

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 2.24	▼ \$ (0.02)	▼ \$ (0.05)

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 40.23	▲ \$ 0.07	▲ \$ 2.4

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 42.31	▲ \$ 0.09	▲ \$ 2.0

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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	1.9	1.3	2.1
24 Hr Chg	0.2	2.5	-3.1	-0.4

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.3	1.5	-2.7	-0.9
24 Hr Chg	2.3	-0.9	-2.1	-0.6

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	86.6	▲ 0.80	▼ -0.55

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	34.2	▲ 1.42	▲ 0.33

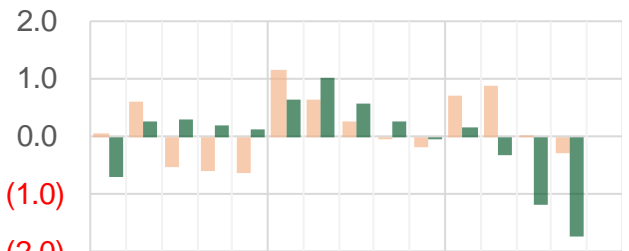
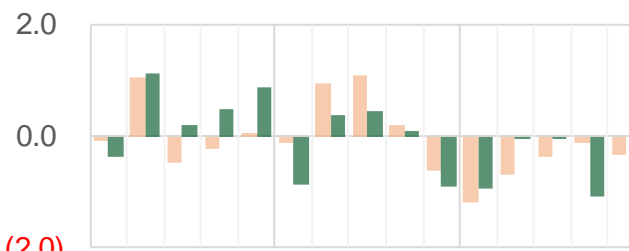
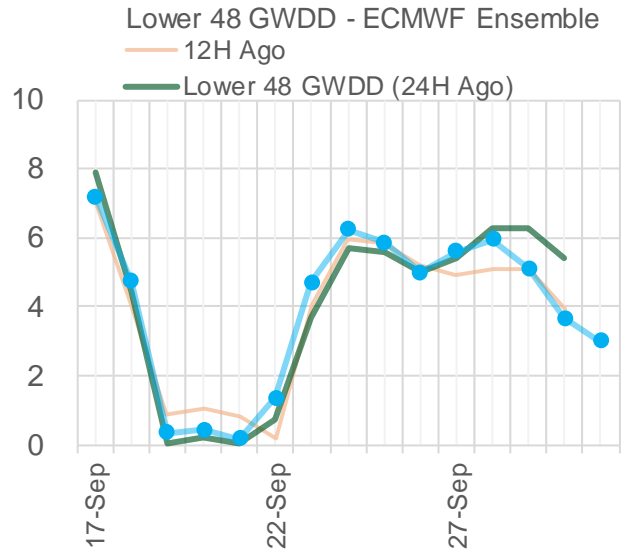
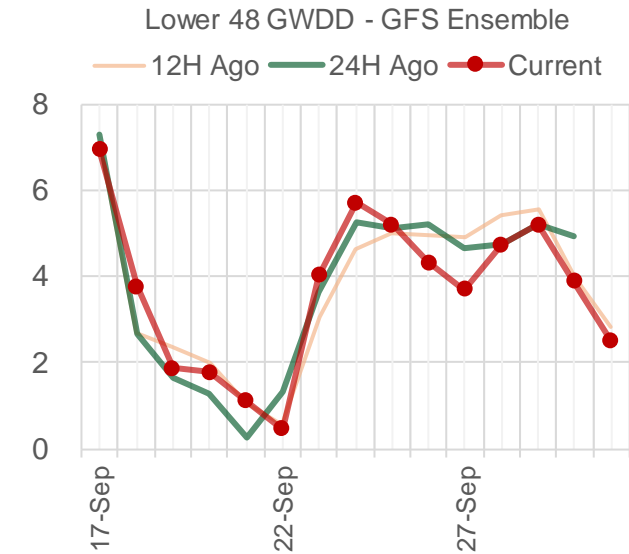
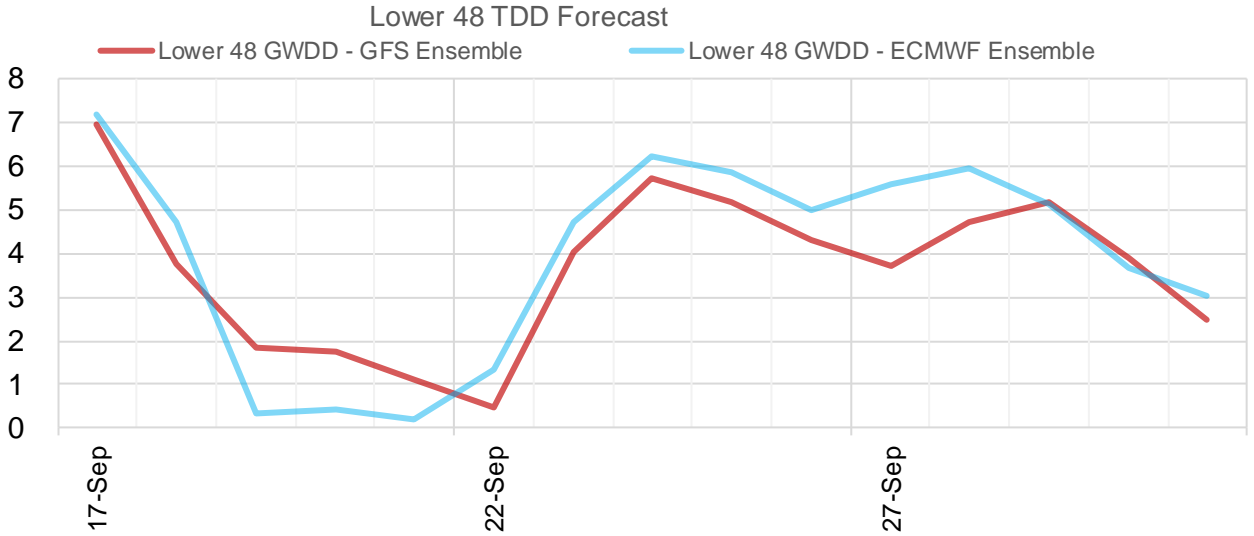
	Current	Δ from YD	Δ from 7D Avg
US ResComm	9.3	▲ 0.56	▲ 0.47

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	3.6	▼ -0.10	▼ -0.35

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	7.5	▲ 0.29	▲ 0.34

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.3	▲ 0.14	▲ 0.14

Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep	DoD	vs. 7D
Lower 48 Dry Production	87.7	87.7	87.3	87.0	86.4	85.8	86.6	▲ 0.8	▼ -0.4
Canadian Imports	3.8	3.9	4.0	4.0	3.6	3.7	3.6	▼ -0.1	▼ -0.2
L48 Power	34.9	32.0	32.4	34.7	33.0	32.8	34.2	▲ 1.4	▲ 0.9
L48 Residential & Commercial	9.2	7.7	7.4	8.2	9.4	8.7	9.3	▲ 0.6	▲ 0.8
L48 Industrial	19.6	19.4	19.3	19.2	19.5	19.6	19.6	▲ 0.0	▲ 0.2
L48 Lease and Plant Fuel	4.9	4.9	4.9	4.8	4.8	4.8	4.8	▲ 0.0	▼ 0.0
L48 Pipeline Distribution	2.1	1.9	1.9	2.0	2.0	2.0	2.1	▲ 0.1	▲ 0.1
L48 Regional Gas Consumption	70.8	65.8	65.8	69.0	68.8	67.8	70.0	▲ 2.1	▲ 1.9
Net LNG Exports	6.4	7.2	7.6	7.3	7.4	7.2	7.5	▲ 0.3	▲ 0.3
Total Mexican Exports	6.2	6.0	5.9	6.3	6.3	6.2	6.3	▲ 0.1	▲ 0.2
Implied Daily Storage Activity	8.0	12.6	11.9	8.3	7.5	8.3	6.5		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	7-Aug	14-Aug	21-Aug	28-Aug	4-Sep	11-Sep	WoW	vs. 4W
Lower 48 Dry Production	87.3	87.4	87.2	86.0	86.3	88.3	▲ 2.1	▲ 1.6
Canadian Imports	4.7	5.0	4.7	5.2	4.4	3.8	▼ -0.6	▼ -1.0
L48 Power	40.7	42.8	40.0	41.6	37.3	35.2	▼ -2.1	▼ -5.2
L48 Residential & Commercial	8.1	8.1	8.2	8.3	7.8	8.8	▲ 1.1	▲ 0.7
L48 Industrial	18.9	19.1	20.5	19.6	19.6	19.8	▲ 0.2	▲ 0.1
L48 Lease and Plant Fuel	4.9	4.9	4.8	4.8	4.8	4.9	▲ 0.1	▲ 0.1
L48 Pipeline Distribution	2.2	2.3	2.2	2.3	2.1	2.1	▼ 0.0	▼ -0.2
L48 Regional Gas Consumption	74.7	77.2	75.7	76.6	71.6	70.8	▼ -0.8	▼ -4.5
Net LNG Exports	3.9	4.4	4.7	3.9	3.0	5.2	▲ 2.1	▲ 1.2
Total Mexican Exports	6.1	6.0	6.2	6.6	6.5	6.4	▼ -0.2	▲ 0.0
Implied Daily Storage Activity	7.3	4.8	5.3	4.1	9.5	9.8	0.3	
EIA Reported Daily Storage Activity	8.3	6.1	6.4	5.0	10.0			
Daily Model Error	-1.0	-1.3	-1.2	-0.9	-0.5			

Monthly Balances

	2Yr Ago Sep-18	LY Sep-19	May-20	Jun-20	Jul-20	Aug-20	MTD Sep-20	MoM	vs. LY
Lower 48 Dry Production	85.2	93.5	85.8	85.1	86.6	86.8	87.4	▲ 0.5	▼ -6.1
Canadian Imports	4.5	4.7	3.9	4.0	4.4	4.9	3.9	▼ -1.0	▼ -0.8
L48 Power	34.3	36.4	26.9	34.8	43.8	40.6	35.0	▼ -5.5	▼ -1.3
L48 Residential & Commercial	8.5	8.3	12.9	9.0	8.6	8.1	8.5	▲ 0.4	▲ 0.2
L48 Industrial	21.6	22.2	18.9	18.4	17.8	19.5	19.6	▲ 0.1	▼ -2.6
L48 Lease and Plant Fuel	4.8	5.2	4.8	4.9	4.9	4.8	4.9	▲ 0.0	▼ -0.3
L48 Pipeline Distribution	2.0	2.1	1.9	2.0	2.4	2.2	2.1	▼ -0.2	▼ -0.1
L48 Regional Gas Consumption	71.2	74.3	65.5	69.1	77.5	75.3	70.1	▼ -5.1	▼ -4.1
Net LNG Exports	3.1	6.2	6.7	4.0	3.3	4.0	5.7	▲ 1.6	▼ -0.5
Total Mexican Exports	5.1	5.4	4.9	5.7	6.1	6.3	6.4	▲ 0.1	▲ 1.0
Implied Daily Storage Activity	10.3	12.4	12.6	10.2	4.1	6.1	9.1		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

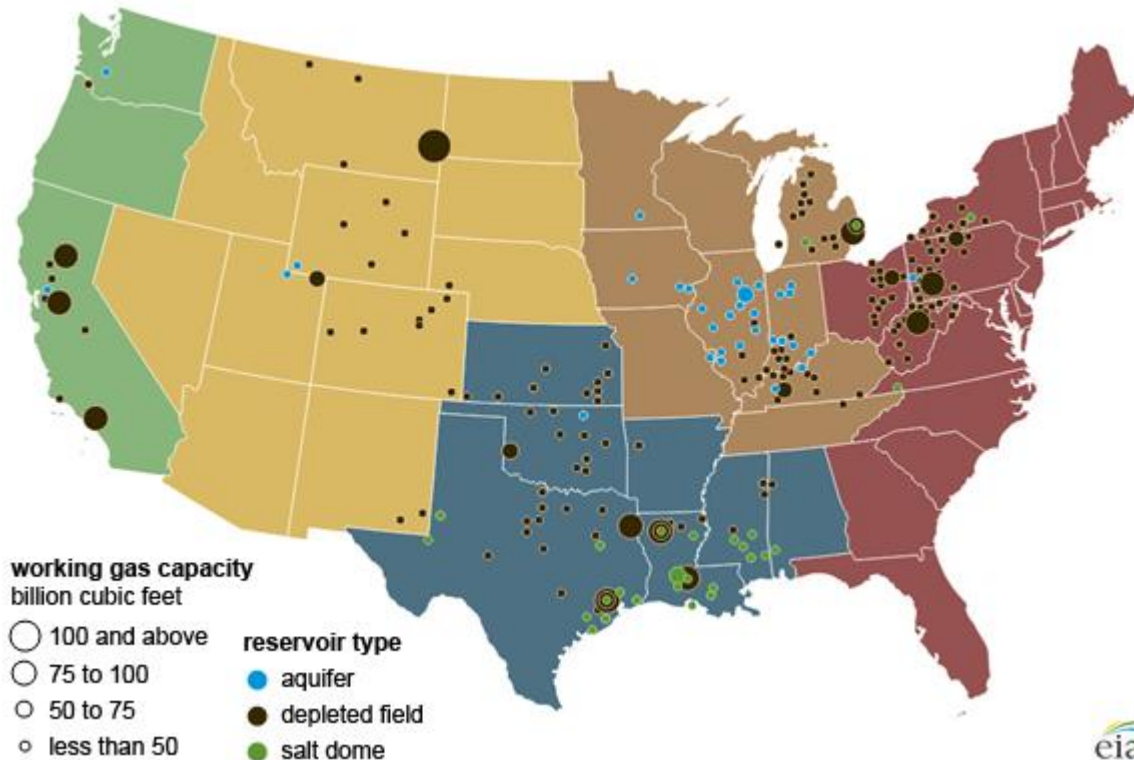
Regional S/D Models Storage Projection

Week Ending 11-Sep

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	9.6	1.0	10.6	74
East	0.9	1.4	2.3	16
Midwest	3.7	0.4	4.0	28
Mountain	3.4	-2.9	0.5	4
South Central	0.9	2.7	3.5	25
Pacific	0.8	-0.5	0.3	2

*Adjustment Factor is calculated based on historical regional deltas

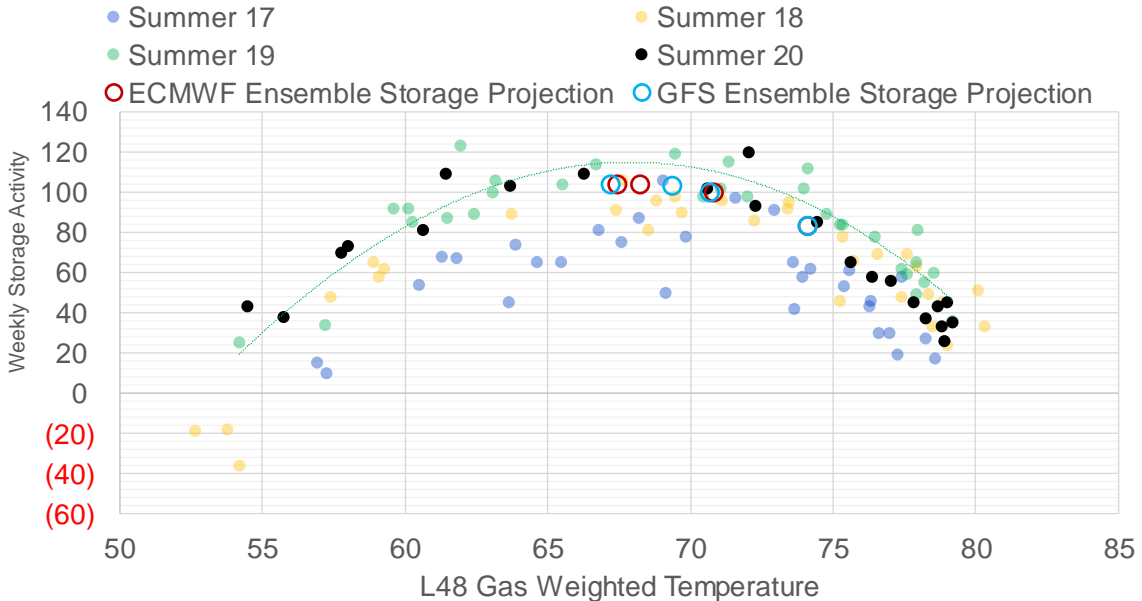
U.S. underground natural gas storage facilities by type (July 2015)



Weather Model Storage Projection

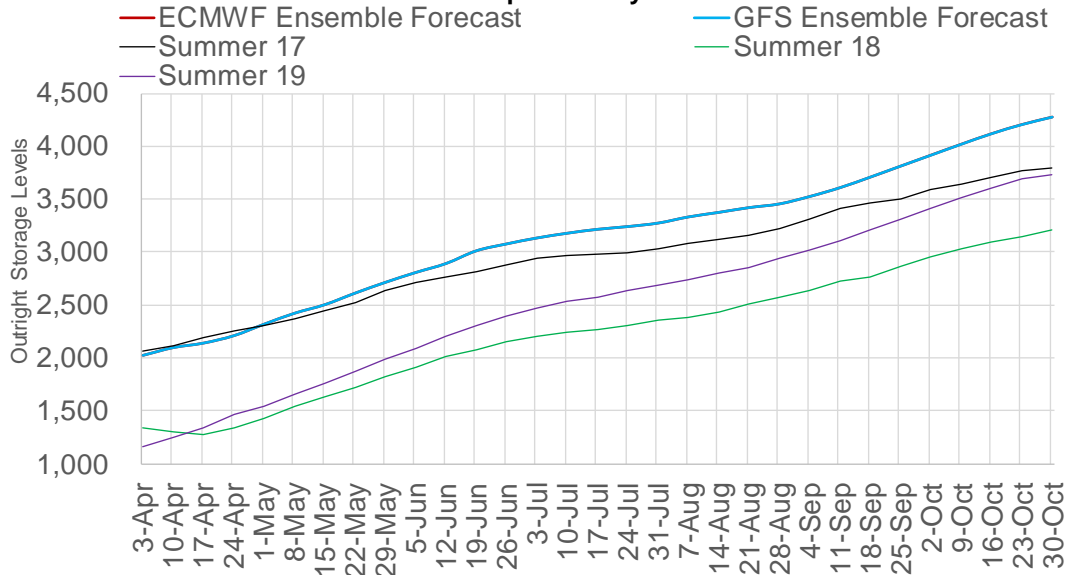
Next report and beyond	
Week Ending	Week Storage Projection
18-Sep	100
25-Sep	104
2-Oct	104

Weather Storage Model - Next 4 Week Forecast



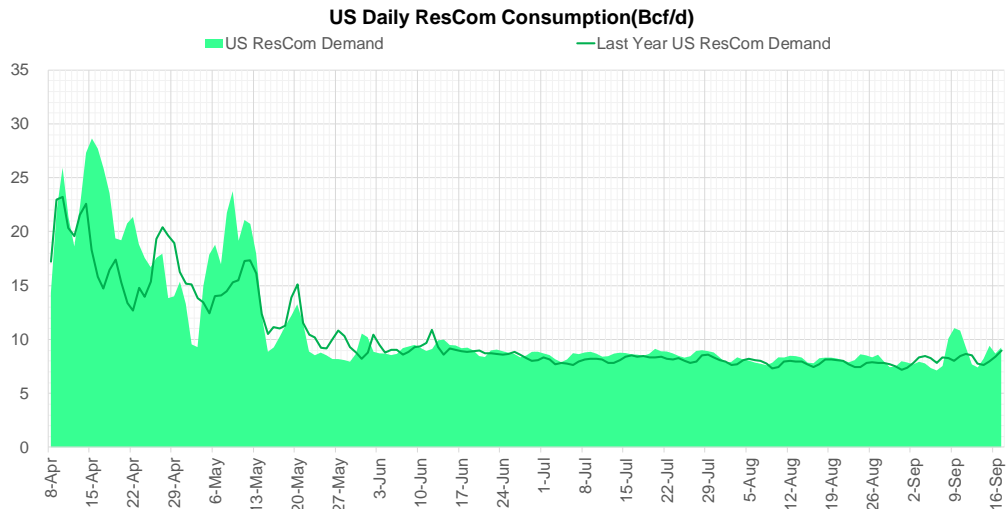
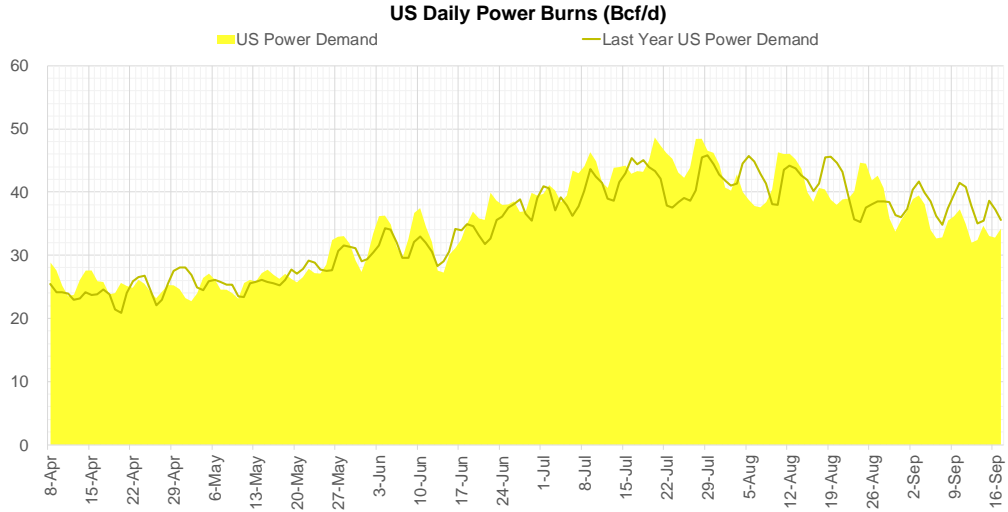
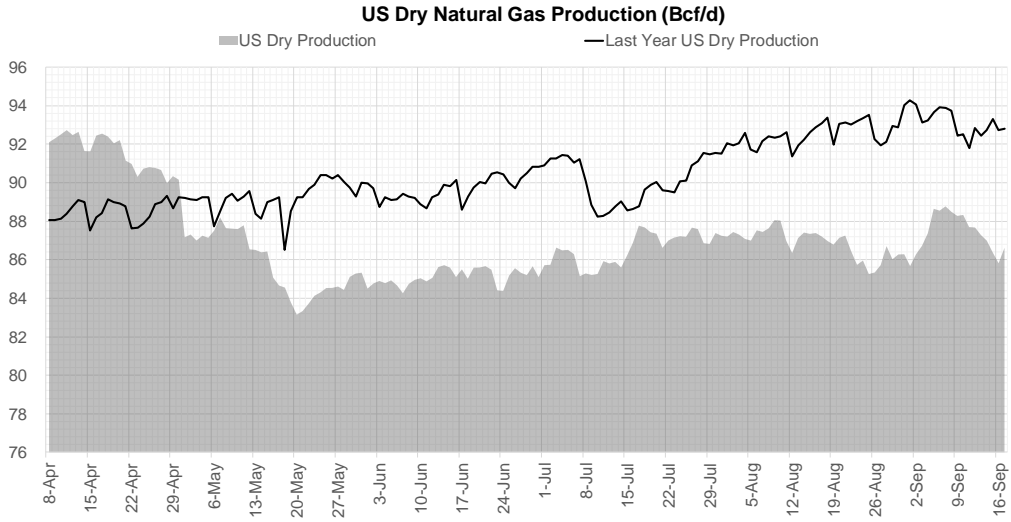
Weather Based End of Winter Projection (Bcf)

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.

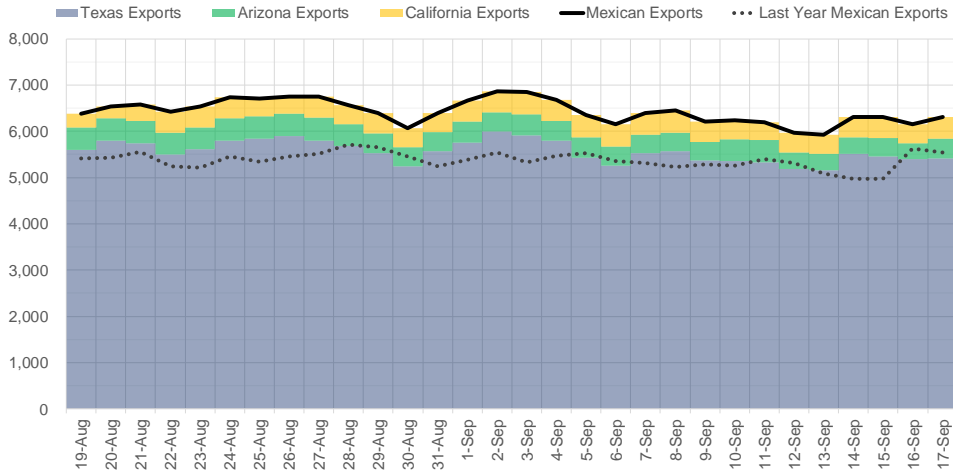
Supply – Demand Trends



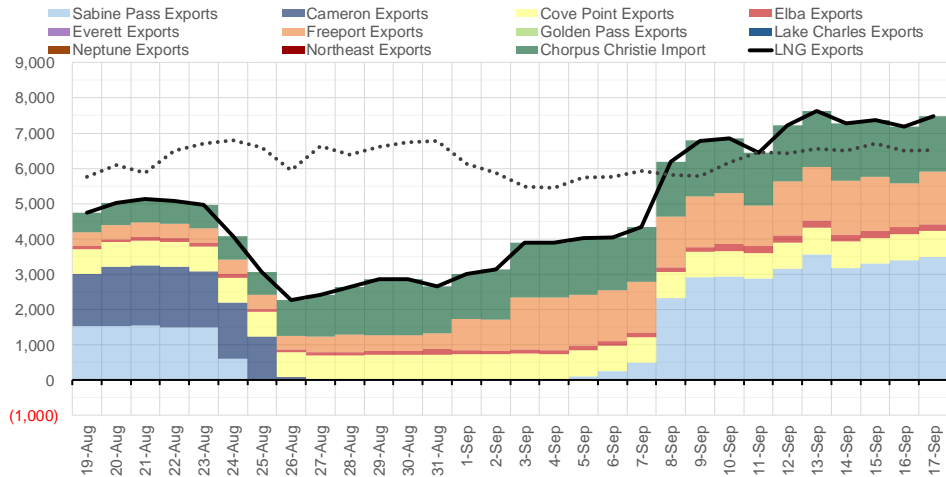
Source: Bloomberg

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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

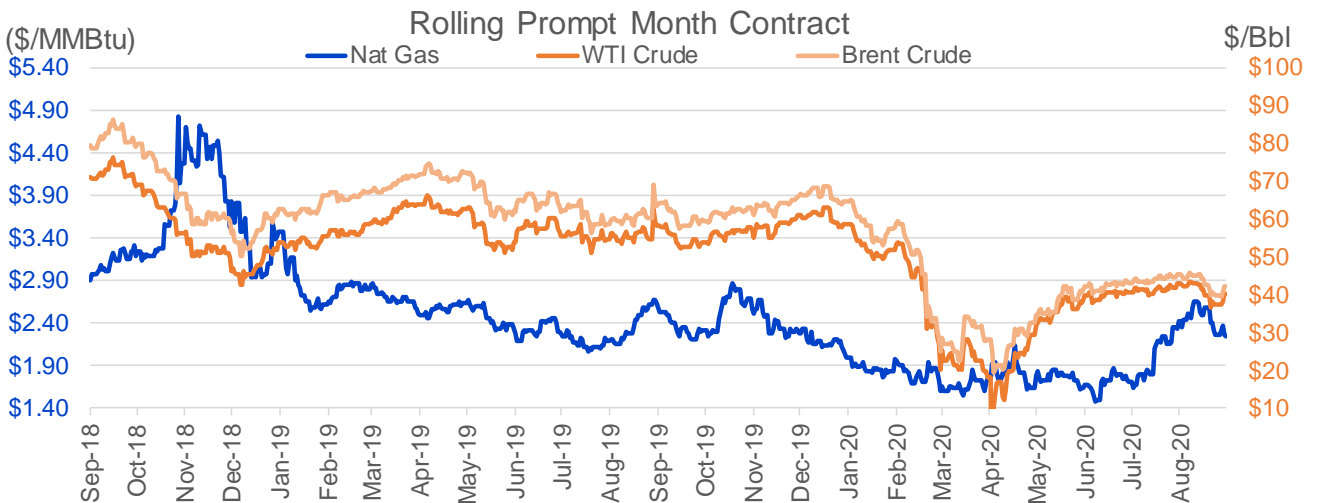
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
10	2020	C	2.75	11042	10	2020	C	2.75	50256
10	2020	C	2.50	9002	10	2020	C	3.00	47137
10	2020	P	2.00	8609	10	2020	P	2.00	45986
10	2020	P	2.25	7869	10	2020	P	1.50	43956
10	2020	P	2.20	5904	10	2020	P	2.25	39728
10	2020	P	2.05	5462	10	2020	P	1.60	34457
10	2020	C	2.60	4730	10	2020	C	2.50	33891
11	2020	C	3.50	4337	10	2020	P	1.75	33600
11	2020	C	3.10	4059	3	2021	P	2.00	33139
11	2020	P	2.25	3819	4	2021	C	5.00	32687
10	2020	C	2.80	3526	10	2020	P	1.25	28902
11	2020	C	2.75	3436	11	2020	C	5.00	27491
10	2020	C	2.45	3217	11	2020	C	3.50	27365
10	2020	P	2.15	2861	3	2021	C	3.25	26195
10	2020	P	2.10	2817	11	2020	P	2.00	25958
10	2020	C	2.70	2782	3	2021	C	4.00	25609
11	2020	C	3.25	2653	10	2020	P	2.10	25185
1	2021	C	5.00	2510	10	2020	P	1.00	24016
11	2020	C	4.00	2358	1	2021	C	3.50	23550
10	2020	P	1.75	2253	10	2020	C	3.25	23428
10	2020	C	2.55	2086	12	2020	P	2.00	23198
11	2020	C	3.00	2071	1	2021	C	4.50	23165
10	2020	C	2.40	1937	10	2020	P	2.20	22865
10	2020	C	2.30	1901	10	2020	P	1.90	22130
10	2020	C	3.00	1785	10	2020	C	2.10	21982
11	2020	P	2.00	1702	3	2021	C	3.00	21686
10	2020	C	2.65	1580	10	2020	P	1.80	21361
4	2022	C	3.00	1150	11	2020	P	2.25	21254
10	2020	P	2.30	1076	3	2021	C	6.00	21055
1	2021	P	2.50	1051	1	2021	C	5.00	19829
1	2021	P	3.00	1050	11	2020	P	2.50	19811
10	2021	C	4.00	1050	10	2020	C	2.60	19538
1	2021	P	2.25	1028	10	2020	C	2.80	19480
1	2021	C	4.30	1000	10	2020	P	1.30	19457
1	2021	C	4.55	1000	3	2021	C	3.50	19231
3	2021	C	4.50	1000	12	2020	P	2.50	18835
10	2021	C	3.50	1000	10	2020	C	3.50	18823
1	2022	C	3.00	950	10	2020	C	2.00	18668
2	2022	C	3.00	950	10	2020	P	2.05	17865
3	2022	C	3.00	950	11	2020	C	3.25	17846
1	2021	C	3.75	903	11	2020	C	3.00	17521
1	2021	C	4.00	900	2	2021	C	5.00	17146
10	2020	P	1.95	767	1	2021	C	3.00	16784
2	2021	C	5.00	755	1	2021	C	3.75	16559
3	2021	C	5.00	746	10	2020	C	2.25	16520
12	2020	C	3.50	732	10	2020	C	2.40	16454
11	2022	C	3.00	725	10	2020	P	1.40	15908
12	2022	C	3.00	725	12	2020	C	4.00	15159
11	2020	C	3.15	721	11	2020	C	4.00	14354
					12	2020	C	3.75	14213

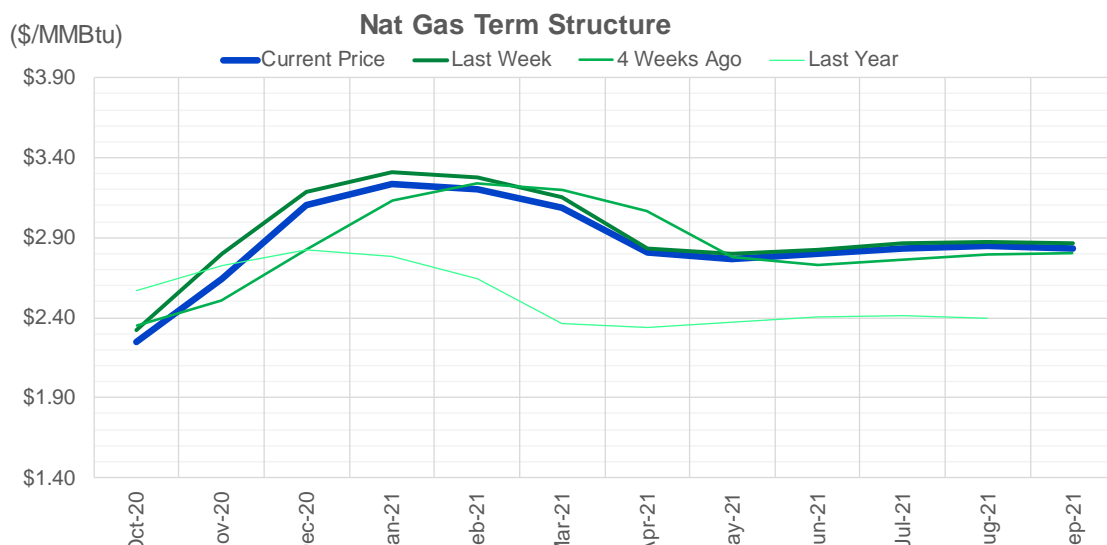
Source: CME, Nasdaq, ICE

Nat Gas Futures Open Interest CME, and ICE Combined

CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MMBtu)			
	Current	Prior	Daily Change	FOR JUNE 26	Current	Prior	Daily Change
OCT 20	102197	112789	-10592	OCT 20	80312	81012	-700.75
NOV 20	264375	255277	9098	NOV 20	84698	81265	3433.5
DEC 20	119379	115185	4194	DEC 20	75327	74582	744.75
JAN 21	141135	139104	2031	JAN 21	87555	87733	-177.25
FEB 21	56209	55925	284	FEB 21	59051	59038	12.25
MAR 21	115958	114227	1731	MAR 21	78495	78823	-328.75
APR 21	78885	77947	938	APR 21	65107	64728	378.5
MAY 21	45636	44822	814	MAY 21	55359	55241	118.75
JUN 21	28601	29094	-493	JUN 21	51457	51132	325.25
JUL 21	20737	20655	82	JUL 21	53904	53677	227.25
AUG 21	22276	22043	233	AUG 21	53676	53599	77
SEP 21	28109	27818	291	SEP 21	50492	50306	185.5
OCT 21	70139	69707	432	OCT 21	75077	74741	335.25
NOV 21	27137	27065	72	NOV 21	43111	42915	196
DEC 21	24141	24206	-65	DEC 21	43185	43129	56
JAN 22	24144	23705	439	JAN 22	37037	36884	153
FEB 22	12983	12990	-7	FEB 22	32237	32151	86
MAR 22	18267	18176	91	MAR 22	34250	34049	201
APR 22	22506	21959	547	APR 22	34627	34115	511.75
MAY 22	6374	6269	105	MAY 22	25124	24968	156
JUN 22	3623	3617	6	JUN 22	23985	24140	-155
JUL 22	2987	2987	0	JUL 22	25308	25236	71.75
AUG 22	2170	1968	202	AUG 22	24532	24485	46.5
SEP 22	2177	2177	0	SEP 22	23577	23532	45
OCT 22	3309	3242	67	OCT 22	25051	25032	19
NOV 22	2513	2306	207	NOV 22	22700	22574	126
DEC 22	2491	2488	3	DEC 22	24763	24641	122
JAN 23	2832	2827	5	JAN 23	12528	12479	49
FEB 23	855	855	0	FEB 23	12004	11959	44.75
MAR 23	901	901	0	MAR 23	11953	11889	64.5

Source: CME, ICE





	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
Current Price	\$2.244	\$2.644	\$3.107	\$3.237	\$3.199	\$3.085	\$2.804	\$2.768	\$2.796	\$2.836	\$2.846	\$2.834
Last Week	\$2.323	\$2.798	\$3.186	\$3.309	\$3.273	\$3.154	\$2.832	\$2.796	\$2.825	\$2.862	\$2.874	\$2.862
vs. Last Week	-\$0.079	-\$0.154	-\$0.079	-\$0.072	-\$0.074	-\$0.069	-\$0.028	-\$0.028	-\$0.029	-\$0.026	-\$0.028	-\$0.028
4 Weeks Ago	\$2.352	\$2.503	\$2.827	\$3.136	\$3.243	\$3.197	\$3.065	\$2.777	\$2.733	\$2.759	\$2.793	\$2.802
vs. 4 Weeks Ago	-\$0.108	\$0.141	\$0.280	\$0.101	-\$0.044	-\$0.112	-\$0.261	-\$0.009	\$0.063	\$0.077	\$0.053	\$0.032
Last Year	\$2.538	\$2.569	\$2.726	\$2.828	\$2.786	\$2.646	\$2.363	\$2.336	\$2.369	\$2.406	\$2.411	\$2.396
vs. Last Year	-\$0.294	\$0.075	\$0.381	\$0.409	\$0.413	\$0.439	\$0.441	\$0.432	\$0.427	\$0.430	\$0.435	\$0.438

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.25	1.63	0.38
TETCO M3	\$/MMBtu	0.87	1.32	0.45
FGT Zone 3	\$/MMBtu	0.97	2.34	1.37
Zone 6 NY	\$/MMBtu	0.97	1.32	0.35
Chicago Citygate	\$/MMBtu	1.90	2.00	0.10
Michcon	\$/MMBtu	1.89	1.90	0.01
Columbia TCO Pool	\$/MMBtu	1.69	1.50	-0.19
Ventura	\$/MMBtu	1.85	1.97	0.12
Rockies/Opal	\$/MMBtu	2.40	1.85	-0.55
El Paso Permian Basin	\$/MMBtu	1.78	1.53	-0.25
Socal Citygate	\$/MMBtu	2.80	2.19	-0.61
Malin	\$/MMBtu	2.25	2.00	-0.25
Houston Ship Channel	\$/MMBtu	2.14	2.30	0.16
Henry Hub Cash	\$/MMBtu	2.06	2.03	-0.03
AECO Cash	C\$/GJ	1.82	1.79	-0.03
Station2 Cash	C\$/GJ	1.85	2.23	0.38
Dawn Cash	C\$/GJ	1.88	1.90	0.02

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks		vs. Last Year
				Ago		
NatGas Jan/Apr	\$/MMBtu	-0.43	▲ 0.044	▲ 0.033	▲ 0.008	
NatGas Mar/Apr	\$/MMBtu	-0.281	▲ 0.041	▼ -0.569	▼ -0.550	
NatGas Oct/Nov	\$/MMBtu	0.40	▼ -0.075	▲ 0.076	▲ 0.346	
NatGas Oct/Jan	\$/MMBtu	0.99	▲ 0.007	▲ 0.253	▲ 0.657	
WTI Crude	\$/Bbl	40.23	▲ 2.930	▼ -2.350	▼ -17.900	
Brent Crude	\$/Bbl	42.31	▲ 2.250	▼ -2.590	▼ -22.090	
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000	
Heating Oil	cents/Gallon	112.87	▲ 4.630	▼ -11.800	▼ -87.620	
Propane, Mt. Bel	cents/Gallon	0.50	▲ 0.033	▼ -0.007	▲ 0.049	
Ethane, Mt. Bel	cents/Gallon	0.21	▼ -0.005	▼ -0.039	▼ -0.012	
Coal, PRB	\$/MTon	12.30	▲ 0.000	▲ 0.000	▲ 0.150	
Coal, ILB	\$/MTon	31.05	▲ 0.000	▲ 0.000	▼ -4.500	