

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.85	▲ \$ 0.11	▲ \$ 0.12

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 40.52	▼ \$ (0.13)	▲ \$ 0.3

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 43.14	▲ \$ 0.34	▲ \$ 0.8

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00z GWDD Change

Cooler Change

Warmer Change

ECMWF Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.0	1.3	2.5	3.7
24 Hr Chg	-1.0	-2.6	1.7	-1.9

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.6	-2.5	2.7	0.8
24 Hr Chg	-0.9	-3.3	2.5	-1.8

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	84.9	▼ -0.17	▲ 0.12

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	41.2	▲ 1.93	▲ 1.57

	Current	Δ from YD	Δ from 7D Avg
US ResComm	7.3	▲ 0.29	▼ -0.01

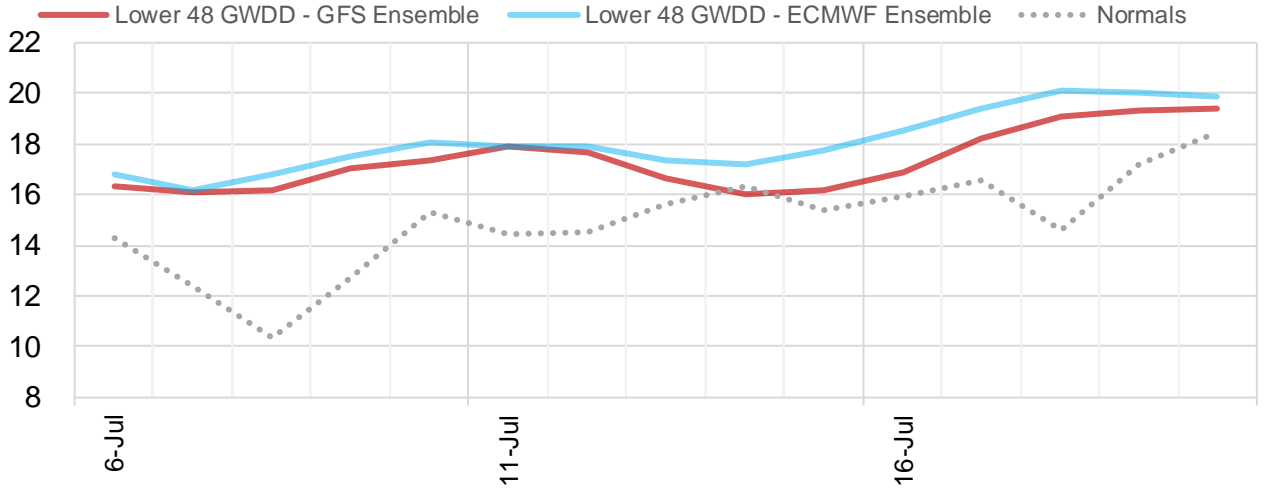
	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.1	▲ 0.11	▲ 0.01

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	3.1	▲ 0.05	▼ -0.35

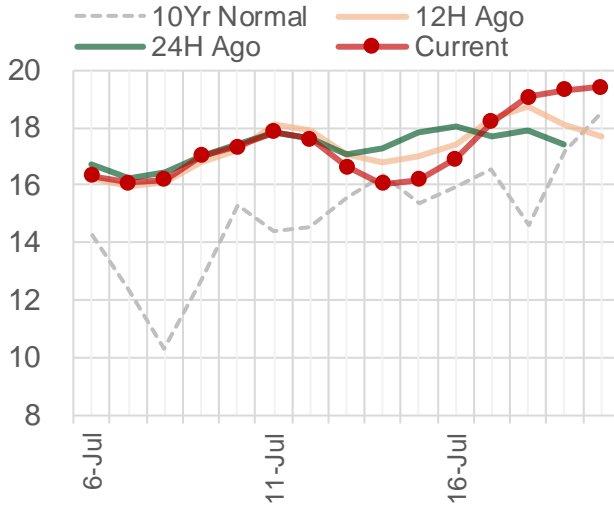
	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.6	▲ 0.37	▼ -0.11

Short-term Weather Model Outlooks (00z)

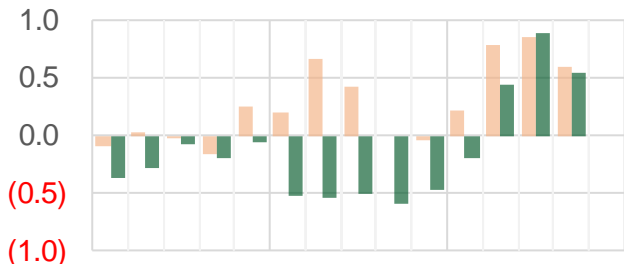
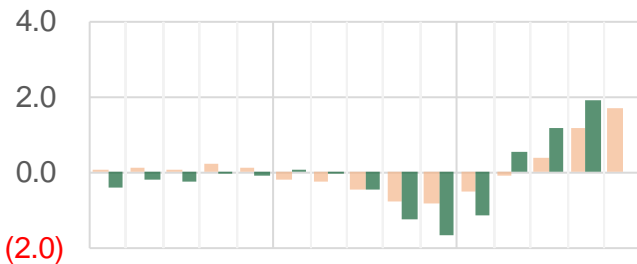
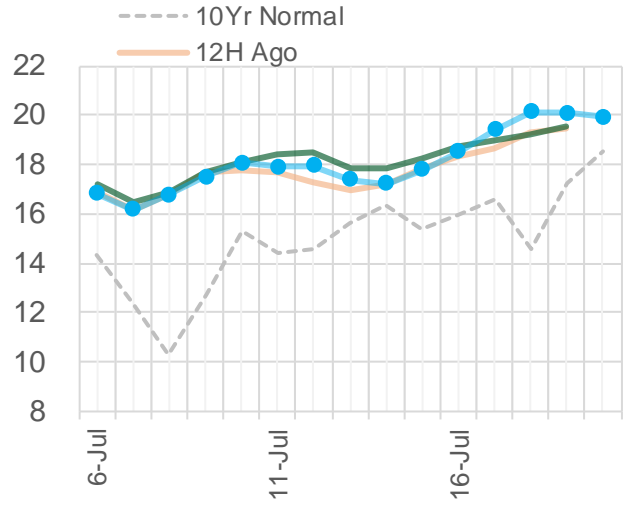
Lower 48 TDD Forecast



Lower 48 GWDD - GFS Ensemble



Lower 48 GWDD - ECMWF Ensemble



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	30-Jun	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	DoD	vs. 7D
Lower 48 Dry Production	84.2	84.5	84.4	85.4	85.2	85.1	84.9	▼ -0.2	▲ 0.1
Canadian Imports	4.5	4.1	4.1	3.9	3.8	4.0	4.1	▲ 0.1	▲ 0.0
L48 Power	39.3	39.6	41.1	40.1	38.2	39.3	41.2	▲ 1.9	▲ 1.6
L48 Residential & Commercial	7.7	7.5	7.4	7.0	6.8	7.0	7.3	▲ 0.3	▲ 0.1
L48 Industrial	18.1	18.3	18.6	18.9	19.0	19.4	19.6	▲ 0.2	▲ 0.9
L48 Lease and Plant Fuel	4.7	4.7	4.7	4.8	4.8	4.8	4.8	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	2.3	2.1	2.2	2.1	2.0	2.1	2.2	▲ 0.1	▲ 0.1
L48 Regional Gas Consumption	72.1	72.3	74.0	72.8	70.8	72.5	75.0	▲ 2.5	▲ 2.6
Net LNG Exports	4.3	3.2	3.0	3.0	3.2	3.0	3.1	▲ 0.0	▼ -0.2
Total Mexican Exports	5.7	6.0	5.8	5.7	5.5	5.2	5.6	▲ 0.4	▼ -0.1
Implied Daily Storage Activity	6.5	7.1	5.7	7.7	9.5	8.3	5.3		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	29-May	5-Jun	12-Jun	19-Jun	26-Jun	3-Jul	WoW	vs. 4W
Lower 48 Dry Production	83.8	84.4	84.2	84.5	84.4	84.4	▲ 0.1	▲ 0.1
Canadian Imports	4.1	4.2	3.9	3.8	4.2	4.1	▼ -0.1	▲ 0.1
L48 Power	29.2	31.4	33.3	30.3	37.3	38.8	▲ 1.4	▲ 5.7
L48 Residential & Commercial	7.7	8.1	7.7	8.0	7.4	7.4	▲ 0.0	▼ -0.4
L48 Industrial	20.5	20.3	19.2	18.2	18.5	18.2	▼ -0.3	▼ -0.9
L48 Lease and Plant Fuel	4.7	4.7	4.7	4.8	4.8	4.7	▼ 0.0	▼ 0.0
L48 Pipeline Distribution	1.8	1.9	2.0	1.8	2.2	2.2	▲ 0.0	▲ 0.2
L48 Regional Gas Consumption	63.9	66.4	67.0	63.1	70.1	71.3	▲ 1.2	▲ 4.6
Net LNG Exports	6.1	5.1	3.9	3.8	4.0	4.0	▼ 0.0	▼ -0.2
Total Mexican Exports	5.0	5.3	5.7	5.6	5.9	5.8	▼ -0.1	▲ 0.2
Implied Daily Storage Activity	12.9	11.8	11.6	15.7	8.5	7.4	-1.1	
EIA Reported Daily Storage Activity	14.6	13.3	12.1	17.1	9.3			
Daily Model Error	-1.7	-1.5	-0.6	-1.5	-0.8			

Monthly Balances

	2Yr Ago Jul-18	LY Jul-19	Mar-20	Apr-20	May-20	Jun-20	MTD Jul-20	MoM	vs. LY
Lower 48 Dry Production	81.9	90.1	92.2	90.7	85.1	84.3	84.9	▲ 0.5	▼ -5.2
Canadian Imports	5.6	5.0	4.1	4.0	3.9	4.0	4.0	▼ 0.0	▼ -1.0
L48 Power	39.0	40.9	28.3	25.4	26.3	34.3	39.9	▲ 5.6	▼ -1.0
L48 Residential & Commercial	7.8	8.1	27.5	20.9	12.3	7.7	7.1	▼ -0.5	▼ -1.0
L48 Industrial	20.7	20.1	21.9	19.6	19.6	18.7	19.0	▲ 0.2	▼ -1.2
L48 Lease and Plant Fuel	4.6	5.0	5.2	5.1	4.8	4.8	4.8	▲ 0.0	▼ -0.3
L48 Pipeline Distribution	2.2	2.2	2.5	2.1	1.9	2.0	2.1	▲ 0.1	▼ -0.1
L48 Regional Gas Consumption	74.3	76.4	85.3	73.1	64.8	67.6	72.9	▲ 5.3	▼ -3.5
Net LNG Exports	3.3	6.0	8.5	8.2	6.7	4.0	3.1	▼ -1.0	▼ -2.9
Total Mexican Exports	5.0	5.4	5.6	4.9	4.9	5.7	5.6	▼ -0.1	▲ 0.3
Implied Daily Storage Activity	5.0	7.3	-3.1	8.4	12.7	11.1	7.3		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

Regional S/D Models Storage Projection

Week Ending 3-Jul

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	7.1	1.4	8.5	59
East	1.2	1.5	2.7	19
Midwest	3.5	-0.5	3.0	21
Mountain	2.9	-2.0	0.9	7
South Central	-1.9	2.7	0.8	6
Pacific	1.4	-0.3	1.0	7

*Adjustment Factor is calculated based on historical regional deltas

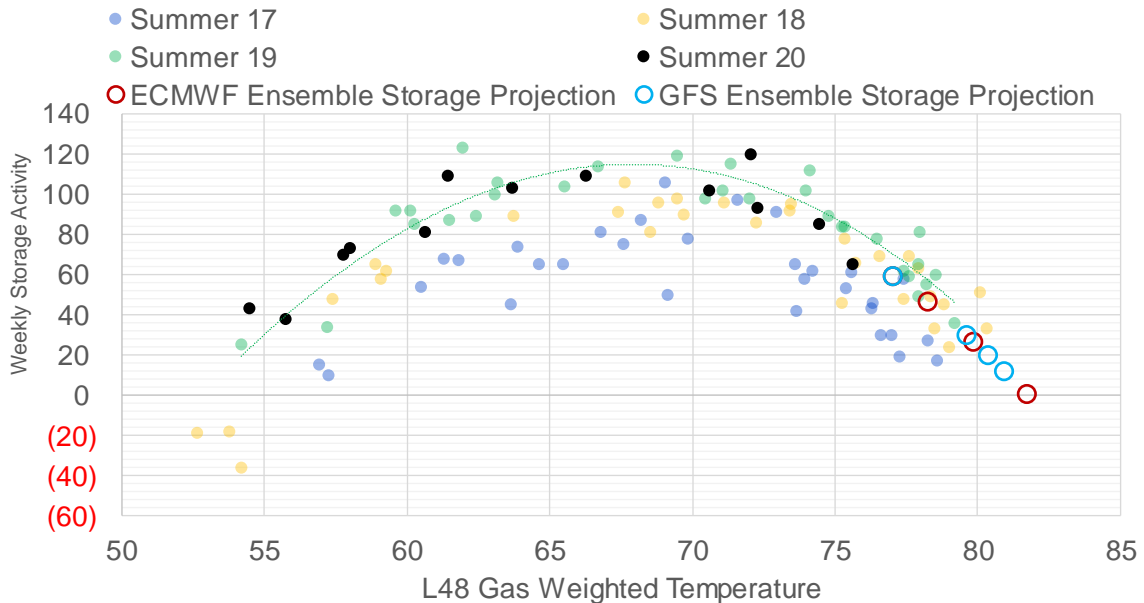
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

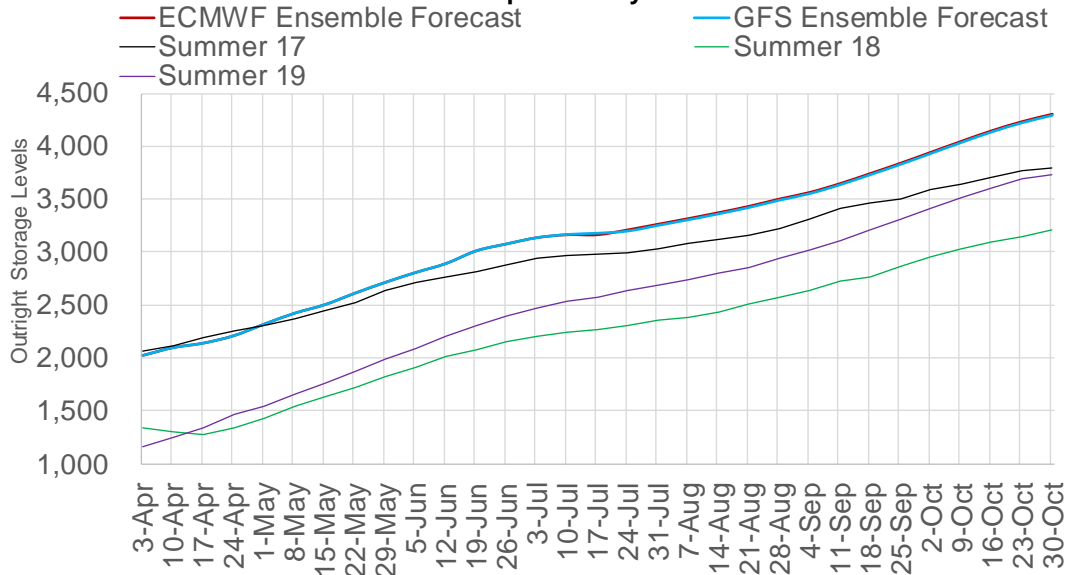
Next report and beyond	
Week Ending	Week Storage Projection
10-Jul	29
17-Jul	6
24-Jul	33

Weather Storage Model - Next 4 Week Forecast



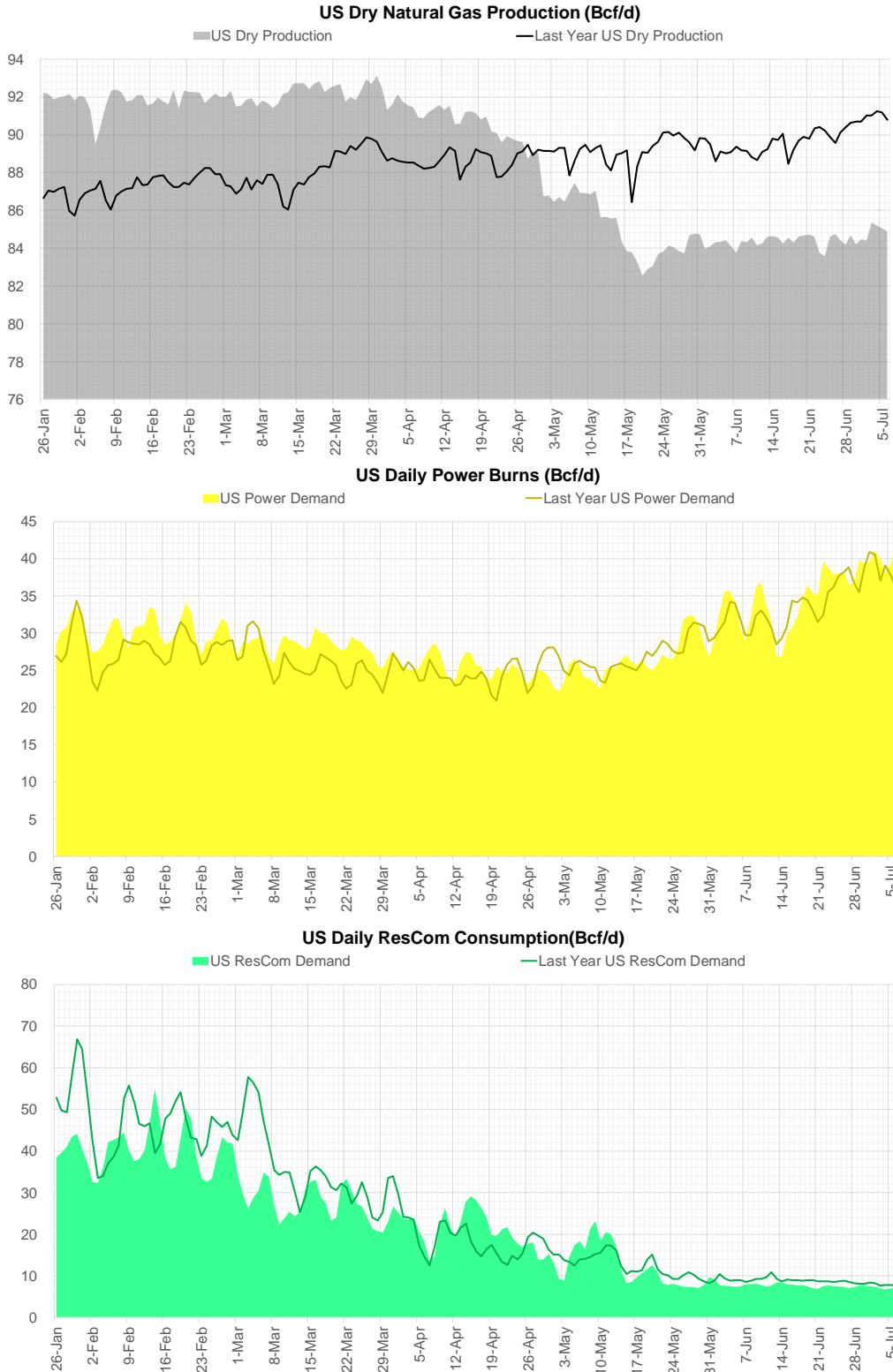
Weather Based End of Winter Projection (Bcf)

10Y normals past 15 day forecast window



The risk of trading futures and options and other derivatives involves a substantial risk of loss and is not suitable for all persons. Each person must consider whether a particular trade, combination of trades, or strategy is suitable for that person's financial means and objectives. Past results are not necessarily indicative of future results. This communication may contain links to third party websites which are not under the control of and are not maintained by ION Energy Group, and ION Energy Group is not responsible for their content.

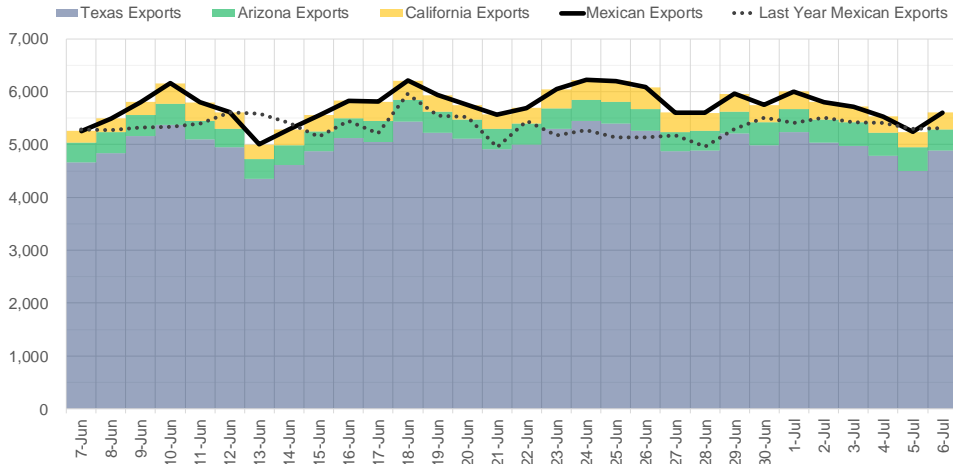
Supply – Demand Trends



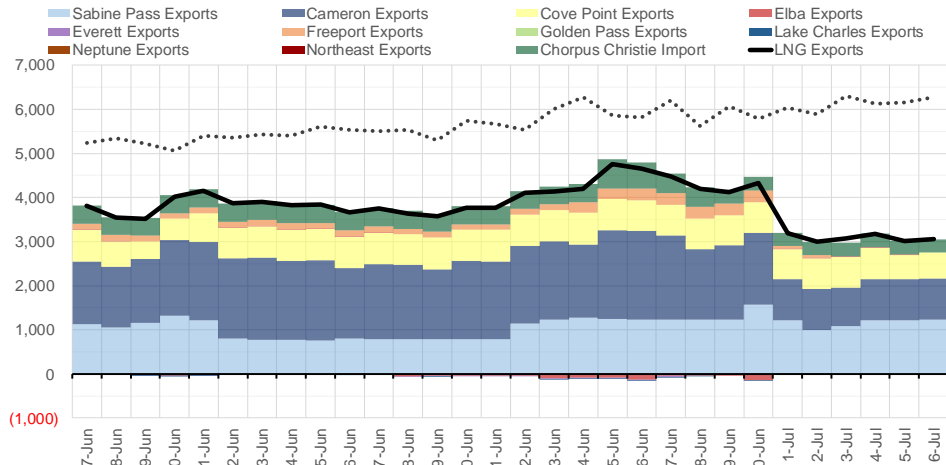
Source: Bloomberg

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Mexican Exports - Last 30 days (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

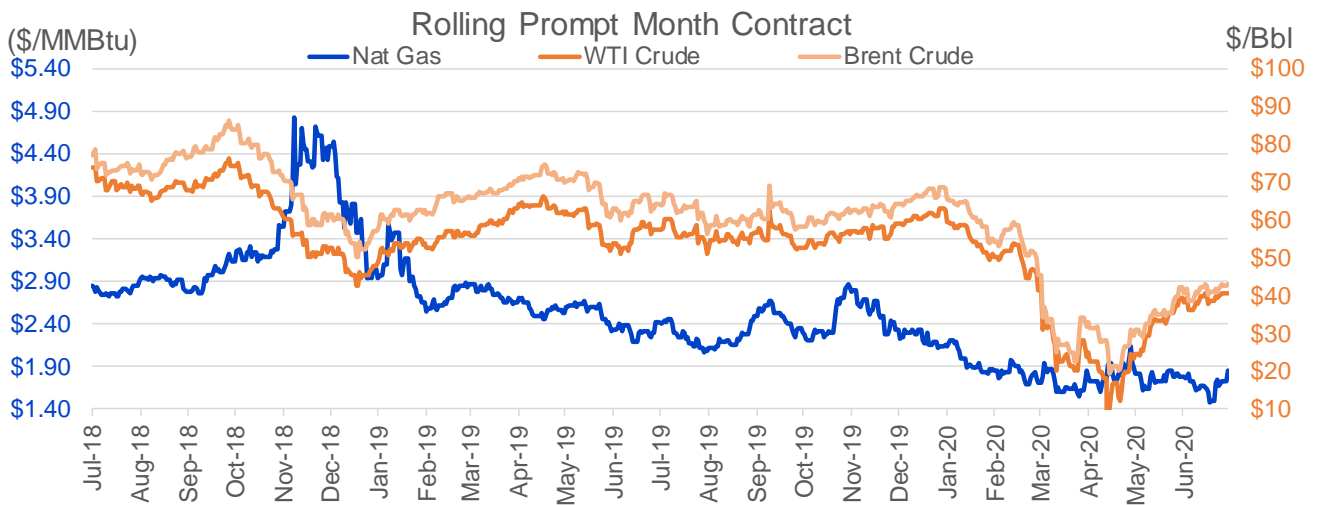
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
8	2020	C	2.10	5462	8	2020	P	1.50	39803
8	2020	P	1.50	5443	10	2020	P	1.50	38661
9	2020	P	1.50	3861	10	2020	C	2.75	35239
9	2020	C	2.25	3413	3	2021	P	2.00	33300
8	2020	C	2.25	3142	8	2020	C	2.00	32183
8	2020	C	1.85	2876	10	2020	C	2.50	32183
8	2020	C	2.00	2591	10	2020	P	1.60	31408
9	2020	P	1.25	2371	9	2020	P	1.20	30404
8	2020	P	1.25	2101	10	2020	C	3.00	30393
8	2020	C	1.75	2077	10	2020	P	2.00	28384
9	2020	P	1.65	2010	9	2020	C	2.50	27464
9	2020	P	1.00	1886	9	2020	P	1.50	25063
10	2020	C	2.50	1857	8	2020	C	2.50	24604
9	2020	C	2.00	1789	10	2020	P	1.75	24476
8	2020	P	1.55	1686	9	2020	P	1.00	24400
8	2020	P	1.75	1525	10	2020	P	1.25	23859
10	2020	P	1.10	1451	9	2020	P	1.75	20754
11	2020	C	2.65	1228	8	2020	P	1.20	19956
11	2020	C	2.25	1104	9	2020	P	1.25	19880
9	2020	C	2.75	1103	9	2020	C	2.75	19669
8	2020	C	2.40	1011	8	2020	P	1.30	19354
10	2020	C	2.20	1002	8	2020	C	2.25	18962
8	2020	P	1.40	995	10	2020	P	1.20	18798
9	2020	C	2.10	958	10	2020	C	3.25	18197
10	2020	P	1.50	952	10	2020	P	2.10	18132
8	2020	C	1.95	816	1	2021	C	3.50	17943
9	2020	C	2.50	814	10	2020	P	1.00	17743
10	2020	P	1.30	812	10	2020	C	2.10	17377
8	2020	C	1.80	753	8	2020	C	2.10	17070
11	2020	P	1.70	750	8	2020	P	1.00	16759
11	2020	P	1.80	750	1	2021	C	3.00	16649
11	2020	P	2.10	750	9	2020	C	2.25	16325
10	2020	C	2.00	699	9	2020	C	3.00	15950
8	2020	P	1.35	612	3	2021	C	3.00	15797
8	2020	C	2.20	571	8	2020	P	1.25	15545
8	2020	C	1.90	562	12	2020	P	1.50	15154
8	2020	C	2.05	533	8	2020	P	1.40	15094
10	2020	P	1.25	502	10	2020	C	2.25	14957
10	2020	C	2.75	500	10	2020	P	1.30	14746
10	2020	P	1.85	475	4	2021	C	3.00	14710
9	2020	P	1.20	415	8	2020	C	3.00	14665
9	2020	C	3.00	401	9	2020	P	1.30	14458
9	2020	P	1.75	374	8	2020	P	1.60	14398
8	2020	P	1.65	343	9	2020	P	2.00	13891
8	2020	P	1.70	334	8	2020	P	1.75	13440
8	2020	P	1.60	307	11	2020	C	3.50	13349
10	2020	P	1.40	300	8	2020	C	2.75	13181
8	2020	P	1.15	258	10	2020	C	3.50	13077
8	2020	P	1.30	238	1	2021	P	2.50	12974
					9	2020	C	2	12816

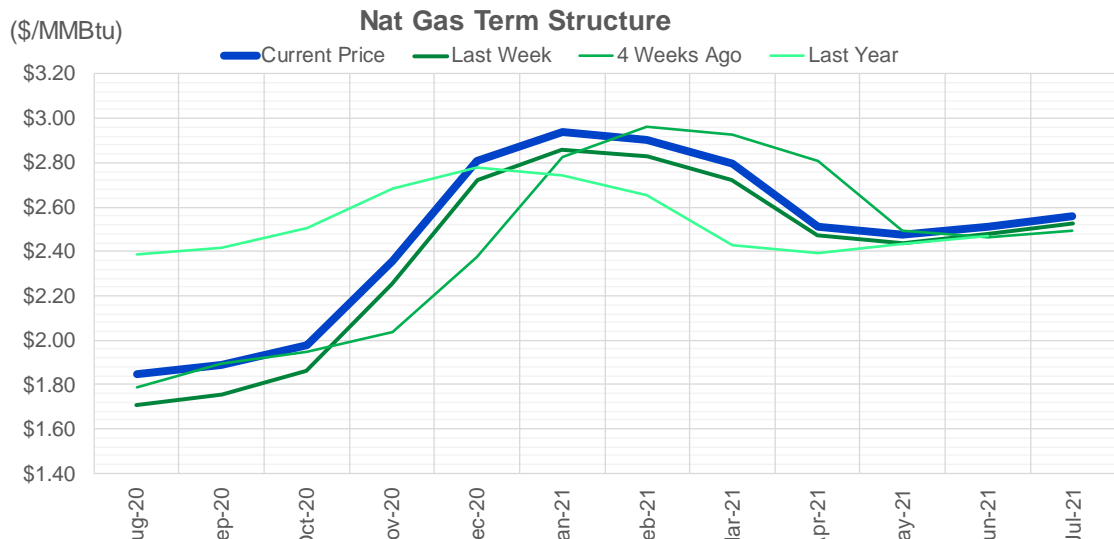
Source: CME, Nasdaq, ICE

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
AUG 20	273584	273041	543	AUG 20	87206	87566	-360
SEP 20	207981	209517	-1536	SEP 20	72985	72181	803.75
OCT 20	120805	122332	-1527	OCT 20	77527	78164	-637.25
NOV 20	71484	70798	686	NOV 20	65966	65539	427
DEC 20	74873	76241	-1368	DEC 20	61186	61486	-299.5
JAN 21	115175	117590	-2415	JAN 21	75665	75568	97
FEB 21	39417	38803	614	FEB 21	46958	46815	142.5
MAR 21	84352	83940	412	MAR 21	63085	63006	79.5
APR 21	76329	76957	-628	APR 21	50838	50356	481.75
MAY 21	30816	29637	1179	MAY 21	46214	46227	-12.25
JUN 21	18069	18219	-150	JUN 21	44397	44382	15.25
JUL 21	16625	16541	84	JUL 21	44863	44930	-67
AUG 21	12846	12693	153	AUG 21	45330	45386	-56.25
SEP 21	15853	15779	74	SEP 21	43315	43180	134.75
OCT 21	36687	36485	202	OCT 21	61582	61504	78.5
NOV 21	20451	20330	121	NOV 21	36933	36970	-36.5
DEC 21	15664	15678	-14	DEC 21	37767	37857	-89.5
JAN 22	13186	13230	-44	JAN 22	29776	29616	160.5
FEB 22	8810	8685	125	FEB 22	26635	26571	64.25
MAR 22	13545	13482	63	MAR 22	28329	28381	-52.5
APR 22	12458	12521	-63	APR 22	27410	27569	-158.5
MAY 22	5204	5202	2	MAY 22	22519	22499	20.25
JUN 22	2029	2029	0	JUN 22	22319	22208	111
JUL 22	1796	1796	0	JUL 22	22248	22159	88.75
AUG 22	1248	1248	0	AUG 22	22032	21912	119.75
SEP 22	1451	1451	0	SEP 22	21611	21497	114.25
OCT 22	1910	1910	0	OCT 22	23470	23487	-17
NOV 22	1425	1425	0	NOV 22	20105	20018	87.25
DEC 22	1292	1292	0	DEC 22	20686	20595	90.5
JAN 23	2464	2464	0	JAN 23	11056	11021	34.75

Source: CME, ICE





	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21
Current Price	\$1.847	\$1.891	\$1.975	\$2.360	\$2.805	\$2.937	\$2.902	\$2.797	\$2.514	\$2.478	\$2.514	\$2.557
Last Week	\$1.709	\$1.754	\$1.863	\$2.255	\$2.720	\$2.859	\$2.826	\$2.722	\$2.470	\$2.439	\$2.478	\$2.524
vs. Last Week	\$0.138	\$0.137	\$0.112	\$0.105	\$0.085	\$0.078	\$0.076	\$0.075	\$0.044	\$0.039	\$0.036	\$0.033
4 Weeks Ago	\$1.789	\$1.892	\$1.947	\$2.036	\$2.376	\$2.824	\$2.961	\$2.925	\$2.809	\$2.494	\$2.461	\$2.492
vs. 4 Weeks Ago	\$0.058	-\$0.001	\$0.028	\$0.324	\$0.429	\$0.113	-\$0.059	-\$0.128	-\$0.295	-\$0.016	\$0.053	\$0.065
Last Year	\$2.403	\$2.384	\$2.415	\$2.505	\$2.683	\$2.781	\$2.744	\$2.656	\$2.426	\$2.393	\$2.432	\$2.472
vs. Last Year	-\$0.556	-\$0.493	-\$0.440	-\$0.145	\$0.122	\$0.156	\$0.158	\$0.141	\$0.088	\$0.085	\$0.082	\$0.085

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.55	1.66	0.11
TETCO M3	\$/MMBtu	1.45	1.52	0.07
FGT Zone 3	\$/MMBtu	0.00	1.74	1.74
Zone 6 NY	\$/MMBtu	0.00	1.52	1.52
Chicago Citygate	\$/MMBtu	1.52	1.66	0.14
Michcon	\$/MMBtu	1.59	1.60	0.01
Columbia TCO Pool	\$/MMBtu	1.45	1.42	-0.03
Ventura	\$/MMBtu	1.45	1.63	0.18
Rockies/Opal	\$/MMBtu	1.29	1.52	0.23
El Paso Permian Basin	\$/MMBtu	0.90	1.46	0.56
Socal Citygate	\$/MMBtu	1.36	2.00	0.64
Malin	\$/MMBtu	1.27	1.64	0.37
Houston Ship Channel	\$/MMBtu	1.52	1.70	0.18
Henry Hub Cash	\$/MMBtu	1.61	1.58	-0.03
AECO Cash	C\$/GJ	1.26	1.43	0.17
Station2 Cash	C\$/GJ	1.26	1.69	0.43
Dawn Cash	C\$/GJ	1.56	1.64	0.08

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.42	▼ -0.034	▲ 0.044	▼ -0.042	
NatGas Mar/Apr	\$/MMBtu	-0.283	▼ -0.031	▼ -0.598	▼ -0.527	
NatGas Oct/Nov	\$/MMBtu	0.39	▼ -0.007	▲ 0.045	▲ 0.326	
NatGas Oct/Jan	\$/MMBtu	0.96	▼ -0.034	▲ 0.037	▲ 0.639	
WTI Crude	\$/Bbl	40.52	▲ 0.820	▲ 2.330	▼ -17.140	
Brent Crude	\$/Bbl	43.14	▲ 1.430	▲ 2.340	▼ -20.970	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	124.69	▲ 8.150	▲ 12.560	▼ -64.840	
Propane, Mt. Bel	cents/Gallon	0.47	▼ -0.031	▼ -0.037	▼ -0.009	
Ethane, Mt. Bel	cents/Gallon	0.20	▼ -0.018	▼ -0.031	▲ 0.061	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -7.500	