

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 2.95	▼ \$ (0.02)	▲ \$ 0.00

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 64.63	▼ \$ (1.45)	▼ \$ (0.5)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 67.89	▼ \$ (1.43)	▼ \$ (0.6)

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[Lower 48 Component Models](#)

[Regional S/D Models Storage Projection](#)

[Weather Model Storage Projection](#)

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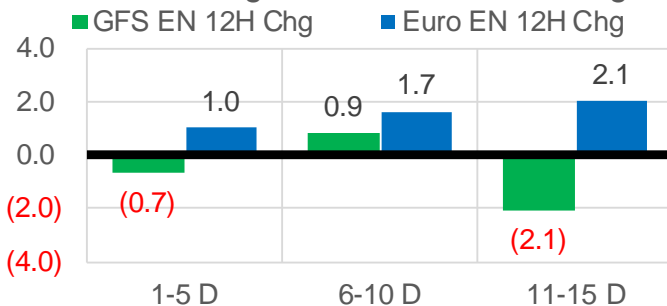
[Nat Gas Options Volume and Open Interest](#)

[Nat Gas Futures Open Interest](#)

[Price Summary](#)

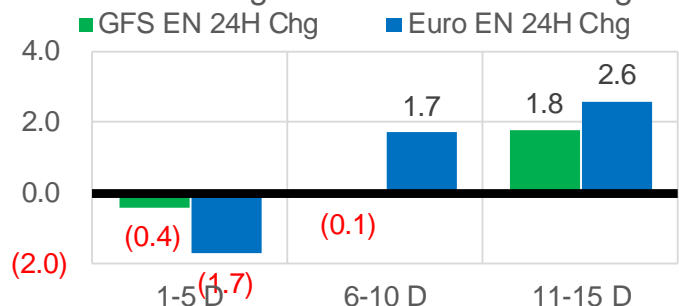
### Vs. 12H Ago

L48 Region - 00z TDD vs 12H Ago



### Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago



	Current	Δ from YD	Δ from 7D Avg
US Dry Production	89.4	▼ -2.27	▼ -2.98

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	26.1	▼ -1.64	▲ 0.09

	Current	Δ from YD	Δ from 7D Avg
US ResComm	15.9	▼ -1.78	▼ -2.30

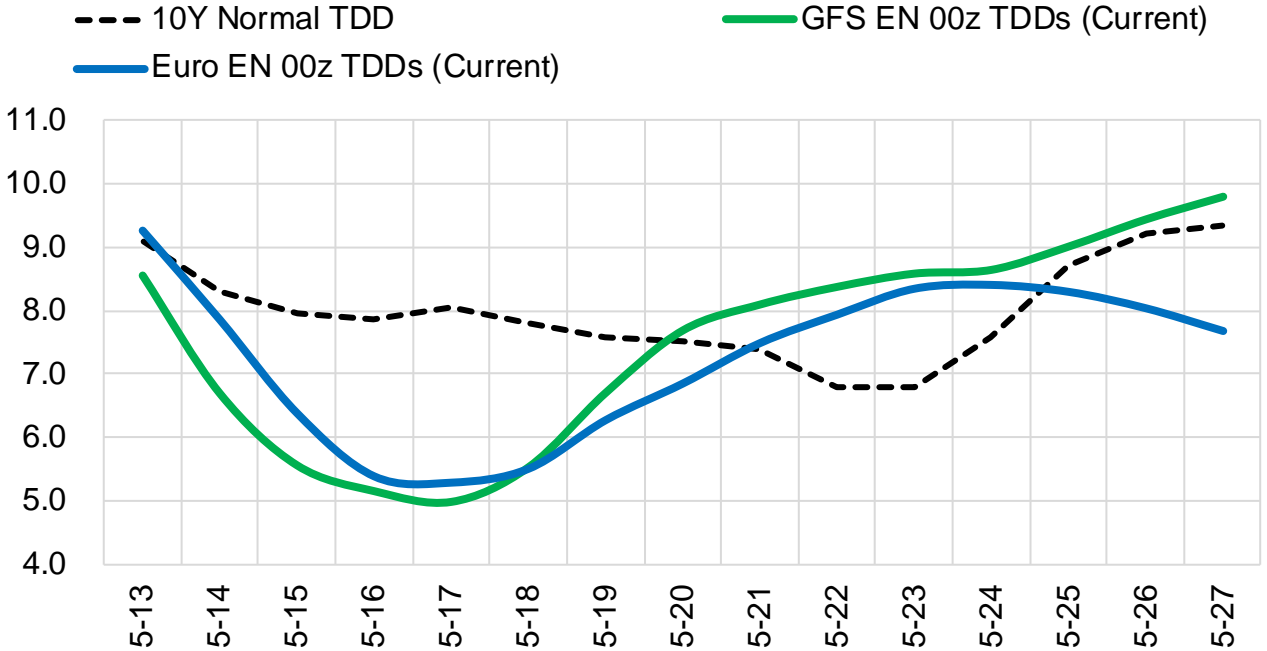
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.8	▼ -0.18	▼ -0.03

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	9.5	▼ -0.85	▼ -1.79

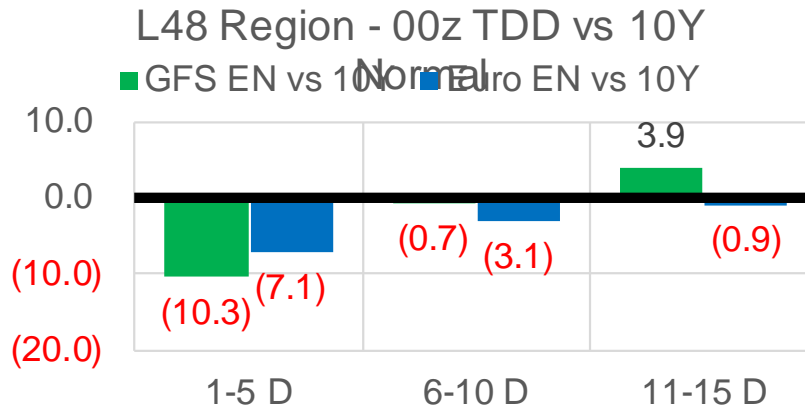
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	7.0	▼ -0.23	▲ 0.22

## Short-term Weather Model Outlooks (00z)

### L48 Region



## Vs. 10Y Normal



Source: WSI, Bloomberg

## Lower 48 Component Models

### Daily Balances

	7-May	8-May	9-May	10-May	11-May	12-May	13-May	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>92.8</b>	<b>93.1</b>	<b>92.6</b>	<b>91.9</b>	<b>91.9</b>	<b>91.6</b>	<b>89.4</b>	▼ -2.3	▼ -3.0
<b>Canadian Imports</b>	<b>4.8</b>	<b>4.6</b>	<b>4.6</b>	<b>4.8</b>	<b>5.1</b>	<b>5.0</b>	<b>4.8</b>	▼ -0.2	▲ 0.0
L48 Power	24.5	23.5	25.0	27.0	27.5	27.7	26.1	▼ -1.6	▲ 0.2
L48 Residential & Commercial	17.8	18.9	18.2	18.8	18.9	17.7	15.9	▼ -1.8	▼ -2.5
L48 Industrial	20.5	20.8	20.6	20.5	20.3	20.0	19.4	▼ -0.5	▼ -1.0
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.0	5.0	5.0	4.9	▼ -0.1	▼ -0.2
L48 Pipeline Distribution	2.2	2.2	2.2	2.3	2.4	2.3	2.1	▼ -0.2	▼ -0.1
<b>L48 Regional Gas Consumption</b>	<b>70.2</b>	<b>70.5</b>	<b>71.1</b>	<b>73.7</b>	<b>74.1</b>	<b>72.7</b>	<b>68.4</b>	▼ -4.3	▼ -3.6
<b>Net LNG Delivered</b>	<b>11.60</b>	<b>11.61</b>	<b>11.48</b>	<b>11.36</b>	<b>10.89</b>	<b>10.36</b>	<b>9.51</b>	▼ -0.9	▼ -1.7
<b>Total Mexican Exports</b>	<b>6.9</b>	<b>6.4</b>	<b>6.3</b>	<b>6.7</b>	<b>7.2</b>	<b>7.2</b>	<b>7.0</b>	▼ -0.2	▲ 0.2
<b>Implied Daily Storage Activity</b>	<b>9.0</b>	<b>9.3</b>	<b>8.4</b>	<b>4.8</b>	<b>4.8</b>	<b>6.4</b>	<b>9.2</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	2-Apr	9-Apr	16-Apr	23-Apr	30-Apr	7-May	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>92.8</b>	<b>92.7</b>	<b>92.1</b>	<b>91.3</b>	<b>92.0</b>	<b>92.2</b>	▲ 0.2	▲ 0.2
<b>Canadian Imports</b>	<b>4.5</b>	<b>4.2</b>	<b>4.3</b>	<b>5.3</b>	<b>4.6</b>	<b>4.6</b>	▼ -0.1	▼ 0.0
L48 Power	24.6	23.2	24.6	25.9	26.7	26.7	▲ 0.1	▲ 1.6
L48 Residential & Commercial	23.4	18.6	18.6	24.0	16.5	13.6	▼ -2.9	▼ -5.8
L48 Industrial	21.5	22.0	21.4	20.1	20.9	20.4	▼ -0.4	▼ -0.7
L48 Lease and Plant Fuel	5.1	5.1	5.0	5.0	5.0	5.1	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	2.3	2.1	2.1	2.5	2.1	2.1	▼ -0.1	▼ -0.1
<b>L48 Regional Gas Consumption</b>	<b>76.8</b>	<b>70.9</b>	<b>71.7</b>	<b>77.4</b>	<b>71.2</b>	<b>67.9</b>	▼ -3.3	▼ -4.9
<b>Net LNG Exports</b>	<b>11.7</b>	<b>11.5</b>	<b>11.4</b>	<b>11.6</b>	<b>11.4</b>	<b>11.3</b>	▼ -0.1	▼ -0.2
<b>Total Mexican Exports</b>	<b>6.4</b>	<b>6.2</b>	<b>7.3</b>	<b>6.8</b>	<b>6.7</b>	<b>6.7</b>	▲ 0.0	▼ -0.1
<b>Implied Daily Storage Activity</b>	<b>2.4</b>	<b>8.3</b>	<b>6.0</b>	<b>0.9</b>	<b>7.4</b>	<b>10.9</b>	<b>3.6</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>2.9</b>	<b>8.7</b>	<b>5.4</b>	<b>2.1</b>	<b>8.6</b>			
<b>Daily Model Error</b>	<b>-0.4</b>	<b>-0.4</b>	<b>0.6</b>	<b>-1.3</b>	<b>-1.2</b>			

### Monthly Balances

	2Yr Ago May-19	LY May-20	Jan-21	Feb-21	Mar-21	Apr-21	MTD May-21	MoM	vs. LY
<b>Lower 48 Dry Production</b>	<b>90.6</b>	<b>87.3</b>	<b>91.6</b>	<b>84.7</b>	<b>92.0</b>	<b>92.1</b>	<b>92.0</b>	▼ -0.1	▲ 7.3
<b>Canadian Imports</b>	<b>4.7</b>	<b>3.9</b>	<b>6.3</b>	<b>6.4</b>	<b>4.8</b>	<b>4.7</b>	<b>4.7</b>	▲ 0.0	▼ -1.7
L48 Power	26.9	26.9	28.2	27.9	25.0	25.2	26.3	▲ 1.1	▼ -1.6
L48 Residential & Commercial	12.8	12.7	43.9	47.9	28.4	19.7	15.9	▼ -3.8	▼ -32.0
L48 Industrial	23.2	19.8	24.3	21.6	20.1	21.1	20.3	▼ -0.8	▼ -1.3
L48 Lease and Plant Fuel	5.0	4.8	5.0	4.7	5.0	5.0	5.0	▲ 0.0	▲ 0.4
L48 Pipeline Distribution	2.1	2.0	3.2	3.3	2.5	2.2	2.2	▼ -0.1	▼ -1.1
<b>L48 Regional Gas Consumption</b>	<b>69.9</b>	<b>66.2</b>	<b>104.7</b>	<b>105.4</b>	<b>81.1</b>	<b>73.3</b>	<b>69.7</b>	▼ -3.5	▼ -35.6
<b>Net LNG Exports</b>	<b>5.6</b>	<b>6.7</b>	<b>10.5</b>	<b>8.4</b>	<b>11.1</b>	<b>11.5</b>	<b>11.1</b>	▼ -0.4	▲ 2.7
<b>Total Mexican Exports</b>	<b>5.0</b>	<b>4.8</b>	<b>6.2</b>	<b>5.7</b>	<b>6.5</b>	<b>6.7</b>	<b>6.7</b>	▲ 0.0	▲ 1.0
<b>Implied Daily Storage Activity</b>	<b>14.8</b>	<b>13.6</b>	<b>-23.5</b>	<b>-28.4</b>	<b>-1.9</b>	<b>5.3</b>	<b>9.1</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

Source: Bloomberg, analytix.ai

### Regional S/D Models Storage Projection

Week Ending 7-May

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	10.6	1.1	11.7	82
East	1.8	0.8	2.6	18
Midwest	2.6	-0.1	2.5	18
Mountain	4.2	-2.9	1.3	9
South Central	0.3	3.4	3.7	26
Pacific	1.7	-0.2	1.5	10

\*Adjustment Factor is calculated based on historical regional deltas

U.S. underground natural gas storage facilities by type (July 2015)

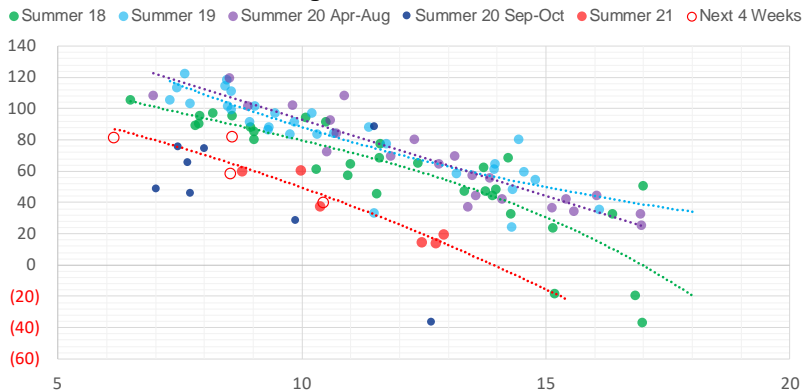


### Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
07-May	8.6	82
14-May	10.5	39
21-May	6.2	81
28-May	8.5	58

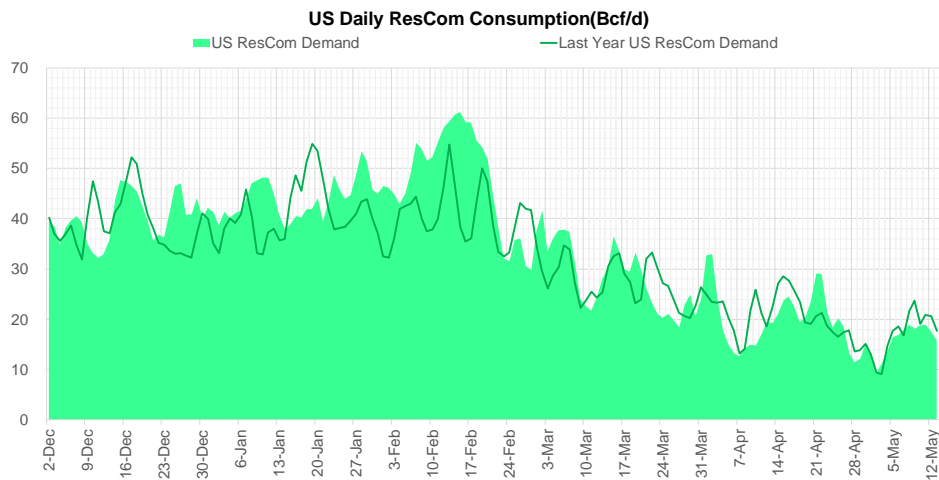
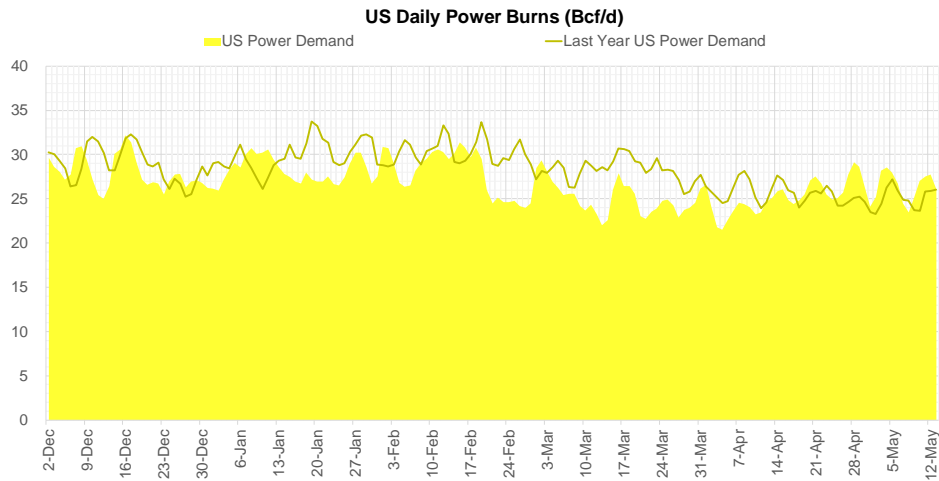
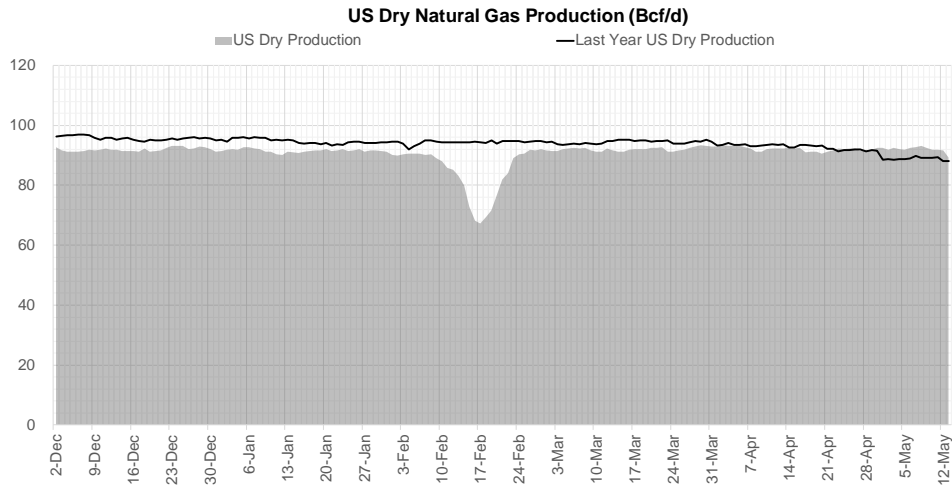
**Weather Storage Model - Next 4 Week Forecast**



Go to larger image



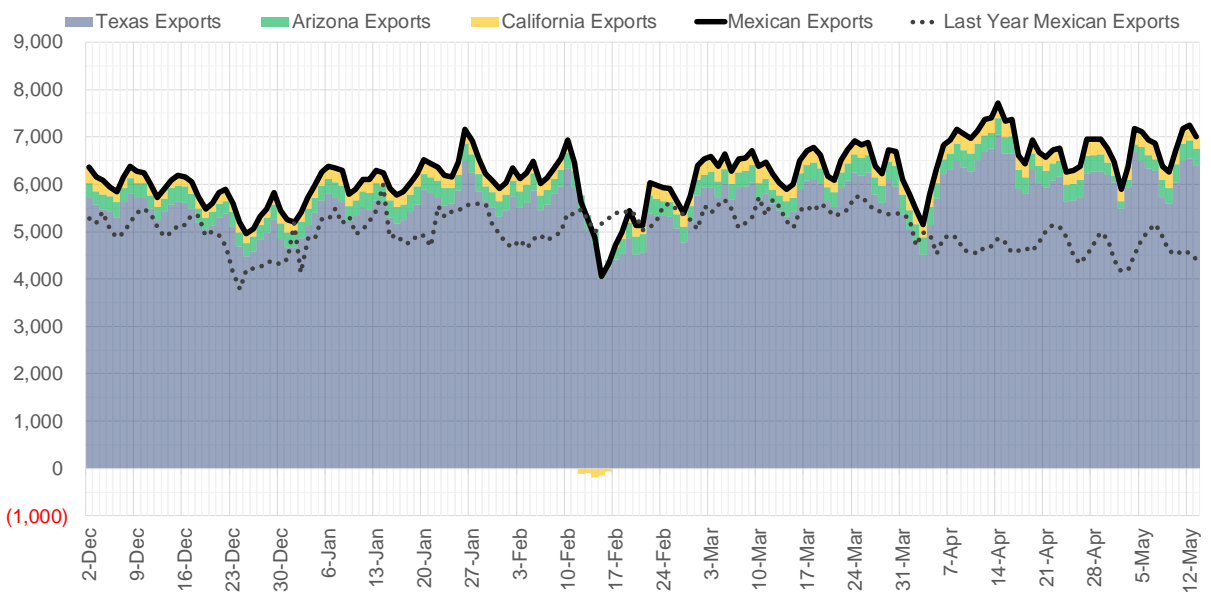
## Supply – Demand Trends



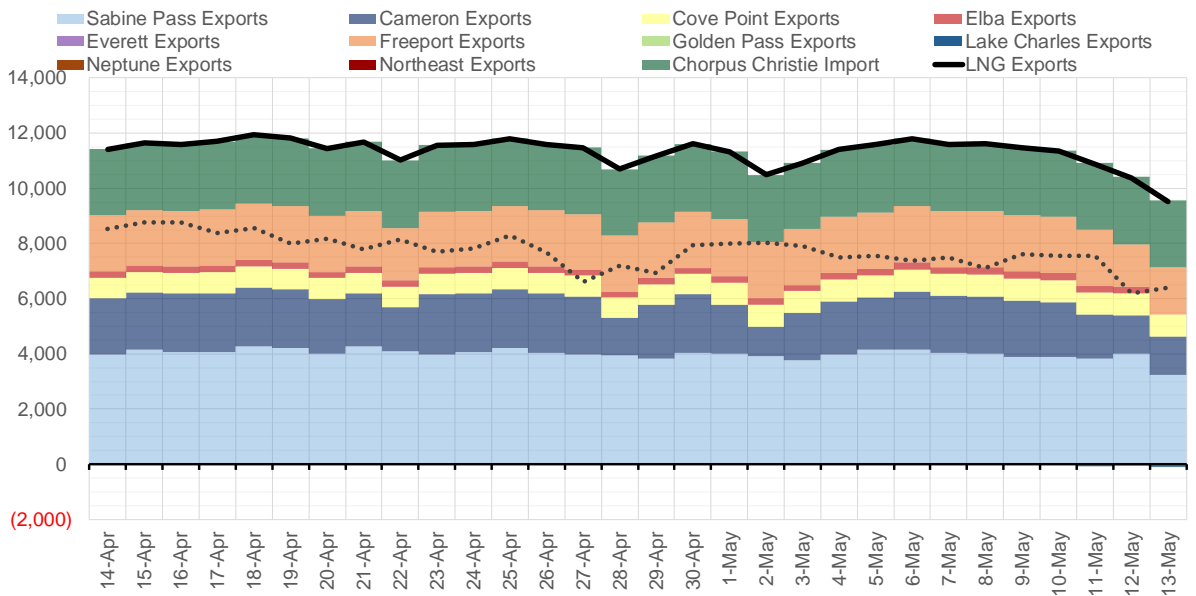
Source: Bloomberg

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### Mexican Exports (MMcf/d)



### Net LNG Exports - Last 30 days (MMcf/d)



Source: Bloomberg

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## Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

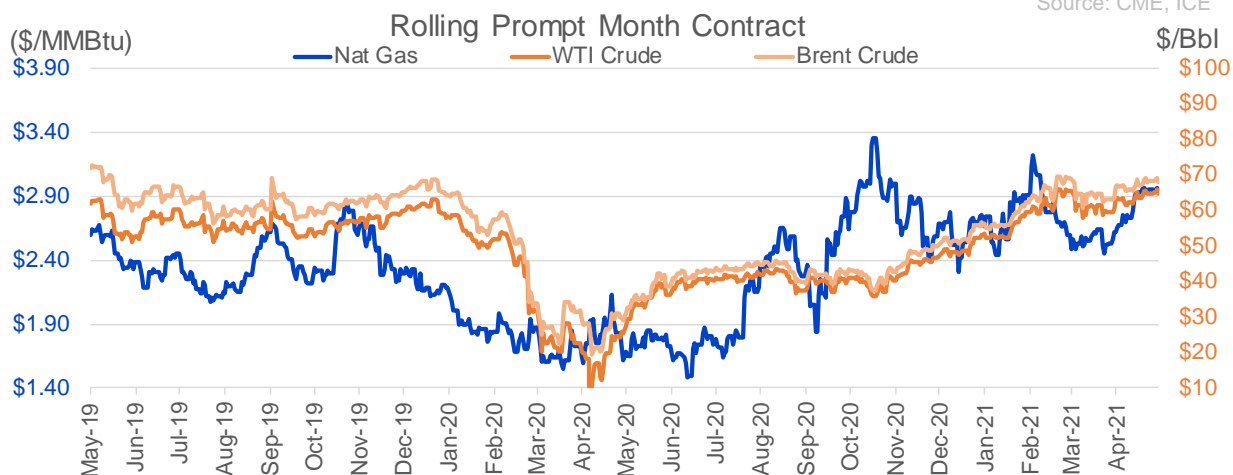
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
7	2021	P	2.50	6238	10	2021	C	4.00	41299
8	2021	P	2.60	5045	8	2021	C	3.50	34191
7	2021	P	2.60	4892	9	2021	C	4.00	32636
6	2021	P	2.80	4704	6	2021	C	3.25	30748
9	2021	P	2.50	4048	8	2021	C	4.00	30304
8	2021	P	2.50	4014	6	2021	P	2.50	29827
3	2022	C	8.00	3200	10	2021	C	3.25	29426
3	2022	C	10.00	3200	6	2021	C	4.00	27949
6	2021	P	2.90	3050	6	2021	P	2.65	26812
7	2021	P	2.65	2746	7	2021	C	4.00	26798
6	2021	C	3.25	2738	8	2021	C	3.25	26589
8	2021	P	2.65	2593	7	2021	P	2.50	26189
7	2021	P	2.55	2569	10	2021	C	3.50	25546
8	2021	P	2.55	2500	6	2021	C	3.00	25395
6	2021	P	2.75	2304	9	2021	C	3.50	25226
9	2021	P	2.60	2025	10	2021	P	2.50	25208
7	2021	P	2.63	1500	10	2021	C	5.00	25132
7	2021	P	2.75	1406	6	2021	P	2.75	24293
6	2021	P	2.85	1321	7	2021	C	3.50	23655
8	2021	P	3.00	1186	6	2021	C	3.50	22800
6	2021	C	2.95	1179	6	2021	P	2.90	22619
8	2021	P	2.75	1172	7	2021	C	3.25	21837
6	2021	C	3.15	1168	10	2021	C	3.00	20184
6	2021	P	2.95	1166	6	2021	P	2.70	19718
7	2021	C	3.15	1100	4	2022	C	3.00	19579
8	2021	P	2.00	1100	9	2021	P	2.00	19447
9	2021	C	4.00	1057	12	2021	C	4.00	19395
6	2021	C	3.05	1034	8	2021	P	2.50	19334
2	2022	C	3.25	1003	6	2021	P	2.25	19089
8	2021	P	2.25	1000	10	2021	P	2.25	19048
6	2021	C	3.00	990	8	2021	P	2.25	19031
7	2021	C	3.75	981	10	2021	P	2.00	18378
7	2021	C	4.00	981	11	2021	C	4.00	17192
9	2021	C	3.75	900	6	2021	P	2.00	17062
3	2022	C	3.00	825	6	2021	C	3.05	16906
7	2021	C	3.25	824	9	2021	P	2.50	16720
6	2021	C	3.10	666	3	2022	C	4.00	16635
7	2021	C	3.00	656	8	2021	P	2.00	16405
7	2021	C	3.50	635	9	2021	C	3.25	16381
10	2021	C	4.50	602	7	2021	C	3.00	16331
11	2021	C	4.50	600	8	2021	C	3.75	16148
12	2021	C	4.50	600	8	2021	C	3.00	16037
10	2021	C	3.75	503	7	2021	P	2.00	16035
8	2021	C	3.00	454	7	2021	P	2.65	16015
6	2021	P	2.55	450	6	2021	C	3.75	15823
8	2021	C	4.00	445	7	2021	P	2.75	15546
9	2021	C	3.00	411	6	2021	C	2.75	15033
9	2021	P	3.00	411	8	2021	P	2.75	14470
7	2021	C	3.30	407	3	2022	C	5.00	14200
					10	2021	C	4.5	14182

Source: CME, ICE



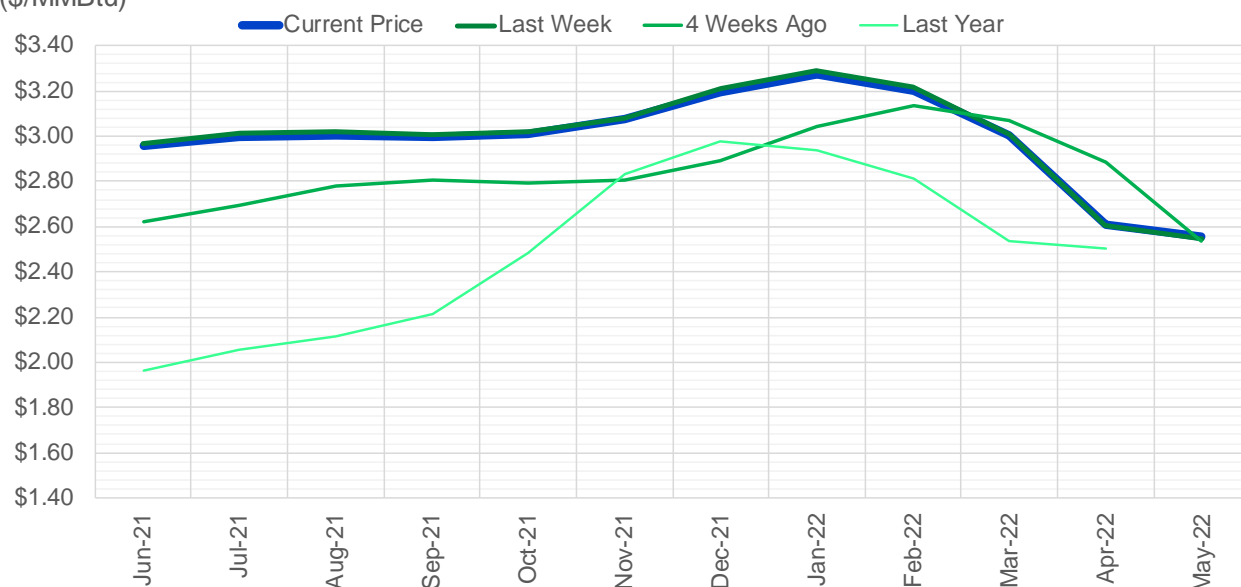
## Nat Gas Futures Open Interest CME, and ICE Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM			
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
JUN 21	147419	165817	-18398	JUN 21	89990	91515	-1525
JUL 21	242646	231678	10968	JUL 21	91504	89672	1832
AUG 21	70003	69338	665	AUG 21	77631	77296	335
SEP 21	108961	108488	473	SEP 21	70125	69678	448
OCT 21	129111	129374	-263	OCT 21	88388	88667	-280
NOV 21	67172	63880	3292	NOV 21	67225	67105	120
DEC 21	46716	45874	842	DEC 21	61144	60886	259
JAN 22	80217	79731	486	JAN 22	68859	68743	117
FEB 22	27646	27291	355	FEB 22	52957	52835	121
MAR 22	55606	55345	261	MAR 22	58453	58263	191
APR 22	53722	53821	-99	APR 22	49655	49447	208
MAY 22	32396	32117	279	MAY 22	45257	45030	227
JUN 22	17895	18012	-117	JUN 22	42011	41823	188
JUL 22	11085	11110	-25	JUL 22	42353	42020	333
AUG 22	9147	9141	6	AUG 22	40752	40464	288
SEP 22	9684	9646	38	SEP 22	41573	41211	362
OCT 22	23782	23927	-145	OCT 22	46145	45863	282
NOV 22	10488	10669	-181	NOV 22	37383	37099	284
DEC 22	10415	10308	107	DEC 22	41143	40639	504
JAN 23	5488	5540	-52	JAN 23	23744	23600	144
FEB 23	2561	2568	-7	FEB 23	22112	21939	173
MAR 23	5164	5148	16	MAR 23	23924	23457	468
APR 23	5640	5612	28	APR 23	19382	19223	160
MAY 23	4549	4557	-8	MAY 23	19361	19258	103
JUN 23	969	968	1	JUN 23	17849	17726	122
JUL 23	1024	1033	-9	JUL 23	17848	17763	85
AUG 23	808	795	13	AUG 23	17993	17907	85
SEP 23	769	769	0	SEP 23	17360	17278	83
OCT 23	1757	1756	1	OCT 23	18322	18219	103
NOV 23	612	611	1	NOV 23	17694	17572	123



(\$/MMBtu)

## Nat Gas Term Structure



	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22
<b>Current Price</b>	<b>\$2.955</b>	<b>\$2.999</b>	<b>\$3.007</b>	<b>\$2.994</b>	<b>\$3.011</b>	<b>\$3.073</b>	<b>\$3.194</b>	<b>\$3.275</b>	<b>\$3.202</b>	<b>\$3.002</b>	<b>\$2.610</b>	<b>\$2.556</b>
Last Week	\$2.967	\$3.012	\$3.020	\$3.004	\$3.021	\$3.081	\$3.211	\$3.292	\$3.217	\$3.007	\$2.602	\$2.545
vs. Last Week	-\$0.012	-\$0.013	-\$0.013	-\$0.010	-\$0.010	-\$0.008	-\$0.017	-\$0.017	-\$0.015	-\$0.005	\$0.008	\$0.011
4 Weeks Ago	\$2.619	\$2.696	\$2.779	\$2.805	\$2.791	\$2.809	\$2.889	\$3.044	\$3.136	\$3.071	\$2.882	\$2.537
vs. 4 Weeks Ago	\$0.336	\$0.303	\$0.228	\$0.189	\$0.220	\$0.264	\$0.305	\$0.231	\$0.066	-\$0.069	-\$0.272	\$0.019
Last Year	\$1.720	\$1.965	\$2.053	\$2.117	\$2.214	\$2.482	\$2.833	\$2.977	\$2.938	\$2.812	\$2.534	\$2.503
vs. Last Year	\$1.235	\$1.034	\$0.954	\$0.877	\$0.797	\$0.591	\$0.361	\$0.298	\$0.264	\$0.190	\$0.076	\$0.053

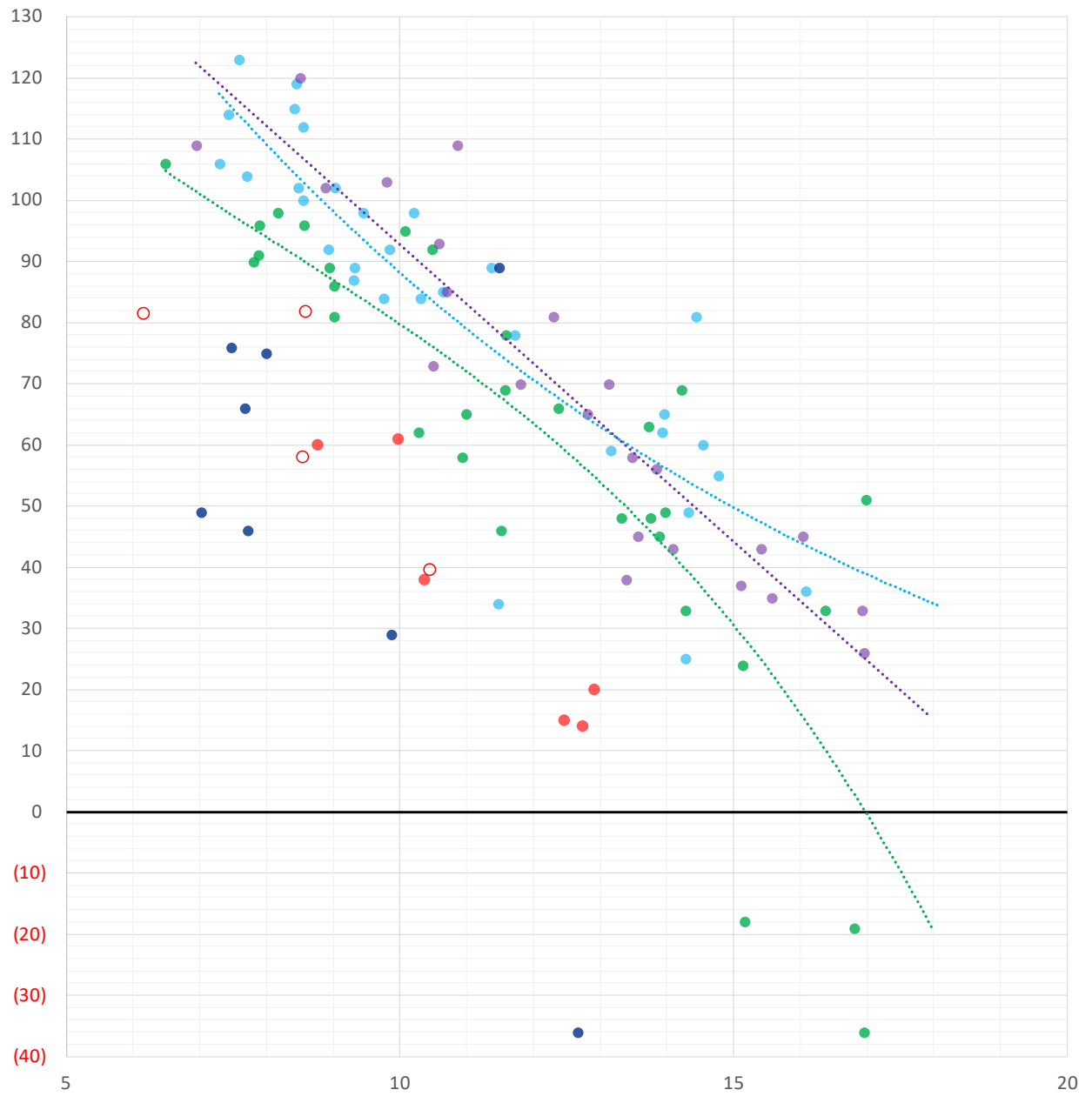
	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	2.40	2.36	-0.04
TETCO M3	\$/MMBtu	2.45	2.32	-0.14
FGT Zone 3	\$/MMBtu	2.46	3.05	0.59
Zone 6 NY	\$/MMBtu	2.46	2.30	-0.16
Chicago Citygate	\$/MMBtu	2.78	2.83	0.05
Michcon	\$/MMBtu	2.75	2.77	0.02
Columbia TCO Pool	\$/MMBtu	2.49	2.43	-0.06
Ventura	\$/MMBtu	2.56	2.78	0.22
Rockies/Opal	\$/MMBtu	2.82	2.76	-0.06
El Paso Permian Basin	\$/MMBtu	2.70	2.86	0.16
Socal Citygate	\$/MMBtu	3.60	3.45	-0.15
Malin	\$/MMBtu	2.91	3.04	0.13
Houston Ship Channel	\$/MMBtu	3.00	3.07	0.07
Henry Hub Cash	\$/MMBtu	2.88	2.82	-0.06
AECO Cash	C\$/GJ	2.52	2.43	-0.09
Station2 Cash	C\$/GJ	2.29	2.83	0.54
Dawn Cash	C\$/GJ	2.73	2.79	0.06

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	0.012	▲ 0.003	▼ -0.018	▲ 0.004
NatGas Oct21/Nov21	\$/MMBtu	0.062	▲ 0.002	▼ -0.018	▲ 0.016
NatGas Oct21/Jan22	\$/MMBtu	0.264	▼ -0.007	▼ -0.063	▼ -0.028
NatGas Apr22/Oct22	\$/MMBtu	0.022	▲ 0.002	▼ -0.012	▼ -0.024
WTI Crude	\$/Bbl	65.28	▼ -0.410	▲ 5.100	▲ 39.500
Brent Crude	\$/Bbl	68.55	▼ -0.330	▲ 4.880	▲ 38.570
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	204.17	▲ 4.290	▲ 22.720	▲ 120.330
Propane, Mt. Bel	cents/Gallon	0.81	▼ -0.012	▼ -0.014	▲ 0.423
Ethane, Mt. Bel	cents/Gallon	0.26	▲ 0.002	▲ 0.025	▲ 0.052
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000
Coal, PRB	\$/MMBtu	0.70			
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▲ 0.000
Coal, ILB	\$/MMBtu	1.32			

### Weather Storage Model - Next 4 Week Forecast

● Summer 18   
 ● Summer 19   
 ● Summer 20 Apr-Aug   
 ● Summer 20 Sept-Oct   
 ● Summer 21   
 ○ Next 4 Weeks



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