2024 Impact Fee Estimate

December 2024

Pennsylvania imposes an annual impact fee on unconventional (i.e., shale) natural gas wells that were drilled or operating in the previous calendar year. This update uses recent data published by the Department of Environmental Protection (DEP) to estimate collections for calendar year (CY) 2024, which will be remitted in April 2025. Proceeds are distributed to local governments and state agencies for infrastructure, emergency services, environmental initiatives and other programs. Local governments receive funds based on the number of wells located within their boundaries or their proximity to jurisdictions where natural gas extraction occurred. **Table 1** shows (1) total revenues and distributions, (2) number of wells that paid (or will pay) the fee and (3) the average fee per well for the last four years.

Table 1: Impact Fee Revenue and Distributions

	2021	2022	2023	2024
Total Revenues	**$234.4**	**$278.9**	**$179.6**	**$163.8**
Counties, Municipalities and HARE Fund	129.0	155.5	95.7	86.2
Marcellus Legacy Fund	86.0	103.6	63.8	57.5
Commonwealth Agencies	10.5	10.5	10.5	10.5
Conservation Districts/Commission	8.9	9.3	9.7	9.7
Wells Subject to Fee	10,995	11,454	11,829	12,050
Average Fee per Well	$21,322	$24,348	$15,186	$13,593

Note: Revenue amounts in millions. Fees are remitted in the following April and distributed in July.

Source: Pennsylvania Public Utility Commission. Revenue and well count for 2024 estimated by the IFO.

2024 Impact Fee Revenues

The annual impact fee for an unconventional well is determined according to a bracketed schedule, based on the number of years since a well became subject to the impact fee (operating year), the type of well (horizontal or vertical) and, to a limited extent, the price of natural gas.[1] Horizontal wells in operating years four or greater that produce less than 90 Mcf (thousand cubic feet) per day are exempt (stripper wells). Plugged horizontal wells are exempt after remitting the fee in the first year. Vertical wells that produce less than 90 Mcf per day are exempt from the fee in any operating year.

The estimate for the CY 2024 impact fee is $163.8 million, a $15.8 million (-8.8%) decline from collections in the prior year. The decline in collections is largely due to a significant decrease in new wells that pay the highest fee and help offset reduced collections from older wells. The IFO estimates that 320 wells will be drilled in CY 2024, a decrease of 103 wells (-25%) from the prior year and the lowest number since CY 2007. The average fee per well fluctuates each year with the average operating year of wells paying the fee and the fee schedule. Average fee per well peaked in 2022 when the NYMEX annual average price was $6.64 and the fee schedule was at its highest level. The 2024 fee for a well in operating year one is $51,800, the same as the prior year, but a decline of $17,300 (-25%) from 2022.

1 The price used is the annual average of the settled prices for near-month contracts on the New York Mercantile Exchange (NYMEX) in million British thermal units (MMBtu). This is the national benchmark price for the sale of natural gas.

Effective Tax Rate

Impact fee collections do not respond proportionately to the price of natural gas or the volume of production, and do not provide a measure of tax burden relative to natural gas sales. Therefore, this update computes an annual effective tax rate (ETR) for all wells in operation during the year. The ETR is equal to annual impact fee revenues divided by the total market value of unconventional natural gas production. The market value is equal to the product of (1) the annual average regional hub price of natural gas net of post-production costs and (2) the total production from all unconventional wells. The ETR computation facilitates comparisons to states that levy a severance tax.

Table 2 shows the annual ETR for the last four calendar years. The estimated ETR for CY 2024 is 2.5%, the same as the prior year. The estimated reduction in fee collections (-8.8%) is similar to the projected decrease in market value (-8.9%), so the ETR is flat from the prior year. The decline in market value is attributable to (1) an 8.0% reduction in the average net regional price, (2) an increase in post-production costs and (3) a projected 1.0% decrease in production.

Table 2: Impact Fee Annual Effective Tax Rates

Calendar Year	Impact Fee Revenues	Unconventional Production (Bcf)[1]	Price of Gas (Mcf)[2]	Market Value	Annual ETR
2021	$234.4	7,579	$2.38	$18,033	1.3%
2022	$278.9	7,451	$4.97	$37,005	0.8%
2023	$179.6	7,528	$0.94	$7,056	2.5%
2024	$163.8	7,452	$0.86	$6,426	2.5%

Note: Fees are remitted in the following April and distributed in July. Millions of dollars.

1 Production data from DEP. Bcf is billion cubic feet.

2 Weighted average spot prices at major PA hubs, net of post-production costs. Excludes impact of hedging contracts.

Source: Pennsylvania Public Utility Commission, Department of Environmental Protection, Natural Gas Intelligence and the U.S. Energy Information Administration. Fee revenues for 2024 estimated by IFO.

The ETR computation for CY 2024 uses these data:

- Annual production of 7.45 trillion cubic feet. This figure is based on DEP production data published through September.
- An annual average hub price of $1.76 per Mcf, prior to deduction of post-production costs. This price is a weighted average of spot prices at the Dominion South and Leidy trading hubs, converted to dollars per thousand cubic feet.[2]
- Post-production costs of $0.90 per Mcf. This amount reflects costs for gathering, processing and transporting gas to markets. Such costs are deducted to approximate the value of gas at the wellhead, the point at which other states levy severance taxes. This estimate is based on recent investor presentations for several major producers.

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2 The CY 2024 price is based on actuals from Natural Gas Intelligence through November and estimates for December based on daily Henry Hub spot prices from the U.S. Energy Information Administration. Prices are converted to dollars per thousand cubic feet using Pennsylvania-specific heat content.