

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 3.01 ▲	\$ 0.02 ▲	\$ 0.09

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 66.08 ▼	\$ (0.13) ▲	\$ 1.6

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 68.63 ▼	\$ (0.24) ▲	\$ 1.4

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[Lower 48 Component Models](#)

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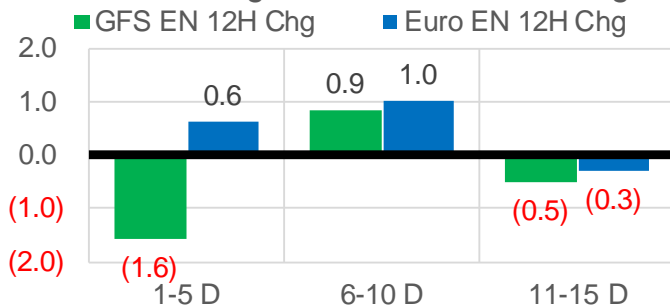
[Nat Gas Options Volume and Open Interest](#)

[Nat Gas Futures Open Interest](#)

[Price Summary](#)

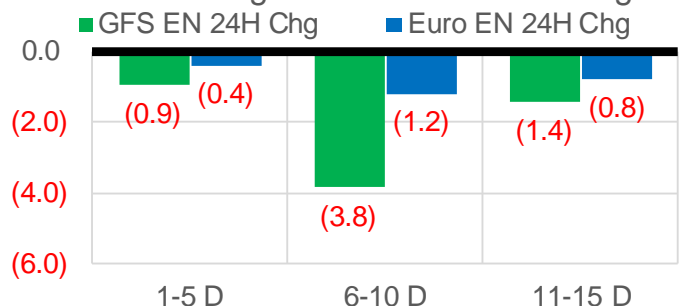
### Vs. 12H Ago

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	91.0 ▼	-0.88 ▼	-1.26

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	30.9 ▼	-1.22 ▲	1.30

	Current	Δ from YD	Δ from 7D Avg
US ResComm	9.7 ▲	0.66 ▲	0.68

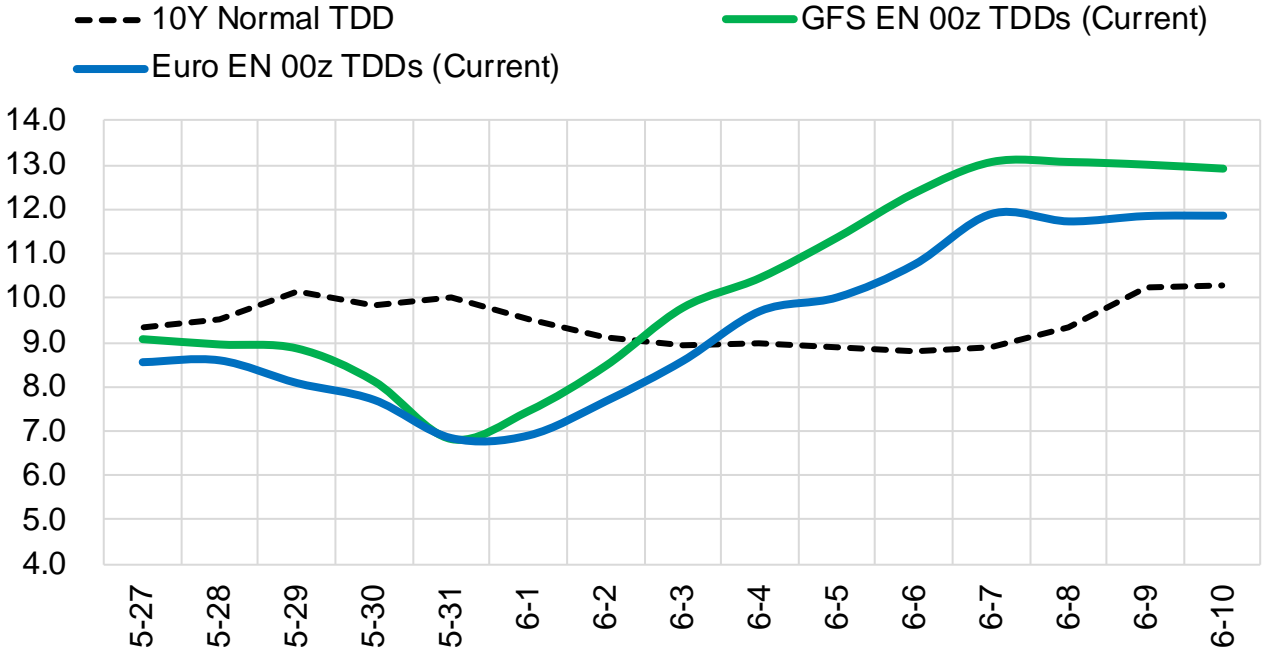
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.2 ▼	-0.49 ▼	-0.30

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	10.0 ▲	0.37 ▼	-0.59

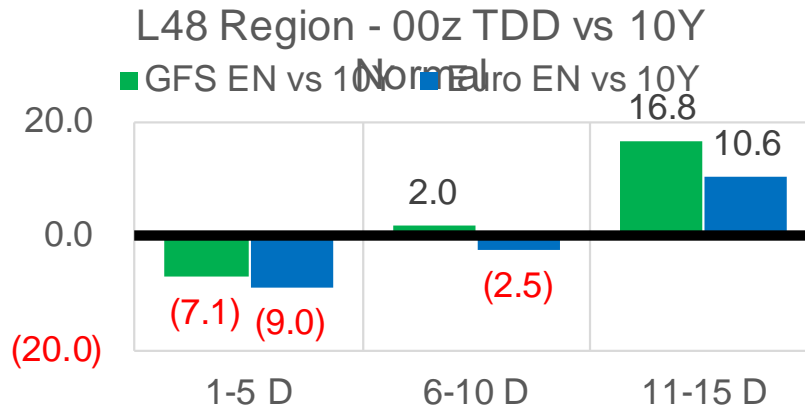
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	7.0 ▲	0.02 ▲	0.18

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

#### L48 Region



### Vs. 10Y Normal



Source: WSI , Bloomberg

## Lower 48 Component Models

### Daily Balances

	21-May	22-May	23-May	24-May	25-May	26-May	27-May	DoD	vs. 7D
<b>Lower 48 Dry Production</b>	<b>92.1</b>	<b>92.6</b>	<b>92.6</b>	<b>92.6</b>	<b>91.8</b>	<b>91.8</b>	<b>91.0</b>	▼ -0.9	▼ -1.3
<b>Canadian Imports</b>	<b>4.5</b>	<b>4.3</b>	<b>4.3</b>	<b>4.3</b>	<b>4.7</b>	<b>4.7</b>	<b>4.2</b>	▼ -0.5	▼ -0.3
L48 Power	28.3	27.8	28.7	29.7	31.1	32.1	30.9	▼ -1.2	▲ 1.3
L48 Residential & Commercial	9.3	8.9	8.9	9.0	8.7	9.1	9.7	▲ 0.7	▲ 0.7
L48 Industrial	20.2	20.4	20.8	21.0	21.1	20.7	20.5	▼ -0.1	▼ -0.2
L48 Lease and Plant Fuel	5.0	5.1	5.1	5.1	5.0	5.0	5.0	▼ 0.0	▼ -0.1
L48 Pipeline Distribution	1.9	1.9	1.9	2.0	2.0	2.1	2.1	▼ 0.0	▲ 0.1
<b>L48 Regional Gas Consumption</b>	<b>64.8</b>	<b>64.1</b>	<b>65.4</b>	<b>66.8</b>	<b>67.9</b>	<b>69.0</b>	<b>68.2</b>	▼ -0.8	▲ 1.9
<b>Net LNG Delivered</b>	<b>10.72</b>	<b>11.12</b>	<b>11.18</b>	<b>10.70</b>	<b>9.89</b>	<b>9.58</b>	<b>9.95</b>	▲ 0.4	▼ -0.6
<b>Total Mexican Exports</b>	<b>6.9</b>	<b>6.5</b>	<b>6.3</b>	<b>6.9</b>	<b>7.0</b>	<b>7.0</b>	<b>7.0</b>	▲ 0.0	▲ 0.2
<b>Implied Daily Storage Activity</b>	<b>14.2</b>	<b>15.1</b>	<b>14.0</b>	<b>12.6</b>	<b>11.7</b>	<b>11.0</b>	<b>10.0</b>		
<b>EIA Reported Daily Storage Activity</b>									
<b>Daily Model Error</b>									

### EIA Storage Week Balances

	16-Apr	23-Apr	30-Apr	7-May	14-May	21-May	WoW	vs. 4W
<b>Lower 48 Dry Production</b>	<b>91.7</b>	<b>90.9</b>	<b>91.5</b>	<b>91.6</b>	<b>91.7</b>	<b>91.6</b>	▼ -0.1	▲ 0.2
<b>Canadian Imports</b>	<b>4.3</b>	<b>5.3</b>	<b>4.6</b>	<b>4.6</b>	<b>4.8</b>	<b>4.6</b>	▼ -0.3	▼ -0.3
L48 Power	24.6	25.7	26.5	26.5	25.9	26.6	▲ 0.7	▲ 0.5
L48 Residential & Commercial	18.6	24.0	16.5	13.6	18.0	10.3	▼ -7.7	▼ -7.7
L48 Industrial	21.0	19.8	20.1	20.4	18.1	19.8	▲ 1.8	▲ 0.2
L48 Lease and Plant Fuel	5.0	5.0	5.0	5.0	5.0	5.0	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	2.1	2.5	2.1	2.0	2.2	1.9	▼ -0.4	▼ -0.3
<b>L48 Regional Gas Consumption</b>	<b>71.4</b>	<b>77.0</b>	<b>70.2</b>	<b>67.6</b>	<b>69.3</b>	<b>63.7</b>	▼ -5.5	▼ -7.3
<b>Net LNG Exports</b>	<b>11.4</b>	<b>11.6</b>	<b>11.4</b>	<b>11.3</b>	<b>11.0</b>	<b>10.4</b>	▼ -0.6	▼ -0.9
<b>Total Mexican Exports</b>	<b>7.3</b>	<b>6.8</b>	<b>6.7</b>	<b>6.7</b>	<b>6.8</b>	<b>6.8</b>	▼ 0.0	▲ 0.0
<b>Implied Daily Storage Activity</b>	<b>6.0</b>	<b>0.9</b>	<b>7.9</b>	<b>10.6</b>	<b>9.5</b>	<b>15.3</b>	<b>5.8</b>	
<b>EIA Reported Daily Storage Activity</b>	<b>5.4</b>	<b>2.1</b>	<b>8.6</b>	<b>10.1</b>	<b>10.1</b>			
<b>Daily Model Error</b>	<b>0.6</b>	<b>-1.2</b>	<b>-0.7</b>	<b>0.5</b>	<b>-0.6</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>91.7</b>	<b>91.7</b>	<b>91.8</b>	▲ 0.1	▲ 7.1
<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>4.6</b>	▼ -0.1	▼ -1.8
L48 Power	26.9	26.9	28.2	27.9	25.1	25.1	27.3	▲ 2.1	▼ -0.6
L48 Residential & Commercial	12.8	12.7	43.9	47.9	28.4	19.7	12.7	▼ -7.0	▼ -35.2
L48 Industrial	23.1	19.7	24.3	21.6	19.7	20.7	19.7	▼ -1.0	▼ -1.9
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	2.0	▼ -0.2	▼ -1.2
<b>L48 Regional Gas Consumption</b>	<b>69.9</b>	<b>66.2</b>	<b>104.7</b>	<b>105.4</b>	<b>80.7</b>	<b>72.7</b>	<b>66.7</b>	▼ -6.0	▼ -38.7
<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>10.8</b>	▼ -0.7	▲ 2.3
<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>-28.5</b>	<b>-1.9</b>	<b>5.4</b>	<b>12.1</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 21-May

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	15.0	0.8	15.8	111
East	2.8	0.8	3.6	25
Midwest	4.8	0.1	4.9	34
Mountain	4.3	-3.3	1.0	7
South Central	1.4	3.5	4.9	34
Pacific	1.7	-0.3	1.4	10

\*Adjustment Factor is calculated based on historical regional deltas

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

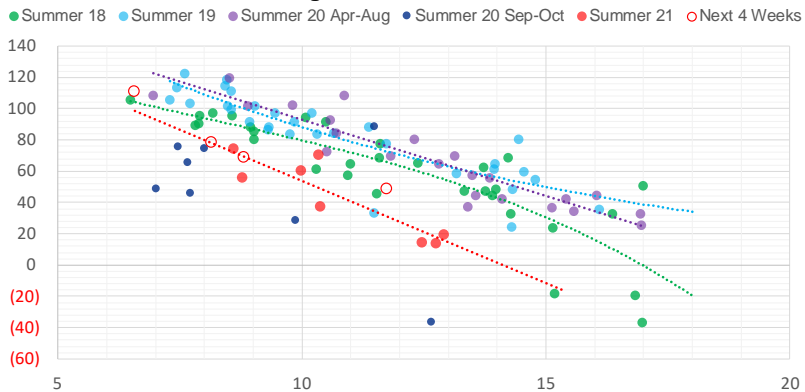


### Weather Model Storage Projection

Next report  
and beyond

Week Ending	GWDDs	Week Storage Projection
21-May	6.6	111
28-May	8.8	69
04-Jun	8.2	78
11-Jun	11.7	49

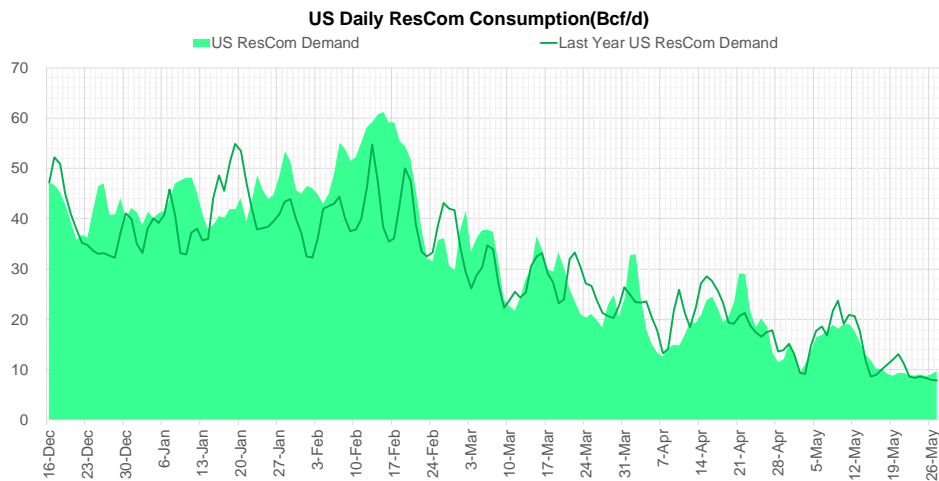
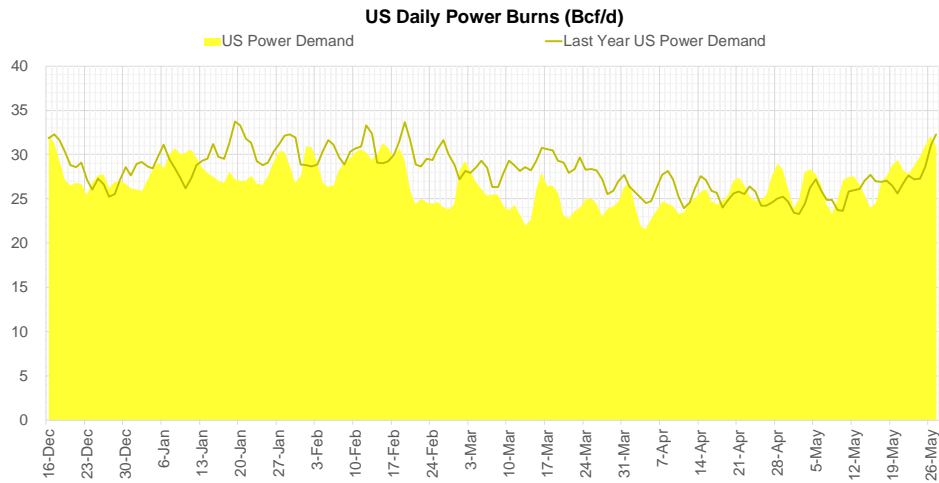
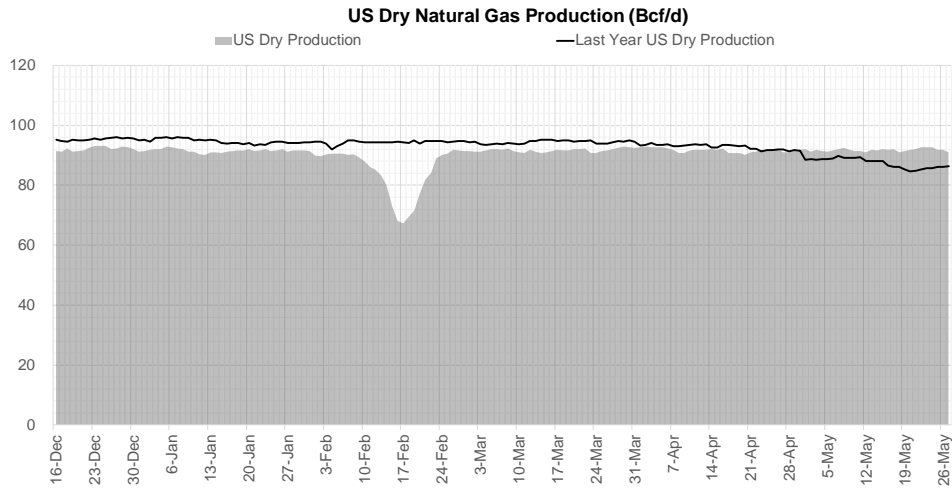
**Weather Storage Model - Next 4 Week Forecast**



[Go to larger image](#)



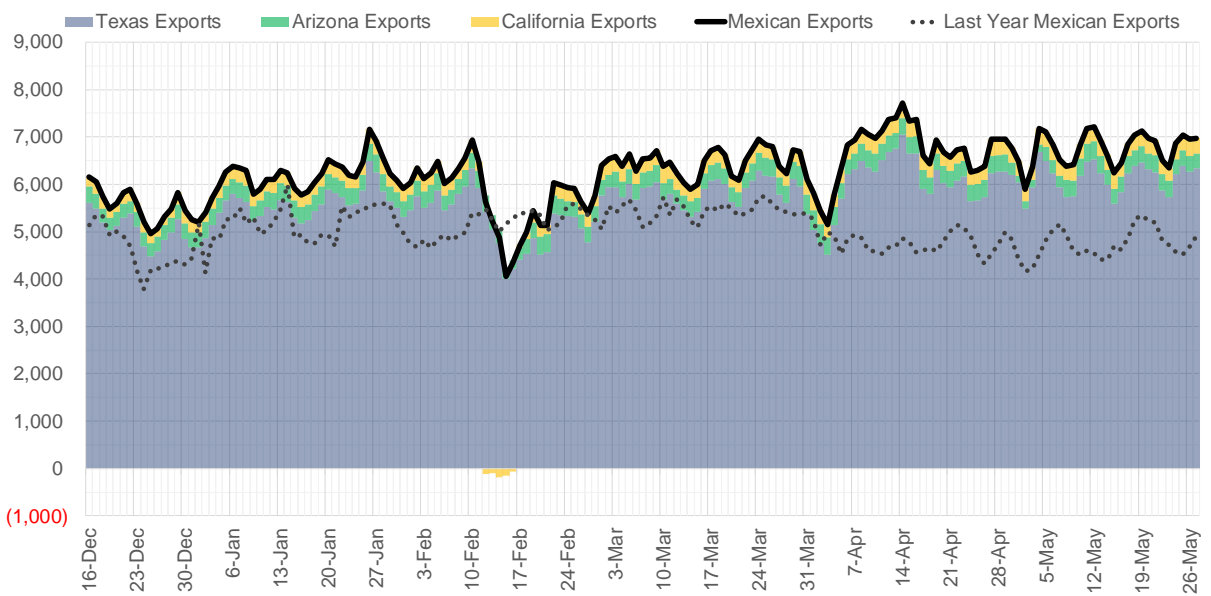
## Supply – Demand Trends



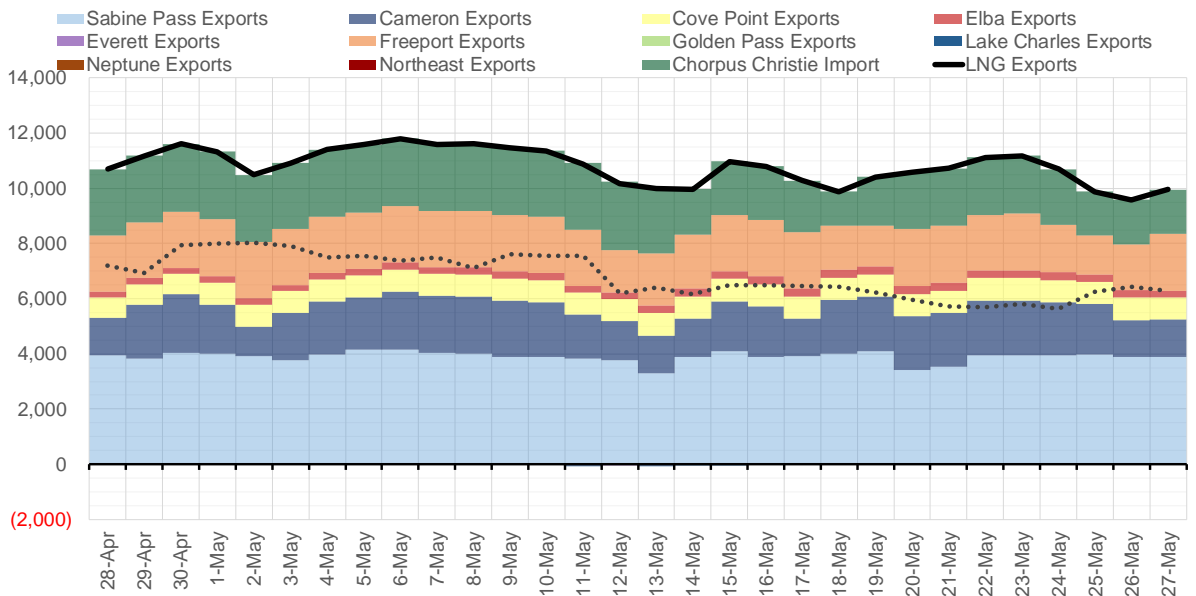
Source: Bloomberg

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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

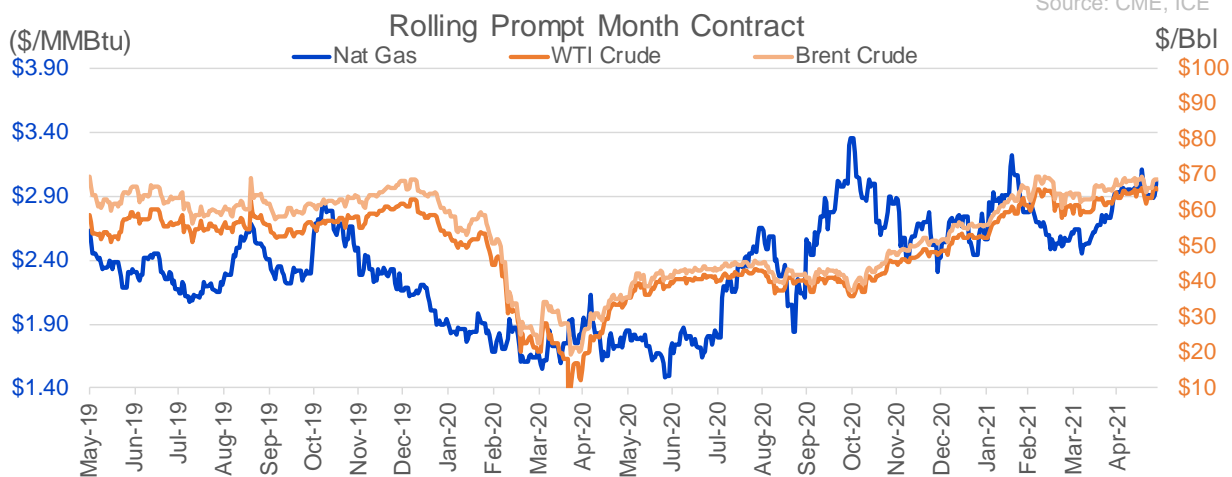
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
7	2021	C	3.50	14812	10	2021	C	4.00	40661
7	2021	P	2.80	10700	8	2021	C	3.50	34962
7	2021	P	2.75	7158	9	2021	C	4.00	33043
8	2021	C	4.00	6783	8	2021	C	3.25	32932
7	2021	P	2.50	6202	7	2021	C	3.50	30506
7	2021	P	2.70	5788	10	2021	C	3.25	30428
7	2021	P	2.65	5611	8	2021	C	4.00	29462
7	2021	C	3.25	5597	10	2021	P	2.50	28601
8	2021	C	3.50	5484	10	2021	C	5.00	27284
10	2021	C	3.50	4100	7	2021	C	4.00	26676
7	2021	C	3.00	4078	7	2021	C	3.25	26508
8	2021	P	2.50	3928	10	2021	C	3.50	26111
7	2021	C	3.10	3532	7	2021	P	2.50	23110
7	2021	C	3.40	3103	7	2021	P	2.75	21502
8	2021	C	3.40	2881	9	2021	C	3.50	21288
9	2021	C	3.40	2800	12	2021	C	4.00	20816
10	2021	C	3.25	2558	8	2021	P	2.00	20589
7	2021	P	2.60	2422	8	2021	P	2.50	20283
9	2021	C	3.50	2401	9	2021	P	2.00	20162
7	2021	P	3.00	2331	9	2021	P	2.50	20105
9	2021	C	3.25	2277	4	2022	C	3.00	19685
7	2021	P	2.85	2152	9	2021	C	3.25	19514
8	2021	P	2.75	2117	8	2021	P	2.25	19386
8	2021	P	2.80	2103	10	2021	C	3.00	19188
11	2021	P	2.50	2000	10	2021	P	2.00	18813
9	2021	P	2.75	1994	7	2021	C	3.00	18428
12	2021	C	3.50	1650	7	2021	P	2.80	18179
10	2021	P	2.00	1600	11	2021	C	4.00	18162
8	2021	P	2.70	1505	10	2021	P	2.25	17652
8	2021	C	3.25	1504	3	2022	C	4.00	16995
9	2021	P	2.70	1417	8	2021	C	3.75	16868
9	2021	P	2.80	1412	8	2021	C	3.00	16426
8	2021	P	2.90	1401	7	2021	P	2.00	16035
9	2021	P	2.90	1400	8	2021	P	2.75	15217
10	2021	P	2.70	1400	10	2021	P	2.75	14751
10	2021	P	2.90	1400	3	2022	C	3.00	14519
10	2021	P	2.75	1367	10	2021	C	4.50	14306
7	2021	C	3.20	1337	3	2022	C	5.00	14200
8	2021	P	2.60	1311	10	2021	C	6.00	13996
9	2021	P	2.60	1304	12	2021	P	2.00	13884
10	2021	P	2.60	1300	7	2021	P	3.00	13757
7	2021	P	2.90	1296	9	2021	P	1.90	13733
10	2021	C	3.75	950	7	2021	C	3.75	13603
8	2021	C	3.75	828	7	2021	P	2.25	13561
11	2021	P	3.00	800	7	2021	P	2.65	13440
3	2022	C	4.00	800	5	2022	C	3.00	13355
8	2021	P	2.65	752	1	2022	C	4.00	13215
7	2021	P	2.95	665	6	2022	C	3.00	13068
7	2021	P	2.95	665	10	2022	C	3.00	12856
7	2021	C	3.35	595	7	2021	C	2.75	12848

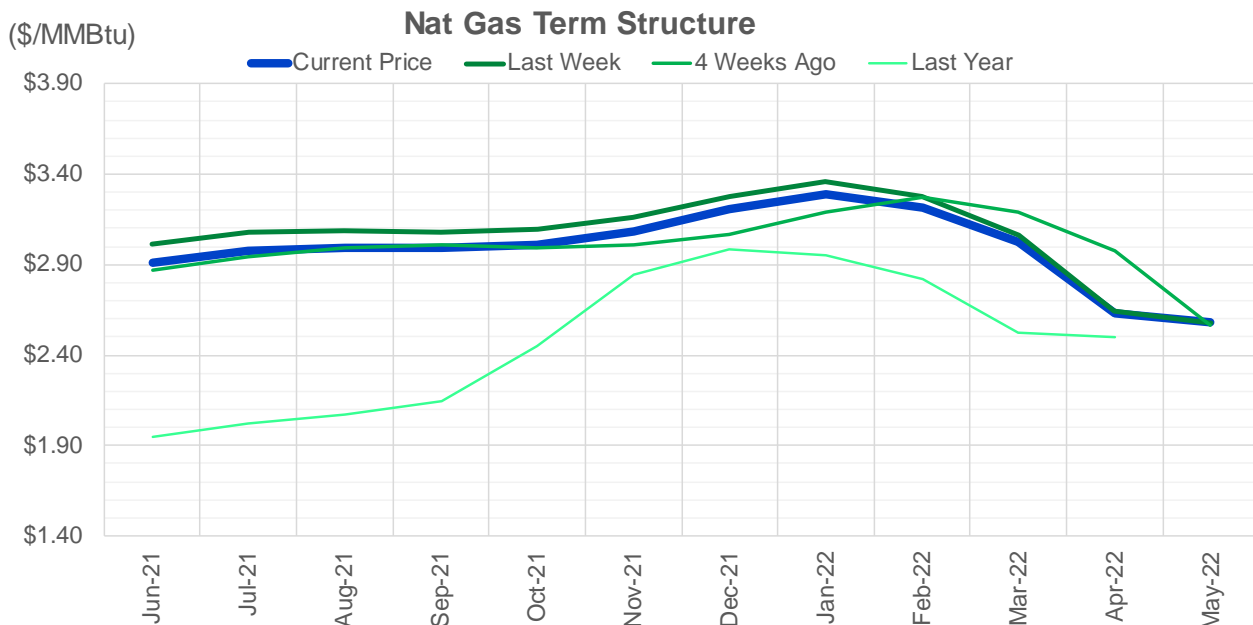
Source: CME, ICE



### 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
JUL 21	525	2946	-2421	JUL 21	86478	83718	2759
AUG 21	308153	296077	12076	AUG 21	101052	95024	6028
SEP 21	84652	83917	735	SEP 21	79521	79183	338
OCT 21	140604	135550	5054	OCT 21	76752	76093	658
NOV 21	133400	134160	-760	NOV 21	93223	93300	-77
DEC 21	75275	76463	-1188	DEC 21	69404	69592	-188
JAN 22	52281	50388	1893	JAN 22	64939	64962	-23
FEB 22	81787	80300	1487	FEB 22	71838	71497	342
MAR 22	30109	29928	181	MAR 22	56886	56552	333
APR 22	56109	56756	-647	APR 22	60340	60405	-65
MAY 22	56993	55796	1197	MAY 22	52639	52558	82
JUN 22	37209	36769	440	JUN 22	47469	46648	822
JUL 22	20505	20066	439	JUL 22	43495	43191	304
AUG 22	11463	11435	28	AUG 22	44337	44174	163
SEP 22	10356	10273	83	SEP 22	42314	42120	194
OCT 22	11107	10993	114	OCT 22	42688	42475	212
NOV 22	28282	28505	-223	NOV 22	47035	47046	-11
DEC 22	11577	11520	57	DEC 22	37885	37719	166
JAN 23	11331	11222	109	JAN 23	42224	42081	143
FEB 23	5920	5782	138	FEB 23	24677	24644	34
MAR 23	2766	2718	48	MAR 23	22471	22453	18
APR 23	5504	5508	-4	APR 23	24343	24248	95
MAY 23	5740	5791	-51	MAY 23	20098	20015	84
JUN 23	4500	4700	-200	JUN 23	19848	19800	48
JUL 23	964	964	0	JUL 23	18373	18327	46
AUG 23	1088	1089	-1	AUG 23	18396	18373	22
SEP 23	847	846	1	SEP 23	18494	18472	23
OCT 23	777	777	0	OCT 23	17901	17878	23
NOV 23	1721	1721	0	NOV 23	18653	18632	21
DEC 23	684	684	0	DEC 23	18167	18126	41





	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>\$2.913</b>	<b>\$2.974</b>	<b>\$2.993</b>	<b>\$2.990</b>	<b>\$3.009</b>	<b>\$3.081</b>	<b>\$3.207</b>	<b>\$3.287</b>	<b>\$3.217</b>	<b>\$3.025</b>	<b>\$2.631</b>	<b>\$2.581</b>
Last Week	\$3.012	\$3.078	\$3.091	\$3.082	\$3.098	\$3.160	\$3.280	\$3.357	\$3.277	\$3.067	\$2.639	\$2.579
vs. Last Week	-\$0.099	-\$0.104	-\$0.098	-\$0.092	-\$0.089	-\$0.079	-\$0.073	-\$0.070	-\$0.060	-\$0.042	-\$0.008	\$0.002
4 Weeks Ago	\$2.873	\$2.942	\$2.995	\$3.010	\$2.993	\$3.007	\$3.069	\$3.193	\$3.273	\$3.192	\$2.977	\$2.566
vs. 4 Weeks Ago	\$0.040	\$0.032	-\$0.002	-\$0.020	\$0.016	\$0.074	\$0.138	\$0.094	-\$0.056	-\$0.167	-\$0.346	\$0.015
Last Year	\$1.793	\$1.945	\$2.019	\$2.069	\$2.146	\$2.449	\$2.848	\$2.987	\$2.949	\$2.818	\$2.525	\$2.496
vs. Last Year	\$1.120	\$1.029	\$0.974	\$0.921	\$0.863	\$0.632	\$0.359	\$0.300	\$0.268	\$0.207	\$0.106	\$0.085

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	2.62	2.36	-0.26
TETCO M3	\$/MMBtu	2.38	2.33	-0.05
FGT Zone 3	\$/MMBtu	2.53	3.08	0.55
Zone 6 NY	\$/MMBtu	2.53	2.32	-0.21
Chicago Citygate	\$/MMBtu	2.78	2.88	0.10
Michcon	\$/MMBtu	2.77	2.83	0.06
Columbia TCO Pool	\$/MMBtu	2.50	2.53	0.03
Ventura	\$/MMBtu	2.69	2.83	0.14
Rockies/Opal	\$/MMBtu	2.76	2.80	0.04
El Paso Permian Basin	\$/MMBtu	2.46	2.87	0.41
Socal Citygate	\$/MMBtu	3.96	3.58	-0.38
Malin	\$/MMBtu	2.78	3.07	0.29
Houston Ship Channel	\$/MMBtu	2.91	3.10	0.19
Henry Hub Cash	\$/MMBtu	2.85	2.84	0.00
AECO Cash	C\$/GJ	2.57	2.48	-0.09
Station2 Cash	C\$/GJ	2.53	2.94	0.41
Dawn Cash	C\$/GJ	2.77	2.82	0.05

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks Ago	vs. Last Year
NatGas Jul21/Oct21	\$/MMBtu	0.035	▲ 0.015	▲ 0.023	▲ 0.037
NatGas Oct21/Nov21	\$/MMBtu	0.072	▲ 0.010	▲ 0.010	▲ 0.024
NatGas Oct21/Jan22	\$/MMBtu	0.278	▲ 0.019	▲ 0.012	▼ -0.009
NatGas Apr22/Oct22	\$/MMBtu	0.035	▲ 0.014	▲ 0.013	▼ -0.019
WTI Crude	\$/Bbl	66.07	▲ 0.580	▲ 3.130	▲ 31.720
Brent Crude	\$/Bbl	68.65	▼ -0.060	▲ 2.230	▲ 32.480
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	203.54	▼ -2.100	▲ 12.970	▲ 104.460
Propane, Mt. Bel	cents/Gallon	0.82	▲ 0.004	▲ 0.007	▲ 0.409
Ethane, Mt. Bel	cents/Gallon	0.26	▼ -0.003	▲ 0.023	▲ 0.037
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

