



U.S. Energy Information
Administration

2010 Domestic Uranium Production Report

June 2011



Independent Statistics & Analysis
www.eia.gov

U.S. Department of Energy
Washington, DC 20585

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Preface

The U.S. Energy Information Administration (EIA) reports detailed data spanning 2003 through 2010 and summary data back to 1993 on U.S. uranium production activities in this report, 2010 Domestic Uranium Production Report. The Annual Energy Review provides historical data back to 1949.

Data in this report are based on information reported on Form EIA-851A, "Domestic Uranium Production Report (Annual)." Form EIA-851A survey collects data on uranium milling and processing, uranium feed sources, employment, drilling, expenditures (for drilling, production, and land/other), and uranium mining. Beginning with this report, Table 3 includes new data series on uranium concentrate sales based on information reported on Form EIA-858, "Uranium Marketing Annual Survey."

Prior editions of this report may be found on the EIA website at <http://www.eia.gov/nuclear/reports.cfm>.

The Annual Energy Review may be found on the EIA website at

<http://www.eia.gov/totalenergy/data/annual/>.

Definitions for terms used in this report can be found in EIA's Energy Glossary:

<http://www.eia.doe.gov/glossary/index.html>.

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2010 Domestic Uranium Production Report

Drilling

U.S. uranium exploration drilling was 2,439 holes covering 1.5 million feet in 2010. Development drilling was 4,770 holes and 3.4 million feet. Combined, total uranium drilling was 7,209 holes covering 4.9 million feet, 31 percent more than in 2009. Expenditures for uranium drilling in the United States were \$45 million in 2010, an increase of 26 percent compared with 2009.

Mining

U.S. uranium mines produced 4.2 million pounds U_3O_8 in 2010, 2 percent more than in 2009. Four underground mines produced ore containing uranium during 2010, ten less than during 2009. Four in-situ-leach mining operations produced solutions containing uranium. Overall during part or all of 2010, there were 8 U.S. mines that produced uranium to be processed into uranium concentrate (a yellow or brown powder obtained by the milling of uranium ore or processing of in-situ-leach mining solutions).

Production and Shipments

Total production of U.S. uranium concentrate in 2010 was 4.23 million pounds U_3O_8 , 14 percent above the 2009 level, from one U.S. mill (White Mesa Mill) and four in-situ-leach plants (Alta Mesa Project, Crow Butte Operation, La Palangana (new), and Smith Ranch-Highland Operation). All but one was in production for the entire year. Shipments of uranium concentrate from these facilities were 5.14 million pounds U_3O_8 in 2010, 42 percent above the 2009 level of 3.62 million pounds.

Sales

Beginning with this report, Table 3 includes a new data series on total uranium concentrate sales by U.S. producers by quantity, weighted-average price, and delivery year.

U.S. producer sales in 2010 totaled 2.68 million pounds U_3O_8 of deliveries at a weighted-average price of \$37.59 per pound compared with the 2009 level of 2.04 million pounds U_3O_8 at a weighted-average price of \$36.61 per pound. This represents 2.45 million pounds less than the 5.14 million pounds shipped in 2010, with the difference being primarily exchanges of U.S.-origin for foreign-origin uranium.

Facilities

At the end of 2010, one U.S. uranium mill was operating with a capacity of 2,000 short tons of ore per day. Three other existing U.S. mills with a total capacity of 4,150 short tons of ore per day were on standby. There was one planned mill at the end of 2010.

Seven U.S. uranium in-situ-leach plants were operating or operational at the end of 2010, with a combined capacity of 11.8 million pounds U_3O_8 per year. Three other existing U.S. in-situ-leach plants with a total capacity of 2.5 million pounds U_3O_8 per year were on standby or permitted and licensed. There were eight planned in-situ-leach plants at the end of 2010.

Employment

Total employment in the U.S. uranium production industry was 1,073 person-years in 2010, a decrease of 2 percent from the 2009 total. Reclamation employment decreased the most (23 percent). Uranium mining, milling and processing employment decreased 3 percent, while exploration employment increased 21 percent from 2009 to 2010. Eight States (Arizona, Colorado, Nebraska, New Mexico, Texas, Utah, Washington and Wyoming) accounted for 98 percent of total employment in the uranium production industry in 2010.

Expenditures

Total expenditures for land, exploration, drilling, production, and reclamation were \$277 million in 2010, one percent less than in 2009. Expenditures for U.S. uranium production, including facility expenses, was the largest category of expenditures at \$133 million in 2010 and is down by 5 percent from the 2009 level. Uranium exploration expenditures were \$35 million and increased 43 percent from 2009 to 2010. Expenditures for land were \$20 million in 2010, a 17-percent increase compared with 2009.

Table 1. U.S. uranium drilling activities, 2003-2010

Year	Exploration Drilling		Development Drilling		Exploration and Development Drilling	
	Number of Holes	Feet (thousand)	Number of Holes	Feet (thousand)	Number of Holes	Feet (thousand)
2003	NA	NA	NA	NA	W	W
2004	W	W	W	W	2,185	1,249
2005	W	W	W	W	3,143	1,668
2006	1,473	821	3,430	1,892	4,903	2,713
2007	4,351	2,200	4,996	2,946	9,347	5,146
2008	5,198	2,543	4,157	2,551	9,355	5,093
2009	1,790	1,051	3,889	2,691	5,679	3,742
2010	2,439	1,460	4,770	3,444	7,209	4,904

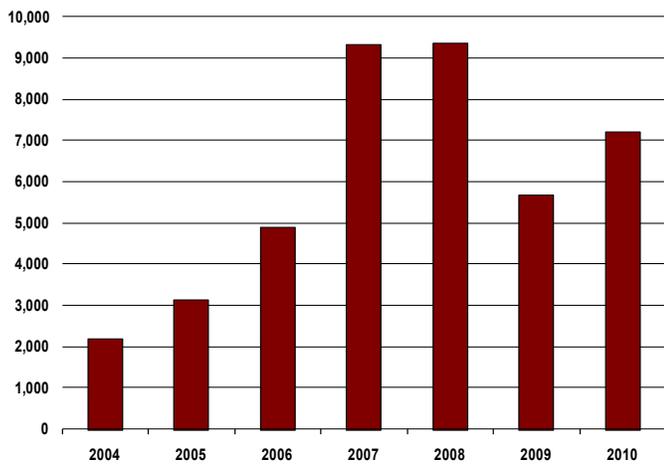
NA = Not available.

W = Data withheld to avoid disclosure of individual company data.

Note: Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Figure 1. U.S. uranium drilling by number of holes, 2004-2010 number of holes



Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2004-2010).

Figure 2. U.S. uranium drilling in footage, 2004-2010 feet (thousand)



Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2004-2010).

Table 2. U.S. uranium mine production and number of mines and sources, 2003-2010

Production / Mining Method	2003	2004	2005	2006	2007	2008	2009	2010
Underground (estimated contained thousand pounds U ₃ O ₈)	W	W	W	W	W	W	W	W
Open Pit (estimated contained thousand pounds U ₃ O ₈)	0	0	0	0	0	0	0	0
In-Situ Leaching (thousand pounds U ₃ O ₈)	W	W	2,681	4,259	W	W	W	W
Other ¹ (thousand pounds U ₃ O ₈)	W	W	W	W	W	W	W	W
Total Mine Production (thousand pounds U₃O₈)	E2,200	2,452	3,045	4,692	4,541	3,879	4,145	4,237
Number of Mines Operated								
Underground	1	2	4	5	6	10	14	4
Open Pit	0	0	0	0	0	0	0	0
In-Situ Leaching	2	3	4	5	5	6	4	4
Other Sources ¹	1	1	2	1	1	1	2	1
Total Mines and Sources	4	6	10	11	12	17	20	9

¹ Other includes, in various years, mine water, mill site cleanup and mill tailings, and well field restoration as sources of uranium.

E = Estimated data.

W = Data withheld to avoid disclosure of individual company data.

Notes: Totals may not equal sum of components because of independent rounding. Table does not include byproduct production and sources. The 2003 annual production amount was estimated by rounding to the nearest 200,000 pounds to avoid disclosure of individual company data.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Table 3. U.S. Uranium concentrate production, shipments, and sales, 2003-2010

Activity at U.S. Mills and In-Situ-Leach Plants	2003	2004	2005	2006	2007	2008	2009	2010
Estimated contained U₃O₈ (thousand pounds)								
Ore from Mines and Stockpiles Fed to Mills ¹	0	W	W	W	0	W	W	W
Other Feed Materials ²	W	W	W	W	W	W	W	W
Total Mill Feed	W							
Uranium Concentrate Produced at U.S. Mills (thousand pounds U ₃ O ₈)								
	W	W	W	W	W	W	W	W
Uranium Concentrate Produced at U.S. In-Situ-Leach Plants (thousand pounds U ₃ O ₈)								
	W	W	W	W	W	W	W	W
Total Uranium Concentrate Production (thousand pounds U ₃ O ₈)								
	E2,000	2,282	2,689	4,106	4,534	3,902	3,708	4,228
Total Uranium Concentrate Shipped from U.S. Mills and In-Situ-Leach Plants (thousand pounds U ₃ O ₈)								
	E1,600	2,280	2,702	3,838	4,050	4,130	3,620	5,137
Total Uranium Concentrate Sales by U.S. Producers³								
Deliveries (thousand pounds U ₃ O ₈)	W	W	W	3,786	3,602	3,656	2,044	2,684
Weighted-Average Price (dollars per pound U ₃ O ₈)	W	W	W	28.98	42.11	43.81	36.61	37.59

¹ Uranium ore "Fed to Mills" in any year can include: ore mined and shipped to a mill during the same year, ore that was mined during a prior year and later shipped from mine-site stockpiles, and/or ore obtained from drawdowns of stockpiles maintained at a mill site.

² Includes for various years uranium from mill cleanup, mine water, tailings water, and other materials.

³ Sales of U.S.-origin uranium only.

E = Estimated data.

W = Data withheld to avoid disclosure of individual company data.

Notes: The 2003 annual amounts were estimated by rounding to the nearest 200,000 pounds to avoid disclosure of individual company data. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2003-2010) and Form EIA-858, "Uranium Marketing Annual Survey" (2003-2010).

Table 4. U.S. Uranium mills by owner, capacity, and operating status at end of the year, 2006-2010

Mill Owner	Mill Name	Milling Capacity (short tons of ore per day)	Operating Status at End of the Year				
			2006	2007	2008	2009	2010
Cotter Corporation	Canon City Mill	400	Standby	Standby	Standby	Standby	Standby
Denison White Mesa LLC	White Mesa Mill	2,000	Operating- Processing Alternate Feed	Operating- Processing Alternate Feed	Operating	Operating	Operating
Energy Fuels Resources Corp.	Piñon Ridge Mill	500	-	-	Developing	Developing	Developing
Kennecott Uranium Company/Wyoming Coal Resource Company	Sweetwater Uranium Project	3,000	Standby	Standby	Standby	Standby	Standby
Uranium One Exploration U.S.A Inc	Shootaring Canyon Uranium Mill	750	Standby	Changing License To Operational	Changing License To Operational	Standby	Standby
Total Milling Capacity:		6,650					

- = No data reported.

Notes: Milling capacity for 2010. An operating status of "Operating" indicates the mill was producing uranium concentrate at the end of the period.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2006-2010).

Table 5. U.S. Uranium in-situ-leach plants by owner, capacity, and operating status at end of the year, 2006-2010

In-Situ-Leach Plant Owner	In-Situ-Leach Plant Name	Production Capacity (pounds U ₃ O ₈ per year)	Operating Status at End of the Year				
			2006	2007	2008	2009	2010
Cameco Corporation	Crow Butte Operation	1,000,000	Operating	Operating	Operating	Operating	Operating
Hydro Resources Inc.	Church Rock	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	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	2,000,000	-	-	Developing	Developing	Developing
Mestena Uranium LLC	Alta Mesa Project	1,000,000	Operational	Producing	Producing	Producing	Producing
Power Resources, Inc. dba Cameco Resources	Smith Ranch-Highland Operation	5,500,000	Operating	Operating	Operating	Operating	Operating
Powertech Uranium Corp	Centennial Project	-	-	-	Undeveloped	Undeveloped	Undeveloped
Powertech Uranium Corp	Dewey Burdock Project	-	-	-	Undeveloped	Undeveloped	Undeveloped
South Texas Mining Venture	Hobson ISR Plant	1,000,000	Standby	Under Construction	Permitted And Licensed	Permitted And Licensed	Operational
South Texas Mining Venture	La Palangana	1,000,000	Developing	Partially Permitted And Licensed	Partially Permitted And Licensed	Permitted And Licensed	Operating
URI, Inc.	Kingsville Dome	1,000,000	Operational	Producing	Producing	Standby	Standby
URI, Inc.	Rosita	1,000,000	Standby	Standby	Standby	Standby	Standby
URI, Inc.	Vasquez	800,000	Producing	Producing	Restoration	Restoration	Restoration
Uranerz Energy Corporation	Nichols Ranch ISR Project	-	-	-	Developing	Developing	Partially Permitted And Licensed
Uranium Energy Corporation	Goliad ISR Uranium Project	1,000,000	-	-	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed
Uranium Energy Corporation	Nichols Project	-	-	-	Developing	Developing	Inactive
Uranium One Americas, Inc.	Jab and Antelope	2,000,000	-	-	Developing	Developing	Developing
Uranium One Americas, Inc.	Moore Ranch	500,000	-	-	Developing	Partially Permitted And Licensed	Permitted And Licensed
Uranium One USA, Inc.	Christensen Ranch	1,000,000	Reclamation	Changing License To Operational	Standby	Standby	Operational
Uranium One USA, Inc.	Irigaray Ranch	1,300,000	Reclamation	Inactive	Standby	Standby	Operational
Uranium One USA, Inc.	Texas Operations	0	Reclamation	Reclamation	Reclamation	Reclamation	Reclamation
Total Production Capacity:		22,100,000					

- = No data reported.

Notes: Production capacity for 2010. An operating status of "Operating" indicates the in-situ-leach plant usually was producing uranium concentrate at the end of the period. La Palangana did produce uranium, but Hobson ISR Plant did not produce uranium concentrate during 2010. Hobson and La Palangana are part of the same project. ISR stands for in-situ recovery. Christensen Ranch and Irigaray Ranch did not produce uranium during 2010 (both are part of the same project).

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2006-2010).

Table 6. Employment in the U.S. uranium production industry by category, 2003-2010

person-years

Year	Employment Categories					Total
	Exploration	Mining	Milling	Processing	Reclamation	
2003	W	W	W	W	117	321
2004	18	108	W	W	121	420
2005	79	149	142	154	124	648
2006	188	121	W	W	155	755
2007	375	378	107	216	155	1,231
2008	457	558	W	W	154	1,563
2009	175	441	W	W	162	1,096
2010	211	400	W	W	125	1,073

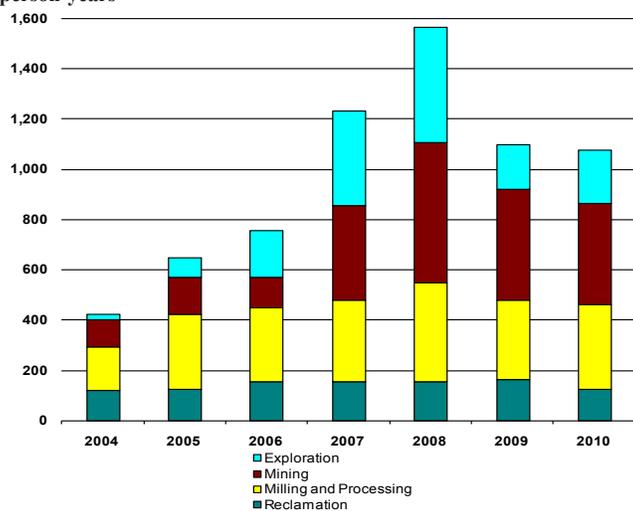
W = Data withheld to avoid disclosure of individual company data.

Note: Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Figure 3. Employment in the U.S. uranium production industry by category, 2004-2010

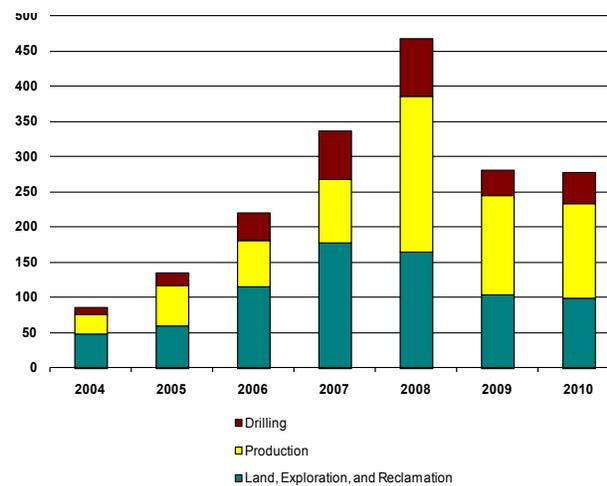
person-years



Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2004-2010).

Figure 4. U.S. uranium expenditures, 2004-2010

million dollars



Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2004-2010).

Table 7. Employment in the U.S. uranium production industry by State, 2003-2010

person-years

State(s)	2003	2004	2005	2006	2007	2008	2009	2010
Wyoming	134	139	181	195	245	301	308	348
Colorado and Texas	48	140	269	263	557	696	340	292
Nebraska and New Mexico	92	102	123	160	149	160	159	134
Arizona, Utah, and Washington	47	40	75	120	245	360	273	281
Alaska, Michigan, Nevada, and South Dakota	0	0	0	16	25	30	W	W
Other	0	0	0	0	9	17	W	W
Total	321	420	648	755	1,231	1,563	1,096	1,073

W = Data withheld to avoid disclosure of individual company data.

Notes: Totals may not equal sum of components because of independent rounding. Other includes California, Montana, North Dakota, Oklahoma, Oregon, and Virginia.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Table 8. U.S. uranium expenditures, 2003-2010

million dollars

Year	Drilling	Production	Land and Other				Total Expenditures
			Total Land and Other	Land	Exploration	Reclamation	
2003	W	W	31.3	NA	NA	NA	W
2004	10.6	27.8	48.4	NA	NA	NA	86.9
2005	18.1	58.2	59.7	NA	NA	NA	136.0
2006	40.1	65.9	115.2	41.0	23.3	50.9	221.2
2007	67.5	90.4	178.2	77.7	50.3	50.2	336.2
2008	81.9	221.2	164.4	65.2	50.2	49.1	467.6
2009	35.4	141.0	104.0	17.3	24.2	62.4	280.5
2010	44.6	133.3	99.5	20.2	34.5	44.7	277.3

Drilling: All expenditures directly associated with exploration and development drilling.

Production: All expenditures for mining, milling, processing of uranium, and facility expense.

Land and Other: All expenditures for land; geological research; geochemical and geophysical surveys; costs incurred by field personnel in the course of exploration, reclamation and restoration work; and overhead and administrative charges directly associated with supervising and supporting field activities.

NA = Not available.

W = Data withheld to avoid disclosure of individual company data.

Notes: Expenditures are in nominal U.S. dollars. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration: Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Table 9. Summary production statistics of the U.S. uranium industry, 1993-2010

Item	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	E2003	2004	2005	2006	2007	2008	2009	2010
Exploration and Development																		
Surface Drilling (million feet)	1.1	0.7	1.3	3.0	4.9	4.6	2.5	1.0	0.7	W	W	1.2	1.7	2.7	5.1	5.1	3.7	4.9
Drilling Expenditures (million dollars) ¹	5.7	1.1	2.6	7.2	20.0	18.1	7.9	5.6	2.7	W	W	10.6	18.1	40.1	67.5	81.9	35.4	44.6
Mine Production of Uranium																		
(million pounds U ₃ O ₈)	2.1	2.5	3.5	4.7	4.7	4.8	4.5	3.1	2.6	2.4	2.2	2.5	3.0	4.7	4.5	3.9	4.1	4.2
Uranium Concentrate Production																		
(million pounds U ₃ O ₈)	3.1	3.4	6.0	6.3	5.6	4.7	4.6	4.0	2.6	2.3	2.0	2.3	2.7	4.1	4.5	3.9	3.7	4.2
Uranium Concentrate Shipments																		
(million pounds U ₃ O ₈)	3.4	6.3	5.5	6.0	5.8	4.9	5.5	3.2	2.2	3.8	1.6	2.3	2.7	3.8	4.0	4.1	3.6	5.1
Employment																		
(person-years)	871	980	1,107	1,118	1,097	1,120	848	627	423	426	321	420	648	755	1,231	1,563	1,096	1,073

¹ Expenditures are in nominal U.S. dollars.

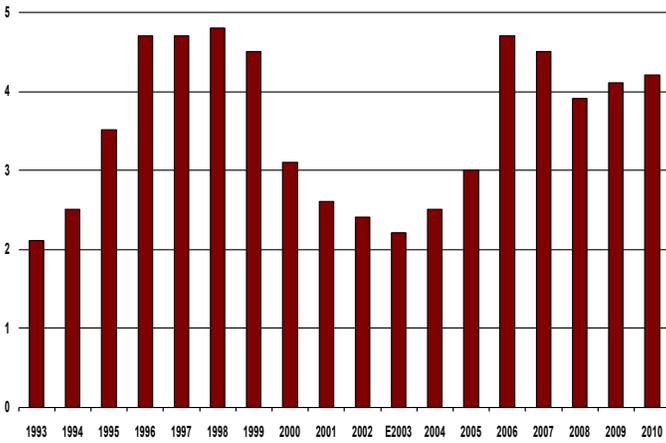
E = Estimated data.

W = Data withheld to avoid disclosure of individual company data.

Note: The 2003 annual production and shipment amounts were estimated by rounding to the nearest 200,000 pounds to avoid disclosure of individual company data.

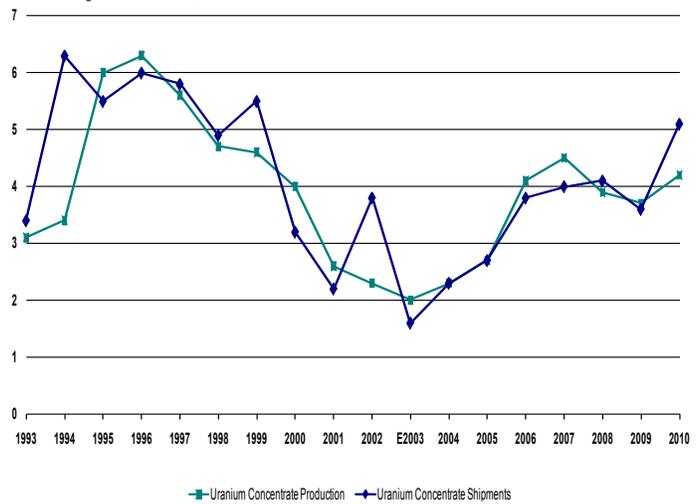
Source: U.S. Energy Information Administration: 1993-2002-Uranium Industry Annual 2002 (May 2003), Table H1 and Table 2. 2003-2010-Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Figure 5. U.S. mine production of uranium, 1993-2010
million pounds U₃O₈



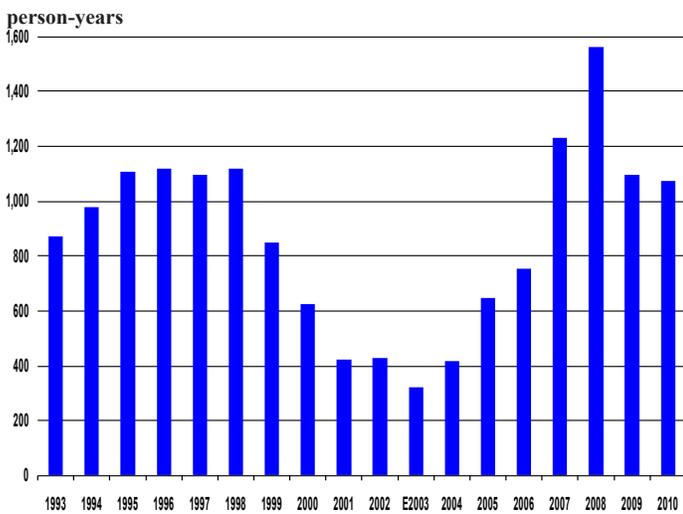
E = Estimated data.
Source: U.S. Energy Information Administration: 1993-2002 Uranium Industry Annual 2002 (May 2003). Table H1 and Table 2. 2003-2010-Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Figure 6. U.S. uranium concentrate production and shipments, 1993-2010
million pounds U₃O₈



E = Estimated data.
Source: U.S. Energy Information Administration: 1993-2002 Uranium Industry Annual 2002 (May 2003). Table H1 and Table 2. 2003-2010-Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).

Figure 7. Employment in the U.S. production industry, 1993-2010
person-years



Source: U.S. Energy Information Administration: 1993-2002 Uranium Industry Annual 2002 (May 2003). Table H1 and Table 2. 2003-2010-Form EIA-851A, "Domestic Uranium Production Report" (2003-2010).