

Domestic Uranium Production Report Fourth-Quarter 2021

February 2022















This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

Contacts

This report was prepared by the Electricity Supply & Uranium Statistics & Product Innovation Team in the Office of Energy Production, Conversion, & Delivery. If you have questions about the preparation and content of this report, email us at eiainfonuclear@eia.gov.

Contents

Contacts	ii
Introduction	1
Fourth-quarter 2021	2

Tables

Table 1. Total production of uranium concentrate in the United States	3
Table 2. Number of uranium mills and plants producing uranium concentrate in the United States	
Table 3. U.S. uranium mills and heap leach facilities by owner, location, capacity, and operating status	5
Table 4. U.S. uranium in-situ recovery plants by owner, location, capacity, and operating status	6

Figures

Figure 1. Uranium concentrate production in the United States, 1996 to fourth-quarter 20218

Introduction

In this report, the U.S. Energy Information Administration (EIA) reports U.S. uranium production from 1996 through the fourth quarter of 2021. 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 2021

U.S. production of uranium concentrate (U3O8) in the fourth quarter of 2021 totaled 9,978 pounds U3O8. Though fourth quarter 2021 production is 88% higher than the third quarter total, it is 98% lower than the 2015-2019 five-year range for the fourth quarter (fourth quarter 2020 data was not published). This quarter's production occurred at three facilities, the Nichols Ranch ISR Project and Ross CPP in Wyoming and the Crowe Butte Operation located in Nebraska.

Table 1. Total production of uranium concentrate in the United States

pounds U3O8

Facility	Location	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022
	Johnson and Campbell,					
Nichols Ranch ISR Project	Wyoming	153	120	-	-	-
Ross CPP	Crook, Wyoming	1,335	1,085	-	-	-
Smith Ranch-Highland Operation	Converse, Wyoming	3,809	-	-	-	-
Crowe Butte Operation	Dawes, Nebraska	-	8,773	-	-	-
Total production		5,297	9,978	-	-	-

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

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

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

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

		Capacity		Operating status at end of					
Mill and heap leach ¹ facility name	County, state (existing and planned locations)	(short tons of ore per day)	2020	First-quarter 2021	Second-quarter 2021	Third-quarter 2021	Fourth-quarter 2021		
Shootaring Canyon	Carfiold								
Uranium Mill	Utah	750	standby	standby	standby	standby	standby		
White Mesa Mill	San Juan, Utah	2,000	operating	standby	standby	standby	standby		
	Fremont,								
Sheep Mountain	Wyoming	725	undeveloped	undeveloped	undeveloped	undeveloped	undeveloped		
Sweetwater Uranium Project	Sweetwater, Wyoming	3,000	standby	standby	standby	standby	standby		
	leach¹ facility name Shootaring Canyon Uranium Mill White Mesa Mill Sheep Mountain Sweetwater	Mill and heap leach¹ facility name leach¹ facility name locations) Shootaring Canyon Uranium Mill Garfield, Utah San Juan, Utah White Mesa Mill Utah Fremont, Wyoming Sweetwater Sweetwater,	Mill and heap leach¹ facility name Shootaring Canyon Uranium Mill White Mesa Mill Sheep Mountain County, state (existing and planned locations) Garfield, Utah San Juan, Utah Fremont, Wyoming Temporate Sweetwater, Sweetwater Sweetwater Sweetwater (short tons of ore per locations) Any Day Day Day Day Day Day Day Day Day Da	County, state (short (existing and planned ore per leach¹ facility name locations) day) 2020 Shootaring Canyon Uranium Mill Utah 750 standby San Juan, Utah 2,000 operating Fremont, Wyoming 725 undeveloped Sweetwater Sweetwater,	Mill and heap leach¹ facility name locations) day) 2020 First-quarter leach¹ facility name locations) day) 2020 2021 Shootaring Canyon Uranium Mill Utah 750 standby standby White Mesa Mill Utah 2,000 operating standby Fremont, Wyoming 725 undeveloped undeveloped Sweetwater Sweetwater,	Mill and heap leach¹ facility nameCounty, state (existing and planned planned locations)(short tons of ore per leach¹ facility name)First-quarter 2021Second-quarter 2021Shootaring Canyon Uranium MillGarfield, Utah750standbystandbystandbyWhite Mesa MillSan Juan, Utah2,000operatingstandbystandbySheep MountainFremont, Wyoming725undevelopedundevelopedundevelopedSweetwaterSweetwater,	Mill and heap leach¹ facility nameCounty, state (existing and planned ore per leach¹ facility name)(short tons of planned ore per locations)First-quarter day)Second-quarter 2021Third-quarter 2021Shootaring Canyon Uranium MillGarfield, Utah750standbystandbystandbystandbyWhite Mesa MillSan Juan, Utah2,000operating standbystandbystandbystandbySheep MountainFremont, Wyoming725undevelopedundevelopedundevelopedundevelopedSweetwaterSweetwater,		

Total capacity 6,475

- = No data reported

Notes: Capacity for the fourth-quarter of 2021. 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)

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.

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

		County, state	Production capacity		Operating status at end of			
In-situ recovery plant owner	In-situ recovery plant name	(existing and planned locations)	(pounds U3O8 per year)	2020	First- quarter 2021	Second- quarter 2021	Third- quarter 2021	Fourth- quarter 2021
	· ·							
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
Corporation	Keno creek isk oranium Project	Fall River and	2,000,000	partially	partially	partially	partially	partially
		Custer, South		permitted	permitted	permitted	permitted	permitted
Azarga Uranium Corp	Dewey Burdock Project	Dakota	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
	0 0 0	Dawes,	1 000 000		. 11			
Cameco	Crow Butte Operation	Nebraska	1,000,000	standby	standby	standby	standby	standby
		McKinley, New		partially permitted	partially permitted	partially permitted	partially permitted	partially permitted
Hydro Resources, Inc.	Church Rock	Mexico	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
				partially	partially	partially	partially	partially
		McKinley, New		permitted	permitted	permitted	permitted	permitted
Hydro Resources, Inc.	Crownpoint	Mexico	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
Lost Creek ISR LLC	Lost Creek Project	Sweetwater, Wyoming	2,000,000	operating	operating	operating	operating	operating
LOST CICCK ISIN LLC	LOST CICCRITOJCCC	vvyoning	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		Carbon County,		permitted	permitted	permitted	permitted	permitted
Corporation	Pathfinder Shirley Basin	Wyoming	2,000,000	and licensed	and licensed	and licensed	and licensed	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	375,000	standby	standby	standby	standby	standby

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

		County, state	Production capacity		Oper	ating status at e	nd of	
		(existing and	(pounds			Second-	Third-	
In-situ recovery plant		planned	U3O8 per		First-quarter	quarter	quarter	Fourth-
owner	In-situ recovery plant name	locations)	year)	2020	2021	2021	2021	quarter 2021
Strata Energy Inc	Ross CPP	Crook, Wyoming	375,000	standby	standby	standby	standby	standby
Uranerz Energy		Johnson and						
Corporation (An Energy		Campbell,						
Fuels company)	Nichols Ranch ISR Project	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		Bee County,		permitted	permitted	permitted	permitted	permitted
Corporation	Burke Hollow ISR Uranium Project	Texas	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
Uranium Energy				permitted	permitted	permitted	permitted	permitted
Corporation	Goliad ISR Uranium Project	Goliad, Texas	1,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
Uranium Energy		Sweetwater,						
Corporation	Jab and Antelope	Wyoming	2,000,000	developing	developing	developing	developing	developing
Uranium Energy		Campbell,		permitted	permitted	permitted	permitted	permitted
Corporation	Moore Ranch	Wyoming	3,000,000	and licensed	and licensed	and licensed	and licensed	and licensed
		Campbell and						
Uranium Energy	Willow Creek Project (Ludeman,	Johnson,						
Corporation	Christensen Ranch and Irigaray)	Wyoming	1,300,000	standby	standby	standby	standby	standby
Total production capacity			33,675,000					

Notes: Production capacity for the fourth-quarter of 2021. 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)

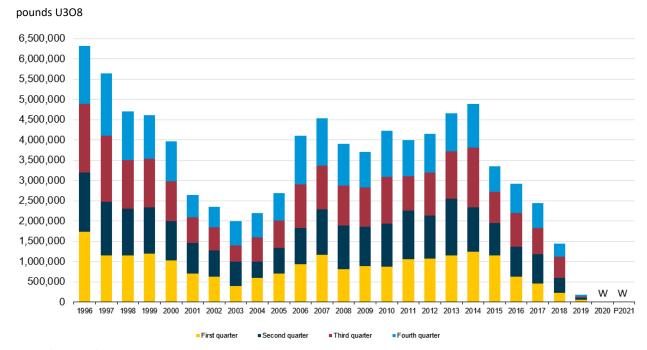


Figure 1. Uranium concentrate production in the United States, 1996 to fourth-quarter 2021

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)*