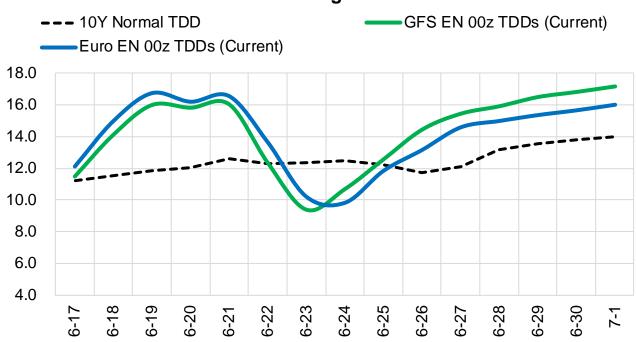


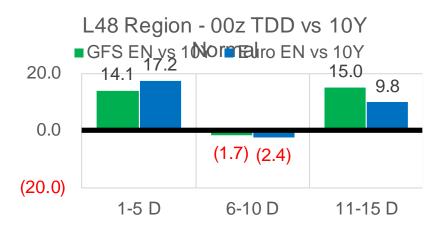


## Short-term Weather Model Outlooks (00z)



## L48 Region

## Vs. 10Y Normal



Source: WSI, Bloomberg

# **Market Report**

#### **Daily Balances**

	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun	DoD	vs.7D
Lower 48 Dry Production	92.7	91.7	91.6	91.5	91.4	90.8	90.9	<b>0.1</b>	▼ -0.7
Canadian Imports	5.1	5.0	5.1	5.3	5.2	5.2	5.0	▼ -0.2	<b>T-0.1</b>
L48 Power	34.5	34.4	35.0	36.5	35.0	33.8	34.3	<b>a</b> 0.4	<b>-</b> 0.6
L48 Residential & Commercial	8.6	7.4	7.6	8.1	8.3	8.7	8.3	<b>V</b> -0.3	<b>0.2</b>
L48 Industrial	21.1	20.7	20.9	20.9	20.9	20.9	20.6	<b>T</b> -0.2	<b>V</b> -0.3
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.0	5.0	5.0	<b>0</b> .0	▼ 0.0
L48 Pipeline Distribution	2.1	2.1	2.1	2.2	2.1	2.1	2.1	<b>0.0</b>	▼ 0.0
L48 Regional Gas Consumption	71.5	69.7	70.5	72.7	71.4	70.5	70.3	<b>T-0.1</b>	<b>▼ -0.7</b>
Net LNG Delivered	9.84	9.84	9.64	8.95	9.28	9.75	9.75	▼ 0.0	<b>0.2</b>
Total Mexican Exports	7.4	7.2	7.2	7.5	7.8	8.0	7.6	<b>-0.4</b>	<b>0.1</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	9.0	10.0	9.3	7.6	8.0	7.8	8.2		

Lower 48 Component Models

Daily Model Error

#### **EIA Storage Week Balances**

	7-May	14-May	21-May	28-May	4-Jun	11-Jun	WoW	vs. 4W
Lower 48 Dry Production	91.3	91.5	91.4	92.1	92.0	92.4	▲ 0.4	<b>0.6</b>
Canadian Imports	4.6	4.8	4.6	4.5	3.9	4.8	<b>0.9</b>	<b>0.3</b>
L48 Power	26.9	26.1	26.5	29.5	27.8	34.4	<b>6</b> .6	<b>7</b> .0
L48 Residential & Commercial	13.9	18.2	10.5	9.4	11.8	8.4	▼ -3.3	<b>-4</b> .1
L48 Industrial	19.6	17.7	19.7	19.8	17.2	21.0	<b>3.7</b>	<b>2</b> .4
L48 Lease and Plant Fuel	5.0	5.0	5.0	5.0	5.1	5.1	▲ 0.0	<b>a</b> 0.1
L48 Pipeline Distribution	2.1	2.3	1.9	2.0	2.0	2.1	<b>0.1</b>	<b>a</b> 0.1
L48 Regional Gas Consumption	67.4	69.2	63.6	65.7	63.8	71.0	<b>A</b> 7.2	<b>5.4</b>
Net LNG Exports	11.3	11.0	10.4	10.5	11.0	9.4	▼ -1.6	▼-1.3
Total Mexican Exports	6.7	6.8	6.8	6.7	7.2	7.3	<b>0.1</b>	<b>0.4</b>
Implied Daily Storage Activity	10.5	9.3	15.2	13.7	13.8	9.4	-4.4	
EIA Reported Daily Storage Activity	10.1	10.1	16.4	14.0	14.0			
Daily Model Error	0.4	-0.8	-1.2	-0.3	-0.2			

#### **Monthly Balances**

-	2Yr Ago	LY					MTD		
	Jun-19	Jun-20	Feb-21	Mar-21	Apr-21	May-21	Jun-21	МоМ	vs. LY
Lower 48 Dry Production	91.5	87.7	85.2	91.8	91.4	91.6	92.0	<b>0.4</b>	<b>0.2</b>
Canadian Imports	4.7	4.0	6.3	4.8	4.7	4.5	4.8	<b>0.3</b>	<b>0.1</b>
L48 Power	33.1	35.0	27.8	24.2	25.0	27.0	34.0	<b>6</b> .9	<b>4</b> 9.7
L48 Residential & Commercial	9.0	8.8	47.1	29.3	20.0	13.1	8.3	<b>-</b> 4.8	▼-21.0
L48 Industrial	22.5	19.9	21.3	19.7	20.2	18.9	20.3	<b>1</b> .4	<b>a</b> 0.6
L48 Lease and Plant Fuel	5.0	4.8	4.7	5.0	5.0	5.0	5.1	<b>A</b> 0.1	▲ 0.0
L48 Pipeline Distribution	2.1	2.2	3.3	2.5	2.2	2.1	2.1	<b>0.0</b>	<b>-</b> 0.5
L48 Regional Gas Consumption	71.7	70.7	104.1	80.9	72.5	66.1	69.7	<b>3.7</b>	▼-11.1
Net LNG Exports	5.5	4.0	8.6	11.1	11.5	10.8	9.8	▼-1.1	▼-1.4
Total Mexican Exports	5.2	5.5	5.8	6.5	6.7	6.8	7.4	<b>0.7</b>	<b>1.0</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	13.8	11.5	-27.0	-2.0	5.4	12.4	9.9		

Source: Bloomberg, analytix.ai

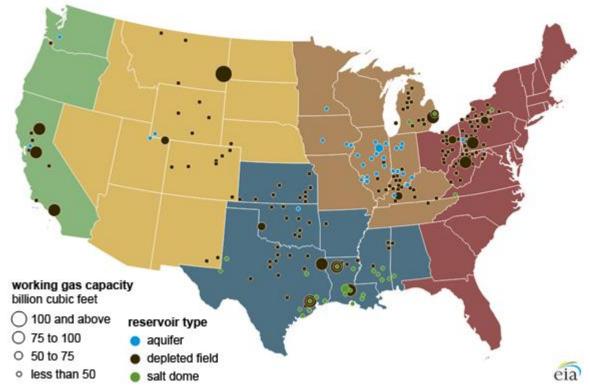


## Regional S/D Models Storage Projection

Week Ending	11-Jun			
	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	9.1	0.8	9.9	69
East Midwest Mountain South Central Pacific	2.0 4.1 4.7 -3.2 1.4	1.0 -0.7 -3.4 4.4 -0.5	3.0 3.4 1.4 1.2 0.9	21 24 10 9 6

\*Adjustment Factor is calcuated based on historical regional deltas

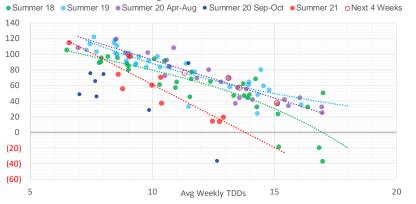
### U.S. underground natural gas storage facilities by type (July 2015)



## Weather Model Storage Projection

Next report and beyond		
Week Ending	GWDDs	Week Storage Projection
11-Jun	13.1	69
18-Jun	11.3	76
25-Jun	13.6	57
02-Jul	15.1	37

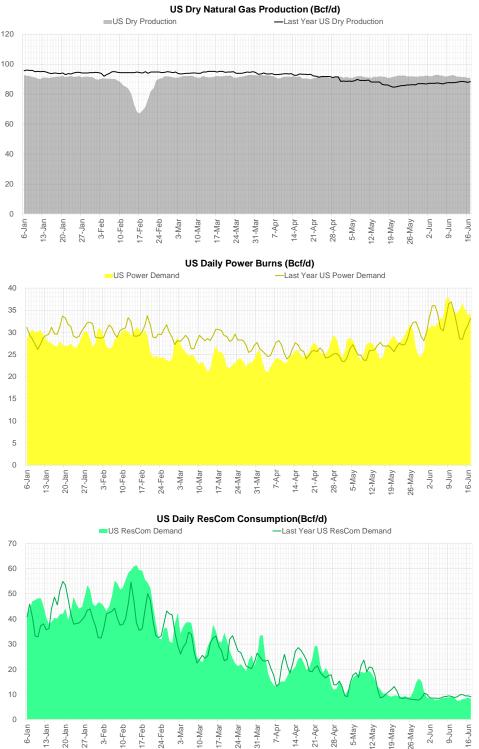
#### Weather Storage Model - Next 4 Week Forecast



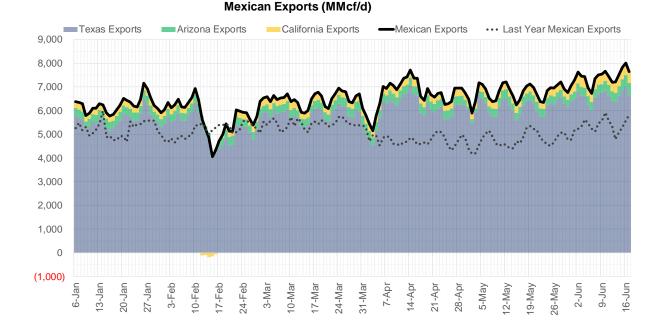
# Go to larger image

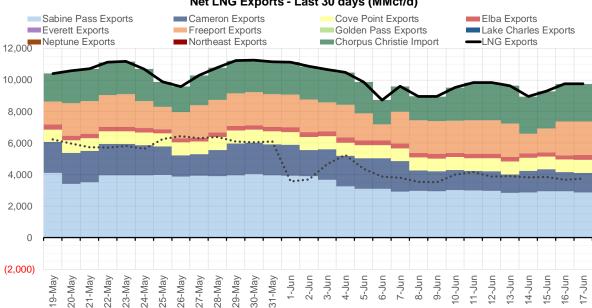






Source: Bloomberg





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

Source: Bloomberg

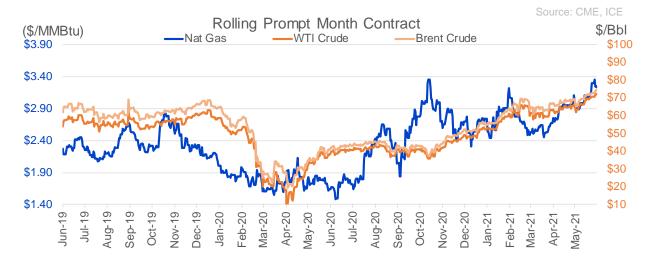


### Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

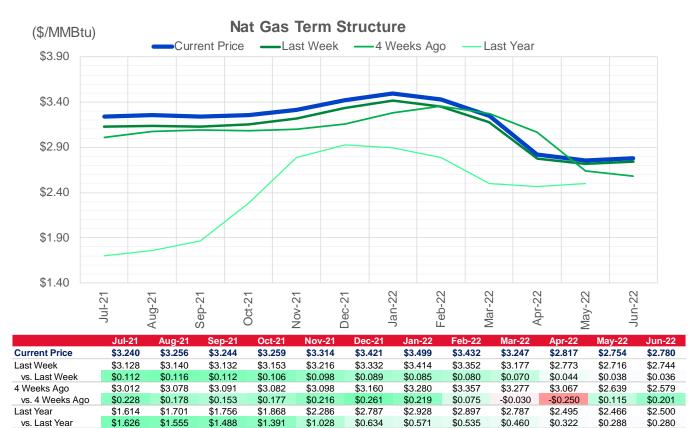
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
10	2021	С	3.50	13545	10	2021	С	4.00	45935
7	2021	C	3.50	10241	9	2021	С	4.00	40572
7	2021	C	3.25	6819	8	2021	С	3.50	39626
8	2021	C	3.40	6040	7	2021	С	3.50	37062
11	2021	C	3.75	6000	8	2021	С	4.00	37034
11	2021	C	4.00	4832	10	2021	Р	2.50	33992
8	2021	Р	3.00	4736	10	2021	С	3.50	33726
8	2021	С	4.00	3491	7	2021	Р	2.90	29957
10	2021	С	4.00	3487	8	2021	Р	2.50	29379
10	2021	Р	2.75	3141	10	2021	С	3.25	28855
8	2021	Р	2.90	3075	7	2021	Р	2.50	28794
7	2021	С	3.40	3021	7	2021	С	4.00	28471
7	2021	P	3.25	2809	8	2021	Р	2.90	28315
10	2021	С	4.50	2760	8	2021	Р	3.00	28260
9	2021	С	4.00	2751	7	2021	С	3.25	27962
10	2021	Р	2.50	2577	10	2021	С	5.00	27884
8	2021	Р	3.20	2525	8	2021	С	3.25	27087
7	2021	С	3.35	2369	10	2021	Р	2.75	26340
8	2021	С	3.65	2018	7	2021	Р	2.75	26183
9	2021	C	3.65	2002	9	2021	С	3.50	26120
10	2021	С	3.65	2000	7	2021	Р	3.00	25857
10	2021	С	5.05	2000	9	2021	Р	2.50	24000
8	2021	C	3.25	1738	8	2021	С	3.75	23510
9	2021	С	3.25	1616	7	2021	Р	2.85	23491
8	2021	Р	3.25	1499	7	2021	Р	2.80	23071
7	2021	Р	3.00	1450	10	2021	P	2.00	22836
9	2021	С	3.50	1322	7	2021	С	3.75	22015
3	2022	C	4.50	1102	7 12	2021	C C	3.00	21981
7	2021	C	3.60	1014		2021	P	4.00	20486
8	2021	Р	2.50	1006	9	2021 2021	P C	2.00	20423
10	2021	Р	3.00	1001	9 8	2021	P	3.25 2.75	20178 19982
9	2021	Р	2.50	1000	8	2021	P	2.75	19982
9	2021	Р	2.90	1000	8	2021	P C	2.00	19664
10	2021	С	5.00	1000	8	2022	P	2.25	19598
10	2021	Р	2.90	1000	10	2021	P	2.25	18463
7	2021	Р	3.10	999	10	2021	C	3.00	18010
7	2021	С	3.30	927	10	2021	c	4.00	17846
10	2021	C	3.80	877	10	2021	c	4.50	17260
9	2021	P	3.00	851	3	2021	c	4.00	16900
7	2021	Р	3.15	783	8	2022	c	3.00	16068
12	2021	С	4.00	725	7	2021	P	2.00	16035
8	2021	С	4.20	705	3	2022	Ċ	3.00	15543
8	2021	c	3.35	703	11	2022	P	2.50	15470
10	2021	C	4.25	550	7	2021	P	2.70	15371
7	2021	P	3.20	500	10	2021	C	6.00	14164
11	2021	C	5.50	500	3	2022	c	5.00	14101
7	2021	P	2.90	492	7	2022	c	3.15	13983
4	2022	P	2.50	475	12	2021	P	2.00	13884
9	2021	P	3.25	430	9	2021	Р	19	13732
-	-				-		Source	e: CMÉ, 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									
CME Henry H	lub Futures (1			ICE Henry					
	Current	Prior	Daily Change		Current	Prior	Daily Change		
JUL 21	115887	136364	-20477	JUL 21	90666	93943	-3277		
AUG 21	177823	170740	7083	AUG 21	80131	80774	-643		
SEP 21	201506	204369	-2863	SEP 21	83435	83396	40		
OCT 21	145869	145808	61	OCT 21	100133	100076	57		
NOV 21	90274	90458	-184	NOV 21	70475	70464	11		
DEC 21	63965	63732	233	DEC 21	67674	67680	-7		
JAN 22	91626	90547	1079	JAN 22	84267	83327	941		
FEB 22	37987	36483	1504	FEB 22	64882	63189	1693		
MAR 22	83106	81911	1195	MAR 22	65045	64495	551		
APR 22	77847	77177	670	APR 22	57196	56886	311		
MAY 22	50097	50014	83	MAY 22	53948	53656	292		
JUN 22	23716	23946	-230	JUN 22	50190	49922	268		
JUL 22	15947	15567	380	JUL 22	48361	48251	110		
AUG 22	17030	17240	-210	AUG 22	48801	48646	156		
SEP 22	14751	14553	198	SEP 22	49331	49214	117		
OCT 22	44855	45270	-415	OCT 22	54907	54716	191		
NOV 22	16695	16889	-194	NOV 22	42931	42691	240		
DEC 22	12579	12475	104	DEC 22	46616	46412	205		
JAN 23	7949	7151	798	JAN 23	25792	25717	75		
FEB 23	2841	2842	-1	FEB 23	23485	23444	41		
MAR 23	6959	6934	25	MAR 23	26383	26172	211		
APR 23	8240	8177	63	APR 23	21471	21268	203		
MAY 23	4530	4539	-9	MAY 23	21229	21039	190		
JUN 23	1082	1086	-4	JUN 23	19753	19567	186		
JUL 23	1785	1790	-5	JUL 23	19651	19459	193		
AUG 23	880	881	-1	AUG 23	19653	19461	192		
SEP 23	1006	925	81	SEP 23	19188	19003	186		
OCT 23	2295	2297	-2	OCT 23	20076	19874	202		
NOV 23	801	801	0	NOV 23	18959	18924	36		
DEC 23	1134	1135	-1	DEC 23	19560	19547	13		



# **Market Report**



		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	2.42	2.74	0.32
TETCO M3	\$/MMBtu	2.25	2.60	0.35
FGT Zone 3	\$/MMBtu	2.33	3.22	0.89
Zone 6 NY	\$/MMBtu	2.33	2.57	0.24
Chicago Citygate	\$/MMBtu	3.09	3.06	-0.03
Michcon	\$/MMBtu	3.08	2.99	-0.09
Columbia TCO Pool	\$/MMBtu	2.76	2.59	-0.17
Ventura	\$/MMBtu	2.66	2.99	0.33
Rockies/Opal	\$/MMBtu	3.35	3.01	-0.34
El Paso Permian Basin	\$/MMBtu	3.04	3.12	0.08
Socal Citygate	\$/MMBtu	5.68	4.43	-1.25
Malin	\$/MMBtu	3.41	3.47	0.06
Houston Ship Channel	\$/MMBtu	3.23	3.19	-0.04
Henry Hub Cash	\$/MMBtu	3.31	3.01	-0.30
AECO Cash	C\$/GJ	2.71	2.66	-0.05
Station2 Cash	C\$/GJ	2.34	3.39	1.05
Dawn Cash	C\$/GJ	3.08	3.01	-0.07

Source: CME, Bloomberg

П	ENERGY

					vs	. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week		Ago	vs	. Last Year
NatGas Jul21/Oct21	\$/MMBtu	0.026		-0.002		0.003		0.017
NatGas Oct21/Nov21	\$/MMBtu	0.054		-0.012		-0.010		0.011
NatGas Oct21/Jan22	\$/MMBtu	0.237		-0.025	▼	-0.029	▼	-0.036
NatGas Apr22/Oct22	\$/MMBtu	0.018		0.000		-0.009	▼	-0.036
WTI Crude	\$/Bbl	72.15		2.190		8.790		34.190
Brent Crude	\$/Bbl	74.39		2.170		7.730		33.680
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	210.34		-2.610		9.630		92.140
Propane, Mt. Bel	cents/Gallon	0.95		0.012		0.131		0.448
Ethane, Mt. Bel	cents/Gallon	0.28		0.006		0.017		0.050
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						





Summer 18

Summer 19

Summer 20 Apr-Aug

Summer 20 Sept-Oct

t • Summer 21

ONext 4 Weeks

