

Mineral Industry Surveys

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SILVER IN DECEMBER 2016

U.S. mines produced 94,800 kilograms (kg) of silver in December, a slight increase compared with revised November production and a slight increase compared with that in December 2015 (table 1). Preliminary annual silver production for 2016 was 1,150,000 kg, 6% more than that in 2015 (table 1). Based on unrounded data, the average daily silver production in December was 3,060 kg, a slight decrease compared with 3,130 kg in November, and about 3% less than 3,150 kg for full-year 2016.

Prices

The average monthly Engelhard silver price, which had trended upward from January through July, decreased slightly for the fifth consecutive month to \$16.47 per troy ounce in December (table 2, fig. 1).

The daily price ranged between a low of \$15.72 per troy ounce on December 20 and a high of \$17.70 per troy ounce on December 12. The trends in monthly silver prices (high, low, and average) from December 2014 through December 2016 are shown in figure 1. The 2016 annual average price was \$17.20 per troy ounce, 9% more than the 2015 average price.

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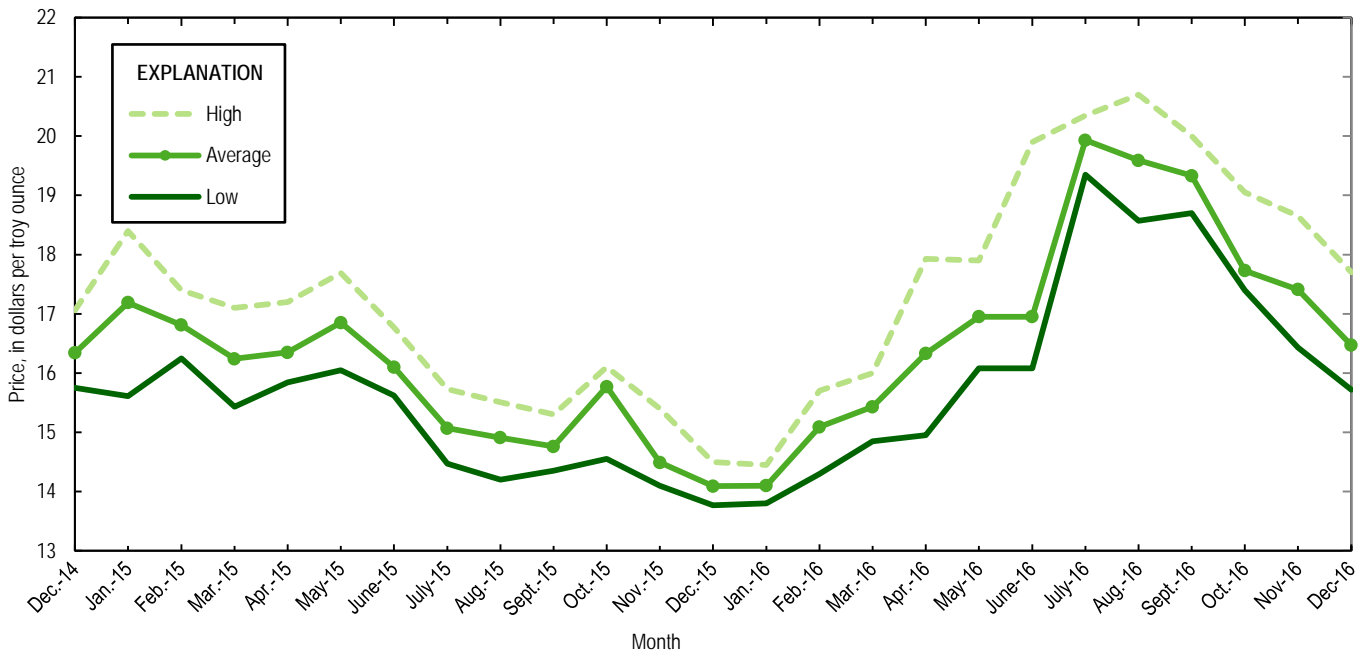


Figure 1. Engelhard monthly silver prices for December 2014 through December 2016. Source: Platts Metals Week.

TABLE 1
MINE PRODUCTION OF RECOVERABLE SILVER
IN THE UNITED STATES, BY STATE¹

(Kilograms)

| | Nevada | Other States ² | Total |
|--------------------|---------|------------------------------|----------------------|
| 2015: ^P | | | |
| December | 22,900 | 71,300 | 94,200 |
| January–December | 290,000 | 800,000 | 1,090,000 |
| 2016: | | | |
| January | 22,100 | 71,900 | 94,000 |
| February | 20,700 | 74,700 | 95,400 |
| March | 22,500 | 76,500 ^r | 99,000 ^r |
| April | 24,400 | 69,600 ^r | 94,100 ^r |
| May | 24,700 | 70,900 ^r | 95,700 ^r |
| June | 23,800 | 68,600 ^r | 92,400 ^r |
| July | 24,000 | 67,500 ^r | 91,600 ^r |
| August | 24,900 | 79,700 ^r | 105,000 ^r |
| September | 24,100 | 74,900 ^r | 99,000 ^r |
| October | 22,700 | 76,200 ^r | 98,900 ^r |
| November | 23,800 | 70,200 ^r | 94,000 ^r |
| December | 24,600 | 70,300 | 94,800 |
| January–December | 282,000 | 871,000 | 1,150,000 |

^PPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, New Mexico, South Dakota, and Utah.

TABLE 2
SILVER PRICES

(Dollars per troy ounce)

| | Price | Date |
|----------------------------------|-------|---------|
| Engelhard: | | |
| 2015: | | |
| Low | 13.77 | Dec. 15 |
| High | 18.40 | Jan. 21 |
| Average | 15.72 | XX |
| 2016: | | |
| October: | | |
| Low | 17.40 | Oct. 17 |
| High | 19.05 | Oct. 3 |
| Average | 17.73 | XX |
| November: | | |
| Low | 16.43 | Nov. 23 |
| High | 18.65 | Nov. 10 |
| Average | 17.49 | XX |
| December: | | |
| Low | 15.72 | Dec. 20 |
| High | 17.70 | Dec. 12 |
| Average | 16.47 | XX |
| Year to date: | | |
| Low | 13.80 | Jan. 14 |
| High | 20.70 | Aug. 2 |
| Average | 17.20 | XX |
| Handy and Harman: | | |
| 2015, Average | 15.72 | XX |
| 2016: | | |
| October | 17.66 | XX |
| November | 17.41 | XX |
| December | 16.45 | XX |
| Year to date | 18.00 | XX |
| London Final:¹ | | |
| 2015, Average | 15.70 | XX |
| 2016: | | |
| October | 17.74 | XX |
| November | 17.42 | XX |
| December | 16.38 | XX |
| Year to date | 17.98 | XX |

XX Not applicable.

¹Reported as "London Spot/US Equiv."

Source: Platts Metals Week.

TABLE 3
U.S. IMPORTS OF SILVER¹

| Period and country | Bullion | | Doré | | Ores and concentrates ² Ash and residues | | Total | |
|-------------------------------|-------------------------------|----------------------|-------------------------------|----------------------|--|----------------------|-------------------------------|----------------------|
| | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) |
| 2015 | 4,660,000 | \$2,410,000 | 1,280,000 | \$998,000 | 253 | \$61 | 5,940,000 | \$3,410,000 |
| 2016: | | | | | | | | |
| October | 403,000 | 243,000 | 95,900 | 99,300 | (3) | 4 | 498,000 | 342,000 |
| November | 380,000 | 217,000 | 113,000 | 96,000 | 161 | 34 | 493,000 | 314,000 |
| December: | | | | | | | | |
| Argentina | 5,660 | 6,630 | 12,700 | 13,400 | -- | -- | 18,400 | 20,100 |
| Bolivia | 17,000 | 9,100 | -- | -- | -- | -- | 17,000 | 9,100 |
| Canada | 160,000 | 90,000 | -- | -- | -- | -- | 160,000 | 90,000 |
| China | -- | -- | 11,600 | 6,240 | -- | -- | 11,600 | 6,240 |
| Colombia | -- | -- | 319 | 150 | -- | -- | 319 | 150 |
| Germany | 19,900 | 10,500 | 410 | 229 | -- | -- | 20,300 | 10,800 |
| Guatemala | -- | -- | 15,500 | 17,700 | -- | -- | 15,500 | 17,700 |
| Italy | -- | -- | 378 | 225 | -- | -- | 378 | 225 |
| Mexico | 152,000 | 81,600 | 60,700 | 48,700 | -- | -- | 213,000 | 130,000 |
| Peru | 13,500 | 7,310 | 17,200 | 12,300 | -- | -- | 30,700 | 19,600 |
| Poland | 16,000 | 10,300 | -- | -- | -- | -- | 16,000 | 10,300 |
| Switzerland | -- | -- | 400 | 326 | -- | -- | 400 | 326 |
| United Kingdom | -- | -- | 66 | 37 | -- | -- | 66 | 37 |
| Other | 32 | 19 | 103 | 139 | -- | -- | 135 | 158 |
| Total | 385,000 | 216,000 | 119,000 | 99,400 | -- | -- | 504,000 | 315,000 |
| January–December ⁴ | 4,870,000 | 2,680,000 | 1,290,000 | 1,090,000 | 172 | 46 | 6,160,000 | 3,770,000 |

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes silver content of base metal ores and concentrates.

³Less than ½ unit.

⁴May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF REFINED SILVER¹

| Period and country | Other unwrought silver (gross weight) | | Metal powder (gross weight) | | Silver nitrate (gross weight) | | Semi manufactured forms ² (gross weight) | | Waste and scrap (gross weight) | |
|-------------------------------|--|----------------------|--------------------------------|----------------------|----------------------------------|----------------------|--|----------------------|-----------------------------------|----------------------|
| | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) |
| 2015 | 238,000 | \$98,300 | 531,000 | \$124,000 | 2,550 | \$352 | 441,000 | \$199,000 | 5,400,000 | \$293,000 |
| 2016: | | | | | | | | | | |
| October | 35,200 | 18,200 | 30,600 | 2,500 | 159 | 54 | 66,200 | 37,900 | 598,000 | 28,000 |
| November | 15,700 | 8,120 | 31,200 | 5,960 | 806 | 281 | 65,100 | 40,800 | 368,000 | 19,700 |
| December: | | | | | | | | | | |
| Belgium | -- | -- | -- | -- | -- | -- | -- | -- | 39,700 | 114 |
| Brazil | -- | -- | -- | -- | -- | -- | -- | -- | 236,000 | 1,170 |
| Canada | 5,170 | 2,610 | 1,420 | 59 | -- | -- | 1,810 | 1,070 | 79,100 | 4,210 |
| Chile | -- | -- | -- | -- | -- | -- | 27,600 | 14,400 | -- | -- |
| China | -- | -- | 3,060 | 126 | -- | -- | -- | -- | 91,700 | 216 |
| Costa Rica | -- | -- | -- | -- | -- | -- | -- | -- | 983 | 109 |
| Dominican Republic | -- | -- | -- | -- | -- | -- | -- | -- | 1,230 | 335 |
| Egypt | -- | -- | -- | -- | -- | -- | -- | -- | 20,000 | 85 |
| France | -- | -- | 135 | 125 | -- | -- | -- | -- | 9,920 | 33 |
| Germany | -- | -- | 1,120 | 48 | 35 | 4 | 1 | 3 | 145,000 | 18,400 |
| Hong Kong | -- | -- | -- | -- | -- | -- | -- | -- | 472 | 61 |
| Hungary | -- | -- | 3,660 | 163 | -- | -- | -- | -- | -- | -- |
| India | -- | -- | -- | -- | -- | -- | 66 | 14 | 466 | 112 |
| Japan | -- | -- | 16,900 | 4,290 | -- | -- | -- | -- | -- | -- |
| Korea, Republic of | -- | -- | -- | -- | -- | -- | 18,100 | 11,200 | -- | -- |
| Malaysia | -- | -- | 2 | 4 | -- | -- | -- | -- | 155 | 13 |
| Mexico | 34,400 | 18,200 | -- | -- | -- | -- | -- | -- | 16,800 | 1,230 |
| Singapore | -- | -- | 30 | 9 | -- | -- | -- | -- | 2,180 | 1,740 |
| Sweden | -- | -- | 100 | 39 | -- | -- | -- | -- | -- | -- |
| Switzerland | -- | -- | -- | -- | -- | -- | 251 | 129 | -- | -- |
| Taiwan | -- | -- | -- | -- | -- | -- | -- | -- | 151 | 67 |
| United Kingdom | -- | -- | 72 | 43 | 17 | 10 | -- | -- | 1,540 | 52 |
| Other | 119 | 58 | -- | -- | -- | -- | 37 | 24 | 98 | 192 |
| Total | 39,700 | 20,900 | 26,500 | 4,910 | 52 | 14 | 47,900 | 26,900 | 645,000 | 28,200 |
| January–December ³ | 343,000 | 164,000 | 356,000 | 52,500 | 3,390 | 731 | 692,000 | 357,000 | 6,650,000 | 260,000 |

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Containing 99.5% or more by weight of silver.

³May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF SILVER¹

| Period and country | Bullion | | Doré | | Ores and concentrates ² | | Total | |
|-------------------------------|----------------------------|-------------------|----------------------------|-------------------|------------------------------------|-------------------|----------------------------|-------------------|
| | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) | Silver content (kilograms) | Value (thousands) |
| 2015 | 781,000 | \$557,000 | 34,400 | \$18,300 | 2,500 | \$8,480 | 818,000 | \$583,000 |
| 2016: | | | | | | | | |
| October | 20,300 | 13,100 | 2,100 | 1,300 | 2,570 | 4,690 | 24,900 | 19,100 |
| November | 10,200 | 5,630 | 2,550 | 1,410 | 1,070 | 1,990 | 13,800 | 9,030 |
| December: | | | | | | | | |
| Canada | 9,410 | 7,640 | -- | -- | 32 | 14 | 9,450 | 7,650 |
| Cayman Islands | 591 | 465 | -- | -- | -- | -- | 591 | 465 |
| China | -- | -- | 621 | 403 | 1,470 | 802 | 2,090 | 1,210 |
| Germany | -- | -- | 5,110 | 4,230 | -- | -- | 5,110 | 4,230 |
| India | 165 | 104 | 742 | 442 | -- | -- | 907 | 546 |
| Korea, Republic of | -- | -- | -- | -- | 1,000 | 2,590 | 1,000 | 2,590 |
| Mexico | 1,360 | 1,890 | -- | -- | -- | -- | 1,360 | 1,890 |
| Singapore | 80 | 31 | 220 | 132 | -- | -- | 300 | 163 |
| Sweden | 293 | 270 | -- | -- | -- | -- | 293 | 270 |
| Switzerland | -- | -- | 197 | 90 | -- | -- | 197 | 90 |
| United Kingdom | 32 | 22 | 614 | 348 | -- | -- | 646 | 370 |
| United Arab Emirates | 3 | 3 | 244 | 128 | -- | -- | 247 | 131 |
| Uruguay | 260 | 152 | -- | -- | -- | -- | 260 | 152 |
| Other | 81 | 74 | 107 | 54 | -- | -- | 188 | 128 |
| Total | 12,300 | 10,700 | 7,860 | 5,830 | 2,500 | 3,410 | 22,600 | 19,900 |
| January–December ³ | 237,000 | 139,000 | 35,800 | 21,300 | 15,900 | 27,500 | 289,000 | 188,000 |

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes silver content of base metal ores and concentrates.

³May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 6
U.S. EXPORTS OF REFINED SILVER¹

| Period and country | Other unwrought silver (gross weight) | | Metal powder (gross weight) | | Silver nitrate (gross weight) | | Semi manufactured forms ² (gross weight) | | Waste and scrap (gross weight) | |
|-------------------------------|--|----------------------|--------------------------------|----------------------|----------------------------------|----------------------|--|----------------------|-----------------------------------|----------------------|
| | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) | Quantity (kilograms) | Value (thousands) |
| 2015 | 141,000 | \$127,000 | 617,000 | \$375,000 | 28,900 | \$3,170 | 265,000 | \$140,000 | 14,700,000 | \$1,430,000 |
| 2016: | | | | | | | | | | |
| October | 18,600 | 21,200 | 43,900 | 31,200 | 4,260 | 457 | 27,500 | 16,500 | 1,340,000 | 163,000 |
| November | 17,600 | 9,750 | 72,300 | 41,500 | 3,720 | 305 | 46,200 | 27,500 | 1,210,000 | 132,000 |
| December: | | | | | | | | | | |
| Australia | -- | -- | -- | -- | 526 | 108 | 343 | 166 | -- | -- |
| Belgium | -- | -- | 598 | 378 | -- | -- | -- | -- | 211,000 | 11,000 |
| Brazil | -- | -- | 144 | 144 | -- | -- | 5 | 9 | -- | -- |
| Canada | 16,900 | 10,900 | 858 | 799 | 1,540 | 113 | 32,700 | 18,200 | 154,000 | 29,200 |
| Chile | 110 | 60 | -- | -- | -- | -- | 12 | 6 | -- | -- |
| China | 50 | 32 | 6,790 | 3,940 | 6 | 3 | 1,140 | 638 | 213 | 135 |
| Costa Rica | 101 | 51 | -- | -- | -- | -- | 115 | 73 | -- | -- |
| France | 107 | 47 | 3,020 | 1,840 | -- | -- | 301 | 177 | -- | -- |
| Germany | 63 | 35 | 1,120 | 816 | 5 | 3 | 295 | 345 | 236,000 | 17,400 |
| Hong Kong | 625 | 409 | 677 | 452 | -- | -- | 181 | 258 | 556 | 472 |
| India | 2,890 | 1,620 | 17 | 17 | -- | -- | 378 | 193 | -- | -- |
| Ireland | -- | -- | -- | -- | -- | -- | 3,090 | 1,440 | -- | -- |
| Israel | -- | -- | -- | -- | -- | -- | 106 | 83 | -- | -- |
| Italy | -- | -- | 1,610 | 2,450 | -- | -- | 81 | 45 | 123,000 | 26,800 |
| Japan | -- | -- | 4,760 | 3,180 | -- | -- | 54 | 35 | 142,000 | 9,070 |
| Korea, Republic of | -- | -- | 6,110 | 3,670 | -- | -- | 1,250 | 904 | 37,600 | 10,400 |
| Malaysia | -- | -- | 140 | 124 | -- | -- | 266 | 183 | -- | -- |
| Mexico | 411 | 258 | 1,090 | 815 | 60 | 14 | 4,470 | 2,560 | 16,800 | 1,870 |
| Netherlands | -- | -- | 905 | 583 | -- | -- | -- | -- | -- | -- |
| New Zealand | 201 | 62 | -- | -- | -- | -- | -- | -- | -- | -- |
| Philippines | -- | -- | -- | -- | -- | -- | 241 | 259 | -- | -- |
| Saudi Arabia | -- | -- | -- | -- | -- | -- | 197 | 99 | -- | -- |
| Singapore | 5 | 3 | 28,200 | 16,600 | 20 | 8 | 187 | 95 | 1,400 | 28 |
| Spain | -- | -- | 44 | 32 | -- | -- | 416 | 210 | -- | -- |
| Sweden | -- | -- | -- | -- | 100 | 19 | 422 | 222 | 48,200 | 2,590 |
| Switzerland | 17 | 49 | 4 | 4 | -- | -- | 946 | 486 | -- | -- |
| Taiwan | 7 | 5 | 11,100 | 7,710 | -- | -- | 44 | 33 | -- | -- |
| Thailand | 141 | 34 | 182 | 113 | -- | -- | 137 | 84 | -- | -- |
| United Kingdom | 13 | 9 | 3,730 | 2,360 | -- | -- | 1,320 | 758 | 39,300 | 5,510 |
| Vietnam | 151 | 27 | -- | -- | -- | -- | 119 | 64 | -- | -- |
| Other | 65 | 51 | 144 | 89 | 16 | 6 | 455 | 253 | (3) | 20 |
| Total | 21,900 | 13,700 | 71,200 | 46,100 | 2,280 | 274 | 49,300 | 27,900 | 1,010,000 | 114,000 |
| January–December ⁴ | 231,000 | 166,000 | 772,000 | 468,000 | 43,600 | 4,040 | 702,000 | 427,000 | 13,400,000 | 1,460,000 |

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Containing 99.5% or more by weight of silver.

³Less than ½ unit.

⁴May include revisions to previously published data.