

# Mineral Industry Surveys

**For information, contact:**

Anne Hartingh, Silver Commodity Specialist  
 National Minerals Information Center  
 Telephone: (703) 648-4985  
 Email: ahartingh@usgs.gov

Michelle Blackwell (Data)

Telephone: (703) 648-7943

Email: mblackwell@usgs.gov

**Internet:** <https://www.usgs.gov/centers/national-minerals-information-center/mineral-industry-surveys>

## SILVER IN OCTOBER 2022

U.S. mines produced 80,400 kilograms (kg) of silver in October 2022 (table 1). Based on unrounded data, the average daily silver production in October was 2,590 kg, a 7% decrease from the daily silver production of 2,800 kg in September 2022, and a 7% decrease from the daily silver production of 2,800 kg for the full year 2021 (fig. 1, table 1).

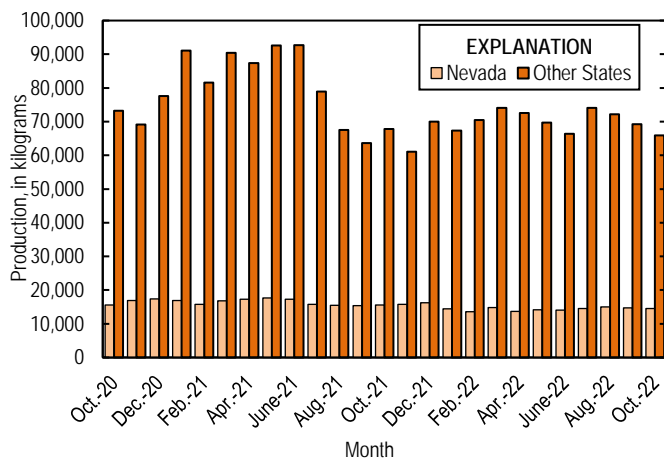


Figure 1. Monthly domestic production of silver in the United States from October 2020 through October 2022.

**Prices**

In October 2022, the Engelhard average daily silver price was \$19.62 per troy ounce, a 3% increase from the September 2022 average daily price of \$19.00 per troy ounce, a 16% decrease from that in October 2021, and 19% less than that in October 2020. The daily price in October ranged between a high of \$21.75 per troy ounce and low of \$18.70 per troy ounce (fig. 2, table 2).

**Trade**

In October 2022 imports of silver in the form of bullion, dore, and ores and concentrates totaled 322,000 kg, a 5% decrease from that in September 2022. This decrease from the previous month was owing to decreased imports of silver bullion and dore, which decreased by 4% and 11%, respectively. Imports of silver bullion decreased from Canada (20,900 kg), Belgium

(18,500 kg), Finland (10,000 kg), and Switzerland (7,220 kg), but were partially offset by increased imports of silver bullion from Poland (17,000 kg), Mexico (9,390 kg) and Chile (7,550 kg). Imports of dore decreased from Mexico (10,600 kg) and Nicaragua (820 kg). The leading import sources of silver in September 2022 in the form of bullion, dore, and ores and concentrates were: Mexico (176,000 kg), Turkey (49,700 kg), Canada (31,200 kg), Chile (22,500 kg) Poland (18,500 kg) and Switzerland (7,890 kg) (table 3).

**Recycling**

According to S&P Global Platts Metals Daily the leading residential solar panel provider in the United States, Sunrun Inc., has reached a deal with a California startup SolarCycle, Inc., to start recycling metals from its older panels as newer solar cells enter the market. SolarCycle claimed its recycling process can remove about 95% of all high-value metals including aluminum, copper, and silver, with the goal to reuse the commodities and create a circular solar economy. The U.S. Energy Department’s National Renewable Energy Laboratory recently estimated that the cumulative amount of panel waste could reach 1 million metric tons per year by 2030. In the second quarter of 2022, Sunrun installed 245 megawatts (MW) of solar photovoltaic cells, which brought its capacity for networked solar energy to 5,136 MW as of June 30, 2022 (Siciliano, 2022).

**Reference Cited**

Siciliano, John, 2022, Solar giant Sunrun signs deal to recycle valuable metals from old panels: S&P Global Platts Metals Daily, v. 11, no. 196, October 4, p. 4.

List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services>.

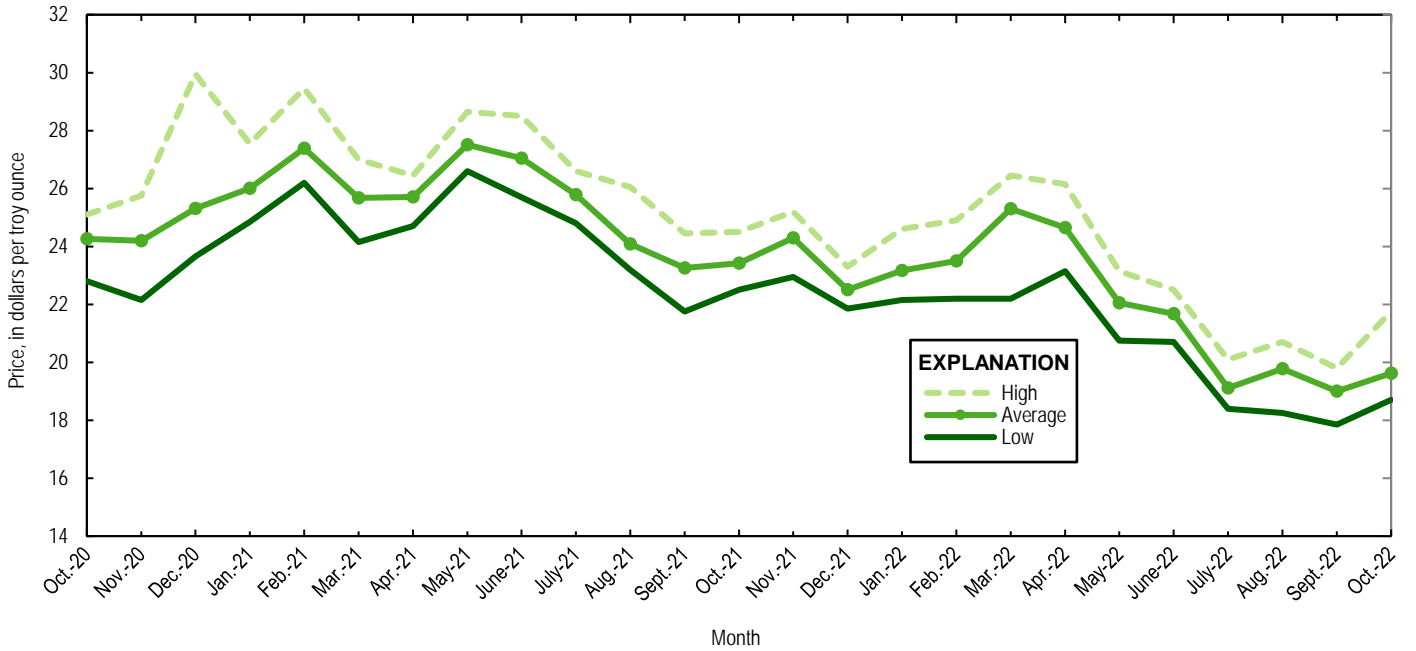


Figure 2. Engelhard monthly silver prices for October 2020 through October 2022. Source: S&P Global Platts Metals Week.

TABLE 1  
MINE PRODUCTION OF RECOVERABLE SILVER  
IN THE UNITED STATES, BY STATE<sup>1</sup>

(Kilograms)

	Nevada	Other States <sup>2</sup>	Total
2021:			
October	15,600	67,800	83,400
November	15,800	61,100	76,900
December	16,200	70,000	86,200
January–December	196,000	827,000	1,020,000
2022:			
January	14,400	67,300	81,700
February	13,600	70,500	84,100
March	14,800	74,100	88,900
April	13,700	72,600	86,300
May	14,200	69,700	83,900
June	14,100	66,400	80,500
July	14,500	74,100	88,600
August	15,000	72,200	87,200
September	14,700	69,200	83,900
October	14,500	65,900	80,400
January–October	144,000	702,000	846,000

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

<sup>2</sup>Includes Alaska, Arizona, California, Colorado, Idaho, Missouri, Montana, New Mexico, South Carolina, South Dakota, and Utah.

TABLE 2  
SILVER PRICES

(Dollars per troy ounce)

	Price	Date
<u>Engelhard:</u>		
<u>2021:</u>		
Low	21.75	September 30
High	29.45	Feb. 1
Average	25.23	XX
<u>2022:</u>		
<u>September</u>		
Low	17.85	September 1
High	19.80	September 14
Average	19.00	XX
<u>October</u>		
Low	18.70	October 19
High	21.75	October 6
Average	19.62	XX
<u>Year to date</u>		
Low	17.85	September 1
High	26.45	March 8
Average	21.79	XX
<u>Handy and Harman:</u>		
<u>2021, Average</u>		
	25.16	XX
<u>2022:</u>		
September	18.94	XX
October	19.43	XX
Year to date	21.72	XX
<u>London Final:<sup>1</sup></u>		
<u>2021, Average</u>		
	25.17	XX
<u>2022:</u>		
September	18.84	XX
October	19.36	XX
Year to date	21.68	XX

XX Not applicable.

<sup>1</sup>Reported as "London Spot/US Equiv."

Source: S&P Global Platts Metals Week.

TABLE 3  
U.S. IMPORTS OF SILVER<sup>1</sup>

Period and country or locality	Bullion		Dore		Ores and concentrates <sup>2</sup> Ash and residues		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2021	5,240,000	\$4,320,000	910,000	\$972,000	14,800	\$11,400	6,160,000	\$5,300,000
2022:								
August	270,000	174,000	66,400	69,100	594	381	337,000	244,000
September	281,000	173,000	58,300	58,000	486	299	340,000	231,000
October:								
Argentina	--	--	4,610	2,690	--	--	4,610	2,690
Australia	22	27	--	--	--	--	22	27
Belgium	88	47	--	--	--	--	88	47
Bolivia	7,680	4,950	--	--	--	--	7,680	4,950
Bulgaria	11	13	--	--	--	--	11	13
Canada	30,500	19,200	--	--	762	388	31,200	19,600
Chile	22,300	13,700	150	116	--	--	22,500	13,900
Colombia	--	--	10	6	--	--	10	6
Germany	838	559	569	363	--	--	1,410	922
Italy	1,280	1,390	549	357	--	--	1,830	1,750
Korea, Republic of	150	92	--	--	--	--	150	92
Mexico	131,000	82,200	45,100	49,500	--	--	176,000	132,000
Nicaragua	--	--	740	454	--	--	740	454
Panama	8	7	--	--	--	--	8	7
Poland	18,500	11,500	--	--	--	--	18,500	11,500
Switzerland	7,890	5,250	--	--	--	--	7,890	5,250
Turkey	49,700	32,000	--	--	--	--	49,700	32,000
United Kingdom	49	45	--	--	--	--	49	45
Total	270,000	171,000	51,800	53,500	762	388	322,000	225,000
January–October	3,060,000	2,180,000	589,000	641,000	18,000	12,300	3,670,000	2,830,000

-- Zero.

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

<sup>2</sup>Includes silver content of base metal ores and concentrates.

Source: U.S. Census Bureau.

TABLE 4  
U.S. IMPORTS OF REFINED SILVER<sup>1</sup>

Period and country or locality	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semi manufactured forms <sup>2</sup> (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)
2021	397,000	\$289,000	196,000	\$49,600	2,370	\$316	1,200,000	\$998,000	6,200,000	\$1,510,000
2022:										
August	37,700	23,200	32,600	16,100	309	47	76,700	51,800	551,000	103,000
September	40,600	23,500	43,700	17,900	462	50	186,000	128,000	459,000	119,000
October:										
Argentina	--	--	--	--	--	--	--	--	5,820	117
Brazil	--	--	--	--	--	--	--	--	3,900	844
Canada	4,210	2,460	1,440	73	19	6	327	256	159,000	13,400
Costa Rica	--	--	--	--	--	--	--	--	2,080	543
Dominican Republic	--	--	--	--	--	--	--	--	1,990	227
Ecuador	--	--	--	--	--	--	--	--	1,150	15
Germany	777	441	164	238	26	2	1,050	785	4,910	4,590
Hungary	1,360	54	45	4	--	--	--	--	--	--
India	--	--	338	207	--	--	90	54	8,630	236
Japan	--	--	1,280	424	--	--	10	13	78,100	28,300
Korea, Republic of	258	183	(3)	5	--	--	40,300	26,800	192	124
Malaysia	--	--	--	--	--	--	--	--	2,870	451
Mexico	24,600	15,500	--	--	--	--	--	--	42,700	36,800
Peru	3,800	2,310	--	--	--	--	--	--	19,700	27
Poland	--	--	--	--	--	--	7,560	4,540	--	--
Singapore	--	--	--	--	--	--	--	--	3,660	12
South Africa	--	--	--	--	--	--	--	--	2,130	739
Switzerland	--	--	--	--	--	--	2,110	1,430	--	--
Taiwan	--	--	960	63	--	--	--	--	3,600	198
Thailand	--	--	--	--	--	--	--	--	6,920	1,380
United Kingdom	--	--	--	--	176	16	--	--	130,000	38,200
Other	1,060	669	334	175	--	--	215	160	274	1,160
Total	36,100	21,700	4,550	1,190	221	24	51,600	34,100	477,000	127,000
January–October	373,000	251,000	260,000	150,000	2,760	372	1,570,000	1,170,000	4,980,000	1,110,000

-- Zero.

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

<sup>2</sup>Containing 99.5% or more by weight of silver.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF SILVER<sup>1</sup>

Period and country or locality	Bullion		Dore		Ores and concentrates <sup>2</sup> Ash and residues		Total	
	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)	Silver content (kilograms)	Value (thousands)
2021	111,000	\$99,100	25,400	\$22,800	515	\$323	137,000	\$122,000
2022:								
August	17,700	13,800	4,840	3,360	--	--	22,500	17,200
September	61,400	42,300	9	8	--	--	61,400	42,300
October:								
Australia	--	--	--	--	69	49	69	49
Canada	5,510	4,220	--	--	--	--	5,510	4,220
Germany	61	39	--	--	--	--	61	39
Japan	49	38	--	--	--	--	49	38
Macau	6	4	--	--	--	--	6	4
Malaysia	--	--	--	--	(3)	4	(3)	4
Mexico	600	367	--	--	--	--	600	367
Panama	62	44	--	--	--	--	62	44
Poland	40	30	--	--	--	--	40	30
South Africa	9	7	--	--	--	--	9	7
United Kingdom	44,200	34,400	--	--	--	--	44,200	34,400
Vietnam	54	35	--	--	--	--	54	35
Total	50,600	39,200	--	--	70	53	50,700	39,200
January–October	210,000	157,000	13,500	9,990	130	91 <sup>4</sup>	223,000	168,000 <sup>4</sup>

-- Zero.

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

<sup>2</sup>Includes silver content of base metal ores and concentrates.

<sup>3</sup>Less than ½ unit.

<sup>4</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 6  
U.S. EXPORTS OF REFINED SILVER<sup>1</sup>

Period and country or locality	Other unwrought silver (gross weight)		Metal powder (gross weight)		Silver nitrate (gross weight)		Semi manufactured forms <sup>2</sup> (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)
2021	973,000	\$864,000	586,000	\$521,000	55,100	\$22,400	774,000	\$657,000	17,300,000	\$4,710,000
2022:										
August	11,200	7,560	45,700	33,800	3,400	1,000	40,100	29,000	1,060,000	190,000
September	9,330	5,960	36,000	25,500	4,580	1,680	47,100	33,300	823,000	273,000
October:										
Belgium	9	8	88	65	--	--	--	--	92,600	13,100
Canada	25,400	16,300	1,620	1,100	1,630	471	30,800	21,500	80,000	16,800
China	--	--	5,400	4,140	--	--	946	699	--	--
France	--	--	6,520	4,270	--	--	262	192	7	36
Germany	160	103	3,110	2,290	--	--	551	380	292,000	26,900
Hong Kong	89	47	--	--	--	--	1,500	1,110	--	--
India	1,300	827	548	423	184	5	266	215	5	27
Italy	--	--	195	136	--	--	108	75	229,000	100,000
Japan	--	--	3,160	2,390	--	--	609	438	351,000	66,300
Korea, Republic of	--	--	3,490	2,620	19	4	143	98	5,960	61
Malaysia	34	26	16	12	--	--	250	192	62,800	19,300
Mexico	1,010	617	1,840	1,390	1,610	470	10,400	7,540	--	--
Netherlands	--	--	1,170	899	--	--	7	6	37,600	806
Singapore	34	22	3,880	2,770	2,070	857	128	100	156	7
Sweden	--	--	--	--	--	--	5	3	223,000	5,680
Switzerland	2,050	1,290	--	--	--	--	251	198	606	375
Taiwan	--	--	2,570	1,840	364	69	117	98	--	--
United Kingdom	1	3	3,000	2,310	--	--	240	178	35,000	44,100
Other	770	497	584	453	--	--	4,040	2,940	41	203
Total	30,800	19,700	37,200	27,100	5,880	1,880	50,700	35,900	1,410,000	294,000
January–October	172,000	144,000	474,000	370,000	48,800	18,600	525,000	407,000	11,800,000	2,760,000

-- Zero.

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

<sup>2</sup>Containing 99.3% or more by weight of silver.

Source: U.S. Census Bureau.