



*Independent Statistics & Analysis*  
U.S. Energy Information  
Administration

---

# 2012 Uranium Marketing Annual Report

May 2013



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 Department of Energy or other Federal agencies.

## Contacts

---

This report was prepared by the staff of the Renewables and Uranium Statistics Team, Office of Electricity, Renewables, and Uranium Statistics. Questions about the preparation and content of this report may be directed to [InfoNuclearData@eia.gov](mailto:InfoNuclearData@eia.gov).

## Preface

---

The U.S. Energy Information Administration (EIA) reports detailed data spanning 2008 through 2012 and summary data back to 1994 on uranium marketing activities in the United States in this report, *2012 Uranium Marketing Annual Report*. The Annual Energy Review provides a uranium overview table with historical data back to 1949.

Data in this report are based on information reported on Form EIA-858, “Uranium Marketing Annual Survey.” Form EIA-858 survey collects data on contracts, deliveries (during the report year and projected for the next ten years), enrichment services purchased, inventories, use in fuel assemblies, feed deliveries to enrichers (during the report year and projected for the next ten years), and unfilled market requirements for the next ten years.

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/>.

## Contents

---

Contacts .....	ii
Preface .....	iii
Uranium purchases and prices .....	1
New and future uranium contracts .....	1
Uranium feed, enrichment services, uranium loaded .....	2
Uranium foreign purchases/sales and inventories.....	2

## Tables

Table S1a. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2012 .....	3
Table S1b. Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2012.....	3
Table S2. Uranium feed deliveries, enrichment services, and uranium loaded by owners and operators of U.S. civilian nuclear power reactors, 1994-2012 .....	4
Table S3a. Foreign purchases, foreign sales, and uranium inventories owned by U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors, 1994-2012 .....	5
Table S3b. Weighted-average price of foreign purchases and foreign sales by U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors, 1994-2012 .....	5
Table 1. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by supplier and delivery year, 2008-2012 .....	6
Table 2. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012 .....	7
Table 3. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin country and delivery year, 2008-2012.....	8
Table 4. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and material type, 2012 deliveries .....	9
Table 5. Average price and quantity for uranium purchased by owners and operators of U.S. civilian nuclear power reactors by pricing mechanisms and delivery year, 2011-2012 .....	10
Table 6a. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors ranked by price and distributed by quantity, 2010-2012 deliveries.....	11
Table 6b. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors ranked by price and distributed by purchaser, 2010-2012 deliveries .....	12
Table 7. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by contract type and material type, 2012 deliveries.....	13
Table 8. Contracts signed in 2012 by owners and operators of U.S. civilian nuclear power reactors by contract type.....	14
Table 9. Contracted purchases of uranium by owners and operators of U.S. civilian nuclear power reactors, signed in 2012, by delivery year, 2013-2022 .....	15
Table 10. Contracted purchases of uranium from suppliers by owners and operators of U.S. civilian nuclear power reactors, in effect at the end of 2012, by delivery year, 2013-2022 .....	16
Table 11. Unfilled uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, 2012-2022.....	17

Table 12. Maximum anticipated uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, 2013-2022, as of December 31, 2012 .....	18
Table 13. Deliveries of uranium feed by owners and operators of U.S. civilian nuclear power reactors by enrichment country and delivery year, 2010-2012 .....	19
Table 14. Deliveries of uranium feed for enrichment by owners and operators of U.S. civilian nuclear power reactors by origin country and delivery year, 2010-2012 .....	20
Table 15. Shipments of uranium feed by owners and operators of U.S. civilian nuclear power reactors to domestic and foreign enrichment suppliers, 2013-2022.....	21
Table 16. Purchases of enrichment services by owners and operators of U.S. civilian nuclear power reactors by origin country and year, 2008-2012 .....	22
Table 17. Purchases of enrichment services by owners and operators of U.S. civilian nuclear power reactors by contract type in delivery year, 2012 .....	23
Table 18. Uranium in fuel assemblies loaded into U.S. civilian nuclear power reactors by year, 2008-2012 .....	24
Table 19. Foreign purchases of uranium by U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by delivery year, 2008-2012 .....	25
Table 20. U.S. broker and trader purchases of uranium by origin, supplier, and delivery year, 2008-2012 .....	26
Table 21. Foreign sales of uranium from U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012.....	27
Table 22. Inventories of natural and enriched uranium by material type as of end of year, 2008-2012..	28
Table 23. Inventories of uranium by owner as of end of year, 2008-2012.....	29
Table 24. Uranium sellers to owners and operators of U.S. civilian nuclear power reactors, 2010-2012	30
Table 25. Enrichment service sellers to owners and operators of U.S. civilian nuclear power reactors, 2010-2012 .....	31

## Figures

Figure S1. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2012 deliveries .....	3
Figure S2. Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2012 deliveries .....	3
Figure S3. Uranium loaded into U.S. civilian nuclear power reactors, 1994-2012 .....	4
Figure S4. Uranium enrichment services purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2012 .....	4
Figure S5. Weighted-average price of foreign purchases and foreign sales of uranium, 1994-2012 .....	5
Figure S6. Total commercial uranium inventories of U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors, 1994-2012 .....	5
Figure 1. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors , 2008-2012 .....	6
Figure 2. Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors by supplier and delivery year, 2008-2012 .....	6
Figure 3. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012 .....	7
Figure 4. Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012.....	7
Figure 5. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by selected origin country and delivery year, 2008-2012 .....	8
Figure 6. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by material type, 2012 deliveries .....	9
Figure 7. Average price for uranium purchased by owners and operators of U.S. civilian nuclear power reactors by pricing mechanisms and delivery year, 2011-2012.....	10
Figure 8. Contracted purchases of uranium by owners and operators of U.S. civilian nuclear power reactors, signed in 2012, by delivery year, 2013-2022.....	15
Figure 9. Maximum contracted purchases of uranium from suppliers by owners and operators of U.S. civilian nuclear power reactors, in effect at the end of 2012, by delivery year, 2013-2020.....	16
Figure 10. Annual unfilled uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, as of 12/31/2011 and 12/31/2012.....	17
Figure 11. Maximum anticipated uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, 2013-2022, as of December 31, 2012 .....	18
Figure 12. Deliveries of uranium feed for U.S. and foreign enrichment by owners and operators of U.S. civilian nuclear power reactors by delivery year, 2010-2011.....	19
Figure 13. Deliveries of uranium feed for enrichment by owners and operators of U.S. civilian nuclear power reactors by selected origin country of feed and delivery year, 2010-2012 .....	20
Figure 14. Shipments of uranium feed by owners and operators of U.S. civilian nuclear power reactors to domestic and foreign enrichment suppliers, 2013-2021 .....	21



Figure 15. Purchases of enrichment services by owners and operators of U.S. civilian nuclear power reactors by selected origin country and year, 2008-2012 ..... 22

Figure 16. Uranium in fuel assemblies loaded into U.S. civilian nuclear power reactors by year, 2008-2012 ..... 24

Figure 17. Foreign purchases of uranium by U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by delivery year, 2008-2012 ..... 25

Figure 18. U.S. broker and trader purchases of uranium by supplier, and delivery year, 2008-2012..... 26

Figure 19. Foreign sales of uranium from U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012..... 27

Figure 20. Commercial inventories of natural and enriched uranium as of end of year, 2008-2012 ..... 28

Figure 21. Owners and operators of U.S. civilian nuclear power reactors inventories by material type as of end of year, 2008-2012 ..... 28

Figure 22. Commercial inventories of uranium by owner as of end of year, 2008-2012 ..... 29

## Uranium purchases and prices

Owners and operators of U.S. civilian nuclear power reactors (“civilian owner/operators” or “COOs”) purchased a total of 58 million pounds  $U_3O_8e$  (equivalent<sup>1</sup>) of deliveries from U.S. suppliers and foreign suppliers during 2012, at a weighted-average price of \$54.99 per pound  $U_3O_8e$ . The 2012 total of 58 million pounds  $U_3O_8e$  increased 5 percent compared with the 2011 total of 55 million pounds  $U_3O_8e$ . The 2012 weighted-average price of \$54.99 per pound  $U_3O_8e$  increased 442 percent compared with the 2001 weighted-average price of \$10.15 per pound  $U_3O_8e$ , the lowest weighted-average price from 1994-2012.

Seventeen percent of the  $U_3O_8e$  delivered in 2012 was U.S.-origin uranium at a weighted-average price of \$59.44 per pound. Foreign-origin uranium accounted for the remaining 83 percent of deliveries at a weighted-average price of \$54.07 per pound. Australian-origin and Canadian-origin uranium together accounted for 35 percent of the 58 million pounds. Uranium originating in Kazakhstan, Russia and Uzbekistan accounted for 29 percent and the remaining 19 percent originated from Brazil, China, Malawi, Namibia, Niger, South Africa, and Ukraine. Owners and operators of U.S. civilian nuclear power reactors purchased uranium for 2012 deliveries from 32 sellers, the same number as in 2011.

COOs purchased uranium of three material types. Uranium concentrate was 50 percent of the deliveries in 2012 and natural and enriched  $UF_6$  were 50 percent. During 2012, 14 percent of the uranium was purchased under spot contracts at a weighted-average price of \$51.04 per pound. The remaining 86 percent was purchased under long-term contracts at a weighted-average price of \$55.65 per pound. Spot contracts are contracts with a one-time uranium delivery (usually) for the entire contract and the delivery is to occur within one year of contract execution (signed date). Long-term contracts are contracts with one or more uranium deliveries to occur after a year following the contract execution (signed date) and as such may reflect some agreements of short and medium terms as well as longer term.

## New and future uranium contracts

In 2012, COOs signed 34 new purchase contracts with deliveries in 2012 of 12 million pounds  $U_3O_8e$  at a weighted-average price of \$55.16 per pound. Thirty one were new spot contracts and three were new long-term contracts.

COOs report minimum and maximum quantities of future deliveries under contract, to allow for the option of either decreasing or increasing quantities. As of the end of 2012, the maximum uranium deliveries for 2013 through 2022 under existing purchase contracts for COOs totaled 252 million pounds  $U_3O_8e$ . Also as of the end of 2012, unfilled uranium market requirements for 2013 through 2022 totaled 255 million pounds  $U_3O_8e$ . These contracted deliveries and unfilled market requirements combined represent the maximum anticipated market requirements of 508 million pounds  $U_3O_8e$  over the ten-year period for COOs.

---

<sup>1</sup> Uranium quantities are expressed in the unit of measure  $U_3O_8e$  (equivalent).  $U_3O_8e$  is uranium oxide (or uranium concentrate) and the equivalent uranium-component of hexafluoride ( $UF_6$ ) and enriched uranium.

## Uranium feed, enrichment services, uranium loaded

In 2012, COOs delivered 52 million pounds U<sub>3</sub>O<sub>8</sub>e of natural uranium feed to U.S. and foreign enrichers. Sixty-two percent of the feed was delivered to U.S. enrichment suppliers and the remaining 38 percent was delivered to foreign enrichment suppliers. Sixteen million separative work units (SWU)<sup>2</sup> were purchased under enrichment services contracts from 11 sellers in 2012, up from the 9 sellers in 2011. The average price paid by the COOs for the 16 million SWU was \$141.36 per SWU in 2012, compared with the 2011 average price of \$136.12 per SWU. In 2012, the U.S.-origin SWU share was 21 percent and foreign-origin SWU accounted for the remaining 79 percent. Russian-origin SWU was 42 percent of the total. Germany, Netherlands, and the United Kingdom had an aggregate share of 33 percent.

Uranium in fuel assemblies loaded into U.S. civilian nuclear power reactors during 2012 contained 49 million pounds U<sub>3</sub>O<sub>8</sub>e, compared with 51 million pounds U<sub>3</sub>O<sub>8</sub>e loaded during 2011. Ten percent of the uranium loaded during 2012 was U.S.-origin uranium, and 90 percent was foreign-origin uranium.

## Uranium foreign purchases/sales and inventories

U.S. suppliers (brokers, converter, enrichers, fabricators, producers, and traders) and COOs purchase uranium each year from foreign suppliers. Foreign purchases totaled 56 million pounds U<sub>3</sub>O<sub>8</sub>e in 2012, and the weighted-average price was \$51.44 per pound U<sub>3</sub>O<sub>8</sub>e. Also, U.S. suppliers and COOs sold uranium to foreign suppliers. Foreign sales totaled 18 million pounds U<sub>3</sub>O<sub>8</sub>e in 2012, and the weighted-average price was \$47.57 per pound U<sub>3</sub>O<sub>8</sub>e.

Year-end commercial uranium inventories represent ownership of uranium in different stages of the nuclear fuel cycle (in-process for conversion, enrichment, or fabrication) at domestic or foreign nuclear fuel facilities. Total U.S. commercial inventories (including inventories owned by COOs, U.S. brokers, converter, enrichers, fabricators, producers, and traders) was 121 million pounds U<sub>3</sub>O<sub>8</sub>e as of the end of 2012. Commercial uranium inventories owned at the end of 2012 by COOs totaled 97 million pounds U<sub>3</sub>O<sub>8</sub>e, an increase of 8 percent from year-end 2011. Uranium inventories owned by U.S. brokers and traders were 6 million pounds U<sub>3</sub>O<sub>8</sub>e. U.S. converter, enrichers, fabricators and producers owned 18 million pounds U<sub>3</sub>O<sub>8</sub>e of inventories at the end of 2012.

<sup>2</sup> Separative work unit (SWU): The standard measure of enrichment services. The effort expended in separating a mass F of feed of assay  $x_f$  into a mass P of product assay  $x_p$  and waste of mass W and assay  $x_w$  is expressed in terms of the number of separative work units needed, given by the expression  $SWU = WV(x_w) + PV(x_p) - FV(x_f)$ , where  $V(x)$  is the "value function," defined as  $V(x) = (1 - 2x) \ln((1 - x)/x)$ .



**Table S2. Uranium feed deliveries, enrichment services, and uranium loaded by owners and operators of U.S. civilian nuclear power reactors, 1994-2012**

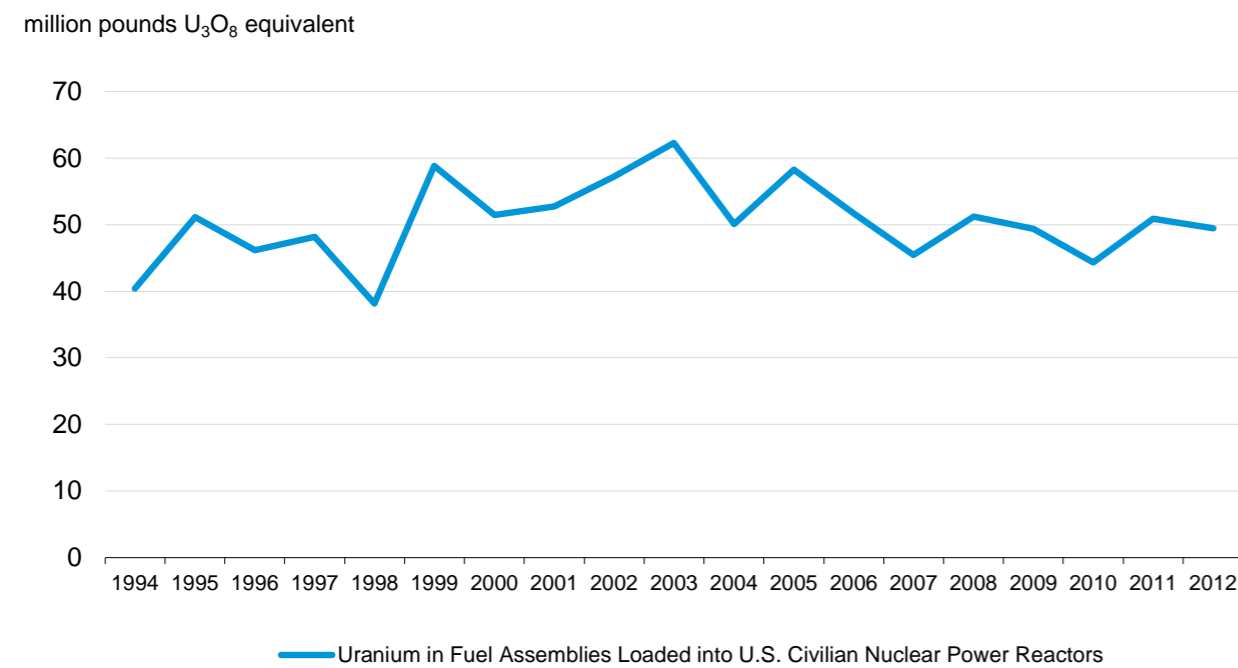
Million Pounds U <sub>3</sub> O <sub>8</sub> Equivalent	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Feed Deliveries by Owners and Operators of U.S. Civilian Nuclear Power Reactors	37.6	44.3	49.1	40.3	40.6	43.9	47.8	47.3	54.7	49.3	53.4	52.9	56.6	49.0	43.4	51.9	45.5	51.3	52.1
Uranium in Fuel Assemblies Loaded into U.S. Civilian Nuclear Power Reactors	40.4	51.1	46.2	48.2	38.2	58.8	51.5	52.7	57.2	62.3	50.1	58.3	51.7	45.5	51.3	49.4	44.3	50.9	49.5
<b>Million Separative Work Units (SWU)</b>																			
U.S.-Origin Enrichment Services Purchased	7.5	6.7	8.0	6.0	5.7	4.6	5.2	1.3	1.7	1.7	1.4	1.1	1.6	1.5	1.9	4.1	2.3	2.4	3.3
Foreign-Origin Enrichment Services Purchased	1.7	2.8	3.2	2.9	4.4	5.4	6.6	9.1	9.8	10.3	10.4	10.3	11.8	12.7	10.7	13.1	11.5	12.4	12.3
<b>Total Purchased Enrichment Services</b>	<b>9.2</b>	<b>9.5</b>	<b>11.2</b>	<b>8.9</b>	<b>10.1</b>	<b>10.0</b>	<b>11.8</b>	<b>10.4</b>	<b>11.5</b>	<b>12.0</b>	<b>11.8</b>	<b>11.4</b>	<b>13.4</b>	<b>14.2</b>	<b>12.6</b>	<b>17.2</b>	<b>13.8</b>	<b>14.8</b>	<b>15.6</b>
<b>Average Price (US\$ per SWU)</b>	-	-	-	-	-	-	-	-	-	-	-	-	106.57	114.58	121.33	130.78	136.14	136.12	141.36

- = No data reported.

Note: Totals may not equal sum of components because of independent rounding. Average prices are not adjusted for inflation.

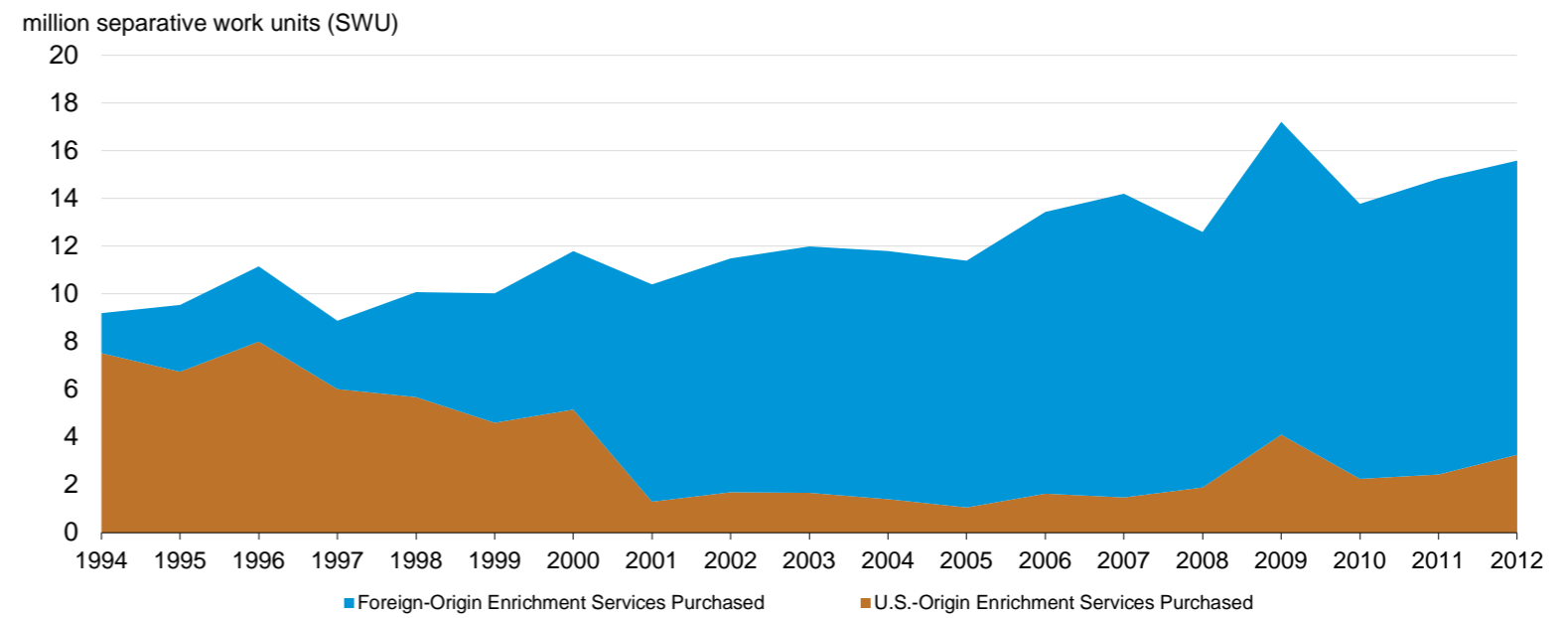
Sources: U.S. Energy Information Administration: 1994-2002-Uranium Industry Annual, Tables 22, 23, 25, and 27. 2003-2012-Form EIA-858, "Uranium Marketing Annual Survey".

**Figure S3. Uranium loaded into U.S. civilian nuclear power reactors, 1994-2012**



Sources: U.S. Energy Information Administration: 1994-2002-Uranium Industry Annual reports. 2003-2012-Form EIA-858, "Uranium Marketing Annual Survey".

**Figure S4. Uranium enrichment services purchased by owners and operators of U.S. civilian nuclear power reactors, 1994-2012**



Sources: U.S. Energy Information Administration: 1994-2002-Uranium Industry Annual reports. 2003-2012-Form EIA-858, "Uranium Marketing Annual Survey".



**Table 1. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by supplier and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Deliveries	2008	2009	2010	2011	2012
<b>Purchased from U.S. Producers</b>					
Purchases of U.S.-Origin and Foreign-Origin Uranium	562	W	350	550	W
Weighted-Average Price	75.16	W	47.13	58.12	W
<b>Purchased from U.S. Brokers and Traders</b>					
Purchases of U.S.-Origin and Foreign-Origin Uranium	9,373	11,125	11,745	14,778	11,545
Weighted-Average Price	39.62	41.88	44.98	53.29	54.44
<b>Purchased from other Owners and Operators of U.S. Civilian Nuclear Power Reactors</b>					
Purchases	W	W	0	0	0
Weighted-Average Price	W	W	--	--	--
<b>Purchased from other U.S. Suppliers</b>					
Purchases of U.S.-Origin and Foreign-Origin Uranium	W	W	1,851	1,061	W
Weighted-Average Price	W	W	42.24	52.50	W
<b>Purchased from Foreign Suppliers</b>					
Purchases of U.S.-Origin and Foreign-Origin Uranium	37,156	36,823	32,637	38,442	37,624
Weighted-Average Price	48.49	46.68	51.30	56.60	54.40
<b>Total Purchased by Owners and Operators of U.S. Civilian Nuclear Power Reactors</b>					
Purchases of U.S.-Origin and Foreign-Origin Uranium	<b>53,353</b>	<b>49,830</b>	<b>46,582</b>	<b>54,831</b>	<b>57,520</b>
Weighted-Average Price	<b>45.88</b>	<b>45.86</b>	<b>49.29</b>	<b>55.64</b>	<b>54.99</b>

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

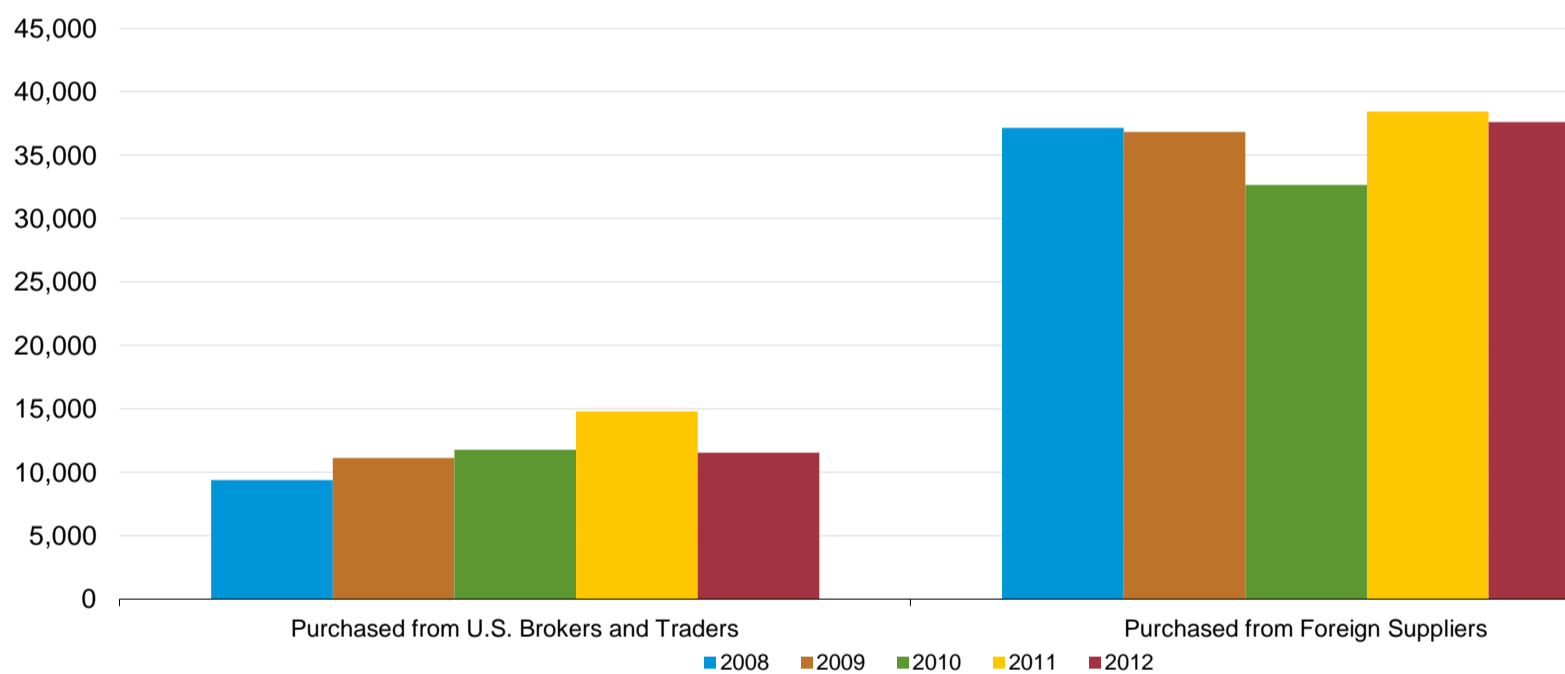
-- = Not applicable.

Notes: "Other U.S. Suppliers" are U.S. converters, enrichers, and fabricators. Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 1. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by supplier and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

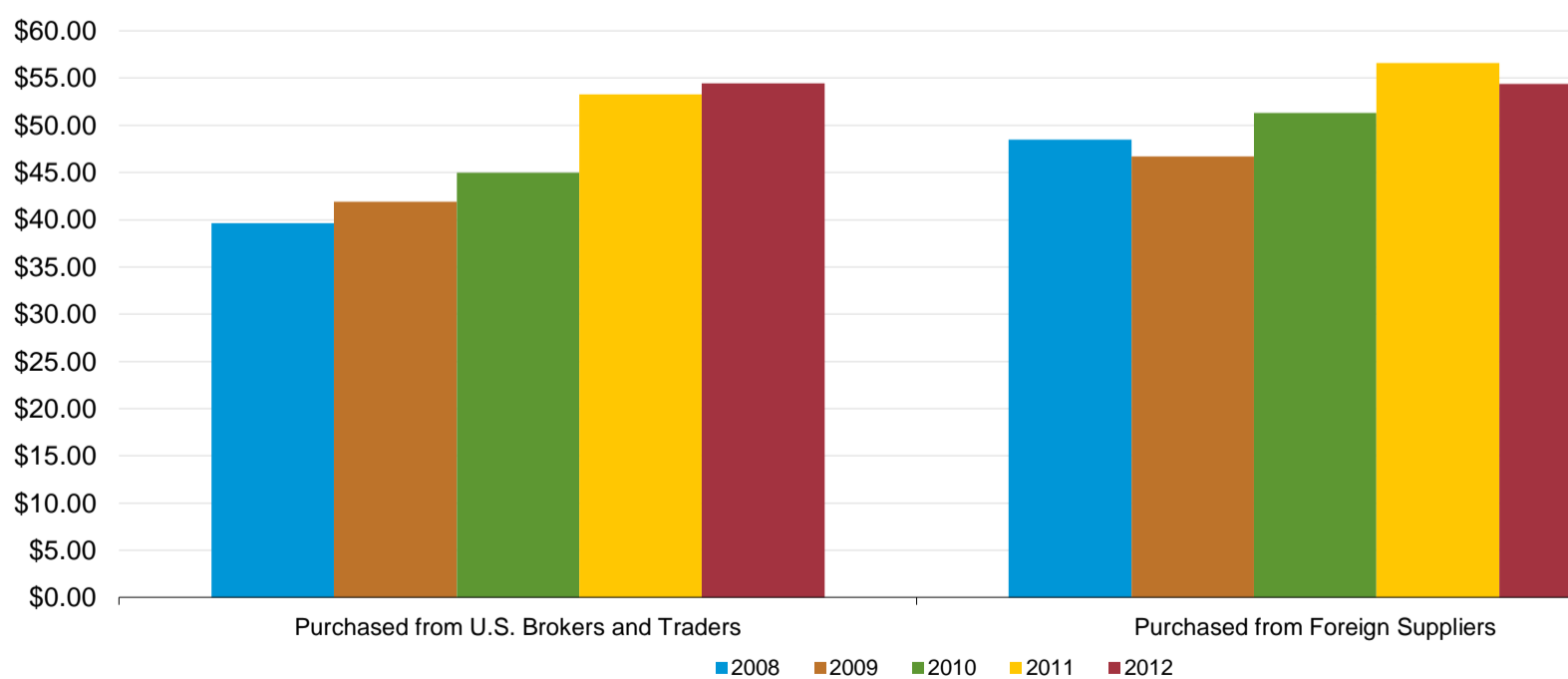


Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).



**Figure 2. Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors by supplier and delivery year, 2008-2012**

dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).



**Table 2. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

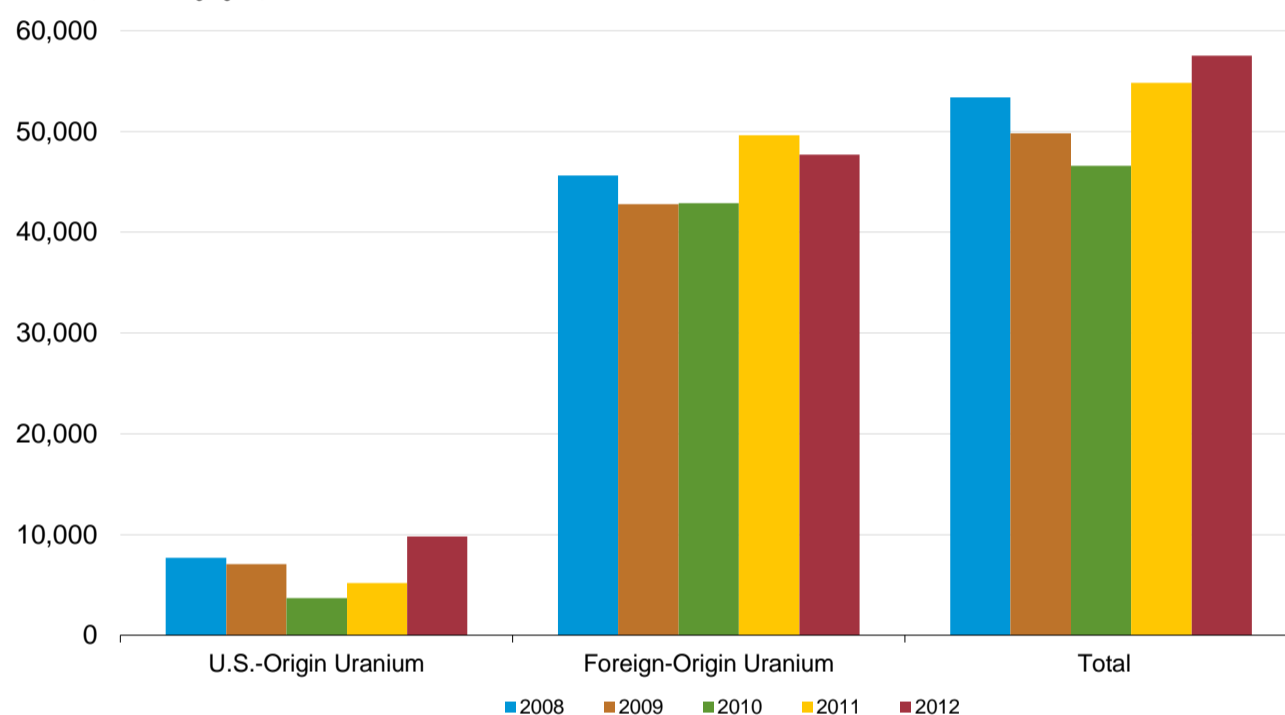
Deliveries	2008	2009	2010	2011	2012
<b>U.S.-Origin Uranium</b>					
Purchases	7,720	7,053	3,687	5,205	9,807
Weighted-Average Price	59.55	48.92	45.25	52.12	59.44
<b>Foreign-Origin Uranium</b>					
Purchases	45,633	42,777	42,895	49,626	47,713
Weighted-Average Price	43.47	45.35	49.64	55.98	54.07
<b>Total</b>					
Purchases	<b>53,353</b>	<b>49,830</b>	<b>46,582</b>	<b>54,831</b>	<b>57,520</b>
Weighted-Average Price	<b>45.88</b>	<b>45.86</b>	<b>49.29</b>	<b>55.64</b>	<b>54.99</b>

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 3. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012**

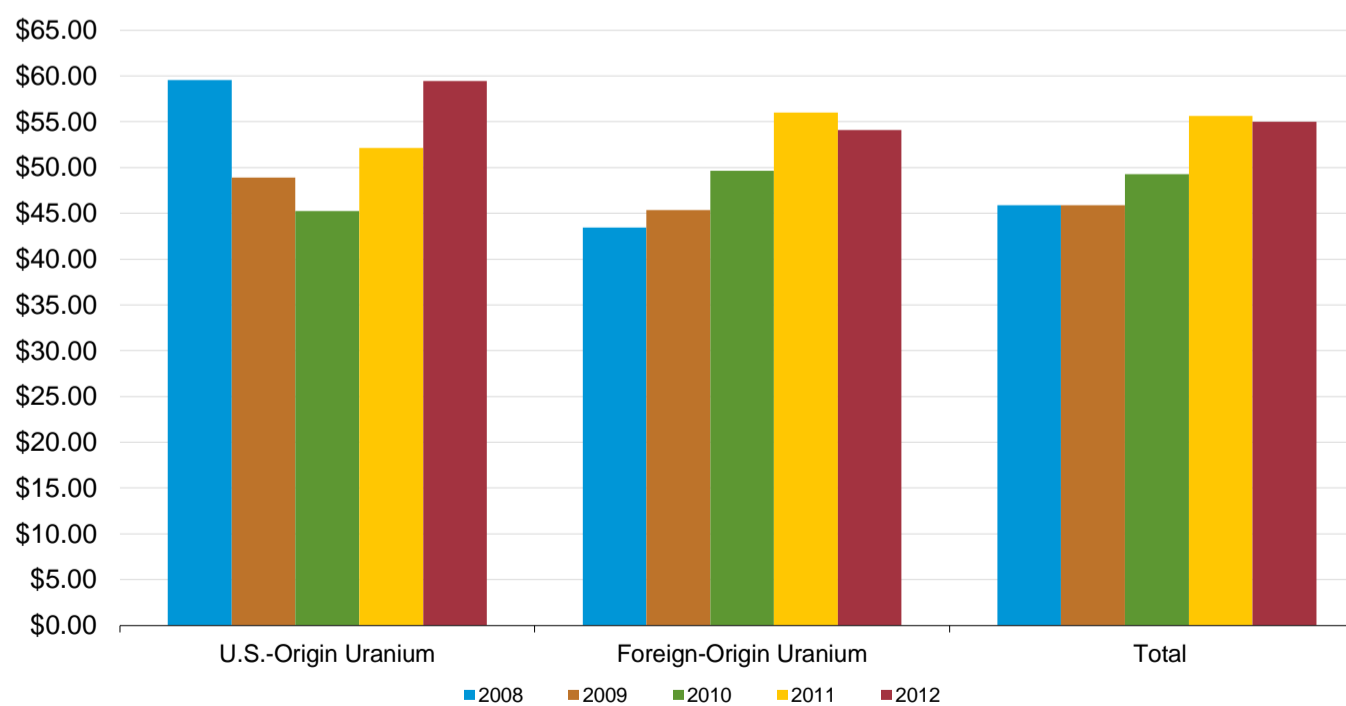
thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 4. Weighted-average price of uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012**

dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).



**Table 3. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin country and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Origin Country	Deliveries in 2008		Deliveries in 2009		Deliveries in 2010		Deliveries in 2011		Deliveries in 2012	
	Purchases	Weighted-Average Price	Purchases	Weighted-Average Price	Purchases	Weighted-Average Price	Purchases	Weighted-Average Price	Purchases	Weighted-Average Price
Australia	12,758	41.59	11,164	52.25	7,112	51.35	6,001	57.47	6,724	51.17
Brazil	W	W	W	W	W	W	W	W	W	W
Canada	9,791	48.72	8,975	42.25	10,238	50.35	10,832	56.08	13,584	56.75
China	0	--	0	--	0	--	W	W	W	W
Czech Republic	W	W	W	W	W	W	0	--	0	--
Germany	0	--	0	--	W	W	0	--	0	--
Hungary	0	--	0	--	W	W	0	--	0	--
Kazakhstan	3,818	60.61	4,985	43.41	6,830	47.81	9,728	53.71	6,234	51.69
Malawi	0	--	0	--	W	W	780	65.44	W	W
Namibia	3,880	54.79	5,732	47.30	4,913	47.90	6,199	56.74	5,986	54.56
Niger	W	W	2,001	47.55	587	49.00	1,744	54.38	2,133	50.45
Russia	12,080	27.64	7,938	37.98	10,544	50.28	10,199	56.57	7,643	54.40
South Africa	783	27.50	W	W	W	W	1,524	53.62	1,243	56.45
Ukraine	0	--	0	--	W	W	W	W	W	W
United Kingdom	W	W	0	--	0	--	0	--	0	--
Uzbekistan	1,923	56.06	1,424	46.65	1,865	48.57	1,808	55.99	2,576	52.80
<b>Foreign Total</b>	<b>45,633</b>	<b>43.47</b>	<b>42,777</b>	<b>45.35</b>	<b>42,895</b>	<b>49.64</b>	<b>49,626</b>	<b>55.98</b>	<b>47,713</b>	<b>54.07</b>
United States	7,720	59.55	7,053	48.92	3,687	45.25	5,205	52.12	9,807	59.44
<b>Total Purchases</b>	<b>53,353</b>	<b>45.88</b>	<b>49,830</b>	<b>45.86</b>	<b>46,582</b>	<b>49.29</b>	<b>54,831</b>	<b>55.64</b>	<b>57,520</b>	<b>54.99</b>

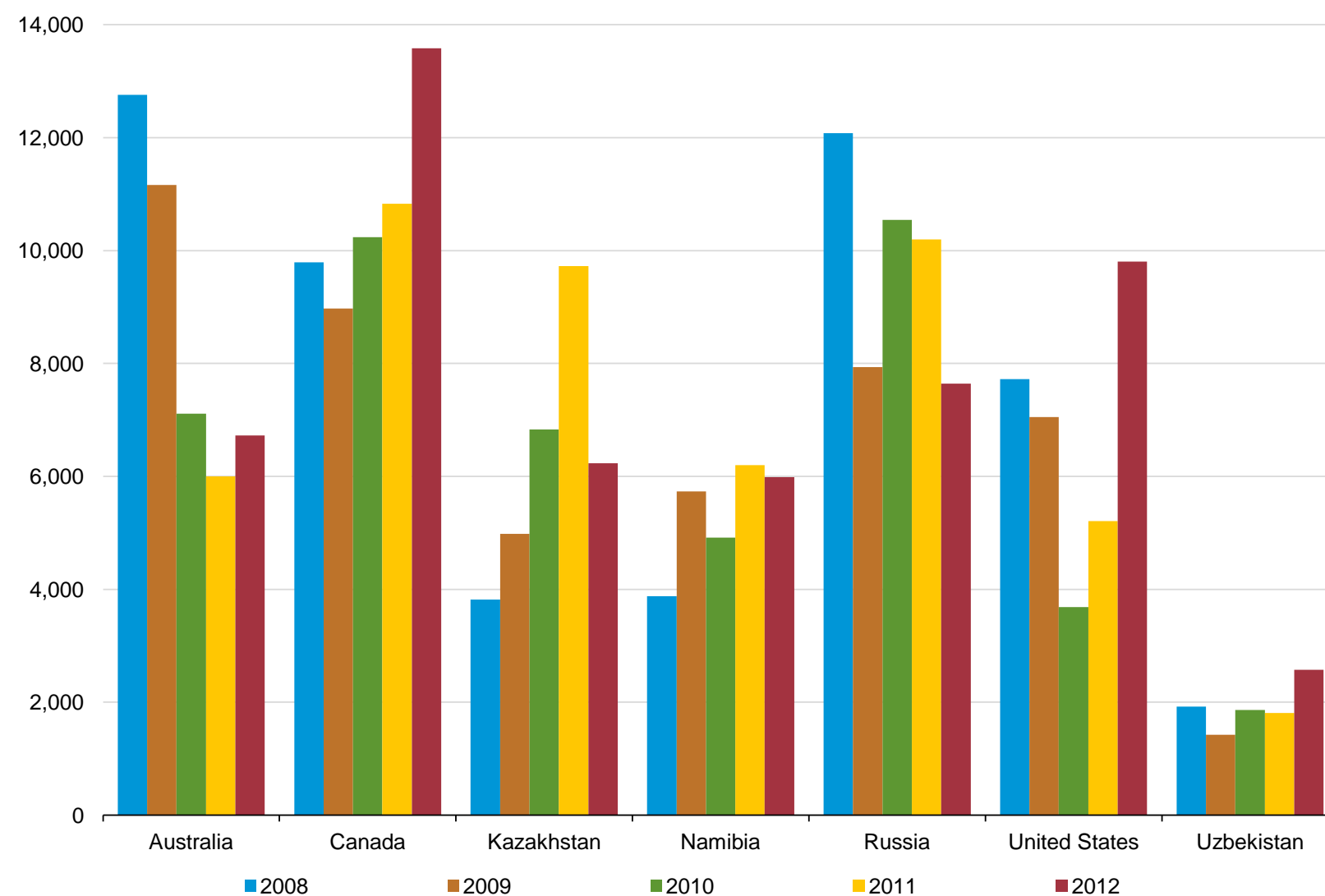
W = Data withheld to avoid disclosure of individual company data. -- = Not applicable.

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 5. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by selected origin country and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Table 4. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by origin and material type, 2012 deliveries**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Deliveries	Uranium Concentrate	Natural UF <sub>6</sub>	Enriched UF <sub>6</sub>	Natural UF <sub>6</sub> and Enriched UF <sub>6</sub>	Total
<b>U.S.-Origin Uranium</b>					
Purchases	W	W	W	W	9,807
Weighted-Average Price	W	W	W	W	59.44
<b>Foreign-Origin Uranium</b>					
Purchases	W	W	W	W	47,713
Weighted-Average Price	W	W	W	W	54.07
<b>Total</b>					
Purchases	<b>28,642</b>	<b>W</b>	<b>W</b>	<b>28,878</b>	<b>57,520</b>
Weighted-Average Price	<b>54.20</b>	<b>W</b>	<b>W</b>	<b>55.80</b>	<b>54.99</b>

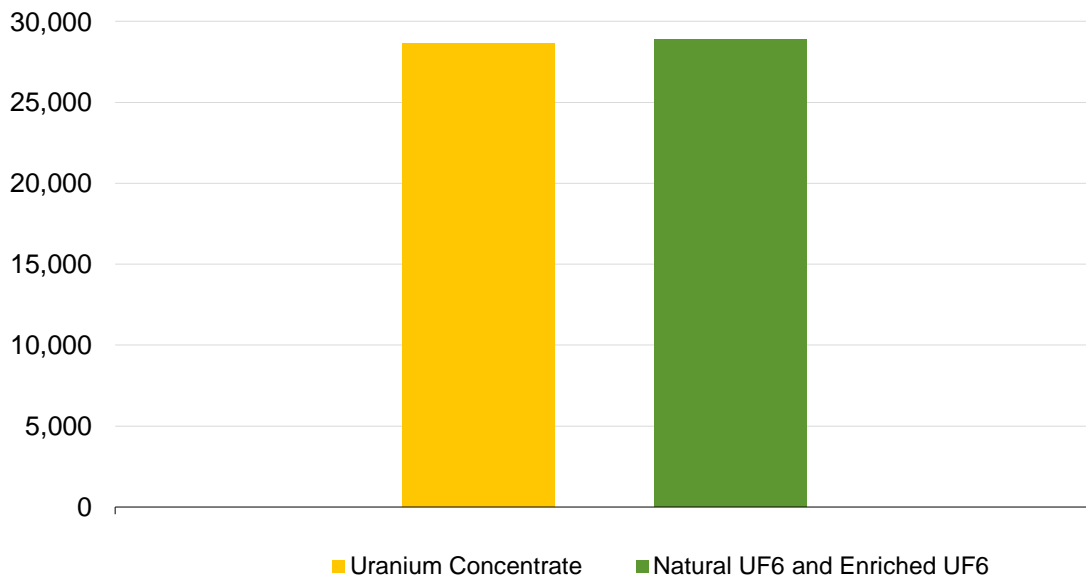
W = Data withheld to avoid disclosure of individual company data.

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation. Natural UF<sub>6</sub> is uranium hexafluoride. The natural UF<sub>6</sub> and enriched UF<sub>6</sub> quantity represents only the U<sub>3</sub>O<sub>8</sub> equivalent uranium-component quantity specified in the contract for each delivery of natural UF<sub>6</sub> and enriched UF<sub>6</sub>. The natural UF<sub>6</sub> and enriched UF<sub>6</sub> weighted-average price represent only the U<sub>3</sub>O<sub>8</sub> equivalent uranium-component price specified in the contract for each delivery of natural UF<sub>6</sub> and enriched UF<sub>6</sub>, and does not include the conversion service and enrichment service components.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Figure 6. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by material type, 2012 deliveries**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Table 5. Average price and quantity for uranium purchased by owners and operators of U.S. civilian nuclear power reactors by pricing mechanisms and delivery year, 2011-2012**

dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent; thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Pricing Mechanisms	Domestic Purchases <sup>1</sup>		Foreign Purchases <sup>2</sup>		Total Purchases	
	2011	2012	2011	2012	2011	2012
<b>Contract-Specified (Fixed and Base-Escalated) Pricing</b>						
Weighted-Average Price	53.48	57.61	56.20	54.74	54.86	56.26
Quantity with Reported Price	11,597	14,495	11,928	12,941	23,525	27,436
<b>Spot-Market Pricing</b>						
Weighted-Average Price	51.56	49.53	57.72	51.89	55.57	51.19
Quantity with Reported Price	2,931	2,237	5,494	5,272	8,425	7,510
<b>Other Pricing</b>						
Weighted-Average Price	54.37	56.42	57.06	54.25	56.48	54.71
Quantity with Reported Price	4,854	4,751	17,505	17,253	22,359	22,004
<b>All Pricing Mechanisms</b>						
Weighted-Average Price	<b>53.41</b>	<b>56.51</b>	<b>56.87</b>	<b>54.08</b>	<b>55.64</b>	<b>54.99</b>
Quantity with Reported Price	<b>19,381</b>	<b>21,483</b>	<b>34,927</b>	<b>35,466</b>	<b>54,308</b>	<b>56,949</b>
<b>Total Quantity</b>	<b>19,760</b>	<b>21,483</b>	<b>35,071</b>	<b>36,037</b>	<b>54,831</b>	<b>57,520</b>

<sup>1</sup> A uranium purchase of both U.S.-origin uranium or from a firm located in the United States.

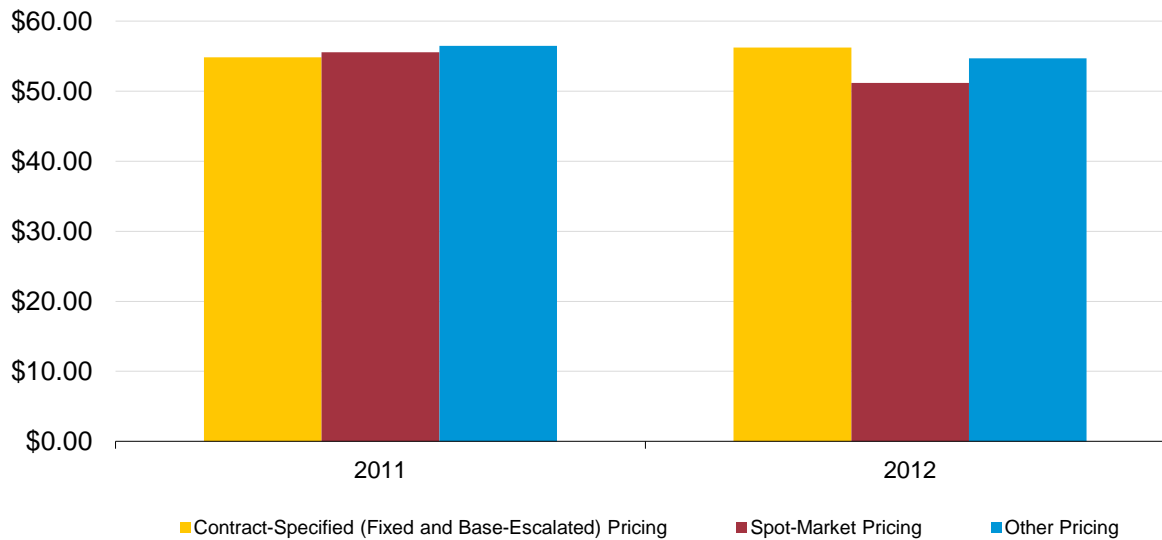
<sup>2</sup> A uranium purchase of foreign-origin uranium from a firm located outside of the United States.

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2011-2012).

**Figure 7. Average price for uranium purchased by owners and operators of U.S. civilian nuclear power reactors by pricing mechanisms and delivery year, 2011-2012**

dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2011-2012).

**Table 6a. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors ranked by price and distributed by quantity, 2010-2012 deliveries**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Quantity Distribution <sup>1</sup>	Deliveries in 2010		Deliveries in 2011		Deliveries in 2012	
	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price
First	5,757	31.91	6,789	34.97	7,119	38.24
Second	5,757	40.66	6,789	46.48	7,119	48.64
Third	5,757	43.60	6,789	50.80	7,119	51.16
Fourth	5,757	45.34	6,789	54.07	7,119	54.15
Fifth	5,757	47.89	6,789	57.21	7,119	56.93
Sixth	5,757	54.28	6,789	61.90	7,119	59.98
Seventh	5,757	60.21	6,789	65.21	7,119	61.02
Eighth	5,757	70.44	6,789	74.45	7,119	69.84
<b>Total</b>	<b>46,060</b>	<b>49.29</b>	<b>54,308</b>	<b>55.64</b>	<b>56,949</b>	<b>54.99</b>

<sup>1</sup> Distribution divides total quantity of uranium delivered (with a price) into eight distributions by price (sorted from lowest to highest) and provides the quantity-weighted average price for each distribution.

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Table 6b. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors ranked by price and distributed by purchaser, 2010-2012 deliveries**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Distribution of Purchasers	Deliveries in 2010			Deliveries in 2011			Deliveries in 2012		
	Number of Purchasers	Quantity with Reported Price	Weighted-Average Price	Number of Purchasers	Quantity with Reported Price	Weighted-Average Price	Number of Purchasers	Quantity with Reported Price	Weighted-Average Price
First	9	5,650	40.28	9	11,382	46.76	8	10,981	45.58
Second	9	21,274	45.77	8	21,780	54.02	7	11,659	53.03
Third	8	11,944	51.64	8	14,043	58.44	7	21,146	57.22
Fourth	8	7,192	62.88	8	7,104	69.28	7	13,163	61.01
<b>Total</b>	<b>34</b>	<b>46,060</b>	<b>49.29</b>	<b>33</b>	<b>54,308</b>	<b>55.64</b>	<b>29</b>	<b>56,949</b>	<b>54.99</b>

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.  
 Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Table 7. Uranium purchased by owners and operators of U.S. civilian nuclear power reactors by contract type and material type, 2012 deliveries**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Material Type	Spot Contracts <sup>1</sup>		Long-Term Contracts <sup>2</sup>		Total	
	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price	Quantity with Reported Price	Weighted-Average Price
U <sub>3</sub> O <sub>8</sub>	3,364	54.00	25,279	54.22	28,642	54.20
Natural UF <sub>6</sub>	W	W	W	W	W	W
Enriched UF <sub>6</sub>	W	W	W	W	W	W
Natural UF <sub>6</sub> and Enriched UF <sub>6</sub>	4,718	48.92	23,589	57.18	28,307	55.80
<b>Total</b>	<b>8,082</b>	<b>51.04</b>	<b>48,867</b>	<b>55.65</b>	<b>56,949</b>	<b>54.99</b>

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

<sup>1</sup> A one-time delivery (usually) of the entire contract to occur within one year of contract execution (signed date).

<sup>2</sup> One or more deliveries to occur after a year following contract execution (signed date).

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

UF<sub>6</sub> is uranium hexafluoride. The natural UF<sub>6</sub> and enriched UF<sub>6</sub> quantity represents only the U<sub>3</sub>O<sub>8</sub> equivalent uranium-component quantity specified in the contract for each delivery of natural UF<sub>6</sub> and enriched UF<sub>6</sub>. The natural UF<sub>6</sub> and enriched UF<sub>6</sub> weighted-average price represent only the U<sub>3</sub>O<sub>8</sub> equivalent uranium-component price specified in the contract for each delivery of natural UF<sub>6</sub> and enriched UF<sub>6</sub>, and does not include the conversion service and enrichment service components.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Table 8. Contracts signed in 2012 by owners and operators of U.S. civilian nuclear power reactors by contract type**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

Purchase Contract Type (Signed in 2012)	Quantity of Deliveries		Contracts for Deliveries in 2012
	Received in 2012	Weighted-Average Price	
Spot	W	W	31
Long-Term	W	W	3
<b>Total</b>	<b>12,346</b>	<b>55.16</b>	<b>34</b>

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

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Table 9. Contracted purchases of uranium by owners and operators of U.S. civilian nuclear power reactors, signed in 2012, by delivery year, 2013-2022**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

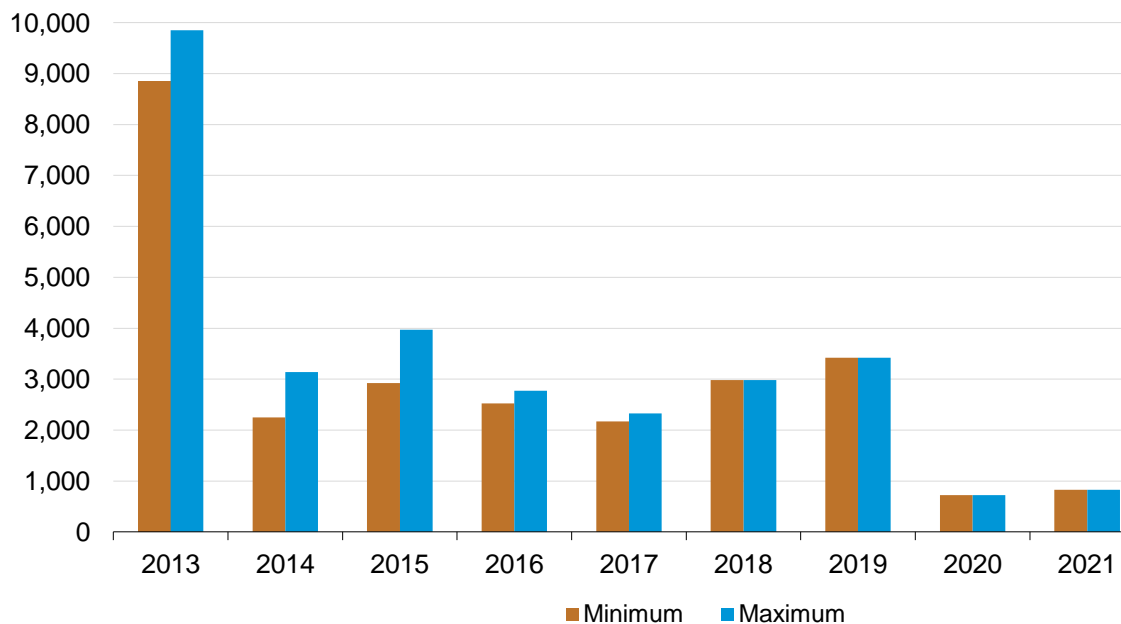
Year of Delivery	Minimum	Maximum
2013	8,841	9,853
2014	2,247	3,137
2015	2,923	3,972
2016	2,525	2,774
2017	2,169	2,329
2018	2,982	2,982
2019	3,421	3,421
2020	721	721
2021	828	828
2022	678	678
<b>Total</b>	<b>27,334</b>	<b>30,694</b>

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

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Figure 8. Contracted purchases of uranium by owners and operators of U.S. civilian nuclear power reactors, signed in 2012, by delivery year, 2013-2022**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2012).



**Table 10. Contracted purchases of uranium from suppliers by owners and operators of U.S. civilian nuclear power reactors, in effect at the end of 2012, by delivery year, 2013-2022**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Year of Delivery	Contracted Purchases from U.S. Suppliers		Contracted Purchases from Foreign Suppliers		Contracted Purchases from All Suppliers	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
2013	14,590	14,790	31,339	34,036	45,929	48,826
2014	6,804	7,032	30,016	33,295	36,820	40,328
2015	7,212	7,649	29,702	32,962	36,913	40,611
2016	5,498	5,910	23,729	25,506	29,227	31,416
2017	4,727	5,147	19,417	20,610	24,144	25,758
2018	4,782	5,027	16,116	16,690	20,898	21,717
2019	5,915	6,196	11,039	11,613	16,954	17,809
2020	2,011	2,171	10,051	10,540	12,062	12,710
2021	W	W	W	W	7,248	7,612
2022	W	W	W	W	5,396	5,669
<b>Total</b>	<b>53,716</b>	<b>56,391</b>	<b>181,874</b>	<b>196,064</b>	<b>235,590</b>	<b>252,456</b>

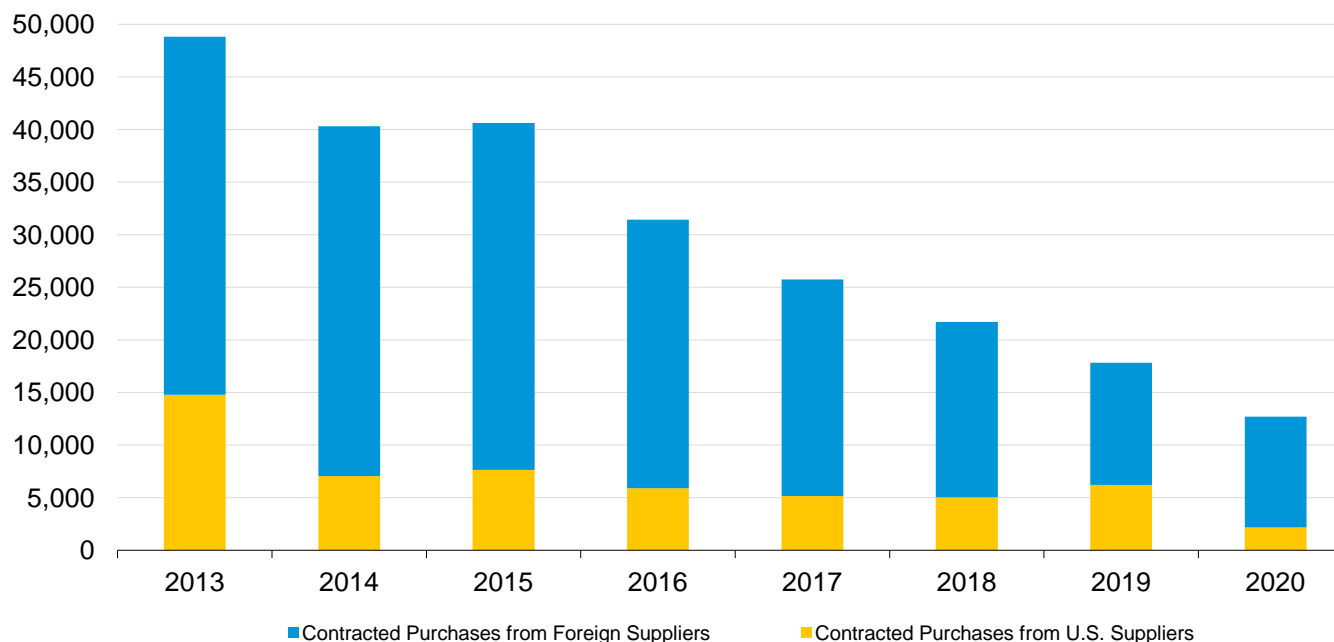
W = Data withheld to avoid disclosure of individual company data.

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

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Figure 9. Maximum contracted purchases of uranium from suppliers by owners and operators of U.S. civilian nuclear power reactors, in effect at the end of 2012, by delivery year, 2013-2020**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Table 11. Unfilled uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, 2012-2022**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Year	As of December 31, 2011		As of December 31, 2012	
	Annual	Cumulative	Annual	Cumulative
2012	2,096	2,096	-	--
2013	6,740	8,836	1,153	1,153
2014	8,765	17,601	7,494	8,647
2015	19,528	37,128	15,029	23,675
2016	24,059	61,187	16,607	40,282
2017	28,255	89,442	24,316	64,597
2018	35,266	124,708	30,310	94,908
2019	40,901	165,608	33,296	128,204
2020	44,668	210,277	39,442	167,645
2021	44,803	255,080	45,780	213,425
2022	-	--	41,720	255,145

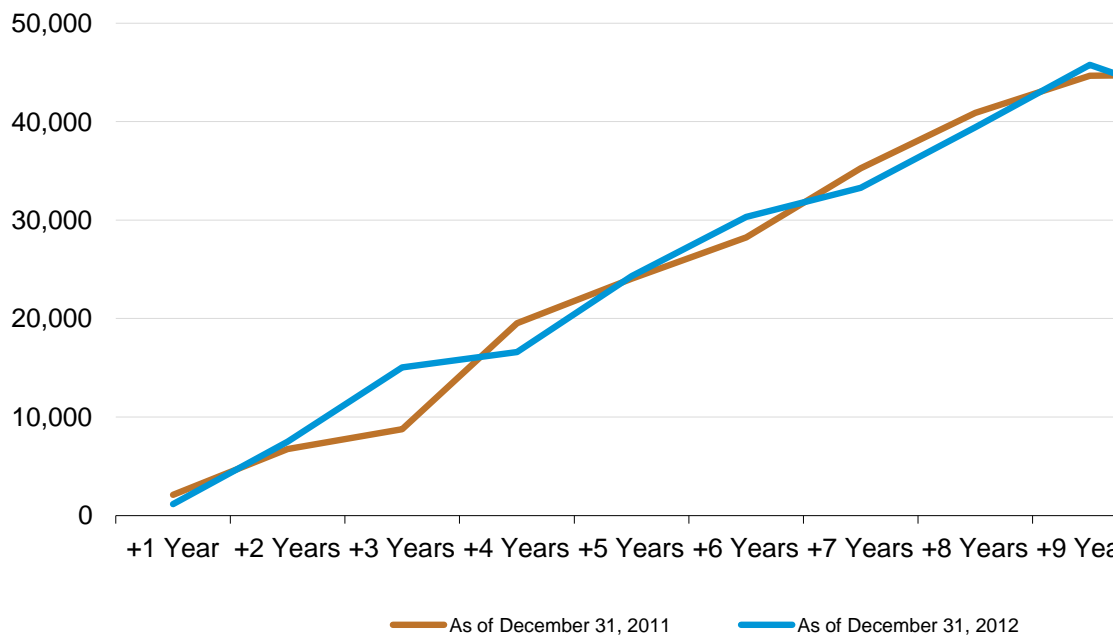
- = No data reported. -- = Not applicable.

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

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2011-2012).

**Figure 10. Annual unfilled uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, as of 12/31/2011 and 12/31/2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2011-2012).

**Table 12. Maximum anticipated uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, 2013-2022, as of December 31, 2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

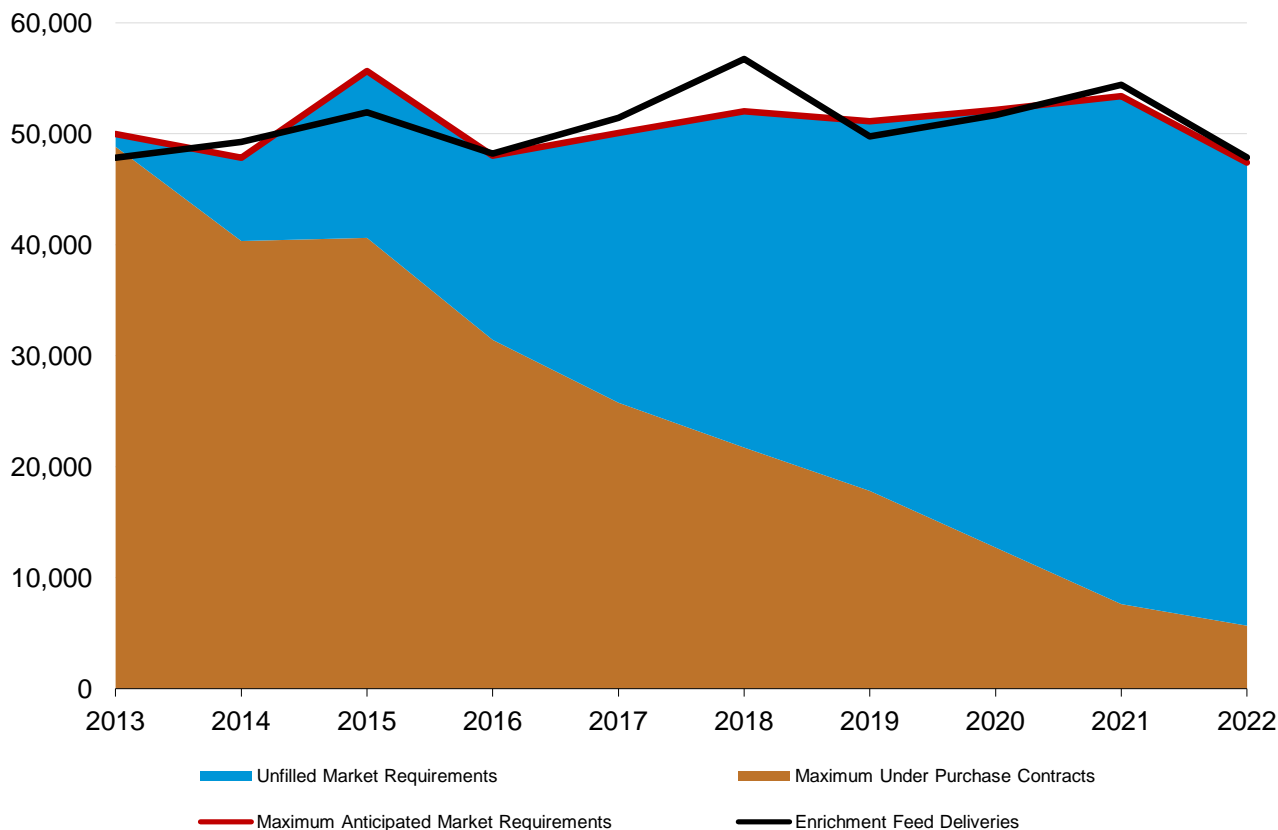
Year	Maximum Under Purchase Contracts	Unfilled Market Requirements	Maximum Anticipated Market Requirements	Enrichment Feed Deliveries
2013	48,826	1,153	49,980	47,834
2014	40,328	7,494	47,821	49,256
2015	40,611	15,029	55,639	51,920
2016	31,416	16,607	48,023	48,190
2017	25,758	24,316	50,074	51,420
2018	21,717	30,310	52,027	56,730
2019	17,809	33,296	51,105	49,753
2020	12,710	39,442	52,152	51,680
2021	7,612	45,780	53,392	54,404
2022	5,669	41,720	47,389	47,868
<b>Total</b>	<b>252,456</b>	<b>255,145</b>	<b>507,601</b>	<b>509,055</b>

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

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Figure 11. Maximum anticipated uranium market requirements of owners and operators of U.S. civilian nuclear power reactors, 2013-2022, as of December 31, 2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2012).

**Table 13. Deliveries of uranium feed by owners and operators of U.S. civilian nuclear power reactors by enrichment country and delivery year, 2010-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Enrichment Country	Feed Deliveries in 2010			Feed Deliveries in 2011			Feed Deliveries in 2012		
	U.S.-Origin	Foreign-Origin	Total	U.S.-Origin	Foreign-Origin	Total	U.S.-Origin	Foreign-Origin	Total
China	0	0	0	0	W	W	0	W	W
France	0	2,831	2,831	0	2,126	2,126	0	4,578	4,578
Germany	0	W	W	W	W	2,665	W	W	1,904
Netherlands	W	W	W	0	W	W	W	W	2,674
Russia	0	2,112	2,112	W	W	W	W	W	3,794
United Kingdom	W	W	4,353	W	W	3,816	W	W	3,930
Europe <sup>1</sup>	0	5,367	5,367	1,116	7,617	8,733	W	W	W
<b>Foreign Total</b>	<b>W</b>	<b>W</b>	<b>19,372</b>	<b>2,137</b>	<b>18,977</b>	<b>21,113</b>	<b>157</b>	<b>19,757</b>	<b>19,914</b>
United States	W	W	26,095	2,293	27,865	30,158	3,908	28,282	32,190
<b>Total</b>	<b>3,245</b>	<b>42,223</b>	<b>45,468</b>	<b>4,430</b>	<b>46,842</b>	<b>51,271</b>	<b>4,065</b>	<b>48,039</b>	<b>52,104</b>

<sup>1</sup> Specific country in Europe was not reported.

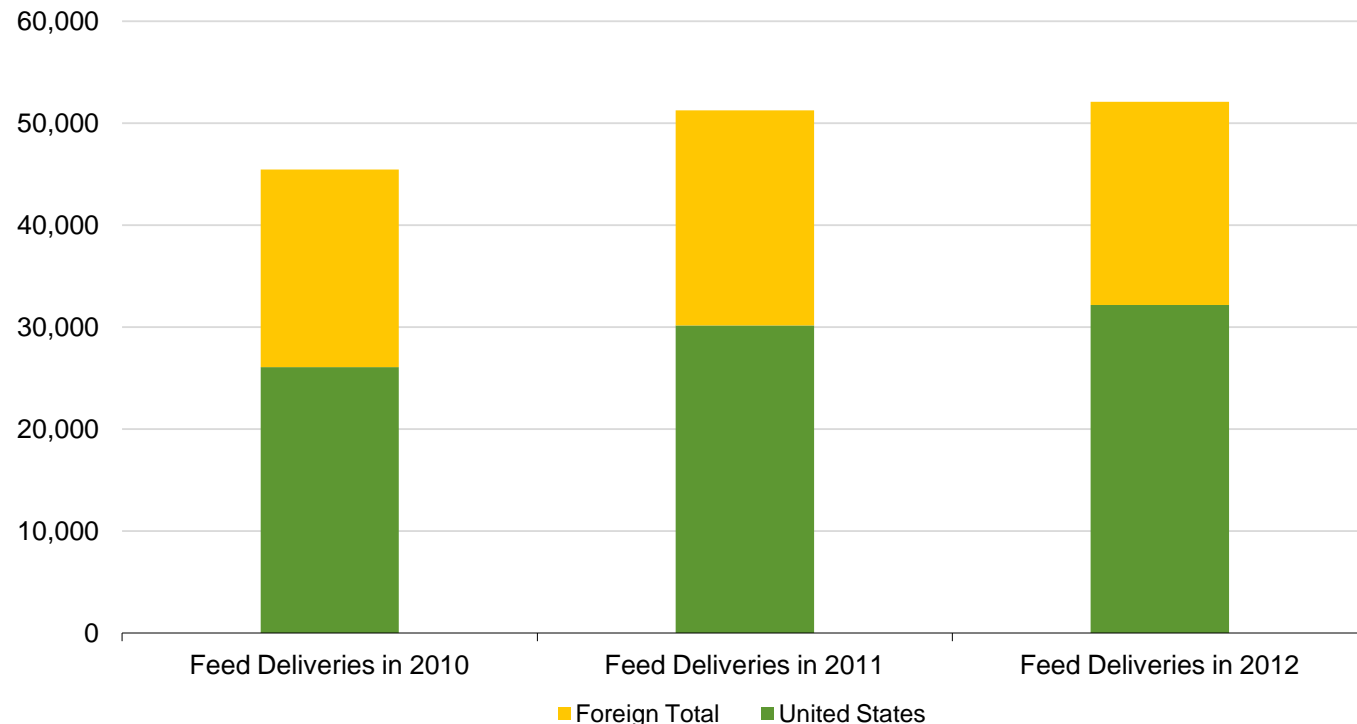
W = Data withheld to avoid disclosure of individual company data.

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

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Figure 12. Deliveries of uranium feed for U.S. and foreign enrichment by owners and operators of U.S. civilian nuclear power reactors by delivery year, 2010-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Table 14. Deliveries of uranium feed for enrichment by owners and operators of U.S. civilian nuclear power reactors by origin country and delivery year, 2010-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Origin Country of Feed	Deliveries in 2010			Deliveries in 2011			Deliveries in 2012		
	U.S. Enrichment	Foreign Enrichment	Total	U.S. Enrichment	Foreign Enrichment	Total	U.S. Enrichment	Foreign Enrichment	Total
Australia	2,646	2,451	5,097	3,504	2,311	5,815	3,195	3,352	6,547
Brazil	W	0	W	0	W	W	0	0	0
Canada	4,454	5,857	10,311	6,171	3,565	9,736	6,741	5,007	11,748
China	W	0	W	0	W	W	0	W	W
Czech Republic	W	0	W	W	0	W	W	0	W
Germany	0	0	0	0	W	W	0	0	0
Kazakhstan	2,532	2,887	5,418	3,761	3,980	7,740	2,968	2,858	5,825
Malawi	0	0	0	0	W	W	0	0	0
Namibia	1,545	1,309	2,854	2,745	1,522	4,267	1,733	1,440	3,173
Niger	W	W	3,030	W	W	1,795	W	W	1,140
Russia	10,817	3,357	14,174	10,400	2,580	12,979	12,154	3,427	15,581
South Africa	W	W	W	W	W	847	W	W	1,325
Ukraine	0	0	0	0	W	W	W	W	W
United Kingdom	W	0	W	0	0	0	0	0	0
Uzbekistan	219	800	1,019	777	1,224	2,001	650	1,080	1,731
<b>Foreign Total</b>	<b>W</b>	<b>W</b>	<b>42,223</b>	<b>27,865</b>	<b>18,977</b>	<b>46,842</b>	<b>28,282</b>	<b>19,757</b>	<b>48,039</b>
United States	W	W	3,245	2,293	2,137	4,430	3,908	157	4,065
<b>Total</b>	<b>26,095</b>	<b>19,372</b>	<b>45,468</b>	<b>30,158</b>	<b>21,113</b>	<b>51,271</b>	<b>32,190</b>	<b>19,914</b>	<b>52,104</b>

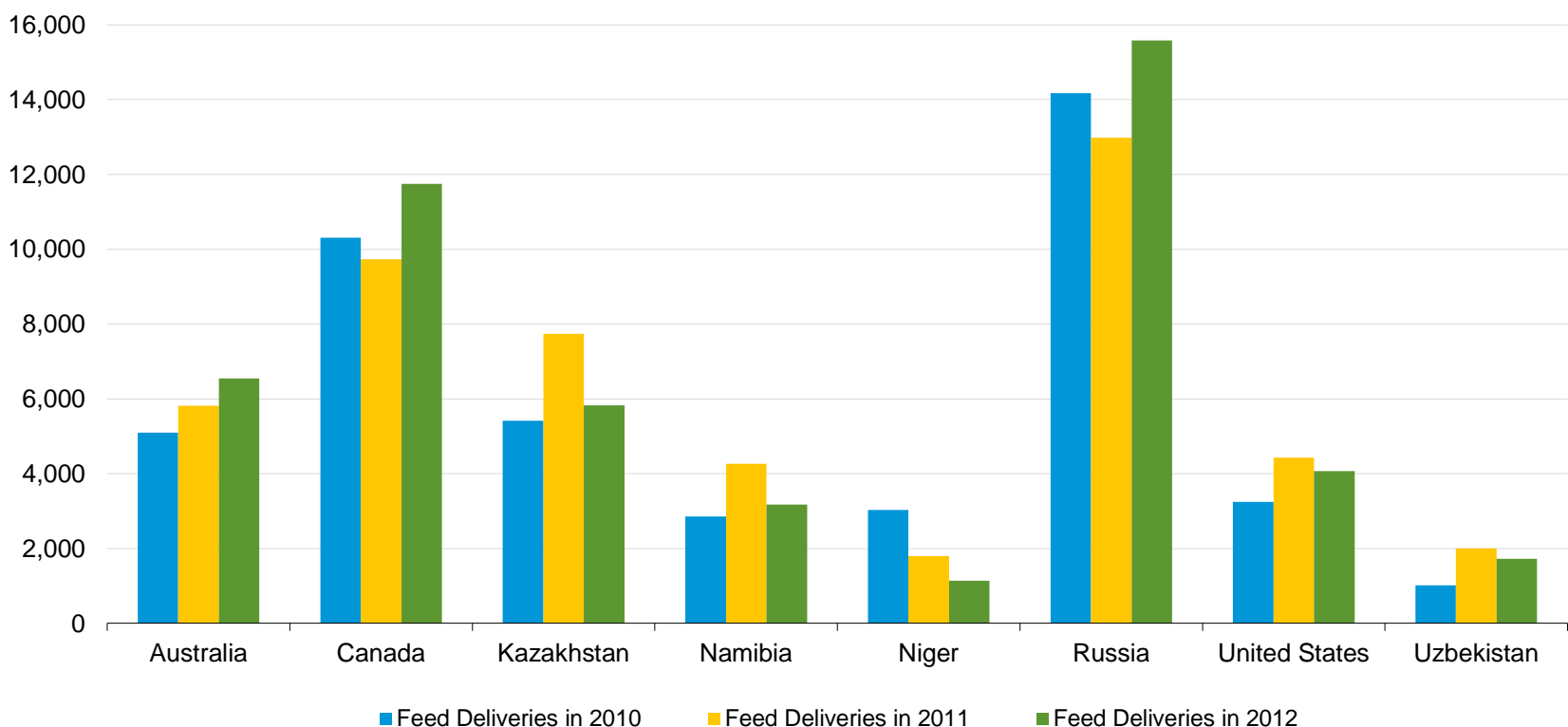
W = Data withheld to avoid disclosure of individual company data.

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

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Figure 13. Deliveries of uranium feed for enrichment by owners and operators of U.S. civilian nuclear power reactors by selected origin country of feed and delivery year, 2010-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Table 15. Shipments of uranium feed by owners and operators of U.S. civilian nuclear power reactors to domestic and foreign enrichment suppliers, 2013-2022**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Year of Shipment	Amount of Feed to be Shipped		Change from 2011 to 2012	
	As of December 31, 2011	As of December 31, 2012	Annual	Cumulative
2013	54,620	47,834	-6,786	-6,786
2014	50,521	49,256	-1,265	-8,051
2015	54,346	51,920	-2,426	-10,477
2016	53,523	48,190	-5,333	-15,810
2017	55,100	51,420	-3,680	-19,490
2018	55,939	56,730	791	-18,699
2019	53,339	49,753	-3,586	-22,285
2020	56,996	51,680	-5,316	-27,601
2021	52,269	54,404	2,135	-25,466
2022	-	47,868	--	--

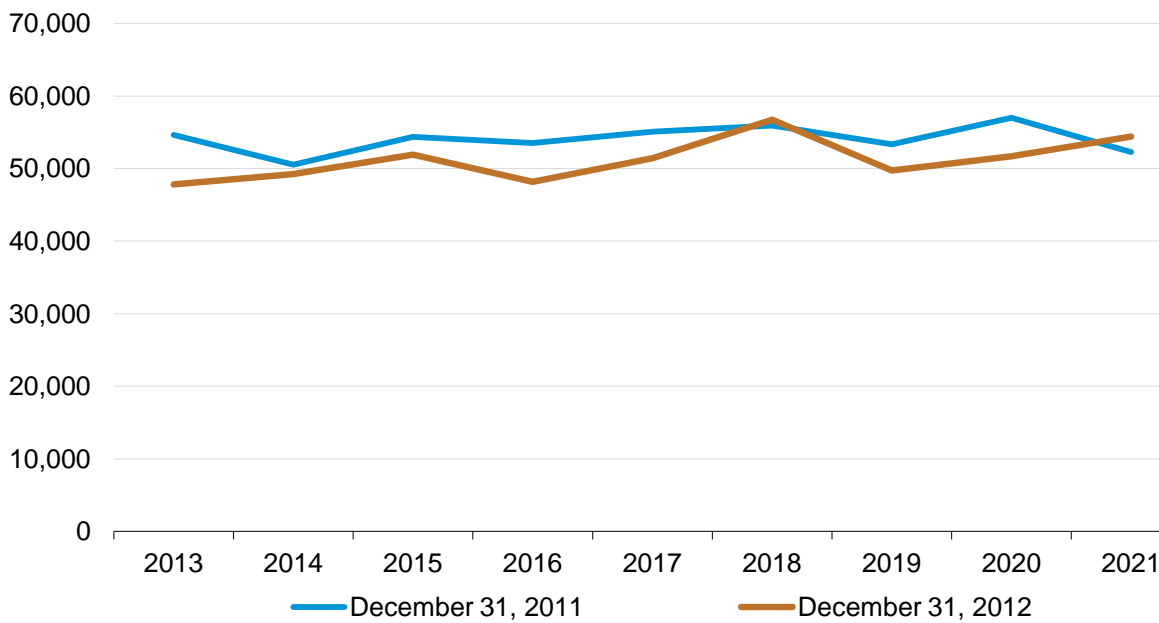
- = No data reported. -- = Not applicable.

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

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2011-2012).

**Figure 14. Shipments of uranium feed by owners and operators of U.S. civilian nuclear power reactors to domestic and foreign enrichment suppliers, 2013-2021**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2011-2012).

**Table 16. Purchases of enrichment services by owners and operators of U.S. civilian nuclear power reactors by origin country and year, 2008-2012**

thousand separative work units (SWU)

Country of Enrichment Service (SWU-origin)	2008	2009	2010	2011	2012
China	0	0	0	W	W
France	556	895	W	W	0
Germany	468	1,059	681	1,539	1,075
Netherlands	1,038	1,345	2,292	1,506	1,496
Russia	4,793	5,478	5,055	5,308	6,560
United Kingdom	2,195	2,940	2,119	2,813	2,648
Europe <sup>1</sup>	W	W	W	670	W
Other <sup>2</sup>	W	W	W	0	W
<b>Foreign Total</b>	<b>10,709</b>	<b>13,115</b>	<b>11,526</b>	<b>12,395</b>	<b>12,330</b>
United States	1,890	4,102	2,251	2,434	3,261
<b>Total</b>	<b>12,599</b>	<b>17,217</b>	<b>13,776</b>	<b>14,829</b>	<b>15,590</b>
<b>Average Price (US\$ per SWU)</b>	<b>121.33</b>	<b>130.78</b>	<b>136.14</b>	<b>136.12</b>	<b>141.36</b>

<sup>1</sup> Specific country in Europe was not reported.

<sup>2</sup> Specific country was not reported.

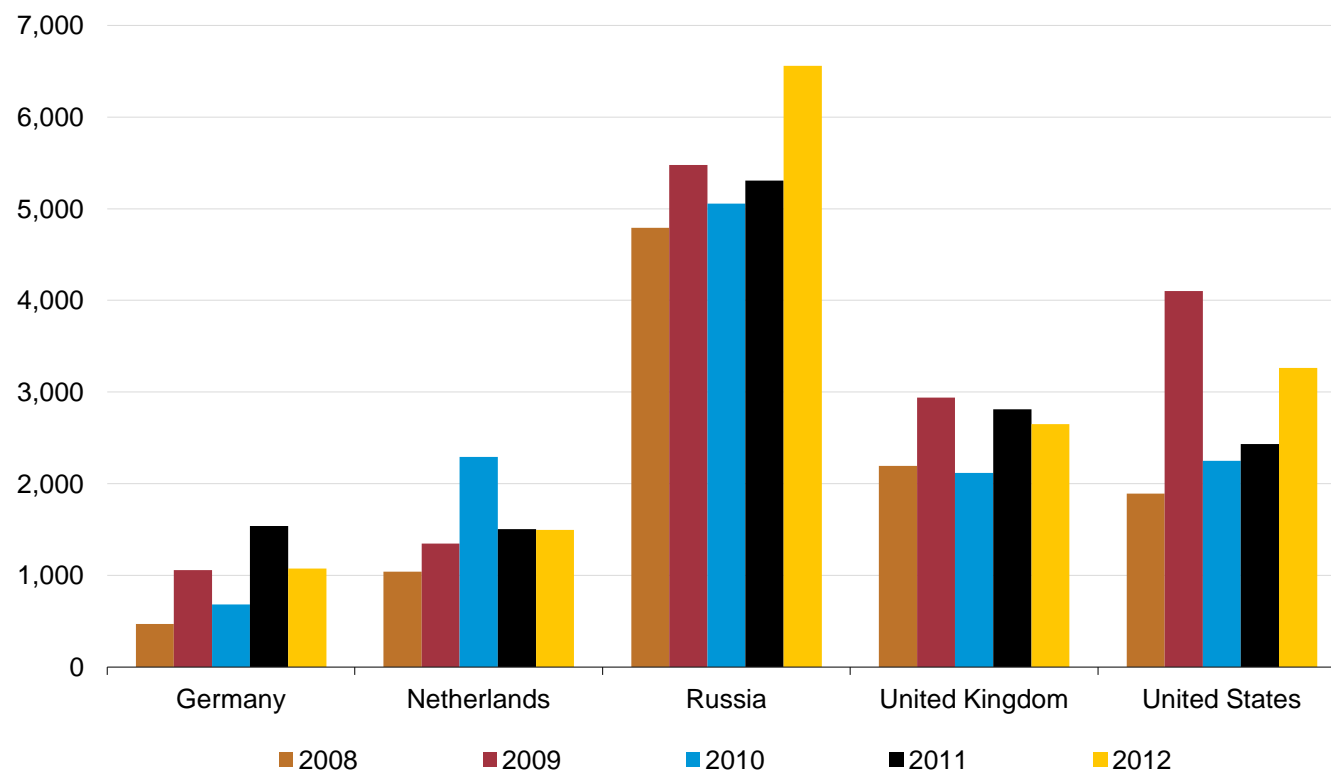
W = Data withheld to avoid disclosure of individual company data.

Notes: Totals may not equal sum of components because of independent rounding. Average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 15. Purchases of enrichment services by owners and operators of U.S. civilian nuclear power reactors by selected origin country and year, 2008-2012**

thousand separative work units (SWU)



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Table 17. Purchases of enrichment services by owners and operators of U.S. civilian nuclear power reactors by contract type in delivery year, 2012**

thousand separative work units (SWU)

<b>Enrichment Service Contract Type</b>	<b>U.S. Enrichment</b>	<b>Foreign Enrichment</b>	<b>Total</b>
Spot	0	521	521
Long-Term	3,261	11,808	15,069
<b>Total</b>	<b>3,261</b>	<b>12,330</b>	<b>15,590</b>

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

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2012).



**Table 18. Uranium in fuel assemblies loaded into U.S. civilian nuclear power reactors by year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Origin of Uranium	2008	2009	2010	2011	P2012
Domestic-Origin Uranium	6,228	5,588	4,119	4,134	4,825
Foreign-Origin Uranium	45,040	43,766	40,187	46,809	44,657
<b>Total</b>	<b>51,268</b>	<b>49,354</b>	<b>44,306</b>	<b>50,943</b>	<b>49,483</b>

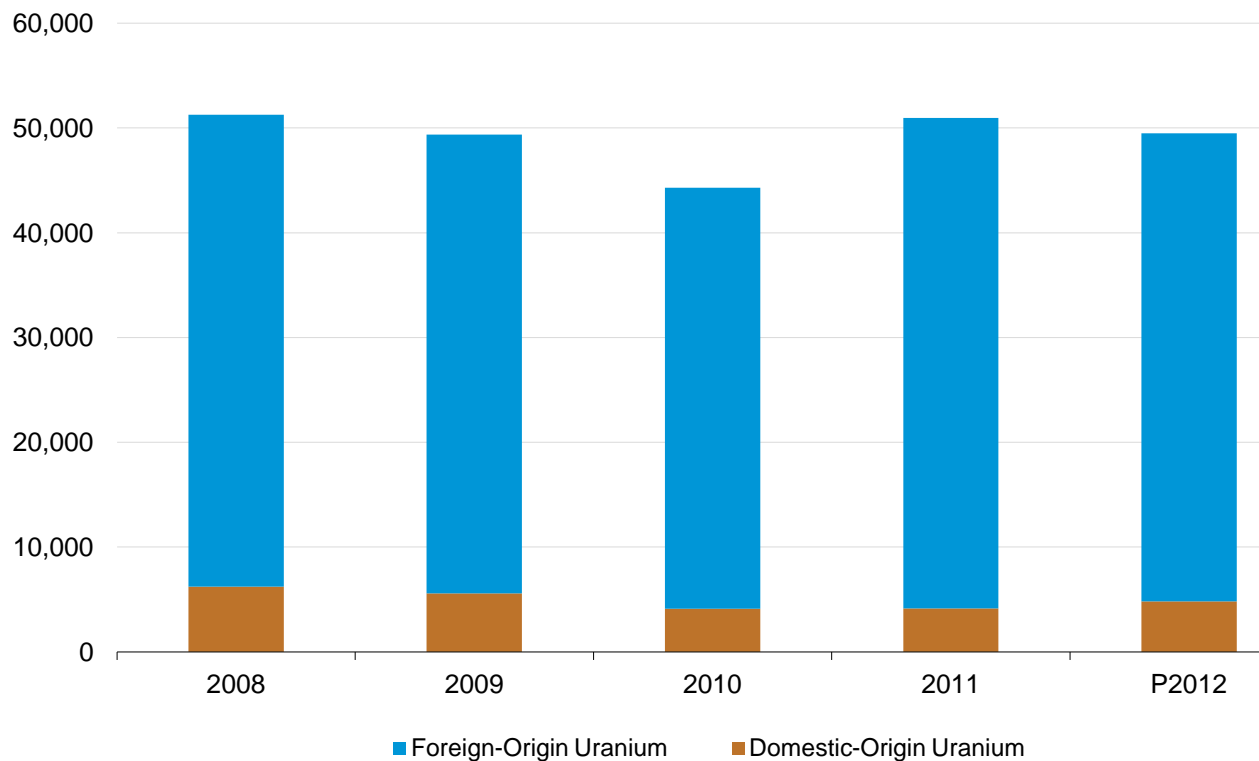
P = Preliminary data. Final 2011 fuel assembly data reported in the 2012 survey.

Notes: Includes only unirradiated uranium in new fuel assemblies loaded into reactors during the year. Does not include uranium removed from reactors that subsequently will be reloaded. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Figure 16. Uranium in fuel assemblies loaded into U.S. civilian nuclear power reactors by year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



P = Preliminary data. Final 2011 fuel assembly data reported in the 2012 survey.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Table 19. Foreign purchases of uranium by U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

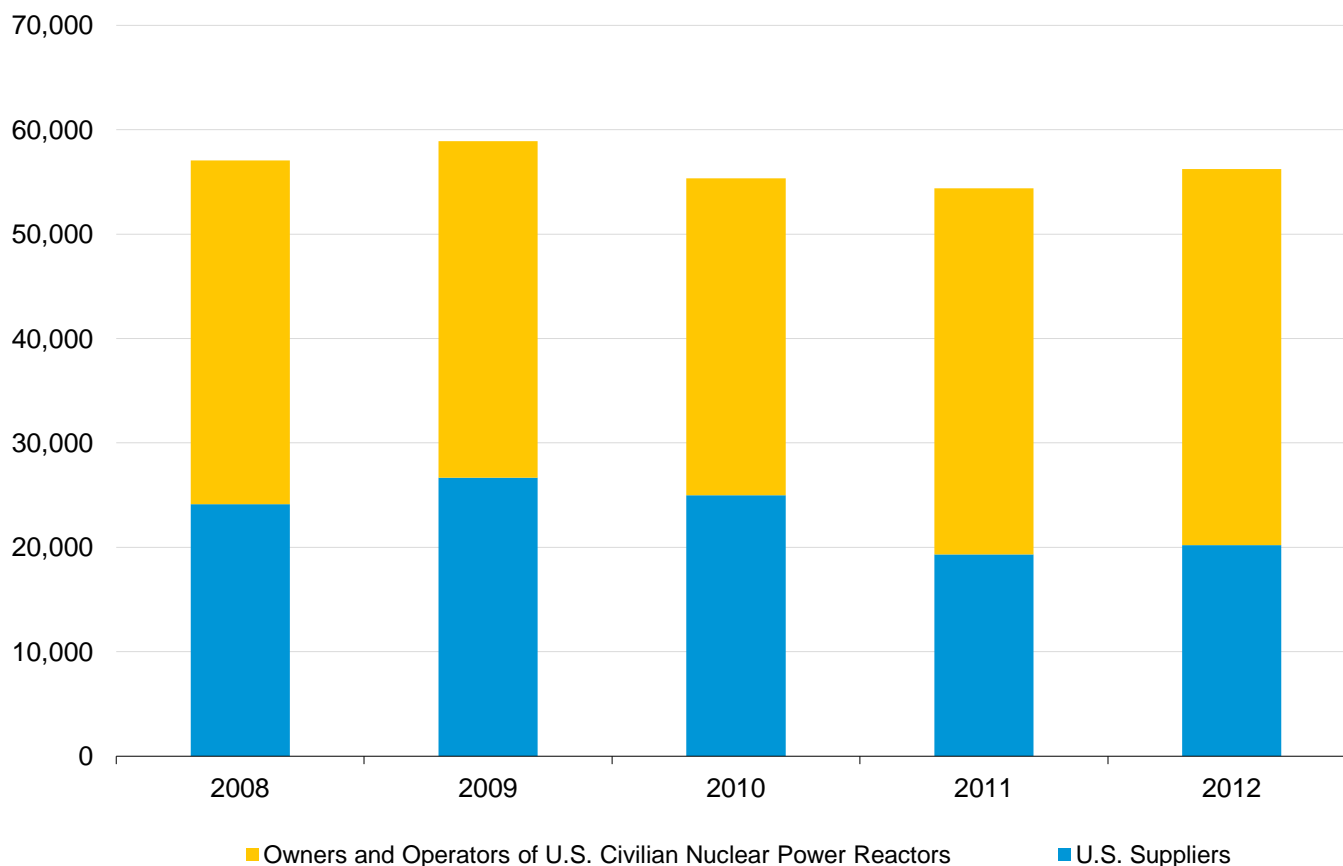
Deliveries	2008	2009	2010	2011	2012
<b>U.S. Suppliers</b>					
Foreign Purchases	24,139	26,661	24,985	19,318	20,196
Weighted-Average Price	33.30	34.80	41.30	48.80	46.80
<b>Owners and Operators of U.S. Civilian Nuclear Power Reactors</b>					
Foreign Purchases	32,936	32,239	30,362	35,071	36,037
Weighted-Average Price	47.46	46.55	51.69	56.87	54.08
<b>Total</b>					
Foreign Purchases	57,074	58,900	55,347	54,388	56,233
Weighted-Average Price	41.30	41.23	47.01	54.00	51.44

Notes: Totals may not equal sum of components because of independent rounding. Foreign Purchase: A uranium purchase of foreign-origin uranium from a firm located outside of the United States. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 17. Foreign purchases of uranium by U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Table 20. U.S. broker and trader purchases of uranium by origin, supplier, and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

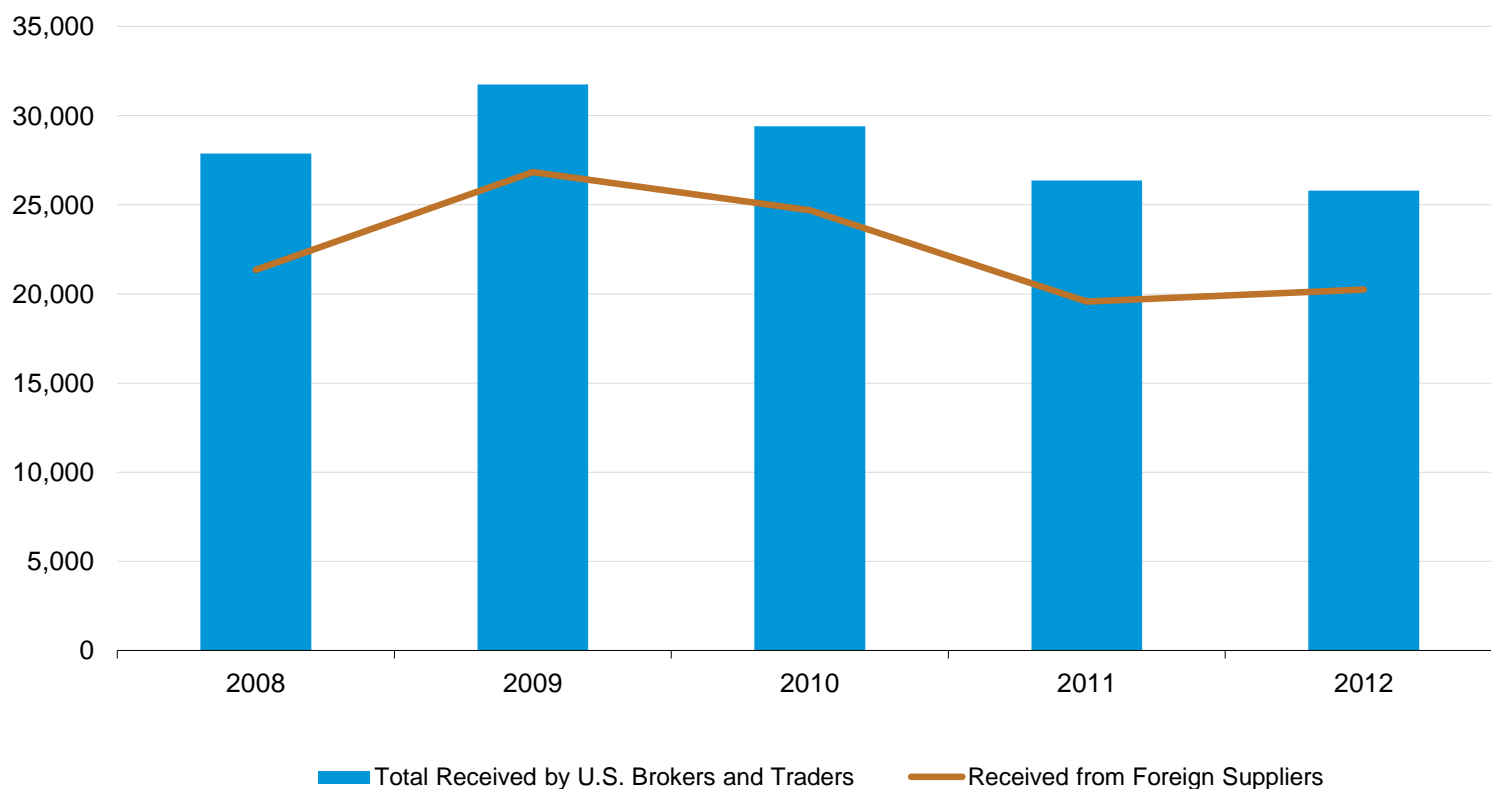
Deliveries	2008	2009	2010	2011	2012
Received U.S.-Origin Uranium					
Purchases	3,009	2,189	2,226	1,668	1,194
Weighted-Average Price	66.14	49.11	43.36	54.85	51.78
Received Foreign-Origin Uranium					
Purchases	24,861	29,568	27,186	24,695	24,606
Weighted-Average Price	38.78	35.96	41.42	49.69	47.75
<b>Total Received by U.S. Brokers and Traders</b>					
Purchases	<b>27,871</b>	<b>31,757</b>	<b>29,412</b>	<b>26,363</b>	<b>25,800</b>
Weighted-Average Price	<b>41.73</b>	<b>36.87</b>	<b>41.57</b>	<b>50.02</b>	<b>47.94</b>
Received from Foreign Suppliers					
Purchases	21,347	26,841	24,693	19,579	20,243
Weighted-Average Price	35.39	34.88	41.23	49.27	47.08

Notes: Totals may not equal sum of components because of independent rounding. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 18. U.S. broker and trader purchases of uranium by supplier, and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Table 21. Foreign sales of uranium from U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent; dollars per pound U<sub>3</sub>O<sub>8</sub> equivalent

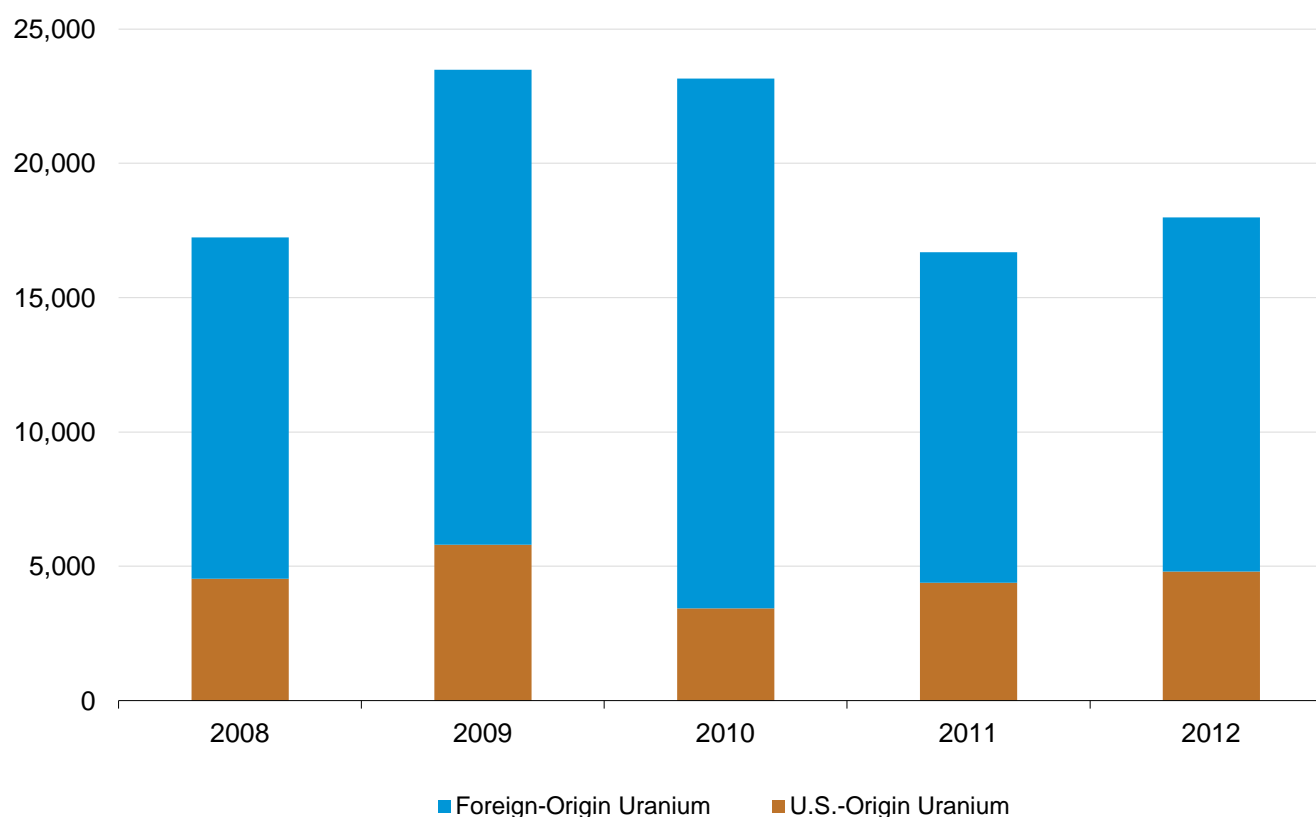
<b>Deliveries to Foreign Suppliers and Utilities</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
<b>U.S.-Origin Uranium</b>					
Foreign Sales	4,531	5,801	3,440	4,387	4,798
Weighted-Average Price	46.36	41.43	37.82	53.08	47.53
<b>Foreign-Origin Uranium</b>					
Foreign Sales	12,709	17,688	19,708	12,297	13,185
Weighted-Average Price	45.36	41.50	43.66	47.61	47.58
<b>Total Sent:</b>					
<b>Foreign Sales</b>	<b>17,240</b>	<b>23,489</b>	<b>23,147</b>	<b>16,683</b>	<b>17,982</b>
<b>Weighted-Average Price</b>	<b>45.62</b>	<b>41.48</b>	<b>42.78</b>	<b>49.05</b>	<b>47.57</b>
<b>From Owners and Operators of U.S. Civilian Nuclear Power Reactors, U.S. Producers, and other U.S. Suppliers</b>					
Foreign Sales	4,202	6,229	6,459	4,538	3,699
Weighted-Average Price	40.04	37.11	38.13	52.63	47.26
<b>From U.S. Brokers and Traders</b>					
Foreign Sales	13,038	17,260	16,688	12,145	14,284
Weighted-Average Price	47.42	43.06	44.63	47.71	47.65

Notes: "Other U.S. Suppliers" are U.S. converters, enrichers, and fabricators. Totals may not equal sum of components because of independent rounding. Foreign sale: A uranium sale to a firm located outside the United States. Weighted-average prices are not adjusted for inflation.

Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Figure 19. Foreign sales of uranium from U.S. suppliers and owners and operators of U.S. civilian nuclear power reactors by origin and delivery year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



Source: U.S. Energy Information Administration: Form EIA-858 "Uranium Marketing Annual Survey" (2008-2012).

**Table 22. Inventories of natural and enriched uranium by material type as of end of year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Type of Uranium Inventory Owned by	Inventories at the End of the Year				
	2008	2009	2010	2011	P2012
<b>Owners and Operators of U.S. Civilian Nuclear Power Reactors Inventories</b>	<b>82,972</b>	<b>84,757</b>	<b>86,527</b>	<b>89,835</b>	<b>97,466</b>
Uranium Concentrate (U <sub>3</sub> O <sub>8</sub> )	12,286	15,094	13,076	14,718	13,454
Natural UF <sub>6</sub>	46,525	38,463	35,767	35,883	30,168
Enriched UF <sub>6</sub>	13,748	18,195	25,392	19,596	38,903
Fabricated Fuel (not inserted into a reactor)	10,414	13,006	12,292	19,638	14,941
<b>U.S. Supplier Inventories</b>	<b>27,010</b>	<b>26,774</b>	<b>24,732</b>	<b>22,269</b>	<b>23,264</b>
Uranium Concentrate (U <sub>3</sub> O <sub>8</sub> )	12,264	12,132	10,153	7,057	W
Natural UF <sub>6</sub>	W	W	W	W	W
Enriched UF <sub>6</sub>	W	W	W	W	W
Fabricated Fuel (not inserted into a reactor)	0	0	0	0	0
<b>Total Commercial Inventories</b>	<b>109,983</b>	<b>111,531</b>	<b>111,259</b>	<b>112,104</b>	<b>120,730</b>

P = Preliminary data. Final 2011 inventory data reported in the 2012 survey.

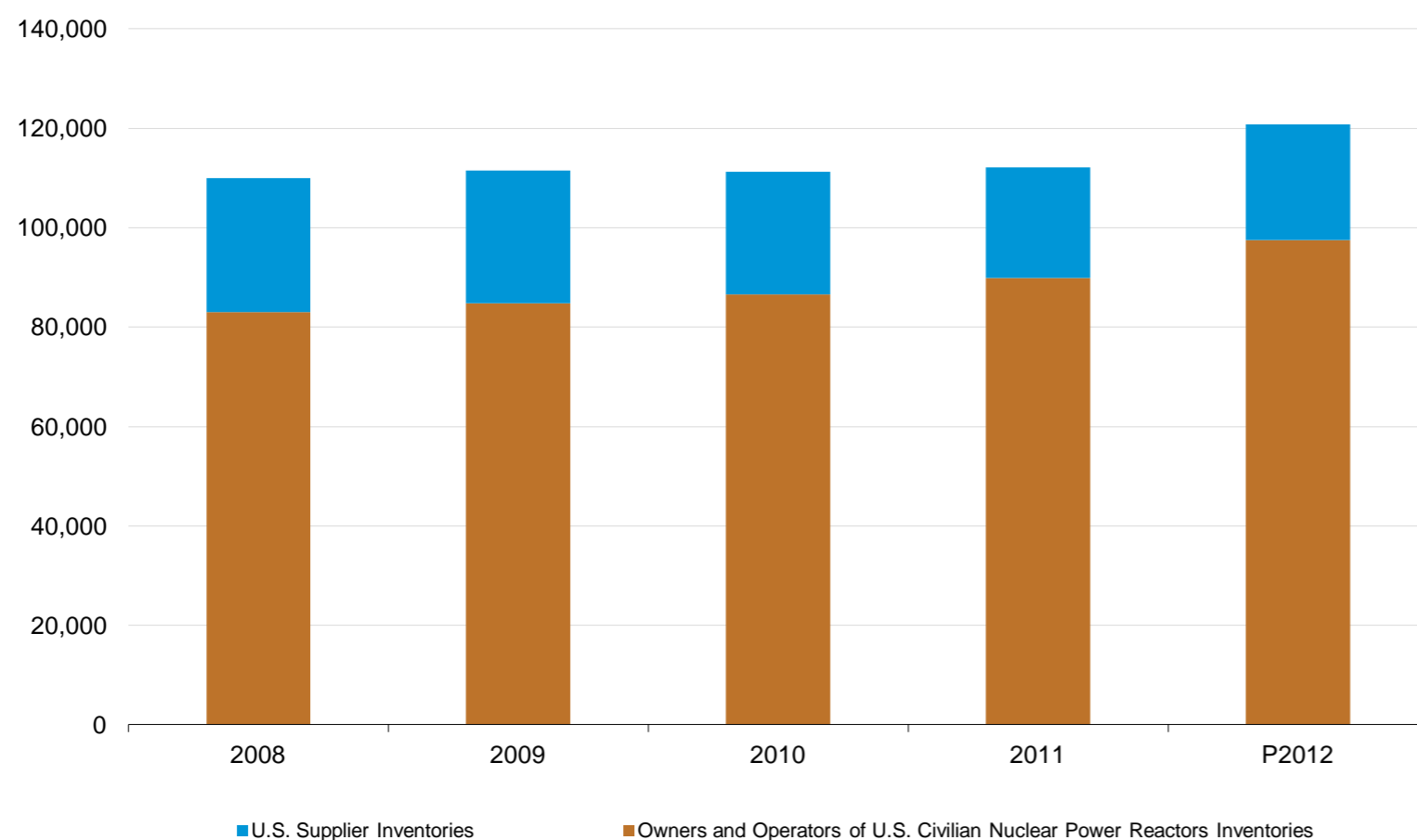
W = Data withheld to avoid disclosure of individual company data.

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

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Figure 20. Commercial inventories of natural and enriched uranium as of end of year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

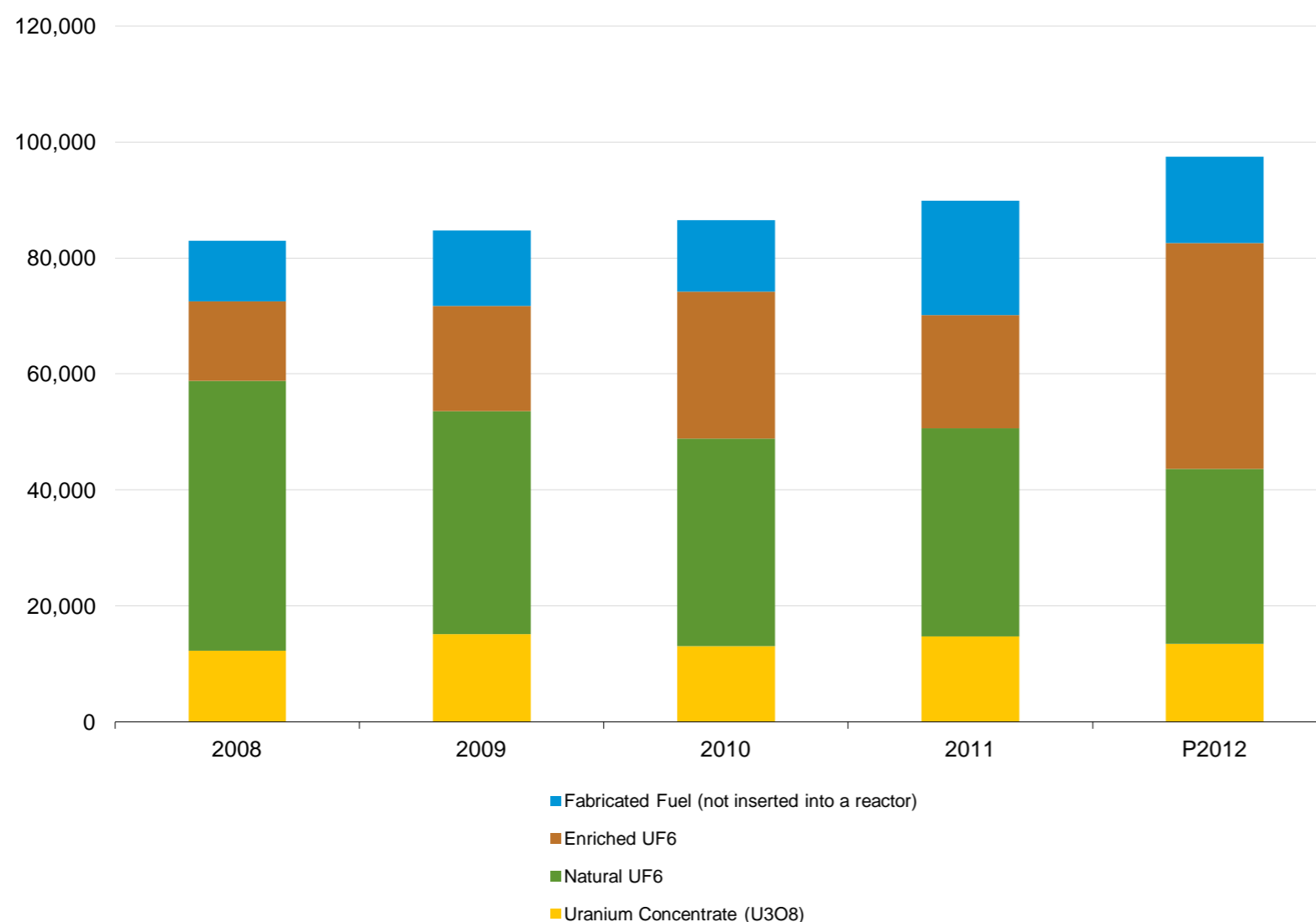


P = Preliminary data. Final 2011 inventory data reported in the 2012 survey.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Figure 21. Owners and operators of U.S. civilian nuclear power reactors inventories by material type as of end of year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



P = Preliminary data. Final 2011 inventory data reported in the 2012 survey.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Table 23. Inventories of uranium by owner as of end of year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent

Owner of Uranium Inventory	Inventories at the End of Year				
	2008	2009	2010	2011	P2012
Owners and Operators of U.S. Civilian Nuclear Power Reactors	82,972	84,757	86,527	89,835	97,466
U.S. Brokers and Traders	14,104	13,362	11,125	6,841	5,653
U.S. Converter, Enrichers, Fabricators, and Producers	12,907	13,412	13,608	15,428	17,611
<b>Total Commercial Inventories</b>	<b>109,983</b>	<b>111,531</b>	<b>111,259</b>	<b>112,104</b>	<b>120,730</b>

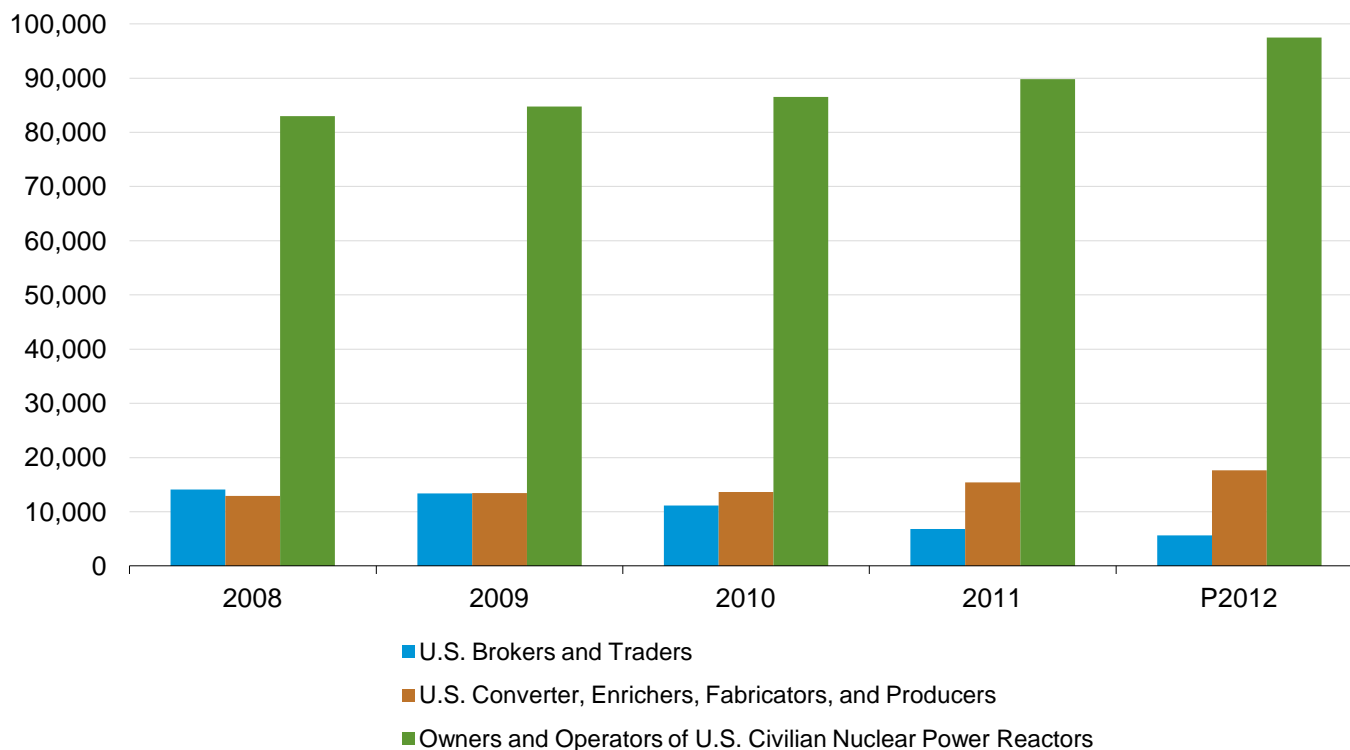
P = Preliminary data. Final 2011 inventory data reported in the 2012 survey.

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

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Figure 22. Commercial inventories of uranium by owner as of end of year, 2008-2012**

thousand pounds U<sub>3</sub>O<sub>8</sub> equivalent



P=Preliminary data. Final 2011 inventory data reported in the 2012 survey.

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2009-2012).

**Table 24. Uranium sellers to owners and operators of U.S. civilian nuclear power reactors, 2010-2012**

2010	2011	2012
American Fuel Resources, LLC	Advance Uranium Asset Management Ltd. (was Uranium Asset Management)	Advance Uranium Asset Management Ltd. (was Uranium Asset Management)
AREVA NC, Inc. (was COGEMA, Inc.)	American Fuel Resources, LLC	American Fuel Resources, LLC
BHP Billiton Olympic Dam Corporation Pty Ltd	AREVA NC, Inc.	AREVA NC, Inc.
CAMECO	BHP Billiton Olympic Dam Corporation Pty Ltd	BHP Billiton Olympic Dam Corporation Pty Ltd
ConverDyn	CAMECO	CAMECO
Denison Mines Corp.	ConverDyn	ConverDyn
Energy Resources of Australia Ltd.	Denison Mines Corp.	Energy Fuels Resources
Energy USA, Inc.	Effective Energy N.V.	Energy Resources of Australia Ltd.
GNSS (Globe Nuclear Services and Supply Ltd.)	Energy Resources of Australia Ltd.	Energy USA, Inc.
INTERNEXCO GmbH	Energy USA, Inc.	GNSS (Globe Nuclear Services and Supply Ltd.)
Itochu Corporation / Itochu International	GNSS (Globe Nuclear Services and Supply Ltd.)	INTERNEXCO GmbH
Mestena Uranium LLC	INTERNEXCO GmbH	Itochu Corporation / Itochu International
Nufcor International Limited	Itochu Corporation / Itochu International	J. Aron & Company
NUKEM, Inc. / NULUX (NUKEM Luxemburg GmbH)	Kazatomprom	Kazatomprom
Paladin Resources Limited / Paladin Energy	Langer Heinrich Uranium Ltd (Paladin Energy)	Langer Heinrich Uranium Ltd (Paladin Energy)
Rossing Uranium Limited	Mestena Uranium LLC	Mestena Uranium LLC
SOPAMIN (Société de Patrimoine des Mines du Niger "Heritage Society of Mines in Niger")	MTM Trading, LLC	MTM Trading, LLC
Traxys North America, LLC	NuCore	Nufcor International Limited
UG U.S.A., Inc.	Nufcor International Limited	NUKEM, Inc.
Uranium Asset Management	NUKEM, Inc.	Paladin Resources Limited / Paladin Energy
Uranium One / Uranium One Africa Limited	Paladin Resources Limited / Paladin Energy	Rio Tinto Uranium Limited
UrAsia Energy Ltd.	PPL Energy Plus LLC	Rossing Uranium Limited
USEC, Inc. (United States Enrichment Corporation)	Rossing Uranium Limited	SOPAMIN (Société de Patrimoine des Mines du Niger "Heritage Society of Mines in Niger")
	SOPAMIN (Société de Patrimoine des Mines du Niger "Heritage Society of Mines in Niger")	Southern Cross Resources Australia Pty. Ltd.
	TENEX (Techsnabexport)	TENEX (Techsnabexport)
	Traxys North America, LLC	Traxys North America, LLC
	UG U.S.A., Inc.	UG U.S.A., Inc.
	Uranium One / Uranium One Africa Limited	Uranium One / Uranium One Africa Limited
	UrAsia Energy Ltd.	UrAsia Energy Ltd.
	URENCO, Inc.	URENCO, Inc.
	USEC, Inc. (United States Enrichment Corporation)	USEC, Inc. (United States Enrichment Corporation)
	Westinghouse Electric Company, LLC	Westinghouse Electric Company, LLC

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).

**Table 25. Enrichment service sellers to owners and operators of U.S. civilian nuclear power reactors, 2010-2012**

2010	2011	2012
AREVA NC, Inc. (was COGEMA, Inc.)	Advance Uranium Asset Management Ltd.	Advance Uranium Asset Management Ltd.
LES, LLC (Louisiana Energy Services)	AREVA NC, Inc.	AREVA NC, Inc.
NUKEM, Inc.	CNEIC (China Nuclear Energy Industry Corporation)	CNEIC (China Nuclear Energy Industry Corporation)
UG U.S.A., Inc.	Energy Northwest	LES, LLC (Louisiana Energy Services)
URENCO, Inc.	LES, LLC (Louisiana Energy Services)	NextEra Energy Seabrook
USEC, Inc. (United States Enrichment Corporation)	NUKEM, Inc.	NUKEM, Inc.
Westinghouse Electric Company	TENEX (Techsnabexport Joint Stock Company)	TENEX (Techsnabexport Joint Stock Company)
	URENCO, Inc.	UG U.S.A., Inc.
	USEC, Inc. (United States Enrichment Corporation)	URENCO, Inc.
		URENCO USA, Inc.
		USEC, Inc. (United States Enrichment Corporation)

Source: U.S. Energy Information Administration, Form EIA-858 "Uranium Marketing Annual Survey" (2010-2012).