

	Current	Δ from YD	Δ from 7D Avg
Nat Gas Prompt	\$ 1.66	▲ \$ 0.02	▲ \$ 0.02

	Current	Δ from YD	Δ from 7D Avg
WTI Prompt	\$ 20.70	▲ \$ 0.22	▼ \$ (1.0)

	Current	Δ from YD	Δ from 7D Avg
Brent Prompt	\$ 25.49	▲ \$ 2.75	▲ \$ 0.6

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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	-3.1	3.4	3.6	3.9
24 Hr Chg	-0.3	4.1	5.8	9.6

GFS Ensemble 00z	1-5 Day	6-10 Day	11-15 Day	Total
12 Hr Chg	0.2	-1.1	5.7	4.8
24 Hr Chg	0.9	0.4	3.6	4.9

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	88.4	▼ -3.46	▼ -3.40

	Current	Δ from YD	Δ from 7D Avg
US Power Burns	26.3	▼ -1.55	▼ -0.70

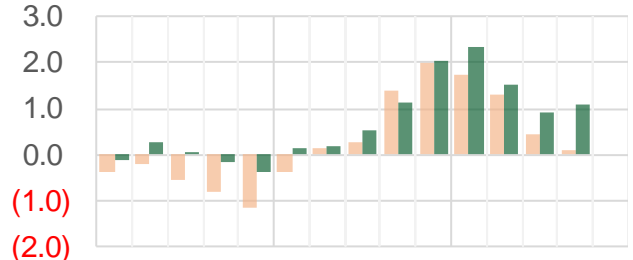
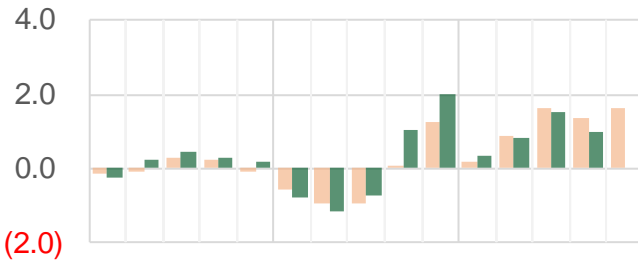
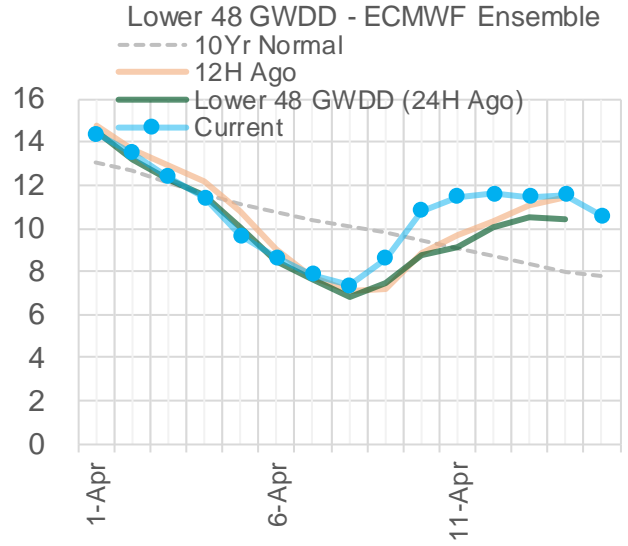
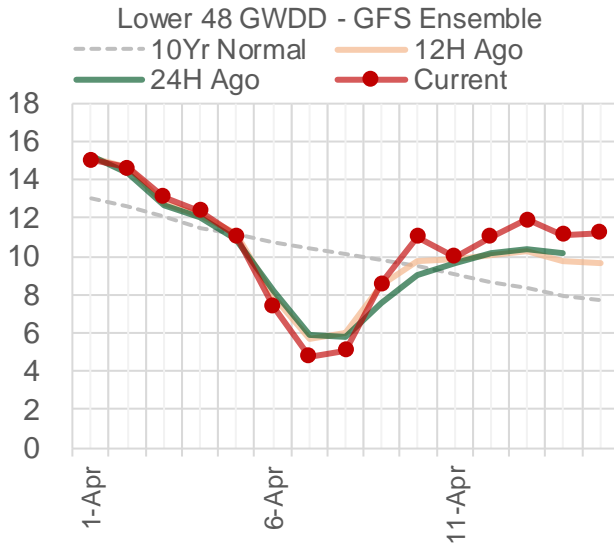
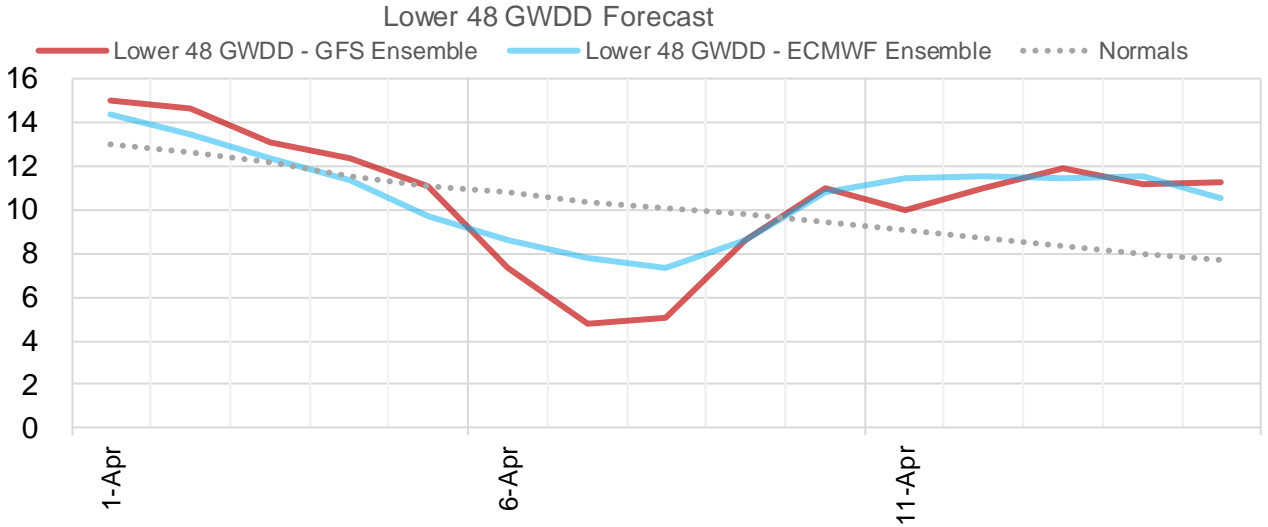
	Current	Δ from YD	Δ from 7D Avg
US ResComm	27.2	▼ -0.74	▲ 2.89

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	4.6	▲ 0.80	▲ 0.82

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	9.3	▼ -0.25	▼ -0.02

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	5.7	▲ 0.08	▲ 0.00

Short-term Weather Model Outlooks (00z)



Source: WSI, Bloomberg

Lower 48 Component Models

Daily Balances

	26-Mar	27-Mar	28-Mar	29-Mar	30-Mar	31-Mar	1-Apr	DoD	vs. 7D
Lower 48 Dry Production	91.1	91.6	92.2	91.9	92.4	91.8	88.3	▼ -3.5	▼ -3.5
Canadian Imports	4.4	3.6	3.3	3.3	3.5	3.8	4.6	▲ 0.8	▲ 0.9
L48 Power	28.2	27.7	24.9	25.4	26.4	27.9	26.3	▼ -1.5	▼ -0.4
L48 Residential & Commercial	24.9	22.4	21.7	21.6	24.0	28.0	27.2	▼ -0.7	▲ 3.5
L48 Industrial	22.2	22.0	22.0	22.2	22.4	23.0	22.9	▼ -0.1	▲ 0.6
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.1	5.1	▲ 0.0	▼ 0.0
L48 Pipeline Distribution	2.3	2.3	2.1	2.2	2.3	1.5	1.5	▲ 0.0	▼ -0.6
L48 Regional Gas Consumption	82.7	79.4	75.8	76.6	80.3	85.4	83.1	▼ -2.3	▲ 3.0
Net LNG Exports	9.1	9.0	9.5	9.5	9.4	9.6	9.3	▼ -0.3	▼ 0.0
Total Mexican Exports	5.8	5.6	5.7	5.6	5.6	5.6	5.7	▲ 0.1	▲ 0.1
Implied Daily Storage Activity	-2.1	1.1	4.6	3.6	0.6	-5.0	-5.2		
EIA Reported Daily Storage Activity									
Daily Model Error									

EIA Storage Week Balances

	21-Feb	28-Feb	6-Mar	13-Mar	20-Mar	27-Mar	WoW	vs. 4W
Lower 48 Dry Production	91.3	91.5	91.2	90.9	91.9	91.5	▼ -0.4	▲ 0.2
Canadian Imports	5.6	5.0	4.5	3.8	4.1	4.5	▲ 0.4	▲ 0.2
L48 Power	30.3	29.5	27.9	27.2	29.1	28.6	▼ -0.5	▲ 0.1
L48 Residential & Commercial	44.8	39.3	34.4	28.6	29.9	29.3	▼ -0.7	▼ -3.8
L48 Industrial	25.1	24.8	23.8	23.1	23.0	23.0	▼ -0.1	▼ -0.7
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.0	5.1	5.1	▼ 0.0	▲ 0.0
L48 Pipeline Distribution	3.1	2.9	2.7	2.5	2.6	2.5	▼ 0.0	▼ -0.1
L48 Regional Gas Consumption	108.4	101.7	93.8	86.4	89.7	88.4	▼ -1.3	▼ -4.5
Net LNG Exports	7.8	8.8	7.8	8.0	7.9	9.3	▲ 1.4	▲ 1.2
Total Mexican Exports	5.4	5.5	5.6	5.6	5.6	5.7	▲ 0.1	▲ 0.1
Implied Daily Storage Activity	-24.7	-19.4	-11.6	-5.3	-7.1	-7.3	-0.1	
EIA Reported Daily Storage Activity	-20.4	-15.6	-6.9	-1.3	-4.1			
Daily Model Error	-4.2	-3.8	-4.7	-4.0	-3.0			

Monthly Balances

	2Yr Ago Apr-18	LY Apr-19	Nov-19	Dec-19	Jan-20	Feb-20	MTD Mar-20	MoM	vs. LY
Lower 48 Dry Production	80.5	88.6	94.1	93.4	92.3	91.3	91.2	▼ -0.1	▲ 2.6
Canadian Imports	5.6	4.6	4.5	4.5	4.8	5.3	4.7	▼ -0.6	▲ 0.1
L48 Power	23.5	24.1	27.4	28.9	29.8	29.8	25.5	▼ -4.3	▲ 1.4
L48 Residential & Commercial	24.3	17.5	32.4	38.8	41.6	41.4	35.5	▼ -5.9	▲ 18.0
L48 Industrial	22.3	21.9	24.3	24.8	25.2	24.9	23.4	▼ -1.4	▲ 1.5
L48 Lease and Plant Fuel	4.6	4.9	5.2	5.2	5.1	5.1	5.1	▼ 0.0	▲ 0.1
L48 Pipeline Distribution	1.9	1.9	2.7	2.9	3.0	3.0	2.6	▼ -0.4	▲ 0.8
L48 Regional Gas Consumption	76.5	70.3	92.0	100.6	104.7	104.1	92.1	▼ -12.0	▲ 21.8
Net LNG Exports	3.5	4.4	7.2	7.8	8.3	8.5	8.7	▲ 0.2	▲ 4.3
Total Mexican Exports	4.3	4.8	5.3	5.0	5.2	5.3	5.1	▼ -0.2	▲ 0.3
Implied Daily Storage Activity	1.8	13.7	-5.8	-15.4	-21.2	-21.3	-10.0		
EIA Reported Daily Storage Activity									
Daily Model Error									

Source: Bloomberg, analytix.ai

Regional S/D Models Storage Projection

Week Ending 27-Mar

	Daily Raw Storage	Daily Adjustment Factor	Daily Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-7.3	3.5	-3.7	-26
East	-4.3	2.7	-1.7	-11.7
Midwest	-3.9	0.9	-3.0	-21.1
Mountain	1.5	-2.2	-0.7	-4.7
South Central	-0.8	1.9	1.1	7.9
Pacific	0.3	0.2	0.5	3.5

*Adjustment Factor is calculated based on historical regional deltas

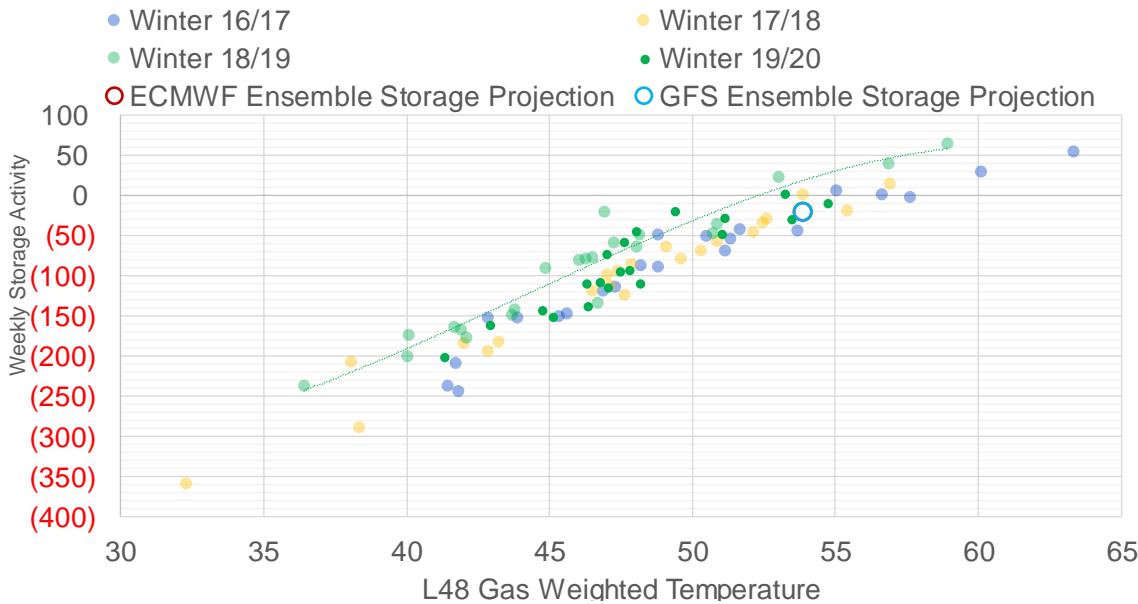
U.S. underground natural gas storage facilities by type (July 2015)



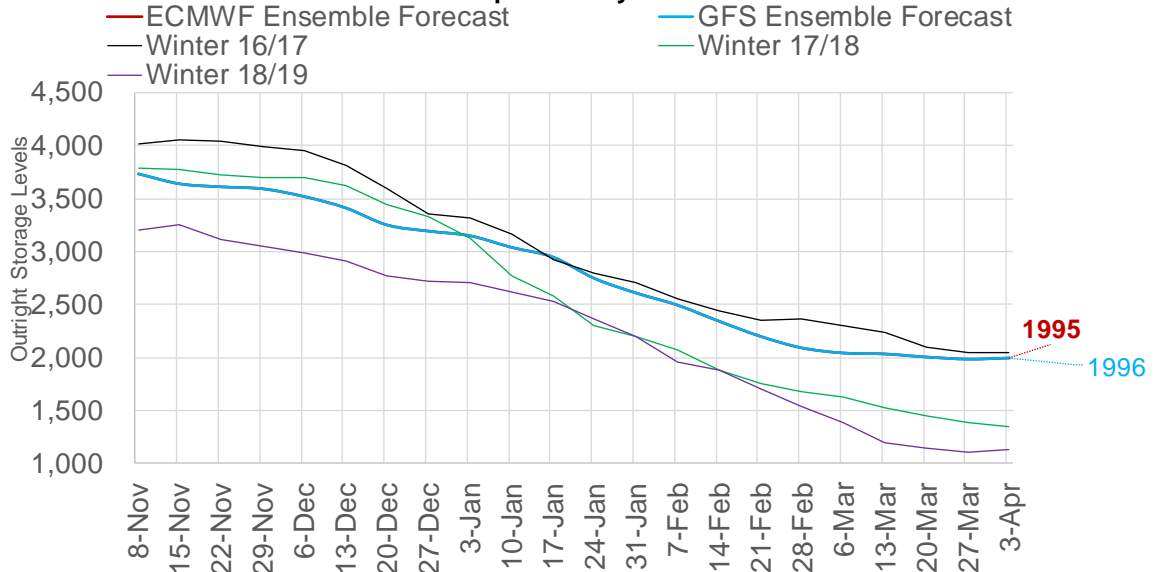
Weather Model Storage Projection

Week Ending	ECMWF Forecast	ECMWF Ensemble Storage Projection	GFS Forecast	GFS Ensemble Storage Projection
27-Mar	53.9	-20	53.9	-20
3-Apr	55.8	10	55.7	10
10-Apr				
17-Apr				

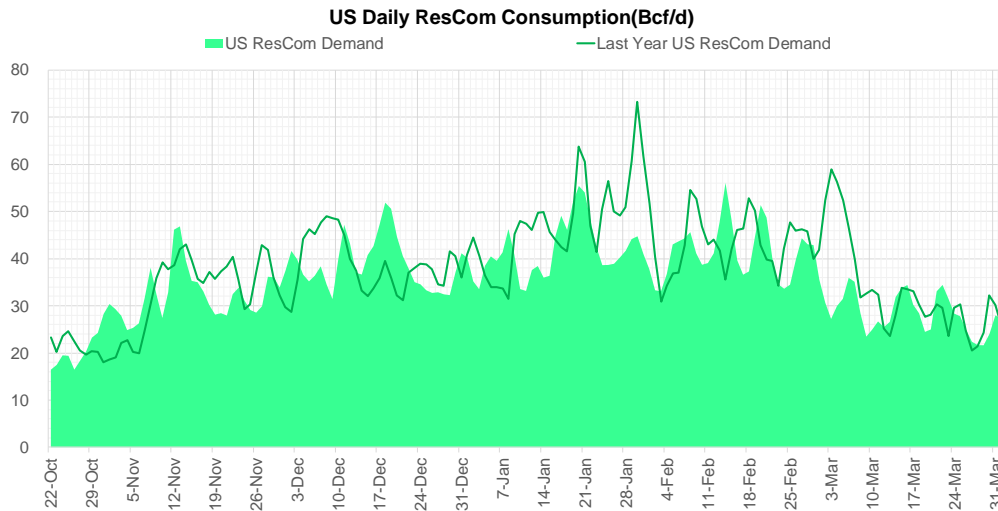
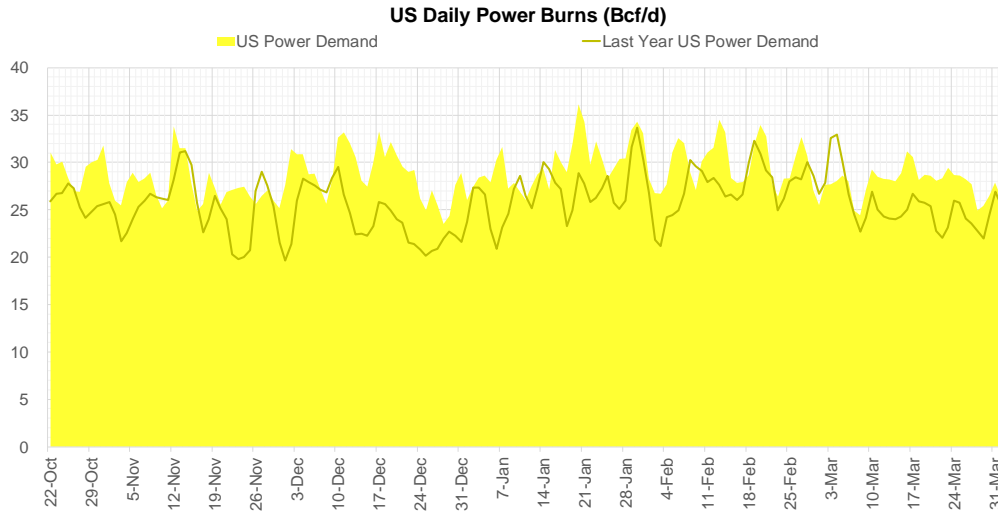
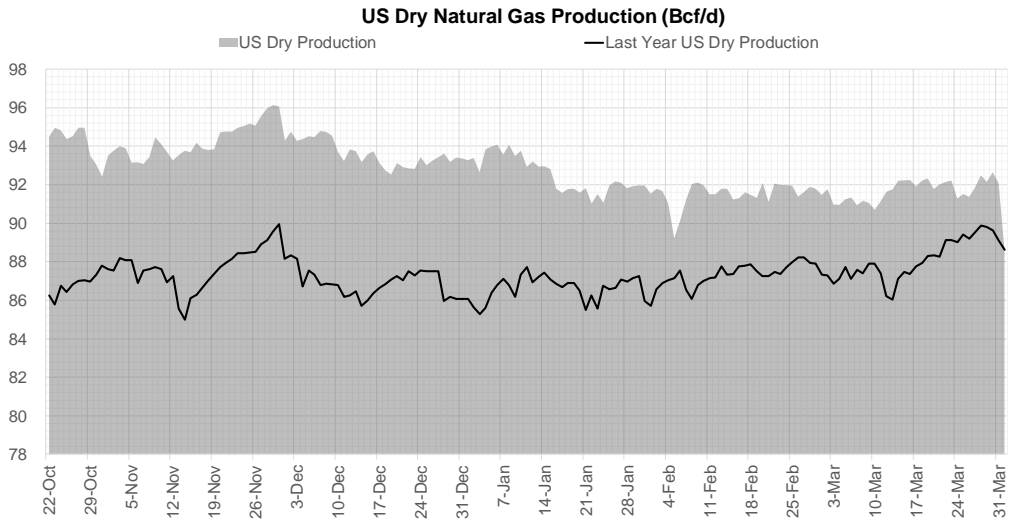
Weather Storage Model - Next 4 Week Forecast



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



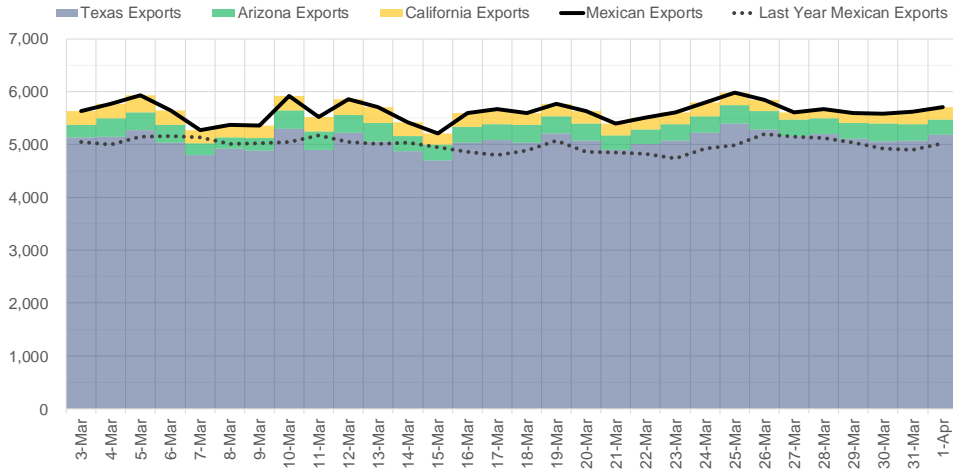
Supply – Demand Trends



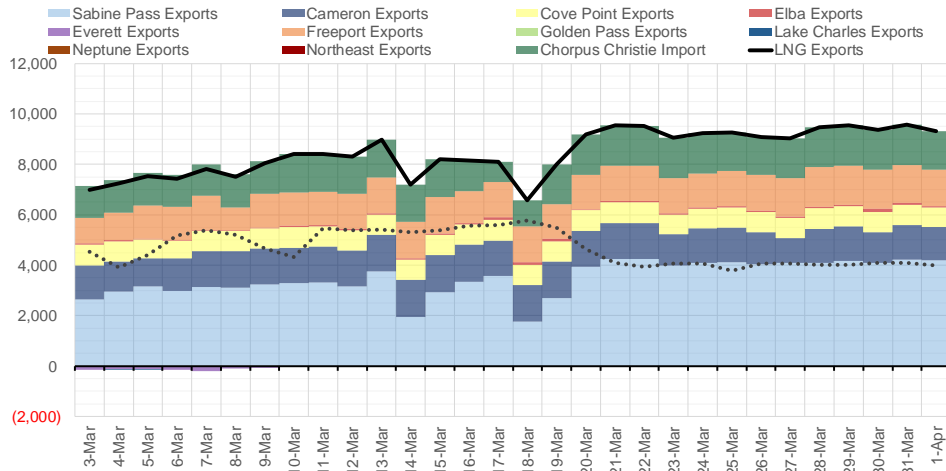
Source: Bloomberg

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.

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

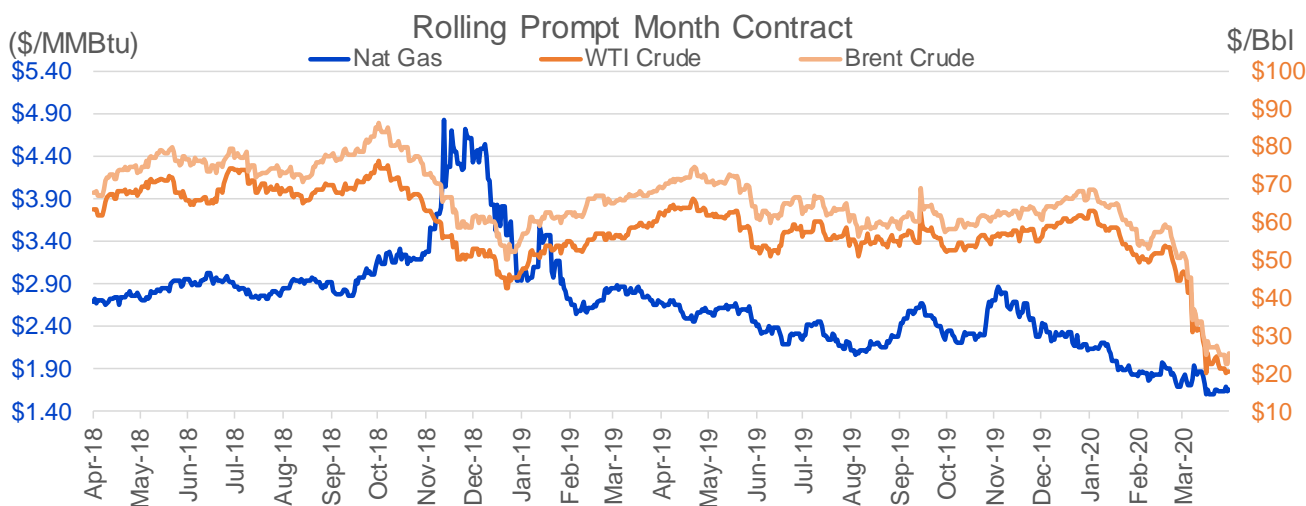
CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE VOL	CONTRACT MONTH	CONTRACT YEAR	PUT/CALL	STRIKE	CUMULATIVE OI
6	2020	P	1.25	30913	5	2020	P	1.50	58169
5	2020	P	1.25	29768	10	2020	P	1.50	42329
5	2020	P	1.50	7240	3	2021	P	2.00	34129
6	2020	C	2.00	4341	5	2020	P	1.40	33695
5	2020	C	1.75	4116	10	2020	P	1.60	32059
5	2020	C	2.00	4114	5	2020	C	2.00	31306
6	2020	P	1.50	3725	5	2020	P	1.75	29636
10	2020	P	1.50	3341	5	2020	P	1.60	29369
10	2020	P	1.60	3203	6	2020	P	1.25	28346
10	2020	C	2.75	2993	5	2020	P	1.25	26551
9	2020	P	1.00	2859	6	2020	C	2.50	26039
5	2020	P	1.00	2534	5	2020	C	2.25	23945
8	2020	P	1.00	2420	6	2020	P	2.00	23698
10	2020	C	2.35	2350	7	2020	C	3.00	23245
3	2021	C	3.00	2225	5	2020	C	2.50	22967
9	2020	P	1.40	2200	10	2020	C	2.75	22879
7	2020	P	1.50	2187	7	2020	P	1.50	22436
1	2021	C	3.50	2165	7	2020	C	2.75	22366
3	2021	C	3.50	2165	6	2020	C	2.00	21868
1	2021	C	3.00	2150	9	2020	C	2.50	21530
2	2021	C	3.00	2150	5	2020	C	2.75	21083
2	2021	C	3.50	2150	10	2020	C	3.00	21064
5	2020	P	1.60	2092	5	2020	C	3.00	20857
10	2020	P	1.25	2080	5	2020	P	1.70	20652
7	2020	P	1.00	2077	7	2020	C	2.50	20401
5	2020	P	1.40	1993	7	2020	P	2.00	20379
9	2020	P	1.25	1924	9	2020	P	1.50	20149
5	2020	P	1.45	1873	5	2020	P	2.00	19627
11	2020	P	2.15	1750	10	2020	C	2.50	19553
7	2020	P	1.35	1744	5	2020	C	2.15	19364
5	2020	C	1.85	1715	8	2020	P	1.50	19157
6	2020	P	1.70	1554	6	2020	P	1.50	18766
9	2020	C	2.50	1302	7	2020	P	1.75	18749
5	2020	C	1.90	1234	5	2020	P	1.80	18502
9	2020	P	1.50	1174	8	2020	C	3.00	17394
5	2020	C	2.25	1152	9	2020	C	3.00	17147
9	2020	P	1.70	1100	6	2020	P	1.75	17028
7	2020	P	1.75	1055	10	2020	P	1.25	16962
9	2020	C	2.25	1046	7	2020	P	1.25	16865
5	2020	C	2.15	1021	1	2021	C	3.00	16810
6	2020	C	1.80	974	10	2020	P	2.00	16559
10	2020	P	2.00	950	6	2020	C	3.00	15733
9	2020	C	2.75	934	6	2020	C	2.25	15489
5	2020	P	1.65	873	6	2020	P	1.60	14894
3	2021	P	2.00	842	1	2021	P	2.00	14688
9	2020	P	1.75	817	5	2020	C	2.60	14573
6	2020	C	2.25	803	9	2020	P	1.25	14532
7	2020	P	1.55	750	7	2020	C	2.30	13674
9	2020	C	2.60	750	5	2020	P	1.00	13526
					9	2020	C	2.75	13333

Source: CME, Nasdaq, ICE

Nat Gas Futures Open Interest CME, ICE and Nasdaq Combined

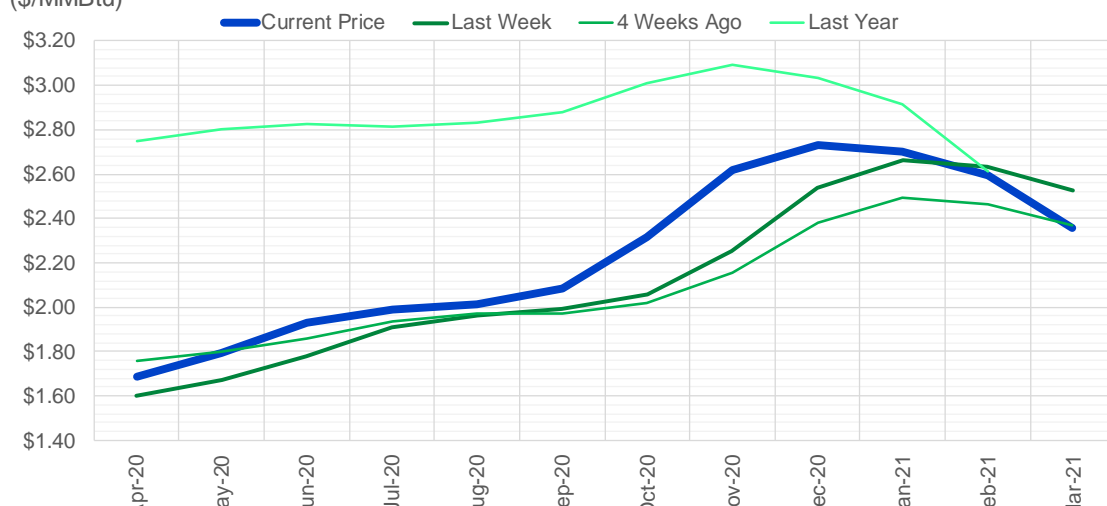
CME Henry Hub Futures (10,000 MMBtu)				ICE Henry Hub Futures Contract Equivalent (10,000 MM)				NASDAQ Henry Hub Futures (10,000 MMBtu)			
	Current	Prior	Daily Change		Current	Prior	Daily Change		Current	Prior	Daily Change
MAY 20	347232	348185	-953	MAY 20	91065	90298	767	MAY 20	551	551	0
JUN 20	96844	96520	324	JUN 20	60878	60730	147.5	JUN 20	1367	1367	0
JUL 20	126779	120665	6114	JUL 20	64192	63327	865.75	JUL 20	2871	2871	0
AUG 20	54201	53382	819	AUG 20	58459	58001	458.5	AUG 20	549	549	0
SEP 20	99735	98332	1403	SEP 20	58724	58999	-275	SEP 20	161	161	0
OCT 20	102542	105471	-2929	OCT 20	73260	73341	-81	OCT 20	1010	1010	0
NOV 20	35965	34522	1443	NOV 20	49811	49418	392.75	NOV 20	741	741	0
DEC 20	35821	35550	271	DEC 20	53639	53004	635.25	DEC 20	242	242	0
JAN 21	66988	67464	-476	JAN 21	56958	56625	332.75	JAN 21	336	336	0
FEB 21	28667	28639	28	FEB 21	37582	37238	343.5	FEB 21	33	33	0
MAR 21	45650	45253	397	MAR 21	44395	43982	412.75	MAR 21	1106	1106	0
APR 21	49864	50994	-1130	APR 21	42056	41461	595.5	APR 21	775	775	0
MAY 21	14326	13703	623	MAY 21	33738	33255	483.25	MAY 21	46	46	0
JUN 21	10963	10509	454	JUN 21	32041	31810	231	JUN 21	45	45	0
JUL 21	8944	8558	386	JUL 21	34380	33830	549.5	JUL 21	46	46	0
AUG 21	8554	8762	-208	AUG 21	34913	34373	540.5	AUG 21	46	46	0
SEP 21	8283	8268	15	SEP 21	31796	31473	323	SEP 21	45	45	0
OCT 21	18023	17038	985	OCT 21	36703	36154	548.75	OCT 21	571	571	0
NOV 21	13320	13107	213	NOV 21	29179	28999	180.75	NOV 21	430	430	0
DEC 21	8493	8502	-9	DEC 21	30473	30133	340.5	DEC 21	30	30	0
JAN 22	6079	5860	219	JAN 22	23036	22861	175.5	JAN 22	36	36	0
FEB 22	4242	4234	8	FEB 22	20353	20117	235.5	FEB 22	33	33	0
MAR 22	7497	7451	46	MAR 22	21801	21612	189.25	MAR 22	900	900	0
APR 22	7638	7523	115	APR 22	18618	18380	237.5	APR 22	1050	1050	0
MAY 22	3324	3290	34	MAY 22	17761	17435	325.5	MAY 22	51	51	0
JUN 22	1161	1093	68	JUN 22	16889	16543	346	JUN 22	50	50	0
JUL 22	1199	1138	61	JUL 22	16980	16621	359.25	JUL 22	51	51	0
AUG 22	834	772	62	AUG 22	16919	16560	359.25	AUG 22	51	51	0
SEP 22	895	833	62	SEP 22	16784	16427	356.5	SEP 22	50	50	0
OCT 22	1282	1249	33	OCT 22	17461	17023	437.75	OCT 22	515	515	0

Source: CME, Nasdaq, ICE



(\$/MMBtu)

Nat Gas Term Structure



	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Current Price	\$1.690	\$1.794	\$1.931	\$1.989	\$2.014	\$2.082	\$2.314	\$2.617	\$2.733	\$2.700	\$2.597	\$2.357
Last Week	\$1.602	\$1.673	\$1.782	\$1.909	\$1.963	\$1.994	\$2.055	\$2.256	\$2.538	\$2.663	\$2.631	\$2.524
vs. Last Week	\$0.088	\$0.121	\$0.149	\$0.080	\$0.051	\$0.088	\$0.259	\$0.361	\$0.195	\$0.037	-\$0.034	-\$0.167
4 Weeks Ago	\$1.756	\$1.797	\$1.858	\$1.935	\$1.969	\$1.974	\$2.022	\$2.154	\$2.379	\$2.495	\$2.463	\$2.370
vs. 4 Weeks Ago	-\$0.066	-\$0.003	\$0.073	\$0.054	\$0.045	\$0.108	\$0.292	\$0.463	\$0.354	\$0.205	\$0.134	-\$0.013
Last Year	\$2.708	\$2.749	\$2.802	\$2.823	\$2.814	\$2.830	\$2.878	\$3.009	\$3.094	\$3.034	\$2.917	\$2.615
vs. Last Year	-\$1.018	-\$0.955	-\$0.871	-\$0.834	-\$0.800	-\$0.748	-\$0.564	-\$0.392	-\$0.361	-\$0.334	-\$0.320	-\$0.258

	Units	Cash Settled	Prompt Settle	Cash to Prompt
AGT Citygate	\$/MMBtu	1.53	1.52	-0.01
TETCO M3	\$/MMBtu	1.38	1.30	-0.08
FGT Zone 3	\$/MMBtu	1.44	1.60	0.16
Zone 6 NY	\$/MMBtu	1.44	1.32	-0.12
Chicago Citygate	\$/MMBtu	1.45	1.44	-0.01
Michcon	\$/MMBtu	1.48	1.46	-0.02
Columbia TCO Pool	\$/MMBtu	1.33	1.33	0.00
Ventura	\$/MMBtu	1.28	1.37	0.09
Rockies/Opal	\$/MMBtu	1.30	1.24	-0.06
El Paso Permian Basin	\$/MMBtu	0.25	0.43	0.18
Socal Citygate	\$/MMBtu	1.68	1.33	-0.36
Malin	\$/MMBtu	1.32	1.39	0.07
Houston Ship Channel	\$/MMBtu	1.59	1.54	-0.05
Henry Hub Cash	\$/MMBtu	1.71	1.40	-0.31
AECO Cash	C\$/GJ	1.28	1.17	-0.11
Station2 Cash	C\$/GJ	1.27	1.34	0.07
Dawn Cash	C\$/GJ	1.45	1.46	0.01

Source: CME, Bloomberg

	Units	Current Price	vs. Last Week	vs. 4 Weeks	
				Ago	vs. Last Year
NatGas Jan/Apr	\$/MMBtu	-0.52	▲ 0.032	▼ -0.122	▼ -0.045
NatGas Mar/Apr	\$/MMBtu	0.187	▼ -0.032	▲ 0.122	▼ -0.115
NatGas Oct/Nov	\$/MMBtu	0.23	▲ 0.031	▲ 0.100	▲ 0.186
NatGas Oct/Jan	\$/MMBtu	0.65	▲ 0.043	▲ 0.178	▲ 0.339
WTI Crude	\$/Bbl	20.09	▼ -3.270	▼ -26.660	▼ -41.500
Brent Crude	\$/Bbl	22.76	▼ -4.270	▼ -29.140	▼ -46.250
Fuel Oil, NY Harbour 1%	\$/Bbl	98.03	▲ 0.000	▲ 0.000	▲ 0.000
Heating Oil	cents/Gallon	101.94	▲ 0.330	▼ -50.930	▼ -96.870
Propane, Mt. Bel	cents/Gallon	0.29	▲ 0.010	▼ -0.114	▼ -0.356
Ethane, Mt. Bel	cents/Gallon	0.12	▲ 0.005	▼ -0.025	▼ -0.095
Coal, PRB	\$/MTon	12.30	▲ 0.000	▼ -0.100	▼ -0.350
Coal, ILB	\$/MTon	31.05	▲ 0.000	▼ -0.750	▼ -14.000