



Pennsylvania Impact Fee and Natural Gas Trends

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Impact Fee

Per well fee paid by producers, varying by well age and type

- Fee schedule is determined each year by the average NYMEX natural gas price.
- Newer wells pay higher fees, payments decline as a well ages.
- Wells can be exempt from the fee if producing less than a certain amount.

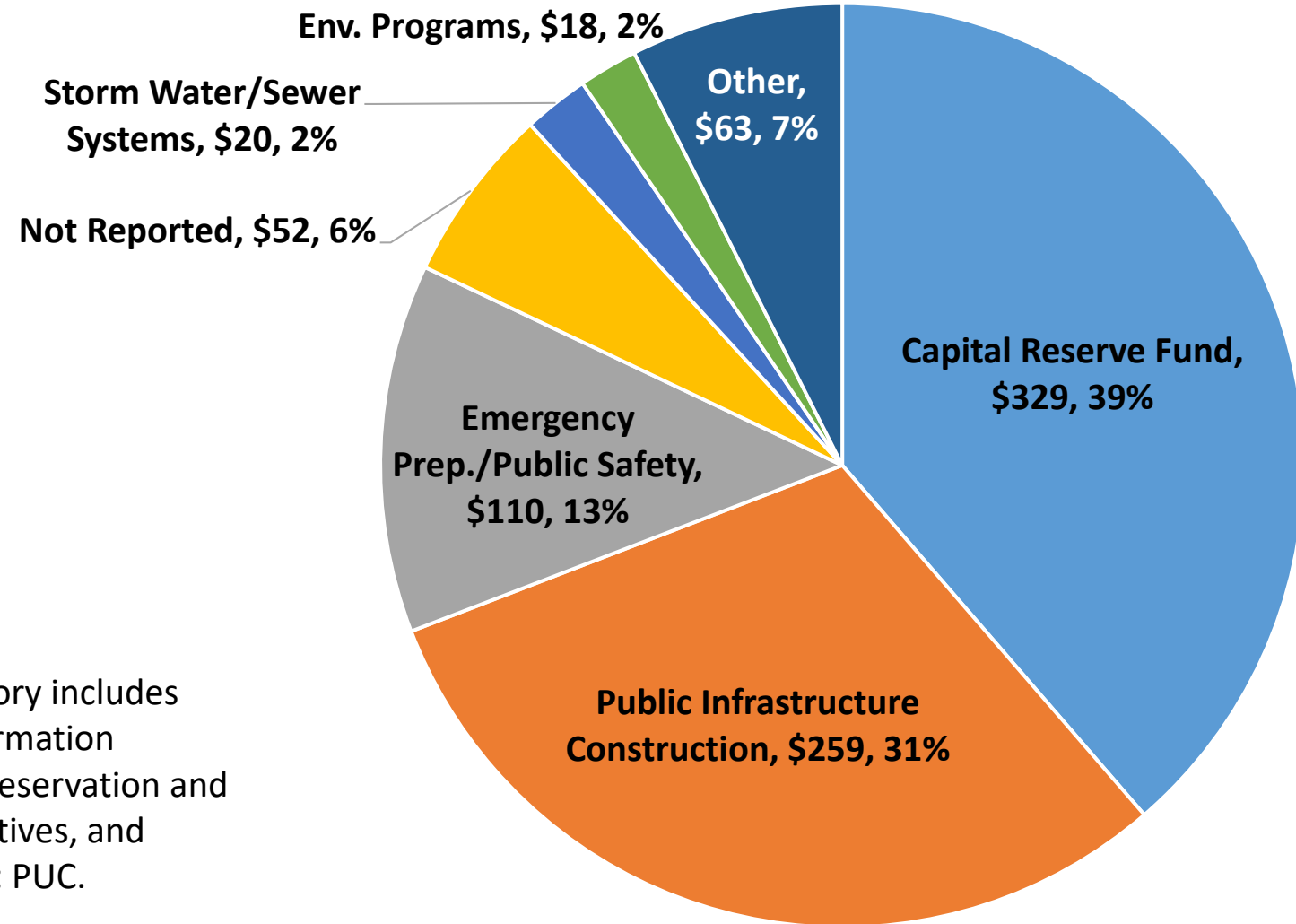
Fees remitted each spring and disbursed each summer to various entities

- Set amounts go to county and state conservation organizations (\$7.5-\$8M) and state agencies (\$10.5M) each year.
- The remaining amount is divided between the counties/municipalities with eligible wells (60%) and the Marcellus Legacy Fund (40%).
- Disbursement to counties/municipalities can be used for various purposes.

Impact Fee Collections History

	2014	2015	2016	2017	2018	2019	2020
Total Collections	\$223.5	\$187.7	\$173.3	\$209.6	\$251.8	\$200.4	\$146.9
County/State Conservation	7.5	7.5	7.6	7.8	7.9	7.9	7.9
State Agencies	10.5	10.5	10.5	10.5	10.5	10.5	10.5
Counties and Municipalities	123.3	101.8	93.1	114.8	140.1	109.2	77.1
Marcellus Legacy Fund	82.2	67.9	62.0	76.5	93.4	72.8	51.4
<p>Note: 2020 projected by the IFO. Collection and disbursement amounts in millions. 2018 was impacted by ~\$14M in collections related to prior years. Source: Public Utility Commission (PUC).</p>							

County/Municipal Spending Through 2018



Note: Dollars in millions. Other category includes Judicial Services, Social Services, Information Technology, Tax Reductions, Water Preservation and Reclamation, Housing, Planning Initiatives, and Career and Technical Centers. Source: PUC.

Southwest County Disbursements

	2015	2016	2017	2018	2019
Washington	\$5.7	\$5.4	\$7.3	\$8.4	\$6.6
Wells	1,249	1,340	1,528	1,655	1,745
Greene	\$3.9	\$3.8	\$5.0	\$6.0	\$4.7
Wells	884	965	1,059	1,184	1,257
Butler	\$1.9	\$1.7	\$2.1	\$3.1	\$2.1
Wells	403	394	420	500	533
Allegheny	\$1.4	\$1.3	\$1.7	\$2.0	\$1.6
Wells	88	98	125	130	150
Beaver	\$0.3	\$0.3	\$0.5	\$0.7	\$0.6
Wells	42	55	75	113	134

Note: Dollars in millions. Counties listed in order of 2020Q1 production. Source: PUC.

2019 Collections Breakdown

Operating Year	Wells Subject to Fee		Fee Amount		Collections \$ Millions
	Horizontal	Vertical	Horizontal	Vertical	
1	618	1	\$45,700	\$9,100	\$28.3
2	764	1	35,500	7,100	27.1
3	810	0	30,400	6,100	24.6
<u>4+</u>	<u>7,937</u>	<u>24</u>	15,200	3,000	<u>120.7</u>
Subtotal	10,129	26			200.7
Late/Unpaid	-43				-0.4
Total	10,086				200.4

Note: Late/unpaid includes the net impact of payments received in 2019 for prior years and payments due for 2019 that were not collected. Source: PUC.

2019 Fee Schedule for Horizontal Wells

Operating Year	\$0.00 - \$2.25	\$2.26 - \$2.99	\$3.00 - \$4.99	\$5.00 - \$5.99	\$6.00+
Year 1	\$40,500	\$45,700	\$50,700	\$55,700	\$60,900
Year 2	\$30,400	\$35,500	\$40,500	\$45,700	\$55,700
Year 3	\$25,400	\$30,400	\$30,400	\$40,500	\$50,700
Year 4 – 10	\$10,200	\$15,200	\$20,300	\$20,300	\$20,300
Year 11+	\$5,000	\$5,000	\$10,200	\$10,200	\$10,200

- Vertical well fees not shown, equal to 20% of horizontal fees until year 10.
- Horizontal wells account for 99 percent of production, over 95 percent of producing wells.
- Price was \$2.63 in 2019, a 15% decrease from 2018 (\$3.09).
- 2020 price through July is \$1.79.

PA Natural Gas Since 2014

	2014	2015	2016	2017	2018	2019	2020
Production (bcf)	4,069	4,596	5,094	5,364	6,123	6,822	7,163
Growth	31.1%	13.0%	10.8%	5.3%	14.2%	11.4%	5.0%
New Wells Drilled	1,369	784	502	811	777	614	500
Growth	12.9%	-42.7%	-36.0%	61.6%	-4.2%	-21.0%	-18.6%
NYMEX Annual Price	\$4.42	\$2.66	\$2.46	\$3.11	\$3.09	\$2.63	\$2.00
Growth	20.9%	-39.7%	-7.8%	26.5%	-0.7%	-14.8%	-24.0%

Note: Bcf is billion cubic feet. Prices in \$ per MMBtu. Production and well data are for horizontal wells only, source is DEP. PA average price represents an average spot price at major PA hubs. NYMEX price is from the Wall Street Journal. 2020 data are projected by the IFO based on year-to-date actuals.

Current Situation

National price at lowest level in decades

- NYMEX average through July is just \$1.79.
- COVID-19 has reduced demand, amplifying an already present trend - low prices discouraging growth and drilling.
- U.S. demand for natural gas to decline by 4% for the year, first drop since 2009.

Low-price environment has discouraged new drilling and production growth

- 270 new wells drilled through the end of June, a 93 well (26%) decline from 2019.
- New wells drilled in 2020 projected to be the fourth consecutive year of decline.
- Quarterly production growth has been decelerating for the last 5 quarters.

Other Implications

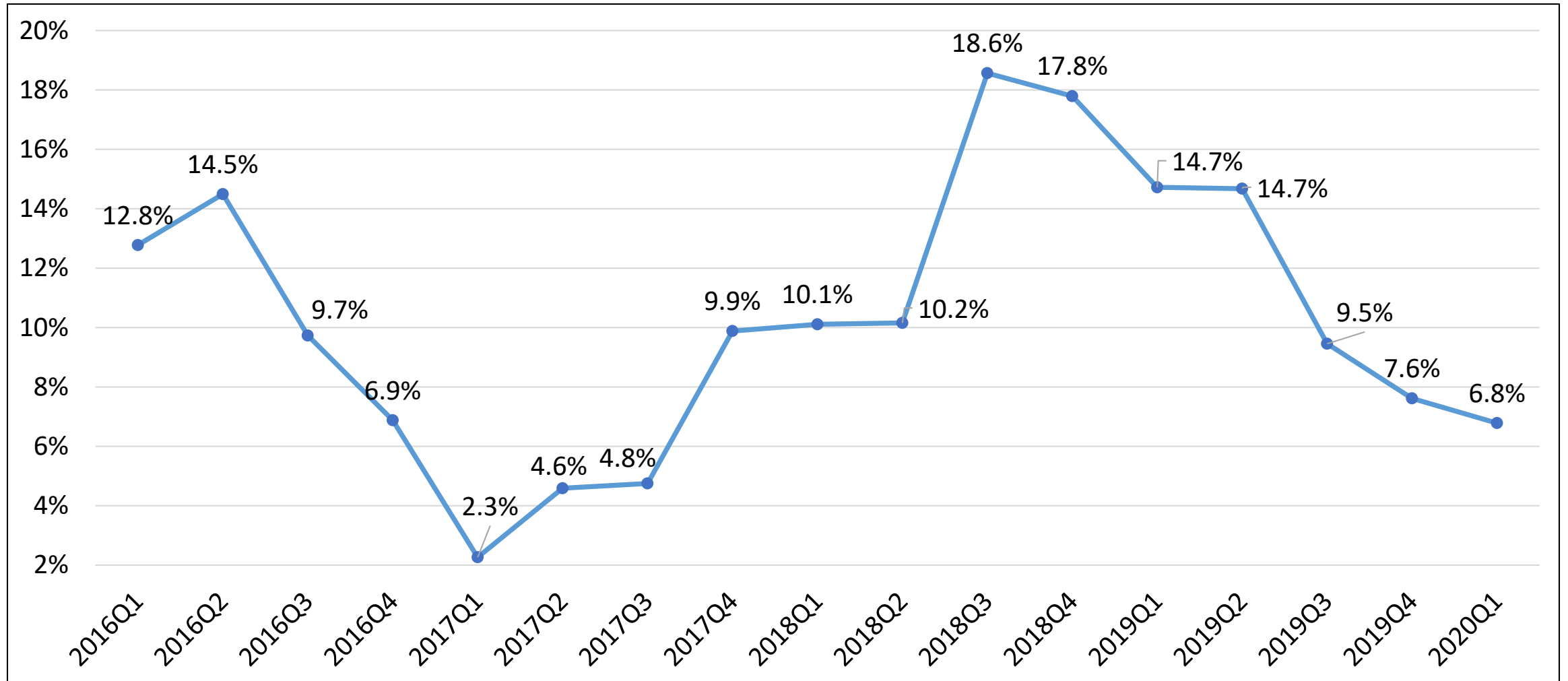
- State liquid fuels taxes down in FY19-20, projected to decline further in FY20-21.
- IFO to release report estimating local revenue losses (county, municipal, school).

Recent Trends – Decline and Deceleration

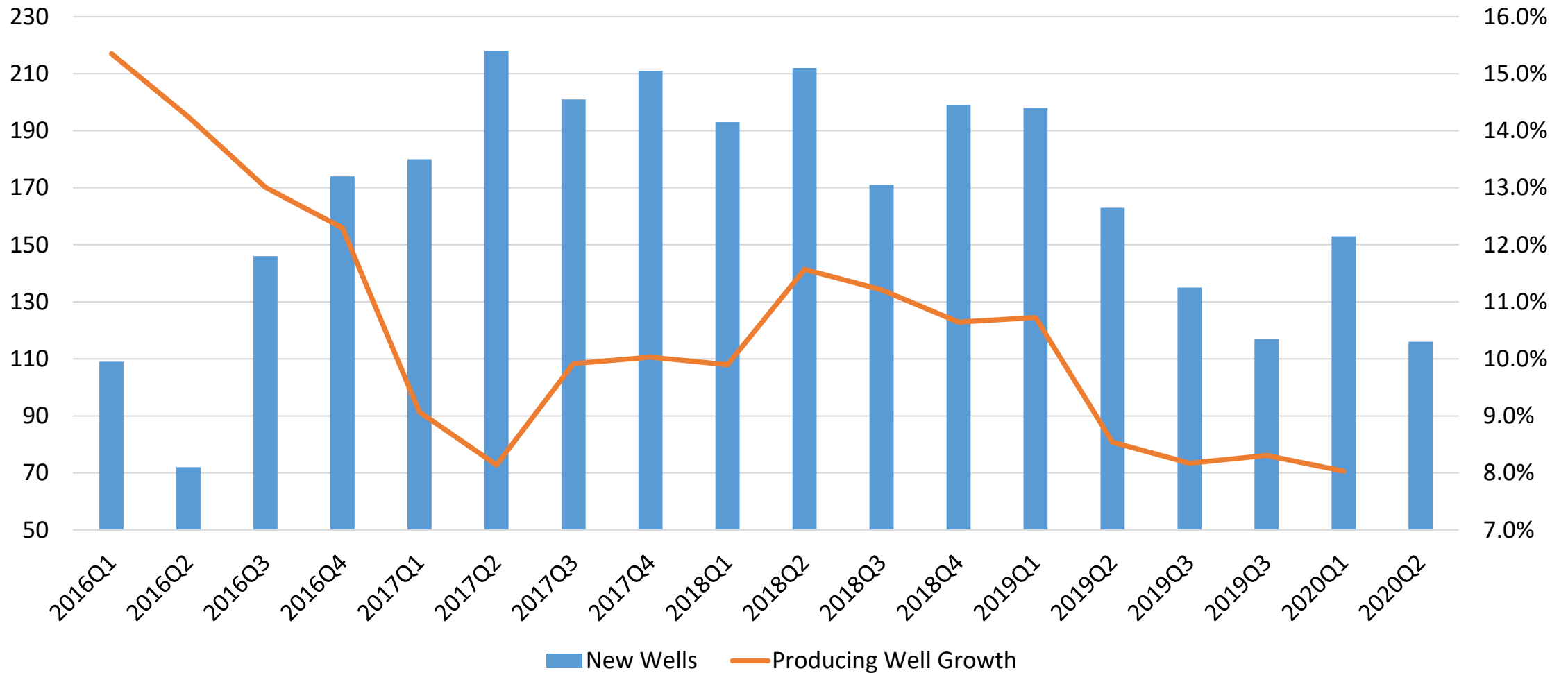
	2018	2019				2020	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Production (bcf)	1,649	1,654	1,670	1,717	1,775	1,766	n.a.
Growth	17.8%	14.7%	14.7%	9.5%	7.6%	6.8%	n.a.
New Wells Spud	199	198	163	135	117	153	116
Growth	-5.7%	2.6%	-23.1%	-21.1%	-41.2%	-22.7%	-29.3%
NYMEX Average	\$3.64	\$3.16	\$2.64	\$2.23	\$2.50	\$1.95	\$1.67
Growth	24.1%	5.2%	-5.7%	-23.3%	-31.4%	-38.2%	-36.7%

Note: Growth rates are year-over-year. Production and well counts are for horizontal only. PA average price represents an average of PA spot prices at major PA hubs. NYMEX price from the Wall Street Journal. Prices in \$ per MMBtu.

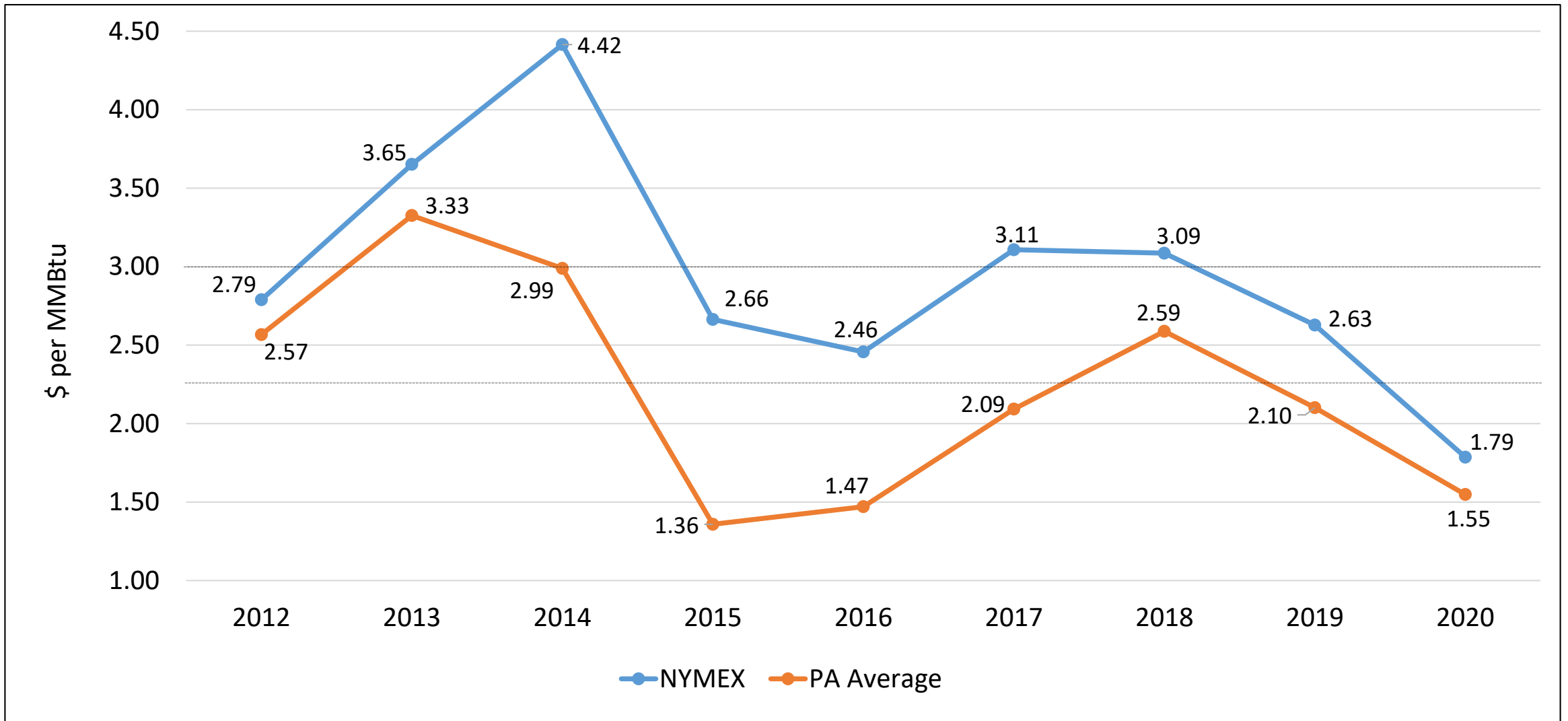
Production Growth Decelerating



Producing Wells and New Wells Spud



Natural Gas Prices Declining



2020 Impact Fees: Two Scenarios

NYMEX price below \$2.25 for the year (likely)

- IFO projection: \$146.9 million in impact fees, a \$53.4 million (27%) decrease from 2019.
- Fee schedule would drop to its lowest level.
- Counties/municipalities would see a decrease similar to 2019 (20% or more), likely getting the smallest amount since the start of the fee.
- Horizontal wells in years 1 and 2 will pay \$10,000 less per well compared to 2018.

NMYEX price above \$2.25 for the year (unlikely)

- IFO projection: \$199.9 million in impact fees, nearly the same amount as 2019.
- Fee schedule would be the same as 2019.
- Projected new wells drilled would be just enough to offset lost collections from aging wells.

Thank You

Questions?

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