

# **6 January 2021**



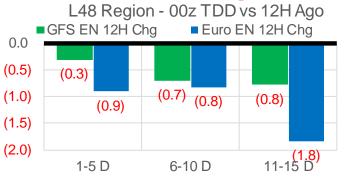
	С	urrent	Δ from YD	Δ from Αν	
WTI Prompt	\$	49.77	<b>\$</b> (0.16)	<b>\$</b>	1.2

	_	urront	Δ from YD		Δ from 7D		
	Current		Δ 110	טו וווי	Avg		
Brent Prompt	\$	53.65	<b>\$</b>	0.05	<b>\$</b>	1.8	

#### 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

# Vs. 12H Ago



# Vs. 24H Ago

L48 Region - 00z TDD vs 24H Ago

GFS EN 24H Chg

(5.0)

(5.0)

(10.4)

(10.1)(10.2)

1-5 D

6-10 D

11-15 D

Δ from YD

	Current	Δ from YD	Δ from 7D Avg
US Dry Production	91.5	<b>-</b> 0.68	<b>0.14</b>

US Dry Production	91.5	▼ -0.68	▲ 0.14	US Power Burns	28.8	<b>a</b> 0.58
	Current	Δ from YD	Δ from 7D Avg		Current	Δ from Y
us				Canadian		

0.88

	Current	Δ from YD	Δ from 7D Avg
Net LNG Exports	11.2	▲ 0.34	<b>a</b> 0.34

0.26

40.5

ResComm

	Current	Δ from YD	Δ from 7D Avg
Canadian Imports	6.1	<b>-</b> 0.01	<b>0.03</b>

Current

	Current	Δ from YD	Δ from 7D Avg
Mexican Exports	6.4	▲ 0.06	<b>0.70</b>

Δ from 7D

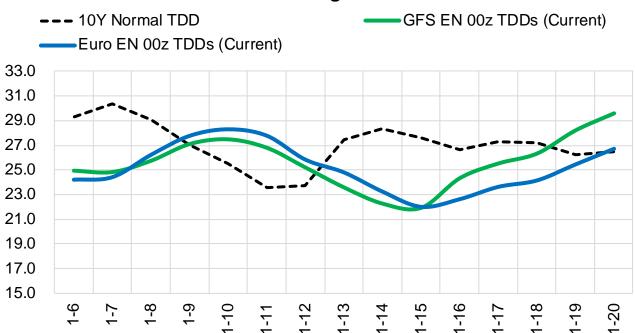
Avg

2.21

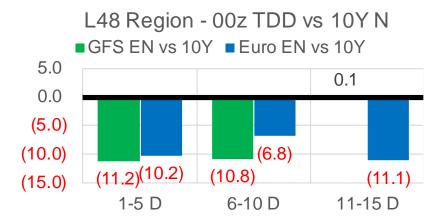


## Short-term Weather Model Outlooks (00z)

## L48 Region



# Vs. 10Y Normal



Source: WSI, Bloomberg



# Lower 48 Component Models

#### **Daily Balances**

	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec	1-Jan	DoD	vs.7D
Lower 48 Dry Production	91.3	91.5	92.4	92.1	91.6	90.6	91.0	<b>0.4</b>	▼ -0.6
Canadian Imports	5.8	5.8	5.7	6.2	5.8	5.9	6.1	<b>0.2</b>	<b>0.3</b>
L48 Power	26.5	25.3	26.5	26.1	26.1	26.3	26.0	▼-0.3	▼-0.1
L48 Residential & Commercial	45.7	39.6	39.8	42.6	38.9	41.0	40.2	▼ -0.7	<b>▼</b> -1.0
L48 Industrial	24.0	23.1	23.1	23.2	22.9	23.4	23.2	▼-0.3	▼ -0.1
L48 Lease and Plant Fuel	5.1	5.1	5.1	5.1	5.1	5.0	5.0	<b>0.0</b>	▼ -0.1
L48 Pipeline Distribution	3.3	3.0	3.0	3.1	3.0	3.1	3.0	▼-0.1	<b>▼</b> -0.1
L48 Regional Gas Consumption	104.5	96.1	97.5	100.1	96.0	98.8	97.4	▼-1.3	▼-1.4
Net LNG Delivered	11.10	10.92	11.30	11.08	10.85	10.98	10.41	▼ -0.6	▼ -0.6
Total Mexican Exports	5.2	5.5	5.7	6.0	5.8	5.6	5.4	▼-0.2	▼ -0.2
Implied Daily Storage Activity EIA Reported Daily Storage Activity	-23.7	-15.1	-16.4	-18.9	-15.2	-18.8	-16.0		
Daily Model Error									

#### **EIA Storage Week Balances**

	27-Nov	4-Dec	11-Dec	18-Dec	25-Dec	1-Jan	WoW	vs. 4W
Lower 48 Dry Production	91.6	91.5	90.8	90.9	91.5	91.7	<b>0.2</b>	<b>0.6</b>
Canadian Imports	4.5	5.3	5.9	5.8	5.8	5.8	▲ 0.0	▲ 0.1
L48 Power	24.7	26.3	28.0	28.3	26.5	26.3	▼-0.3	<b>▼</b> -1.0
L48 Residential & Commercial	25.3	33.3	36.4	40.0	38.8	41.9	<b>3.1</b>	<b>4.8</b>
L48 Industrial	23.6	25.5	24.7	25.5	24.7	23.5	<b>▼</b> -1.2	<b>▼</b> -1.6
L48 Lease and Plant Fuel	5.1	5.1	5.0	5.0	5.1	5.1	▲ 0.0	<b>0.0</b>
L48 Pipeline Distribution	2.3	2.8	2.9	3.1	3.0	3.1	<b>0.1</b>	<b>0.2</b>
L48 Regional Gas Consumption	81.0	92.9	97.0	102.0	98.1	99.9	<b>1.7</b>	<b>2.3</b>
Net LNG Exports	9.7	10.4	11.3	10.9	10.8	11.0	<b>0.2</b>	▲ 0.1
Total Mexican Exports	6.3	6.4	6.3	6.2	5.8	5.5	▼ -0.2	▼-0.6
Implied Daily Storage Activity EIA Reported Daily Storage Activity	-1.0 -0.1	-12.9 -13.0	-17.9 -17.4	-22.4 -21.7	-17.4 -16.3	-18.9	-1.4	
Daily Model Error	-0.8	0.1	-0.5	-0.7	-1.1			

Monthly Balances									
•	2Yr Ago	LY					MTD		
	Jan-19	Jan-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	MoM	vs. LY
Lower 48 Dry Production	87.2	94.0	88.1	87.5	90.4	91.2	91.5	<b>0.3</b>	▼ -2.5
Canadian Imports	5.9	4.8	3.8	4.3	4.6	5.9	6.2	<b>0.3</b>	<b>1.4</b>
L48 Power	27.2	29.9	34.2	30.6	24.8	27.4	27.1	▼-0.3	<b>▼</b> -2.8
L48 Residential & Commercial	48.0	41.1	8.8	14.4	22.8	39.2	39.7	<b>0.5</b>	<b>▼</b> -1.5
L48 Industrial	24.1	24.6	19.3	22.7	24.4	24.8	23.1	<b>▼</b> -1.6	<b>▼</b> -1.5
L48 Lease and Plant Fuel	4.9	5.2	4.9	4.9	5.0	5.1	5.1	▼ 0.0	<b>▼</b> -0.1
L48 Pipeline Distribution	3.4	3.2	2.2	2.3	2.2	3.0	3.0	▼ 0.0	<b>▼</b> -0.2
L48 Regional Gas Consumption	107.6	104.1	69.4	74.9	79.2	99.4	98.0	▼ -1.5	▼-6.1
Net LNG Exports	4.1	8.4	6.0	8.0	10.1	11.0	10.9	▼ -0.1	<b>2.5</b>
Total Mexican Exports	5.0	5.2	6.4	6.2	6.2	6.0	5.8	▼ -0.2	<b>0.6</b>
Implied Daily Storage Activity EIA Reported Daily Storage Activity Daily Model Error	-23.6	-18.9	10.1	2.6	-0.6	-19.3	-16.9		

Source: Bloomberg, analytix.ai



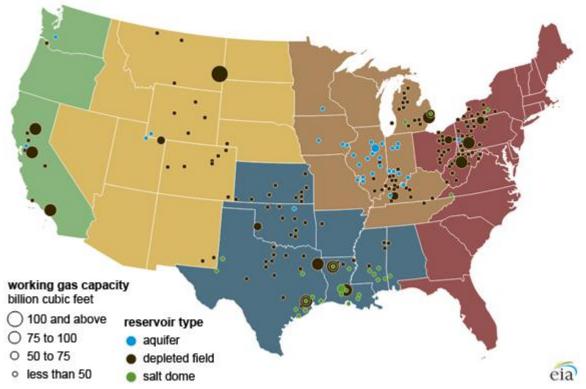
# Regional S/D Models Storage Projection

Week Ending 1-Jan

	Daily Raw Storage	Daily Adjustment Factor	Daily Average Storage Activity (Adjusted) *	Weekly Adjusted Storage Activity
L48	-19.1	1.0	-18.1	-127
East	-7.0	1.2	-5.7	-40
Midwest	-7.3	0.5	-6.8	-48
Mountain	2.5	-3.8	-1.3	-9
South Central	-6.9	3.5	-3.4	-24
Pacific	-0.5	-0.4	-0.8	-6

<sup>\*</sup>Adjustment Factor is calcuated based on historical regional deltas

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



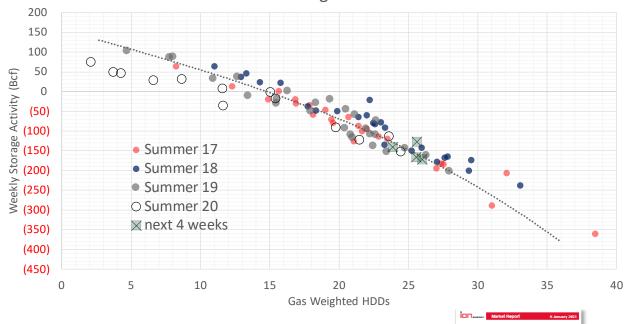


# Weather Model Storage Projection

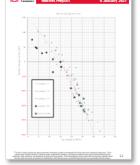
Next report
and beyond

Week Ending	Temp	Week Storage Projection
01-Jan	25.6	-127
08-Jan	23.9	-141
15-Jan	25.6	-165
22-Jan	26.0	-171

## Winter Storage Forecast



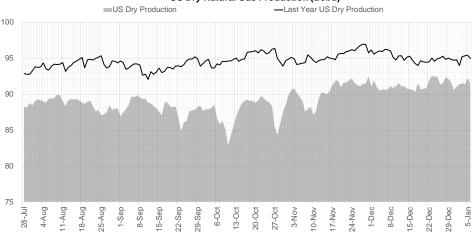
Go to larger image



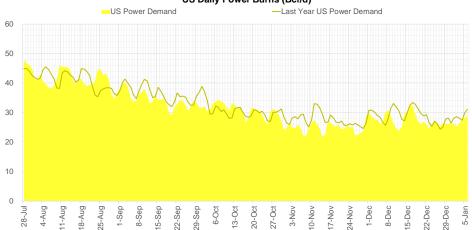


## Supply - Demand Trends

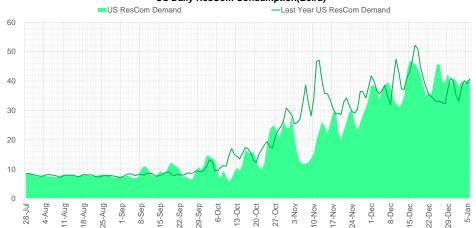
#### US Dry Natural Gas Production (Bcf/d)



#### US Daily Power Burns (Bcf/d)



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



Source: Bloomberg



14,000

12,000

10,000

8,000 6,000

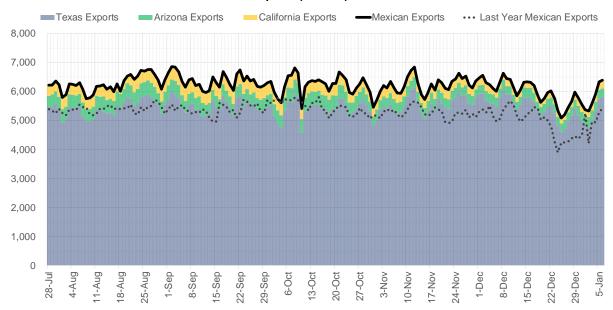
4,000

2,000

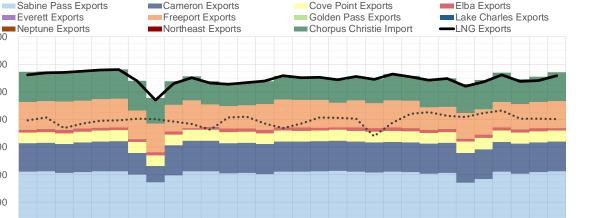
(2,000)

0

#### Mexican Exports (MMcf/d)



Net LNG Exports - Last 30 days (MMcf/d)



23-Dec

Source: Bloomberg



# Nat Gas Options Volume and Open Interest CME, ICE and Nasdaq Combined

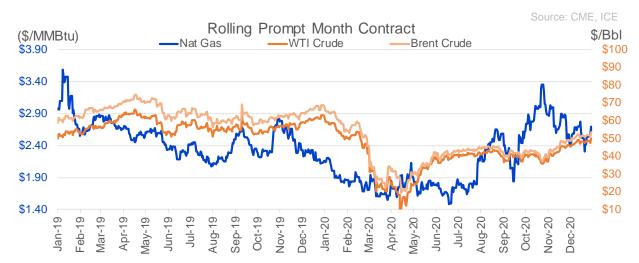
	CONTRACT	PUT/CALL	STRIKE	CUMULATIVE	CONTRACT	CONTRACT	PUT/CALL	STRIKE	CUMULATIVE OI
MONTH	YEAR			VOL	MONTH	YEAR			
2	2021	Р	2.25	9110	3	2021	С	3.50	43766
3	2021	С	3.50	5376	4	2021	С	3.00	42388
2	2021	C	3.00	4396	3	2021	С	4.00	41908
2	2021	P	2.50	4123	3	2021	Р	2.00	41438
2	2021	С	3.25	4078	3	2021	С	5.00	38865
7	2021	С	4.00	3767	3	2021	С	6.00	36829
2	2021	С	4.00	3641	3	2021	С	3.25	32443
2	2021	Р	2.35	3590	2	2021	Р	2.25	30175
3	2021	С	3.25	3578	2	2021	С	4.00	29770
3	2021	Р	2.00	3404	3	2021	С	3.00	29595
3	2021	С	5.00	3069	10	2021	С	4.00	27616
3	2021	Р	2.25	2885	4	2021	С	4.00	27240
2	2021	Р	2.40	2798	3	2021	С	4.50	26907
3	2021	С	4.00	2506	10	2021	С	3.25	24299
2	2021	Р	2.20	2446	2	2021	С	3.00	23923
3	2021	Р	2.50	2332	3	2021	P	2.50	23205
4	2021	Р	2.50	2084	3	2021	С	7.00	21565
5	2021	С	3.00	2029	8	2021	С	4.00	20996
3	2021	С	3.00	1921	4 2	2021	C C	3.25	20956
2	2021	С	2.75	1828	2	2021 2021	P	3.50 2.50	20317
2	2021	Р	2.00	1824	10		C	2.50 5.00	19965 19710
2	2021	С	3.15	1788	2	2021 2021	P	2.00	19580
5	2021	С	3.25	1775	5	2021	C	3.00	19342
6	2021	С	3.00	1551	4	2021	C	5.00	18655
7	2021	С	3.00	1550	4	2021	Č	2.75	18378
4	2021	С	3.25	1450	4	2021	Č	3.50	18333
10	2021	Р	2.00	1425	4	2021	P	2.00	17968
3	2021	С	4.75	1400	8	2021	P	2.25	17794
6	2021	Р	2.50	1388	2	2021	C	5.00	17264
4	2021	С	2.75	1308	6	2021	Ċ	4.00	16164
4	2021	С	3.00	1277	4	2021	P	2.25	15486
2	2021	С	3.50	1254	10	2021	P	2.00	15437
3	2021	Р	2.10	1225	5	2021	C	3.25	15399
5	2021	С	3.50	1205	10	2021	С	3.00	15386
2	2021	Р	2.60	1185	2	2021	С	4.50	15259
10	2021	С	4.00	1138	4	2021	С	2.50	15122
2	2021	С	2.85	1115	5	2021	С	3.50	14596
5	2021	Р	2.50	1084	12	2021	С	4.00	14383
2	2021	Р	2.45	1029	2	2021	С	3.25	14162
2	2021	С	3.35	955	7	2021	С	4.00	14093
10	2021	Р	2.75	900	4	2022	С	3.00	13658
2	2021	Р	2.15	886	8	2021	Р	2.00	13572
6	2021	P	2.00	880	5	2021	Р	2.00	13024
3	2021	С	2.75	812	3	2021	Р	2.25	12822
1	2022	С	5.00	750	5	2021	С	4.00	12792
2	2022	С	5.00	750	5	2021	Р	2.50	12792
3	2022	С	5.00	750	2	2021	С	2.75	12569
5	2021	P	2.75	726	10	2021	Р	2.50	12504
4	2021	С	3.50	725	4	2021	P Source	e: CME, ICE	12499.75



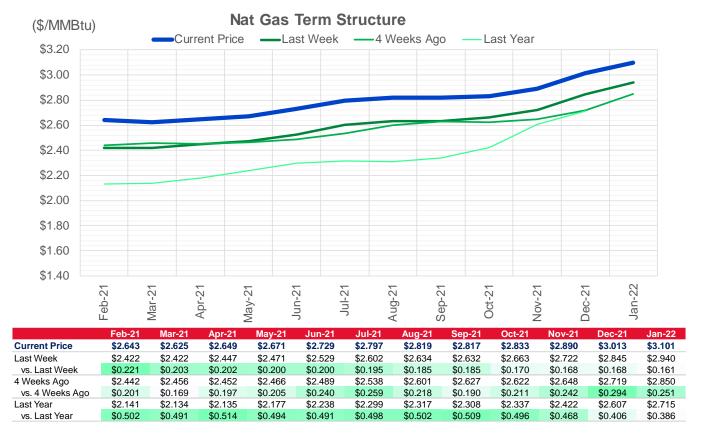
## Nat Gas Futures Open Interest

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
FEB 21	184617	194086	-9469	FEB 21	81052	83073	-2021.75
MAR 21	258073	252737	5336	MAR 21	96658	97677	-1018.75
APR 21	109050	110831	-1781	APR 21	84391	84668	-276.75
MAY 21	65064	65939	-875	MAY 21	77450	77689	-238.75
JUN 21	38826	37832	994	JUN 21	64044	64414	-369.25
JUL 21	34301	35981	-1680	JUL 21	65625	66073	-448
AUG 21	29673	29249	424	AUG 21	66934	67341	-407.25
SEP 21	46788	47939	-1151	SEP 21	63025	63453	-427.5
OCT 21	112310	112426	-116	OCT 21	80229	79727	502
NOV 21	38872	39750	-878	NOV 21	51491	51287	203.75
DEC 21	41331	42634	-1303	DEC 21	52295	52548	-253
JAN 22	45635	45361	274	JAN 22	52561	53225	-664.75
FEB 22	23847	24347	-500	FEB 22	38569	38564	5
MAR 22	26784	26664	120	MAR 22	40831	40970	-138.75
APR 22	24438	24030	408	APR 22	38944	38753	191.5
MAY 22	13203	12887	316	MAY 22	34434	34372	62.25
JUN 22	7014	6712	302	JUN 22	32545	32314	231.25
JUL 22	6046	6027	19	JUL 22	33610	33561	49
AUG 22	5422	5410	12	AUG 22	32793	32675	118.25
SEP 22	4901	4714	187	SEP 22	32886	32634	251.25
OCT 22	8733	8787	-54	OCT 22	36191	36048	143.5
NOV 22	6256	6158	98	NOV 22	30180	30197	-16.5
DEC 22	7119	7210	-91	DEC 22	33347	33379	-32.5
JAN 23	4433	4426	7	JAN 23	16471	16401	69.5
FEB 23	1480	1383	97	FEB 23	15474	15369	105
MAR 23	1942	1961	-19	MAR 23	14886	14677	208.5
APR 23	3506	3621	-115	APR 23	14039	13996	42.5
MAY 23	1886	1781	105	MAY 23	13342	13283	59.75
JUN 23	735	635	100	JUN 23	13064	13049	15
JUL 23	809	809	0	JUL 23	12737	12722	15.5







		Cash Prompt		Cash to
	Units	Settled	Settle	Prompt
AGT Citygate	\$/MMBtu	3.30	5.22	1.92
TETCO M3	\$/MMBtu	2.64	3.14	0.50
FGT Zone 3	\$/MMBtu	2.80	2.45	-0.35
Zone 6 NY	\$/MMBtu	2.80	3.75	0.95
Chicago Citygate	\$/MMBtu	2.58	2.39	-0.19
Michcon	\$/MMBtu	2.56	2.28	-0.28
Columbia TCO Pool	\$/MMBtu	2.47	2.01	-0.46
Ventura	\$/MMBtu	2.28	2.53	0.25
Rockies/Opal	\$/MMBtu	2.64	2.42	-0.23
El Paso Permian Basin	\$/MMBtu	2.51	2.29	-0.22
Socal Citygate	\$/MMBtu	3.89	3.00	-0.89
Malin	\$/MMBtu	2.66	3.06	0.40
Houston Ship Channel	\$/MMBtu	2.67	2.44	-0.23
Henry Hub Cash	\$/MMBtu	2.56	2.27	-0.29
AECO Cash	C\$/GJ	2.12	1.96	-0.16
Station2 Cash	C\$/GJ	2.07	3.10	1.03
Dawn Cash	C\$/GJ	2.59	2.32	-0.27

Source: CME, Bloomberg



					VS	s. 4 Weeks		
	Units	<b>Current Price</b>	vs.	<b>Last Week</b>		Ago	V:	s. Last Year
NatGas Jan21/Apr21	\$/MMBtu	0.182		0.202		0.158		0.599
NatGas Mar21/Apr21	\$/MMBtu	0.024	•	-0.001		0.038		-0.227
NatGas Oct21/Nov21	\$/MMBtu	0.057		-0.002		-0.014		-0.002
NatGas Apr21/Oct21	\$/MMBtu	0.184		0.380		0.390		-0.180
WTI Crude	\$/Bbl	49.77		1.370		4.250		-9.840
Brent Crude	\$/Bbl	53.65		2.310		4.790		-11.790
Fuel Oil, NY Harbour 1%	\$/Bbl	97.18		0.000		0.000		0.000
Heating Oil	cents/Gallon	151.32		2.340		11.430		-44.500
Propane, Mt. Bel	cents/Gallon	0.80		0.151		0.213		0.348
Ethane, Mt. Bel	cents/Gallon	0.22		0.024		0.033		0.062
Coal, PRB	\$/MTon	12.30		0.000		0.000		0.050
Coal, PRB	\$/MMBtu	0.70						
Coal, ILB	\$/MTon	31.05		0.000		0.000		-4.500
Coal, ILB	\$/MMBtu	1.32						



