



Tenth District Energy Activity Fell at a Steady Pace

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Summary of Quarterly Indicators

Tenth District energy activity declined further in the fourth quarter of 2024, as indicated by firms contacted between December 16th, 2024, and January 2nd, 2025 (Tables 1 & 2). The quarter-over-quarter drilling and business activity index was -13 in Q4, unchanged from the previous quarter (Chart 1). Employment and employee hours continued to increase even as revenues and profits declined further, falling to -16 and -23, respectively.

Drilling activity also remained down from this time last year, with the year-over-year drilling and business activity index at -16. Annual revenues decreased substantially at a reading of -39. However, employment and capital expenditures grew moderately, each posting readings of 13.

Firms anticipate a rebound in activity in the next six months, with the drilling expectations index rising from -3 in Q3 to 13 in Q4. However, revenues and profits are still expected to decline further in the coming months.

Summary of Special Questions

Firms were asked what oil and natural gas prices were needed on average for drilling to be profitable across the fields in which they are active. The average oil price needed was \$62 per barrel (Chart 2), while the average natural gas price needed was \$3.69 per million Btu (Chart 3). Firms were also asked what prices were needed for a substantial increase in drilling to occur across the fields in which they are active. The average oil price needed was \$84 per barrel (Chart 2), and the average natural gas price needed was \$4.66 per million Btu (Chart 3).

Firms reported what they expected oil and natural gas prices to be in six months, one year, two years, and five years. The average expected WTI prices were \$70, \$71, \$75, and \$81 per barrel, respectively. The average expected Henry Hub natural gas prices were \$3.09, \$3.36, \$3.67, and \$3.98 per million Btu, respectively.

Firms were asked about their plans for employment and capital expenditures in 2025 vs. 2024 (Chart 4). Most firms plan to keep employment levels mostly unchanged (43%) or increase them slightly (40%). Another 10% of firms plan to increase employment significantly, and only 7% plan to decrease employment slightly. Plans for capital expenditures were more mixed. Many firms plan to increase capital expenditures slightly (43%), while 17% plan to increase them significantly, 13% remain unchanged, 17%, decrease slightly, and 10% decrease significantly.

Contacts were also asked about other future plans (Chart 5). 52% of firms plan to reduce methane emissions, 35% plan to reduce flaring, 32% plan to recycle/reuse water, 26% plan to reduce CO2 emissions, and 10% plan to invest in renewables, while 32% have none of the above planned.

Chart 2. Special Question: What price is currently needed for a drilling to be profitable and for a substantial increase in drilling to occur for oil? What do you expect WTI prices to be in six months, one year, two years, and five years?

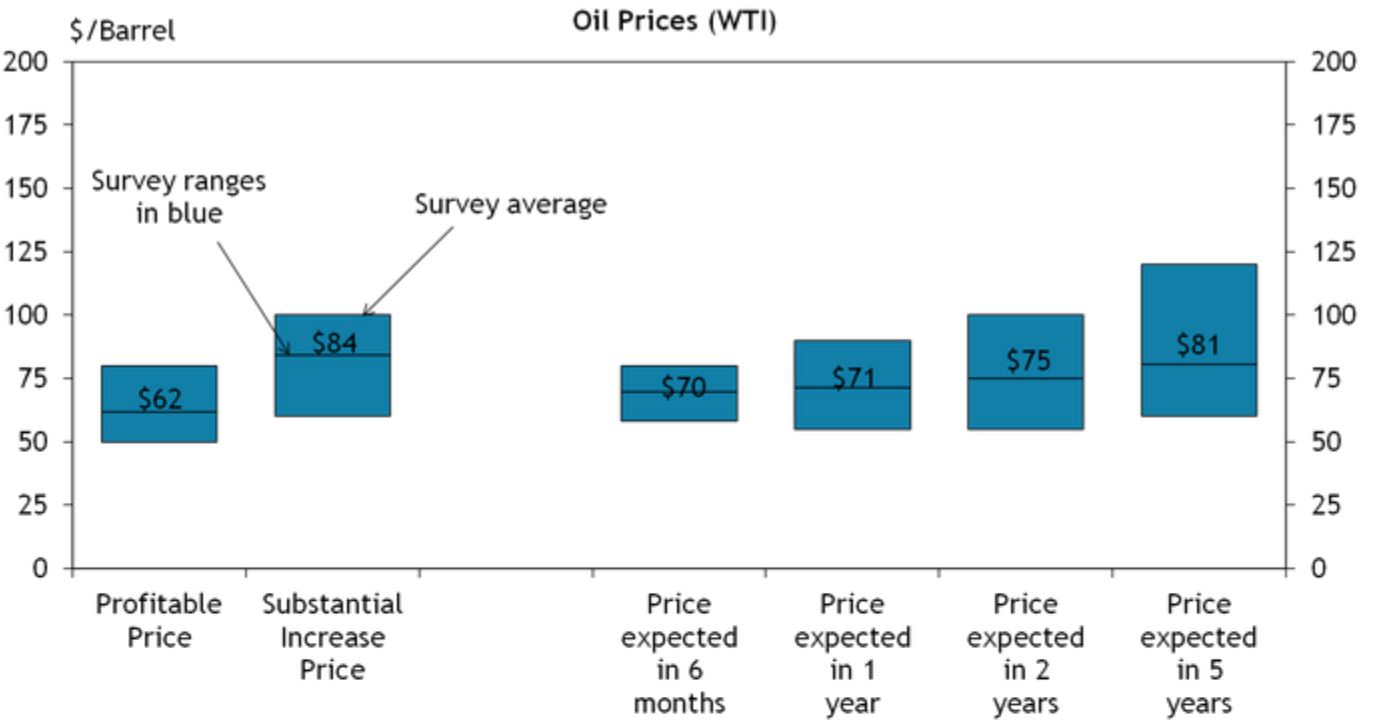


Chart 3. Special Question: What price is currently needed for a drilling to be profitable and for a substantial increase in drilling to occur for natural gas? What do you expect Henry Hub prices to be in six months, one year, two years, and five years?

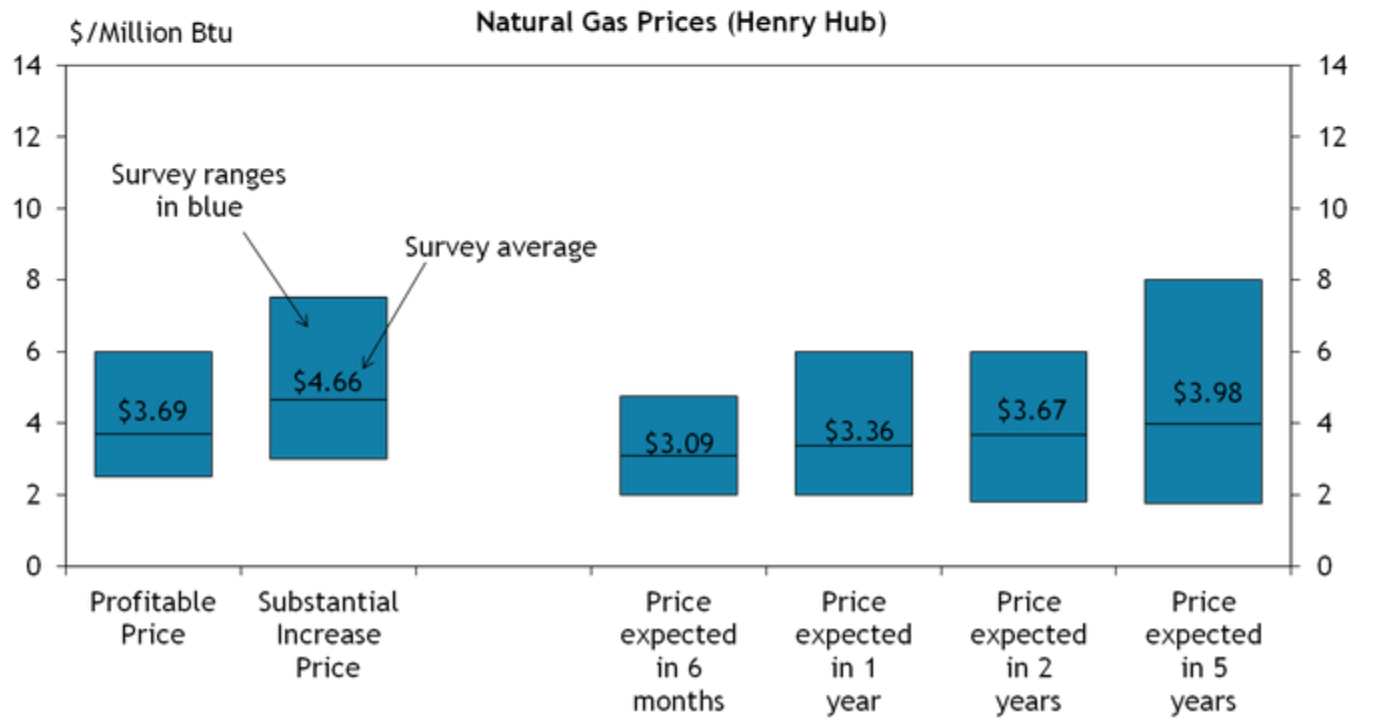


Table 1
Summary of Tenth District Energy Conditions, Quarter 4, 2024

	Quarter 4 vs. Quarter 3 (percent)*				Quarter 4 vs. Year Ago (percent)*				Expected in Six Months (percent)*			
	No		Diff		No		Diff		No		Diff	
Energy Company Indicators	Increase	Change	Decrease	Index [^]	Increase	Change	Decrease	Index [^]	Increase	Change	Decrease	Index [^]
Drilling/Business Activity	13	61	26	-13	16	52	32	-16	32	48	19	13
Total Revenues	29	26	45	-16	19	23	58	-39	29	39	32	-3
Capital Expenditures					39	35	26	13	32	39	29	3
Supplier Delivery Time	3	84	13	-10	6	71	23	-16	10	81	10	0
Total Profits	19	39	42	-23	29	23	48	-19	29	32	39	-10
Number of Employees	32	55	13	19	32	48	19	13	29	61	10	19
Employee Hours	26	61	13	13	23	65	13	10	19	71	10	10
Wages and Benefits	45	48	6	39	77	13	10	68	55	35	10	45
Access to Credit	6	90	3	3	19	71	10	10	19	77	3	16
Expected Oil Prices									6	55	39	-32
Expected Natural Gas Prices									48	41	10	38
Expected Natural Gas Liquids Prices									20	73	7	13

*Percentage may not add to 100 due to rounding.

[^]Diffusion Index. The diffusion index is calculated as the percentage of total respondents reporting increases minus the percentage reporting declines.

Note: The fourth quarter survey ran from December 16, 2024 to January 2, 2025 and included 31 responses from firms in Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico, and western Missouri.

Table 2
Historical Energy Survey Indexes

	Q4'21	Q1'22	Q2'22	Q3'22	Q4'22	Q1'23	Q2'23	Q3'23	Q4'23	Q1'24	Q2'24	Q3'24	Q4'24
<i>Versus a Quarter Ago</i> (not seasonally adjusted)													
Drilling/Business Activity	32	29	57	44	6	-13	-19	-13	-33	-13	-14	-13	-13
Total Revenues	63	38	87	25	-8	-42	-42	13	-13	0	-10	-13	-16
Capital Expenditures	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Supplier Delivery Time	6	-9	10	-3	-11	-3	-21	-10	-3	-16	-13	-3	-10
Total Profits	34	44	68	29	-17	-26	-39	-3	-19	-6	-13	-6	-23
Number of Employees	34	39	42	47	38	6	27	13	13	18	3	19	19
Employee Hours	28	41	39	37	41	6	18	6	0	3	13	-3	13
Wages and Benefits	53	56	58	61	59	42	27	35	32	48	27	19	39
Access to Credit	10	25	16	6	6	0	3	-3	-6	-3	13	6	3
<i>Versus a Year Ago</i>													
Drilling/Business Activity	74	52	77	78	56	17	-16	-23	-33	-26	-25	-29	-16
Total Revenues	88	72	90	87	67	-10	-48	-23	-17	-6	-21	-42	-39
Capital Expenditures	59	63	71	71	65	26	0	6	6	-21	-20	-9	13
Supplier Delivery Time	9	-3	23	6	-5	10	-45	-6	-23	-39	-28	-13	-16
Total Profits	84	75	81	84	61	3	-48	-26	-17	-13	-10	-26	-19
Number of Employees	32	66	55	61	56	26	39	23	43	34	24	26	13
Employee Hours	29	63	55	50	57	26	21	3	20	13	14	-10	10
Wages and Benefits	77	84	77	87	89	77	58	77	73	69	72	71	68
Access to Credit	23	38	19	27	3	6	6	-3	0	3	14	6	10
<i>Expected in Six Months</i> (not seasonally adjusted)													
Drilling/Business Activity	45	42	50	25	19	-13	-22	7	7	-10	21	-3	13
Total Revenues	50	53	55	27	11	-26	3	42	23	13	28	-3	-3
Capital Expenditures	53	63	52	52	49	-6	-9	16	7	-19	14	13	3
Supplier Delivery Time	9	9	16	-10	-19	-23	-42	0	-13	-13	-4	-6	0
Total Profits	44	38	35	39	6	-23	-3	23	3	3	24	29	-10
Number of Employees	42	47	42	42	38	13	12	19	40	25	28	35	19
Employee Hours	23	41	32	27	30	13	3	3	27	13	14	10	10
Wages and Benefits	71	72	63	65	70	45	24	52	55	31	34	45	45
Access to Credit	6	19	6	7	3	-6	3	-3	-3	10	0	10	16
Expected Oil Prices	34	-16	-6	20	62	29	42	32	32	31	14	16	-32
Expected Natural Gas Prices	3	0	10	-10	-3	14	53	50	-16	45	86	56	38
Expected Natural Gas Liquids Prices	13	19	0	21	22	20	31	37	-7	16	41	45	13
<i>Special Price Questions</i> (averages)													
Profitable WTI Oil Price (per barrel)		\$62	\$65	\$61	\$64	\$64	\$63	\$64	\$64	\$65	\$64	\$65	\$62
WTI Price to Substantially Increase Drilling	\$73	\$86	\$98	\$102	\$89	\$86	\$86	\$90	\$84	\$90	\$91	\$89	\$84
WTI Price Expected in 6 Months	\$75	\$96	\$109	\$88	\$83	\$75	\$75	\$91	\$76	\$81	\$79	\$73	\$70
WTI Price Expected in 1 Year	\$78	\$89	\$102	\$89	\$86	\$81	\$79	\$88	\$79	\$83	\$80	\$77	\$71
WTI Price Expected in 2 Years	\$78	\$83	\$88	\$90	\$88	\$86	\$83	\$88	\$84	\$85	\$83	\$80	\$75
WTI Price Expected in 5 Years	\$80	\$84	\$86	\$93	\$88	\$90	\$88	\$93	\$88	\$90	\$88	\$86	\$81
Profitable Natural Gas Price (per million BTU)		\$3.72	\$4.64	\$4.42	\$4.32	\$3.45	\$3.49	\$3.45	\$3.12	\$3.47	\$3.47	\$3.43	\$3.69
Natural Gas Price to Substantially Increase Drilling	\$4.27	\$4.53	\$6.34	\$7.65	\$6.13	\$4.74	\$4.67	\$4.36	\$4.04	\$4.38	\$4.68	\$4.24	\$4.66
Henry Hub Price Expected in 6 Months	\$3.66	\$4.45	\$7.06	\$7.46	\$5.01	\$2.82	\$3.00	\$3.06	\$2.55	\$2.16	\$3.00	\$2.73	\$3.09
Henry Hub Price Expected in 1 Year	\$3.92	\$4.32	\$6.65	\$6.48	\$5.52	\$3.33	\$3.33	\$3.34	\$3.04	\$2.71	\$3.10	\$3.05	\$3.36
Henry Hub Price Expected in 2 Years	\$3.97	\$4.29	\$6.06	\$6.16	\$5.78	\$4.04	\$3.71	\$3.97	\$3.42	\$3.01	\$3.45	\$3.33	\$3.67
Henry Hub Price Expected in 5 Years	\$4.29	\$4.74	\$5.77	\$6.51	\$6.19	\$4.51	\$3.98	\$4.83	\$3.96	\$3.58	\$3.86	\$3.68	\$3.98

Selected Energy Comments

“At this point, the high cost of capital along with inflation are our only significant concerns.”

“Commodity pricing and inflation will control activity. Activity levels are not hypersensitive to either but changing trends will impede or accelerate activity.”

Tenth District Energy Activity Fell at a Steady Pace

<https://www.kansascityfed.org/surveys/energy-survey/tenth-district-energy-activity-fell-at-a-steady-pace/>

“Long term, companies will not make the money they need at sub \$70 oil and therefore capex will fall off, leading to lower domestic and international production then to slightly increasing prices.”

“At sub \$3.25 Henry Hub, companies are not profitable enough to continue development.”

“Build-out of LNG is also supporting price recovery.”

“We can deliver as much gas as country needs at \$3.50 prices. LNG ramp up raises U.S. price and drops worldwide price.”

“Disassociated gas in west Texas trades for less than \$1.00/mcf.”

“Strong rig response from any price lift.”

“We are currently reusing produced water for frac water. We are increasing our methane monitoring.”

“Wind project is underway on some of our land holdings.”

Additional Resources

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Authors



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