

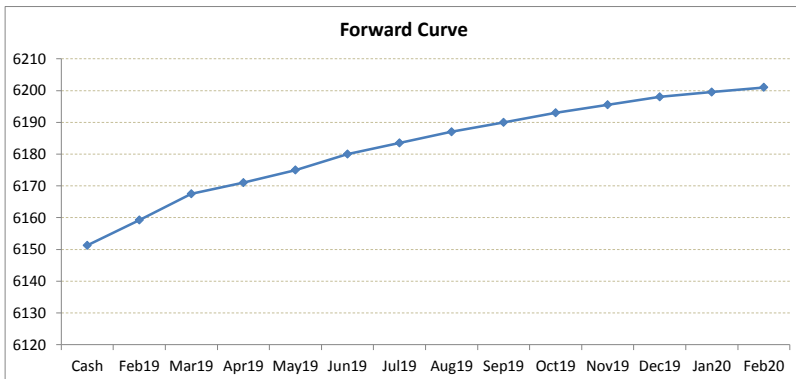
LME Valuation - Copper

Cash - 3M: 17.75c

Date: 2019-01-31

Cash 6151.25
 3M 6169.00
 Feb19 6159.25
 Mar19 6167.50
 Apr19 6171.00
 May19 6175.00
 Jun19 6180.00
 Jul19 6183.50
 Aug19 6187.00
 Sep19 6190.00
 Oct19 6193.00
 Nov19 6195.50
 Dec19 6198.00
 Jan20 6199.50
 Feb20 6201.00

	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	Cash-Jan20
Cash	8.00c	16.25c	19.75c	23.75c	28.75c	32.25c	35.75c	38.75c	41.75c	44.25c	46.75c	48.25c
	Feb19-3M	Mar19-3M	Apr19-3M	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	3M-Jan20
3M	9.75c	1.50c	2.00b	6.00c	11.00c	14.50c	18.00c	21.00c	24.00c	26.50c	29.00c	30.50c
	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	Jan20-Feb20
3rd wed	8.25c	3.50c	4.00c	5.00c	3.50c	3.50c	3.00c	3.00c	2.50c	2.50c	1.50c	1.50c
	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	Feb20
Feb19	8.25c	11.75c	15.75c	20.75c	24.25c	27.75c	30.75c	33.75c	36.25c	38.75c	40.25c	41.75c
	Mar19	3.50c	7.50c	12.50c	16.00c	19.50c	22.50c	25.50c	28.00c	30.50c	32.00c	33.50c
		Apr19	4.00c	9.00c	12.50c	16.00c	19.00c	22.00c	24.50c	27.00c	28.50c	30.00c
			May19	5.00c	8.50c	12.00c	15.00c	18.00c	20.50c	23.00c	24.50c	26.00c
				Jun19	3.50c	7.00c	10.00c	13.00c	15.50c	18.00c	19.50c	21.00c
					Jul19	3.50c	6.50c	9.50c	12.00c	14.50c	16.00c	17.50c
						Aug19	3.00c	6.00c	8.50c	11.00c	12.50c	14.00c
							Sep19	3.00c	5.50c	8.00c	9.50c	11.00c
								Oct19	2.50c	5.00c	6.50c	8.00c
									Nov19	2.50c	4.00c	5.50c
										Dec19	1.50c	3.00c
											Jan20	1.50c
												Feb20



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 ** Source: Reuters



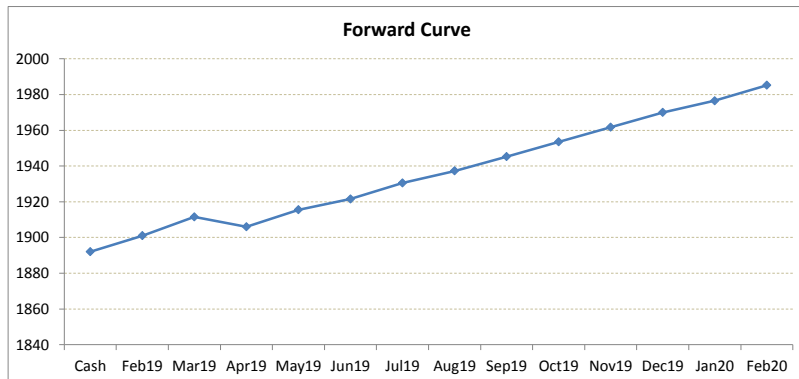
LME Valuation - Aluminium

Cash - 3M: 18.00c

Date: 2019-01-31

Cash 1892.00
 3M 1910.00
 Feb19 1901.00
 Mar19 1911.50
 Apr19 1906.00
 May19 1915.50
 Jun19 1921.50
 Jul19 1930.50
 Aug19 1937.25
 Sep19 1945.25
 Oct19 1953.50
 Nov19 1961.75
 Dec19 1970.00
 Jan20 1976.50
 Feb20 1985.25

	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	Cash-Jan20
Cash	9.00c	19.50c	14.00c	23.50c	29.50c	38.50c	45.25c	53.25c	61.50c	69.75c	78.00c	84.50c
	Feb19-3M	Mar19-3M	Apr19-3M	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	3M-Jan20
3M	9.00c	1.50b	4.00c	5.50c	11.50c	20.50c	27.25c	35.25c	43.50c	51.75c	60.00c	66.50c
	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	Jan20-Feb20
3rd wed	10.50c	5.50b	9.50c	6.00c	9.00c	6.75c	8.00c	8.25c	8.25c	8.25c	6.50c	8.75c
	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	Feb20
Feb19	10.50c	5.00c	14.50c	20.50c	29.50c	36.25c	44.25c	52.50c	60.75c	69.00c	75.50c	84.25c
	Mar19	5.50b	4.00c	10.00c	19.00c	25.75c	33.75c	42.00c	50.25c	58.50c	65.00c	73.75c
		Apr19	9.50c	15.50c	24.50c	31.25c	39.25c	47.50c	55.75c	64.00c	70.50c	79.25c
			May19	6.00c	15.00c	21.75c	29.75c	38.00c	46.25c	54.50c	61.00c	69.75c
				Jun19	9.00c	15.75c	23.75c	32.00c	40.25c	48.50c	55.00c	63.75c
					Jul19	6.75c	14.75c	23.00c	31.25c	39.50c	46.00c	54.75c
						Aug19	8.00c	16.25c	24.50c	32.75c	39.25c	48.00c
							Sep19	8.25c	16.50c	24.75c	31.25c	40.00c
								Oct19	8.25c	16.50c	23.00c	31.75c
									Nov19	8.25c	14.75c	23.50c
										Dec19	6.50c	15.25c
											Jan20	8.75c
												Feb20



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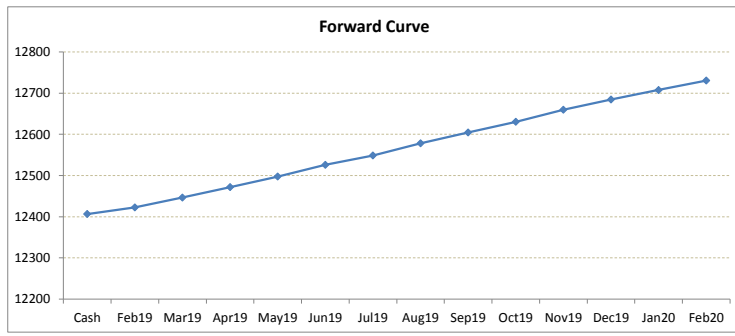
LME Valuation - Nickel

Cash - 3M: 73.50c

Date: 2019-01-31

Cash 12406.50
3M 12480.00
 Feb19 12422.50
 Mar19 12446.50
 Apr19 12472.00
 May19 12497.50
 Jun19 12526.00
 Jul19 12548.50
 Aug19 12578.00
 Sep19 12604.50
 Oct19 12630.50
 Nov19 12659.50
 Dec19 12684.50
 Jan20 12707.50
 Feb20 12730.50

	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	Cash-Jan20
Cash	16.00c	40.00c	65.50c	91.00c	119.50c	142.00c	171.50c	198.00c	224.00c	253.00c	278.00c	301.00c
	Feb19-3M	Mar19-3M	Apr19-3M	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	3M-Jan20
3M	57.50c	33.50c	8.00c	17.50c	46.00c	68.50c	98.00c	124.50c	150.50c	179.50c	204.50c	227.50c
	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	Jan20-Feb20
3rd wed	24.00c	25.50c	25.50c	28.50c	22.50c	29.50c	26.50c	26.00c	29.00c	25.00c	23.00c	23.00c
	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	Feb20
Feb19	24.00c	49.50c	75.00c	103.50c	126.00c	155.50c	182.00c	208.00c	237.00c	262.00c	285.00c	308.00c
	Mar19	25.50c	51.00c	79.50c	102.00c	131.50c	158.00c	184.00c	213.00c	238.00c	261.00c	284.00c
		Apr19	25.50c	54.00c	76.50c	106.00c	132.50c	158.50c	187.50c	212.50c	235.50c	258.50c
			May19	28.50c	51.00c	80.50c	107.00c	133.00c	162.00c	187.00c	210.00c	233.00c
				Jun19	22.50c	52.00c	78.50c	104.50c	133.50c	158.50c	181.50c	204.50c
					Jul19	29.50c	56.00c	82.00c	111.00c	136.00c	159.00c	182.00c
						Aug19	26.50c	52.50c	81.50c	106.50c	129.50c	152.50c
							Sep19	26.00c	55.00c	80.00c	103.00c	126.00c
								Oct19	29.00c	54.00c	77.00c	100.00c
									Nov19	25.00c	48.00c	71.00c
										Dec19	23.00c	46.00c
											Jan20	23.00c
												Feb20



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 ** Source: Reuters



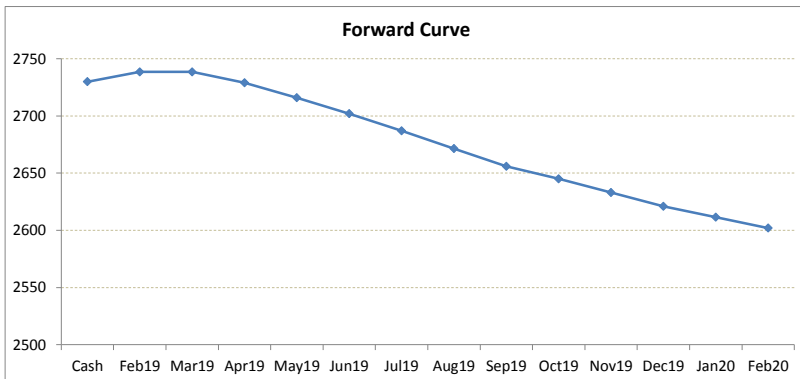
LME Valuation - Zinc

Cash - 3M: **11.00b**

Date: **2019-01-31**

Cash 2730.00
3M 2719.00
 Feb19 **2738.50**
 Mar19 **2738.50**
 Apr19 **2729.00**
 May19 **2716.00**
 Jun19 **2702.00**
 Jul19 **2687.00**
 Aug19 **2671.50**
 Sep19 **2656.00**
 Oct19 **2645.00**
 Nov19 **2633.00**
 Dec19 **2621.00**
 Jan20 **2611.50**
 Feb20 **2602.00**

	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	Cash-Jan20
Cash	8.50c	8.50c	1.00b	14.00b	28.00b	43.00b	58.50b	74.00b	85.00b	97.00b	109.00b	118.50b
	Feb19-3M	Mar19-3M	Apr19-3M	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	3M-Jan20
3M	19.50b	19.50b	10.00b	3.00b	17.00b	32.00b	47.50b	63.00b	74.00b	86.00b	98.00b	107.50b
	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	Jan20-Feb20
3rd wed	0.00b	9.50b	13.00b	14.00b	15.00b	15.50b	15.50b	11.00b	12.00b	12.00b	9.50b	9.50b
	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	Feb20
Feb19	0.00b	9.50b	22.50b	36.50b	51.50b	67.00b	82.50b	93.50b	105.50b	117.50b	127.00b	136.50b
	Mar19	9.50b	22.50b	36.50b	51.50b	67.00b	82.50b	93.50b	105.50b	117.50b	127.00b	136.50b
		Apr19	13.00b	27.00b	42.00b	57.50b	73.00b	84.00b	96.00b	108.00b	117.50b	127.00b
			May19	14.00b	29.00b	44.50b	60.00b	71.00b	83.00b	95.00b	104.50b	114.00b
				Jun19	15.00b	30.50b	46.00b	57.00b	69.00b	81.00b	90.50b	100.00b
					Jul19	15.50b	31.00b	42.00b	54.00b	66.00b	75.50b	85.00b
						Aug19	15.50b	26.50b	38.50b	50.50b	60.00b	69.50b
							Sep19	11.00b	23.00b	35.00b	44.50b	54.00b
								Oct19	12.00b	24.00b	33.50b	43.00b
									Nov19	12.00b	21.50b	31.00b
										Dec19	9.50b	19.00b
											Jan20	9.50b
												Feb20



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 ** Source: Reuters

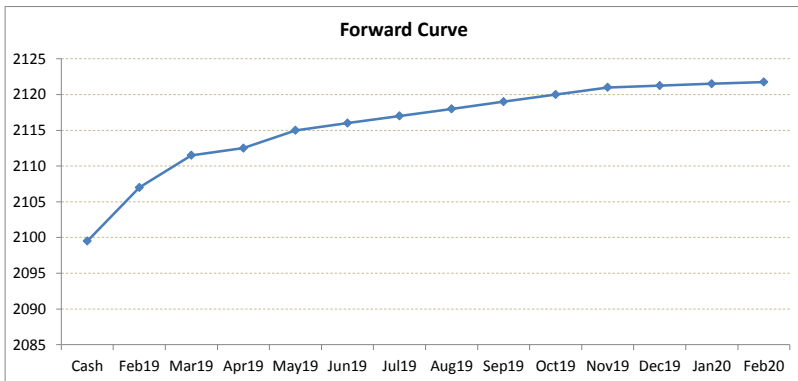
LME Valuation - Lead

Cash - 3M: 12.50c

Date: 2019-01-31

Cash 2099.50
 3M 2112.00
 Feb19 2107.00
 Mar19 2111.50
 Apr19 2112.50
 May19 2115.00
 Jun19 2116.00
 Jul19 2117.00
 Aug19 2118.00
 Sep19 2119.00
 Oct19 2120.00
 Nov19 2121.00
 Dec19 2121.25
 Jan20 2121.50
 Feb20 2121.75

	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	Cash-Jan20
Cash	7.50c	12.00c	13.00c	15.50c	16.50c	17.50c	18.50c	19.50c	20.50c	21.50c	21.75c	22.00c
	Feb19-3M	Mar19-3M	Apr19-3M	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	3M-Jan20
3M	5.00c	0.50c	0.50b	3.00c	4.00c	5.00c	6.00c	7.00c	8.00c	9.00c	9.25c	9.50c
	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	Jan20-Feb20
3rd wed	4.50c	1.00c	2.50c	1.00c	1.00c	1.00c	1.00c	1.00c	1.00c	0.25c	0.25c	0.25c
	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	Feb20
Feb19	4.50c	5.50c	8.00c	9.00c	10.00c	11.00c	12.00c	13.00c	14.00c	14.25c	14.50c	14.75c
	Mar19	1.00c	3.50c	4.50c	5.50c	6.50c	7.50c	8.50c	9.50c	9.75c	10.00c	10.25c
		Apr19	2.50c	3.50c	4.50c	5.50c	6.50c	7.50c	8.50c	8.75c	9.00c	9.25c
			May19	1.00c	2.00c	3.00c	4.00c	5.00c	6.00c	6.25c	6.50c	6.75c
				Jun19	1.00c	2.00c	3.00c	4.00c	5.00c	5.25c	5.50c	5.75c
					Jul19	1.00c	2.00c	3.00c	4.00c	4.25c	4.50c	4.75c
						Aug19	1.00c	2.00c	3.00c	3.25c	3.50c	3.75c
							Sep19	1.00c	2.00c	2.25c	2.50c	2.75c
								Oct19	1.00c	1.25c	1.50c	1.75c
									Nov19	0.25c	0.50c	0.75c
										Dec19	0.25c	0.50c
											Jan20	0.25c
												Feb20



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 ** Source: Reuters



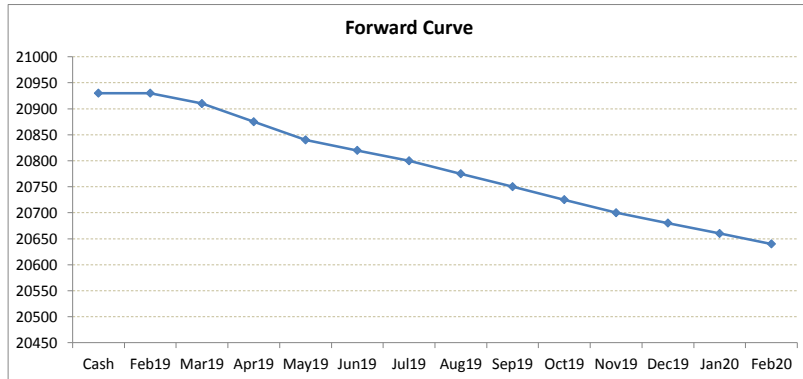
LME Valuation - Tin

Cash - 3M: **80.00b**

Date: **2019-01-31**

Cash **20930.00**
3M 20850.00
 Feb19 **20930.00**
 Mar19 **20910.00**
 Apr19 **20875.00**
 May19 **20840.00**
 Jun19 **20820.00**
 Jul19 **20800.00**
 Aug19 **20775.00**
 Sep19 **20750.00**
 Oct19 **20725.00**
 Nov19 **20700.00**
 Dec19 **20680.00**
 Jan20 **20660.00**
 Feb20 **20640.00**

	Cash-Feb19	Cash-Mar19	Cash-Apr19	Cash-May19	Cash-Jun19	Cash-Jul19	Cash-Aug19	Cash-Sep19	Cash-Oct19	Cash-Nov19	Cash-Dec19	Cash-Jan20
Cash	0.00b	20.00b	55.00b	90.00b	110.00b	130.00b	155.00b	180.00b	205.00b	230.00b	250.00b	270.00b
	Feb19-3M	Mar19-3M	Apr19-3M	3M-May19	3M-Jun19	3M-Jul19	3M-Aug19	3M-Sep19	3M-Oct19	3M-Nov19	3M-Dec19	3M-Jan20
3M	80.00b	60.00b	25.00b	10.00b	30.00b	50.00b	75.00b	100.00b	125.00b	150.00b	170.00b	190.00b
	Feb19-Mar19	Mar19-Apr19	Apr19-May19	May19-Jun19	Jun19-Jul19	Jul19-Aug19	Aug19-Sep19	Sep19-Oct19	Oct19-Nov19	Nov19-Dec19	Dec19-Jan20	Jan20-Feb20
3rd wed	20.00b	35.00b	35.00b	20.00b	20.00b	25.00b	25.00b	25.00b	25.00b	20.00b	20.00b	20.00b
	Mar19	Apr19	May19	Jun19	Jul19	Aug19	Sep19	Oct19	Nov19	Dec19	Jan20	Feb20
Feb19	20.00b	55.00b	90.00b	110.00b	130.00b	155.00b	180.00b	205.00b	230.00b	250.00b	270.00b	290.00b
	Mar19	35.00b	70.00b	90.00b	110.00b	135.00b	160.00b	185.00b	210.00b	230.00b	250.00b	270.00b
		Apr19	35.00b	55.00b	75.00b	100.00b	125.00b	150.00b	175.00b	195.00b	215.00b	235.00b
			May19	20.00b	40.00b	65.00b	90.00b	115.00b	140.00b	160.00b	180.00b	200.00b
				Jun19	20.00b	45.00b	70.00b	95.00b	120.00b	140.00b	160.00b	180.00b
					Jul19	25.00b	50.00b	75.00b	100.00b	120.00b	140.00b	160.00b
						Aug19	25.00b	50.00b	75.00b	95.00b	115.00b	135.00b
							Sep19	25.00b	50.00b	70.00b	90.00b	110.00b
								Oct19	25.00b	45.00b	65.00b	85.00b
									Nov19	20.00b	40.00b	60.00b
										Dec19	20.00b	40.00b
											Jan20	20.00b
												Feb20



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