

### 22 June 2021

	Cı	urrent	Δ fro	m YD		m 7D vg
Nat Gas Prompt	\$	3.24	<b>\$</b>	0.05	<b>\$</b>	0.01

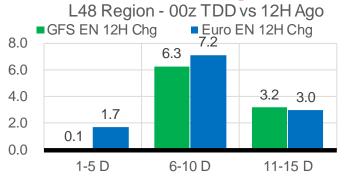
	С	urrent	Δ from YD	Δ from Av	
WTI Prompt	\$	73.15	<b>\$</b> (0.51)	<b>\$</b>	1.2

	<u> </u>	ırrent	Δ from YD	Δ from 7D		
	Current	ם וווטוו זט	Av	g		
Brent Prompt	\$	74.44	<b>*</b> \$ (0.46)	<b>\$</b>	0.6	
i ionibr						

#### Page Menu

Short-term Weather Model Outlooks
Lower 48 Component Models
Regional S/D Models Storage Projection
Weather Model Storage Projection
Supply – Demand Trends
Nat Gas Options Volume and Open Interest
Nat Gas Futures Open Interest
Price Summary

## Vs. 12H Ago



## Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago GFS EN 24H Chg ■ Euro EN 24H Chg 10.0 5.6 5.0 2.9 2.5 0.0 (0.7) (1.1)(5.0)(4.6)(10.0)1-5 D 6-10 D 11-15 D

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	90.7	▼ -2.28	

	Current	Δ from YD	Δ from 7D Avg
US ResComm	8.6	▼ -0.17	<b>a</b> 0.33

	Current	Δ from YD	Δ from 7D Avg		
Net LNG Exports	9.8	<b>▼</b> -0.42	▼ -0.15		

	Current	Δ from YD	Δ from 7D Avg		
US Power Burns	32.5	▼ -2.41	<b>▼</b> -2.45		

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.4	-0.50	<b>-</b> 0.61

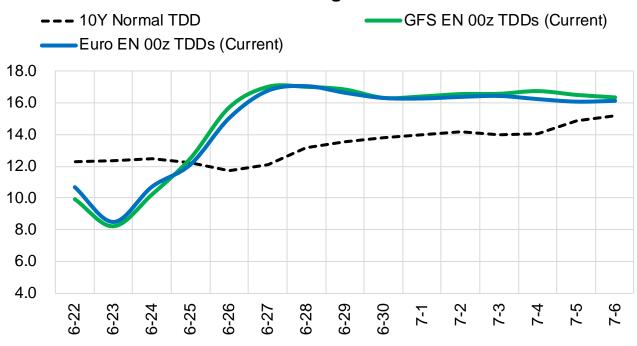
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	7.4	<b>-</b> 0.05	▼ -0.15



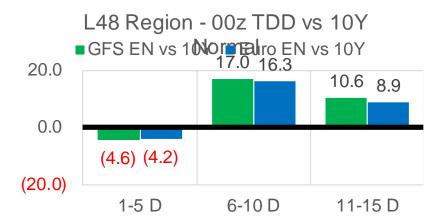


### Short-term Weather Model Outlooks (00z)

### L48 Region



### Vs. 10Y Normal



Source: WSI, Bloomberg



## Lower 48 Component Models

#### **Daily Balances**

	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun	DoD	vs. 7D
Lower 48 Dry Production	91.1	92.1	92.4	92.6	93.0	93.0	90.7	▼ -2.3	▼-1.7
Canadian Imports	5.1	5.2	5.1	4.6	4.8	4.9	4.4	▼-0.5	▼ -0.6
L48 Power	33.8	34.9	36.0	34.8	35.4	35.0	32.5	▼-2.4	▼-2.4
L48 Residential & Commercial	8.6	8.6	8.1	7.7	7.9	8.8	8.6	▼-0.2	<b>0.3</b>
L48 Industrial	22.7	22.7	22.7	22.0	22.0	21.8	21.6	▼-0.2	▼ -0.7
L48 Lease and Plant Fuel	5.0	5.1	5.1	5.1	5.1	5.1	5.0	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	2.1	2.1	2.2	2.1	2.1	2.2	2.0	▼ -0.1	▼ -0.1
L48 Regional Gas Consumption	72.2	73.4	74.2	71.7	72.5	72.8	69.8	▼ -3.0	▼ -3.0
Net LNG Delivered	9.69	9.75	9.73	10.34	10.48	10.19	9.77	▼-0.4	▼ -0.3
Total Mexican Exports	7.8	7.9	7.9	7.2	7.0	7.5	7.4	▼ -0.1	▼ -0.1
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	6.5	6.3	5.7	8.0	7.8	7.4	8.1		

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

	14-May	21-May	28-May	4-Jun	11-Jun	18-Jun	WoW	vs. 4W
Lower 48 Dry Production	91.8	91.7	92.4	92.2	92.6	91.9	▼-0.7	▼-0.3
Canadian Imports	4.8	4.6	4.5	3.9	4.8	5.1	<b>0.3</b>	<b>0.7</b>
L48 Power	26.1	26.5	29.5	27.8	34.4	34.9	<b>0.4</b>	<b>5.3</b>
L48 Residential & Commercial	18.2	10.5	9.4	11.7	8.4	8.1	▼-0.2	<b>▼</b> -1.9
L48 Industrial	18.0	20.0	20.1	18.0	20.8	22.2	<b>1.4</b>	<b>2.5</b>
L48 Lease and Plant Fuel	5.0	5.0	5.1	5.1	5.1	5.1	▼ 0.0	<b>0.0</b>
L48 Pipeline Distribution	2.3	1.9	2.0	2.0	2.1	2.1	<b>0.0</b>	<b>0.1</b>
L48 Regional Gas Consumption	69.5	63.9	66.0	64.6	70.8	72.4	<b>1.6</b>	<b>▲ 6.1</b>
Net LNG Exports	11.0	10.4	10.5	11.0	9.4	9.6	<b>0.1</b>	▼-0.8
Total Mexican Exports	6.8	6.8	6.7	7.2	7.3	7.5	<b>▲</b> 0.2	<b>0.5</b>
Implied Daily Storage Activity	9.3	15.2	13.7	13.3	9.8	7.5	-2.3	
EIA Reported Daily Storage Activity	10.1	16.4	14.0	14.0	2.3			
Daily Model Error	-0.9	-1.2	-0.3	-0.7	7.5			

Monthly Balances									
•	2Yr Ago	LY					MTD		
	Jun-19	Jun-20	Feb-21	Mar-21	Apr-21	May-21	Jun-21	MoM	vs. LY
Lower 48 Dry Production	91.5	87.7	85.2	91.8	91.7	91.9	92.3	<b>0.4</b>	<b>0.5</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	34.2	<b>7.2</b>	<b>1</b> 0.0
L48 Residential & Commercial	9.0	8.8	47.1	29.3	20.0	13.1	8.3	<b>▼</b> -4.8	<b>▼-21.0</b>
L48 Industrial	22.5	19.9	21.3	19.7	20.5	19.3	21.1	<b>1.9</b>	<b>1.4</b>
L48 Lease and Plant Fuel	5.0	4.8	4.7	5.0	5.0	5.0	5.1	<b>0.1</b>	<b>0.1</b>
L48 Pipeline Distribution	2.1	2.2	3.3	2.5	2.2	2.1	2.1	<b>0.0</b>	▼-0.5
L48 Regional Gas Consumption	71.7	70.7	104.1	80.9	72.8	66.5	70.8	<b>4.3</b>	▼-10.1
Net LNG Exports	5.5	4.0	8.6	11.1	11.5	10.8	9.8	▼-1.0	▼-1.3
Total Mexican Exports	5.2	5.5	5.8	6.5	6.7	6.8	7.4	<b>0.6</b>	▲ 0.9
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	13.8	11.5	-27.0	-2.0	5.4	12.4	9.1		

Source: Bloomberg, analytix.ai

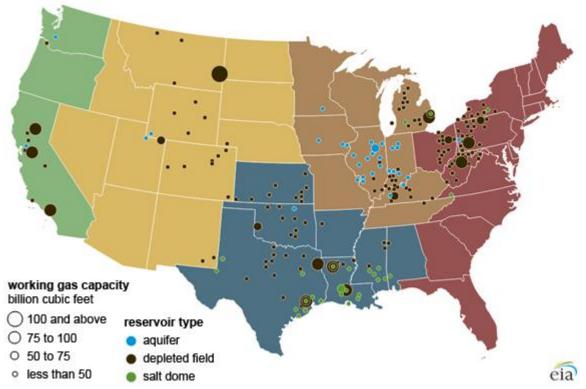
## Regional S/D Models Storage Projection

Week Ending 18-Jun

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	7.2	0.5	7.7	54
East	3.3	0.6	3.9	28
Midwest	3.7	-0.8	2.9	20
Mountain	4.6	-3.7	0.9	7
South Central	-5.1	4.6	-0.6	-4
Pacific	0.6	-0.1	0.5	4

<sup>\*</sup>Adjustment Factor is calcuated based on historical regional deltas

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



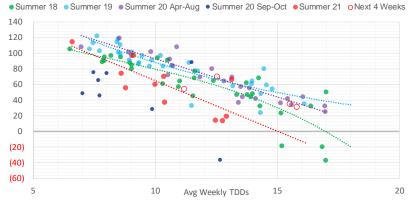


## Weather Model Storage Projection

Next report
and beyond

Week Ending	GWDDs	Week Storage Projection
18-Jun	11.2	54
25-Jun	12.5	70
02-Jul	15.5	35
09-Jul	15.8	31

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



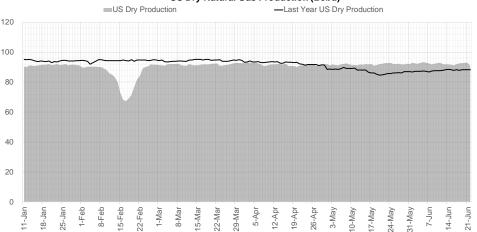
Go to larger image



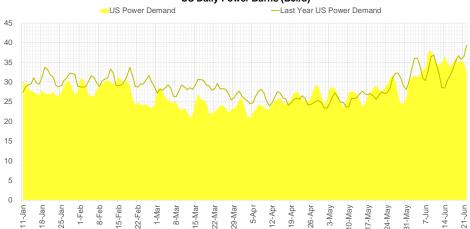


### Supply - Demand Trends

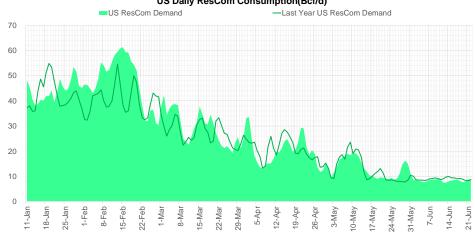
#### US Dry Natural Gas Production (Bcf/d)



#### US Daily Power Burns (Bcf/d)



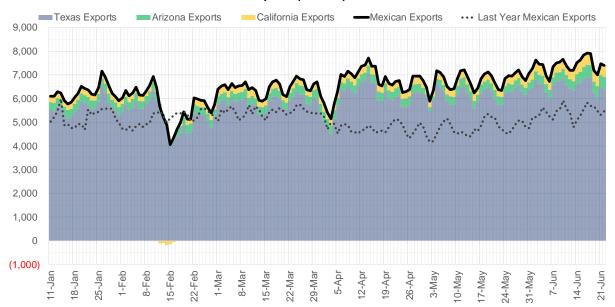
#### US Daily ResCom Consumption(Bcf/d)



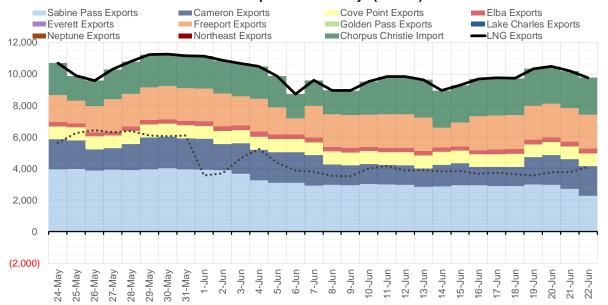
Source: Bloomberg



#### Mexican Exports (MMcf/d)



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



Source: Bloomberg



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

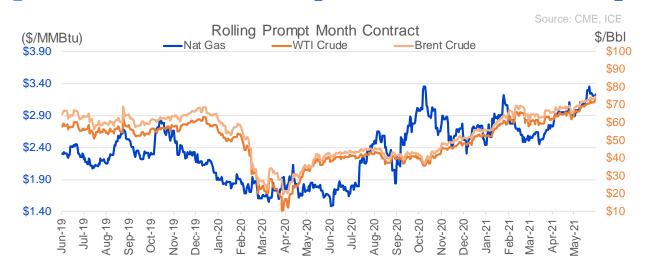
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
7	2021	Р	2.95	11517	10	2021	С	4.00	45037
, 7	2021	Р	3.05	8725	8	2021	Č	3.50	42442
7	2021	P	3.00	7534	9	2021	Ċ	4.00	41600
7	2021	P	2.85	5953	8	2021	Ċ	4.00	39347
7	2021	C	3.25	4734	7	2021	C	3.50	35790
7	2021	Ċ	3.20	2344	10	2021	С	3.50	34494
10	2021	Ċ	4.50	2000	10	2021	Р	2.50	32858
8	2021	Č	3.50	1910	7	2021	С	3.25	30021
7	2021	P	3.10	1666	8	2021	Р	3.00	30016
10	2021	P	2.00	1500	7	2021	Р	2.90	29616
7	2021	P	3.15	1479	8	2021	Р	2.50	29301
8	2021	C	3.30	1209	10	2021	С	5.00	28851
7	2021	Ċ	3.30	1049	7	2021	Р	2.50	28794
7	2021	P	3.25	1027	10	2021	С	3.25	28720
, 7	2021	C	3.15	1026	7	2021	С	4.00	28471
9	2021	Č	3.50	1011	8	2021	С	3.75	27889
8	2021	P	3.00	911	9	2021	С	3.50	27128
8	2021	Ċ	3.75	886	7	2021	Р	2.75	26182
7	2021	Č	3.40	812	8	2021	Р	2.90	25689
8	2021	P	2.80	785	8	2021	С	3.25	24839
10	2021	P	2.75	750	10	2021	Р	2.75	24794
7	2021	C	3.50	730 724	7	2021	Р	3.00	24134
7 10		C			9	2021	Р	2.50	24000
8	2021 2021	C	3.75 3.90	702 684	7	2021	Р	2.85	23644
9		C			7	2021	Р	2.80	23469
9	2021	P	3.20	663	12	2021	С	4.00	23366
	2021		3.20	660	10	2021	Р	2.00	22736
7	2021	С	3.35	643	7	2021	С	3.75	21846
8	2021	С	3.25	605	7	2021	С	3.00	21299
7	2021	С	3.55	587	9	2021	Р	2.00	20423
8	2021	С	3.35	578	9	2021	С	3.25	20311
8	2021	P	2.75	552	8	2021	Р	2.75	20023
1	2022	P	2.25	550	8	2021	Р	2.00	19664
3	2022	P	2.25	550	4	2022	С	3.00	19598
8	2021	С	4.00	519	8	2021	Р	2.25	19478
11	2021	P	3.00	514	10	2021	Р	2.25	19463
7	2021	P	3.20	510	10	2021	С	4.50	19428
8	2021	P	2.65	503	10	2021	С	3.00	18010
9	2021	P	2.90	501	11	2021	С	4.00	17748
11	2021	С	3.80	500	3	2022	С	4.00	16906
9	2021	С	4.25	444	8	2021	С	3.00	16069
10	2021	Р	2.50	441	7	2021	Р	2.00	16035
8	2021	С	3.85	410	8	2021	С	3.30	15701
12	2022	С	3.00	410	11	2021	Р	2.50	15470
8	2021	С	4.50	404	7	2021	Р	2.70	15368
10	2021	С	5.00	401	3	2022	С	3.00	15293
11	2022	С	3.00	400	10	2021	С	6.00	14648
10	2021	Р	2.60	369	3	2022	С	5.00	14141
9	2021	Р	2.65	343	12	2021	Р	2.00	13884
8	2021	Р	3.10	333	7	2021	<b>C</b> Source	3.15 :: CME, ICE	13830.5



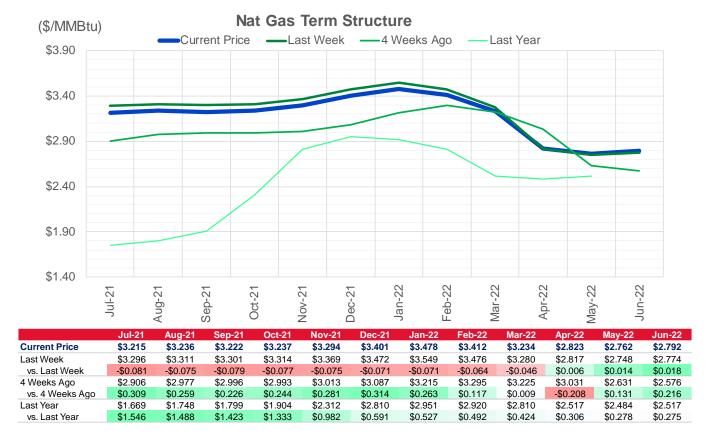
## Nat Gas Futures Open Interest

CME, and ICE Combined

CME Henry	CME Henry Hub Futures (10,000 MMBtu) ICE Henry Hub Futures Contract Equivalent (10,000 MM							
	Current	Prior	Daily Change		Current	Prior	Daily Change	
JUL 21	57754	78648	-20894	JUL 21	90486	89185	1302	
AUG 21	197010	189620	7390	AUG 21	80399	80353	47	
SEP 21	204671	202042	2629	SEP 21	85090	84745	344	
OCT 21	143991	144272	-281	OCT 21	98441	99113	-672	
NOV 21	91670	91930	-260	NOV 21	70836	70966	-130	
DEC 21	64102	64806	-704	DEC 21	67766	67784	-18	
JAN 22	94201	92743	1458	JAN 22	84528	84679	-152	
FEB 22	38040	38158	-118	FEB 22	65491	65459	32	
MAR 22	82886	82842	44	MAR 22	65071	64903	168	
APR 22	74642	76652	-2010	APR 22	58177	57995	182	
MAY 22	51075	50789	286	MAY 22	54360	54342	18	
JUN 22	23668	23587	81	JUN 22	50781	50696	85	
JUL 22	16481	15958	523	JUL 22	48877	48797	80	
AUG 22	17175	17061	114	AUG 22	49256	49246	10	
SEP 22	15385	15191	194	SEP 22	49372	49325	47	
OCT 22	47211	47039	172	OCT 22	55910	55900	10	
NOV 22	18857	17818	1039	NOV 22	43438	43354	85	
DEC 22	13040	12829	211	DEC 22	46823	46798	26	
JAN 23	7875	7857	18	JAN 23	25875	25852	23	
FEB 23	2836	2819	17	FEB 23	23645	23625	21	
MAR 23	7057	7049	8	MAR 23	26751	26688	63	
APR 23	8326	8411	-85	APR 23	21169	21177	-8	
MAY 23	4531	4531	0	MAY 23	21366	21336	31	
JUN 23	1082	1082	0	JUN 23	19889	19860	29	
JUL 23	1785	1785	0	JUL 23	19744	19715	30	
AUG 23	880	880	0	AUG 23	19730	19700	30	
SEP 23	1012	1016	-4	SEP 23	19288	19258	29	
OCT 23	2320	2320	0	OCT 23	20302	20271	31	
NOV 23	802	802	0	NOV 23	19100	18948	153	
DEC 23	1133	1133	0	DEC 23	19482	19549	-67	







		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	2.75	2.96	0.21
TETCO M3	\$/MMBtu	2.58	2.76	0.18
FGT Zone 3	\$/MMBtu	2.57	3.42	0.85
Zone 6 NY	\$/MMBtu	2.57	2.71	0.14
Chicago Citygate	\$/MMBtu	2.99	3.28	0.29
Michcon	\$/MMBtu	2.97	3.19	0.22
Columbia TCO Pool	\$/MMBtu	2.68	2.70	0.02
Ventura	\$/MMBtu	2.66	3.22	0.56
Rockies/Opal	\$/MMBtu	3.41	3.24	-0.17
El Paso Permian Basin	\$/MMBtu	2.95	3.35	0.40
Socal Citygate	\$/MMBtu	5.21	4.95	-0.26
Malin	\$/MMBtu	3.37	3.77	0.40
Houston Ship Channel	\$/MMBtu	3.05	3.43	0.38
Henry Hub Cash	\$/MMBtu	3.15	3.23	0.08
AECO Cash	C\$/GJ	2.58	2.78	0.20
Station2 Cash	C\$/GJ	2.52	3.67	1.15
Dawn Cash	C\$/GJ	3.00	3.20	0.20

Source: CME, Bloomberg





					V	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week		Ago	VS	. Last Year
NatGas Jul21/Oct21	\$/MMBtu	0.026		0.010	$\overline{}$	-0.009		0.012
NatGas Oct21/Nov21	\$/MMBtu	0.060		0.011	~	-0.013		0.015
NatGas Oct21/Jan22	\$/MMBtu	0.246		0.021	•	-0.036	▼	-0.030
NatGas Apr22/Oct22	\$/MMBtu	0.033		0.026		0.000	•	-0.018
WTI Crude	\$/Bbl	73.66		2.780		7.610		33.200
Brent Crude	\$/Bbl	74.90		2.040		6.440		31.820
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	212.68		1.520		8.480		90.820
Propane, Mt. Bel	cents/Gallon	0.96		0.018		0.136		0.448
Ethane, Mt. Bel	cents/Gallon	0.27		-0.004		0.016		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

