

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.78	▼ \$ (0.02)	▲ \$ 0.01

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 41.44	▲ \$ 0.40	▲ \$ 0.1

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 43.76	▲ \$ 0.54	▲ \$ 0.3

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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	1.1	-4.4	-0.4	-3.7
24 Hr Chg	-1.5	-4.5	-4.2	-10.2

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.4	-0.4	1.0	1.0
24 Hr Chg	-0.2	-0.8	-0.2	-1.2

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	84.5	▼ -1.17	▼ -1.62

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	44.8	▼ -3.23	▼ -0.65

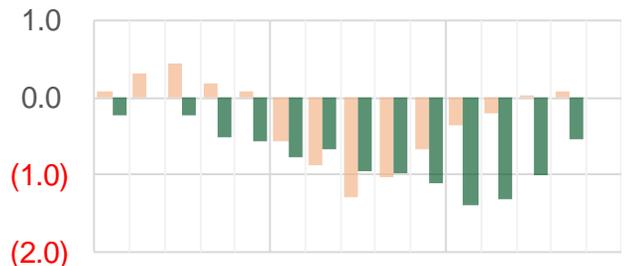
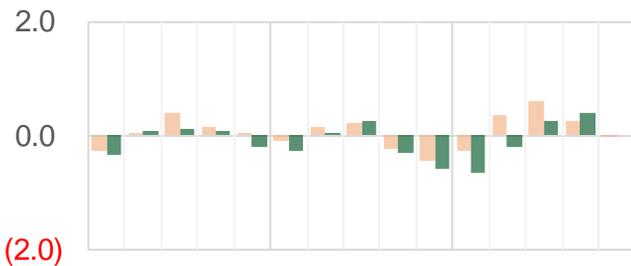
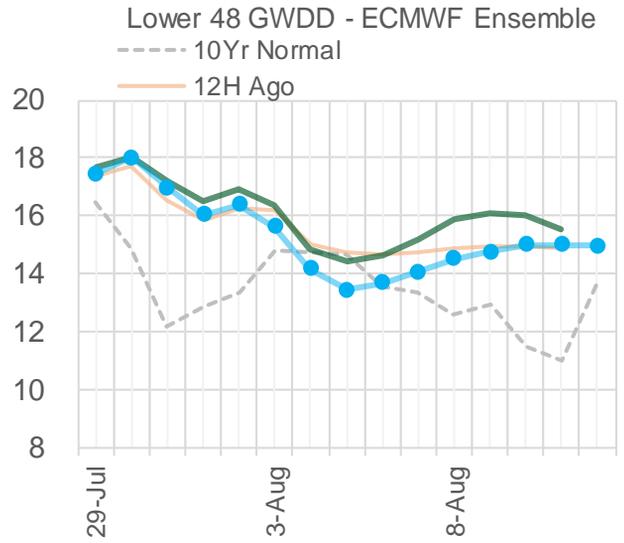
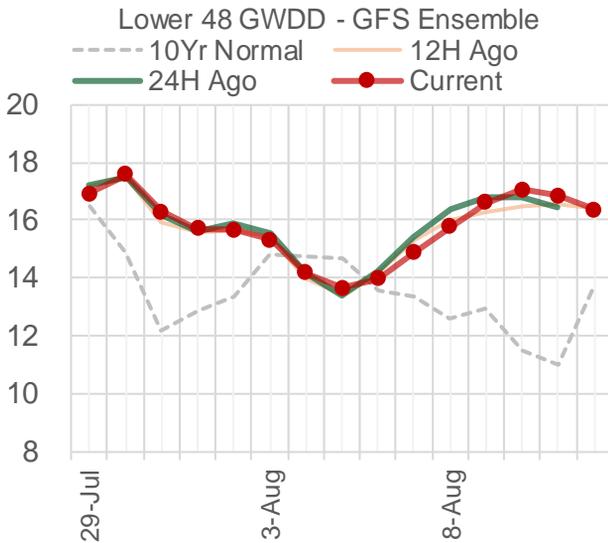
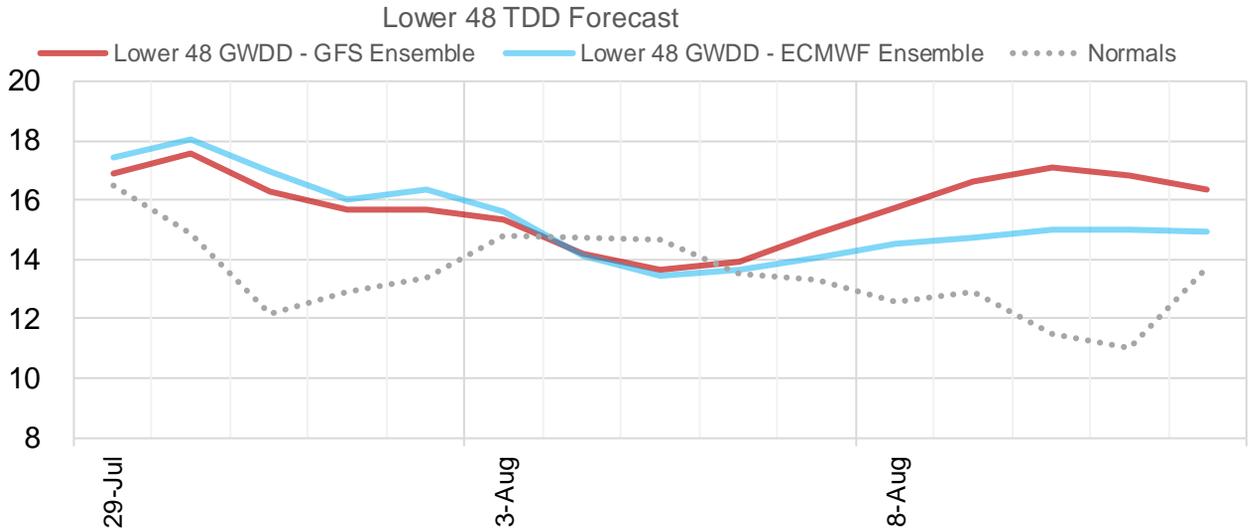
	Current	Δ from YD	Δ from 7D Avg
US ResComm	7.9	▼ -0.07	▲ 0.34

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.7	▼ -0.18	▲ 0.43

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	3.4	▲ 0.27	▲ 0.22

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.1	▼ -0.30	▼ -0.09

Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	DoD	vs. 7D
Lower 48 Dry Production	86.1	86.2	86.1	86.6	86.5	85.7	84.5	▼ -1.2	▼ -1.7
Canadian Imports	4.0	4.1	4.1	4.2	4.6	4.9	4.7	▼ -0.2	▲ 0.4
L48 Power	45.5	43.1	42.4	44.1	48.8	48.1	44.8	▼ -3.2	▼ -0.5
L48 Residential & Commercial	7.6	7.4	7.2	7.4	7.9	8.0	7.9	▼ -0.1	▲ 0.4
L48 Industrial	17.1	17.0	16.8	16.8	16.9	17.2	17.6	▲ 0.4	▲ 0.7
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	4.7	▼ -0.1	▼ -0.1
L48 Pipeline Distribution	2.4	2.3	2.3	2.3	2.6	2.5	2.4	▼ -0.2	▼ 0.0
L48 Regional Gas Consumption	77.3	74.6	73.5	75.4	81.0	80.6	77.5	▼ -3.1	▲ 0.5
Net LNG Exports	3.4	2.9	3.1	3.1	3.0	3.1	3.4	▲ 0.3	▲ 0.3
Total Mexican Exports	6.6	6.5	6.1	6.0	5.7	6.4	6.1	▼ -0.3	▼ -0.1
Implied Daily Storage Activity	2.8	6.2	7.6	6.2	1.4	0.4	2.2		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	19-Jun	26-Jun	3-Jul	10-Jul	17-Jul	24-Jul	WoW	vs. 4W
Lower 48 Dry Production	85.1	84.9	85.2	85.6	85.5	86.2	▲ 0.7	▲ 0.9
Canadian Imports	3.8	4.2	4.1	4.3	4.5	4.4	▼ -0.1	▲ 0.1
L48 Power	30.3	37.1	38.5	41.8	43.0	45.7	▲ 2.7	▲ 5.6
L48 Residential & Commercial	8.0	7.4	7.4	7.3	7.4	7.6	▲ 0.2	▲ 0.2
L48 Industrial	18.9	19.3	19.8	18.8	18.3	17.4	▼ -0.9	▼ -1.6
L48 Lease and Plant Fuel	4.8	4.8	4.8	4.8	4.8	4.8	▲ 0.0	▲ 0.0
L48 Pipeline Distribution	1.8	2.1	2.2	2.2	2.3	2.4	▲ 0.1	▲ 0.2
L48 Regional Gas Consumption	63.8	70.7	72.6	74.9	75.7	77.9	▲ 2.2	▲ 4.5
Net LNG Exports	3.8	4.0	4.0	3.0	3.3	3.6	▲ 0.3	▲ 0.0
Total Mexican Exports	5.6	5.9	5.8	5.9	6.2	6.3	▲ 0.2	▲ 0.4
Implied Daily Storage Activity	15.7	8.5	6.9	6.0	4.8	2.7	-2.1	
EIA Reported Daily Storage Activity	17.1	9.3	8.0	6.4	5.3			
Daily Model Error	-1.5	-0.8	-1.1	-0.4	-0.5			

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	81.8	90.1	93.3	91.8	86.0	84.9	85.8	▲ 0.8	▼ -4.3
Canadian Imports	5.6	5.0	4.1	4.0	3.9	4.0	4.4	▲ 0.4	▼ -0.6
L48 Power	39.1	40.9	28.3	25.3	26.3	34.3	43.6	▲ 9.4	▲ 2.7
L48 Residential & Commercial	7.8	8.1	27.5	20.9	12.3	7.7	7.5	▼ -0.2	▼ -0.7
L48 Industrial	20.7	20.3	22.8	20.7	20.3	19.6	18.0	▼ -1.5	▼ -2.3
L48 Lease and Plant Fuel	4.6	5.0	5.2	5.1	4.8	4.8	4.8	▲ 0.0	▼ -0.2
L48 Pipeline Distribution	2.2	2.2	2.5	2.1	1.9	2.0	2.3	▲ 0.3	▲ 0.1
L48 Regional Gas Consumption	74.3	76.6	86.4	74.2	65.6	68.3	76.2	▲ 7.9	▼ -0.4
Net LNG Exports	3.3	6.0	8.5	8.2	6.7	4.0	3.3	▼ -0.8	▼ -2.7
Total Mexican Exports	5.0	5.4	5.6	4.9	4.9	5.7	6.1	▲ 0.4	▲ 0.7
Implied Daily Storage Activity	4.8	7.1	-3.1	8.4	12.7	10.9	4.6		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

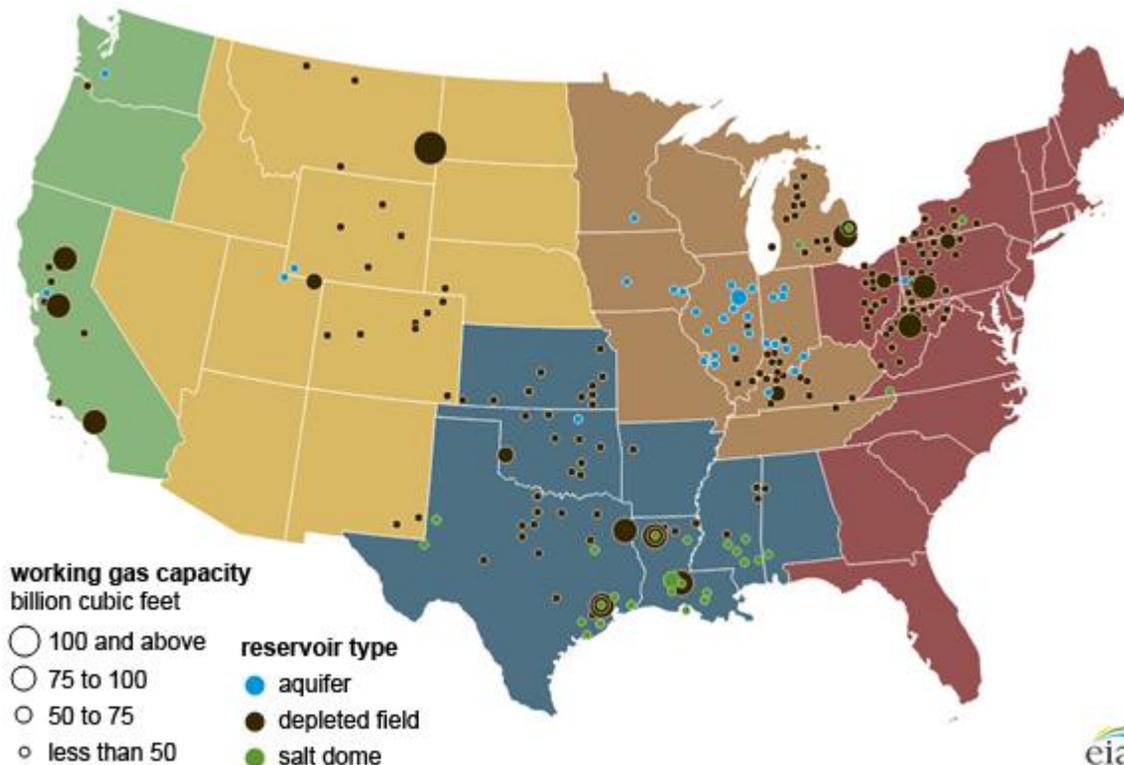
Regional S/D Models Storage Projection

Week Ending 24-Jul

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	2.5	0.7	3.2	22
East	-0.6	2.0	1.4	10
Midwest	2.6	-0.7	1.9	13
Mountain	2.8	-2.4	0.4	3
South Central	-3.0	2.2	-0.8	-5
Pacific	0.7	-0.3	0.3	2

*Adjustment Factor is calculated based on historical regional deltas

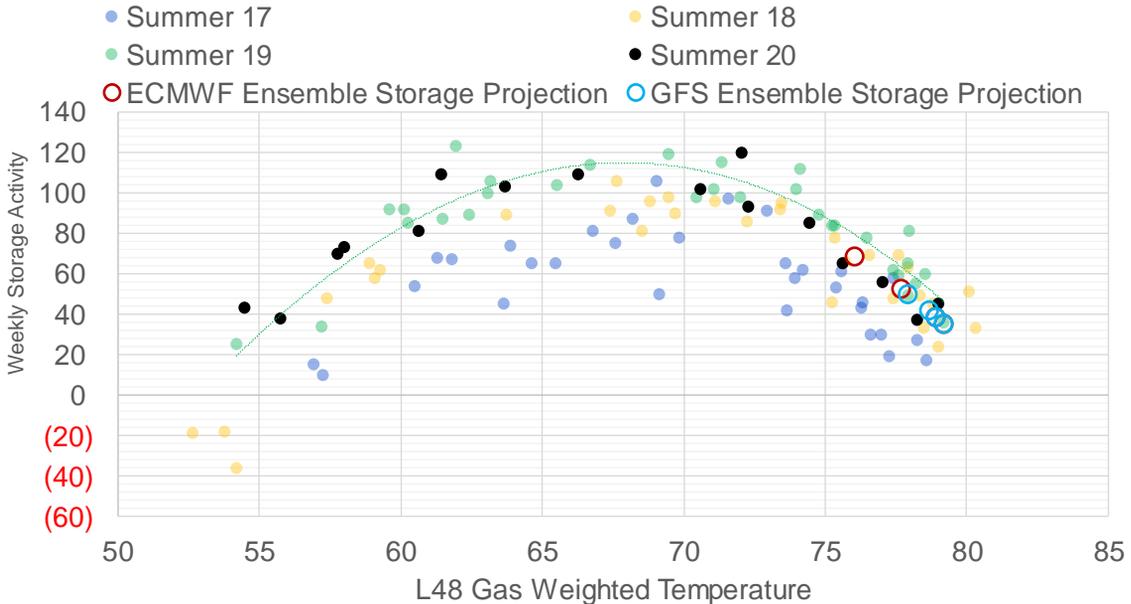
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

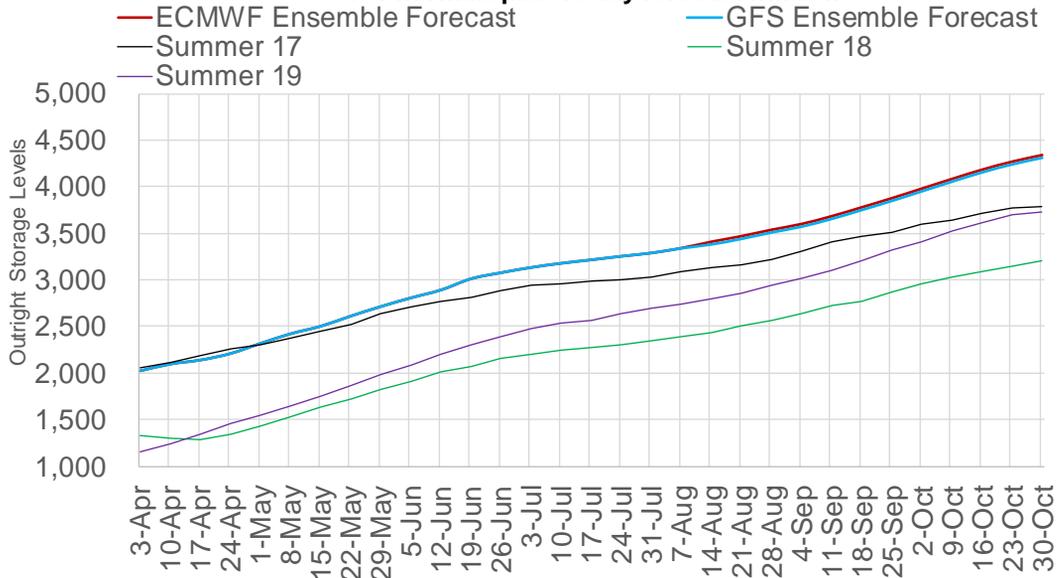
Next report and beyond	
Week Ending	Week Storage Projection
31-Jul	35
7-Aug	51
14-Aug	55

Weather Storage Model - Next 4 Week Forecast



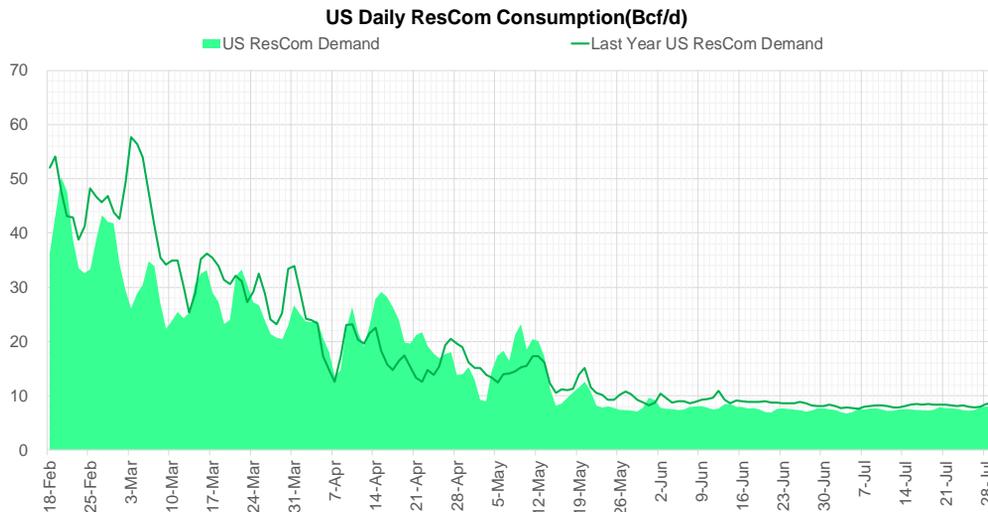
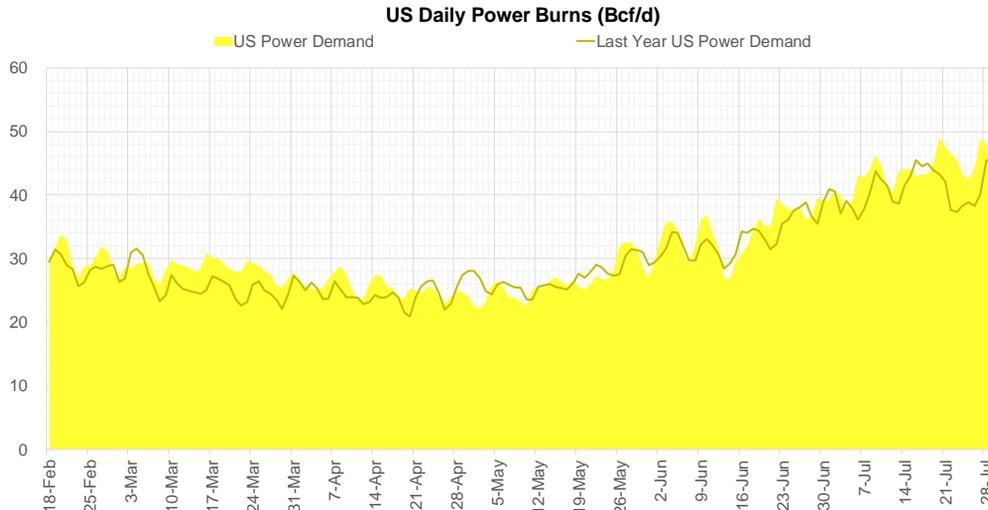
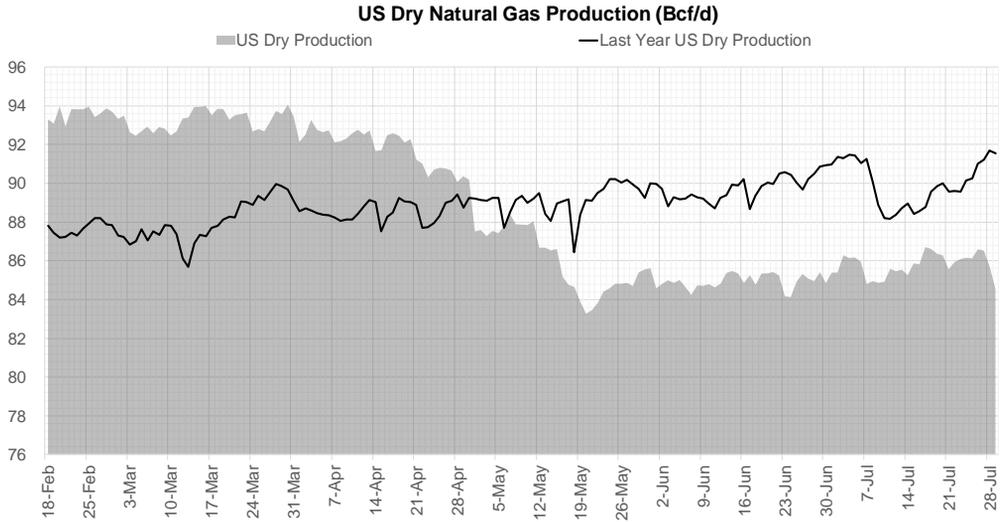
Weather Based End of Winter Projection (Bcf)

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.

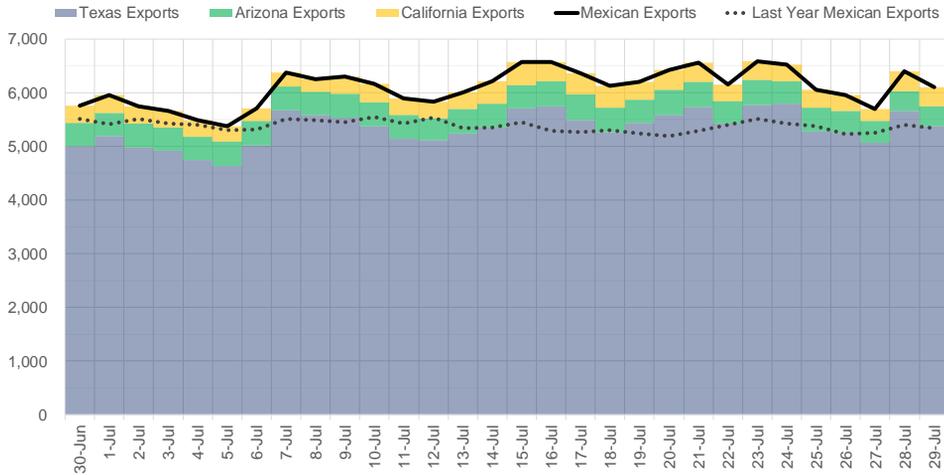
Supply – Demand Trends



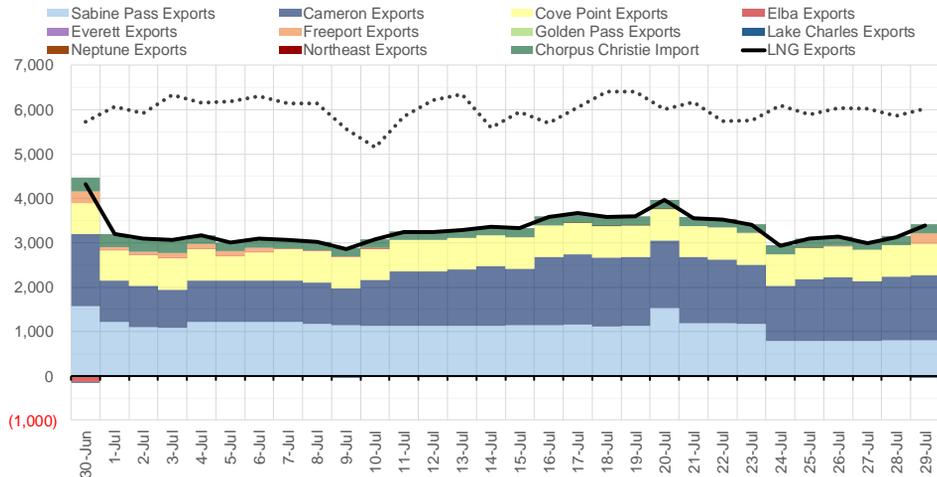
Source: Bloomberg

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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

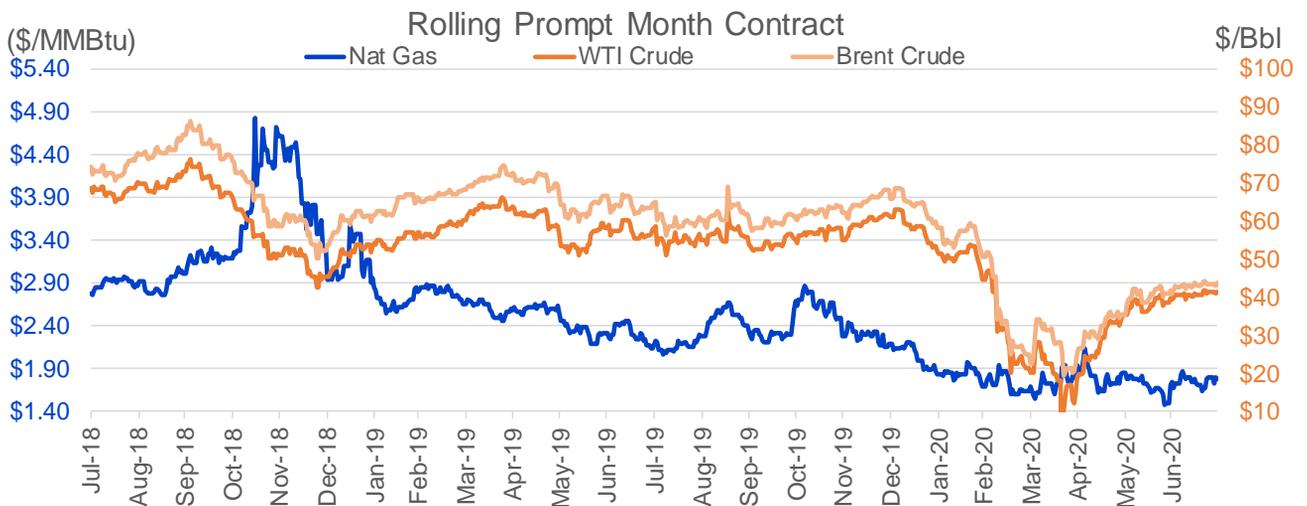
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
10	2020	P	1.75	4675	10	2020	C	2.75	50327
9	2020	P	1.50	3614	10	2020	P	1.50	49207
9	2020	P	1.75	3570	10	2020	C	2.50	38408
10	2020	P	1.00	2586	8	2020	C	2.00	36630
10	2020	P	1.40	2536	3	2021	P	2.00	35681
10	2020	P	0.75	2500	10	2020	P	1.60	33171
9	2020	P	1.40	2423	10	2020	C	3.00	31823
9	2020	P	1.65	2180	8	2020	P	1.50	30741
11	2020	P	1.90	2108	10	2020	P	2.00	30633
11	2020	P	1.60	2051	9	2020	C	2.50	30293
3	2021	C	6.00	2007	9	2020	P	1.50	30142
8	2020	P	1.75	2000	10	2020	P	1.25	28374
3	2021	C	4.50	2000	10	2020	P	1.75	25732
9	2020	C	1.90	1927	9	2020	C	3.00	24385
8	2020	C	1.80	1836	9	2020	P	1.00	24122
9	2020	P	1.30	1701	8	2020	C	2.50	23901
9	2020	C	2.10	1618	9	2020	P	1.20	22379
9	2020	P	1.25	1424	10	2020	P	1.00	22199
9	2020	C	2.00	1420	3	2021	C	3.00	21579
11	2020	C	2.75	1403	9	2020	P	1.75	20894
11	2020	C	3.00	1297	9	2020	C	2.00	19555
9	2020	C	1.95	1163	10	2020	C	2.10	19398
10	2020	P	1.55	1153	9	2020	P	1.25	19380
3	2021	C	7.00	1102	9	2020	P	1.30	19231
3	2021	C	5.00	1100	10	2020	P	1.30	19148
9	2020	P	1.80	1073	8	2020	C	2.25	18977
8	2020	C	1.90	1010	8	2020	P	1.30	18845
9	2020	C	4.00	1000	9	2020	C	2.75	18750
3	2021	C	4.00	1000	3	2021	C	6.00	18626
3	2021	C	8.00	1000	1	2021	C	3.50	18266
9	2020	P	1.60	966	10	2020	C	3.25	18190
10	2020	C	3.00	924	10	2020	P	2.10	18182
3	2021	P	2.50	900	9	2020	C	2.25	18017
10	2020	P	1.50	863	3	2021	C	3.50	17915
9	2020	P	1.70	827	12	2020	P	2.00	17493
3	2021	C	3.25	801	10	2020	C	2.25	17274
8	2020	C	1.75	770	1	2021	C	3.00	17264
9	2020	C	2.50	763	8	2020	P	1.75	17220
10	2020	C	2.10	756	8	2020	P	1.00	16762
9	2020	C	1.85	736	11	2020	P	1.75	16740
11	2020	P	2.20	677	8	2020	P	1.60	16352
4	2022	C	3.00	675	10	2020	C	2.40	16218
5	2022	C	3.00	675	10	2020	C	2.00	15678
6	2022	C	3.00	675	8	2020	P	1.25	15675
7	2022	C	3.00	675	8	2020	P	1.20	15626
8	2022	C	3.00	675	4	2021	C	3.00	15541
9	2022	C	3.00	675	12	2020	P	1.50	15254
10	2022	C	3.00	675	8	2020	C	3.00	14670
9	2020	C	2.20	637	8	2020	P	1.65	14469
					8	2020	C	2.1	14084.5

Source: CME, Nasdaq, ICE

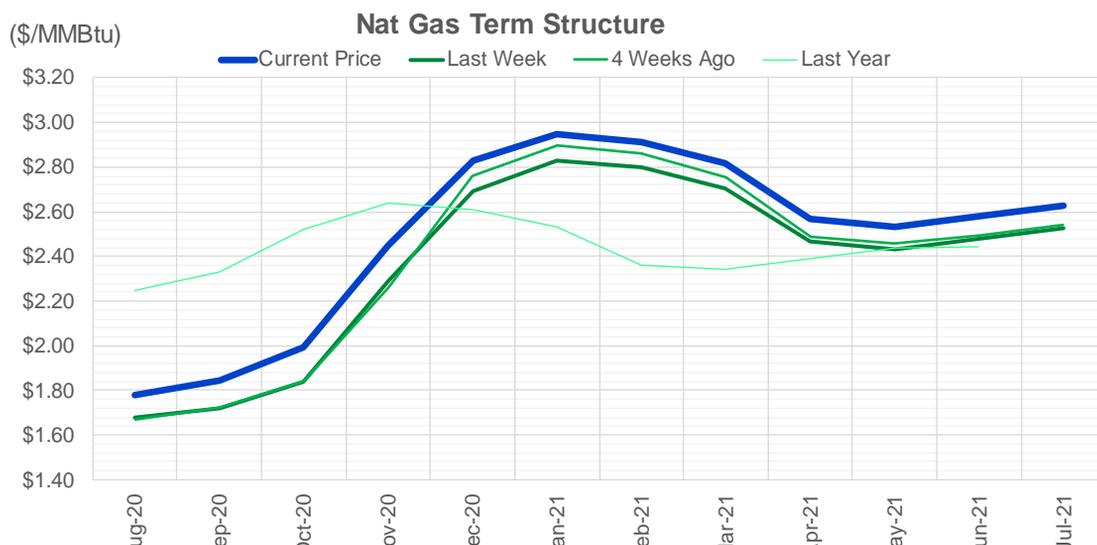
Nat Gas Futures Open Interest CME, and ICE Combined

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	2541	13183	-10642	AUG 20	70969	68697	2272
SEP 20	342362	342077	285	SEP 20	77611	77831	-220
OCT 20	151559	149250	2309	OCT 20	81501	81507	-6.5
NOV 20	103177	101924	1253	NOV 20	66931	66781	150
DEC 20	87808	87318	490	DEC 20	64174	63818	356.25
JAN 21	130626	129601	1025	JAN 21	82607	81995	611.5
FEB 21	41829	41706	123	FEB 21	50173	49402	771.25
MAR 21	78876	78171	705	MAR 21	67578	66743	834.75
APR 21	77580	77703	-123	APR 21	55986	55324	661.5
MAY 21	36429	35760	669	MAY 21	47686	47625	60.5
JUN 21	21268	21023	245	JUN 21	46551	46438	113.5
JUL 21	17962	17154	808	JUL 21	47188	47021	167.25
AUG 21	15475	14306	1169	AUG 21	47421	47292	129
SEP 21	17165	16465	700	SEP 21	45296	44930	365.75
OCT 21	43748	43106	642	OCT 21	66859	66649	210
NOV 21	22629	22347	282	NOV 21	38058	37665	393.75
DEC 21	15672	15564	108	DEC 21	40118	39694	424
JAN 22	15631	15169	462	JAN 22	31633	31545	88
FEB 22	8905	9002	-97	FEB 22	28319	28215	104.5
MAR 22	13692	13658	34	MAR 22	30409	30101	308.5
APR 22	13602	13462	140	APR 22	28963	29111	-147.25
MAY 22	5433	5429	4	MAY 22	22827	22957	-130
JUN 22	2682	2647	35	JUN 22	22577	22572	5
JUL 22	2063	2035	28	JUL 22	22526	22566	-40.75
AUG 22	1532	1462	70	AUG 22	22381	22377	4.25
SEP 22	2057	1991	66	SEP 22	22039	22012	27.5
OCT 22	2343	2325	18	OCT 22	23565	23671	-105.75
NOV 22	1764	1736	28	NOV 22	20984	20761	222.5
DEC 22	1475	1433	42	DEC 22	21475	21238	236.75
JAN 23	2596	2595	1	JAN 23	11631	11243	387.75

Source: CME, ICE



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	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	\$1.781	\$1.844	\$1.990	\$2.450	\$2.829	\$2.949	\$2.913	\$2.815	\$2.570	\$2.535	\$2.579	\$2.629
Last Week	\$1.681	\$1.718	\$1.838	\$2.288	\$2.694	\$2.826	\$2.797	\$2.703	\$2.464	\$2.434	\$2.477	\$2.528
vs. Last Week	\$0.100	\$0.126	\$0.152	\$0.162	\$0.135	\$0.123	\$0.116	\$0.112	\$0.106	\$0.101	\$0.102	\$0.101
4 Weeks Ago	\$1.671	\$1.721	\$1.840	\$2.265	\$2.760	\$2.895	\$2.860	\$2.756	\$2.489	\$2.457	\$2.495	\$2.540
vs. 4 Weeks Ago	\$0.110	\$0.123	\$0.150	\$0.185	\$0.069	\$0.054	\$0.053	\$0.059	\$0.081	\$0.078	\$0.084	\$0.089
Last Year	\$2.233	\$2.250	\$2.330	\$2.520	\$2.641	\$2.611	\$2.534	\$2.360	\$2.343	\$2.388	\$2.435	\$2.446
vs. Last Year	-\$0.452	-\$0.406	-\$0.340	-\$0.070	\$0.188	\$0.338	\$0.379	\$0.455	\$0.227	\$0.147	\$0.144	\$0.183

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.94	1.60	-0.34
TETCO M3	\$/MMBtu	1.89	1.68	-0.22
FGT Zone 3	\$/MMBtu	1.89	1.77	-0.12
Zone 6 NY	\$/MMBtu	1.89	1.59	-0.31
Chicago Citygate	\$/MMBtu	1.73	1.64	-0.09
Michcon	\$/MMBtu	1.66	1.58	-0.08
Columbia TCO Pool	\$/MMBtu	1.57	1.47	-0.10
Ventura	\$/MMBtu	1.72	1.62	-0.10
Rockies/Opal	\$/MMBtu	1.66	1.52	-0.14
El Paso Permian Basin	\$/MMBtu	1.40	1.44	0.04
Socal Citygate	\$/MMBtu	2.75	1.79	-0.96
Malin	\$/MMBtu	1.76	1.62	-0.14
Houston Ship Channel	\$/MMBtu	1.75	1.68	-0.07
Henry Hub Cash	\$/MMBtu	1.74	1.60	-0.14
AECO Cash	C\$/GJ	1.61	1.46	-0.15
Station2 Cash	C\$/GJ	1.58	1.60	0.02
Dawn Cash	C\$/GJ	1.70	1.61	-0.09

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.38	▼ -0.017	▲ 0.027	▲ 0.016	
NatGas Mar/Apr	\$/MMBtu	-0.245	▼ -0.006	▼ -0.512	▼ -0.498	
NatGas Oct/Nov	\$/MMBtu	0.46	▲ 0.010	▲ 0.035	▲ 0.390	
NatGas Oct/Jan	\$/MMBtu	0.96	▼ -0.029	▼ -0.096	▲ 0.619	
WTI Crude	\$/Bbl	41.44	▼ -0.460	▲ 1.620	▼ -17.140	
Brent Crude	\$/Bbl	43.76	▼ -0.530	▲ 1.730	▼ -21.410	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	125.38	▼ -1.690	▲ 5.420	▼ -70.120	
Propane, Mt. Bel	cents/Gallon	0.49	▼ -0.003	▲ 0.029	▲ 0.007	
Ethane, Mt. Bel	cents/Gallon	0.22	▲ 0.003	▲ 0.013	▲ 0.071	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.000	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -7.500	