

## **Market Report**

## 1 July 2020

	Cu	irrent	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$	1.68	<b>\$</b> (0.07)	<b>\$</b> 0.11

	Cı	Current			Δ from YD			Δ from 7D Avg		
WTI Prompt	\$	39.96	_	\$	0.69	_	\$	1.2		

	Current	Δ from YD	Δ from 7D
	Current	Δ 110111 11	Avg
Brent Prompt	\$ 41.87	<b>\$</b> 0.72	<b>\$</b> 0.8

#### 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

00z GWDD Change

## Cooler Change

## Warmer Change

ECMWF Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	-0.2	2.6	2.9	5.3
24 Hr Chg	-1.7	-1.0	0.5	-2.2
GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
GFS Ensemble 00z 12 Hr Chg	1-5 Day -2.3	6-10 Day 1.2	11-15 Day 2.4	Total 1.3

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	83.3	▼ -0.96	▼ -1.10

	Current	Δ from YD	Δ from 7D Avg
US ResComm	7.6	▼ -0.12	<b>0.17</b>

	Current	Δ from YD	Δ from 7D Avg		
Net LNG Exports	3.2	<b>▼</b> -1.13	<b>▼</b> -1.21		

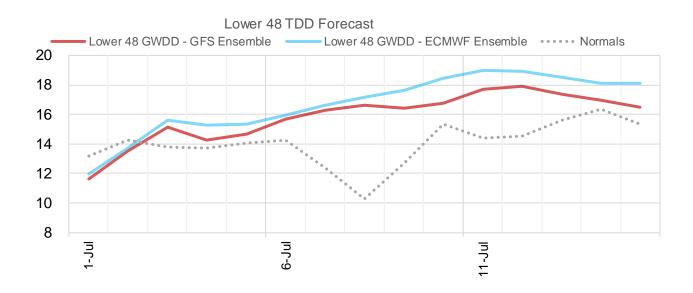
	Current	Δf	rom YD	Δf	rom 7D Avg
US Power Burns	38.9		80.0		0.88

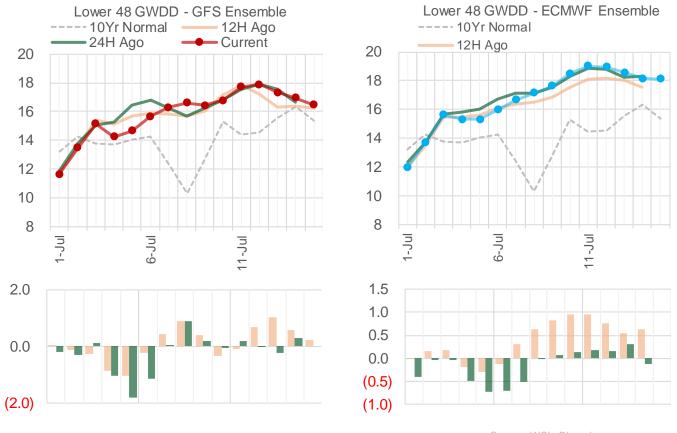
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.1	<b>▼</b> -0.48	▼ -0.06

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.2	▼ -0.60	▼ -0.73



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





Source: WSI, Bloomberg



## **Market Report**

## Lower 48 Component Models

#### **Daily Balances**

	25-Jun	26-Jun	27-Jun	28-Jun	29-Jun	30-Jun	1-Jul	DoD	vs. 7D
Lower 48 Dry Production	84.6	84.8	84.4	84.2	84.7	84.2	83.3	▼ -1.0	▼ -1.2
Canadian Imports	4.2	4.1	3.9	3.8	4.0	4.5	4.1	▼ -0.5	▼ 0.0
L48 Power	37.8	38.3	36.5	36.7	39.8	38.8	38.9	<b>0.1</b>	▲ 0.9
L48 Residential & Commercial	7.4	7.3	7.1	7.3	7.6	7.7	7.6	▼ -0.1	<b>0.2</b>
L48 Industrial	17.3	17.4	17.3	17.3	17.5	17.7	17.9	<b>△</b> 0.2	<b>a</b> 0.5
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.7	4.8	4.7	4.7	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	2.2	2.2	2.1	2.1	2.3	2.2	2.1	▼ -0.1	▼ -0.1
L48 Regional Gas Consumption	69.5	70.0	67.8	68.2	72.0	71.2	71.2	<b>▽ -0.1</b>	<b>1.4</b>
Net LNG Exports	4.8	4.7	4.5	4.2	4.1	4.3	3.2	▼ -1.1	▼ -1.2
Total Mexican Exports	6.2	6.1	5.7	5.5	6.0	5.7	5.2	<b>▽ -0.6</b>	▼ -0.7
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	8.3	8.1	10.2	10.2	6.6	7.4	7.8		

**Monthly Balances** 

**EIA Reported Daily Storage Activity** 

**Daily Model Error** 

	22-May	29-May	5-Jun	12-Jun	19-Jun	26-Jun	WoW	vs. 4W
Lower 48 Dry Production	83.8	83.8	84.4	84.3	84.5	84.4	<b>▽ -0.1</b>	<b>△</b> 0.1
Canadian Imports	4.1	4.1	4.2	3.9	3.8	4.2	<b>△</b> 0.5	<b>△</b> 0.2
L48 Power	25.9	29.2	31.4	33.3	30.3	37.3	<b>~</b> 7.0	<b>▲</b> 6.3
L48 Residential & Commercial	10.3	7.7	8.1	7.7	8.0	7.4	▼ -0.6	▼ -0.5
L48 Industrial	20.0	20.5	20.3	19.2	18.2	17.5	▼ -0.7	▼ -2.1
L48 Lease and Plant Fuel	4.7	4.7	4.7	4.7	4.8	4.8	▼ 0.0	<b>△</b> 0.0
L48 Pipeline Distribution	1.8	1.8	1.9	2.0	1.8	2.2	<b>a</b> 0.3	<b>△</b> 0.3
L48 Regional Gas Consumption	62.7	63.9	66.4	66.9	63.1	69.0	<b>5.9</b>	<b>3.9</b>
Net LNG Exports	6.3	6.1	5.1	3.9	3.8	4.0	<b>0.3</b>	▼ -0.7
Total Mexican Exports	5.2	5.0	5.3	5.7	5.6	5.9	<b>0.3</b>	<b>0.5</b>
Implied Daily Storage Activity	13.7	12.9	11.8	11.6	15.7	9.6	-6.1	
EIA Reported Daily Storage Activity	15.6	14.6	13.3	12.1	17.1			
Daily Model Error	-1.8	-1.7	-1.5	-0.5	-1.4			

Lower 48 Dry Production	81.9	90.1	91.8	92.2	90.7	85.1	84.0	▼ -1.1	▼ -6.1
Canadian Imports	5.6	5.0	5.2	4.1	4.0	3.9	4.0	<b>△</b> 0.1	▼ -1.0
L48 Power	39.0	40.9	30.0	28.3	25.4	26.3	29.3	<b>3.0</b>	<b>▽-11.6</b>
L48 Residential & Commercial	7.8	8.1	39.8	27.5	20.9	12.3	9.2	▼ -3.1	<b>1.1</b>
L48 Industrial	20.7	20.1	24.3	21.9	19.6	19.6	20.4	<b>8.0</b>	<b>a</b> 0.2
L48 Lease and Plant Fuel	4.6	5.0	5.2	5.2	5.1	4.8	4.7	▼ 0.0	▼ -0.3
L48 Pipeline Distribution	2.2	2.2	3.0	2.5	2.1	1.9	1.9	▼ -0.1	▼ -0.4

Feb-20

Apr-20

May-20

Jun-20 MoM

2Yr Ago

Jul-18

LY

L48 Regional Gas Consumption 74.3 76.4 102.3 85.3 73.1 64.8 **△** 0.6 **▽-11.0 Net LNG Exports** 6.0 8.5 6.7 5.4 **Total Mexican Exports** 5.0 5.3 5.6 4.9 4.9 5.5 **0.6 0.1** 5.0 7.3 -19.0 -3.1 8.4 Implied Daily Storage Activity 12.7 13.6

Source: Bloomberg, analytix.ai



## Regional S/D Models Storage Projection

Week Ending 26-Jun

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	9.4	1.4	10.7	75
East	1.7	1.5	3.3	23
Midwest	3.9	-0.7	3.3	23
Mountain	3.1	-2.0	1.1	8
South Central	-0.6	2.8	2.1	15
Pacific	1.2	-0.3	1.0	7

<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 Storage						
Week Ending	Projection						
3-Jul	60						
10-Jul	28						
17-Jul	29						

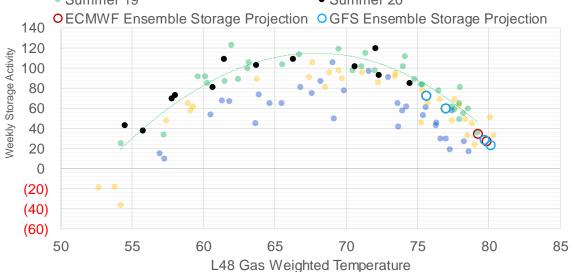
#### Weather Storage Model - Next 4 Week Forecast

Summer 17

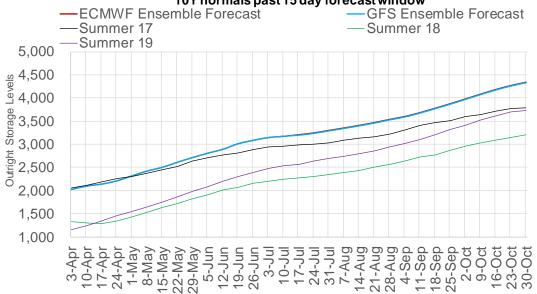
Summer 18

Summer 19

• Summer 20



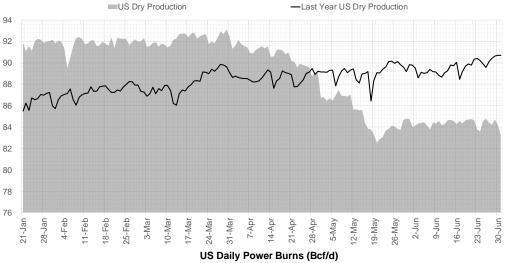
#### Weather Based End of Winter Projection (Bcf) 10Y normals past 15 day forecast window

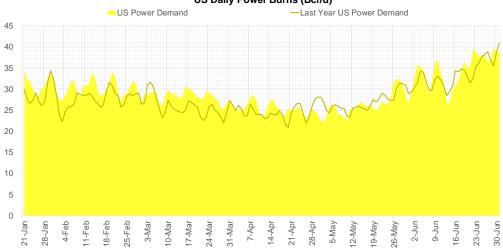




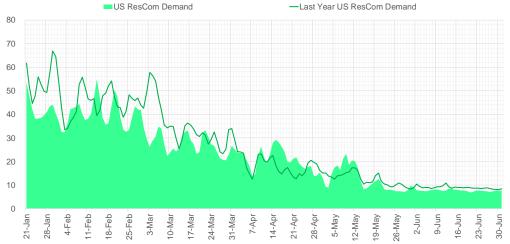
### Supply - Demand Trends

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





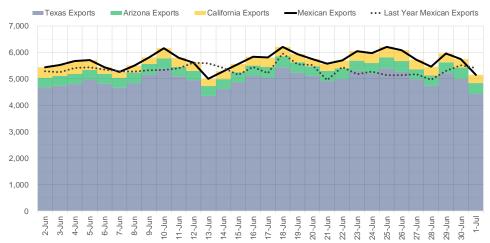
#### US Daily ResCom Consumption(Bcf/d)

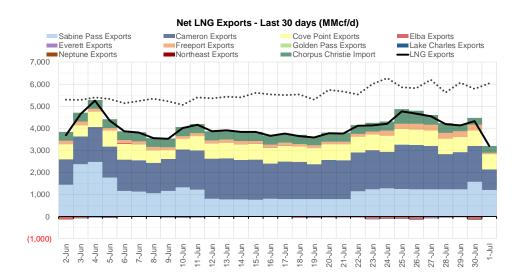


Source: Bloomberg



#### Mexican Exports - Last 30 days (MMcf/d)





Source: Bloomberg



## **Market Report**

# 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 O
8	2020	Р	1.50	11298	10	2020	Р	1.50	38344
10	2020	С	2.10	6862	10	2020	С	2.75	35239
8	2020	С	2.10	5767	8	2020	Р	1.50	33319
9	2020	C	2.10	4594	3	2021	Р	2.00	32800
9	2020	P	1.25	4205	10	2020	Р	1.60	32187
8	2020	C	2.00	4056	10	2020	С	2.50	31952
9	2020	P	1.50	3640	8	2020	С	2.00	31407
10	2020	C	2.20	3044	9	2020	Р	1.20	30768
8	2020	P	1.60	3017	10	2020	С	3.00	30400
8	2020	C	1.80	2602	10	2020	Р	2.00	28684
9	2020	Č	1.80	2540	9	2020	С	2.50	27420
10	2020	P	1.40	2500	8	2020	С	2.50	27335
12	2020	P	1.00	2500	10	2020	Р	1.75	25451
12	2020	r P	1.50	2500	9	2020	Р	1.00	24407
10	2020	P	1.30	2465	9	2020	Р	1.50	23877
9	2020	P	1.20	2410	10	2020	Р	1.25	23346
		P			9	2020	Р	1.75	20817
8	2020 2020	C	1.65 2.50	2389 2375	8	2020	Р	1.20	19861
8		P			8	2020	Р	1.30	19373
8	2020		1.75	2365	8	2020	С	2.25	19359
9	2020	С	2.00	2365	10	2020	P	1.00	19340
10	2020	P	1.00	2354	10	2020	Р	1.20	18702
10	2020	C	2.40	2271	9	2020	С	2.75	18468
8	2020	P	1.20	2215	10	2020	Č	3.25	18188
10	2020	P	1.50	2170	10	2020	P	2.10	18132
10	2020	Р	1.20	2121	1	2021	С	3.50	17918
9	2020	P	1.10	2096	1	2021	C	3.00	16650
8	2020	Р	1.40	2056	9	2020	P	1.25	16511
9	2020	Р	1.40	2045	8	2020	Р	1.00	16403
9	2020	С	3.00	2025	8	2020	Р	1.25	15819
10	2020	Р	1.10	2009	3	2021	С	3.00	15797
8	2020	Р	1.10	2001	10	2020	Č	2.25	15320
9	2020	С	2.40	1905	8	2020	P	1.60	15086
8	2020	С	2.25	1883	9	2020	С	2.25	14890
8	2020	С	1.75	1866	9	2020	C	3.00	14873
9	2020	Р	1.60	1800	10	2020	P	1.30	14769
8	2020	С	2.40	1760	4	2021	C	3.00	14710
10	2020	С	1.80	1750	8	2020	C	3.00	14665
8	2020	С	1.90	1716	9	2020	P	1.30	14573
8	2020	С	1.85	1532	8	2020	Р	1.40	13978
10	2020	С	2.30	1356	8	2020	C	2.10	13878
10	2020	Р	1.25	1273	3	2021	Ċ	7.00	13722
10	2020	С	2.50	1263	9	2020	P	2.00	13716
9	2020	C	2.20	1168	10	2020	C	2.10	13555
9	2020	P	1.00	1151	9	2020	Ċ	2.00	13465
9	2020	С	2.75	1149	12	2020	P	1.50	13354
9	2020	Č	2.35	1124	8	2020	C	2.75	13181
8	2020	P	1.55	1115	10	2020	Ċ	3.50	13087
9	2020	C	1.85	1010	1	2021	P	2.50	12964
9	2020	C	2.50	920	11	2020	C	3.5	12903

Source: CME, Nasdaq, ICE

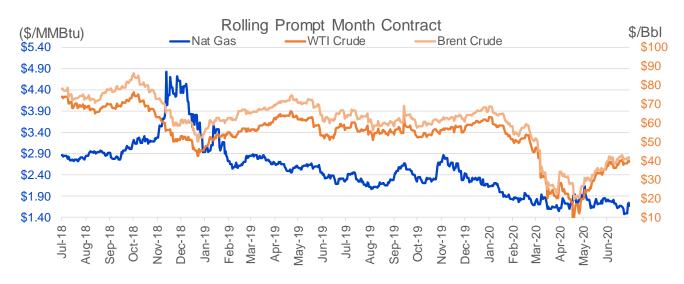


### Nat Gas Futures Open Interest

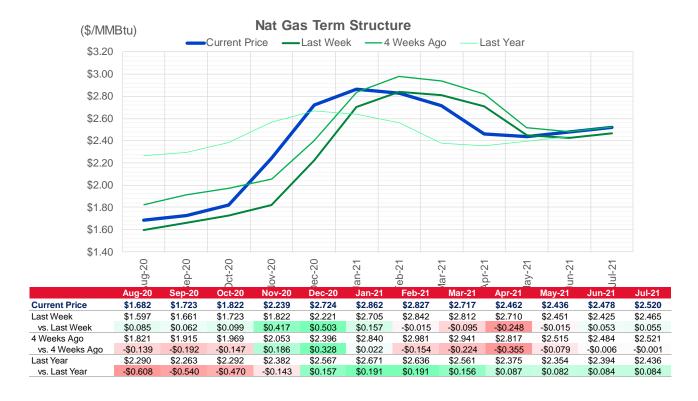
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CME Henry	CME Henry Hub Futures (10,000 MMBtu)  CME Henry Hub Futures Contract Equivalent (10,000 MMBtu)							
CIVIL FICTILY	Current	Prior		FOR JUNE 26	Current	Prior	Daily Change	
AUG 20	281196	289309	-8113	AUG 20	86619	87395	-776.25	
SEP 20	206296	201152	5144	SEP 20	71851	71932	-81	
OCT 20	124409	123285	1124	OCT 20	78777	77801	976	
NOV 20	69068	67037	2031	NOV 20	64689	63581	1107.5	
DEC 20	77426	74537	2889	DEC 20	61645	60922	722.25	
JAN 21	116768	117307	-539	JAN 21	75651	75017	634.5	
FEB 21	39053	40163	-1110	FEB 21	46747	46784	-37	
MAR 21	84581	84594	-13	MAR 21	63295	63506	-211	
APR 21	76767	77482	-715	APR 21	50046	50201	-154.75	
MAY 21	29532	28798	734	MAY 21	46231	46284	-53	
JUN 21	18002	17765	237	JUN 21	44364	44296	67.75	
JUL 21	16515	16416	99	JUL 21	44890	44883	6.5	
AUG 21	12673	12517	156	AUG 21	45353	45362	-9	
SEP 21	15763	15611	152	SEP 21	43109	43079	30.25	
OCT 21	36250	35911	339	OCT 21	61190	61168	22.5	
NOV 21	20342	20136	206	NOV 21	36960	36944	16.25	
DEC 21	15936	16277	-341	DEC 21	37824	37776	48	
JAN 22	13289	13073	216	JAN 22	29514	29335	178.5	
FEB 22	8602	8640	-38	FEB 22	26489	26377	112.25	
MAR 22	13583	13468	115	MAR 22	28193	28064	129	
APR 22	12575	12465	110	APR 22	27202	27127	75.25	
MAY 22	5203	5202	1	MAY 22	22386	22339	47	
JUN 22	2030	2029	1	JUN 22	22107	22054	52.75	
JUL 22	1796	1795	1	JUL 22	22099	22037	62.25	
AUG 22	1248	1248	0	AUG 22	21808	21731	77.75	
SEP 22	1451	1451	0	SEP 22	21396	21343	52.75	
OCT 22	1894	1894	0	OCT 22	23487	23401	85.75	
NOV 22	1425	1395	30	NOV 22	19941	19853	88.25	
DEC 22	1292	1293	-1	DEC 22	20516	20424	92.25	
JAN 23	2464	2464	0	JAN 23	10996	10976	20	

Source: CME, ICE







		Cash	Prompt	Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	1.74	1.53	-0.21
TETCO M3	\$/MMBtu	1.62	1.45	-0.18
FGT Zone 3	\$/MMBtu	1.56	1.63	0.07
Zone 6 NY	\$/MMBtu	1.56	1.45	-0.11
Chicago Citygate	\$/MMBtu	1.65	1.59	-0.06
Michcon	\$/MMBtu	1.65	1.53	-0.12
Columbia TCO Pool	\$/MMBtu	1.53	1.36	-0.17
Ventura	\$/MMBtu	1.59	1.53	-0.06
Rockies/Opal	\$/MMBtu	1.48	1.45	-0.03
El Paso Permian Basin	\$/MMBtu	1.35	1.34	-0.01
Socal Citygate	\$/MMBtu	1.65	1.78	0.13
Malin	\$/MMBtu	1.43	1.55	0.12
Houston Ship Channel	\$/MMBtu	1.59	1.57	-0.02
Henry Hub Cash	\$/MMBtu	1.64	1.49	-0.15
AECO Cash	C\$/GJ	1.41	1.33	-0.08
Station2 Cash	C\$/GJ	1.17	1.51	0.34
Dawn Cash	C\$/GJ	1.65	1.56	-0.09

Source: CME, Bloomberg



					VS	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	Last Week		Ago	VS	. Last Year
NatGas Jan/Apr	\$/MMBtu	-0.40	$\overline{}$	-0.009	_	0.066	$\overline{}$	-0.028
NatGas Mar/Apr	\$/MMBtu	-0.255	_	0.004	$\overline{}$	-0.557	$\overline{}$	-0.498
NatGas Oct/Nov	\$/MMBtu	0.42	_	0.018	_	0.074	_	0.353
NatGas Oct/Jan	\$/MMBtu	1.04	<b>A</b>	0.020	_	0.112		0.705
WTI Crude	\$/Bbl	39.96	<u> </u>	1.950		2.670	$\overline{}$	-17.380
Brent Crude	\$/BbI	41.87	<b>A</b>	1.560	_	2.080	$\overline{}$	-21.950
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	<b>A</b>	0.000	_	0.000	_	0.000
Heating Oil	cents/Gallon	120.26	_	5.180	_	13.800	$\overline{}$	-69.610
Propane, Mt. Bel	cents/Gallon	0.50	$\overline{}$	-0.003	_	0.000	_	0.023
Ethane, Mt. Bel	cents/Gallon	0.22	$\overline{}$	-0.001	$\overline{}$	-0.027		0.086
Coal, PRB	\$/MTon	12.30		0.000		0.000	_	0.000
Coal, ILB	\$/MTon	31.05	_	0.000	_	0.000	$\overline{}$	-7.500