Cameco

Uranium Operations

Uranium | Investing in clean electricity

Cameco is one of the world's largest, low-cost uranium producers with mining and milling operations in Canada, the US and Central Asia. Our diverse operations account for 15% of world production and are backed by approximately 500 million pounds of proven and probable reserves.

Uranium Strategy

Cameco is renewing and building on its base of quality uranium production assets. The goal is to sustain our position as a leading global, low-cost producer. We are reinvesting in our mines and mills in Canada and the US to expand production and improve environmental performance. Inkai, our joint venture project in Kazakhstan, is expected to reach commercial production in 2009. As well, the Cigar Lake project in Saskatchewan is being remediated following water inflows. Remediation work will take most of 2009 with dewatering to follow. Once the mine is dewatered, the underground will be secured and assessed. The resulting information will be incorporated into a new mining plan for this valuable deposit.

Top Uranium Producers

In 2008, seven companies provided more than 81% of the world's uranium production.

Company	million pounds U_3O_8	%
Rio Tinto (Australia)	21	18
Cameco (Canada)	17	15
AREVA (France)	17	14
Kazatomprom (Kazakhstan)	14	12
ARMZ (Russia)	10	9
BHP Billiton (Australia)	9	8
Navoi (Uzbekistan)	6	5

Source: Cameco

Exploration Potential

Cameco maintains an active exploration program to sustain its production base. Over the past five years we have significantly increased our investment in exploration programs and expanded our land holdings in Canada, Australia, the US, Mongolia and Africa. In 2008, we invested $57 million in direct uranium exploration and an additional $32 million in three strategic partnerships. Cameco's long-term approach to reserve replacement is to complement our own exploration activities with partnerships, joint ventures, or equity investments in other companies with attractive assets and expertise in the world's most promising regions for uranium.

Cameco

McArthur River & Key Lake

The world's largest, high-grade, low-cost uranium production centre

McArthur River Mine

Location 620 kilometres north of Saskatoon, Saskatchewan, Canada

Ownership 70% Cameco, 30% AREVA Resources

Proven & probable reserves
332.6 million pounds U_3O_8
(Cameco's share 232.2 million pounds U_3O_8)

Average grade 20.7% U_3O_8

Annual production capacity
18.7 million pounds U_3O_8

2008 production
16.6 million pounds U_3O_8
(Cameco's share 11.6 million pounds U_3O_8)

Mine life 25 years

Employment 400 Cameco employees, 245 long-term contract employees

Key Lake Mill

Location 570 kilometres north of Saskatoon, Saskatchewan, Canada

Ownership 83% Cameco, 17% AREVA Resources

Annual milling capacity
18.7 million pounds U_3O_8

2008 production
16.6 million pounds U_3O_8
(Cameco's share 11.6 million pounds U_3O_8)

History Dedicated to open pit uranium mining from 1983 through the 1990s. In 2000 began milling ore from McArthur River.

Employment 365 Cameco employees, 115 long-term contract employees

Overview

McArthur River began production in 1999.

Cameco's McArthur River and Key Lake operations are the world's largest, low-cost uranium producers. Together, these facilities accounted for about 14% of world uranium production in 2008. The McArthur River deposit with ore grades about 100 times the world average was discovered in 1988 and production began in 1999. McArthur River has produced more than 154 million pounds of U_3O_8 and has reserves sufficient to sustain production until 2033. Upgrading known resources to the category of reserves could help achieve licensed annual production at 18.7 million pounds for longer than currently estimated. Exploration drilling since 2007 on the fault structure that produced the deposit has shown encouraging results.

Key Lake began production as a mining and milling operation in 1983. Two orebodies on the site were mined out by 1997. Cameco is planning a major renewal of its milling facilities at Key Lake to upgrade process circuits to new technology, increase nominal production capacity and improve environmental performance. A revitalized Key Lake mill will provide a regional milling facility for continued processing of ore from McArthur River and other potential sources in the area.

09-166-034

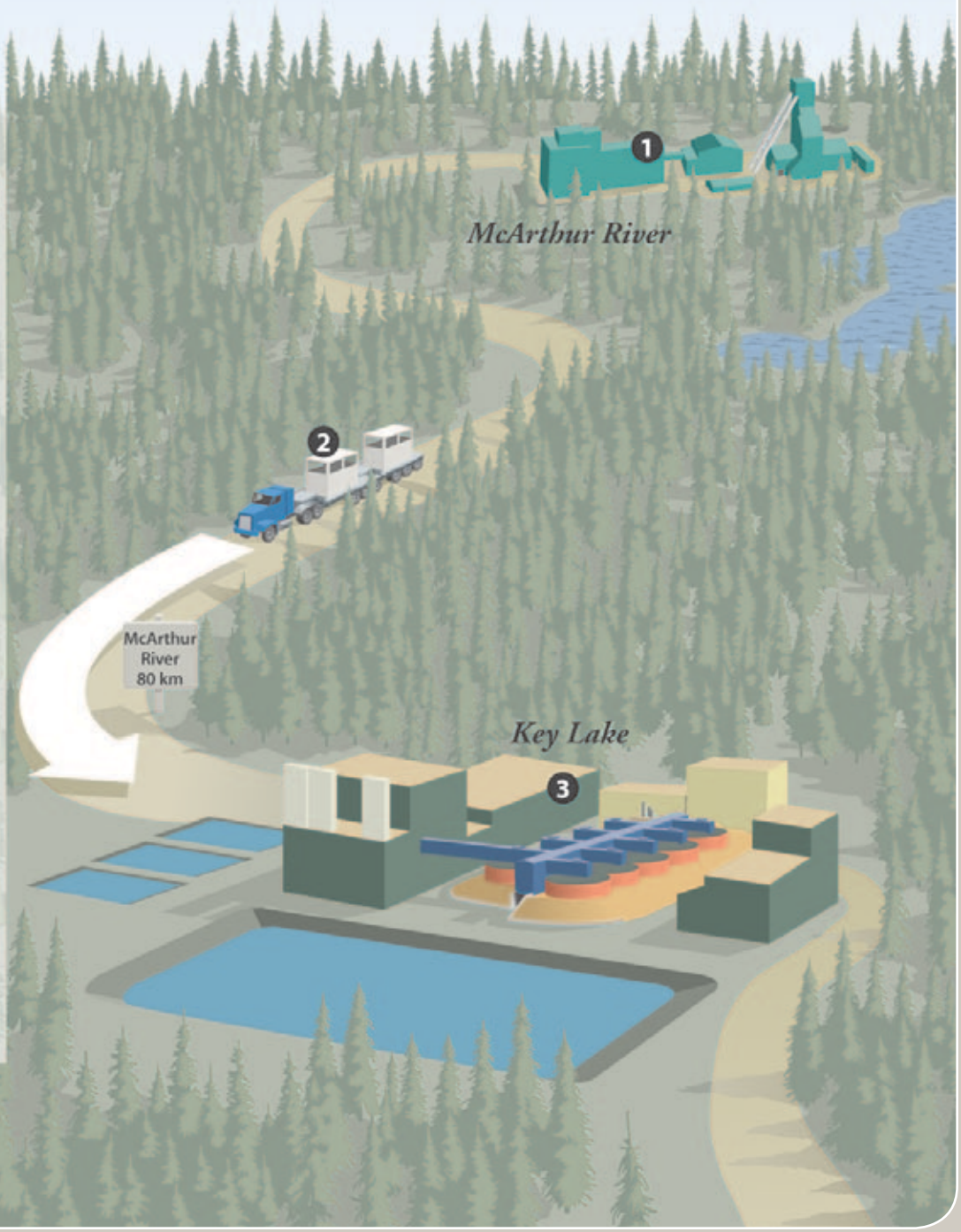
1 *McArthur River*

The McArthur River orebody is located between 530 and 640 metres underground between dry granite basement rock and overlying water-saturated sandstone. The area surrounding the orebody must be frozen in order to mine safely. Ore is mined by the raise bore method and removed using remote-controlled equipment to minimize workers' exposure to radiation. It is crushed in an underground mill and pumped to the surface as a slurry for transportation to Key Lake.

2 McArthur River ore in slurry form is loaded in special containers and trucked to Key Lake for milling over an 80-kilometre all-weather road.

3 *Key Lake*

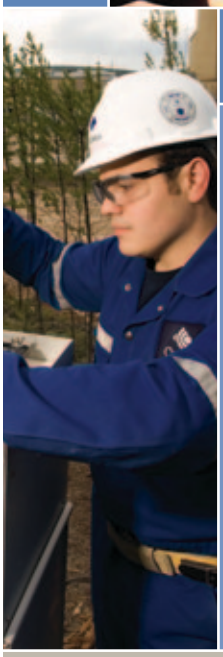
High grade ore from McArthur River is blended down to 4% U_3O_8 with waste rock prior to entering the milling circuits at Key Lake. The mill uses a conventional acid leach/solvent extraction process to recover uranium from the ore. Uranium concentrate is dried and packaged in steel drums for shipment to Cameco's refinery at Blind River, Ontario, and other processing facilities in the US and Europe. Water used in the process is treated to meet regulatory standards before release to the environment. Solid wastes are placed in a tailings management facility built into a mined out pit.



Cameco

Cigar Lake & Rabbit Lake

Uranium supply for the future



Cigar Lake Project

Location 660 kilometres north of Saskatoon, Saskatchewan, Canada

Ownership 50% Cameco, 37% AREVA Resources, 8% Idemitsu Uranium Exploration Canada Ltd., 5% TEPCO Resources Inc.

Proven & probable reserves
226 million pounds U_3O_8
(Cameco's share 113 million pounds)

Average grade 20.7% U_3O_8

Mine life 15 years

Employment
Up to 500 during construction,
250 when fully operational

Rabbit Lake Operation

Location 700 kilometres north of Saskatoon, Saskatchewan, Canada

Ownership 100% Cameco

Annual milling capacity
12 million pounds U_3O_8

2008 production 3.6 million pounds U_3O_8

Proven & probable reserves
17.5 million pounds U_3O_8

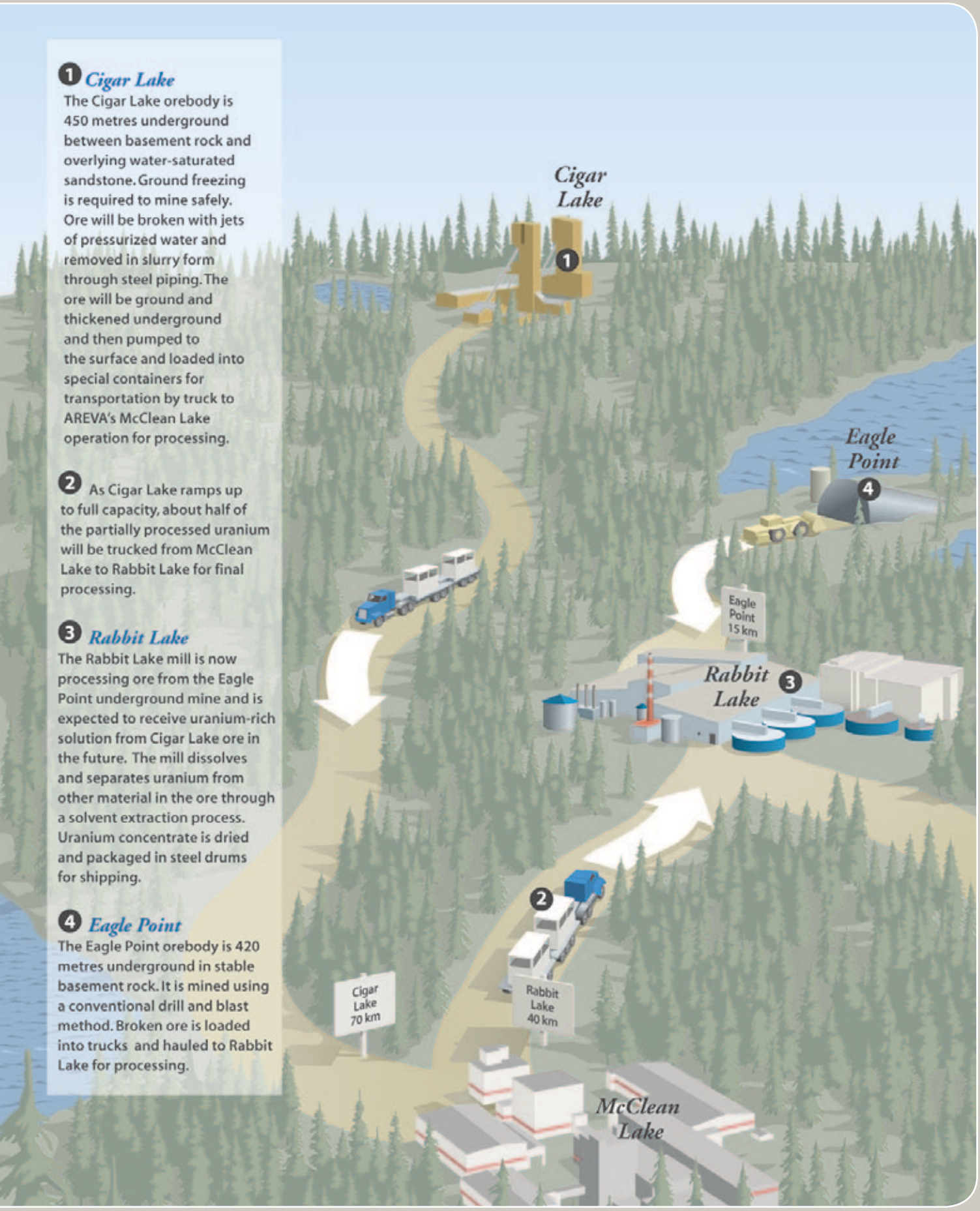
History Production began in 1975. Five orebodies have been mined at the site to produce more than 172.6 million pounds U_3O_8

Employment 305 Cameco employees, 445 long-term contract employees

Overview

Cigar Lake will employ an innovative jet boring mining method.

Cigar Lake is the world's second largest, high-grade uranium deposit. Cameco and its partners secured regulatory approval to construct a mine late in 2004. Water inflows in 2006 and 2008 have delayed construction progress and remediation work is proceeding to seal the identified inflow areas and dewater the mine before mine development work can resume. When it reaches full capacity, Cigar Lake will provide enough ore to produce 18 million pounds of U_3O_8 annually. Initially, Cigar Lake ore, in slurry form, will be loaded into containers and trucked 70 kilometres to AREVA's mill at McClean Lake for processing. As the mine ramps up to full capacity, slightly more than half of the processing will be completed at Cameco's Rabbit Lake mill, subject to regulatory approvals. Uranium-rich solution will be loaded into special containers and trucked 40 kilometres to Rabbit Lake for final processing and packaging. In the meantime, Cameco has extended the mine life of Eagle Point underground deposit by finding incremental reserves. Prospects have been identified and underground exploration work will continue during winter 2009 as part of Rabbit Lake's reserves replacement program. Cameco plans to renew facilities at the Rabbit Lake mill which began production in 1975. A revitalization assessment was initiated in 2007.


1 Cigar Lake
The Cigar Lake orebody is 450 metres underground between basement rock and overlying water-saturated sandstone. Ground freezing is required to mine safely. Ore will be broken with jets of pressurized water and removed in slurry form through steel piping. The ore will be ground and thickened underground and then pumped to the surface and loaded into special containers for transportation by truck to AREVA's McClean Lake operation for processing.
2 As Cigar Lake ramps up to full capacity, about half of the partially processed uranium will be trucked from McClean Lake to Rabbit Lake for final processing.
3 Rabbit Lake
The Rabbit Lake mill is now processing ore from the Eagle Point underground mine and is expected to receive uranium-rich solution from Cigar Lake ore in the future. The mill dissolves and separates uranium from other material in the ore through a solvent extraction process. Uranium concentrate is dried and packaged in steel drums for shipping.
4 Eagle Point
The Eagle Point orebody is 420 metres underground in stable basement rock. It is mined using a conventional drill and blast method. Broken ore is loaded into trucks and hauled to Rabbit Lake for processing.
Cigar Lake
1
Eagle Point
4
Eagle Point 15 km
Rabbit Lake
3
2
Cigar Lake 70 km
Rabbit Lake 40 km
McClean Lake

Cameco

Inkai

Providing diversity of supply

Inkai

Location Kazakhstan

Ownership 60% Cameco, 40% Kazatomprom

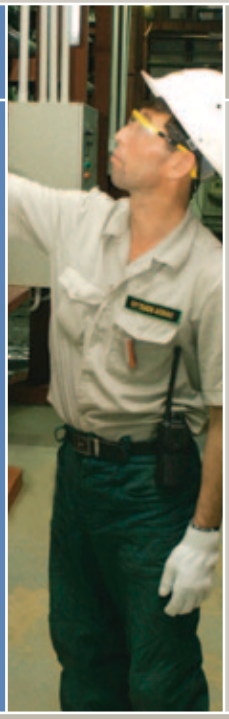
Proven & probable reserves
141.8 million pounds U_3O_8
(Cameco's share 85.1 million pounds)

Average grade 0.07% U_3O_8

Capacity 5.2 million pounds U_3O_8 annually by 2012
(Cameco's share 3.1 million pounds)

Expected mine life 17 years

Employment
350 - 400 during construction,
340 at full production



Overview

Inkai is an in situ recovery (ISR) uranium mining project under development in Kazakhstan. The project is owned and operated by Joint Venture Inkai (JVI), owned 60% by Cameco and 40% by the Kazakh government through Kazatomprom. Test mining at Inkai began in April 2002. The joint venture decided to proceed with construction of an ISR mine and mill in 2004 and doubled the original scale of the project. In 2005, the partners received regulatory approval to construct facilities with capacity to produce 5.2 million pounds of U_3O_8 annually. Construction is largely complete with the production facilities in commissioning stage. The project is expected to begin commercial production in 2009, ramping up to full production by 2012. A non-binding memorandum of understanding signed between Cameco and Kazatomprom in May 2007 provides for the doubling of future production capacity at Inkai, raising annual production capacity to 10.4 million pounds on a timeframe yet to be determined.

Mining

Inkai follows western safety, health and environmental standards.

Uranium mineralization at Inkai occurs in sandstone aquifers 400 to 500 metres below the surface. The uranium is recovered using the in situ recovery mining method which produces no waste rock or tailings and results in minimal disturbance to the surface and underground areas being mined. Using a grid of injection and production wells, an acid solution is circulated through the orebody to dissolve the uranium. Uranium-bearing solution is then pumped to a surface processing facility where the uranium is removed using a chemical process. When commercial production begins, the uranium will be processed, dried and packaged as yellowcake at the site.

The Inkai project is located in a remote part of south central Kazakhstan. The site is about 20 kilometres by road from the nearest village and 370 kilometres from the regional capital, Chimkent. Supplies and equipment are brought to the site by road. Inkai is essentially staffed by Kazakh nationals. Training and education opportunities are provided to ensure the safe and efficient operation of the mine. The operation follows western standards for worker safety and environmental protection. Cameco maintains a solid relationship with Kazakh authorities through the joint venture partnership and is familiar with the country's laws and procedures related to mining developments.

Cameco

Smith Ranch-Highland / Crow Butte

The largest US producer

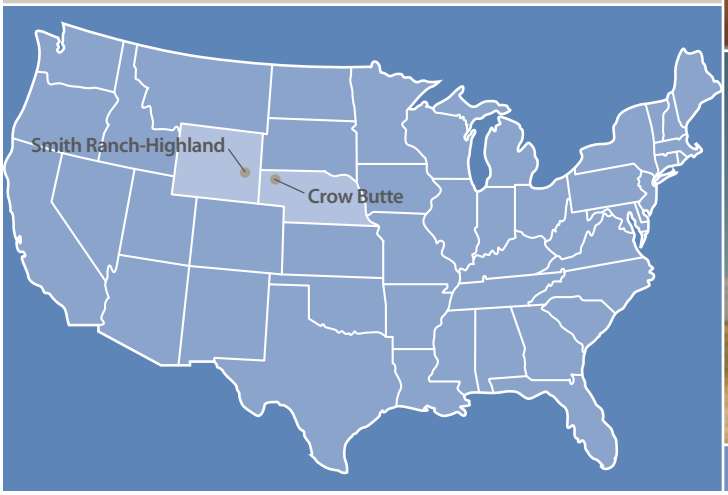
Overview

Cameco is the largest uranium producer in the US through its in situ recovery (ISR) mining operations in Wyoming and Nebraska. Smith Ranch-Highland and Crow Butte are 100% owned by Cameco. The Smith Ranch and Highland properties in Wyoming share a common border and are operated as a single facility. The Crow Butte operation is located near Crawford, Nebraska. Cameco is working to expand production at its US operations to 3.7 million pounds of U_3O_8 annually by 2013. These operations and related projects combined have more than 45 million pounds of proven and probable reserves plus additional resources and exploration potential.

Mining

Cameco's US operations employ the environment-friendly in situ recovery (ISR) mining method. The uranium at all three sites occurs in sandstone aquifers located up to 300 metres underground. It is extracted by pumping natural groundwater mixed with small amounts of oxygen and carbon dioxide into the ore zone to dissolve the uranium. Uranium-bearing solution is pumped to the surface and piped or trucked to processing plants where the uranium is recovered.

ISR mining produces no waste rock or tailings and results in minimal disturbance to the surface and underground areas being mined. It also minimizes workers' exposure to radiation. Water used in the process is recycled back into the operation.



Smith Ranch-Highland

Location 210 kilometres north of Cheyenne, Wyoming

Ownership 100% Cameco

Proven & probable reserves
6.4 million pounds U_3O_8

Average grade 0.12% U_3O_8

2008 production
1.2 million pounds U_3O_8

Milling Capacity
4.0 million pounds annually

Employment 120

Crow Butte

Location 460 kilometres northwest of Lincoln, Nebraska

Ownership 100% Cameco

Proven & probable reserves
5.0 million pounds U_3O_8

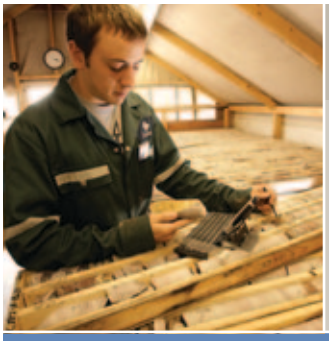
Average grade 0.15% U_3O_8

2008 production
0.6 million pounds U_3O_8

Milling capacity
1.0 million pounds annually

Employment 65

ISR mining method has minimal environmental impact.



Uranium Reserves

The following table shows the estimated uranium reserves as at December 31, 2008, on a property basis and Cameco's share.

Qualified Persons Scientific and technical information regarding Cameco's material uranium properties, including reserve estimates, was prepared under the supervision of the following qualified persons, all of whom are Cameco employees, except as otherwise indicated: (i) for McArthur River, Alain G. Mainville, director, mineral resources management; David Bronkhorst, general manager, McArthur River; Chuck Edwards, director, metallurgy, AMEC; and Greg Murdock, technical superintendent, McArthur River; and (ii) for Cigar Lake, Alain G. Mainville, director, mineral resources management; C. Scott Bishop, chief mine engineer, Cigar Lake; Chuck Edwards, director, metallurgy, AMEC; Doug McIlveen, chief geologist, Cigar Lake; and Grant J. H. Goddard, general manager, Cigar Lake

*(tonnes in thousands; pounds in millions)

RESERVES	PROVEN (100% basis)			PROBABLE (100% basis)			TOTAL RESERVES (100% basis)					
Property	Tonnes	Grade % U_3O_8	Content (lbs U_3O_8)	Tonnes	Grade % U_3O_8	Content (lbs U_3O_8)	Tonnes	GRADE % U_3O_8	Content (lbs U_3O_8)	Cameco's Share (lbs U_3O_8)	Estimated Metallurgical Recovery %	Mining Method
Cigar Lake	497.0	20.67	226.3	–	–	–	497.0	20.67	226.3	113.2	98.5%	UG
Crow Butte	780.2	0.13	2.2	703.2	0.18	2.8	1,483.4	0.15	5.0	5.0	85.0%	ISR
Gas Hills – Peach	–	–	–	6,859.0	0.13	19.7	6,859.0	0.13	19.7	19.7	65.0%	ISR
Highland	246.6	0.14	0.7	410.1	0.11	1.0	656.7	0.12	1.7	1.7	80.0%	ISR
Inkai	7,415.0	0.08	13.7	86,080.0	0.07	128.1	93,495.0	0.07	141.8	85.1	80.0%	ISR
Key Lake	61.9	0.52	0.7	–	–	–	61.9	0.52	0.7	0.6	98.7%	OP
McArthur River	449.2	17.18	170.1	280.0	26.33	162.5	729.2	20.69	332.6	232.2	98.7%	UG
North Butte/ Brown Ranch	–	–	–	3,879.1	0.10	8.5	3,879.1	0.10	8.5	8.5	80.0%	ISR
Rabbit Lake	35.8	0.99	0.8	776.8	0.98	16.7	812.6	0.98	17.5	17.5	96.7%	UG
Reynolds Ranch	–	–	–	757.9	0.08	1.3	757.9	0.08	1.3	1.3	80.0%	ISR
Ruby Ranch	–	–	–	2,066.5	0.08	3.8	2,066.5	0.08	3.8	3.8	80.0%	ISR
Ruth	–	–	–	855.1	0.09	1.7	855.1	0.09	1.7	1.7	80.0%	ISR
Smith Ranch	908.5	0.11	2.3	1,006.6	0.11	2.4	1,915.1	0.11	4.7	4.7	80.0%	ISR
Total	**10,394.2**	**–**	**416.8**	**103,674.3**	**–**	**348.5**	**114,068.5**	**–**	**765.3**	**495.0**	**–**	–

Notes:

1. Cameco reports mineral reserves and mineral resources separately.
2. Estimated metallurgical recovery factors must be applied in order to obtain the expected amounts of recovered pounds U_3O_8. Cameco's share of U_3O_8 content does not include the estimated metallurgical recovery factor.
3. Mineral reserves incorporate allowances for dilution and mining losses.
4. Mining method: OP – Open Pit; UG – Underground; ISR – In situ recovery.
5. Mineral reserves are estimated using current geological models and current and/or projected operating costs and mine plans. Cameco's data verification procedures have been employed in connection with the mineral reserve estimations for each property.
6. For the purpose of estimating mineral reserves in accordance with NI 43-101, an average uranium price of $47 (US)/lb U_3O_8 was used. For the purpose of estimating mineral reserves in accordance with US Securities Commission Industry Guide 7, an average uranium price of $70 (US)/lb U_3O_8 was used. Estimated mineral reserves are identical at either price.
7. The key economic parameters underlying the mineral reserves include an exchange rate of $1.00 US = $1.22 Cdn (reflecting the exchange rate at December 31, 2008).
8. Environmental, permitting, legal, title, taxation, socio-economic, political, marketing or other issues are not expected to materially affect the above estimates of mineral reserves.
9. Totals may not add up due to rounding.
10. Inkai mineral reserves assume production at an annual rate of 5.2 million pounds of U_3O_8. Inkai currently has regulatory approval to produce at an annual rate of 2.6 million pounds and an application for regulatory approval to increase annual production to 5.2 million pounds was made in 2005. Cameco is familiar with the statutory, regulatory and procedural framework governing new mining projects in Kazakhstan and, based upon its experience to date, Cameco believes that it is reasonably likely that all permits and approvals required for the construction and operation of its new ISR mine at Inkai – including approvals for increased annual production to 5.2 million pounds – will be obtained. However, there can be no certainty that permits or approvals will be forthcoming. Failure to obtain approval for increased annual production at Inkai will require Cameco to recategorize half of the mineral reserves at Inkai as mineral resources.

Forward-Looking Statements

Statements contained in this document, which are not current statements or historical facts are forward-looking information or statements which may be material and that involve risks, uncertainties and other factors that could cause actual results to differ materially. They represent management's views as of March 27, 2009 and should not be considered current as of any subsequent date. We specifically disclaim any obligation to update our views except to the extent required by applicable securities laws. This information is presented for the purpose of assisting Cameco's shareholders in understanding management's current views, and may not be appropriate for other purposes. It is subject to material risk factors that could cause actual results to differ materially, and is based upon a number of material assumptions which may prove to be incorrect. For example, our production target dates and estimates assume that forecast production levels can be achieved, and are subject to the risk of natural disasters or other occurrences delaying, reducing or suspending production. These and other risk factors and assumptions are discussed in detail in our current annual information form and most recent annual and quarterly MD&A, which you should read before making any decision to invest in Cameco.

Cameco

***NUCLEAR.** The Clean Air Energy.*

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