

CME Group Exchange ADV Report - Monthly

January 2017

Page 1 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Commodities and Alternative Investments Futures								
HDD SEASONAL STRIP	0	0	-	0	-	0	1	-100.0%
CDD SEASONAL STRIP	0	0	-	0	-	0	6	-100.0%
CDD WEATHER	0	0	-	0	-	0	13	-100.0%
HDD WEATHER EUROPEAN	15	0	-	0	-	15	3	481.6%
HDD WEATHER	40	14.53	175.4%	128.57	-68.9%	40	25	62.5%
HOUSING INDEX	1	0.47	163.9%	0.33	275.0%	1	1	115.8%
USD CRUDE PALM OIL	22	0	-	31.43	-29.4%	22	12	78.2%
CAT EURO SEASONAL STRIP	0	0	-	0	-	0	1	-100.0%
MILK	1,372	1,093.11	25.5%	1,792.52	-23.5%	1,372	1,278	7.4%
HDD EURO SEASONAL STRIP	0	0	-	0	-	0	1	-100.0%
CASH-SETTLED CHEESE	454	561.26	-19.2%	383.05	18.4%	454	468	-3.0%
LIVE CATTLE	65,043	59,349.37	9.6%	50,983.52	27.6%	65,043	52,075	24.9%
BUTTER CS	120	162.37	-26.3%	131.86	-9.3%	120	155	-23.0%
LUMBER	570	702.11	-18.8%	611.38	-6.8%	570	694	-17.9%
DRY WHEY	142	88.63	60.2%	88.33	60.8%	142	64	123.1%
CLASS IV MILK	32	51.68	-38.7%	75.24	-57.9%	32	57	-44.1%
NFD MILK	250	370.63	-32.7%	157.57	58.4%	250	220	13.6%
GSCI EXCESS RETURN FUT	80	129.05	-38.4%	4,319.67	-98.2%	80	1,368	-94.2%
LEAN HOGS	42,365	35,011.68	21.0%	39,706.48	6.7%	42,365	36,488	16.1%
FEEDER CATTLE	10,195	9,920.89	2.8%	9,576.38	6.5%	10,195	10,071	1.2%
MLK MID	0	0	-	0	-	0	0	-
GOLDMAN SACHS	1,837	1,513.74	21.3%	1,643.71	11.7%	1,837	1,429	28.6%
COCOA TAS	0	18.37	-98.4%	0.62	-51.5%	0	10	-97.1%
SUGAR 11	1	6.42	-89.1%	0	-	1	2	-57.8%
COFFEE	0	0.63	-100.0%	0	-	0	1	-100.0%
COTTON	0	1	-95.0%	0.05	5.0%	0	2	-97.8%
MINI WHEAT	264	221.79	19.2%	203.33	30.0%	264	296	-10.8%
CORN	295,561	309,371.53	-4.5%	189,687	55.8%	295,561	339,783	-13.0%
SOYBEAN MEAL	92,925	81,454.84	14.1%	98,031.43	-5.2%	92,925	102,992	-9.8%
SOYBEAN OIL	100,081	90,170.68	11.0%	123,801.76	-19.2%	100,081	116,783	-14.3%
ROUGH RICE	605	781.32	-22.6%	1,682.62	-64.1%	605	1,210	-50.1%
DOW-UBS COMMOD INDEX	988	1,211.32	-18.4%	2,979.24	-66.8%	988	1,656	-40.3%
MINI SOYBEAN	1,061	551.37	92.5%	1,015	4.6%	1,061	1,176	-9.7%
OATS	756	822.84	-8.1%	480.48	57.4%	756	894	-15.4%
SOYBEAN	188,035	202,425.63	-7.1%	232,933.9	-19.3%	188,035	244,963	-23.2%
MINI CORN	411	336.37	22.3%	408.1	0.8%	411	571	-27.9%
ETHANOL	945	744.79	26.9%	835.9	13.1%	945	685	37.9%
FERTILIZER PRODUCS	81	171.32	-52.7%	44.29	82.9%	81	91	-10.6%
S&P GSCI ENHANCED ER SWAP	0	0	-	1,622.19	-100.0%	0	462	-100.0%
Intercommodity Spread	0	0	-	0	-	0	0	-
KC WHEAT	42,605	27,776.21	53.4%	29,807.67	42.9%	42,605	38,456	10.8%
MALAYSIAN PALM SWAP	375	252.63	48.3%	642.48	-41.7%	375	466	-19.6%
DJ_UBS ROLL SELECT INDEX FUTU	16	0	-	101.9	-83.9%	16	20	-17.9%
PALM OIL	0	0	-	0	-	0	0	-
CHI WHEAT	119,226	95,825.16	24.4%	75,149.1	58.7%	119,226	123,253	-3.3%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 2 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Commodities and Alternative Investments Options								
HDD SEASONAL STRIP	0	0	-	33.33	-100.0%	0	80	-100.0%
CDD SEASONAL STRIP	0	0	-	0	-	0	116	-100.0%
CDD WEATHER	0	0	-	0	-	0	4	-100.0%
HDD WEATHER EUROPEAN	0	0	-	0	-	0	22	-100.0%
HDD WEATHER	13	0	-	47.62	-73.7%	13	8	57.5%
HOUSING INDEX	0	0	-	0	-	0	0	-100.0%
LV CATL CSO	18	0	-	27.67	-33.3%	18	3	446.3%
MILK	1,773	1,119.26	58.4%	2,566	-30.9%	1,773	1,522	16.5%
HDD EURO SEASONAL STRIP	0	0	-	0	-	0	10	-100.0%
CASH-SETTLED CHEESE	414	287.47	44.0%	454.52	-8.9%	414	364	13.8%
LIVE CATTLE	12,985	20,515.26	-36.7%	11,608.48	11.9%	12,985	16,004	-18.9%
BUTTER CS	106	111.63	-5.4%	105	0.6%	106	63	67.9%
LUMBER	55	55.37	-1.0%	48.86	12.2%	55	50	10.3%
DRY WHEY	33	1.05	3039.8%	13.95	136.9%	33	5	528.6%
CLASS IV MILK	48	21.53	123.4%	89.43	-46.2%	48	55	-12.6%
NFD MILK	247	387.95	-36.3%	38.81	536.3%	247	137	80.9%
LEAN HOGS	6,883	8,735.16	-21.2%	9,437.1	-27.1%	6,883	8,764	-21.5%
FEEDER CATTLE	1,445	1,793.21	-19.4%	1,265.14	14.2%	1,445	1,626	-11.1%
MLK MID	10	3.47	182.1%	8.29	18.3%	10	4	167.3%
JULY-DEC WHEAT CAL SPRD	18	132.74	-86.8%	0	-	18	133	-86.9%
CORN	69,746	69,533	0.3%	51,497.29	35.4%	69,746	90,454	-22.9%
SOYBEAN MEAL	9,681	7,969.11	21.5%	6,475.43	49.5%	9,681	9,005	7.5%
SOYBEAN OIL	7,140	7,941.58	-10.1%	7,825.9	-8.8%	7,140	9,120	-21.7%
AUG-NOV SOYBEAN CAL SPRD	0	0	-	0	-	0	0	-100.0%
DEC-JULY CORN CAL SPRD	30	0	-	0	-	30	105	-71.5%
DEC-DEC CORN CAL SPRD	57	0	-	42.62	34.1%	57	75	-23.3%
JULY-JULY WHEAT CAL SPRD	0	0	-	0	-	0	2	-100.0%
NOV-NOV SOYBEAN CAL SPRD	3	0	-	0	-	3	12	-73.0%
ROUGH RICE	77	117.84	-34.5%	28.24	173.2%	77	78	-1.7%
WHEAT	0	0	-	0	-	0	0	-
WHEAT-CORN IC50	35	268.16	-87.0%	14.29	144.0%	35	70	-50.5%
CORN NEARBY+2 CAL SPRD	72	122.68	-41.3%	72.14	-0.2%	72	146	-50.6%
SOYBN NEARBY+2 CAL SPRD	23	0	-	14.29	57.5%	23	7	233.3%
WHEAT NEARBY+2 CAL SPRD	58	67.32	-13.4%	51.52	13.2%	58	218	-73.3%
SOYMEAL NEARBY+2 CAL SPRD	0	0	-	0	-	0	15	-100.0%
JULY-DEC CORN CAL SPRD	15	189.26	-92.1%	2.38	530.0%	15	146	-89.7%
DEC-JULY WHEAT CAL SPRD	0	0	-	0	-	0	2	-100.0%
JULY-NOV SOYBEAN CAL SPRD	665	73.79	801.7%	16.14	4021.7%	665	262	154.0%
OATS	80	57.26	40.2%	59.1	35.9%	80	74	8.9%
SOYBEAN	60,392	59,875.84	0.9%	51,568.86	17.1%	60,392	79,800	-24.3%
JULY-DEC SOY OIL CAL SPRD	12	0	-	0.95	1133.7%	12	4	190.3%
SOYBEAN CRUSH	5	35.37	-85.9%	1.52	228.1%	5	19	-73.9%
AUG-DEC SOYBEAN MEAL CSO	0	0	-	0	-	0	0	-100.0%
Intercommodity Spread	5	13.16	-61.6%	28.57	-82.3%	5	16	-68.5%
KC WHEAT	1,565	982.68	59.2%	934.48	67.4%	1,565	1,376	13.7%
MAR-JULY WHEAT CAL SPRD	40	2.63	1414.3%	40.14	-0.7%	40	13	214.5%
MAR-JULY CORN CAL SPRD	0	125.21	-100.0%	0	-	0	10	-100.0%
CHI WHEAT	28,749	34,142.26	-15.8%	21,649.71	32.8%	28,749	27,688	3.8%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 3 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
FX Futures								
TURKISH LIRA	54	0	-	19.05	183.5%	54	2	3140.1%
JAPANESE YEN	192,200	191,461.68	0.4%	150,083.81	28.1%	192,200	145,194	32.4%
KOREAN WON	0	0.37	-72.9%	1.67	-94.0%	0	1	-87.8%
CD/JY CROSS RATES	0	0.11	-5.0%	0	-	0	0	68.1%
CANADIAN DOLLAR	70,288	94,461.68	-25.6%	67,292.43	4.5%	70,288	74,196	-5.3%
AD/NE CROSS RATES	1	6.16	-91.9%	0.05	950.4%	1	3	-82.8%
BRITISH POUND	124,568	101,004	23.3%	119,418.19	4.3%	124,568	115,579	7.8%
RUSSIAN RUBLE	1,242	1,774.74	-30.0%	3,948.71	-68.6%	1,242	1,911	-35.0%
SWISS FRANC	23,716	21,398.42	10.8%	29,797.71	-20.4%	23,716	23,686	0.1%
NEW ZEALND DOLLAR	26,875	23,674.68	13.5%	26,514.86	1.4%	26,875	23,565	14.0%
BP/JY CROSS RATES	123	106.95	15.2%	110.71	11.3%	123	90	37.3%
E-MICRO USD/CAD	0	0	-	0	-	0	0	-100.0%
E-MICRO GBP/USD	3,890	2,457.58	58.3%	3,006.95	29.4%	3,890	4,121	-5.6%
E-MICRO USD/CHF	0	0	-	0	-	0	0	-100.0%
E-MICRO EUR/USD	16,135	22,778.53	-29.2%	14,479.48	11.4%	16,135	13,381	20.6%
E-MICRO USD/JPY	0	0	-	0	-	0	0	-100.0%
E-MICRO AUD/USD	3,959	4,633.63	-14.6%	3,331	18.9%	3,959	4,835	-18.1%
AUSTRALIAN DOLLAR	89,998	119,634.53	-24.8%	82,846.67	8.6%	89,998	100,411	-10.4%
E-MINI JAPANESE YEN	1,857	2,183.84	-15.0%	1,483.9	25.1%	1,857	1,560	19.0%
EFX/JY CROSS RATES	1,628	2,114.84	-23.0%	3,596.43	-54.7%	1,628	2,152	-24.3%
RMB USD	3	28.42	-90.9%	13.76	-81.1%	3	15	-82.8%
EFX/BP CROSS RATES	2,070	4,248.05	-51.3%	4,553.38	-54.5%	2,070	3,794	-45.4%
EFX/SF CROSS RATES	943	1,607.05	-41.3%	2,891.81	-67.4%	943	1,896	-50.3%
INDIAN RUPEE	1,115	650.26	71.4%	728.62	53.0%	1,115	636	75.3%
EC/SEK CROSS RATES	4	2.32	51.1%	35.57	-90.2%	4	14	-75.0%
S.AFRICAN RAND	1,741	609.47	185.6%	1,674.38	4.0%	1,741	961	81.0%
MEXICAN PESO	54,635	57,321.05	-4.7%	49,918.9	9.4%	54,635	55,851	-2.2%
EURO FX	216,421	214,586.32	0.9%	244,203.86	-11.4%	216,421	196,254	10.3%
SF/JY CROSS RATES	2	0	-	0	-	2	0	-
EC/CD CROSS RATES	117	165.21	-29.2%	281.19	-58.4%	117	134	-12.6%
EC/NOK CROSS RATES	2	0.16	1103.3%	0.1	1895.8%	2	0	4247.8%
EC/AD CROSS RATES	17	129.89	-86.9%	164.1	-89.6%	17	87	-80.4%
BP/SF CROSS RATES	0	0.84	-100.0%	0.1	-100.0%	0	2	-100.0%
E-MINI EURO FX	4,411	5,825.47	-24.3%	5,173.29	-14.7%	4,411	3,767	17.1%
MICRO CHF/USD	44	110.26	-59.8%	62.57	-29.2%	44	87	-48.8%
POLISH ZLOTY (EC)	3	268.26	-99.0%	2	27.5%	3	79	-96.8%
AD/JY CROSS RATES	84	450.37	-81.3%	395.43	-78.7%	84	207	-59.3%
AD/CD CROSS RATES	0	0.79	-68.3%	0.48	-47.5%	0	0	-8.7%
POLISH ZLOTY (US)	37	30.63	22.3%	284.52	-86.8%	37	91	-59.1%
SKR/USD CROSS RATES	55	49.11	12.1%	268.1	-79.5%	55	104	-47.1%
NKR/USD CROSS RATE	39	32.42	19.4%	226.33	-82.9%	39	95	-59.2%
BRAZIL REAL	4,424	2,955.95	49.7%	3,736.52	18.4%	4,424	3,988	10.9%
FCXRX	100	0	-	49.19	103.5%	100	54	86.4%
CHINESE RENMINBI (CNH)	104	144.58	-28.1%	153.05	-32.0%	104	84	24.3%
USDZAR	0	0	-	0	-	0	0	-100.0%
E-MICRO INR/USD	132	5.11	2491.4%	157	-15.7%	132	119	11.3%
E-MICRO USD/CNH	0	1.68	-100.0%	0	-	0	0	-100.0%
E-MICRO JPY/USD	3,409	1,247.58	173.2%	2,437.38	39.9%	3,409	1,575	116.4%
E-MICRO CAD/USD	731	952.05	-23.3%	647.05	12.9%	731	976	-25.1%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 4 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
FX Options								
AUSTRALIAN DLR (EU)	0	21.74	-99.5%	0	-	0	5	-97.8%
JAPANESE YEN	5,822	17,454.05	-66.6%	4,005.81	45.3%	5,822	13,575	-57.1%
EURO FX (EU)	3	312.47	-99.1%	4.33	-36.5%	3	114	-97.6%
CANADIAN DOLLAR	2,186	12,467.26	-82.5%	1,970.62	11.0%	2,186	5,775	-62.1%
BRITISH POUND	4,308	10,869.9	-60.4%	2,730.38	57.8%	4,308	9,066	-52.5%
RUSSIAN RUBLE	0	9.11	-100.0%	0	-	0	5	-100.0%
CANADIAN DOLLAR (EU)	1	30	-97.0%	0.33	170.0%	1	7	-87.5%
SWISS FRANC	65	498.63	-86.9%	118.24	-44.9%	65	283	-77.0%
BRITISH POUND (EU)	3	106.79	-96.8%	5.05	-31.7%	3	37	-90.6%
AUSTRALIAN DOLLAR	2,197	8,335.95	-73.6%	2,039.81	7.7%	2,197	5,883	-62.6%
MEXICAN PESO	596	140.79	323.5%	47.95	1143.5%	596	202	195.0%
EURO FX	10,793	39,140.84	-72.4%	16,666.14	-35.2%	10,793	30,210	-64.3%
JAPANESE YEN (EU)	4	34.37	-87.1%	9	-50.6%	4	24	-81.7%
CAD/USD PQO 2pm Fix	4,026	0	-	3,270.95	23.1%	4,026	694	480.3%
AUD/USD PQO 2pm Fix	2,920	0	-	3,168.24	-7.8%	2,920	678	330.5%
JPY/USD PQO 2pm Fix	12,440	0	-	8,539.52	45.7%	12,440	1,569	693.1%
CHF/USD PQO 2pm Fix	150	0	-	249.71	-40.1%	150	52	187.2%
EUR/USD PQO 2pm Fix	16,583	0	-	15,975.19	3.8%	16,583	2,925	467.0%
GBP/USD PQO 2pm Fix	6,784	0	-	3,765.71	80.2%	6,784	877	674.0%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 5 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Equity Index Futures								
E-MINI RUSSELL 1000	29	81.11	-64.1%	46.86	-37.8%	29	21	40.9%
DJ US REAL ESTATE	929	838.74	10.7%	2,409.81	-61.5%	929	1,015	-8.5%
E-MINI NASDAQ 100	181,328	432,819.21	-58.1%	213,153.29	-14.9%	181,328	260,913	-30.5%
S&P ENERGY SECTOR	467	529	-11.7%	876.62	-46.7%	467	562	-17.0%
S&P MATERIALS SECTOR	225	168.63	33.2%	587.9	-61.8%	225	340	-34.0%
S&P FINANCIAL SECTOR	675	453.21	49.0%	1,442.05	-53.2%	675	692	-2.5%
S&P HEALTH CARE SECTOR	470	435.58	7.9%	786.81	-40.3%	470	583	-19.3%
S&P INDUSTRIAL SECTOR	239	126.79	88.9%	991.29	-75.8%	239	530	-54.8%
S&P UTILITIES SECTOR	627	483.16	29.8%	1,471.05	-57.4%	627	1,184	-47.0%
S&P TECHNOLOGY SECTOR	185	254.11	-27.3%	582.14	-68.3%	185	323	-42.8%
S&P CONSUMER DSCRTRNRY SECTC	469	785.47	-40.4%	844.48	-44.5%	469	599	-21.8%
S&P 500	5,524	9,360.84	-41.0%	13,640	-59.5%	5,524	8,880	-37.8%
E-MINI MIDCAP	17,808	27,869.42	-36.1%	25,631	-30.5%	17,808	21,451	-17.0%
NIKKEI 225 (\$) STOCK	14,229	26,443.26	-46.2%	14,665.95	-3.0%	14,229	17,018	-16.4%
NIKKEI 225 (YEN) STOCK	55,116	89,513.32	-38.4%	50,182.95	9.8%	55,116	58,752	-6.2%
IBOVESPA INDEX	17	18.84	-11.6%	45.1	-63.1%	17	35	-52.7%
S&P CONSUMER STAPLES SECTOR	252	994.16	-74.7%	1,058.57	-76.2%	252	1,253	-79.9%
E-MINI S&P500	1,433,141	2,525,649.58	-43.3%	1,721,329.62	-16.7%	1,433,141	1,875,709	-23.6%
S&P 500/VALUE	633	1,253	-49.4%	891.19	-28.9%	633	530	19.4%
S&P 500 GROWTH	0	0.63	-36.7%	2.81	-85.8%	0	1	-65.2%
MINI \$5 DOW	125,781	272,092.37	-53.8%	139,405.29	-9.8%	125,781	168,872	-25.5%
FT-SE 100	131	124.95	5.0%	85.67	53.1%	131	83	58.4%
NIFTY 50	163	435.68	-62.6%	91.57	77.8%	163	465	-65.0%
E-MINI RUSSELL 1000 GROWTH	15	40	-63.0%	31.86	-53.5%	15	14	9.2%
E-MINI RUSSELL 1000 VALUE	59	58.42	1.8%	116.48	-49.0%	59	42	40.8%
NASDAQ BIOTECH	10	0	-	68.76	-86.0%	10	9	4.6%
Equity Index Options								
E-MINI NASDAQ 100	8,585	18,148.05	-52.7%	7,745.52	10.8%	8,585	10,191	-15.8%
S&P 500	8,130	50,990.26	-84.1%	12,799.14	-36.5%	8,130	22,517	-63.9%
EOW4 EMINI S&P 500	52,669	70,617.68	-25.4%	46,703.57	12.8%	52,669	51,285	2.7%
EOW2 S&P 500	6,875	2,955.89	132.6%	5,454.33	26.1%	6,875	6,110	12.5%
EOW1 EMINI S&P 500	51,687	31,930.74	61.9%	34,022.43	51.9%	51,687	46,471	11.2%
EOW1 S&P 500	2,977	1,644.05	81.1%	1,768.19	68.4%	2,977	2,804	6.2%
E-MINI MIDCAP	0	0.05	-100.0%	0	-	0	0	-100.0%
EOM S&P 500	9,440	6,638.63	42.2%	8,202.71	15.1%	9,440	8,213	14.9%
EOM EMINI S&P	87,881	79,719.89	10.2%	108,738.48	-19.2%	87,881	82,929	6.0%
EOW2 EMINI S&P 500	58,727	44,711.68	31.3%	42,225.71	39.1%	58,727	51,559	13.9%
E-MINI S&P500	148,878	436,382.63	-65.9%	228,688	-34.9%	148,878	233,682	-36.3%
MINI \$5 DOW	315	1,224.47	-74.3%	498.38	-36.9%	315	506	-37.8%
EOW3 EMINI S&P 500	199,096	0	-	134,395.29	48.1%	199,096	107,592	85.0%
EOW3 S&P 500	18,609	0	-	13,660.86	36.2%	18,609	12,525	48.6%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 6 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Interest Rate Futures								
5-YR SWAP RATE	3,064	2,922.11	4.9%	5,182.52	-40.9%	3,064	3,146	-2.6%
2-YR SWAP RATE	0	21.68	-100.0%	0	-	0	18	-100.0%
10-YR SWAP RATE	1,706	1,692.79	0.8%	4,591.05	-62.8%	1,706	2,505	-31.9%
1-MONTH EURODOLLAR	167	50.84	227.9%	324	-48.5%	167	78	113.4%
EURODOLLARS	3,127,143	3,196,325.16	-2.2%	2,943,269.38	6.2%	3,127,143	2,598,997	20.3%
7-YR SWAP	0	38.26	-100.0%	0	-	0	12	-100.0%
30-YR BOND	258,292	293,146.63	-11.9%	220,018.62	17.4%	258,292	278,584	-7.3%
5-YR NOTE	781,183	716,771.37	9.0%	654,541.1	19.3%	781,183	801,209	-2.5%
10-YR NOTE	1,427,623	1,437,372.84	-0.7%	1,104,970.1	29.2%	1,427,623	1,391,913	2.6%
2-YR NOTE	287,651	275,242.84	4.5%	227,323.52	26.5%	287,651	324,898	-11.5%
30-YR SWAP RATE	73	80.21	-9.1%	122.14	-40.3%	73	84	-13.5%
ULTRA T-BOND	98,863	98,884.26	0.0%	87,081.43	13.5%	98,863	112,817	-12.4%
FED FUND	163,541	121,804.79	34.3%	97,652.95	67.5%	163,541	132,141	23.8%
Ultra 10-Year Note	99,057	16,957.16	484.2%	87,432.67	13.3%	99,057	67,379	47.0%
Interest Rate Options								
EURO MIDCURVE	785,458	961,616.37	-18.3%	827,400.71	-5.1%	785,458	557,656	40.9%
EURODOLLARS	600,739	1,190,002.11	-49.5%	458,997.29	30.9%	600,739	667,675	-10.0%
30-YR BOND	92,222	105,842.21	-12.9%	67,035.43	37.6%	92,222	84,303	9.4%
5-YR NOTE	124,775	132,428.26	-5.8%	79,592.95	56.8%	124,775	94,764	31.7%
10-YR NOTE	536,689	379,670.95	41.4%	464,640.81	15.5%	536,689	390,891	37.3%
2-YR NOTE	2,732	3,899.11	-29.9%	3,633.76	-24.8%	2,732	6,682	-59.1%
ULTRA T-BOND	101	208.42	-51.4%	59.76	69.5%	101	342	-70.4%
FED FUND	225	337.11	-33.3%	62.14	262.1%	225	376	-40.2%
Ultra 10-Year Note	21	5.58	280.9%	65.48	-67.5%	21	170	-87.5%
Energy Futures								
CAISO SP15 EZGNHUB5 MW P	397	0	-	0	-	397	71	458.0%
ERCOT NORTH ZMCP E 5MW OFFPE	0	0	-	0	-	0	0	-
RBOB GAS	91	71.05	27.4%	103.62	-12.7%	91	77	17.7%
ELEC ERCOT DLY PEAK	0	0	-	0	-	0	0	-
ERCOT NORTH ZMCP E 5MW OFFPE	0	225.26	-100.0%	0	-	0	17	-100.0%
ERCOT NORTH ZMCP E 5MW PEAK	22	12.37	73.8%	0	-	22	1	2205.6%
SINGAPORE JET KERO VS. GASOIL	0	0	-	0	-	0	0	-100.0%
PETRO OUTRIGHT EURO	445	412.79	7.8%	393.24	13.1%	445	450	-1.1%
MONT BELVIEU LDH PROPANE OPIS	168	8.95	1781.6%	108.71	54.9%	168	48	251.5%
MONT BELVIEU ETHANE OPIS BALM	50	6.05	717.8%	17.86	177.2%	50	8	549.7%
CONWAY NATURAL GASOLINE (OPI	4	6.63	-35.9%	0	-	4	7	-36.7%
PETROCHEMICALS	180	167.68	7.2%	150.14	19.7%	180	249	-27.7%
CONWAY PROPANE 5 DECIMALS S	521	228.95	127.5%	384.43	35.5%	521	350	48.6%
CONWAY NORMAL BUTANE (OPIS) S	5	3.95	29.2%	7.86	-35.1%	5	11	-53.4%
MONT BELVIEU NORMAL BUTANE B	61	27.32	124.0%	35.05	74.6%	61	29	113.9%
MONT BELVIEU NATURAL GASOLIN	42	8.84	378.4%	9.52	344.2%	42	8	438.1%
IN DELIVERY MONTH EUA	0	252.63	-100.0%	59.52	-100.0%	0	148	-100.0%
WTS (ARGUS) VS WTI SWAP	258	85	203.2%	647.29	-60.2%	258	221	16.6%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 7 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
ISO NEW ENGLAND PK LMP	1	0	-	0	-	1	0	529.7%
ELEC NYISO OFF-PEAK	0	0	-	0	-	0	0	-
ELEC MISO PEAK	0	0	-	10.24	-100.0%	0	1	-100.0%
TRANSCO ZONE 4 NAT GAS IN	0	0	-	0	-	0	6	-100.0%
COLUMB GULF MAINLINE NG B	0	208.74	-100.0%	0	-	0	87	-100.0%
ONEOK OKLAHOMA NG BASIS	0	23.84	-100.0%	0	-	0	6	-100.0%
TEXAS GAS ZONE1 NG BASIS	0	0	-	0	-	0	1	-100.0%
NYISO ZONE C 5MW D AH O P	0	0	-	0	-	0	215	-100.0%
PJM NI HUB 5MW REAL TIME	35,169	8,319.21	322.7%	35,157.38	0.0%	35,169	10,820	225.1%
NYISO ZONE J 5MW D AH O P	0	0	-	0	-	0	776	-100.0%
NYISO ZONE J 5MW D AH PK	10	34.21	-70.8%	0	-	10	57	-82.5%
NEPOOL W CNT MASS 5MW D A	0	0	-	0	-	0	16	-100.0%
PJM COMED 5MW D AH PK	106	0	-	0	-	106	58	82.8%
NEPOOL SE MASS 5MW D AH O	0	0	-	0	-	0	0	-
NEPOOL CNCTCT 5MW D AH O	0	0	-	0	-	0	47	-100.0%
NEPOOL CONECTIC 5MW D AH	0	0	-	0	-	0	3	-100.0%
NEPOOL NE MASS 5MW D AH P	0	0	-	0	-	0	3	-100.0%
NYISO ZONE C 5MW D AH PK	0	0	-	0	-	0	6	-100.0%
PETRO CRCKS & SPRDS NA	2,508	1,730.95	44.9%	2,021.19	24.1%	2,508	1,684	49.0%
SINGAPORE GASOIL	247	179.68	37.4%	195.19	26.5%	247	196	25.8%
PETRO OUTRIGHT NA	858	600.11	43.0%	809.71	6.0%	858	791	8.5%
CRUDE OIL SPRDS	459	76.11	503.4%	100.48	357.1%	459	184	149.4%
RBOB GASOLINE BALMO CLNDR	71	0	-	123	-42.5%	71	44	60.9%
GASOLINE UP-DOWN BALMO SW	0	18.42	-100.0%	0	-	0	3	-100.0%
COLUMBIA GULF MAIN NAT G	0	0	-	0	-	0	9	-100.0%
ALGON CITY GATES NAT GAS	0	0	-	0	-	0	25	-100.0%
SOUTHERN NAT LA NAT GAS	0	27.47	-100.0%	0	-	0	2	-100.0%
TENN 800 LEG NAT GAS INDE	0	0	-	0	-	0	5	-100.0%
NATURAL GAS PHY	442,929	340,679.21	30.0%	466,806.81	-5.1%	442,929	386,828	14.5%
CRUDE OIL OUTRIGHTS	1,245	520.21	139.2%	428.62	190.4%	1,245	350	256.1%
ELECTRICITY OFF PEAK	0	0	-	0	-	0	93	-100.0%
ELEC FINSETTLED	0	0	-	0	-	0	5	-100.0%
PETRO CRK&SPRD EURO	556	468.26	18.7%	440.71	26.1%	556	357	55.7%
FREIGHT MARKETS	6	12.79	-51.1%	12.76	-51.0%	6	10	-38.4%
PLASTICS	23	30.53	-24.7%	11.9	93.2%	23	20	13.0%
NYH NO 2 CRACK SPREAD CAL	177	116.63	51.8%	42.38	317.8%	177	90	96.9%
TRANSCO ZONE 6 BASIS SWAP	107	55.63	92.3%	43.57	145.6%	107	59	81.2%
NYISO A	0	0	-	0	-	0	0	-
MINY NATURAL GAS	2,253	1,375.63	63.8%	2,304.38	-2.2%	2,253	1,345	67.5%
HEATING OIL PHY	166,127	175,845.68	-5.5%	157,986.05	5.2%	166,127	156,307	6.3%
DOMINION TRANSMISSION INC	989	846.32	16.8%	304.62	224.6%	989	914	8.2%
TCO BASIS SWAP	8	451.05	-98.3%	31.81	-76.3%	8	136	-94.5%
PJM MONTHLY	0	6.32	-100.0%	0	-	0	12	-100.0%
EL PASO PERMIAN INDEX SWA	0	0	-	0	-	0	6	-100.0%
WAHA INDEX SWAP FUTURE	0	0	-	0	-	0	35	-100.0%
NY HARBOR HEAT OIL SWP	86	158.95	-45.7%	239.24	-63.9%	86	116	-25.8%
EASTERN RAIL DELIVERY CSX	79	86.05	-8.5%	38.1	106.7%	79	59	32.6%
HTG OIL	0	0	-	3.62	-100.0%	0	22	-100.0%
EUROPE 3.5% FUEL OIL MED	39	17.58	122.4%	23.29	67.9%	39	18	116.5%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 8 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
AEP-DAYTON HUB DAILY	0	0	-	0	-	0	0	-
PJM OFF-PEAK LMP SWAP FUT	0	0	-	0	-	0	1	-100.0%
AEP-DAYTON HUB OFF-PEAK M	0	0	-	0	-	0	0	-
DOMINION TRAN INC - APP I	0	34.74	-100.0%	0	-	0	79	-100.0%
TENNESSEE ZONE 0 BASIS SW	0	0	-	0	-	0	12	-100.0%
NEW YORK HUB ZONE J PEAK	0	0	-	0	-	0	0	-
FUELOIL SWAP:CARGOES VS.B	21	29.42	-29.5%	9.05	129.3%	21	16	29.8%
MINY HTG OIL	0	0.42	-52.5%	0.24	-16.0%	0	0	-52.0%
BRENT CALENDAR SWAP	169	14.42	1071.9%	127.14	32.9%	169	88	92.8%
EURO GASOIL 10PPM VS ICE	8	3.68	128.0%	4.86	72.9%	8	3	165.9%
WTI-BRENT CALENDAR SWAP	767	647.84	18.4%	454.38	68.8%	767	545	40.8%
CENTERPOINT BASIS SWAP	0	33.37	-100.0%	0	-	0	52	-100.0%
PJM NILL DA OFF-PEAK	7,211	3,159.58	128.2%	5,336.19	35.1%	7,211	4,709	53.1%
PANHANDLE INDEX SWAP FUTU	0	0	-	0	-	0	14	-100.0%
PJM NILL DA PEAK	384	98.21	290.7%	53.71	614.4%	384	193	98.9%
CIN HUB 5MW REAL TIME PK	526	810	-35.0%	85.24	517.4%	526	271	94.4%
MINY WTI CRUDE OIL	11,243	16,457.68	-31.7%	10,888.14	3.3%	11,243	13,417	-16.2%
JAPAN C&F NAPHTHA SWAP	59	76.42	-22.7%	81.67	-27.6%	59	62	-4.0%
LLS (ARGUS) VS WTI SWAP	322	413.95	-22.3%	203.81	57.9%	322	283	13.8%
RBOB PHY	187,425	176,967.21	5.9%	153,403.76	22.2%	187,425	180,272	4.0%
NEPOOL RHD ISLD 5MW D AH	0	0	-	0	-	0	0	-
NEPOOL NE MASS 5MW D AH O	0	0	-	0	-	0	0	-
NEPOOL NEW HAMP 5MW D AH	0	0	-	0	-	0	0	-
CIN HUB 5MW REAL TIME O P	902	15,461.05	-94.2%	7,782.86	-88.4%	902	4,827	-81.3%
LTD NAT GAS	14,672	12,350.37	18.8%	18,614.43	-21.2%	14,672	11,739	25.0%
NORTHWEST ROCKIES BASIS S	0	1,085.11	-100.0%	76	-100.0%	0	725	-100.0%
SINGAPORE 380CST BALMO	3	2.11	63.9%	8.29	-58.4%	3	8	-55.0%
PJM BGE DA OFF-PEAK	0	0	-	0	-	0	93	-100.0%
ULSD 10PPM CIF MED VS ICE	0	1.16	-100.0%	0.86	-100.0%	0	1	-100.0%
GULF COAST JET FUEL CLNDR	6	6.47	-15.0%	5.71	-3.8%	6	8	-27.9%
HEATING OIL CRCK SPRD BAL	0	0	-	0	-	0	0	-100.0%
SINGAPORE GASOIL SWAP	544	123.42	341.1%	586.9	-7.3%	544	324	67.9%
CHICAGO ULSD PL VS HO SPR	13	14.47	-8.5%	7.14	85.5%	13	11	15.6%
CIN HUB 5MW D AH PK	53	265.79	-79.9%	55.43	-3.7%	53	88	-39.2%
PJM AD HUB 5MW REAL TIME	12,801	5,981.84	114.0%	12,514.71	2.3%	12,801	6,498	97.0%
TC5 RAS TANURA TO YOKOHAM	0	0	-	0	-	0	0	-100.0%
Sumas Basis Swap	24	25	-2.4%	0	-	24	72	-66.0%
RBOB CRACK SPREAD	43	131.26	-67.5%	165.67	-74.2%	43	75	-42.8%
NGPL TEX/OK	0	687.16	-100.0%	89.52	-100.0%	0	134	-100.0%
EURO GASOIL 10 CAL SWAP	0	0.16	-100.0%	0	-	0	0	-100.0%
HENRY HUB INDEX SWAP FUTU	315	1,756.05	-82.1%	115.14	173.6%	315	722	-56.4%
WTI-BRENT BULLET SWAP	10	0	-	0	-	10	2	414.1%
NYISO J OFF-PEAK	0	0	-	0	-	0	0	-100.0%
EAST/WEST FUEL OIL SPREAD	42	0.26	15876.4%	1.43	2843.4%	42	2	2562.4%
TENNESSEE 500 LEG BASIS S	0	0	-	0	-	0	6	-100.0%
NORTHEN NATURAL GAS DEMAR	0	4.58	-100.0%	5.9	-100.0%	0	16	-100.0%
NEW ENGLAND HUB PEAK DAIL	0	0	-	0	-	0	0	-
HOUSTON SHIP CHANNEL INDE	0	0	-	0	-	0	1	-100.0%
ROCKIES KERN OPAL - NW IN	0	0	-	0	-	0	4	-100.0%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 9 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
APPALACHIAN COAL (PHY)	0	0	-	0	-	0	1	-100.0%
WTI CALENDAR	2,023	1,687.16	19.9%	2,530.62	-20.1%	2,023	1,539	31.4%
CINERGY HUB PEAK MONTH	0	0	-	0	-	0	0	-
CHICAGO ULSD (PLATTS) SWA	0	0	-	0	-	0	0	-
RBOB CALENDAR SWAP	563	315.68	78.3%	353.48	59.3%	563	320	75.8%
AEP-DAYTON HUB MTHLY	0	0	-	0	-	0	1	-100.0%
CRUDE OIL PHY	1,121,482	1,142,647.95	-1.9%	1,141,951.67	-1.8%	1,121,482	1,098,287	2.1%
N ILLINOIS HUB MTHLY	0	0	-	0	-	0	0	-
RBOB (PLATTS) CAL SWAP	0	0	-	0	-	0	1	-100.0%
NEW YORK ETHANOL SWAP	46	212.63	-78.5%	41.43	10.4%	46	71	-35.5%
LA CARB DIESEL (OPIS)	0	0	-	0	-	0	0	-100.0%
GASOIL BULLET SWAP	0	0	-	0	-	0	0	-
RBOB SPREAD (PLATTS) SWAP	0	0	-	0	-	0	0	-
EURO PROPANE CIF ARA SWA	73	42.89	70.0%	53.52	36.2%	73	63	16.2%
LA CARBOB GASOLINE(OPIS)S	13	107.89	-88.4%	0	-	13	24	-47.1%
MCCLOSKEY ARA ARG S COAL	3,859	12,950.95	-70.2%	2,362.57	63.3%	3,859	7,118	-45.8%
MCCLOSKEY RCH BAY COAL	534	1,857.68	-71.3%	424.1	25.8%	534	760	-29.8%
MGF FUT	0	0	-	0	-	0	0	-100.0%
MNC FUT	189	207.42	-8.7%	191.67	-1.2%	189	190	-0.2%
DLY GAS EURO-BOB OXY	0	0	-	0	-	0	0	-100.0%
MGN1 SWAP FUT	10	10.16	-3.0%	6.67	47.7%	10	7	47.0%
UCM FUT	1	0.79	26.7%	0.48	110.0%	1	1	-28.6%
MJC FUT	4	7.26	-44.9%	0	-	4	4	12.6%
UP DOWN GC ULSD VS NMX HO	2,809	2,948.79	-4.8%	1,736.52	61.7%	2,809	2,460	14.2%
HOUSTON SHIP CHANNEL BASI	0	473.16	-100.0%	68.95	-100.0%	0	126	-100.0%
FUEL OIL CRACK VS ICE	173	198	-12.9%	128.76	34.0%	173	203	-15.1%
NGPL TEXOK INDEX	0	0	-	0	-	0	1	-100.0%
NATURAL GAS	6,830	5,275.47	29.5%	6,354.24	7.5%	6,830	6,261	9.1%
HUSTN SHIP CHNL PIPE SWP	0	0	-	0	-	0	0	-
N ROCKIES PIPE SWAP	0	0	-	0	-	0	0	-
SOCAL PIPE SWAP	0	0	-	0	-	0	23	-100.0%
GAS EURO-BOB OXY NWE BARGES	1,058	907.74	16.6%	880.76	20.1%	1,058	701	50.9%
MONT BELVIEU NATURAL GASOLIN	403	357.95	12.5%	222.38	81.1%	403	363	10.8%
ONTARIO POWER SWAPS	9	9.74	-5.0%	5	85.0%	9	20	-52.9%
DAILY PJM	0	0	-	0	-	0	11	-100.0%
BRENT OIL LAST DAY	97,050	143,174	-32.2%	99,917.86	-2.9%	97,050	94,100	3.1%
SINGAPORE GASOIL CALENDAR	9	0	-	3.71	147.7%	9	3	256.1%
MARS (ARGUS) VS WTI TRD M	1,077	472.11	128.1%	684.76	57.3%	1,077	557	93.4%
MARS (ARGUS) VS WTI SWAP	242	460.42	-47.4%	301.19	-19.6%	242	215	12.9%
SINGAPORE JET KERO BALMO	0	0	-	0	-	0	1	-100.0%
WTS (ARGUS) VS WTI TRD MT	78	59.21	30.9%	7.71	904.6%	78	49	57.9%
DUBAI CRUDE OIL BALMO	0	0	-	0	-	0	1	-100.0%
EURO 1% FUEL OIL NEW BALM	0	9.11	-100.0%	0.29	-100.0%	0	1	-100.0%
PREMIUM UNLND 10P FOB MED	5	21.89	-75.1%	4.67	16.8%	5	11	-52.5%
GASOIL 0.1 CRG CIF NW VS	0	0.26	-100.0%	0	-	0	0	-100.0%
3.5% FUEL OIL CID MED SWA	37	15.26	140.4%	15.52	136.4%	37	13	181.0%
JET FUEL CRG CIF NEW VS I	1	0	-	0	-	1	0	320.2%
ARGUS PROPAN FAR EST INDE	64	58.11	10.6%	49.29	30.4%	64	72	-11.1%
ULSD 10PPM CIF VS ICE GAS	0	1.84	-100.0%	0	-	0	0	-100.0%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 10 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
SINGAPORE NAPHTHA BALMO	0	0	-	0	-	0	0	-100.0%
NYISO ZONE G 5MW D AH PK	372	97.47	281.4%	267.62	38.9%	372	160	132.5%
GASOIL 0.1 BRGS FOB VS IC	0	0	-	0	-	0	0	-100.0%
NYMEX ULSD VS NYMEX HO	0	0	-	0	-	0	0	-
RBOB VS HEATING OIL SWAP	138	39.47	248.3%	208.33	-34.0%	138	87	58.2%
GULF COAST ULSD CRACK SPR	0	75	-100.0%	4.76	-100.0%	0	28	-100.0%
USGC UNL 87 CRACK SPREAD	0	0	-	0	-	0	1	-100.0%
JET FUEL BRG FOB RDM VS I	0	0.11	-100.0%	0	-	0	0	-100.0%
TENNESSEE 800 LEG NG BASI	0	22.53	-100.0%	0	-	0	6	-100.0%
NEPOOL W CNTR M 5MW D AH	0	0	-	0	-	0	7	-100.0%
DATED TO FRONTLINE BRENT	176	0	-	58.57	199.6%	176	87	102.7%
PJM APS ZONE DA PEAK	0	0	-	0	-	0	0	-
PJM BGE DA PEAK	0	0	-	0	-	0	5	-100.0%
PJM PPL DA PEAK	0	0	-	0	-	0	0	-
PJM JCPL DA PEAK	0	0	-	0	-	0	0	-
PJM PSEG DA PEAK	0	0	-	0	-	0	20	-100.0%
PJM PSEG DA OFF-PEAK	0	0	-	0	-	0	650	-100.0%
PJM WESTH RT PEAK	1,098	2,447.42	-55.1%	1,951.19	-43.7%	1,098	2,608	-57.9%
ALGONQUIN CITYGATES BASIS	0	33.79	-100.0%	0	-	0	32	-100.0%
MICHCON NG INDEX SWAP	0	0	-	0	-	0	9	-100.0%
GASOIL 0.1 CIF MED SWAP	0	3.16	-100.0%	0	-	0	0	-100.0%
ULSD 10PPM CIF MED SWAP	0	0	-	0	-	0	0	-100.0%
EUROPE 1% FUEL OIL NWE CA	10	15	-32.0%	3.81	167.8%	10	6	65.8%
NEW YORK HUB ZONE G PEAK	0	0	-	0	-	0	0	-
GULF COAST NO.6 FUEL OIL	3,673	3,408.58	7.8%	2,730.95	34.5%	3,673	2,769	32.7%
SINGAPORE FUEL 180CST CAL	71	62.68	13.9%	71.71	-0.4%	71	56	26.6%
SINGAPORE FUEL OIL SPREAD	60	11.47	425.5%	19	217.4%	60	31	97.7%
NORTHERN ILLINOIS OFF-PEA	0	0	-	0	-	0	0	-
PJM ATSI ELEC	0	0	-	0	-	0	141	-100.0%
SING FUEL	1	0	-	0.24	110.0%	1	0	80.0%
EURO-DENOMINATED PETRO PROD	25	3.68	578.6%	36	-30.6%	25	4	466.5%
DATED BRENT (PLATTS) DAILY SWA	0	0	-	0	-	0	1	-100.0%
GAS EURO-BOB OXY NWE BARGES	401	536.84	-25.3%	249.24	61.0%	401	327	22.8%
MINY RBOB GAS	0	0.16	185.0%	0.1	372.7%	0	0	122.3%
RBOB UP-DOWN CALENDAR SWA	0	391.47	-100.0%	0	-	0	37	-100.0%
LA JET FUEL VS NYM NO 2 H	0	12.37	-100.0%	1.43	-100.0%	0	3	-100.0%
ANR OKLAHOMA	0	86.53	-100.0%	0	-	0	19	-100.0%
MICHIGAN BASIS	130	96	35.0%	46.33	179.7%	130	109	19.4%
TEXAS EASTERN ZONE M-3 BA	335	517.37	-35.3%	50.14	567.2%	335	334	0.1%
NORTHERN NATURAL GAS VENTU	0	0	-	0	-	0	37	-100.0%
CIG BASIS	0	488.37	-100.0%	24.71	-100.0%	0	326	-100.0%
PJM DAILY	0	0	-	0	-	0	5	-100.0%
COLUMBIA GULF ONSHORE	0	163.58	-100.0%	41.33	-100.0%	0	16	-100.0%
Tetco STX Basis	0	0	-	0	-	0	6	-100.0%
Transco Zone 3 Basis	0	22.53	-100.0%	0	-	0	4	-100.0%
GULF COAST GASOLINE CLNDR	0	68.42	-100.0%	0	-	0	5	-100.0%
CENTERPOINT EAST INDEX	0	0	-	0	-	0	3	-100.0%
GULF COAST ULSD CALENDAR	20	100.37	-79.8%	64.05	-68.4%	20	42	-51.7%
LA CARB DIESEL (OPIS) SWA	14	7.21	90.7%	29.86	-53.9%	14	31	-56.2%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 11 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
EURO 3.5% FUEL OIL RDAM B	43	15.63	174.8%	50.43	-14.8%	43	19	127.7%
EUROPEAN NAPHTHA BALMO	21	6	255.0%	13.67	55.9%	21	9	137.8%
GASOIL MINI CALENDAR SWAP	7	10.95	-37.9%	6.86	-0.8%	7	11	-38.3%
NY ULSD (ARGUS) VS HEATING OIL	273	46.05	492.3%	83.9	225.1%	273	38	614.4%
PJM PECO ZONE5MW PEAK CAL MO	0	0	-	0	-	0	0	-
EUROPE 1% FUEL OIL RDAM C	0	0.53	-100.0%	0.38	-100.0%	0	1	-100.0%
SAN JUAN BASIS SWAP	0	215.79	-100.0%	8.86	-100.0%	0	302	-100.0%
GULF COAST JET VS NYM 2 H	2,157	1,495.89	44.2%	1,683.67	28.1%	2,157	1,542	39.9%
NYMEX ALUMINUM FUTURES	0	0	-	0	-	0	0	-
EURO 3.5% FUEL OIL SPREAD	40	48.42	-17.7%	35	13.9%	40	38	5.2%
GASOIL CALENDAR SWAP	1	0.32	90.0%	1.1	-45.2%	1	1	-57.0%
BRENT FINANCIAL FUTURES	443	101.32	336.8%	9.14	4739.8%	443	28	1486.0%
ICE BRENT DUBAI SWAP	590	0	-	527.71	11.7%	590	132	348.0%
GASOIL CRACK SPREAD CALEN	449	39.63	1033.9%	418.29	7.4%	449	257	74.6%
EUROPEAN NAPHTHA CRACK SPR	453	247.05	83.4%	311.76	45.3%	453	275	64.6%
CRUDE OIL	847	1,246.53	-32.1%	591.52	43.1%	847	607	39.5%
NEPOOL INTR HUB 5MW D AH	5	519.47	-99.0%	415	-98.8%	5	2,242	-99.8%
NEPOOL SE MASS 5MW D AH P	0	0	-	0	-	0	0	-
PJM DAYTON DA OFF-PEAK	7,417	0	-	0	-	7,417	218	3298.2%
PJM JCPL DA OFF-PEAK	0	0	-	0	-	0	0	-
PJM WESTH RT OFF-PEAK	14,652	16,540.21	-11.4%	26,348.1	-44.4%	14,652	26,740	-45.2%
CHICAGO ETHANOL SWAP	7,052	5,035.74	40.0%	8,333.71	-15.4%	7,052	5,247	34.4%
HENRY HUB BASIS SWAP	287	2,079.32	-86.2%	95.48	200.6%	287	796	-63.9%
HENRY HUB SWAP	7,305	31,396.16	-76.7%	17,067.9	-57.2%	7,305	19,850	-63.2%
PREM UNL GAS 10PPM RDAM FOB B	0	0	-	0	-	0	0	-100.0%
PREM UNL GAS 10PPM RDAM FOB S	0	0.16	-100.0%	0	-	0	1	-100.0%
MONT BELVIEU NORMAL BUTANE 5	1,438	1,058.11	35.9%	1,821.38	-21.1%	1,438	1,370	4.9%
MONT BELVIEU ETHANE 5 DECIMAL	2,383	1,126.58	111.5%	2,456.52	-3.0%	2,383	2,344	1.7%
MONT BELVIEU LDH PROPANE 5 DE	5,309	4,183.79	26.9%	4,089.48	29.8%	5,309	5,339	-0.6%
SINGAPORE 180CST BALMO	0	5.95	-100.0%	1.67	-100.0%	0	2	-100.0%
PJM APS ZONE DA OFF-PEAK	0	0	-	0	-	0	0	-
GRP THREE UNL GS (PLT) VS	22	98.68	-77.5%	18.81	18.0%	22	67	-66.7%
JET BARGES VS ICE GASOIL	0	1.16	-100.0%	0	-	0	0	-100.0%
SINGAPORE GASOIL VS ICE	485	55.26	777.2%	384.05	26.2%	485	178	172.0%
NATURAL GAS PEN SWP	6,071	4,912.47	23.6%	4,842.67	25.4%	6,071	5,279	15.0%
WESTERN RAIL DELIVERY PRB	10	57.89	-83.2%	5	95.0%	10	37	-73.7%
EUROPE DATED BRENT SWAP	2	15.79	-86.7%	0	-	2	106	-98.0%
SINGAPORE JET KERO GASOIL	185	36.84	400.8%	224.76	-17.9%	185	57	221.0%
TETCO M-3 INDEX	0	0	-	122.29	-100.0%	0	43	-100.0%
PJM AECO DA PEAK	0	0	-	0	-	0	0	-
GASOIL 10PPM CARGOES CIF	0	0.16	-100.0%	0	-	0	0	-100.0%
WAHA BASIS	37	167.79	-78.2%	0	-	37	177	-79.4%
LA JET (OPIS) SWAP	137	56.58	142.6%	42.86	220.3%	137	88	56.4%
NY HARBOR 1% FUEL OIL BAL	0	0	-	2.38	-100.0%	0	1	-100.0%
GASOIL 10PPM VS ICE SWAP	10	0.37	2546.6%	2.1	365.3%	10	4	159.2%
NY H OIL PLATTS VS NYMEX	0	0	-	0	-	0	0	-
NYISO ZONE G 5MW D AH O P	3,598	0	-	0	-	3,598	1,764	104.0%
EUROPEAN GASOIL (ICE)	124	19,737.42	-99.4%	532.33	-76.7%	124	6,247	-98.0%
ULSD UP-DOWN BALMO SWP	380	80.79	370.7%	455.95	-16.6%	380	300	26.8%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 12 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
JET FUEL UP-DOWN BALMO CL	269	195.26	37.7%	381.9	-29.6%	269	226	18.7%
EIA FLAT TAX ONHWAY DIESE	74	189.26	-60.7%	43.86	69.4%	74	46	61.5%
NY 2.2% FUEL OIL (PLATTS	0	6.32	-100.0%	0	-	0	2	-100.0%
RBOB CRACK SPREAD BALMO S	0	0	-	2.86	-100.0%	0	2	-100.0%
HEATING OIL BALMO CLNDR S	0	3.95	-100.0%	0	-	0	2	-100.0%
INDIANA MISO	0	0	-	0	-	0	0	-100.0%
PETROLEUM PRODUCTS ASIA	82	62.16	31.7%	71.67	14.2%	82	66	23.9%
AUSTRIALIAN COKE COAL	15	16.74	-7.7%	12	28.7%	15	19	-19.2%
PETROLEUM PRODUCTS	255	62.11	311.3%	176.19	45.0%	255	111	129.4%
COAL SWAP	6	54.79	-90.0%	2.62	110.0%	6	13	-57.5%
NYISO A OFF-PEAK	0	0	-	0	-	0	0	-
NYISO G OFF-PEAK	0	0	-	0	-	0	0	-
ISO NEW ENGLAND OFF-PEAK	0	0	-	0	-	0	0	-
SINGAPORE 380CST FUEL OIL	874	321.58	171.7%	586.86	48.9%	874	401	117.8%
SINGAPORE JET KEROSENE SW	62	22.37	175.4%	36.71	67.8%	62	33	86.0%
FLORIDA GAS ZONE3 BASIS S	0	0	-	0	-	0	22	-100.0%
TRANSCO ZONE4 BASIS SWAP	200	142.89	39.6%	232.57	-14.2%	200	114	75.6%
ANR LOUISIANA BASIS SWAP	0	0	-	5.9	-100.0%	0	1	-100.0%
CINERGY HUB OFF-PEAK MONT	0	0	-	0	-	0	0	-100.0%
DUBAI CRUDE OIL CALENDAR	825	96.95	750.9%	315.71	161.3%	825	120	586.2%
NGPL MIDCONTINENT INDEX	0	0	-	0	-	0	31	-100.0%
PANHANDLE BASIS SWAP FUTU	2	368.74	-99.3%	86.86	-97.2%	2	385	-99.4%
SONAT BASIS SWAP FUTURE	0	0	-	8.86	-100.0%	0	2	-100.0%
DIESEL 10P BRG FOB RDM VS	0	0	-	4.76	-100.0%	0	1	-100.0%
FUEL OIL NWE CRACK VS ICE	0	0	-	0	-	0	0	-100.0%
EUROPE 3.5% FUEL OIL RDAM	620	387.05	60.1%	591.19	4.8%	620	363	70.5%
GULF COAST 3% FUEL OIL BA	16	87	-82.1%	46.9	-66.8%	16	38	-59.4%
NY1% VS GC SPREAD SWAP	231	121.05	91.2%	176	31.5%	231	119	94.7%
GASOIL 0.1 CIF NWE VS ISE	0	0	-	0	-	0	0	-100.0%
JET CIF NWE VS ICE	4	1.05	232.5%	4.76	-26.5%	4	4	-0.9%
EUROPE JET KERO NWE CALSW	0	0	-	0	-	0	0	-100.0%
JAPAN NAPHTHA BALMO SWAP	3	4.84	-48.4%	3.86	-35.2%	3	2	29.6%
ARGUS PROPAN(SAUDI ARAMCO	64	56.05	14.4%	28.38	125.9%	64	40	59.7%
NYISO G	0	0	-	0	-	0	0	-
NYISO J	0	0	-	0	-	0	1	-100.0%
NGPL MID-CONTINENT	0	385.79	-100.0%	0	-	0	119	-100.0%
BRENT BALMO SWAP	1	1.05	18.8%	11.9	-89.5%	1	9	-86.3%
ULSD 10PPM CIF MED BALMO	0	0	-	0	-	0	0	-100.0%
HENRY HUB SWING FUTURE	0	15.26	-100.0%	0	-	0	1	-100.0%
EUROPE NAPHTHA CALSWAP	138	42.53	224.9%	86.48	59.8%	138	75	84.0%
NY HARBOR RESIDUAL FUEL 1	168	328.84	-49.1%	75.71	121.2%	168	155	8.0%
PERMIAN BASIS SWAP	0	335.63	-100.0%	40.76	-100.0%	0	246	-100.0%
JAPAN C&F NAPHTHA CRACK S	37	81	-53.9%	27.29	36.9%	37	20	90.4%
NATURAL GAS INDEX	3	0	-	0	-	3	27	-89.5%
PETRO CRCKS & SPRDS ASIA	15	55.26	-72.4%	0	-	15	5	185.9%
NYISO CAPACITY	18	8.84	99.0%	11.14	57.9%	18	19	-7.0%
GASOIL 0.1 ROTTERDAM BARG	1	0	-	0	-	1	0	950.4%
GASOIL 0.1 CIF VS ICE GAS	1	0	-	0	-	1	0	4950.5%
GRP THREE ULSD(PLT)VS HEA	139	124.26	11.8%	106.52	30.4%	139	130	7.3%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 13 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
GASOIL 0.1CIF MED VS ICE	0	4.21	-100.0%	0	-	0	1	-100.0%
PJM AECO DA OFF-PEAK	0	0	-	0	-	0	0	-
PJM PPL DA OFF-PEAK	0	0	-	0	-	0	0	-
PJM DAYTON DA PEAK	77	0	-	0	-	77	93	-17.7%
PREMIUM UNLEAD 10PPM FOB	0	1.79	-83.2%	1.1	-72.6%	0	2	-80.2%
PJM WESTH DA OFF-PEAK	0	0	-	14,480.95	-100.0%	0	4,481	-100.0%
GASOIL 0.1 RDAM BRGS VS I	0	0	-	0	-	0	0	-100.0%
GASOIL 10P CRG CIF NW VS	0	0.53	-100.0%	0	-	0	0	-100.0%
PJM WESTHDA PEAK	0	24.21	-100.0%	793.33	-100.0%	0	247	-100.0%
NEPOOL RHODE IL 5MW D AH	0	0	-	0	-	0	0	-
CHICAGO UNL GAS PL VS RBO	0	59.21	-100.0%	0	-	0	8	-100.0%
NYISO ZONE A 5MW D AH O P	468	0	-	891.43	-47.5%	468	1,024	-54.3%
CIN HUB 5MW D AH O PK	0	3,920	-100.0%	0	-	0	1,280	-100.0%
PJM COMED 5MW D AH O PK	1,930	0	-	0	-	1,930	1,022	88.8%
NYISO ZONE A 5MW D AH PK	302	0	-	0	-	302	26	1060.1%
SOUTH STAR TEX OKLHM KNS	0	0	-	0	-	0	9	-100.0%
NY 3.0% FUEL OIL (PLATTS	44	3.95	1008.3%	7.14	512.5%	44	10	350.0%
ARGUS LLS VS. WTI (ARG) T	449	662.58	-32.3%	412.52	8.8%	449	574	-21.8%
NO 2 UP-DOWN SPREAD CALEN	62	69.74	-11.5%	35.71	72.9%	62	14	356.1%
N ILLINOIS HUB DAILY	0	0	-	0	-	0	0	-
PROPANE NON-LDH MT. BEL (OPIS)	670	484.21	38.4%	571.62	17.3%	670	550	21.8%
PROPANE NON-LDH MB (OPIS) BAL	90	40.74	121.4%	7.14	1162.8%	90	24	279.0%
JET AV FUEL (P) CAR FM ICE GAS S	0	0	-	0	-	0	1	-100.0%
SINGAPORE MOGAS 92 UNLEADED	825	401.53	105.5%	586.67	40.6%	825	477	72.9%
NY JET FUEL (PLATTS) HEAT OIL SW	0	0	-	0	-	0	0	-
SINGAPORE MOGAS 92 UNLEADED	1	0	-	17.86	-93.0%	1	24	-94.7%
ETHANOL T2 FOB ROTT INCL DUTY	222	95.26	132.7%	264.67	-16.2%	222	132	67.7%
PJM WES HUB PEAK LMP 50 M	0	0	-	0	-	0	0	-
FUEL OIL (PLATS) CAR CM	0	6.47	-100.0%	7.14	-100.0%	0	5	-100.0%
FUEL OIL (PLATS) CAR CN	0	0	-	0	-	0	0	-100.0%
GROUP THREE ULSD (PLATTS)	0	0	-	0	-	0	1	-100.0%
MICHIGAN MISO	0	4,132.11	-100.0%	0	-	0	535	-100.0%
INDONESIAN COAL	0	0	-	0	-	0	1	-100.0%
ETHANOL FWD	39	26.21	49.2%	33.81	15.6%	39	33	19.9%
NATURAL GAS FIXED PRICE SWAP F	0	0	-	0	-	0	0	-
NAT GAS BASIS SWAP	21	15.89	34.6%	40.76	-47.5%	21	151	-85.8%
SUMAS NAT GAS PLATTS FIXED PRI	0	0	-	0	-	0	0	-
ELEC WEST POWER PEAK	77	0	-	0	-	77	21	260.0%
ELEC WEST POWER OFF-PEAK	0	0	-	0	-	0	7	-100.0%
NY HARBOR LOW SULPUR GAS 100C	33	0	-	74.05	-55.6%	33	26	25.9%
CRUDE OIL TRADE AT MARKER SIN	0	0	-	0	-	0	0	-
MINI RBOB V. EBOB(ARGUS) NWE B	144	38.68	271.1%	214.48	-33.1%	144	86	66.8%
CANADIAN LIGHT SWEET OIL	65	56.05	15.1%	21.24	203.7%	65	83	-22.3%
MINI RBOB V. EBOBARG NWE BRGS	36	26.32	36.0%	2.38	1403.6%	36	15	131.9%
MINI GAS EUROBOB OXY NWE ARG	23	5	367.0%	32.86	-28.9%	23	22	8.4%
MARS BLEND CRUDE OIL	176	6.05	2805.4%	44.71	293.3%	176	79	123.9%
DY EURO 3.5% FUEL OI RDA	75	0	-	0	-	75	0	-
3.5% FUEL OIL CIF BALMO S	1	0.26	374.9%	4.29	-70.8%	1	2	-20.7%
FL GAS ZONE 3 NAT GAS IND	0	0	-	0	-	0	33	-100.0%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 14 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Futures								
CIG ROCKIES NG INDEX SWA	0	0	-	0	-	0	4	-100.0%
TRANSCO ZONE 6 INDEX	0	31.79	-100.0%	0	-	0	27	-100.0%
DEMARCO SWING SWAP	0	0	-	0	-	0	0	-100.0%
NGPL MIDCONTINENT SWING S	0	0	-	0	-	0	2	-100.0%
DEMARCO INDEX FUTURE	0	0	-	0	-	0	3	-100.0%
CAISO SP15 EZGNHUB5 PEAK	0	0	-	0	-	0	0	-
TCO NG INDEX SWAP	0	0	-	0	-	0	1	-100.0%
ELEC ERCOT DLY OFF PK	0	0	-	0	-	0	0	-
Energy Options								
PETRO OUTRIGHT EURO	0	0	-	0	-	0	0	-
PETROCHEMICALS	105	119.21	-11.9%	33.81	210.6%	105	81	30.2%
NATURAL GAS OPTION ON CALEND	20	375.79	-94.7%	112.38	-82.2%	20	111	-82.0%
ELEC MISO PEAK	0	0	-	0	-	0	14	-100.0%
HENRY HUB FINANCIAL LAST	197	64.32	205.8%	255.76	-23.1%	197	115	71.5%
NATURAL GAS PHY	146,435	119,204.68	22.8%	111,621.71	31.2%	146,435	108,494	35.0%
CRUDE OIL OUTRIGHTS	0	7.89	-100.0%	0	-	0	9	-100.0%
ELEC FINSETTLED	0	0	-	0	-	0	1	-100.0%
EUROPEAN JET KEROSENE NWE (P	0	0	-	0	-	0	0	-100.0%
HEATING OIL PHY	1,146	3,585.16	-68.0%	1,731.38	-33.8%	1,146	2,426	-52.8%
PJM MONTHLY	0	0	-	0	-	0	0	-
NY HARBOR HEAT OIL SWP	213	656.89	-67.5%	336	-36.5%	213	269	-20.7%
BRENT CALENDAR SWAP	0	1.58	-100.0%	81.14	-100.0%	0	60	-100.0%
NATURAL GAS 3 M CSO FIN	46	187.89	-75.4%	30.95	49.4%	46	905	-94.9%
RBOB PHY	810	2,119.58	-61.8%	500.05	61.9%	810	1,550	-47.8%
SAN JUAN PIPE SWAP	0	0	-	0	-	0	36	-100.0%
NATURAL GAS 2 M CSO FIN	25	0	-	21.43	16.7%	25	18	39.8%
SINGAPORE JET FUEL CALEND	0	0	-	22.86	-100.0%	0	6	-100.0%
WTI-BRENT BULLET SWAP	4,417	2,463.95	79.3%	4,744.05	-6.9%	4,417	1,110	298.0%
CRUDE OIL APO	1,708	477.32	257.8%	4,023.9	-57.6%	1,708	1,624	5.1%
WTI CRUDE OIL 1 M CSO FI	2,615	11,998.53	-78.2%	8,247.62	-68.3%	2,615	7,348	-64.4%
NATURAL GAS 6 M CSO FIN	298	10.53	2726.3%	98.81	201.1%	298	45	564.9%
RBOB CALENDAR SWAP	58	2.53	2195.8%	7.57	666.0%	58	27	116.7%
CRUDE OIL PHY	154,244	240,624.42	-35.9%	189,796.67	-18.7%	154,244	184,583	-16.4%
RBOB 1MO CAL SPD OPTIONS	0	0	-	0	-	0	47	-100.0%
MCCLOSKEY ARA ARGS COAL	0	0	-	0	-	0	38	-100.0%
MCCLOSKEY RCH BAY COAL	0	0	-	0	-	0	10	-100.0%
NYISO ZONE G 5MW PEAK OPTIONS	562	0	-	0	-	562	44	1167.9%
NATURAL GAS	0	0	-	0	-	0	2	-100.0%
HUSTN SHIP CHNL PIPE SWP	0	0	-	0	-	0	0	-
N ROCKIES PIPE SWAP	0	0	-	0	-	0	26	-100.0%
SOCAL PIPE SWAP	0	0	-	0	-	0	44	-100.0%
ETHANOL SWAP	352	346.84	1.5%	583.38	-39.7%	352	354	-0.7%
SHORT TERM NATURAL GAS	364	383.42	-5.1%	201.43	80.6%	364	276	32.0%
BRENT OIL LAST DAY	772	593.74	30.0%	1,206.71	-36.0%	772	1,252	-38.4%
SINGAPORE GASOIL CALENDAR	0	0	-	0	-	0	0	-
EURO-DENOMINATED PETRO PROD	0	0	-	0	-	0	0	-

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 15 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Energy Options								
HEATING OIL CRK SPD AVG PRICE	0	0	-	0	-	0	1	-100.0%
HO 1 MONTH CLNDR OPTIONS	0	210.53	-100.0%	0	-	0	23	-100.0%
CRUDE OIL 1MO	10,154	11,334.32	-10.4%	10,842.29	-6.3%	10,154	11,928	-14.9%
ROTTERDAM 3.5%FUEL OIL CL	0	2.11	-100.0%	5.71	-100.0%	0	3	-100.0%
SHORT TERM	117	270.79	-56.9%	78.57	48.6%	117	126	-7.0%
COAL SWAP	6	10.53	-43.0%	0	-	6	7	-9.5%
NYMEX EUROPEAN GASOIL OPT	0	0	-	0	-	0	0	-
NATURAL GAS 5 M CSO FIN	0	0	-	0	-	0	5	-100.0%
NYMEX EUROPEAN GASOIL APO	0	0	-	0	-	0	0	-100.0%
COAL API2 INDEX	70	1,711.84	-95.9%	121.43	-42.6%	70	629	-88.9%
COAL API4 INDEX	0	15.79	-100.0%	0	-	0	7	-100.0%
NATURAL GAS 1 M CSO FIN	1,375	904.21	52.1%	2,601.19	-47.1%	1,375	669	105.4%
ETHANOL	1	0	-	19.05	-96.1%	1	2	-58.0%
PJM WES HUB PEAK CAL MTH	62	0	-	6.19	901.5%	62	46	35.6%
PJM WES HUB PEAK LMP 50MW	66	0	-	0	-	66	47	39.6%
GASOLINE	0	0	-	0	-	0	3	-100.0%
LLS CRUDE OIL	0	0	-	0	-	0	47	-100.0%
1 MO GASOIL CAL SWAP SPR	0	0	-	0	-	0	0	-
NG HH 3 MONTH CAL	0	13.16	-100.0%	0	-	0	2	-100.0%
Metals Futures								
PALLADIUM	5,598	4,743.63	18.0%	4,344	28.9%	5,598	5,698	-1.8%
NYMEX PLATINUM	17,281	14,958.05	15.5%	20,151.05	-14.2%	17,281	15,849	9.0%
NYMEX HOT ROLLED STEEL	275	160.95	70.9%	129.38	112.6%	275	214	28.6%
URANIUM	19	21.05	-12.1%	13.71	34.9%	19	30	-38.5%
COMEX SILVER	70,702	50,550.37	39.9%	54,072.81	30.8%	70,702	72,297	-2.2%
COMEX GOLD	298,945	215,893.84	38.5%	167,693.9	78.3%	298,945	228,432	30.9%
COMEX COPPER	84,863	69,683.42	21.8%	68,275.19	24.3%	84,863	85,415	-0.6%
COMEX MINY COPPER	30	22.79	32.3%	26.62	13.3%	30	26	13.8%
COPPER	3	22.47	-86.7%	3.1	-3.1%	3	15	-80.5%
E-MICRO GOLD	3,837	2,850.16	34.6%	2,822.86	35.9%	3,837	3,877	-1.0%
SILVER	290	314.58	-7.8%	308.33	-5.9%	290	405	-28.3%
FERROUS PRODUCTS	0	0	-	0	-	0	4	-100.0%
METALS	0	0	-	0	-	0	0	-100.0%
ALUMINUM	553	128.21	331.3%	155.29	256.1%	553	165	235.0%
GOLD	0	0	-	0	-	0	0	-100.0%
Gold Kilo	39	337.16	-88.3%	177.38	-77.8%	39	223	-82.4%
LNDN ZINC	0	2.32	-89.2%	0.14	74.9%	0	1	-72.6%
Aluminium MW Trans Prem Platts	841	382.95	119.7%	117.57	615.7%	841	273	207.9%
IRON ORE 62 CHINA PLATTS FUTUR	2	0	-	0	-	2	12	-83.5%
IRON ORE 62 CHINA TSI FUTURES	532	1,549.84	-65.7%	659.1	-19.3%	532	791	-32.8%
COMEX E-Mini GOLD	609	374.11	62.7%	346	75.9%	609	517	17.8%
COMEX E-Mini SILVER	45	28.37	56.9%	48.14	-7.6%	45	59	-25.2%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 16 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
Metals Options								
PALLADIUM	234	107.89	117.2%	201.52	16.3%	234	167	40.4%
NYMEX PLATINUM	221	318.05	-30.4%	269.05	-17.7%	221	211	4.8%
COMEX SILVER	4,722	3,846.89	22.8%	3,816.76	23.7%	4,722	5,459	-13.5%
COMEX GOLD	34,888	37,998.68	-8.2%	34,952.81	-0.2%	34,888	39,349	-11.3%
COMEX COPPER	208	88.26	135.3%	87.29	137.9%	208	153	36.0%
SILVER	2	0.26	754.9%	22.76	-90.1%	2	11	-79.0%
GOLD	278	163.32	70.5%	305.05	-8.7%	278	237	17.5%
IRON ORE 62 CHINA TSI PUT OPTIO	98	235.26	-58.2%	16.9	481.2%	98	129	-23.6%
IRON ORE 62 CHINA TSI CALL OPTIC	44	204.21	-78.6%	7.62	472.3%	44	158	-72.4%
Foreign Exchange Futures								
CHILEAN PESO	5	0.32	1499.1%	0	-	5	0	12620.4%
Ags Futures								
WHEAT	682	0	-	290.86	134.6%	682	308	121.5%
Ags Options								
WHEAT	0	0	-	0	-	0	2	-100.0%
TOTAL FUTURES GROUP								
Interest Rate Futures	6,248,364	6,161,310.95	1.4%	5,432,509.48	15.0%	6,248,364	5,713,783	9.4%
Equity Index Futures	1,838,521	3,390,829.47	-45.8%	2,190,439.09	-16.1%	1,838,521	2,419,876	-24.0%
Metals Futures	484,464	362,024.26	33.8%	319,344.57	51.7%	484,464	414,304	16.9%
Energy Futures	2,211,203	2,197,585.58	0.6%	2,236,618.48	-1.1%	2,211,203	2,106,350	5.0%
FX Futures	847,174	879,115.05	-3.6%	823,990.29	2.8%	847,174	781,555	8.4%
Commodities and Alternative Invest	966,474	921,113.74	4.9%	869,057.1	11.2%	966,474	1,078,201	-10.4%
Foreign Exchange Futures	5	0.32	1499.1%	0	-	5	0	12620.4%
Ags Futures	682	0	-	290.86	134.6%	682	308	121.5%
TOTAL FUTURES	12,596,887	13,911,979.37	-9.5%	11,872,249.86	6.1%	12,596,887.05	12,514,375.44	0.7%
TOTAL OPTIONS GROUP								
Interest Rate Options	2,142,963	2,774,010.11	-22.7%	1,901,488.33	12.7%	2,142,963	1,802,859	18.9%
Equity Index Options	653,871	744,964.05	-12.2%	644,902.62	1.4%	653,871	636,383	2.7%
Metals Options	40,696	42,962.84	-5.3%	39,679.76	2.6%	40,696	45,873	-11.3%
Energy Options	326,235	397,697.53	-18.0%	337,332.05	-3.3%	326,235	324,469	0.5%
FX Options	68,883	89,421.89	-23.0%	62,567	10.1%	68,883	71,981	-4.3%
Commodities and Alternative Invest	202,496	214,681.26	-5.7%	166,067.76	21.9%	202,496	247,686	-18.2%
Ags Options	0	0	-	0	-	0	2	-100.0%
TOTAL OPTIONS	3,435,144	4,263,737.69	-19.4%	3,152,037.52	9.0%	3,435,143.6	3,129,252.49	9.8%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.

CME Group Exchange ADV Report - Monthly

January 2017

Page 17 of 17

	ADV JAN 2017	ADV JAN 2016	% CHG	ADV DEC 2017	% CHG	ADV Y.T.D 2017	ADV Y.T.D 2016	% CHG
TOTAL COMBINED								
Commodities and Alternative Invest	1,168,970	1,135,795	2.9%	1,035,124.86	12.9%	1,168,970	1,325,887	-11.8%
FX	916,057	968,536.95	-5.4%	886,557.29	3.3%	916,057	853,536	7.3%
Equity Index	2,492,391	4,135,793.53	-39.7%	2,835,341.71	-12.1%	2,492,391	3,056,258	-18.4%
Interest Rate	8,391,326	8,935,321.05	-6.1%	7,333,997.81	14.4%	8,391,326	7,516,642	11.6%
Energy	2,537,438	2,595,283.11	-2.2%	2,573,950.52	-1.4%	2,537,438	2,430,819	4.4%
Metals	525,160	404,987.11	29.7%	359,024.33	46.3%	525,160	460,177	14.1%
Foreign Exchange	5	0.32	1499.1%	0	-	5	0	12620.4%
Ags	682	0	-	290.86	134.6%	682	310	120.4%
GRAND TOTAL	16,032,031	18,175,717.05	-11.8%	15,024,287.38	6.7%	16,032,030.65	15,643,627.92	2.5%

*** Note - KC HRW Wheat monthly and YTD volume comparatives to prior year is not using a complete year, since collection of 2013 volume data did not start until April 15, 2013.

The information herein is taken from source believed to be reliable. However, it is intended for the purposes of information and education only and is not guaranteed by the CME Group as to accuracy, completeness, nor trading results and does not constitute advice or continue a solicitation of the purchase or sale of any futures or options. The Rules and Regulations of the CME Group should be consulted as the authoritative source on all current contract specifications and regulations. The previous year Average Daily Volume (ADV) may slightly differ for CBOT legacy products based on the way CME Group defines the number of trading days. The open interest values are based on preliminary open interest values only.