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ENERGY™

Sustainable Development of Uranium Production – Time Challenge

Alexander Boytsov – EVP, Exploration

June, 2012 - ATOMEXPO

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Cautionary Statement

Readers are advised to refer to independent technical reports containing detailed information with respect to the material properties of Uranium One. These technical reports are available under the profile of Uranium One Inc. at www.sedar.com and provide the date of each resource or reserve estimate, details of the key assumptions, methods and parameters used in the estimates, details of quantity and grade or quality of each resource or reserve and a general discussion of the extent to which the estimate may be materially affected by any known environmental, permitting, legal, taxation, socio-political, marketing, or other relevant issues. The technical reports also provide information with respect to data verification in the estimation.

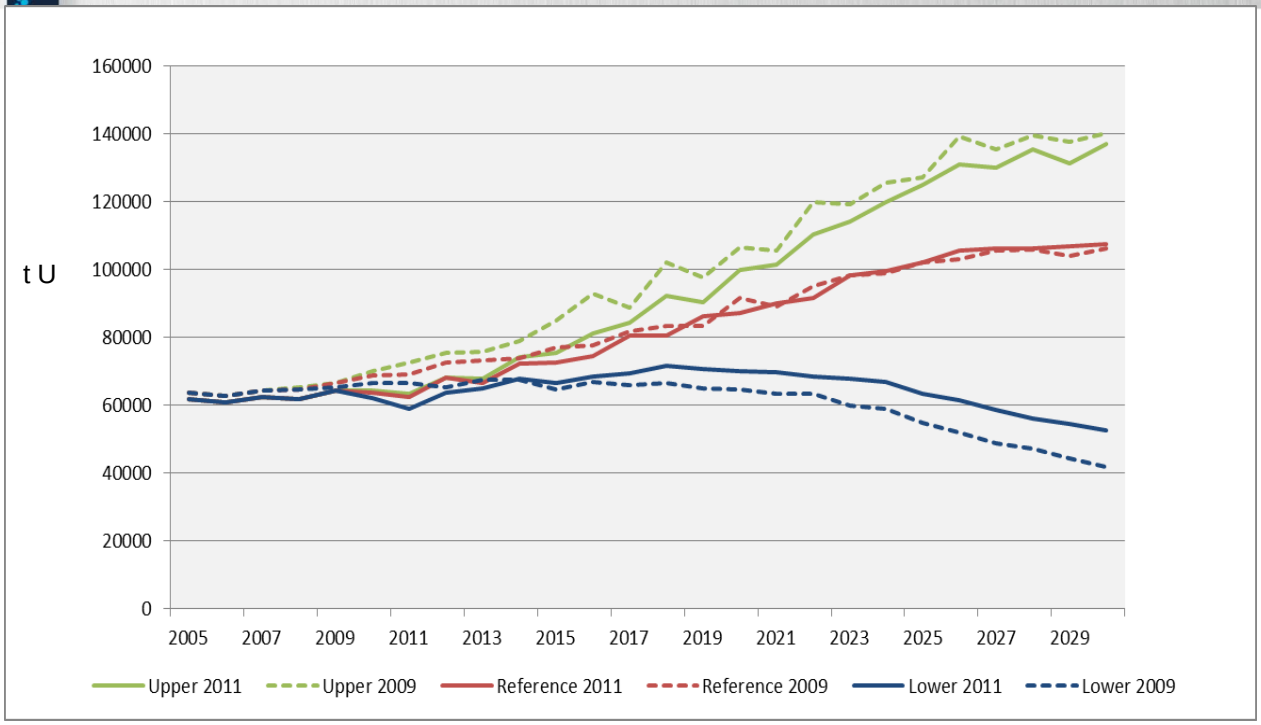
Scientific and technical information contained herein has been reviewed on behalf of Uranium One by Mr. M.H.G. Heyns, Pr.Sci.Nat. (SACNASP), MSAIMM, MGSSA, Senior Vice President of Uranium One Inc., a Qualified Person for the purposes of NI 43-101.

Certain of the statements herein are forward-looking statements. Forward-looking statements include but are not limited to those with respect to the price of uranium, the estimation of mineral resources and reserves, the realization of mineral reserve estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, costs of environmental compliance including reclamation expenses, title disputes or claims and limitations on insurance coverage and the timing and possible outcome of litigation or investigations. In certain cases, forward-looking statements can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes" or variations of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Uranium One to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the actual price of uranium, the actual results of current exploration activities, conclusions of economic evaluations, changes in project parameters as plans continue to be refined, possible variations in grade and ore densities or recovery rates, failure of plant, equipment or processes to operate as anticipated, accidents, labour disputes or other risks of the mining industry, delays in obtaining government approvals or financing or in completion of development or construction activities, risks relating to the completion or integration of acquisitions and to international operations, as well as those factors referred to in the section entitled "Risk Factors" in Uranium One's Annual Information Form for the year ended December 31, 2011, which is available at www.sedar.com, and which should be reviewed in conjunction with this document. Although Uranium One has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. Uranium One expressly disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except in accordance with applicable securities laws.

For further information about Uranium One, please visit www.uranium1.com.

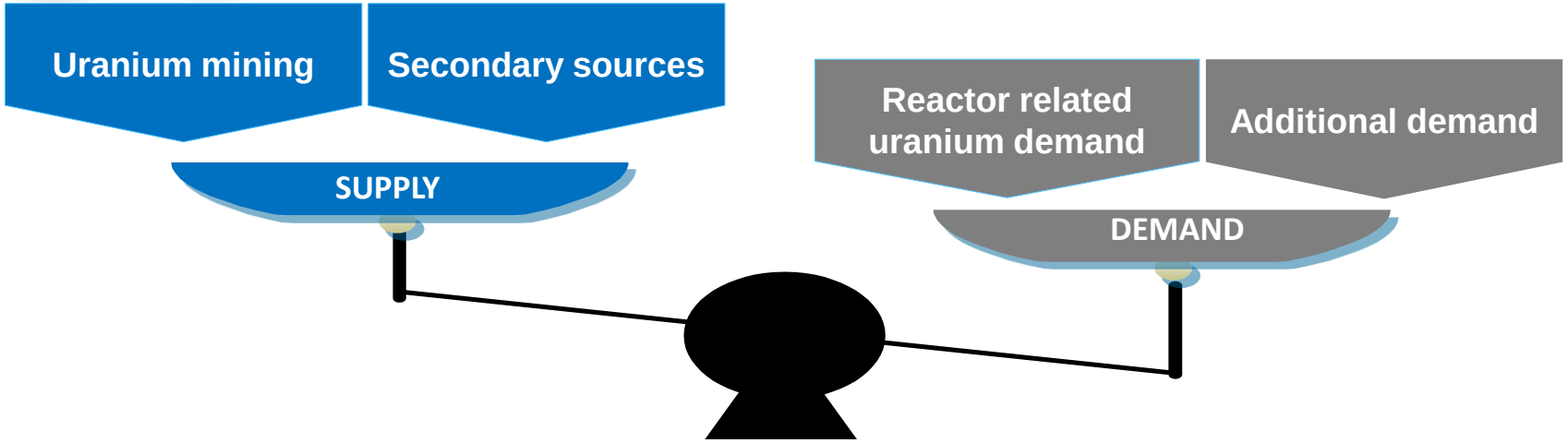
Uranium Industry/Market Overview

World Uranium Requirements, (WNA 2011 Nuclear Fuel Market Report)



- **Despite Fukushima accident the prospects for new worldwide reactors construction continue to be strong.**
- **In the reference scenario, world reactor-related uranium requirements will grow from 64 ktU in 2010 to 108 ktU in 2030, an increase of nearly 70%.**

Uranium demand and supply sources



Main factors of demand/supply relationship

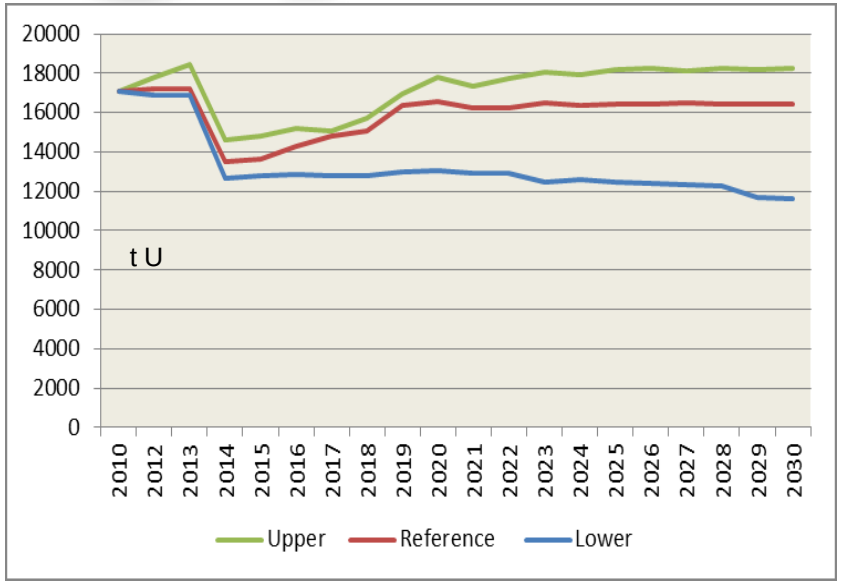
- Favorable uranium prices
- Sufficient and low cost uranium resources
- Uranium production capacities

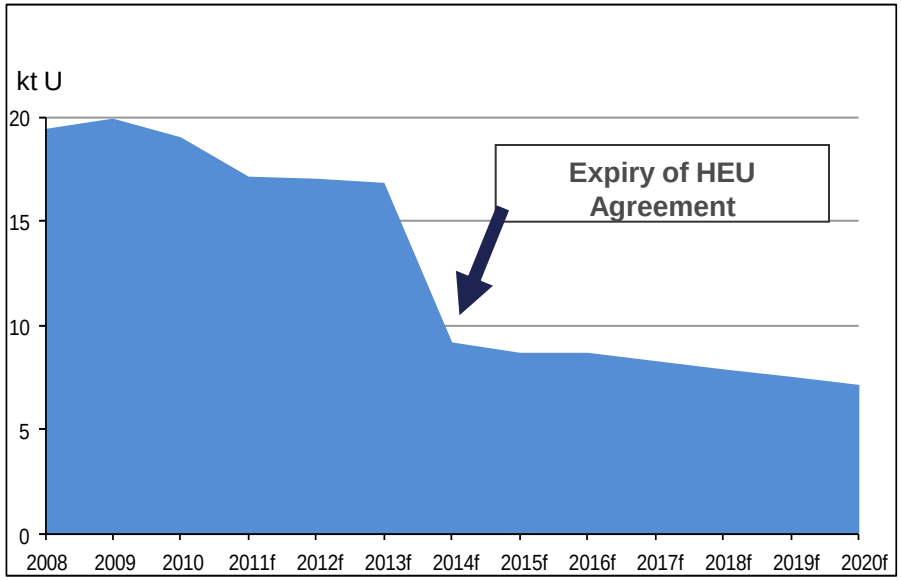
- HEU-LEU program
- Commercial and government inventories maintenance
- Policy in depleted U re-enrichment, spent fuel and HEU reprocessing

- Selection of tails assay
- Load factors
- Extending cycle length and enrichment levels
- Improved fuel design and management
- Increased burn up

- Uranium as a trading commodity (stocks trading)
- Inventories build

Secondary supplies



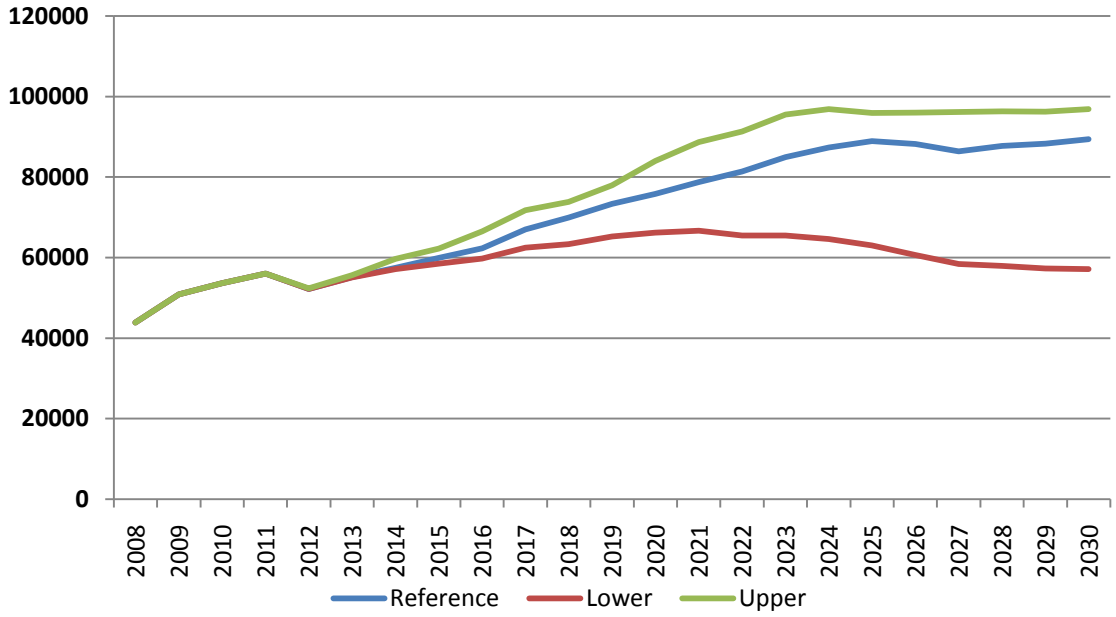


- **WNA 2011 Nuclear Fuel Market Report. Secondary U supplies decline from 17,000 tU in 2011 to 14,000 tU after 2013, but in 2019 will increase to about 16,000 tU.**

- **Ux Consulting Uranium Market Outlook Q1 2012. Secondary U supplies after HEU agreement expires will decline from 17,000 tU to 9,000 tU**

Anticipated uranium production through 2030

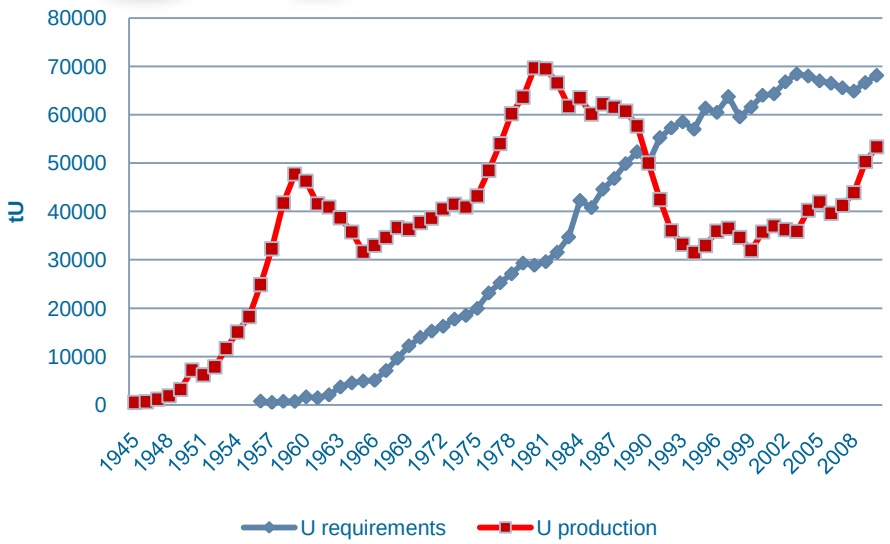
WNA scenarios for prospective uranium production, tU



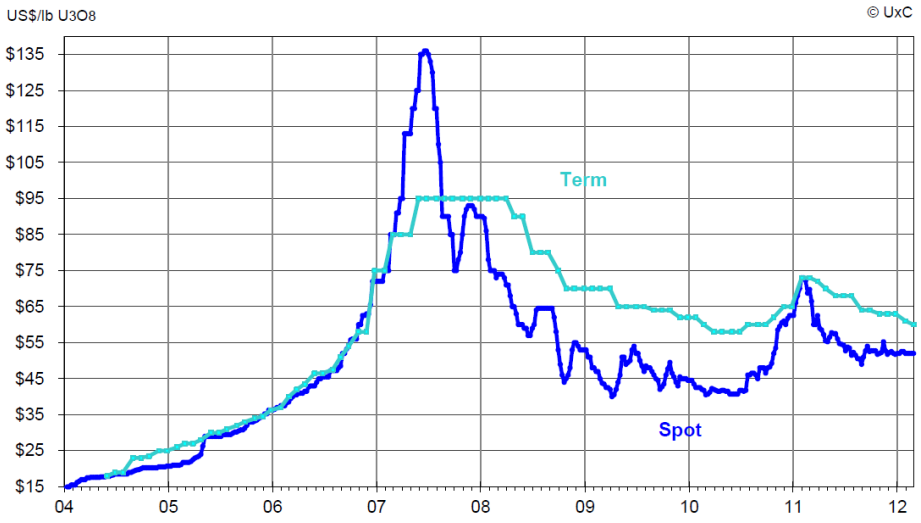
- **Reference production is expected to increase to 75,000 tU by 2020 and to 90,000 tU by 2030.**

Source: WNA 2011 Nuclear Fuel Market Report

Historical uranium supply and demand relationship



Source: IAEA/OECD Red Book, January 1, 2009



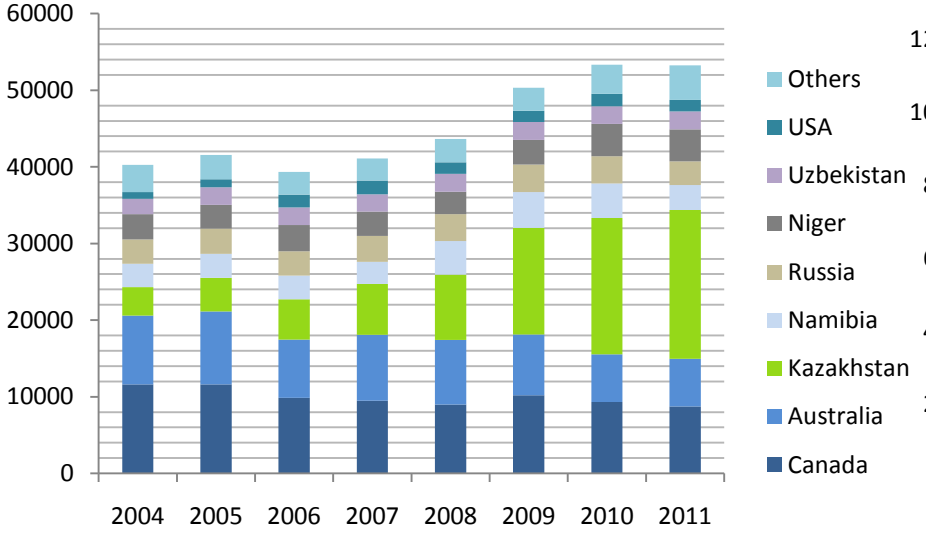
Source: UxC Uranium Market Outlook Q1 2012

Since 1945	Kt U
Produced	2 519
Consumed	1 978
Stockpiled	541

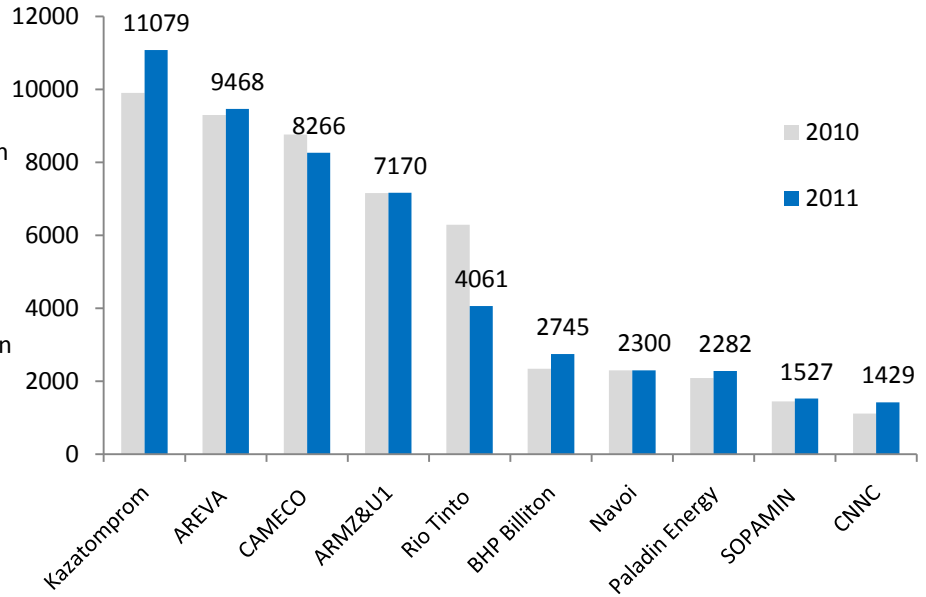
Production was substantially ahead of reactor requirements until 1985, but has since fallen below. Since 1985, requirements have exceeded production by approximately 450,000 tU. The difference was covered by inventories and other secondary sources. Low uranium prices did not stimulate uranium production.

Recent world uranium production

2004-2011world uranium production by country, tU

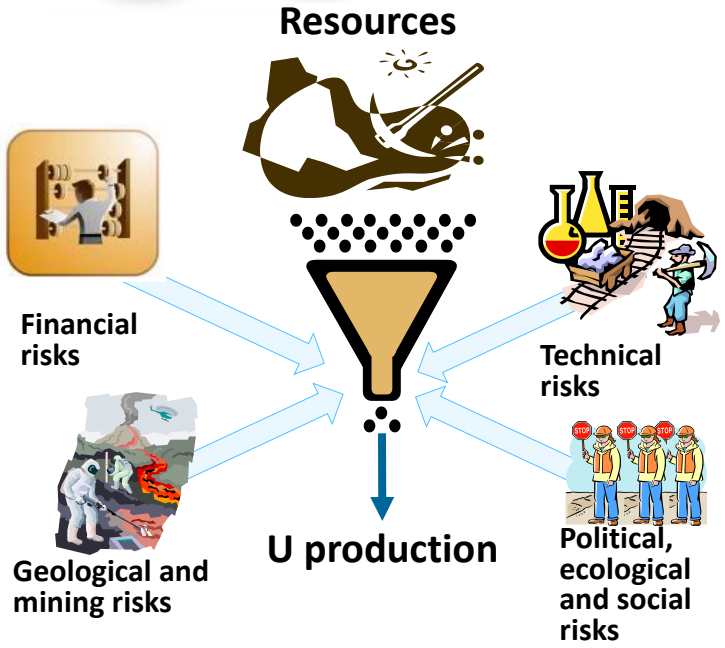


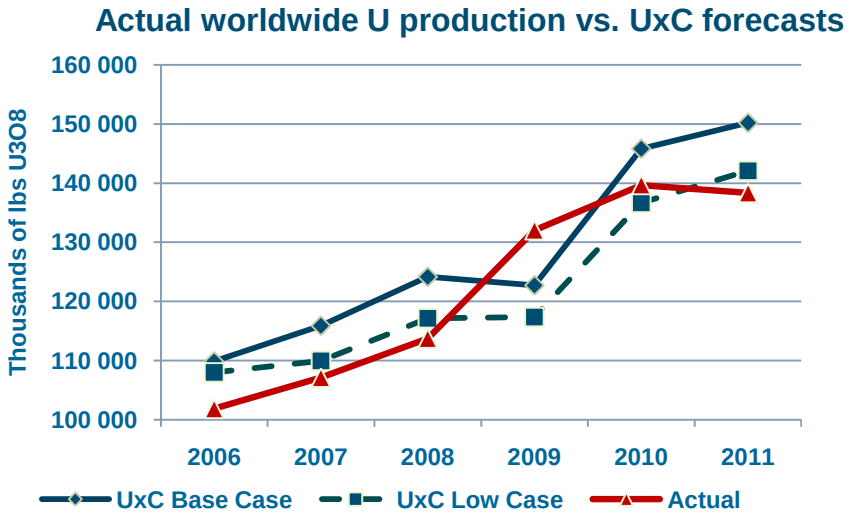
2010-2011 U production by leading companies, tU



- **World uranium production gradually expanded in 2006-2010, by 35%. In 2011 it reached 53,2 ktU – slightly lower than in 2010**
- **An estimated 70% of new global production this decade will come from Kazakhstan and Africa**
- **Kazakhstan targeted production for 2012 of just over 21,000 t U, an increase of 7% from 2011**
- **ARMZ – U1 alliance keeps fourth place in 2011 global uranium production rating**

Factors affecting uranium production





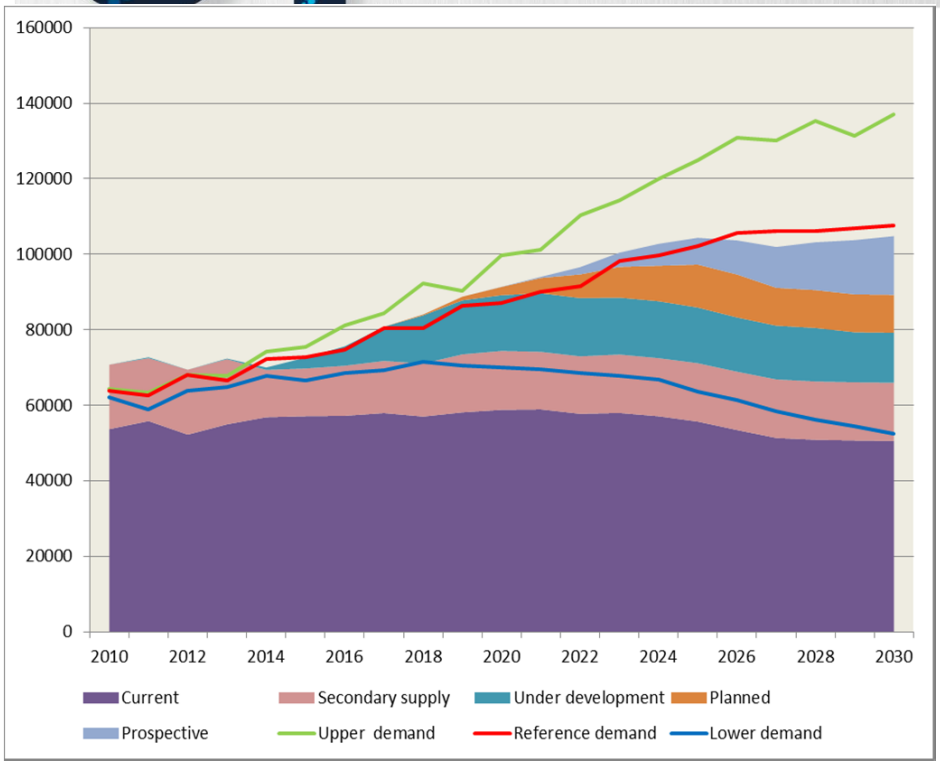
Actual production is often behind the forecasts:

- ❑ Fukushima accident
- ❑ Speculative announcements
- ❑ Low price – high production cost
- ❑ Technical problems
- ❑ Political, social and environmental factors

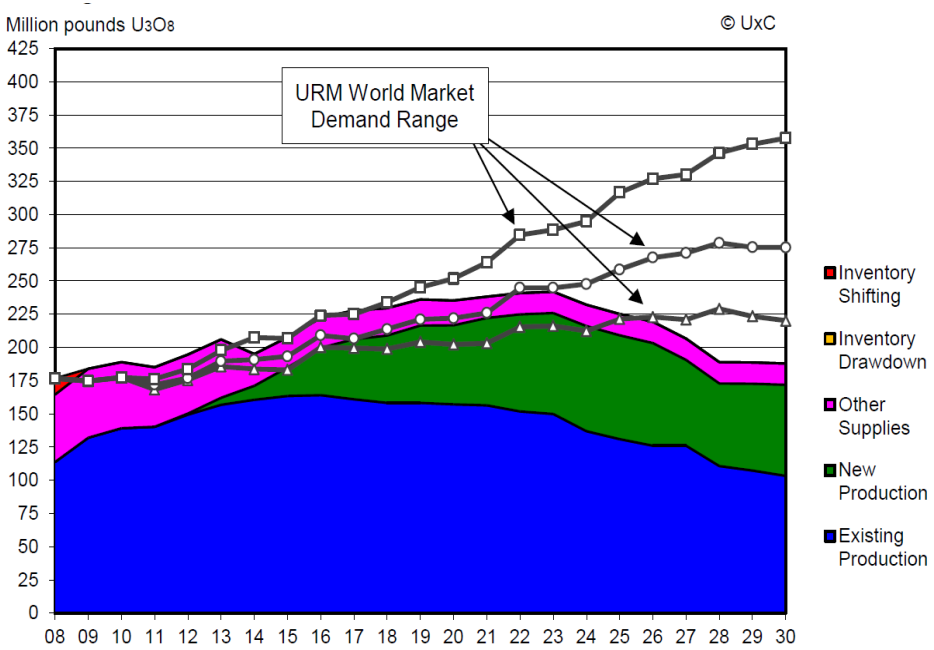
Deposit	Financial risks	Technical risks	Political, social risks
OD expansion	V		V
Cigar Lake	V	V	
Imouraren	V		V
Jabiluka			V
Elkon	V		

uraniumone investing in our energy

WNA / UxC reference case uranium supply demand



Source: WNA 2011 Nuclear Fuel Market Report

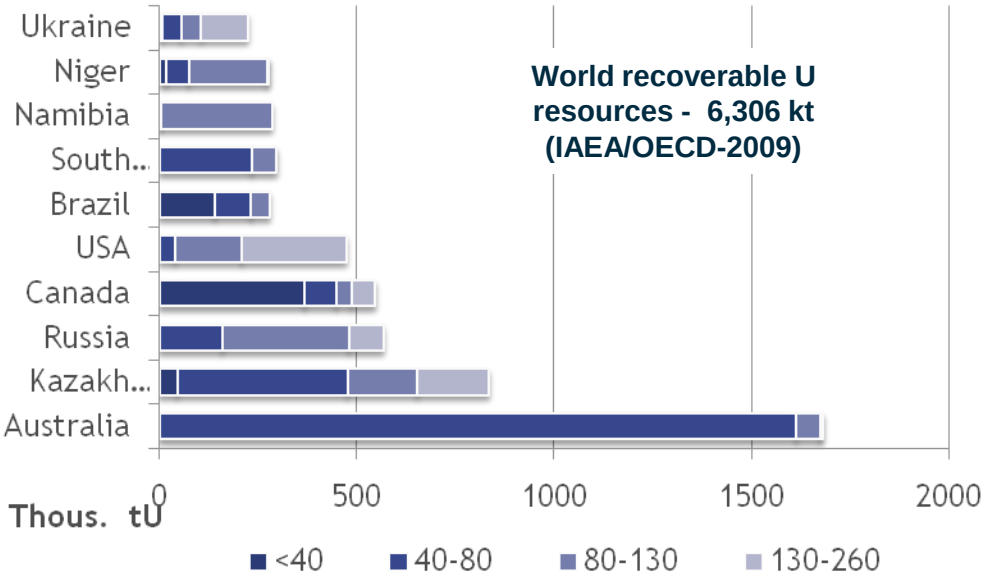


Source: UxC Uranium Market Outlook Q1 2012

- In 2010-2011 the market was over-supplied. Primary uranium mining and secondary sources produced 70,755 tU, compared with uranium requirements of 63,824 tU. The explanation is inventory building in China.
- Beyond 2011, demand and supply are expected to be very much in balance to 2025, with some small surpluses.
- After 2025 demand is expected to continue to rise, with uranium production not quite keeping up

World uranium resources

Known uranium resources by countries, ktU



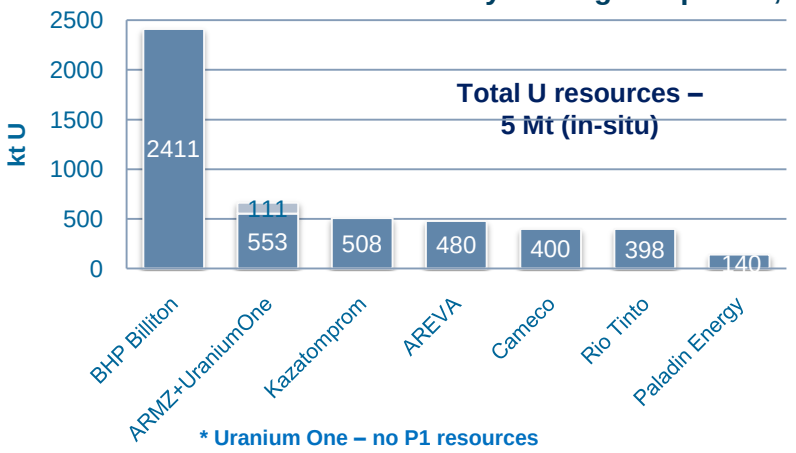
Recoverable Resources (ktU) by Cost range (USD/kgU)

Category	Cost ranges			
	<40$/kgU	<80$/kgU	<130$/kgU	<260$/kgU
Reasonably Assured Resources	570	2516	3524	4004
Inferred	226	1226	1879	2302
Total	796	3742	5403	6306

- IAEA/OECD Red Book January 1, 2009. Identified Resources at cost US$ <260/kgU (~US$ 100/lb U3O8) totalled 6,306 ktU.
- Identified uranium resources of the economically viable cost category of US$ < 80/kgU constitute 3,742 ktU (59 % of total).
- Australia amounted to 27% of total Identified Resources in 2009 (~1,700 ktU), followed by Kazakhstan (832 ktU, 13%), Russia (566 ktU, 9%).
- The identified uranium resources are adequate to meet projected future requirements. At the same time, the majority of the world's U resources are not delineated or developed.

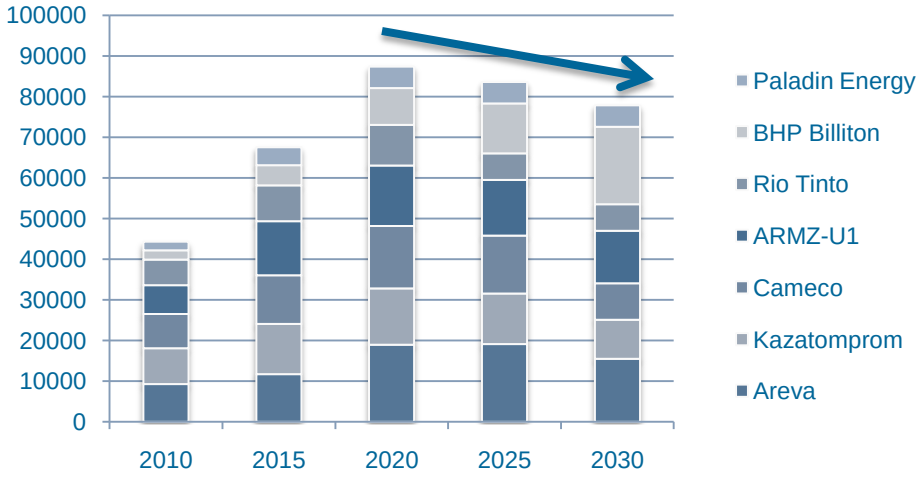
Uranium resources as a key factor for sustainable uranium production

2011 uranium resources by leading companies, ktU

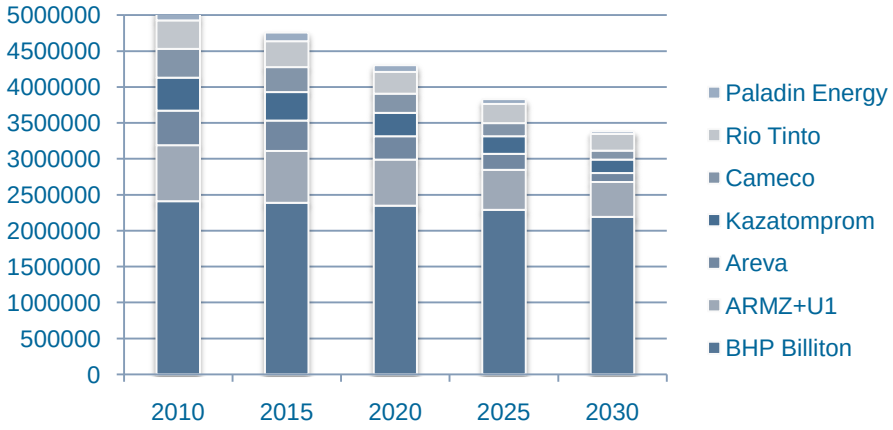


* Uranium One – no P1 resources

Uranium production forecast by leading companies, tU



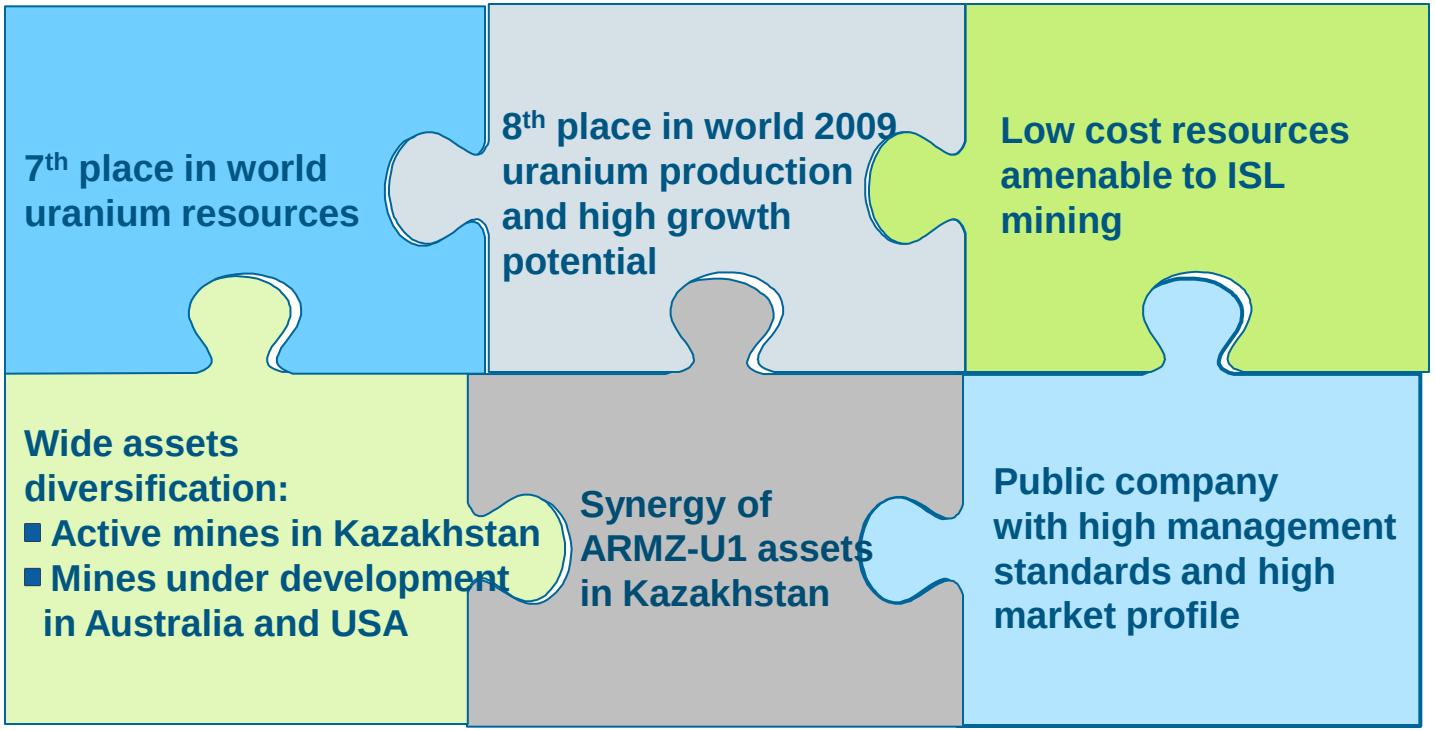
Depletion of U resources by leading companies, tU



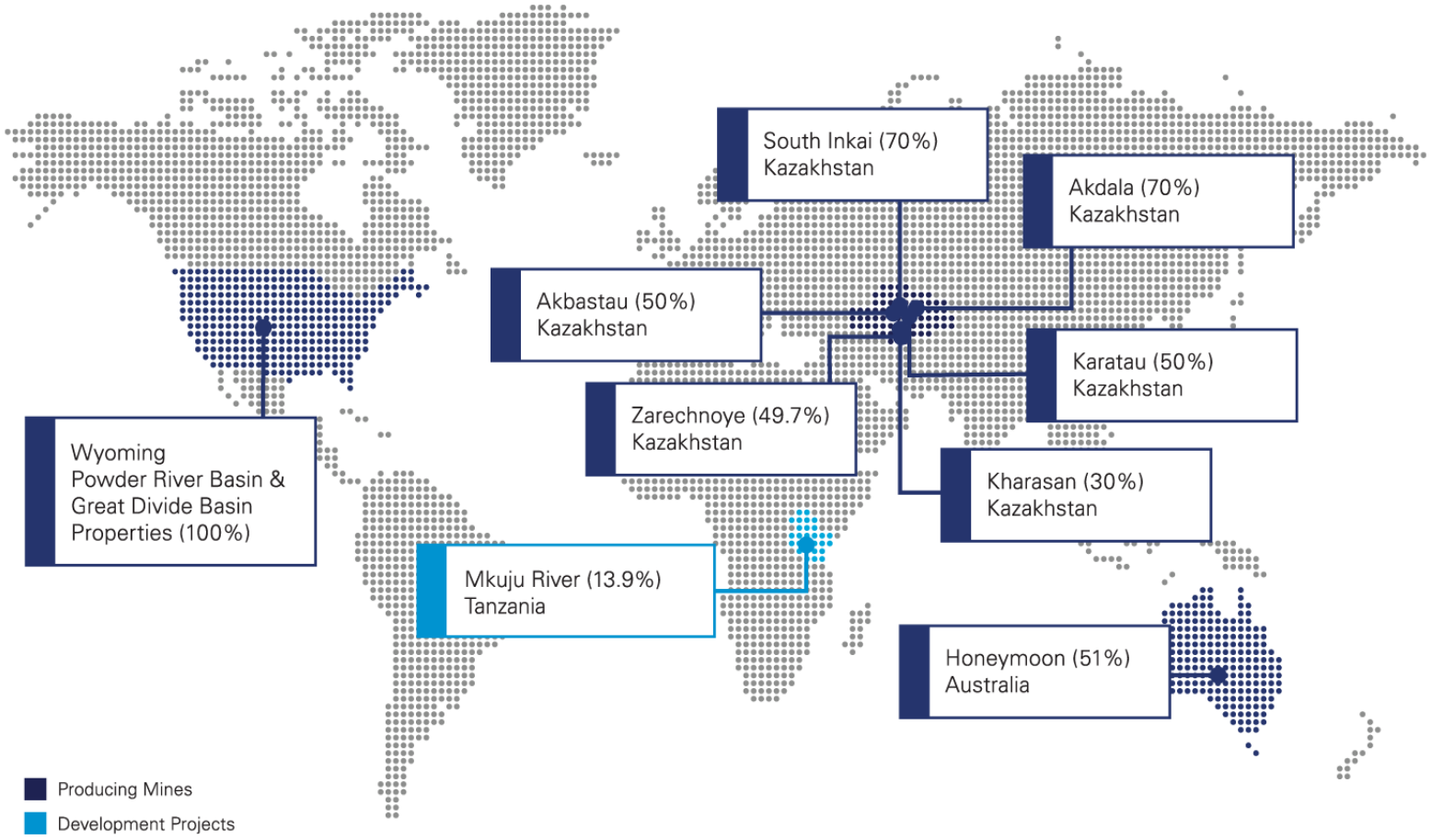
- **Aggregated U production in 2012 – 2030 estimated at 1,5 MtU, which is 24% of total resources and 40% of resources below US$80/kgU category**
- **U resources of primary uranium mines will be decreased by 2030 more than two fold, more than a half of the remaining U resources will be in the Olympic Dam (copper is main)**
- **After 2020, uranium market may face shortage of low cost U resources needed to maintain production.**
- **It is necessary to intensify uranium exploration aimed at discovery new low cost uranium resources.**

Overview of Uranium One

Why Uranium One became the base for ARMZ growth?



Uranium One Global Asset Base



Note: *Uranium One is also the Operator of the Mkuju River Project.*

Uranium One pipeline - from early exploration to advanced production

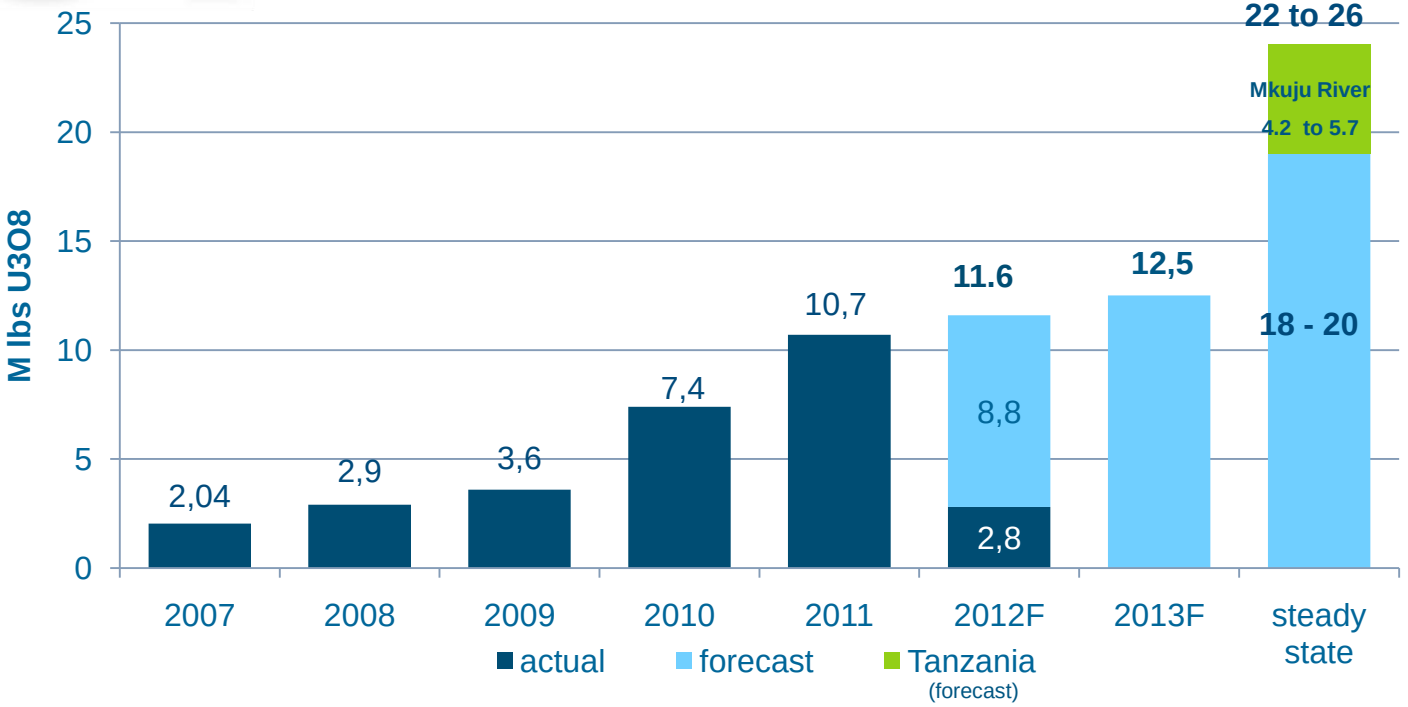
Exploration:
Kazakhstan, Tanzania, Mozambique

Feasibility study:
Tanzania

Development and construction:
Kazakhstan (Akbastau, Karatau), USA, Australia

Mining: Kazakhstan (Karatau, Akbastau, Zarechnoe, South Inkai, Akdala, Kharasan), USA (Powder River), Australia (Honeymoon)

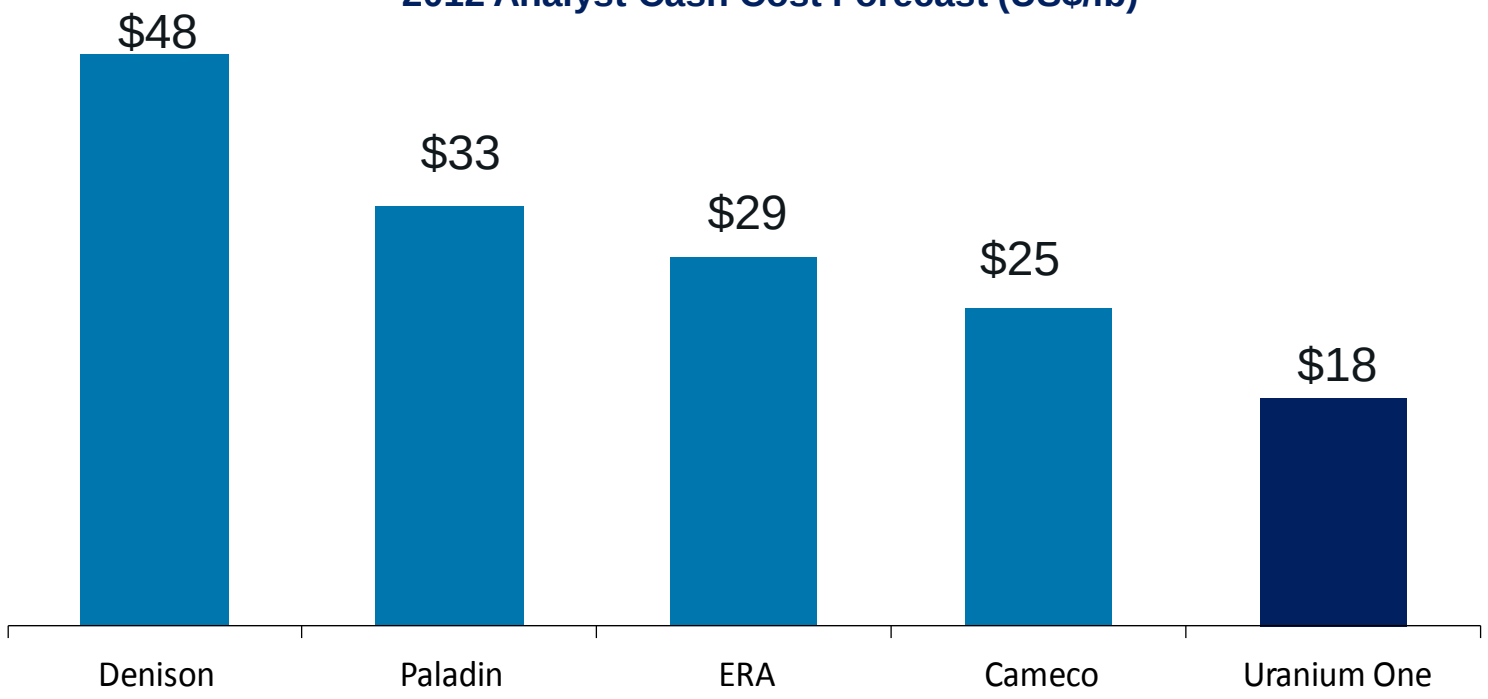
U Production Profile: history, status, forecast



- **Since 2007 attributable U output increased more than 5 fold and amounted 10.7 M lbs (4115 tU) in 2011 – 43% more than in 2010**
- **Q1 2012 production 2.8 M lbs – 18% higher than during Q1 2011**
- **Forecast to 2020: 22 to 26 M lbs (8.5-10 kt), including 18 to 20 M lbs from existing mines**

Uranium One is the Lowest Cost Producer

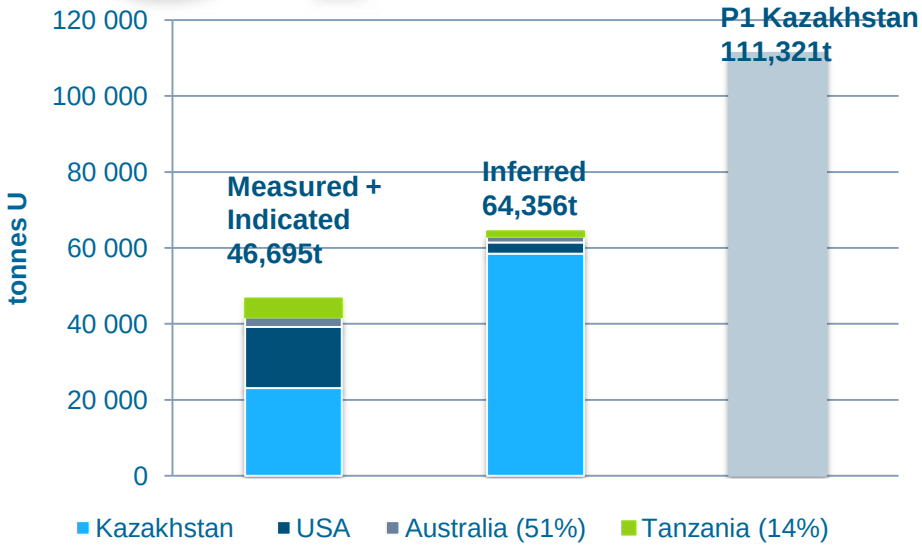
2012 Analyst Cash Cost Forecast (US$/lb)

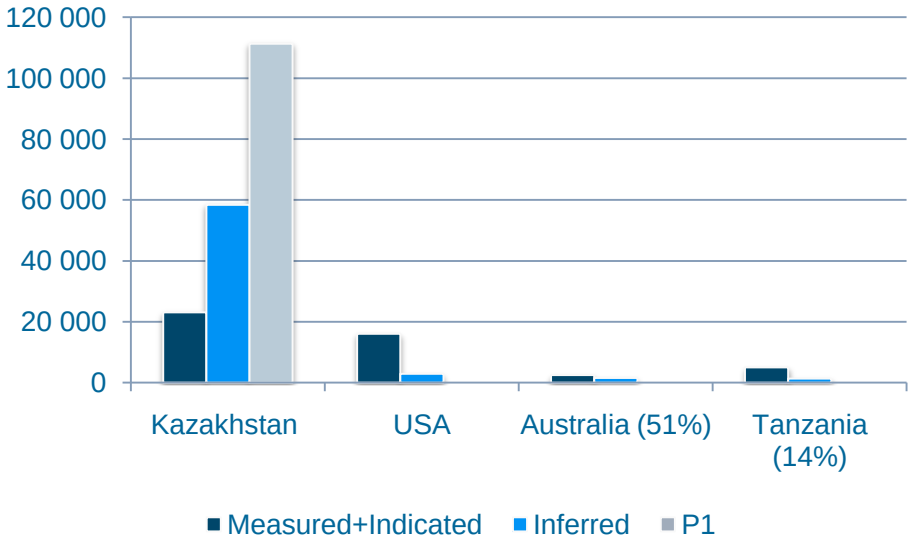


2011-2012 actual average total cash cost of $14 per pound - lowest in the industry

Note: Cash cost shows 2012 median street consensus estimates as of January 10, 2012

Uranium One attributable resources*



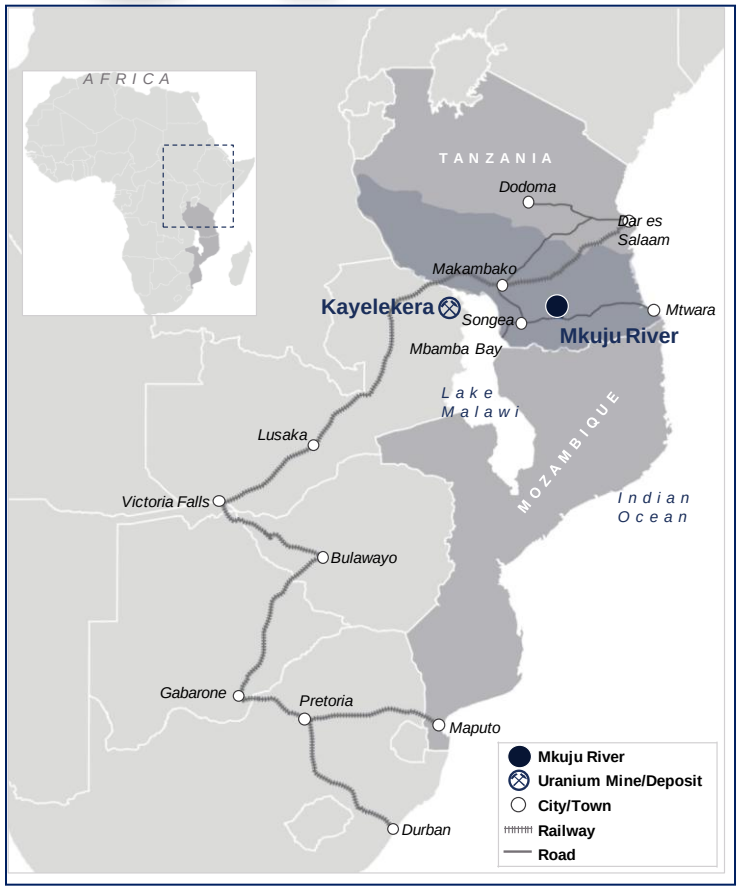


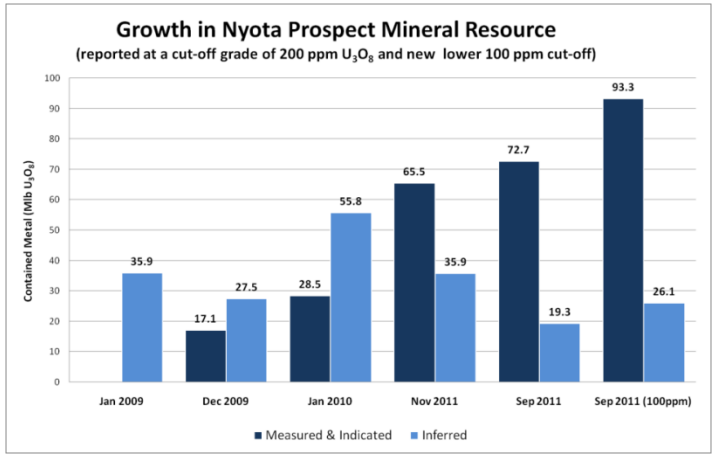
- **Resources in Kazakhstan, USA and Australia are for ISL mining, Tanzania – open pit mining**
- **Kazakhstan - 74% of total known resources plus 111kt of prognosticated P1 resources****
- **Significant exploration potential for new resources discovery in Australia and Tanzania**

** Represents the portion of total reserves and/or resources notionally attributable to Uranium One's equity interest in the joint venture through which the property is owned. For a detailed breakdown of Uranium One's attributable Mineral Resources, please see Appendix 1. All Mineral Resources are reported in accordance with CIM Standards, except as noted below. Also please see Notes 1-6 in Appendix 1.*

*** The CIS P1 resource category has no equivalent in the CIM Standards, but is generally comparable to exploration data and is considered conceptual or order of magnitude. P1 resource estimates are conceptual in nature and further exploration is required to determine if such mineralization can be classified as Mineral Resources under CIM Standards. In the past, P1 resources have been successfully converted into Mineral Resources. However, there can be no assurance that further exploration of Uranium One's properties will result in the above P1 resources being converted into Mineral Resources.*

Mkuju River Project (Tanzania)





87% of the Measured and Indicated resources are within 60 metres of surface, excellent exploration potential

Status

- U1 currently owns 13.9% and is the operator
- Option to acquire remaining 86% of Mantra Resources from ARMZ

Definitive Feasibility Study Update

- On track for completion by mid-2012
- Upside to Definitive Feasibility Study:
  - Potential to increase production beyond 4 M lbs
  - Growth via heap leaching being investigated

Searching for new opportunities worldwide

Identifying new exploration targets in Africa, Canada, South America, Australia, and other countries …

APPENDIX 1
Uranium One Attributable Mineral Resources*

Assets	Measured			Indicated			Measured & Indicated			Company Share	
	Tonnes 000's	Grade U_3O_8 %	lbs U_3O_8 000's	Tonnes 000's	Grade U_3O_8 %	lbs U_3O_8 000's	Tonnes 000's	Grade U_3O_8 %	lbs U_3O_8 000's	Ownership %	lbs U_3O_8 000's
Kazakhstan											
Akdala	33,230	0.011	7,753	628	0.075	1,037	33,858	0.012	8,791	70%	6,153
South Inkai	21,933	0.020	9,630	12,523	0.050	13,810	34,456	0.031	23,440	70%	16,408
Kharasan	2,000	0.193	8,600	10,800	0.091	21,700	12,800	0.107	30,300	30%	9,090
Karatau	10,650	0.052	12,100	9,342	0.089	18,300	19,992	0.069	30,400	50%	15,200
Zarechnoye	7,600	0.032	5,200	18,300	0.064	25,700	25,900	0.054	30,900	50%	15,348
Akbastau	3,494	0.056	4,300	11,194	0.126	31,000	14,692	0.109	35,400	50%	17,700
United States											
Moore Ranch	2,427	0.06	3,210	-		-	2,427	0.06	3,210	100%	3,210
Christensen Ranch	-		-	6,091	0.096	12,905	6,091	0.096	12,905	100%	12,905
Irigaray	-		-	3,516	0.076	5,899	3,516	0.076	5,899	100%	5,899
Peterson	763	0.097	1,624	208	0.086	393	971	0.095	2,017	100%	2,017
Barge	3,922	0.053	4,590	-		-	3,922	0.053	4,590	100%	4,590
Jab	1,133	0.063	1,561	220	0.077	371	1,352	0.065	1,932	100%	1,932
West Jab	328	0.115	830	109	0.059	143	437	0.101	973	100%	973
Jab RD	1,167	0.061	1,570	-		-	1,167	0.061	1,570	100%	1,570
Red Rim	-		-	305	0.169	1,142	305	0.169	1,142	100%	1,142
Allemand-Ross	223	0.085	417	29	0.066	42	252	0.083	459	100%	459
South Sweetwater	151	0.065	217	33	0.091	66	184	0.07	283	100%	283
New Velvet	329	0.271	1,966	-		-	329	0.271	1,966	100%	1,966
Old Velvet	-		-	56	0.41	509	56	0.41	509	100%	509
Wood	-		-	341	0.281	2,113	341	0.281	2,113	100%	2,113
Frank M	-		-	993	0.101	2,210	993	0.101	2,210	100%	2,210
Tanzania											
Mkuju River	80,300	0.031	55,298	59,300	0.029	38,001	139,600	0.03	93,300	14%	13,062
Australia											
Honeymoon				1,553	0.197	6,761	1,553	0.197	6,761	51%	3,448
Goulds Dam				1,700	0.12	4,409	1,700	0.12	4,409	51%	2,249
East Kalkaroo				2,639	0.088	5,129	2,639	0.088	5,129	51%	2,616
Total	169,649		118,836	139,884		191,665	309,533		310,502		142,915
Average		0.032			0.062			0.046			

Assets	Inferred			Company Share	
	Tonnes 000's	Grade U_3O_8 %	lbs U_3O_8 000's	Ownership %	lbs U_3O_8 000's
Kazakhstan					
Akdala	9,683	0.073	15,640	70%	10,948
South Inkai	42,845	0.047	44,450	70%	31,115
Kharasan	17,600	0.120	46,700	30%	14,101
Karatau	9,685	0.085	18,200	50%	9,100
Zarechnoye	11,600	0.055	14,300	50%	7,103
Akbastau	31,370	0.115	79,600	50%	39,800
United States					
Irigaray	94	0.068	141	100%	141
Jab	219	0.031	150	100%	150
West Jab	119	0.09	236	100%	236
Red Rim	428	0.163	1,539	100%	1,539
Allemand-Ross	1,156	0.098	2,496	100%	2,496
Clarkson Hill	684	0.062	940	100%	940
South Sweetwater	42	0.078	73	100%	73
New Velvet	158	0.174	604	100%	604
Wood	10	0.157	35	100%	35
Frank M	38	0.09	75	100%	75
Wate Breccia Pipe	53	0.076	886	100%	443
Findlay Tank	191	0.223	954	100%	954
Tanzania					
Mkuju River	42,500	0.028	26,104	14%	3,631
Australia					
Honeymoon	12,000	0.03	7,937	51%	4,048
Total	180,475		261,068		127,445
Average		0.066			

** Please see notes 1- 7 on slide 24.*

APPENDIX 1
Notes

Notes to slides 20 and 23:

(1) The above technical and scientific information is based on information compiled by "Qualified Persons" (as defined under National Instrument 43-101) and is also based on assumptions, qualifications and procedures which are set out in the following independent technical reports concerning Uranium One's material mineral properties which are available for review under Uranium One's profile at www.sedar.com:

- Akdala Mine: report titled "Technical Report on the Akdala Uranium Mine, Kazakhstan" dated February 17, 2012 prepared by Wayne W. Valliant, P.Geo and R. Dennis Bergen, P.Eng of Roscoe Postle Associates Inc. ("RPA") (the "Akdala Report");
- South Inkai Mine: report titled "Technical Report on the South Inkai Uranium Mine, Kazakhstan" dated March 12, 2012 , prepared by Wayne W. Valliant, P.Geo and R. Dennis Bergen, P.Eng of RPA (the "South Inkai Report");
- Karatau Mine: report titled "Technical Report on the Karatau Uranium Mine, Kazakhstan" dated March 1, 2012, prepared by Wayne W. Valliant, P.Geo and R. Dennis Bergen, P.Eng of RPA (the "Karatau Report");
- Akbastau Mine: report titled "Technical Report on the Akbastau Uranium Mine, Kazakhstan" dated March 1, 2012 , prepared by Wayne W. Valliant, P.Geo and R. Dennis Bergen, P.Eng of RPA (the "Akbastau Report");
- Zarechnoye Mine: report titled "Technical Report on the Zarechnoye Uranium Mine, Kazakhstan" dated February 27, 2012, which was prepared by Hrayr Agnerian, M.Sc.(Applied), P.Geo., and R. Dennis Bergen, P.Eng. of RPA (the "Zarechnoye Report"); and
- Kharasan Mine: report titled "Technical Report on the Kharasan Uranium Mine, Kazakhstan" dated February 14, 2012, which was prepared by Hrayr Agnerian, M.Sc.(Applied), P.Geo., and R. Dennis Bergen, P.Eng. of RPA (the "Kharasan Report").

(2) All Mineral Resources are reported in accordance with CIM Standards, except for P1 resources, which are not recognized as Mineral Resources.

(3) Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

(4) Mineral Resources are inclusive of Mineral Reserves.

(5) All Mineral Resource estimates are as at December 31, 2011 except for the Mineral Resource estimates for the Mkuju River Project which are as at September 27, 2011.

(6) Columns and rows may not add correctly due to rounding.

(7) Attributable resources represent the portion of total resources notionally attributable to Uranium One's equity interest in the joint venture through which the property is owned in the percentage indicated in the table on slide 23.