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Industry Note
Equity Research

Published and distributed by TD Securities Inc.

January 18, 2024

Energy Producers

The Gas Line

Weekly Gas Charts

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Inventory Withdrawal Below Expectations; Well Above Seasonal Norm. Storage levels decreased 154 Bcf w/w versus the consensus expectation of a 167 Bcf withdrawal. This was above the five-year average withdrawal of 122 Bcf. Expectations for next week are for a withdrawal of 375-400 Bcf. This compares with the five-year average withdrawal of 150 Bcf. U.S. gas storage levels are now 11% above the five-year average and 12% above year-ago levels.

U.S. Production Dropped Significantly On The Back of Freeze Offs; Has Started to Recover. U.S. production dropped to 91 Bcf/d earlier this week driven by cold weather-related shut-ins. This is down from highs of ~105 Bcf/d several weeks ago. That said, U.S. dry production now stands at ~96 Bcf/d. The U.S. natural gas rig count was down one w/w (117). Colder temperatures drove total U.S. domestic demand to a record high of 158 Bcf/d on January 15. We expect production curtailments and strong demand to result in a significant storage drawdown this week which should reduce inventory overhang in the near-term.

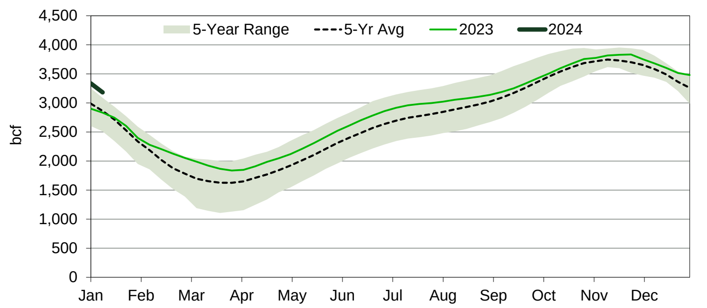
Exhibit 1. Weekly Summary

Natural Gas & Natural Gas Liquids Pricing	Last	1 Wk	1 Month	1 Year	Δ 1 Wk	Δ 1 Month	Δ 1 Year
Nymex [Henry Hub] (US$/mcf)	**$2.79**	$3.10	$2.45	$3.28	-9.8%	14.1%	-14.7%
AECO (C$/mcf)	**$2.73**	$3.79	$1.78	$3.73	-27.9%	53.3%	-26.8%
AECO (US$/mcf)	**$2.03**	$2.83	$1.33	$2.77	-28.4%	51.8%	-27.0%
Marcellus (US$/mcf)	**$2.42**	$2.49	$1.88	$2.65	-2.9%	28.6%	-8.8%
UK NBP (US$/mcf)	**$8.84**	$9.82	$10.51	$18.90	-10.0%	-15.9%	-53.2%
Japan LNG (US$/mcf)	**$11.52**	--	$16.14	$29.52	--	-28.6%	-61.0%
Ethane [Mont Belvieu] (US$/bbl)	**$8.32**	$10.08	$7.81	$10.45	-17.5%	6.5%	-20.4%
Propane [Edmonton] (US$/bbl)	**$23.69**	$23.02	$18.65	$29.82	2.9%	27.0%	-20.6%
Butane [Edmonton] (US$/bbl)	**$35.91**	$34.23	$37.30	$37.96	4.9%	-3.7%	-5.4%
Condensate [Edmonton] (US$/bbl)	**$67.49**	$67.28	$70.91	$84.23	0.3%	-4.8%	-19.9%
Supply - Natural Gas Production (bcf/d)	**Last**		**Δ 1 Month**	**Δ 1 Year**		**Δ 1 Month**	**Δ 1 Year**
U.S. Dry Gas Production	**96.17**	--	-9.65	-4.6	--	-9.1%	-4.6%
Marcellus	**29.28**	--	-0.23	0.1	--	-0.8%	0.5%
Utica	**6.18**	--	0.11	-0.3	--	1.8%	-4.9%
Eagle Ford	**7.27**	--	-0.05	0.3	--	-0.7%	3.9%
Haynesville	**16.39**	--	-0.14	0.0	--	-0.9%	-0.1%
Permian	**24.27**	--	0.13	2.4	--	0.5%	11.0%
Niobrara	**5.34**	--	0.00	0.3	--	0.0%	7.0%
Bakken	**3.48**	--	0.01	0.6	--	0.4%	20.1%
Natural Gas Demand (bcf/d)	**Last**	**Δ 1 Wk**	**Δ 1 Month**	**Δ 1 Year**	**Δ 1 Wk**	**Δ 1 Month**	**Δ 1 Year**
U.S. - Total	**128.73**	18.2	16.9	35.1	16.5%	15.1%	37.6%
U.S. - Electric Power Plants	**37.50**	4.5	2.7	8.7	13.6%	7.7%	30.1%
U.S. - Industrial Plants	**26.60**	1.3	1.2	3.0	5.2%	4.8%	12.6%
U.S. - Residential/Commercial	**53.28**	10.9	11.3	19.3	25.6%	27.0%	56.8%
Inventory Levels (bcf)	**Last**	**Δ 1 Wk**	**Δ 1 Month**	**Δ 1 Year**	**Δ 1 Wk**	**Δ 1 Month**	**Δ 1 Year**
U.S. Total Inventory	**3,182**	-154	-396	350	-4.6%	-11.1%	12.4%
South Central Region	**1,128**	-32	-75	59	-2.8%	-6.2%	5.5%
East Region	**715**	-42	-119	48	-5.5%	-14.3%	7.2%
Midwest Region	**873**	-51	-148	83	-5.5%	-14.5%	10.5%
Mountain Region	**208**	-12	-28	60	-5.5%	-11.9%	40.5%
Pacific Region	**257**	-18	-26	100	-6.5%	-9.2%	63.7%
Canada Total Inventory	**668**	-31	-43	224	-4.5%	-6.1%	50.5%
Western Canada	**446**	-21	-37	177	-4.6%	-7.7%	65.7%
Eastern Canada	**222**	-10	-6	47	-4.3%	-2.8%	27.1%

Source: Bloomberg, Bentek, TD Securities Inc.

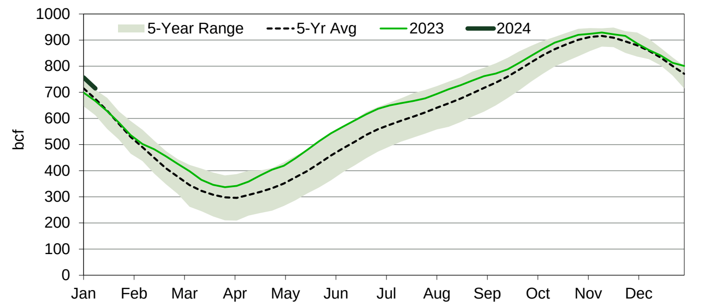
Exhibit 2. North American Natural Gas Storage Levels

US Natural Gas Storage (bcf)



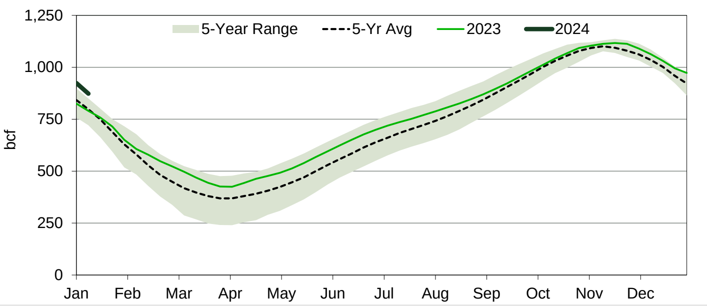
	Last	Δ 1Y	Δ 5Y Avg
US Natural Gas Storage (bcf)	3,182	350	320
% Change	---	12%	11%

US Natural Gas Storage : East



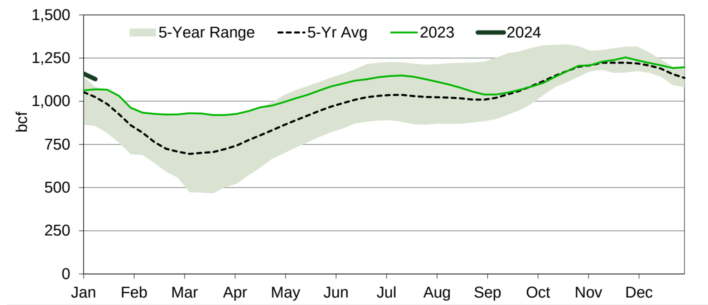
	Last	Δ 1Y	Δ 5Y Avg
US East Region (bcf)	715	48	40
% Change	---	7%	6%

US Natural Gas Storage : Midwest



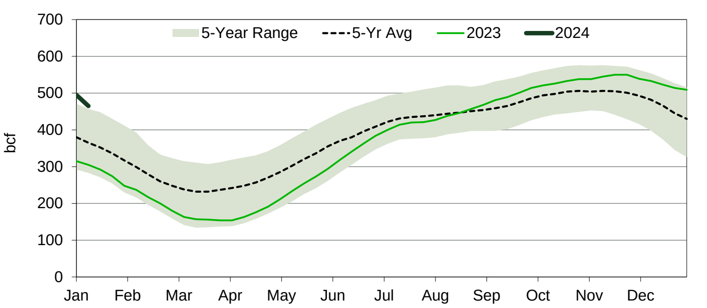
	Last	Δ 1Y	Δ 5Y Avg
US Midwest Region (bcf)	873	83	75
% Change	---	11%	9%

US Natural Gas Storage : South Central



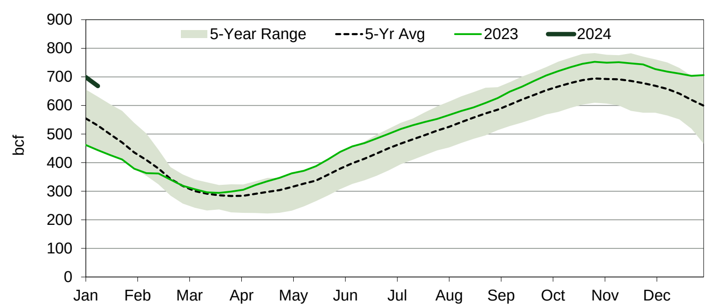
	Last	Δ 1Y	Δ 5Y Avg
US South Central (bcf)	1,128	59	104
% Change	---	6%	10%

US Natural Gas Storage : Pacific & Mountain



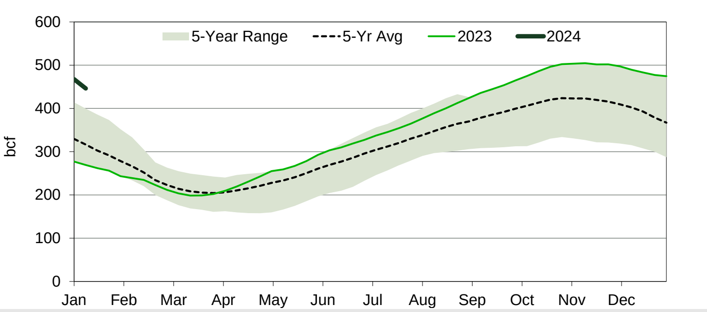
	Last	Δ 1Y	Δ 5Y Avg
US Pacific & Mountain (bcf)	465	160	100
% Change	---	52%	27%

Canada Natural Gas Storage (bcf)



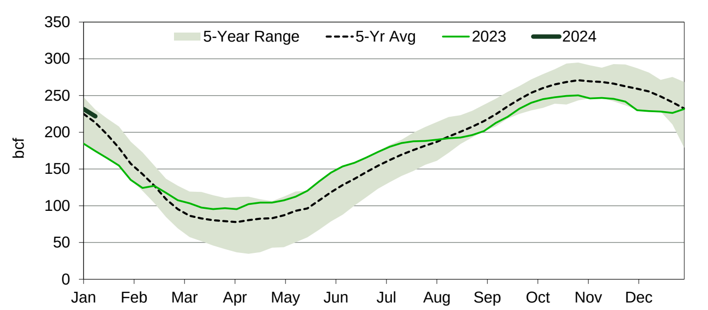
	Last	Δ 1Y	Δ 5Y Avg
Canada Gas Storage (bcf)	668	224	138
% Change	---	51%	26%

Western Canada Natural Gas Storage (bcf)



bcf	Last	Δ 1Y	Δ 5Y Avg
Canada West Storage (bcf)	446	177	130
% Change	---	66%	41%

Eastern Canada Natural Gas Storage (bcf)



	Last	Δ 1Y	Δ 5Y Avg
Canada East Storage (bcf)	222	47	9
% Change	---	27%	4%

Source. Bloomberg, Bentek, TD Securities Inc.

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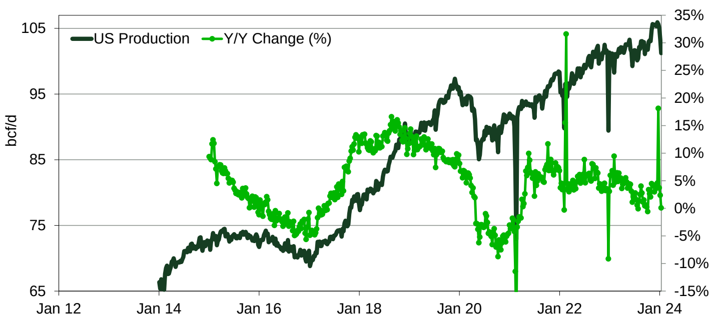
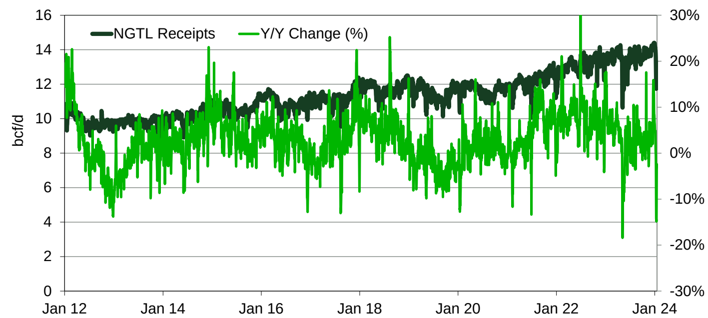
Exhibit 3. North American Natural Gas Supply

U.S Dry Gas Production



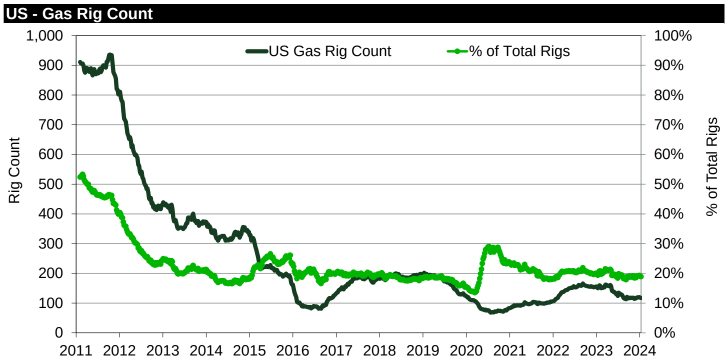
	Last	Δ 1Y	Δ 5Y Avg
US Dry Gas Prod'n (bcf/d)	96.2	-4.6	2.2
% Change	---	-5%	2%

NGTL Receipts



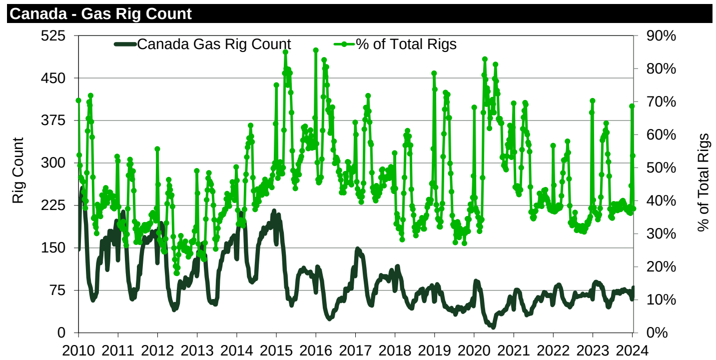
	Last	Δ 1Y	Δ 5Y Avg
NGTL Receipts	13.3	-0.5	0.9
% Change		-4%	7%

US - Gas Rig Count



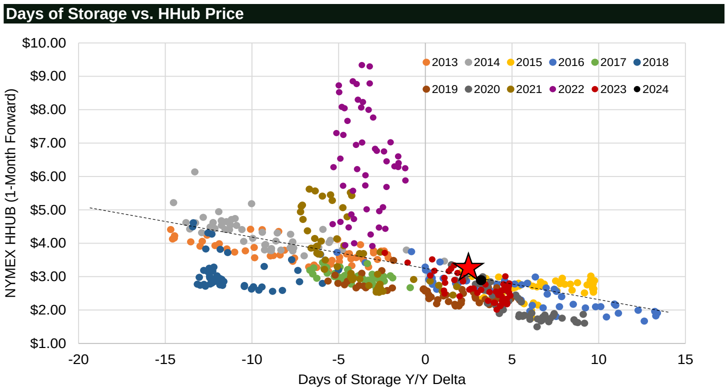
bcf/d	Last	Δ 1Y	Δ 5Y Avg
US Gas Rig Count	117	-33	-16
% Change	---	-22%	-12%

Canada - Gas Rig Count

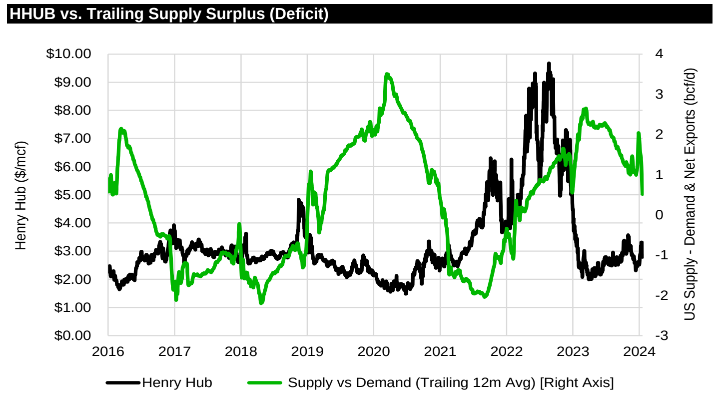


	Last	Δ 1Y	Δ 5Y Avg
Canada Gas Rig Count	80	-6	3
% Change	---	-7%	4%

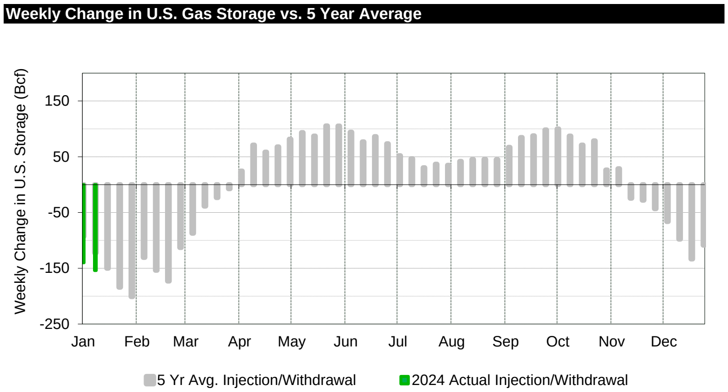
Days of Storage vs. HHub Price



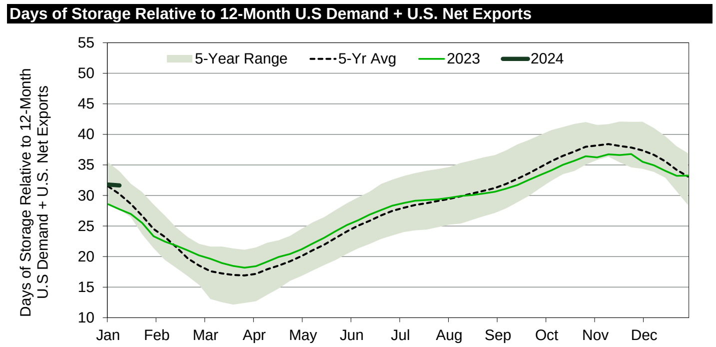
HHUB vs. Trailing Supply Surplus (Deficit)



Weekly Change in U.S. Gas Storage vs. 5 Year Average



Days of Storage Relative to 12-Month U.S Demand + U.S. Net Exports

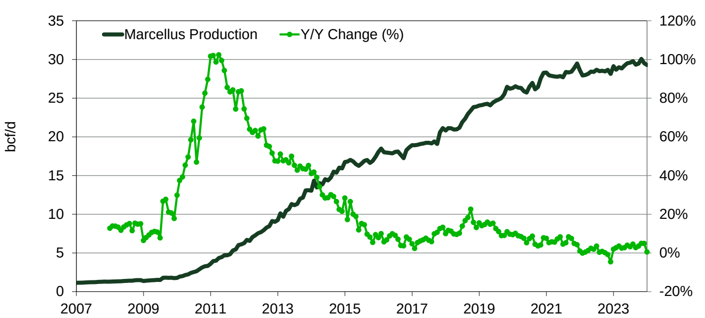


	Last	Δ 1Y	Δ 5Y Avg
Days of Storage	32	4	1
% Change		14%	5%

Source. Bloomberg, Bentek, TD Securities Inc.

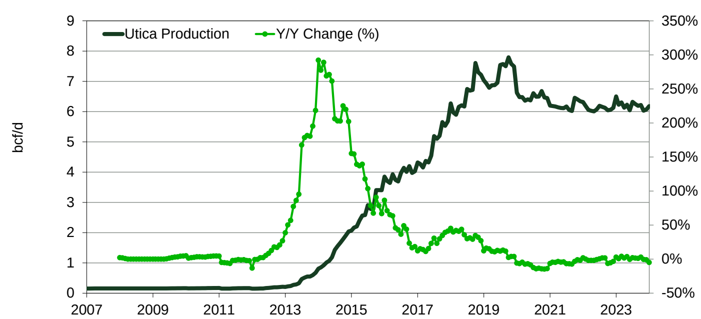
Exhibit 4. U.S. Natural Gas Supply – Key Resource Plays

US Marcellus - Gas Production



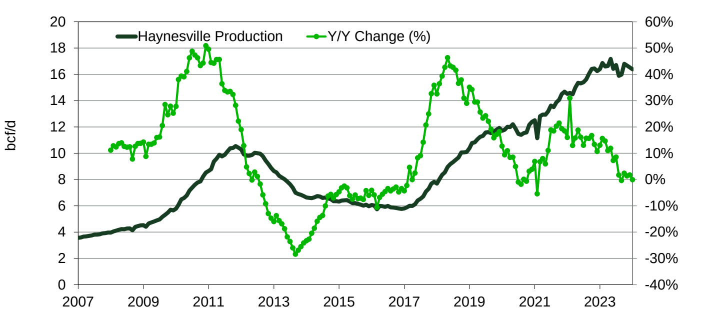
	Last	Δ 1Y	Δ 5Y Avg
US Marcellus (bcf/d)	29.3	0.1	2.0
% Change	---	1%	7%

US Utica - Gas Production



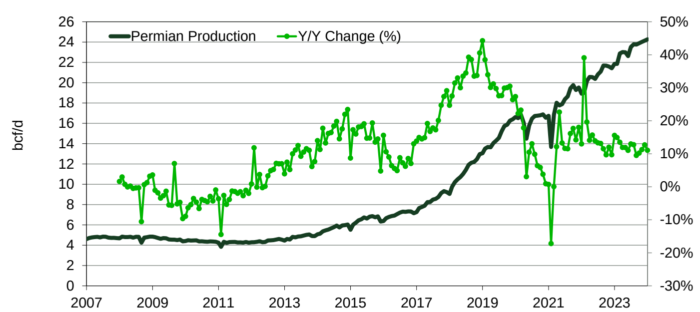
	Last	Δ 1Y	Δ 5Y Avg
US Utica (bcf/d)	6.2	-0.3	-0.4
% Change	---	-5%	-5%

US Haynesville - Gas Production



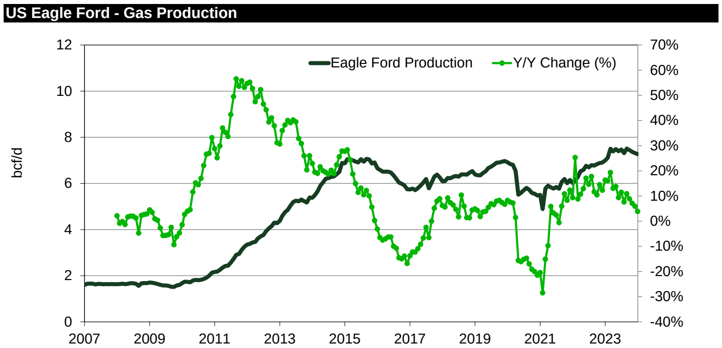
	Last	Δ 1Y	Δ 5Y Avg
US Haynesville (bcf/d)	16.4	0.0	3.3
% Change	---	0%	25%

US Permian - Gas Production



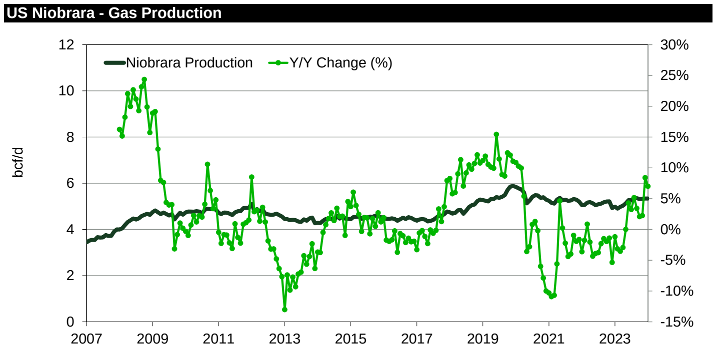
	Last	Δ 1Y	Δ 5Y Avg
US Permian (bcf/d)	24.3	2.4	6.8
% Change	---	11%	39%

US Eagle Ford - Gas Production



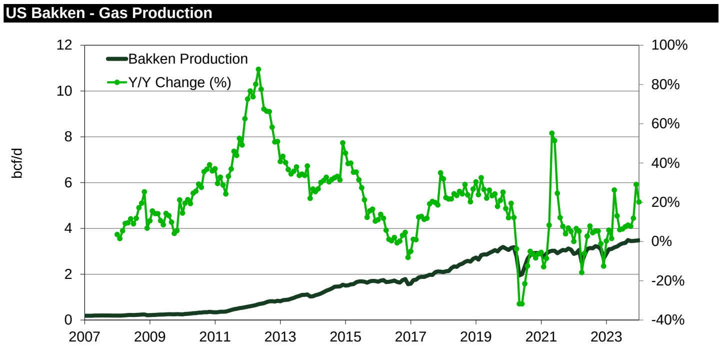
	Last	Δ 1Y	Δ 5Y Avg
US Eagle Ford (bcf/d)	7.3	0.3	0.9
% Change	---	4%	14%

US Niobrara - Gas Production



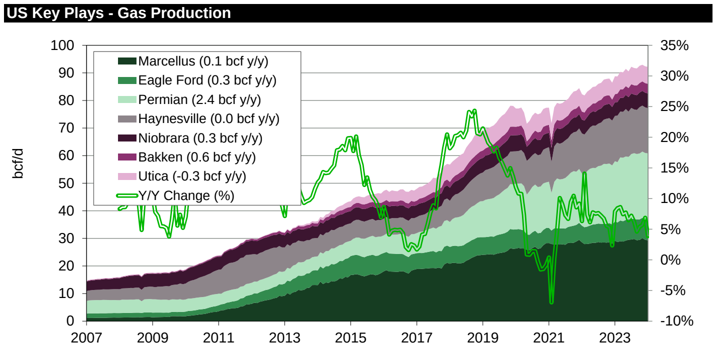
	Last	Δ 1Y	Δ 5Y Avg
US Niobrara (bcf/d)	5.3	0.3	0.1
% Change	---	7%	1%

US Bakken - Gas Production



	Last	Δ 1Y	Δ 5Y Avg
US Bakken (bcf/d)	3.5	0.6	0.6
% Change	---	20%	20%

US Key Plays - Gas Production

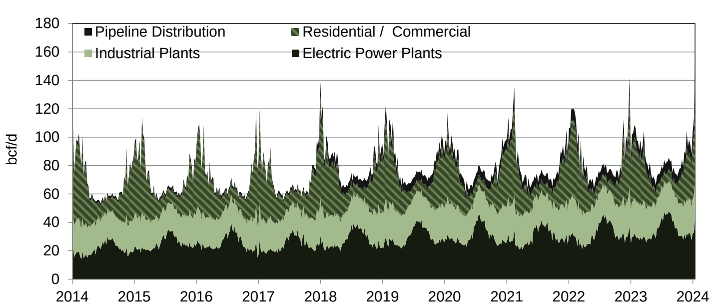


	Last	Δ 1Y	Δ 5Y Avg
US Key Plays (bcf/d)	92.2	3.4	13.3
% Change	---	4%	17%

Source. Bloomberg, TD Securities Inc.

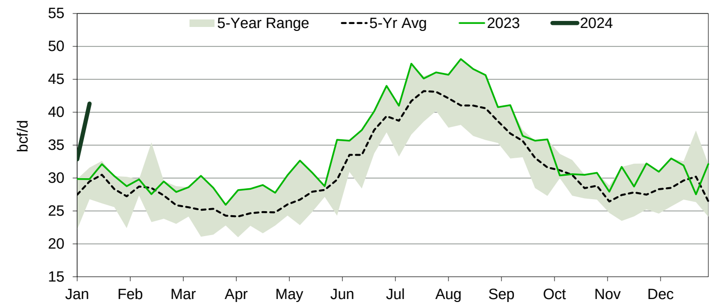
Exhibit 5. North American Natural Gas Demand

US Total Natural Gas Demand (Weekly Average - bcf/d)



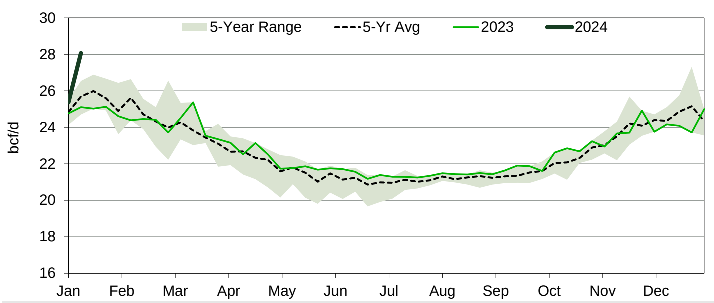
bcf/d	Last	Δ 1Y	Δ 5Y Avg
Total US Nat Gas Demand	128.7	35.1	22.6
% Change	---	38%	21%

US Natural Gas Demand - Electric Power Plants



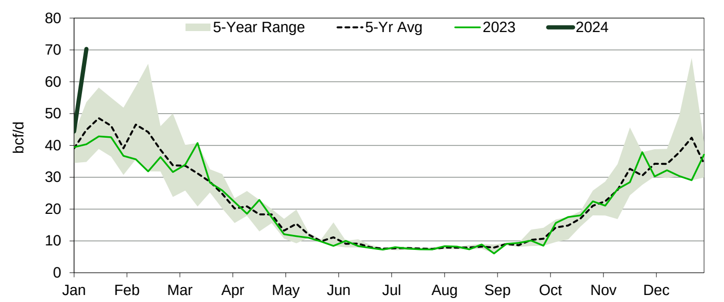
bcf/d	Last	Δ 1Y	Δ 5Y Avg
Electric Power Plants	37.5	8.7	7.4
% Change	---	30%	24%

US Natural Gas Demand - Industrial Plants



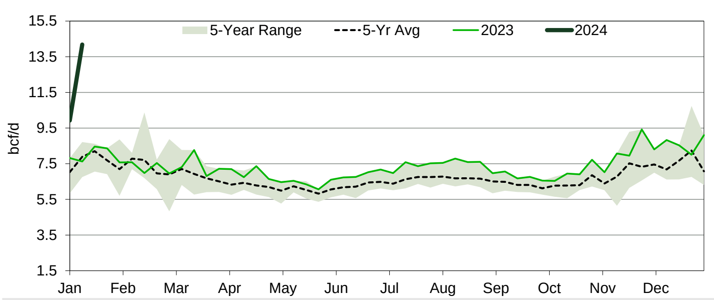
bcf/d	Last	Δ 1Y	Δ 5Y Avg
Industrial Plants	26.6	3.0	1.3
% Change	---	13%	5%

US Natural Gas Demand - Residential / Commercial



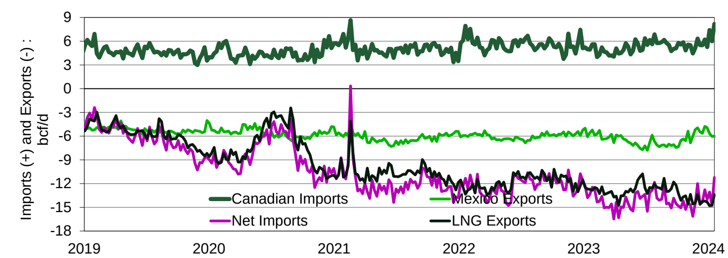
bcf/d	Last	Δ 1Y	Δ 5Y Avg
Residential Commercial	53.3	19.3	10.7
% Change	---	57%	25%

US Natural Gas Demand - Pipeline Distribution



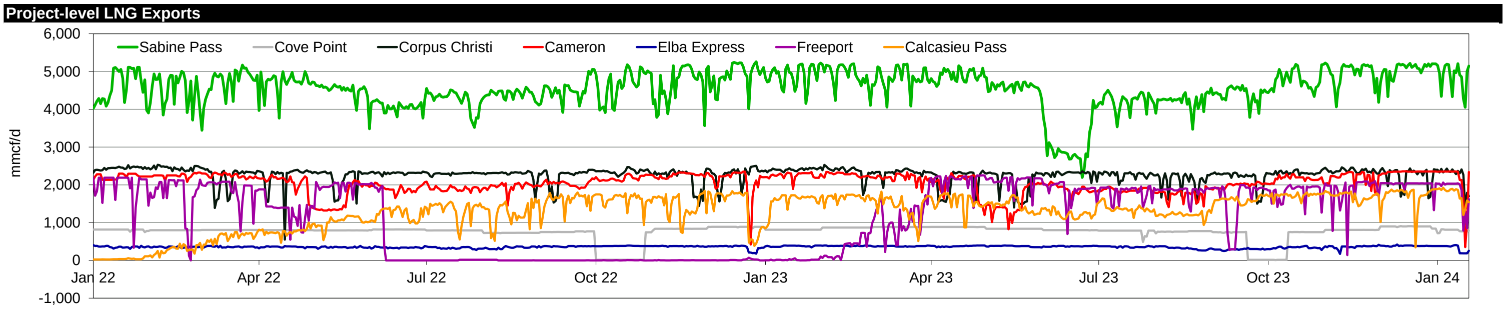
bcf/d	Last	Δ 1Y	Δ 5Y Avg
Pipeline Distribution	11.4	4.2	3.3
% Change	---	59%	41%

US Natural Gas Imports / Exports



bcf/d	Last	Δ 1Y	Δ 5Y Avg
Cdn Imports	8.2	66%	41%
LNG Exports	-13.4	5%	45%
Mexico Exports	-6.0	8%	9%
Net Imports (-Exports)	-11.2	-16%	26%

Project-level LNG Exports



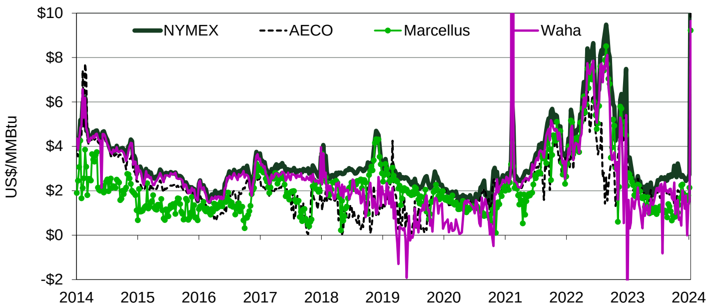
mmcf/d	Last	Δ 6Mo	Δ 1Y	Δ 2Y
Sabine Pass	5,147	20%	11%	5%
Cove Point	784	-1%	-3%	-12%
Corpus Christi	1,700	-25%	-28%	-27%
Calcasieu Pass	1,542	37%	-8%	n/a

	Last	Δ 6Mo	Δ 1Y	Δ 2Y
Cameron	2,342	27%	4%	3%
Elba Express	255	-24%	-34%	-30%
Freeport	1,622	-15%	n/a	n/a
Total	**13,392**	**6%**	**11%**	**7%**

Source. Bloomberg, Bentek, TD Securities Inc.

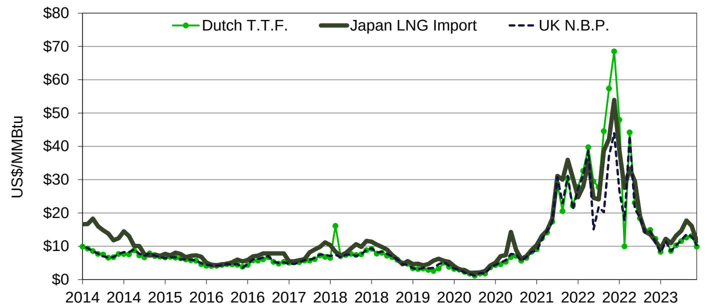
Exhibit 6. Natural Gas Prices

Benchmark Gas Prices - US$/MMBtu



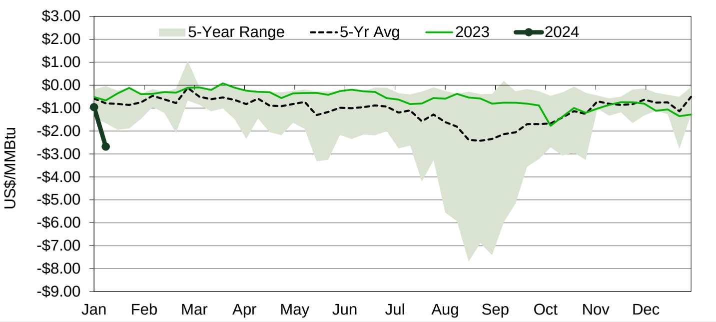
US$/MMBtu	Last	∆ 1M	∆ 1Y
NYMEX	$2.79	14%	-15%
AECO	$2.03	52%	-27%
Marcellus	$2.42	29%	-9%
Waha	$2.00	-50%	-53%

International Gas - US$/MMBtu



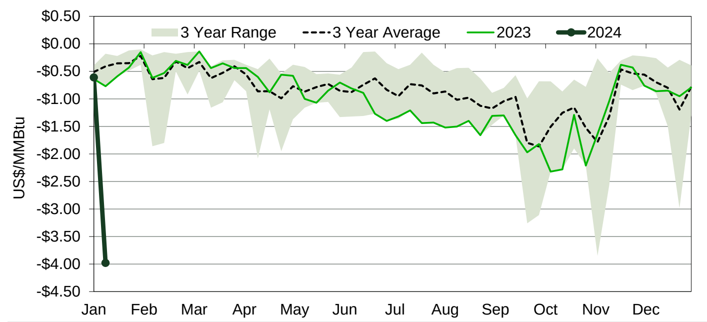
US$/MMBtu	Last	∆ 1M	∆ 1Y
Dutch TTF	$9.87	-24%	-57%
Japan LNG Import	$11.52	-29%	-61%
UK NBP	$8.84	-16%	-53%

AECO Basis Seasonality (US$/MMBtu)



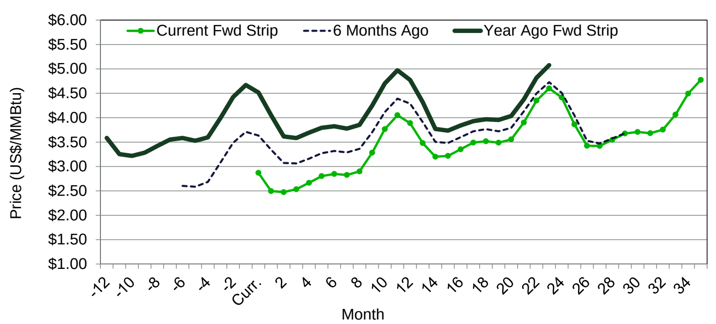
US$/MMBtu	Last	∆ 1Y	∆ 3 Yr
AECO Basis	-$0.77	53%	134%

Marcellus Basis Seasonality (US$/MMBtu)

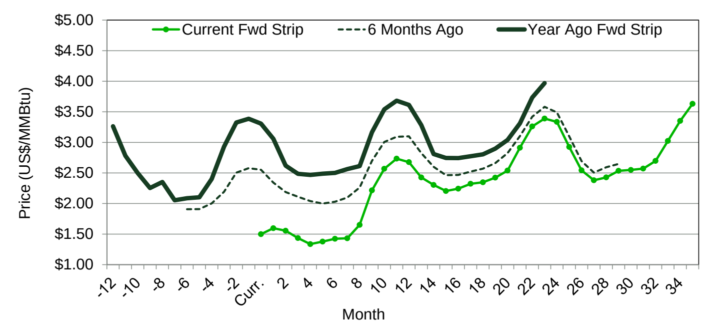


US$/MMBtu	Last	∆ 1Y	∆ 2 Yr
Marcellus Basis	-$0.38	-40%	-326%

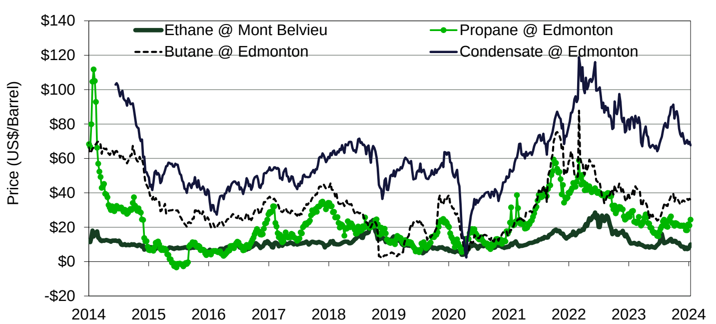
NYMEX Forward Strip Pricing (US$/MMBtu)



AECO Forward Strip Pricing (US$/MMBtu)

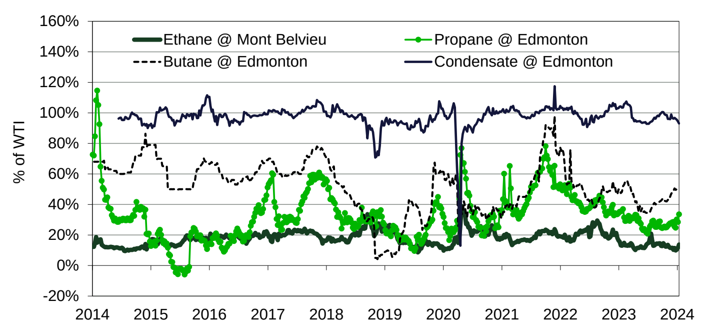


Natural Gas Liquids (US$/Barrel)



US$/Barrel	Last	∆ 1M	∆ 1Y
Ethane	$8.32	6%	-20%
Propane	$23.69	27%	-21%
Butane	$35.91	-4%	-5%
Condensate	$67.49	-5%	-20%

Natural Gas Liquids (% of WTI)



% of WTI	Last	1M	1Y
Ethane	11%	11%	13%
Propane	32%	25%	37%
Butane	49%	50%	47%
Condensate	92%	96%	105%

Note: Charts represent weekly averages (International Gas is monthly), last price is most recent available pricing data.
Source. Bloomberg, Bentek, TD Securities Inc.

Industry Note
Equity Research

January 18, 2024

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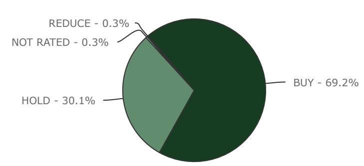

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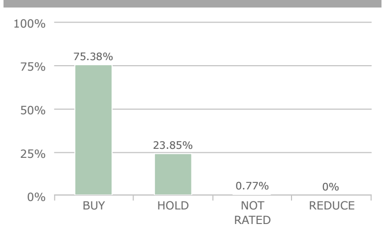

Current as of: January 18, 2024

^ Percentage of subject companies under each rating category: BUY (covering ACTION LIST BUY, BUY and SPECULATIVE BUY ratings), HOLD, and REDUCE (covering TENDER and REDUCE ratings) and NOT RATED (covering UNDER REVIEW, SUSPENDED, and NOT RATED).

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