

Ohio's Shale Economy: Executive Summary

This report presents findings from an investigation into shale-related investment in Ohio. The investment estimates are cumulative from January through June 2023. Prior investments have been included in previous reports that are available from Cleveland State University.¹ Subsequent reports will estimate additional investment since the date of this report. Investment in Ohio into the Utica during the first half of 2023 can be summarized as follows:

Total Estimated Upstream Utica Investment in Ohio		January - June 2023
Estimated Investments	Total Amount	
Lease Renewals and New Leases	\$64,769,000	
Drilling	\$858,000,000	
Roads	\$12,765,000	
Lease Operating Expenses	\$194,321,567	
Royalties	\$763,815,000	
Total Estimated Upstream Investment	\$1,893,670,567	

Total Estimated Midstream Investment in Ohio		January - June 2023
Estimated Investments	Total Amount	
Gathering Lines	\$110,258,000	
Gathering System Compression and Dehydration	\$30,500,000	
NGL Pipeline	\$31,554,000	
Total Estimated Midstream Investment	\$172,312,000	

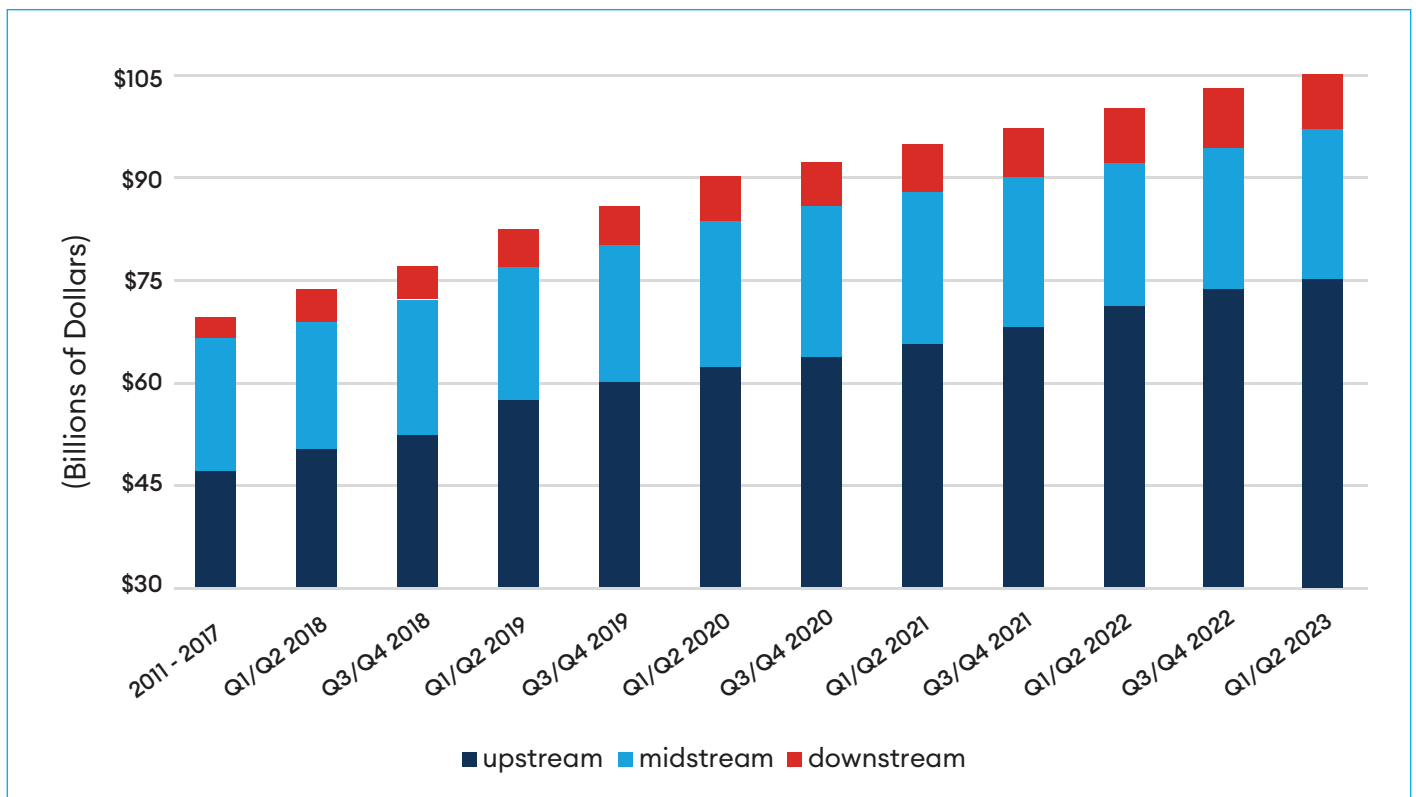
Total Estimated Downstream Investment in Ohio		January - June 2023
Estimated Investments	Total Amount	
LPG Stations	\$1,500,000	
Total Estimated Downstream Investment	\$1,500,000	

¹The fourteen previous reports on shale investment in Ohio up to December 2022 can be found at https://engagedscholarship.csuohio.edu/urban_enpolc/



Total investment from January through June 2023 was approximately \$2.1 billion, including upstream, midstream, and downstream. Indirect downstream investment, such as development of new manufacturing as a result of lower energy costs, was not investigated as part of this Study. Together with previous investment to date, cumulative oil and gas investment in Ohio through June of 2023 is estimated to be around \$105.2 billion. Of this, \$75.1 billion has been in upstream, \$21.7 billion in midstream, and \$8.4 billion in downstream industries. ² Figure 1 shows the growth in cumulative shale-related investment for Ohio since the release of the first Shale Dashboard.

Figure 1. Cumulative Shale Investment in Ohio Over Time



²Numbers may not add up precisely due to rounding.



Overall upstream investments were down by about \$481 million in the first half of 2023 compared to the second half of 2022. This decline was due almost entirely to lower natural gas prices that in turn resulted in lower royalties, as both the number of new wells drilled and production volumes increased in the first half of 2023 compared to the previous 6-month period.

A fall in natural gas prices to \$2/MMBtu or less has been accompanied by rising oil prices that have consistently averaged around \$80/bbl as of late.[1] This has led to sustained 10-year highs in the price ratio of oil to natural gas starting in 2023. (See Figure 2.) This oil-to-gas price ratio is driving the most important new trend in Ohio: an increase in drilling in predominantly oil producing regions of the Utica, which heretofore had been deemed less attractive than the predominantly gas producing regions.

[1] See EIA. (2024). Henry Hub Natural Gas Spot Price. <https://www.eia.gov/dnav/ng/hist/rngwhhdm.htm>. See also EIA. (2024). Cushing, OK WTI Spot Price FOB. <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=M>

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