites and 10-Ks.

Source: Pennsylvania Budget and Policy Center analysis of data from February 2017, downloaded from https://www.paoilandgasreporting.state.pa.us/publicreports/Modules/Welcome/ProdWasteReports.aspx

Most Drilling Companies Structure Themselves as Partnerships to Avoid the Higher Tax Rate

Oil and gas companies can set up subsidiary companies in the state of Pennsylvania to attract new investors or lower their tax bill. Subsidiaries are often structured as non-corporate entities, also referred to as "pass through" entities meaning that business income – and responsibility for paying taxes on that income – goes directly to the owners rather than the business. If the ultimate owners are individuals rather than ("C") corporations they will be subject to the 3.07% Pennsylvania's personal income tax rate rather than the 9.99% rate paid by "C" corporations.[11]

In February 2017, we (conservatively) estimate that 65% of oil and gas companies in Pennsylvania were pass-through entities, accounting for 68% of the gas produced in the state and 71% of active wells.[12]

[11] Pennsylvania Department of Revenue. "Partnerships/S Corporations/Limited Liability Companies." Online at http://www.revenue.pa.gov/GeneralTaxInformation/Tax%20Types%20and%20Information/Pages/Partnerships-S-Corporations-LLCs.aspx#.WTWe-x21ujg

[12] This is a conservative estimate. We only considered companies as "pass throughs" if they had LLC or LP in their name or it was clear from company websites or 10ks that companies operate as a pass through. Several companies have a variety of subsidiaries but we could not confirm they operate as an LLC or an LP in Pennsylvania.

It's Time for a Real Severance Tax in Pennsylvania

Pennsylvania drilling companies pay a declining amount in drilling-related taxes (i.e. impact fees in Pennsylvania's case). They have a lower effective tax rate on drilling than other major drilling states, even while gas production grows rapidly and revenues appear poised to grow because of a combination of rising production volume and rebounding prices.

Drilling companies also pay small amounts in corporate net income tax – at most a few tens of millions, not that much more than they paid before the drilling boom began. The reasons for this include the exploitation of corporate tax loopholes, federal and state tax incentives, and wide use of pass-through entities that pay less than one third of the 9.99% corporate income tax rate on some of their income.

Other natural resource-rich states impose more reasonable taxes on resource extraction including through severance taxes on the value of resources extracted. They then use these resources to invest in K-12, higher education, human services, economic diversification, and natural resource protection – to improve well-being, qualify of life, and the environment in their state. Alaska, Wyoming, and North Dakota, for example, each invest three-to-five times per capita what Pennsylvania does in higher education. These states use severance taxes, in part, to rank first, second, and fourth in investment per capita in higher education. Pennsylvania languishes in 47th place.

Depending on the details of the severance tax enacted, Pennsylvania could generate between nearly a billion dollars (with Rep. Harper's proposal) and $1.4 billion in the next two years (with Gov. Wolf's proposal) with a reasonable severance tax. Our state, our families and communities, and our children live with choices made by lawmakers regarding taxing highly profitable companies and funding critical investments. It's time for Pennsylvania to make the right choice and enact a real severance tax.