

Asset Basis	Asset Name	Consensus Forecast, Dec 18			CI Forecast, Dec 18			Actual			Consensus Error			CI Error		
		Jun-19	Sep-19	Dec-19	Jun-19	Sep-19	Dec-19	Jun-19	Sep-19	Dec-19	Jun-19	Sep-19	Dec-19	Jun-19	Sep-19	Dec-19
ICE Brent Crude Oil Futures (B10)	Brent Crude	70.09	69.84	70.11	60.1895	59.3111	57.6512	60.3585	58.411	58.8186	16.1%	19.6%	19.2%	0.3%	1.5%	2.0%
NYMEX WTI Crude Oil Futures (CL1)	WTI Crude	63.09	63.5	64.07	56.8381	59.5095	54.4991	54.7065	56.967	57.07	15.3%	11.5%	12.3%	3.9%	4.5%	4.5%
NYMEX Natural Gas (Henry Hub) Futures (NG1)	Natural Gas	3.076	3.013	3.119	2.60543	2.49021	2.39003	2.33035	2.51955	2.63145	32.0%	19.6%	18.5%	11.8%	1.2%	9.2%
Newcastle Coal Futures (NCF1)	Coal	94.99	90.08	89.46	63.7631	63.8267	62.8231	71.6575	66.0167	67.2429	32.6%	36.5%	33.0%	11.0%	3.3%	6.6%
Uranium (UXA)	Uranium	30.19	30.75	31.59	24.7193	24.7947	25.6556	24.57	25.405	25.18	22.9%	21.0%	25.5%	0.6%	2.4%	1.9%
Aluminum (LMAHDS03)	Aluminum	2124	2125	2140	1821.41	1790.5	1757.47	1782.88	1779.02	1767.55	19.1%	19.4%	21.1%	2.2%	0.6%	0.6%
COMEX Copper Futures (HG1)	Copper	6507	6558	6592	5333.78	5120.99	5274.73	5351.2	5197.65	5314.65	21.6%	26.2%	24.0%	0.3%	1.5%	0.8%
Nickel (LN1)	Nickel	13341	13747	13937	14527.5	15725.8	16014.8	11943.9	17656.9	15171.8	11.7%	22.1%	8.1%	21.6%	10.9%	5.6%
Lead (LL1)	Lead	2125	2106	2116	1994.92	2030.83	2024.64	1899.7	2071.85	2021.15	11.9%	1.6%	4.7%	5.0%	2.0%	0.2%
Zinc (LMZSDS03)	Zinc	2635	2601	2116	2382.35	2240.73	2358.05	2484.25	2319.52	2390.14	6.1%	12.1%	11.5%	4.1%	3.4%	1.3%
Tin (LMSNDS03)	Tin	20031	20170	20232	17154.7	16397.4	16423	19097.3	16829.3	16352.9	4.9%	19.9%	23.7%	10.2%	2.6%	0.4%
U.S. Midwest Domestic Hot-Rolled Coil Steel (CRU)	Steel	598.3	585.7	571.9	554.781	562.789	496.245	570.6	561.947	494.9	4.9%	4.2%	15.6%	2.8%	0.1%	0.3%
Iron Ore 62% fe (TIOC)	Iron Ore	62.89	62.53	62.81	87.2903	95.6194	89.2053	103.954	92.638	82.8965	39.5%	32.5%	24.2%	16.0%	3.2%	7.6%
Gold Futures (GC1)	Gold	1257	1281	1296	1486.7	1477.75	1459.71	1360.05	1509.09	1471.42	7.6%	15.1%	11.9%	9.3%	2.1%	0.8%
NYMEX Silver Futures (SI1)	Silver	15.54	15.9	16.1	15.8558	17.3735	18.1046	15.0027	18.0708	17.1305	3.6%	12.0%	6.0%	5.7%	3.9%	5.7%
Spot Platinum Price (XPTUSD)	Platinum	870	887	909	826.451	893.431	929.715	807.964	941.489	901.915	7.7%	5.8%	0.8%	2.3%	5.1%	3.1%
Spot Palladium Price (XPDUSD)	Palladium	1105	1107	1095	1610.31	1549.39	1554.25	1444.06	1603.57	1769.72	23.5%	31.0%	38.1%	11.5%	3.4%	12.2%
								<b>Average</b>			<b>16.5%</b>	<b>18.2%</b>	<b>17.5%</b>	<b>7.0%</b>	<b>3.0%</b>	<b>3.7%</b>

Consensus Forecast Source: Consensus Economics "Energy & Metals Consensus Forecasts"

Consensus & CI  
Forecasts  
from Dec. 2018

Actuals

% MAPE  
for Consensus Vs.  
CI Forecasts

