

Domestic Uranium Production Report Fourth-Quarter 2022

February 2023

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Introduction

In this report, the U.S. Energy Information Administration (EIA) reports U.S. uranium production from 1996 through the fourth quarter of 2022. Data in this report are based on information reported on Form EIA-851A, *Domestic Uranium Production Report (Annual)*, and Form EIA-851Q, *Domestic Uranium Production Report (Quarterly)*.

Previous issues of this report are available on the [EIA website](#).

Definitions for terms used in this report are available in EIA's [Energy Glossary](#).

Fourth-quarter 2022

U.S. production of uranium concentrate (U_3O_8) in the fourth quarter of 2022 totaled 174,712 pounds U_3O_8 . This is the largest quarterly production total since 328,860 pounds U_3O_8 were produced during the fourth quarter of 2018 and is the result of a resumption of uranium production at the White Mesa Mill in Utah. This quarter's total uranium production occurred at three facilities in Wyoming (Nichols Ranch ISR Project, Ross CPP, and Smith Ranch-Highland Operation), one facility in Nebraska (Crowe Butte Operation), and one facility in Utah (White Mesa Mill).

Table 1. Total production of uranium concentrate in the United Statespounds U₃O₈

Facility	Location	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Nichols Ranch ISR Project	Johnson and Campbell, Wyoming	120	126	131	101	106
Ross CPP	Crook, Wyoming	1,085	1,890	2,245	367	93
Smith Ranch-Highland Operation	Converse, Wyoming	-	7,930	3,666	2,777	6,663
Crowe Butte Operation	Dawes, Nebraska	8,773	-	-	-	5,916
White Mesa Mill	San Juan, Utah	-	-	-	-	161,934
Total production		9,978	9,946	6,042	3,245	174,712

Source: U.S. Energy Information Administration: Form EIA-851Q, Domestic Uranium Production Report (Quarterly)

Table 2. Number of uranium mills and plants producing uranium concentrate in the United States

End of	Uranium concentrate processing facilities				Total
	Mills - conventional milling ¹	Mills - other operations ²	In-situ recovery plants ³	Byproduct recovery plants ⁴	
1996	0	2	5	2	9
1997	0	3	6	2	11
1998	0	2	6	1	9
1999	1	2	4	0	7
2000	1	2	3	0	6
2001	0	1	3	0	4
2002	0	1	2	0	3
2003	0	0	2	0	2
2004	0	0	3	0	3
2005	0	1	3	0	4
2006	0	1	5	0	6
2007	0	1	5	0	6
2008	1	0	6	0	7
2009	0	1	3	0	4
2010	1	0	4	0	5
2011	1	0	5	0	6
2012	1	0	5	0	6
2013	0	1	6	0	7
2014	0	0	7	0	7
2015	0	0	4	0	4
2016	0	1	6	0	7
2017	0	1	6	0	7
2018	0	1	5	0	6
2019	0	0	5	0	5
2020	0	1	5	0	6
2021	0	0	3	0	3
Fourth quarter of 2022	0	1	4	0	5

¹ Milling uranium-bearing ore

² Not milling ore, but producing uranium concentrate from other (non-ore) materials

³ Not including in-situ-recovery plants that only produced uranium concentrate from restoration

⁴ Uranium concentrate as a byproduct from phosphate production

Source: U.S. Energy Information Administration: Form EIA-851A, Domestic Uranium Production Report (Annual), and Form EIA-851Q, Domestic Uranium Production Report (Quarterly)

Table 3. U.S. uranium mills and heap leach facilities by owner, location, capacity, and operating status

Owner	Mill and heap leach ¹ facility name	County, state (existing and planned locations)	Capacity (short tons of ore per day)	Operating status at end of				
				2021	First-quarter 2022	Second-quarter 2022	Third-quarter 2022	Fourth-quarter 2022
Anfield Resources Inc.	Shootaring Canyon Uranium Mill	Garfield, Utah	750	standby	standby	standby	standby	standby
EFR White Mesa LLC	White Mesa Mill	San Juan, Utah	2,000	operating	standby	standby	standby	operating
Energy Fuels Wyoming Inc	Sheep Mountain	Fremont, Wyoming	725	undeveloped	undeveloped	undeveloped	undeveloped	undeveloped
Kennecott Uranium Company/Wyoming Coal Resource Company	Sweetwater Uranium Project	Sweetwater, Wyoming	3,000	standby	standby	standby	standby	standby
Total capacity			6,475					

¹ Heap leach solutions: The separation, or dissolving-out from mined rock, of the soluble uranium constituents by the natural action of percolating a prepared chemical solution through mounded (heaped) rock material. The mounded material usually contains low-grade mineralized material and/or waste rock produced from open pit or underground mines. The solutions are collected after percolation is completed, and the solutions are processed to recover the valued components.

- = No data reported

Notes: Capacity for the fourth-quarter of 2022. An operating status of *operating* indicates the mill usually was producing uranium concentrate at the end of the period.

Source: U.S. Energy Information Administration: Form EIA-851A, Domestic Uranium Production Report (Annual), and Form EIA-851Q, Domestic Uranium Production Report (Quarterly)

Table 4. U.S. uranium in-situ recovery plants by owner, location, capacity, and operating status

In-situ recovery plant owner	In-situ recovery plant name	County, state (existing and planned locations)	Production capacity (pounds U3O8 per year)	Operating status at end of				
				2021	First-quarter 2022	Second-quarter 2022	Third-quarter 2022	Fourth-quarter 2022
Uranium Energy Corporation	Reno Creek ISR Uranium Project	Campbell, Wyoming	2,000,000	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed
Azarga Uranium Corp	Dewey Burdock Project	Fall River and Custer, South Dakota	1,000,000	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed
Cameco	Crow Butte Operation	Dawes, Nebraska	1,000,000	standby	standby	standby	standby	standby
Hydro Resources, Inc.	Church Rock	McKinley, New Mexico	1,000,000	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed
Hydro Resources, Inc.	Crownpoint	McKinley, New Mexico	1,000,000	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed	partially permitted and licensed
Lost Creek ISR LLC	Lost Creek Project	Sweetwater, Wyoming	2,000,000	operating	operating	operating	operating	operating
Mestena Uranium LLC	Alta Mesa Project	Brooks, Texas	1,500,000	standby	standby	standby	standby	standby
Pathfinder Mines Corporation	Pathfinder Shirley Basin	Carbon County, Wyoming	2,000,000	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed
Power Resources, Inc. doing business as Cameco Resources	Smith Ranch-Highland Operation	Converse, Wyoming	5,500,000	operating	operating	operating	operating	operating
Uranium Energy Corporation	Hobson ISR Processing Plant	Karnes, Texas	2,000,000	standby	standby	standby	standby	standby
Uranium Energy Corporation	La Palangana ISR Uranium Project	Duval, Texas	1,000,000	standby	standby	standby	standby	standby
Strata Energy Inc	Ross CPP	Crook, Wyoming	3,000,000	standby	standby	standby	standby	standby

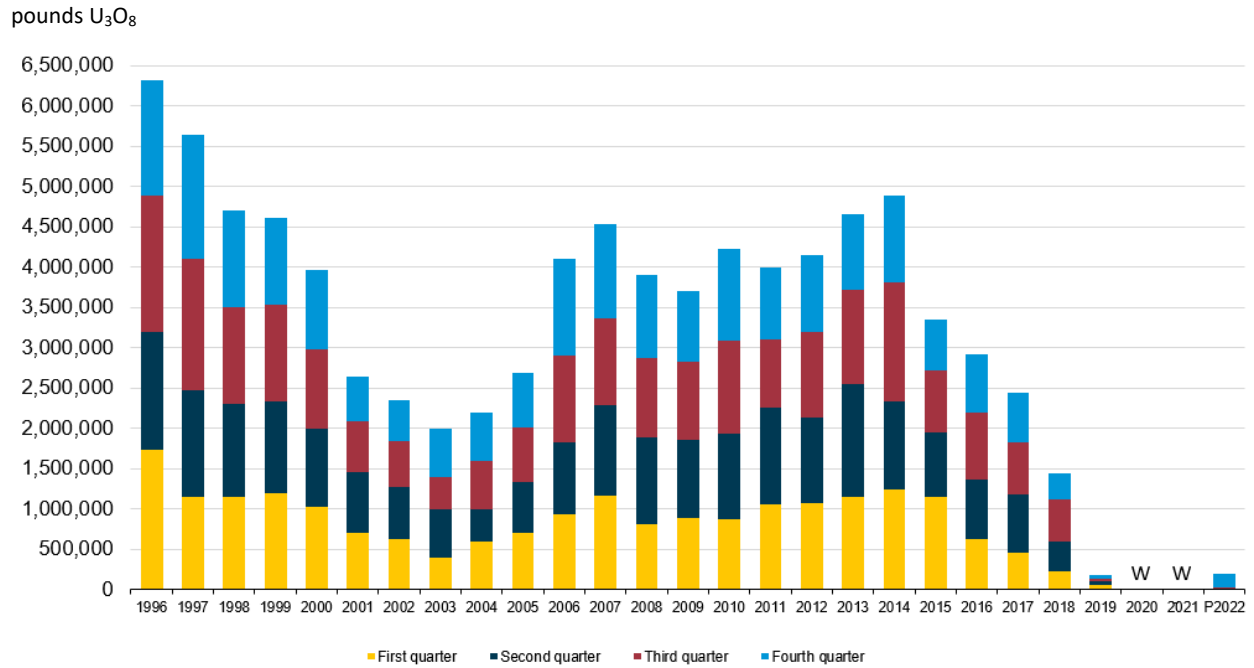
Table 4. U.S. uranium in-situ-recovery plants by owner, location, capacity, and operating status (cont.)

In-situ recovery plant owner	In-situ recovery plant name	County, state (existing and planned locations)	Production capacity (pounds U3O8 per year)	Operating status at end of				
				2021	First-quarter 2022	Second-quarter 2022	Third-quarter 2022	Fourth-quarter 2022
Uranerz Energy Corporation (An Energy Fuels company)	Nichols Ranch ISR Project	Johnson and Campbell, Wyoming	2,000,000	standby	standby	standby	standby	standby
URI, Inc. (an enCore Energy company)	Vasquez	Duval, Texas	1,000,000	reclamation	reclamation	reclamation	reclamation	reclamation
URI, Inc. (an enCore Energy company)	Kingsville Dome	Kleberg, Texas	1,000,000	standby	standby	standby	standby	standby
URI, Inc. (an enCore Energy company)	Rosita	Duval, Texas	1,000,000	standby	standby	standby	standby	standby
Uranium Energy Corporation	Burke Hollow ISR Uranium Project	Bee County, Texas	1,000,000	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed
Uranium Energy Corporation	Goliad ISR Uranium Project	Goliad, Texas	1,000,000	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed
Uranium Energy Corporation	Jab and Antelope	Sweetwater, Wyoming	2,000,000	developing	developing	developing	developing	developing
Uranium Energy Corporation	Moore Ranch	Campbell, Wyoming	3,000,000	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed	permitted and licensed
Uranium Energy Corporation	Willow Creek Project (Ludeman, Christensen Ranch and Irigaray)	Campbell and Johnson, Wyoming	1,300,000	standby	standby	standby	standby	standby
Total production capacity			36,300,000					

Notes: Production capacity for the fourth-quarter of 2022. An operating status of *operating* indicates the in-situ recovery plant usually was producing uranium concentrate at the end of the period. Hobson ISR Plant processed uranium concentrate that came from La Palangana. Hobson and La Palangana are part of the same project. ISR stands for in-situ recovery. Ludeman, Christensen Ranch and Irigaray are part of the Willow Creek Project. Uranerz Energy has a tolling arrangement with Cameco Resources. Uranium is first processed at the Nichols Ranch plant and then transported to the Smith Ranch-Highland Operation plant for final processing into uranium concentrate. CPP stands for *central processing plant*.

Source: U.S. Energy Information Administration: Form EIA-851A, Domestic Uranium Production Report (Annual), and Form EIA-851Q, Domestic Uranium Production Report (Quarterly)

Figure 1. Uranium concentrate production in the United States, 1996 to fourth-quarter 2022



P = Preliminary data

Source: U.S. Energy Information Administration, Form EIA-851A, *Domestic Uranium Production Report (Annual)*, and Form EIA-851Q, *Domestic Uranium Production Report (Quarterly)*