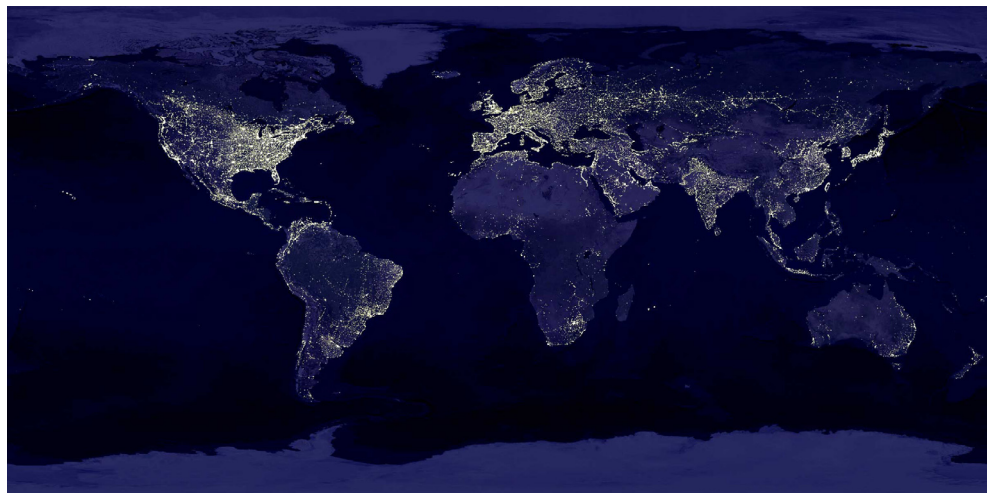


# Uranium Industry Report

June 5, 2008

## Dusting off the Nuclear Cycle

- ✿ **Uranium Demand is here to stay**, and will manifest as a technology-driven nuclear renaissance across a growing number of countries for generations to come. This renaissance has grown across Asia, Europe, Africa, as well as North and South America and is developing momentum through the expansion of the global reactor unit distribution (439 operating units, 36 under construction, 93 under planning, and a further 218 proposed). Furthermore, momentum has impacted ancillary markets where the supporting conversion, enrichment and fabrication sector has also begun capacity expansion and technology upgrades.
- ✿ **Uranium Supply**, however, even given the element's relative abundance in the Earth's crust, is finely balanced with demand. Future growth is at a bottleneck that has continued to narrow and lengthen due to infrastructural impediments, political and NGO engagement, and an over reliance on secondary source material. *So where and when will tomorrow's supply be born?*
- ✿ **2008 Primary Production Forecast:**            **113.5 million pounds U<sub>3</sub>O<sub>8</sub>**
- ✿ **Neoproducers will originate only from the USA in the next three years.** Existing infrastructure and the presence of a regulated permitting regime in the USA means that this nation will be the next across the globe to witness the entrance of new producing companies that employ ISR and small-scale conventional mining practices to extract uranium (and vanadium) in Wyoming, Texas, Colorado and Utah.



Source: NASA



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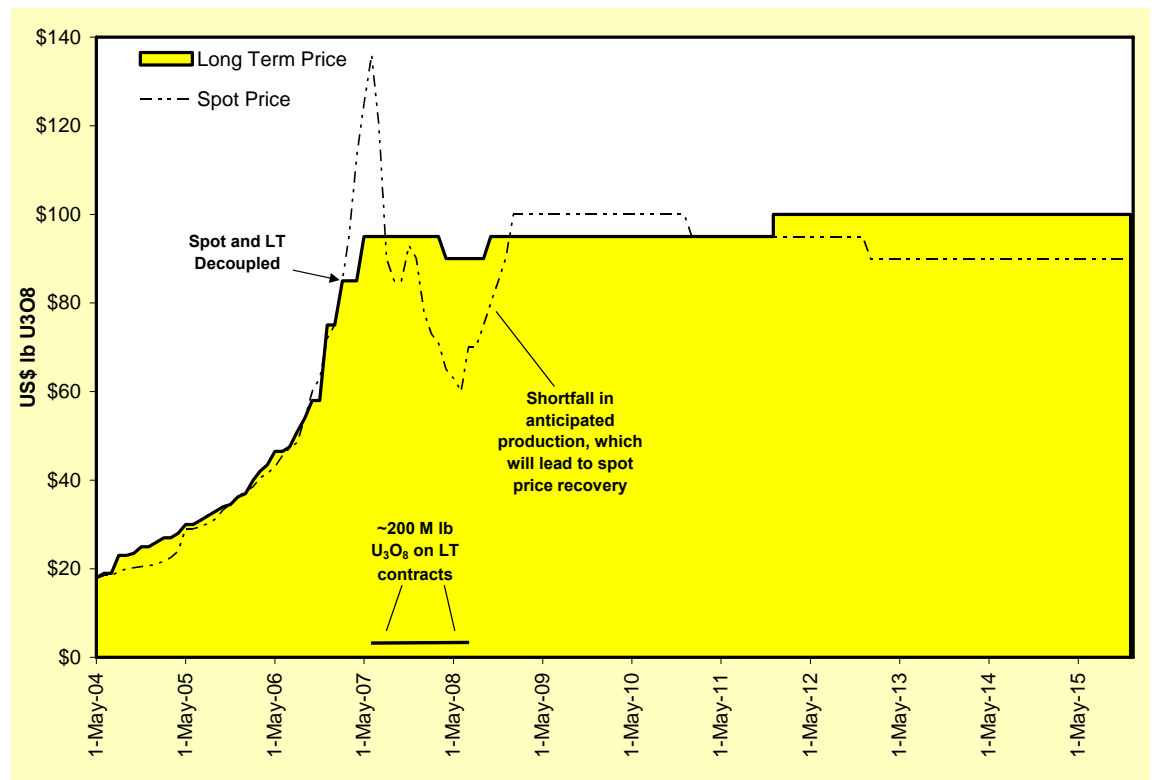


## Dusting off the Nuclear Cycle to Keep the Lights On!

**Uranium Demand is here to stay**, and will manifest as a technology-driven nuclear renaissance across a growing number of countries for generations to come. This renaissance has grown across Asia, Europe, Africa, as well as North and South America and is developing momentum through the expansion of the global reactor unit distribution (439 operating units, 36 under construction, 93 under planning, and a further 218 proposed). Furthermore, momentum has impacted ancillary markets where the supporting conversion, enrichment and fabrication sector has also begun capacity expansion and technology upgrades.

**Uranium Supply**, however, even given the element’s relative abundance in the Earth’s crust, is finely balanced with demand. Future growth is at a bottleneck that has continued to narrow and lengthen due to infrastructural impediments, political and NGO engagement, and an over reliance on secondary source material. *So where and when will tomorrow’s supply be born?*

**Exhibit 1: Historical (UxC) and forecast spot and long-term (LT) U<sub>3</sub>O<sub>8</sub> prices.**



Source: Haywood Securities, UxC.

Note above the price decoupling in early 2007, followed by the spot market price peak in June 2007, and subsequent atrophy thereafter.

Price (US\$)	2008	2009	2010	2011	2012	2013	2014	2015
per lb U <sub>3</sub> O <sub>8</sub>								
<b>Spot</b>	80	100	100	95	95	90	90	90
<b>Long Term Contract</b>	90	95	95	95	100	100	100	100

Source: Haywood Securities.



# URANIUM FACT SHEET

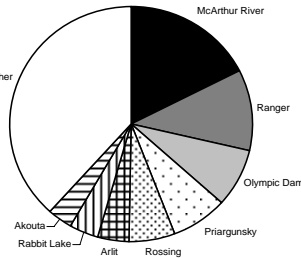
**Short Term** 1. Uranium Spot - Long Term Prices discord is unsustainable, especially given the historic relationship, look for recovery in spot price in H2/2008  
 2. 2008 Production guidance: ~113.5 million lb U<sub>3</sub>O<sub>8</sub>. Uranium production will continue to lag behind forecasts leading to a draw from the spot market.

## Current U<sub>3</sub>O<sub>8</sub> Pricing (\$US per pound)

SPOT Price (3rd June 2008): \$59.0  
 Long Term Price: \$90.0

### Top 8: 2007 Mining Operations

Projected 2008 Primary production (U<sub>3</sub>O<sub>8</sub>): 113.5 (million lb)  
 Source: Haywood Securities, WNA, UxC  
 2007 Uranium Production: 107.1  
 2007 Uranium Demand: 167.0

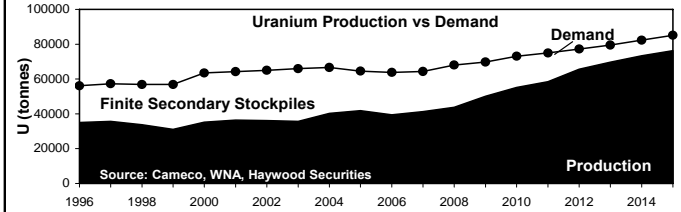
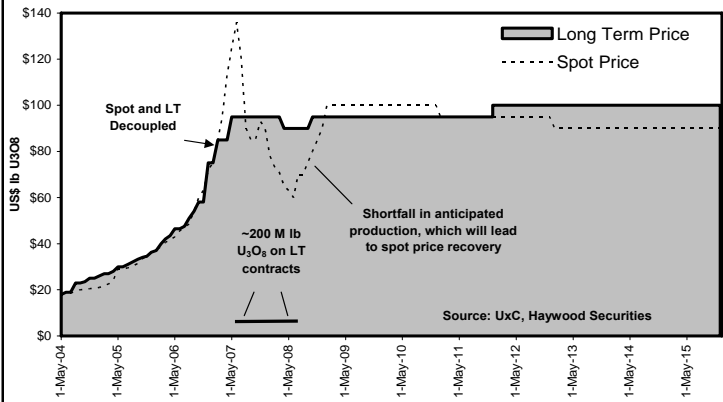


### Top Eight 2007 Uranium Producing Mines

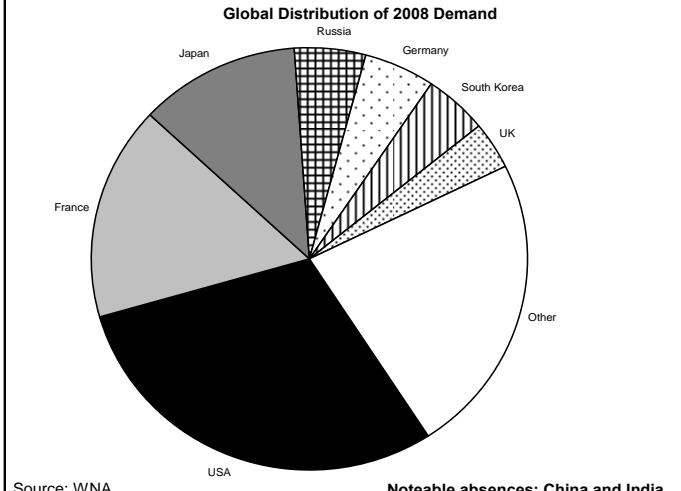
Mine	Country	Operator	Prod.
McArthur River	Canada	Cameco	18.7
Ranger	Australia	ERA	11.9
Olympic Dam	Australia	BHPBilliton	8.8
Priargunsky	Russia	TVEL	7.8
Rossing	Namibia	Rio Tinto	6.7
Arlit	Niger	AREVA	4.6
Rabbit Lake	Canada	Cameco	4.0
Akouta	Niger	AREVA	3.7
Other			41.0
Total (million lb U <sub>3</sub> O <sub>8</sub> )			107.1

## Takeaway Points on Global Uranium

- **Uranium Spot Price** will enjoy a recovery in H2'08
- **2008 Primary Uranium Production** is estimated at 113.5 million pounds U<sub>3</sub>O<sub>8</sub>
- **Uranium Fundamentals remain intact:**  
Demand is much greater than primary production, thus drawing from finite 'secondary' resources
- **Current production** is limited to few publicly listed companies  
Limited number of new, near-term producers will account for a comparatively small amount of additional future uranium production
- **Growth in primary production (2008-2015)** focused in producing countries  
Kazakhstan, Africa (Namibia), Canada, United States and Australia
- **Long term demand** will grow in both depth and breadth:  
Increasing number of planned and proposed nuclear reactors  
Demand growth is diversified across a growing number of countries



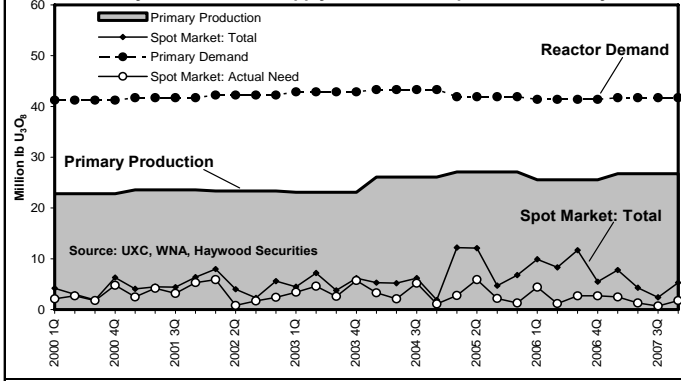
Forecast Uranium Production 2009-2015							
Total	2009e	2010e	2011e	2012e	2013e	2014e	2015e
M lb U <sub>3</sub> O <sub>8</sub>	133.1	143.0	151.9	170.3	180.8	190.3	197.8
Y-o-Y change	14.8%	7.5%	6.2%	12.2%	6.1%	5.3%	3.9%
<b>Australia</b>	24.8	24.8	24.8	24.8	22.8	22.8	22.8
<b>Canada</b>	25.1	23.1	21.8	25.2	26.8	35.3	39.8
<b>Kazakhstan</b>	24.7	29.7	33.2	37.8	39.8	44.9	46.2
<b>Africa</b>	22.6	27.0	30.1	39.6	44.2	44.2	45.5
<b>USA</b>	6.0	7.1	9.0	11.4	13.4	13.7	12.4
<b>Russia</b>	12.7	12.7	12.7	12.7	12.7	12.7	13.6
<b>Other</b>	15.9	18.5	20.3	18.7	21.0	16.7	17.4



Uranium Producers		Price \$/LOC	12 Month Perform.	Year High	Year Low	Market Cap. \$ CDN, million
ASX:BHP	BHP Billiton Ltd.	\$44.54	38%	\$50.00	\$30.91	\$253,251
ASX:RIO	Rio Tinto Ltd.	\$140.20	46%	\$157.45	\$79.35	\$179,944
FR:CEI	Areva SA	\$808.60	7%	\$831.54	\$580.00	\$43,741
TSX:CCO	Cameco Corp.	\$39.92	-29%	\$59.90	\$31.39	\$14,101
Primary Uranium Producers						
ASX:ERA	Energy Resources of Australia Ltd.	\$22.68	-2%	\$24.85	\$14.20	\$4,326
TSX:UUU	Uranium One Inc.	\$4.69	-72%	\$15.45	\$3.04	\$2,249
TSX:DML	Denison Mines Corp.	\$8.29	-41%	\$14.75	\$6.10	\$1,594
TSX:FIU	First Uranium Corporation	\$6.59	-45%	\$12.97	\$5.92	\$908
URRE	Uranium Resources, Inc.	\$4.43	-56%	\$14.99	\$4.06	\$236
Advanced Exploration/Development (Select Group)						
ASX:EON	Equinox Minerals Ltd.	\$4.63	24%	\$7.05	\$2.93	\$2,670
TSX:UEX	UEX Corp.	\$4.36	-37%	\$9.30	\$3.19	\$869
ASX:AGS	Alliance Resources Ltd.	\$1.44	-30%	\$2.17	\$0.61	\$375
TSX:FSY	Forsys Metals Corp.	\$4.21	-35%	\$7.88	\$2.07	\$345
TSX:AXU	Aurora Energy Resources Inc.	\$4.99	-72%	\$18.70	\$3.26	\$344
ASX:BMN	Bannerman Resources Limited	\$2.24	-25%	\$4.14	\$1.30	\$274
TSX:URE	UR-Energy Inc.	\$2.07	-53%	\$5.03	\$1.37	\$208
URZ	Uranerz Energy Corp.	\$3.13	-45%	\$6.54	\$1.98	\$146
TSXV:STM	Strathmore Minerals Corp.	\$1.55	-68%	\$5.01	\$1.33	\$125
TSXV:TVC	Tournigan Energy Ltd.	\$0.88	-78%	\$4.50	\$0.60	\$103
UEC	Uranium Energy Corp.	\$2.44	-49%	\$5.15	\$1.80	\$100
TSX:PWE	Powertech Uranium Corp.	\$1.41	-54%	\$3.30	\$0.83	\$67
TSXV:BRD	Bluerock Resources Ltd.	\$0.56	-2%	\$0.90	\$0.28	\$23

Uranium Investment Holding Company						
TSX:U	Uranium Participation Corp.	\$10.34	-36%	\$16.87	\$7.92	\$730

## Quarterly Uranium Data: Supply, Demand and Spot Market Activity



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## **Value in Uranium Sector in the short, medium and long term!**

**Short Term:** *low spot prices* (US\$59/lb) have negatively impacted uranium equity prices (Exhibit 1). Production shortfalls and renewed trading activity will lead to a rise in the spot price, which will reach equilibrium with the LT price (US\$90/lb) in 2-3 quarters time: equity valuations will follow suit.

**Medium Term:** *future supply has restricted output* that is impeded by infrastructural shortfalls across the entire mining sector. These impediments are compounded by political and NGO engagement, as well as a challenging regulatory environment that has culminated in protracted construction periods. Most of the production growth will be limited to current and historically producing regions or countries, e.g., Kazakhstan and Africa.

*New 'producer' companies in the next three years will originate only from the USA.*

**Long Term:** *public and political impetus* indicates that nuclear energy will be ensconced in tomorrow's energy basket across a growing number of countries planning to diversify baseload electricity capacity, and lower greenhouse gas (GHG) and atmospheric particulate matter emissions.

*Global Nuclear Energy Demand*, largely stemming from Asia, is increasing, and will lead to a rejuvenated, long term demand, and sustained LT U<sub>3</sub>O<sub>8</sub> prices. History shows that nuclear energy generates step-changes in domestic electricity capacity.

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## **Putting Uranium Price on the Spot: three takeaway points**

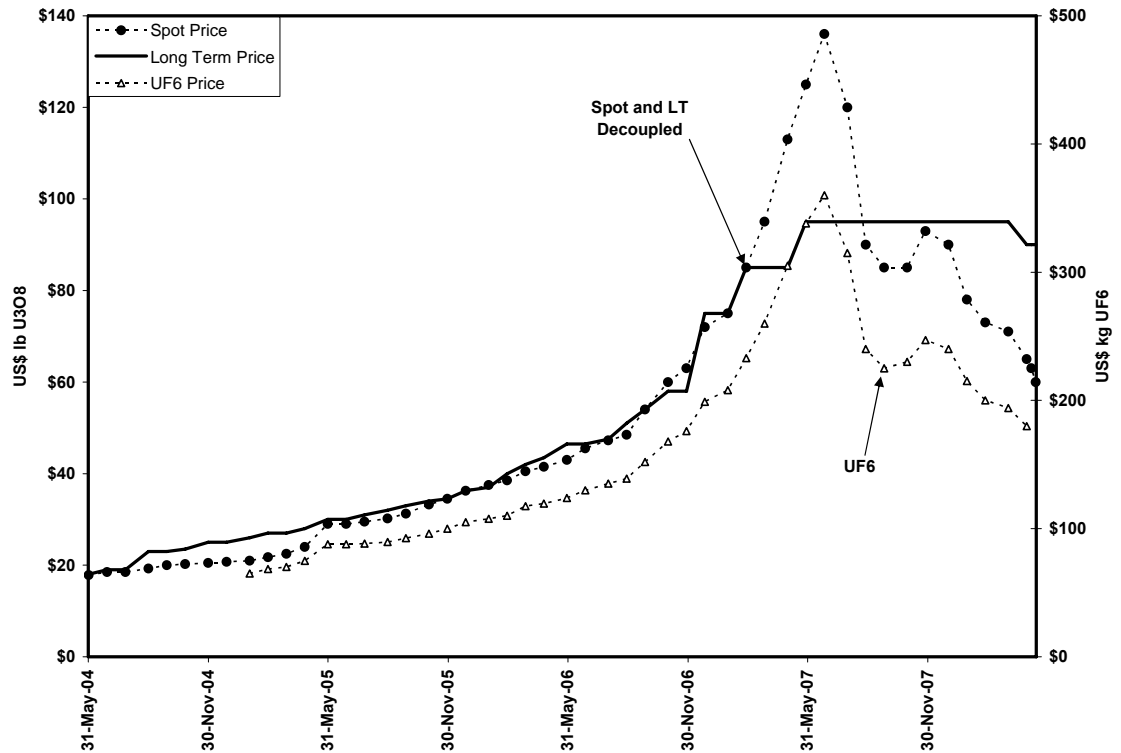
### **1. A discord between the spot and LT uranium prices?**

Since the publication of the LT price by UxC in 2004, the spot and LT prices have shared the same upward trajectory until early 2007. The two pricing paths have evolved of late, and had a 'Robert Frost' moment, walking their own paths (see Exhibits 1 & 2) and have crossed paths infrequently since. Spot price evaluations have exhibited pronounced volatility related to the comparative thinness of the market making it highly sensitive to potential/anticipated production shortfalls (e.g., production delays), market flooding (e.g., dumping of U<sub>3</sub>O<sub>8e</sub> onto the market), and buyer apathy: the latter of which is drawing down the spot price currently. The current spot price is becoming uncomfortably close to actual production costs, and as such is uneconomic and unsustainable for the industry as a whole. A return to the current LT pricing level is more tenable. During the period of unprecedented spot price volatility the LT price has enjoyed relative quiescence with markedly little variation in valuation despite ~200 million pounds of U<sub>3</sub>O<sub>8e</sub> being transacted (>5x spot market mass) over the last year. Something has to give and the stilted mine output reported in Q1/08 production data from virtually all producers is the initial sign for a greater draw on the spot market and elevation in price to the LT marker in H2/08.

**H2/08 will see rejuvenation of the spot price: \$59 is a buying opportunity!**



Exhibit 2: Decoupling between the Spot and LT U<sub>3</sub>O<sub>8</sub> prices.



Source: UxC data.

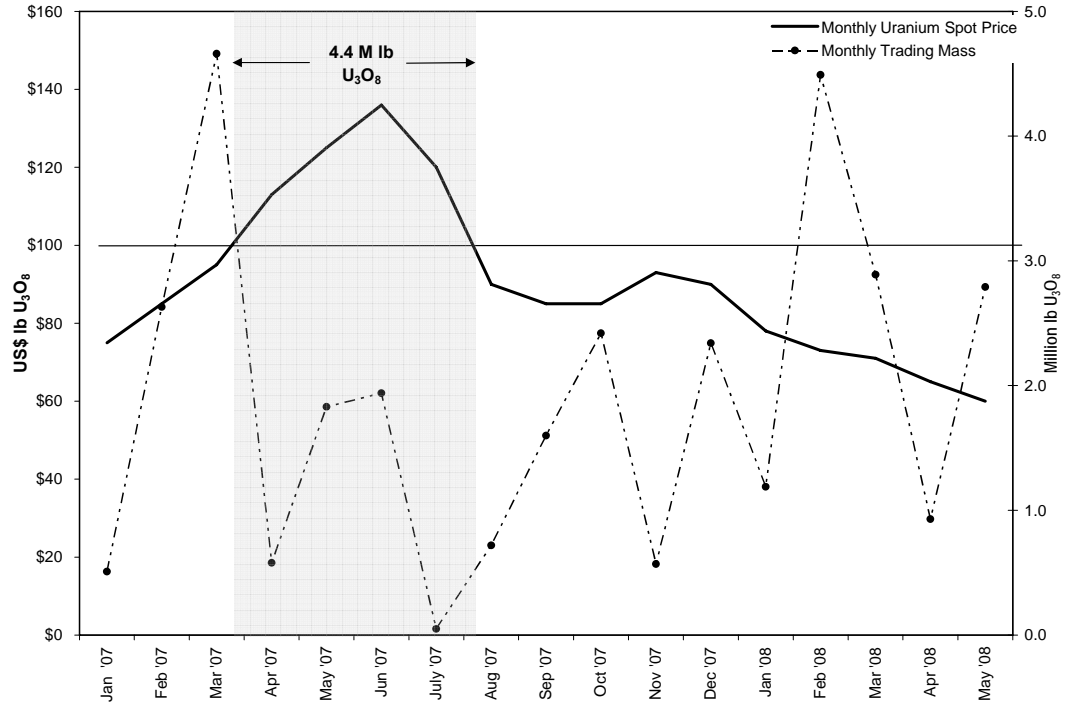
## 2. Upward pressure on the Spot price: history predicts the future

The spot and LT prices diverged in early 2007 to take on different paths, where for a short period the spot price was ~50% greater than the LT price. Presently the LT price is ~50% greater than the spot price. Neither of these scenarios provides stability for the market long term, for either producers or utilities. There needs to be a return to a state of equilibrium, with the spot price moving toward the LT price. Much has been made of the heady heights and more recent lows entertained by the spot price, however, little is actually discussed about the mass of material transacted around that price, which albeit incorrect, is the commonly employed indicator for market valuation. Further examination is particularly pertinent for the price peak in 2007 (Exhibit 3), which when put into context by examining the broader peak shows that the monthly price was at or above US\$100 between April and July 2007. During this period, ~4.4 million pounds U<sub>3</sub>O<sub>8</sub>, or ~2.6 % of the 2007 world demand was transacted, with a third bought by utilities. Thus, a more reasonable analysis is that the LT price during that period was a more accurate representation of the market and provides a foundation for current prices despite the relatively depressed level of the spot price.

**Unwieldy price fluctuations need to be tempered by spot market volume expansion!**



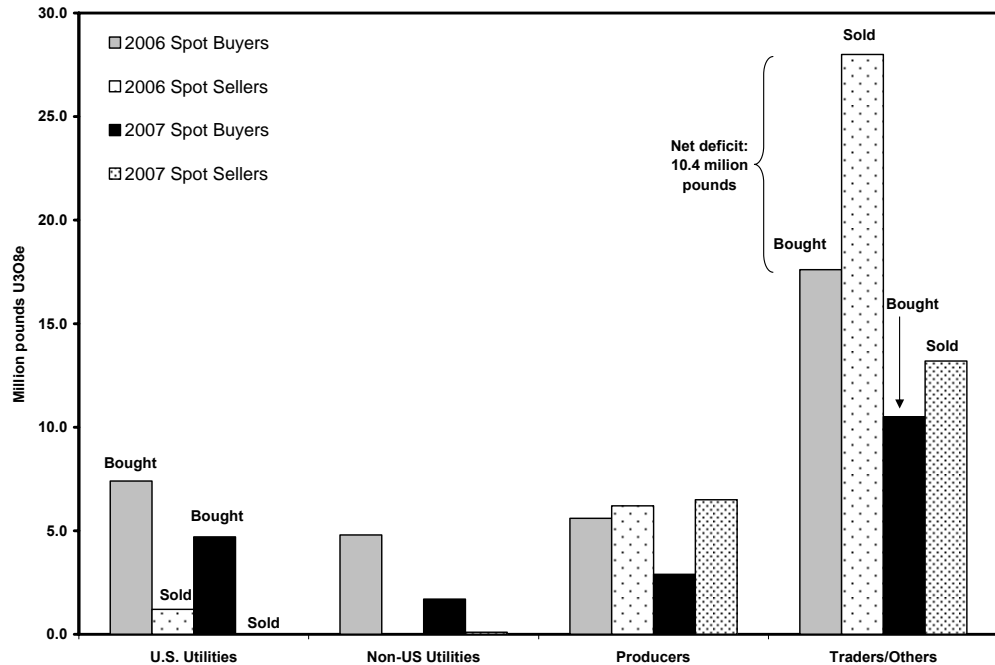
**Exhibit 3: Trading activity on the uranium spot market for 2006 and 2007.**



Source: UxC data.

Note the correlation between the elevated monthly uranium spot price, and the relatively low mass of U<sub>3</sub>O<sub>8e</sub> traded between April and July 2007.

**Exhibit 4: Delineation of the origins of trading activity on the spot market in 2006 and 2007.**



Source: UxC data.



Despite being around for a protracted period, the uranium market, in its current form, is in its infancy and is particularly prone to manipulation given its tiny value compared with the base metal market. An overall size increase is needed to minimize market fluctuations. The spot market is in a state of flux at the moment where, as opposed to the commonly held perception, the traders have on balance offloaded >13 million pounds of  $U_3O_{8e}$  into the spot market during 2006 and 2007 (Exhibit 4). Even though utilities purchased this material, these data show that in 2006 only two million pounds of  $U_3O_{8e}$  was added to their global inventory (WNA). Further, in 2007, USA utility inventories rose by 5.0 million pounds of  $U_3O_{8e}$  (EIA).

**2008 uranium trader/broker activity has increased: continuance will force prices up!**

### **3. Fundamentals: demand growth and a reliance on secondary sources**

**Primary production is well below reactor demand, secondary sources are dwindling!**

**2008 Primary Production: 113.5 million pounds  $U_3O_8$**

*(Haywood Securities Forecast)*

2007 Primary Production: 107.1 million pounds  $U_3O_8$

The present pricing scenario is more a factor of the short term oligarchic mentality of the buyers rather than reflecting any weakness in the demand-driven fundamentals of the nuclear energy sector. Moreover, the depth and breadth of future demand is materializing via both growth in the number of reactor units to come on stream, and an increase in the number of countries considering a nuclear future (~86 countries, UxC March presentation).

**Reactors: 439 working, 36 under construction, 93 planned, and 218 proposed**

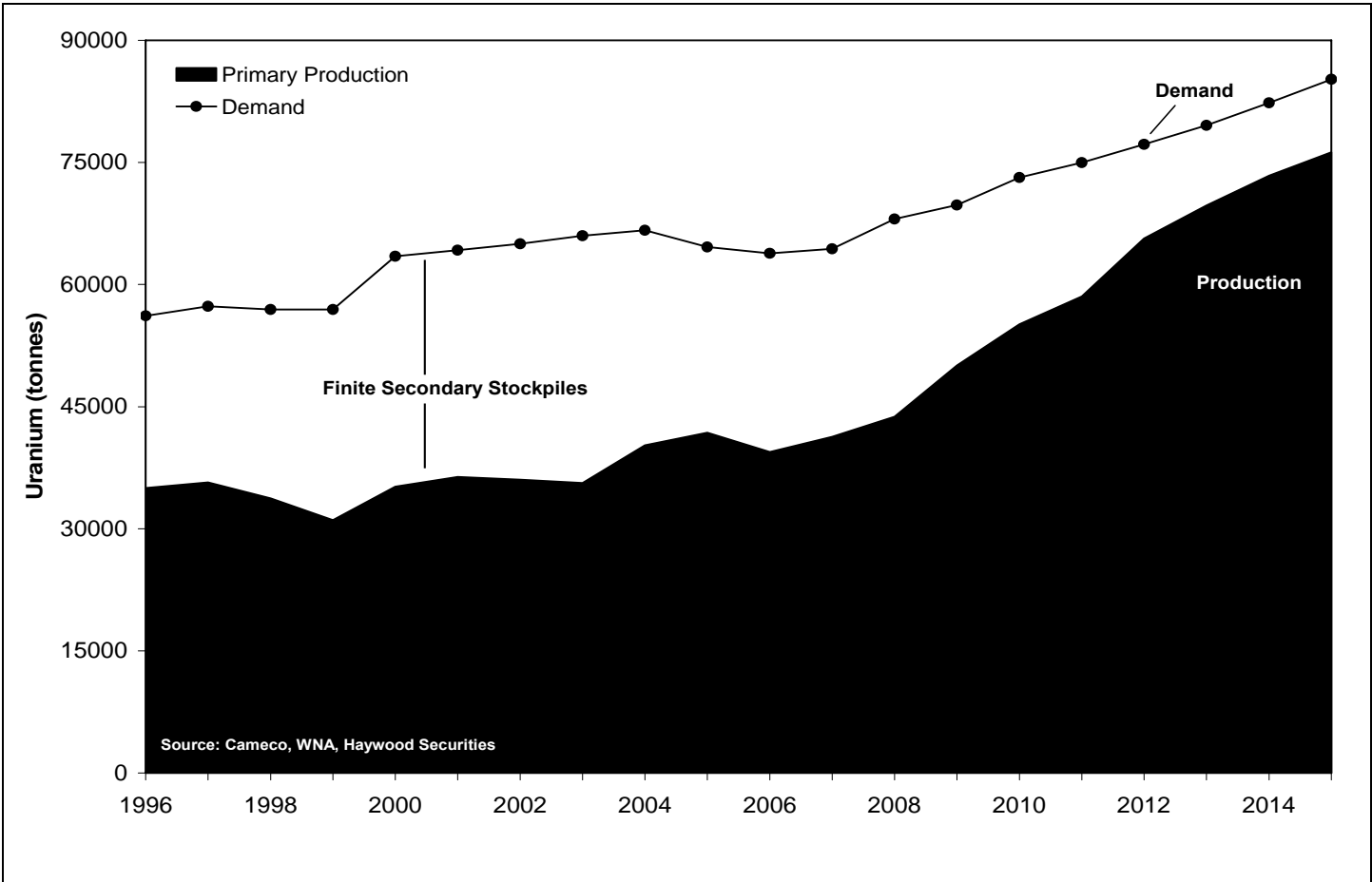
*Source: WNA, May 2008*

**Renewed Demand Countries: China, India, Russia, Great Britain and USA**

Demand growth is partly facilitated by the changing sentiment of the general public to acquiesce with regard to nuclear energy comprising part of tomorrow's energy basket. Growth from China and India is yet to materialize fully on the open market, with both countries supplying product domestically. Growth in Russian demand will trigger a restriction in global access to secondary supplies and enrichment capacity, which from 2013 onwards will be increasingly employed to cater for domestic demand, and selected programs with neighbouring countries (e.g., China, Mongolia and India).



Exhibit 5: Historic and projected primary prod'n and demand volume for the period between 1996 and 2015.



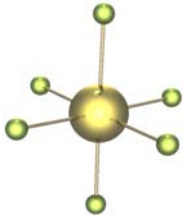
Source: Haywood Securities, UxC, WNA, Cameco.

Note the continued draw on 'finite' secondary stockpiles during the entire period.

Underlying the industry is the fact that foreseeable primary uranium production will continue to fall short of future reactor demand (Exhibit 5). Thus, the entire sector will be ever more reliant on dwindling secondary supplies that progressively become more expensive, as well as technically, and politically difficult to extract. These factors will continue to support uranium prices into the future, where geopolitical interests will become ever more focused on securing domestic supply. This is particularly pertinent given that the major producers (Canada, Australia, and Kazakhstan) have little domestic demand.



## Uranium, not just any metal, it's a Bread & Milk commodity!

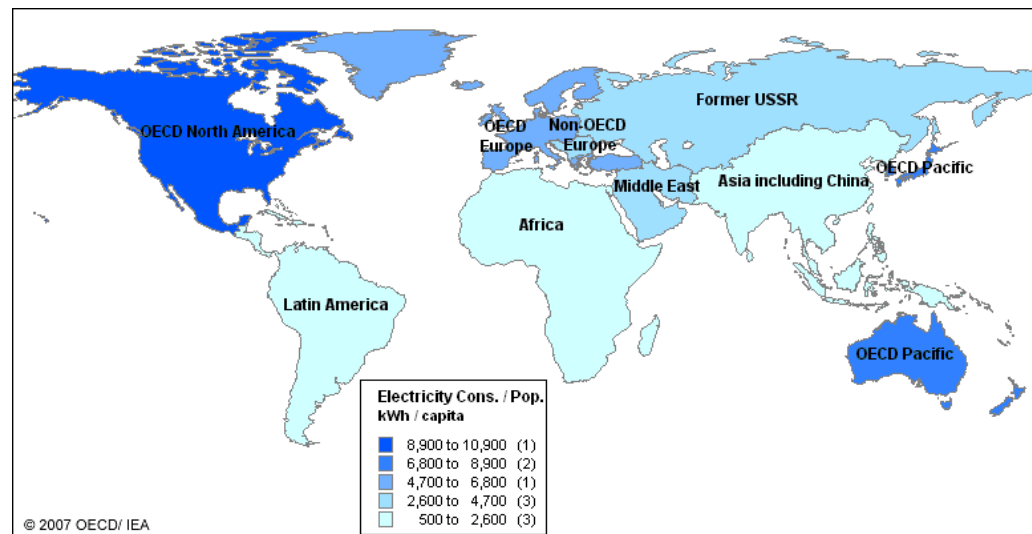


**Uranium** ( $^{92}\text{U}$ ) despite being mined by similar methods to other metals, stands alone as being part of the energy cycle, and as such is a 'Bread and Milk' commodity largely disconnected from the financial drivers that moderate other metal prices. Feeding from the same energy grid, almost every individual or consumer that turns on a light bulb, an implement or perhaps tomorrow's car is inexorably reliant on nuclear power, which once in place, provides a long-lived supply that on an on-going cost basis is less susceptible to global economic fluctuations in commodity prices

### Demand Side Growth

Compounding the deficiency in actual versus forecast primary supply, is the unquenchable thirst for electricity, which is anticipated to grow globally for the long term (avg. ~3 % per annum to 2030), but will see the greatest rate of expansion in countries with low per capita electricity consumption (e.g., China, India and Russia, see Exhibit 6). Favour for nuclear energy is concordant with environmental-political concerns on the deleterious effects of hydrocarbon-based energy production (e.g., coal, gas and oil) on the environment, more specifically the concentration of GHG and particulate matter in the atmosphere. This concern is being met with a measurable change in view and broader acceptance of nuclear power generation by the general populace. Popular acceptance equates to a shifting political outlook on nuclear policy leading to potential changes in nuclear power production policy in both: countries ramping down future production (e.g., Sweden and Germany), as well as those countries considering a nuclear future. These motions are leading to a shift, a rebalance in sources used for future energy supply leading inexorably to a greater role for nuclear energy; and a sustained nuclear renaissance.

**Exhibit 6: Energy consumption per capital: where are the growing nations?**

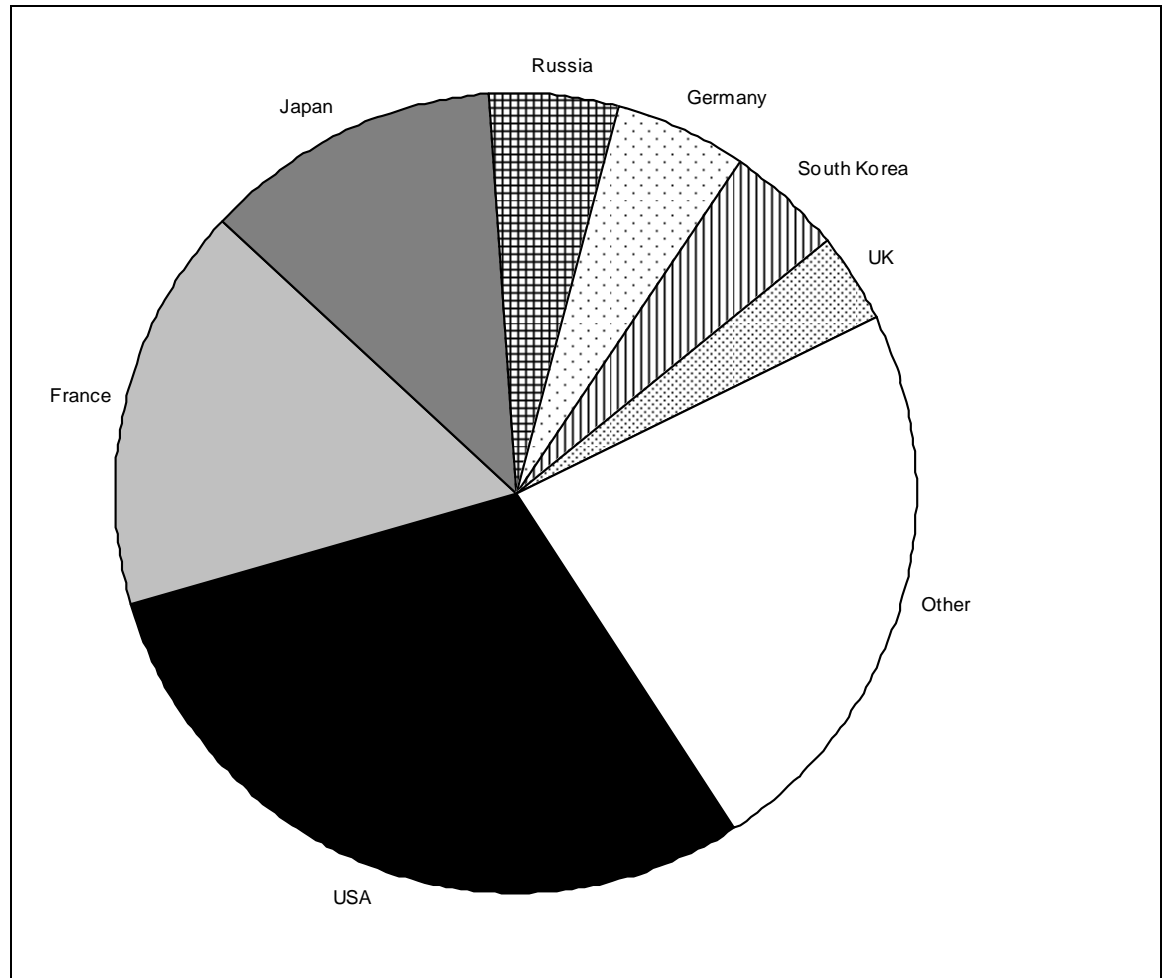


Source: OECD/IEA.

Note the low per capital consumption of Asian and Former USSR countries where nuclear energy will blossom initially.



**Exhibit 7: 2008 uranium demand showing the 7 largest consumers in the nuclear electricity market.**



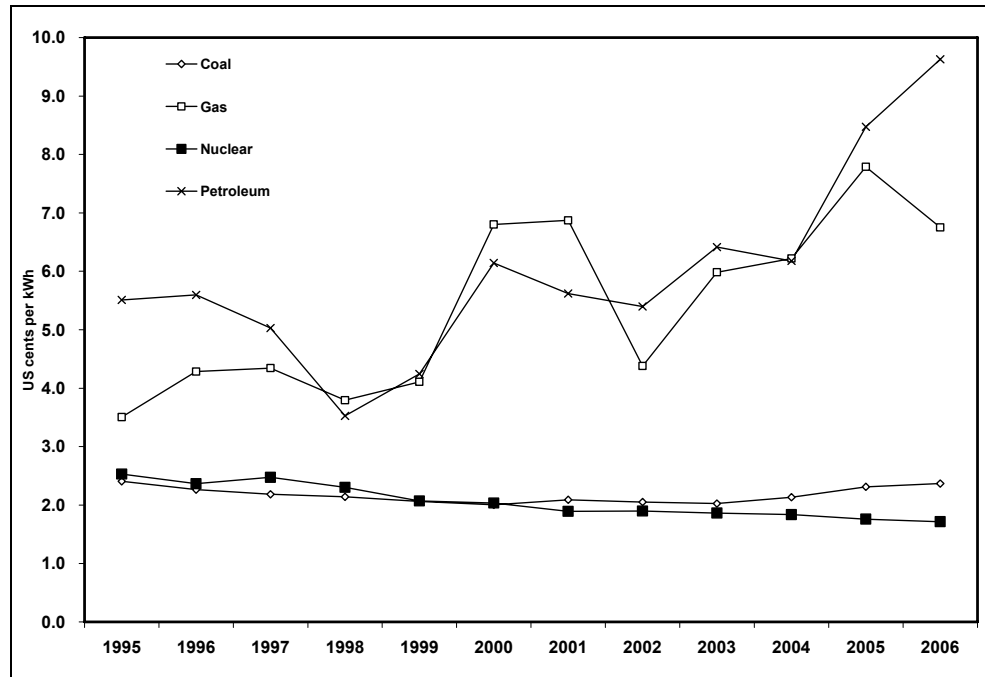
Source: WNA data.

Note that both China and India are outside the current top ten consumers.

As **~16% of the Global Electricity Supply** is of nuclear origin (Exhibit 7), uranium is of strategic geopolitical importance to nations with a significant (e.g., USA, France and Japan) or growing nuclear energy base (e.g., China, India and Russia). Apart from coal, nuclear energy provides the most robust source of baseload electricity where fuel costs comprise a comparatively small component of the cost of electricity (Exhibit 8). This artifact is particularly well pronounced in the USA, where production costs have decreased due to more efficient management and higher capacity rates. This is in a market enjoying higher average electricity costs (Exhibits 9), which makes **Nuclear Energy an attractive long term proposition.**



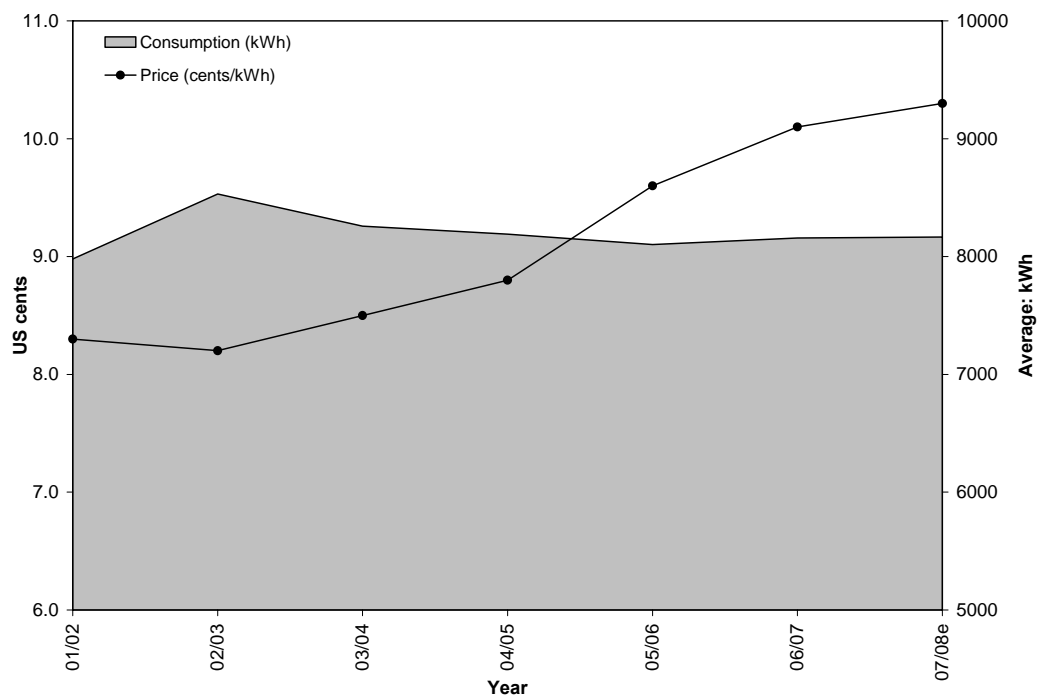
**Exhibit 8: USA electricity production costs, including fuel, operations and maintenance for the four main electricity sources.**



Source: NEI, data.

Note only 0.46 cents kWh of electricity generated in 2005 and 2006 is attributable to fuel costs (e.g., U<sub>3</sub>O<sub>8</sub>, enrichment and fabrication).

**Exhibit 9: Average electricity consumer prices and consumption for USA winters.**



Source: EIA, data.



**A Nuclear Future is Secure**, as manifest by an increasing number of countries (up to 55 countries by 2030, see UxC data) that will potentially embrace nuclear energy, as well as a renewed interest in the expansion of existing capacity. Thirty-one countries have nuclear electricity generation capacity (see Exhibit 10), where the largest generator is the USA (787 billion kWh). France produces the greatest percentage of its electricity via a nuclear path (~78 %), whereas China has the most aggressive expansion plans (up to 40-60 GWe). New long term capacity will be driven largely from China, India, Russia, and United States. The Gulf States, mainland Europe, Africa and other counties will also increase nuclear energy generation capacity, but of smaller note to the aforementioned countries.



**Exhibit 10: 2008 global distribution of nuclear reactors currently operating (439), under construction (36), planned (93) and proposed (218).**

	NUCLEAR ELECTRICITY GENERATION 2006		REACTORS OPERABLE May 2008		REACTORS UNDER CONSTRUCTION M		REACTORS PLANNED May 2008		REACTORS PROPOSED May 2008		URANIUM REQUIRED 2008
	kWh billion	% e	No.	MWe	No.	MWe	No.	MWe	No.	MWe	tonnes U
Argentina	7.2	6.9	2	935	1	692	1	740	1	740	123
Armenia	2.4	42	1	376	0	-	0	-	1	1,000	51
Bangladesh	0	0	0	-	0	-	0	-	2	2,000	-
Belarus	0	0	0	-	0	-	2	2,000	0	-	-
Belgium	44.3	54	7	5,728	0	-	0	-	0	-	1,011
Brazil	13	3.3	2	1,901	0	-	1	1,245	4	4,000	303
Bulgaria	18.1	44	2	1,906	0	-	2	1,900	0	-	261
Canada*	92.4	16	18	12,652	2	1,500	3	3,300	4	4,400	1,665
China	51.8	1.9	11	8,587	7	6,700	24	26,320	76	62,600	1,396
Czech Republic	24.5	31	6	3,472	0	-	0	-	2	1,900	619
Egypt	0	0	0	-	0	-	0	-	1	1,000	-
Finland	22	28	4	2,696	1	1,600	0	-	1	1,000	1,051
France	428.7	78	59	63,473	1	1,630	0	-	1	1,600	10,527
Germany	158.7	32	17	20,339	0	-	0	-	0	-	3,332
Hungary	12.5	38	4	1,826	0	-	0	-	2	2,000	271
India	15.6	2.6	17	3,779	6	2,976	10	8,560	9	4,800	978
Indonesia	0	0	0	-	0	-	2	2,000	2	2,000	-
Iran	0	0	0	-	1	915	2	1,900	1	300	143
Israel	0	0	0	-	0	-	0	-	1	1,200	-
Japan	291.5	30	55	47,577	2	2,285	11	14,945	1	1,100	7,569
Kazakhstan	0	0	0	-	0	-	0	-	1	300	-
Korea DPR (North)	0	0	0	-	0	-	1	950	0	-	-
Korea RO (South)	141.2	39	20	17,533	3	3,000	5	6,600	0	-	3,109
Lithuania	8	69	1	1,185	0	-	0	-	2	3,200	225
Mexico	10.4	4.9	2	1,310	0	-	0	-	2	2,000	246
Netherlands	3.3	3.5	1	485	0	-	0	-	0	-	98
Pakistan	2.6	2.7	2	400	1	300	2	600	2	2,000	65
Romania	5.2	9	2	1,310	0	-	2	1,310	1	655	174
Russia	144.3	16	31	21,743	7	4,920	10	11,960	25	22,280	3,365
Slovakia	16.6	57	5	2,064	2	840	0	-	0	-	313
Slovenia	5.3	40	1	696	0	-	0	-	1	1,000	141
South Africa	10.1	4.4	2	1,842	0	-	1	165	24	4,000	303
Spain	57.4	20	8	7,442	0	-	0	-	0	-	1,398
Sweden	65.1	48	10	9,016	0	-	0	-	0	-	1,418
Switzerland	26.4	37	5	3,220	0	-	0	-	3	4,000	537
Thailand	0	0	0	-	0	-	0	-	4	4,000	-
Turkey	0	0	0	-	0	-	0	-	3	4,500	-
Ukraine	84.8	48	15	13,168	0	-	2	1,900	20	27,000	1,974
United Kingdom	69.2	18	19	11,035	0	-	0	-	0	-	2,199
USA	787.2	19	104	99,049	0	-	12	15,000	20	26,000	18,918
Vietnam	0	0	0	-	0	-	0	-	2	2,000	-
<b>WORLD**</b>	<b>2658</b>	<b>16</b>	<b>439</b>	<b>371,989</b>	<b>36</b>	<b>29,958</b>	<b>93</b>	<b>101,395</b>	<b>218</b>	<b>192,975</b>	<b>64,615</b>

Reactor data: WNA to 23/05/08.

IAEA: nuclear electricity production and percentage of electricity (% e)

WNA: Global Nuclear Fuel Market (reference scenario) for uranium

Operating = Connected to the grid

Building/Construction: first concrete for reactor poured, or major refurbishment under way

Planned: Approvals, funding or major commitment in place, mostly expected in operation within 8 years, or construction well advanced, but suspended indefinitely

Proposed = clear intention or proposal but still without firm commitment. Planned and Proposed are generally gross Mwe

TWh: Terawatt-hours (billion kilowatt-hours), MWe = Megawatt net (electrical as distinct from thermal), kWh = kilowatt-hour

64,615 tU = 76,200 t U<sub>3</sub>O<sub>8</sub>

\* In Canada, 'construction' figure is 2 laid-up Bruce A reactors.

\*\* The world total includes 6 reactors operating on Taiwan with a combined capacity of 4884 MWe, which generated a total of 38.3 billion kWh in 2006 (accounting for 20% of Taiwan's total electricity generation). Taiwan has two reactors under construction with a combined capacity of 2600 MWe.

Source: WNA, May 2008.



**Nuclear energy future by increasing reactors, longevity and power rating!**

The number of reactors planned, proposed and under construction has increased significantly from a year ago, and is distributed over countries with different fiscal and/or political factors. For instance, the USA now has 32 reactors either planned or proposed; China plans to expand from ~8.5 GWe to 40 or even 60 GWe capacity by 2020; and Russia has stated that it plans to build two reactors per annum for the next 15 years. Furthermore, India expects to expand capacity to 20 GWe by 2020, and South Africa to >25 GWe by 2025. The United Kingdom has renewed its vision for an expanded nuclear future, and Europe is looking at mechanisms to maintain and/or bolster nuclear capacity to meet aggressive climate change targets by 2020. Turkey, Egypt, Ukraine, and the Gulf States have all outlined a future for nuclear energy, and are supported by technology from Russia or France. In the shorter term, expansion in demand will also be delivered through power uprates and extensions to reactor life. In excess of 90 % of USA reactors have been or are anticipated to be awarded life extensions of up to 20 years, and other than current power expansions, 36 additional reactors either have applications under review or pending to increase their capacity (Total: +2.83 GWe capacity, data from EIA).

**Nuclear renaissance brings step-change into energy sector capacity!**

Review of historical growth data, using the USA as an example, shows that build out of nuclear capacity makes a significant impact on domestic energy where between 1973 and 1979 nuclear energy capacity increased >20 %, and by ~8 % during the period between 1979 and 1990. Such rates of growth are likely to be seen in multiple countries over the next decade or so, especially in China, India and Russia, and are needed to facilitate economic growth in energy-stretched nations such as South Africa. WNA forecast demand published in 2007 is conservative (based on 2006 data), and at the time was unable to account for more recent candour by multiple nations for escalation in nuclear capacity (e.g., China, Russia, United Kingdom, South Africa), as well as reactor life extension and power uprates. Demand, including initial core requirements, is herein projected to increase ~ 3 % to 2015.

**Exhibit 11: Assumptions underlying Congressional Budget Office (CBO) reference pricing scenario (in 2006 US\$) comparing the relative costs of electricity provided by different power sources.**

	Advanced Nuclear	Conventional Coal	Conventional Natural Gas	Innovative/Clean Coal	Innovative/Clean Natural Gas
<b>Construction</b>					
Time (Years)	6	4	3	4	3
Overnight costs (US\$ per kW)	2,358	1,499	685	2,471	1,388
<b>Operating Costs</b>					
Fuel (US\$ per MWh)	8	16	40	17	52
Fixed O & M (US\$ per MWh)	8	4	1	6	3
<b>Sub Total (US\$ per MWh):</b>	<b>16</b>	<b>20</b>	<b>41</b>	<b>23</b>	<b>55</b>

Source: CBO, May 2008.



**Reactors don't come cheap, but the ongoing costs (including fuel) are!**

One of the largest hurdles to the expansion of the global nuclear energy capacity base is its capital intensive nature, whereby a recently published CBO study (Exhibit 11) shows that overnight costs (excluding financing costs) for 3<sup>rd</sup> Generation Nuclear power plants (\$2,358 per kWe capacity) are far greater than Conventional Coal (\$1,499 per kWe) and Natural Gas (\$685 per kWe), but less than Clean Coal (\$2,471 per kWe). However, the overwhelming benefit of uranium compared to hydrocarbons is the appreciably lower fuel costs, leading to lower operating costs (Exhibits 11 & 12). Consequently, whilst capital infrastructure costs are high, the insertion of fiscal incentives (e.g., imposition of an emissions tax) would help mitigate capital costs, and leave nuclear power as a reasonable option for maintaining diversity in future baseload capacity whilst simultaneously moderating CO<sub>2</sub> and particulate matter emissions.

**Exhibit 12: Calculated fuel costs (cents per kWh) using different U<sub>3</sub>O<sub>8</sub> per pound prices.**

<b>Component</b>		<b>US\$</b>
U <sub>3</sub> O <sub>8</sub> :	8 kg x \$60	\$1,056
conversion:	7 kg U x \$12.25	\$86
enrichment:	4.3 SWU x \$150	\$645
fuel fabrication:	per kg	\$275
<b>Total, approx:</b>		<b>\$2,062</b>

This calculation yields fuel cost: 0.65 c/kWh (\$60 lb U<sub>3</sub>O<sub>8</sub>); 0.82 c/kWh (\$90 lb U<sub>3</sub>O<sub>8</sub>); and, 0.99 c/kWh (\$120 lb U<sub>3</sub>O<sub>8</sub>).

Source: Haywood Securities.

Note that using U<sub>3</sub>O<sub>8</sub> of \$120 per pound increases overall fuel costs by only ~50 %, which in itself is a tiny fraction of operations and management costs, let alone the initial capital costs.



## PRIMARY PRODUCTION: a stilted supply growth story

Primary uranium production has failed to deliver at estimated forecast rates over the last few years, and 2008 appears to be no exception with Q1 production data being lower than either the forecast estimates and/or the previous quarter for a range of operations owned by Cameco, BHP Billiton, Denison Mines, Energy Resources Australia, Paladin Energy, AngloGold Ashanti, Uranium One and Uranium Resources (Exhibit 13). The WNA had earlier forecast 2008 reference scenario uranium production of ~124.8 million pounds of U<sub>3</sub>O<sub>8</sub> for 2008, which presents an anticipated ~16.5 % increase on 2007 production figures. Based on the stilted flow of supply to venture on stream thus far due to various technical and infrastructural impediments, it is anticipated that 2008 production will rise only moderately above 2007 production (Exhibit 14).

### Short term production to be lower than forecasts: a systemic problem!

**Exhibit 13: Table showing publicly listed companies that reporting production delays or lower production outputs than the previous quarter or Q1/07 during 2008**

Company	Deposit/Mill	Country	Reason
Cameco	Rabbit Lake	Canada	Mining impediments
	South Inkia	Kazakhstan	Limited H <sub>2</sub> S supply
Paladin	Langer Heinrich	Namibia	Production ramp up
Denison	White Mesa	USA	Plant refitting
Uranium One	Dominion	South Africa	Infrastructural/Technical
AngloGold Ashanti	Sth African ops.	South Africa	Infrastructural
First Uranium	Sth African ops.	South Africa	Infrastructural
Uranium Resources	Kingsville Dome	USA	Technical (recovery, well-field sequencing)
Rio Tinto	ERA	Australia	Mine scheduling
BHPBilliton	Olympic Dam	Australia	Mine scheduling

Source: Cameco, Paladin, Denison, Uranium One, AngloGold Ashanti, First Uranium, Uranium Resources, Rio Tinto and BHPBilliton.

### 2008 Primary Production Forecast:

**113.5 million pounds U<sub>3</sub>O<sub>8</sub>**

2008 production is estimated to be 113.5 million pounds of U<sub>3</sub>O<sub>8</sub> (Haywood Securities forecast), which represents a ~6.0 % increase on 2007 production. Growth is largely derived from Kazakhstan (13 % increase), Africa (6 % increase, namely Namibia) and the USA (8 % increase). There is a greater likelihood of the year’s production to be lower, rather than higher for three main reasons: on-going production pressure within the sector; 2. uncertainly of power and acid supply; and, 3. technical nuances of bringing new production on stream. Consequently, these factors provide greater potential for upward pressure on the spot price.

**Exhibit 14: Estimated 2008 primary uranium supply and demand.**

2008	Supply lb U <sub>3</sub> O <sub>8</sub> (million)	Demand lb U <sub>3</sub> O <sub>8</sub> (million)
Haywood	113.5	
UxC	121.5	
Lower*	111.6	166.6
Reference*	125.0	167.6
Upper*	128.7	170.3
*WNA 2007 data		

Haywood Securities estimate is near to the WNA lower scenario, and is well below the UxC forecast and the WNA\* reference.

Source: Haywood Securities, UxC and WNA.



## Longer Term Outlook

Majors and mid-size companies dominate global uranium production (Exhibit 15), and in the mid term increased production capacity is going to be largely derived by the expansion of current mines, or exploitation of deposits in currently producing countries (e.g., Kazakhstan), or particular provenances/states within those countries (e.g., Wyoming, United States; Saskatchewan Canada; South Australia, Australia). This is primarily due to infrastructural, regulatory and community support that is in place to expand and/or develop mines in locations with a ready draw on personnel currently engaged in mining.

**Exhibit 15: Top eight production mines in 2007.**

Mine	Country	Operator	Production	
			2007	2006
McArthur River/Key Lake	Canada	Cameco	18.7	18.7
Ranger	Australia	ERA	11.9	10.5
Olympic Dam	Australia	BHPBilliton	8.8	7.4
Priargunsky	Russia	TVEL	7.8	8.2
Rossing	Namibia	Rio Tinto	6.7	8.0
Arlit	Niger	AREVA	4.6	4.1
Rabbit Lake	Canada	Cameco	4.0	5.1
Akouta	Niger	AREVA	3.7	4.8
<b>Total</b>			<b>66.1</b>	<b>66.8</b>
(%) World			<b>62%</b>	65%
World (million lb U <sub>3</sub> O <sub>8</sub> )			<b>107.1</b>	102.7

Source: UxC, Cameco, Areva, BHP Billiton, Energy Resources Australia

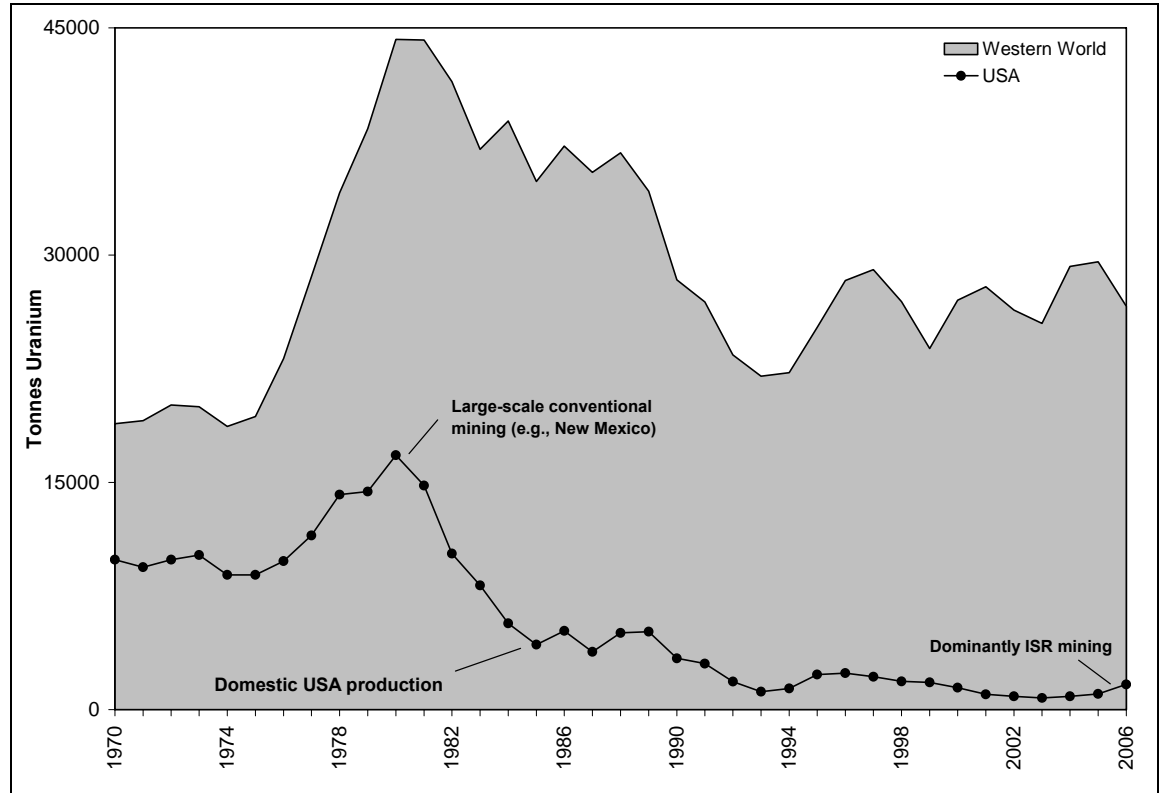
Note that these mines produced ~62 % of the world’s primary production via conventional mining practice.

### ***The USA will be the home to the next neoproducers over the next 3 years!***

Despite the advantages of actively producing regions, the next companies to move to ‘producer’ status in the next 3 years will originate from **USA operations**. The rationale is that the USA was the primary producer of the world’s uranium, and thus is a producer with a regulatory framework and a well established infrastructure that can be employed to bring projects into production rapidly. A number of the USA located companies are on the verge of taking the next step, and moving into production. These USA projects will be small at <2 million pounds of U<sub>3</sub>O<sub>8</sub> per annum. Given these factors, and considering other legacy items, the most likely states that will witness augmented production are Colorado, Utah, Wyoming and Texas. These four states either have current uranium production output (e.g., Wyoming and Texas), or have permitted mining licenses on mine sites with historic production (e.g., Colorado and Utah). However, production in the United States, in at least the next five (5) years, is likely to be predominantly derived from *in situ* recovery (ISR) mining operations in Wyoming, Texas and Nebraska, and small-scale mining operations in Colorado and Utah. These factors mean that whilst the USA will witness growth in uranium production it will not reach the magnitude obtained in the late 70’s and early 80’s (Exhibit 16), and will still have a significant need to purchase exogenous uranium or deplete the existing secondary source material.



**Exhibit 16: Historic USA and Western World uranium production between 1970 and 2006.**



Source: WNA data.

USA dominated production in the late 70's and early 80's when conventional mining was ongoing, which is in stark contrast with modern day production borne largely via ISR mining.

### **Longer Term Production from: Kazakhstan, Africa and USA**

In the long term, shortfalls in forecasted primary production are expected to continue (e.g., 2009 production at McArthur River mine, Canada; and the cessation of mining operation plans by Uranium One for Honeymoon), and to continue to at least 2012 (Exhibit 17). Short term increases in production are predicted to stem mainly from operations in Kazakhstan, Africa and the USA, whence from 2012 potential new growth is expected also from operations in Canada and Africa, and thereafter Australia (e.g., Olympic Dam open pit expansion: anticipated initial commercial uranium production well after 2015, and in four stages of development).

**Exhibit 17: A table exhibiting the projected primary U<sub>3</sub>O<sub>8</sub> production for the period between 2009 and 2015.**

<b>Total</b>	<b>2009e</b>	<b>2010e</b>	<b>2011e</b>	<b>2012e</b>	<b>2013e</b>	<b>2014e</b>	<b>2015e</b>
<b>Million lb U<sub>3</sub>O<sub>8</sub></b>	129.8	138.2	143.1	159.7	169.6	180.2	193.0
<b>Y-o-Y change (%)</b>	14.4%	6.4%	3.6%	11.6%	6.2%	6.2%	7.1%
<b>Australia</b>	24.8	24.8	24.8	24.8	22.8	22.8	22.8
<b>Canada</b>	25.1	23.1	21.8	25.2	26.8	33.8	39.8
<b>Kazakhstan</b>	22.8	27.7	30.6	34.0	37.2	39.7	44.9
<b>Africa</b>	22.6	27.0	30.1	37.7	42.3	44.2	45.5
<b>USA</b>	6.0	7.1	9.0	11.4	13.4	13.7	12.4
<b>Russia</b>	12.7	12.7	12.7	12.7	12.7	12.7	13.6
<b>Other</b>	15.9	20.5	22.9	24.5	25.4	23.4	18.7
<b>WNA 2007 est.</b>							
<b>Lower</b>	122.8	132.5					165.0
<b>Reference</b>	140.1	156.5					176.2
<b>Upper</b>	147.1	168.0					213.6

2007 uranium production: 107.1 million pounds U<sub>3</sub>O<sub>8</sub>

2008e uranium production: 113.5 million pounds U<sub>3</sub>O<sub>8</sub>

e, internal Haywood Securities Inc. forecast estimate

Source: Haywood Securities

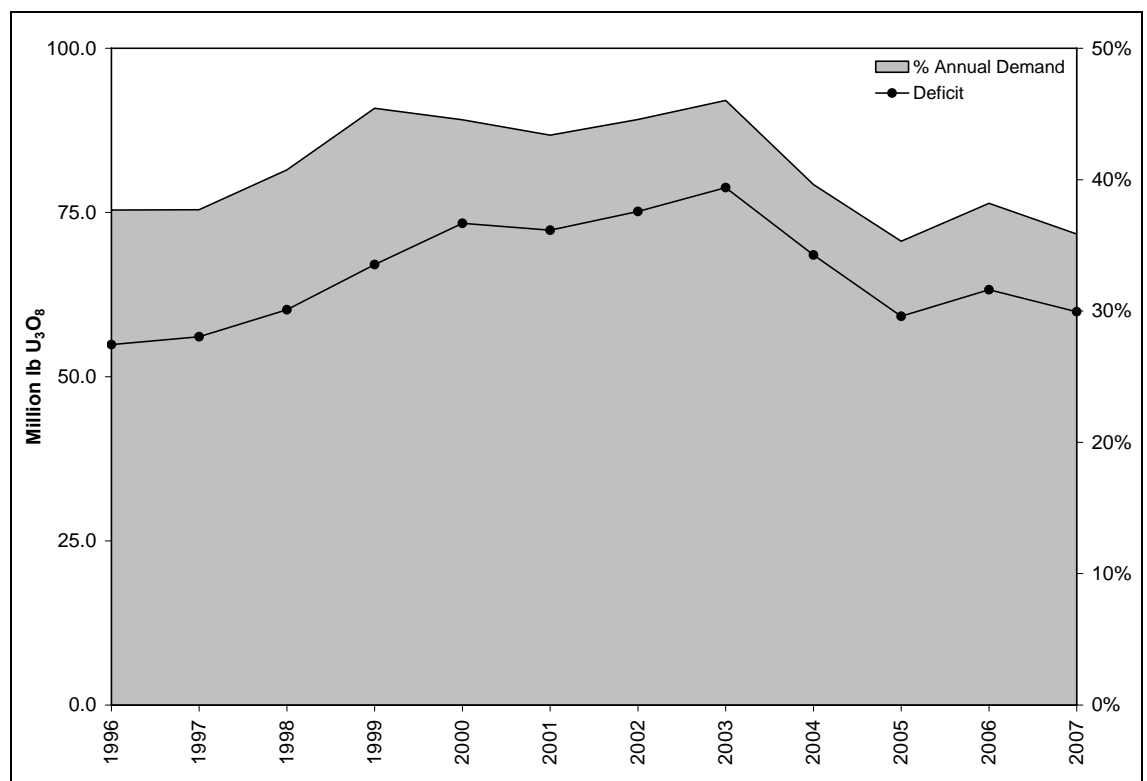


## Secondary Uranium Sources

### Secondary Sources: 'finite' resources with restricted future access!

The underlying equation in the uranium sector is that demand is much greater than primary supply, and as such has led to a protracted period where this deficit is drawn from secondary stockpiles. Over the last decade this deficit ranges between ~56 and ~79 million pounds of  $U_3O_8$ , or between 35 and 46 % of total demand (Exhibit 18). Thus, the global nuclear energy sector is increasingly reliant on access to secondary material. Future access to this material is likely to be more restricted as it is withdrawn to meet domestic demand obligations.

**Exhibit 18: Annual deficit between uranium demand and primary supply covered by secondary source material.**



Source: WNA data

Secondary supplies are derived from a multitude of sources that constitute natural (0.71 % uranium as  $U^{235}$ ), depleted (<0.71 %  $U^{235}$ ) and enriched (>0.71 %  $U^{235}$ ) uranium and plutonium ( $Pu^{239}$ ). Natural uranium is held as inventories and stockpiles by utilities, producers, governments and other commercial companies involved in the nuclear fuel market. However, the greatest mass of the secondary supplies is derived from stockpiles of previously processed material (e.g., highly enriched uranium (HEU, >90 %  $U^{235}$ ), highly enriched plutonium (HEP), depleted uranium tails, and spent fuel. Depleted uranium tails provide the largest stockpile of uranium. However, most pressing is the potential limitation to Russian HEU after 2013, where delays in new or expanded production from large uranium mines (e.g., Cigar Lake and Olympic Dam) will place particular pressure on supply.



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## The HEU Equation: 1 tonne of HEU equates to ~0.78 million pounds $U_3O_8e$

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### **Highly Enriched Uranium (HEU)**

Stockpiles of HEU are held in Russia and the USA. The defined surplus material is currently being down-blended with depleted, natural or less-enrich material to produce low-enriched uranium (LEU: 3-5 %  $U^{235}$ ). Most LEU is produced through the Russian Suspension Agreement (RSA). The RSA has currently used about 325 tonnes of HEU material (producing ~9,700 t of LEU) with the remaining 175 tonnes to be blended under the agreement to 2013. Thereafter, the future access to the remaining 900 t of HEU surplus held by Russia is clouded, and is considered likely to be used mainly for domestic purposes, or to meet demand within neighbouring countries (e.g., China, Mongolia and India). The USA also has a nominated surplus of 174 t of HEU.

### **Highly Enriched Plutonium (HEP)**

HEP (>90%  $Pu^{239}$ ) is an artifact of the Russian and American weapons programs that developed surplus stockpiles. The plutonium can be converted into Mixed Oxide (MOX) fuel; combined with thorium for placement in Russian Reactors (VVER Reactor); employed as fuel for fast-neutron reactors; or, immobilized as high-level waste. About 200 t of HEP are considered to be stockpiled. The USA and Russia have agreed to each convert 34 t of HEP into MOX fuel (~12,000 t of  $U_3O_8e$ : conversion of the USA component will not start conversion until at least 2016, whereas the Russian source will be inputted into their domestic reactors by 2012). In total, the USA has a nominated surplus stockpile of ~61.5 t of HEP, where 20 t of HEP may not be useable as MOX fuel.

### **Depleted Uranium Tails**

By far the largest sources of uranium reside within depleted uranium tails stockpiles. Most tails stockpiles contain uranium with between 0.1 and 0.25 %  $U^{235}$ . Depleted uranium tailings (which like HEU, are progressively being drawn-down, given the deficiency of primary uranium) is dominated by stockpiles within the USA. Global stockpiles at the end of 2006 (WNA) were estimated to be 1,500,000 tU, where the USEC/DOE (USA) hold the lion's share (~700,000 tU), followed by Russia (545,000 tU) and France (Eurodif, 150,000 tU). The degree to which these tails may be re-enriched is unknown, and will depend on their  $U^{235}$  concentration, the cost of natural uranium, the cost of enrichment (separative work units, SWU), and most of all, access.

### **Inventories: natural, converted and enriched uranium**

These inventories represent the stockpiles (e.g., natural  $U_3O_8$ ,  $UF_6$ ) held by the utilities, traders/brokers, producers and other companies involved in the nuclear fuel industry. By the end of 2006 global inventories were estimated at ~376 million pounds of  $U_3O_8$ : ~311 million pounds of  $U_3O_8$  held by utilities; ~26 million pounds of  $U_3O_8$  held by producers; ~16 million pounds of  $U_3O_8$  held by conversion/enrichment/fabrication companies, ~23 million pounds of  $U_3O_8$  held by uranium funds and brokers (WNA). These numbers are little modified in 2007, with data showing that the USA utilities increased their inventories, albeit modestly, whereas the US brokers/traders lowered their inventories by ~3 million pounds of  $U_3O_8$ . Government held inventories are exclusive of these estimates. Most of the inventory held by the utilities is strategic in character, which leaves a little over 50 million pounds of  $U_3O_8$  for use, and or for short term loans.



**Role of the DOE: forward sale structure of uranium in excess stockpiles**

The DOE is estimated to hold ~153 million pounds of U<sub>3</sub>O<sub>8e</sub> that is divided into ~ 70 million pounds of U<sub>3</sub>O<sub>8e</sub> as depleted uranium products (e.g., tails or DUF<sub>6</sub>); ~47 million pounds of U<sub>3</sub>O<sub>8e</sub> as HEU; ~36 million pounds of U<sub>3</sub>O<sub>8e</sub> as natural and converted products (e.g., U<sub>3</sub>O<sub>8</sub> and UF<sub>6</sub>). The DOE are currently considering the sale of its material and of imposing a ceiling on sales to 10 % of annual domestic demand (~3 million pounds of U<sub>3</sub>O<sub>8e</sub>). Provision may also exist to augment this amount to provide initial core material for new reactors. The timing and final structure of these sales is contingent on minimizing the effects on the domestic uranium sector. However, prior to finalization the DOE must fully characterize the nature of its inventories. Given these considerations, little uranium, if any, will be sold in 2008, and initial sales will begin in 2009.

**Uranium Price Forecast**

**Fundamental Conditions for Pricing:**

- Demand is real and is outstripping primary supply. Unsustainable!
- Capital injection is needed to meet required primary production increases!
- Production costs are increasing across the sector: a global phenomenon!
- Uranium price represents only a small fraction of operating costs!

**Exhibit 19: Estimated Spot and Long-Term prices for U<sub>3</sub>O<sub>8</sub> market prices.**

Price (US\$)	2008	2009	2010	2011	2012	2013	2014	2015
per lb U <sub>3</sub> O <sub>8</sub>								
<b>Spot</b>	80	100	100	95	95	90	90	90
<b>Long Term Contract</b>	90	95	95	95	100	100	100	100

Source: Haywood Securities

**Factors**

**Sustained Capital Infusion: bringing production online and finding the next one!**

A discord is growing between the capital injected into the sector and the amount required to sustain production and growth via exploration. The latter is important as the deposits going into production (except 4 Mile east/west deposits) were found in a previous era. A stable flow of equity needs to be infused to sustain mine development and exploration (~12 year cycle), and the main impetus is return via a realistic commodity price structure.

**Tale of Two Markets: Spot vs LT**

Market capital valuations for publicly-listed uranium companies correlate well with fluctuations and trends in uranium spot market prices. This association is discordant with the nature of sales by most producers (and therefore utilities) that have only a component (<30 %) of production available for spot market transactions. Indeed, the LT market is a far larger and more stable market, and hence needs to be considered in valuations.



### **Demand: ever reliant on ‘finite’ secondary sources**

Despite the apparent urgent rush towards a new superior nuclear cycle, momentum borne for a change in the future energy balance is out-of-step with primary uranium production and forecasted production growth, and hence outlines a reliance on secondary source material for future supply. This disconnect is primarily due to a lack of infrastructural development and investment in exploration over the last score years, leaving the exploration sector moribund. Continued dearth of investment, witnessed now as a function of subdued interest in venture capital, will continue to be deleterious to the long term well-being of primary uranium production, and will be manifest via delays in mid term production guidelines, along with atrophy in the scope of modern day exploration for tomorrow’s discoveries.

### **NIMBY (Not-In-My-Backyard): focusing the likely regions for new production**

Whilst much is made of the relative abundance of known uranium mineral deposits, many of the well-defined, rich occurrences reside in districts where their exploitation will prove to be difficult due to standing environmental and political impediments (e.g., New Mexico, USA; Western Australia and Queensland, Australia). Furthermore, the growth of the NIMBY phenomenon has impacted the entire mining sector. The likely effect of this growing philosophical ethos, not only in North America (including Labrador, British Columbia), but across the globe, is to direct the concentration of activity into currently producing countries and regions (e.g., Namibia; Kazakhstan; Saskatchewan; South Australia; Utah and Wyoming) to mitigate political risk.

## **SPOT PRICE: rationale**

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The current spot price low (\$59 lb U<sub>3</sub>O<sub>8</sub>) correlates to utilities staying out of the market and traders selling a component of their inventory, albeit under the auspices that primary production will meet forecasts, which is beginning to see significant signs of weakness from available Q1/08 production data. The historical concordance of spot and LT prices indicate that the spot price will move to the LT price later in H2/08. Buyer demand from all sectors in late 2008 will see spot prices increase thereafter. This prediction is based on lower than forecast production, and the progressive increase of unfilled requirements of the utilities in 2009 onwards (Exhibit 19).

### **Five takeaway points:**

- 1. 2008 primary production will be stymied:** failing to reach earlier forecasts
- 2. Costs of production are increasing:** within and across sectors
- 3. Fundamental demand and supply imbalance** will continue the reliance on ‘finite’ secondary sources
- 4. Limited enrichment capacity** until at least 2013 will restrict input
- 5. Trading activity will increase,** as shown by the creation of Paladin Nuclear, to aid in maximizing the value of inventory management

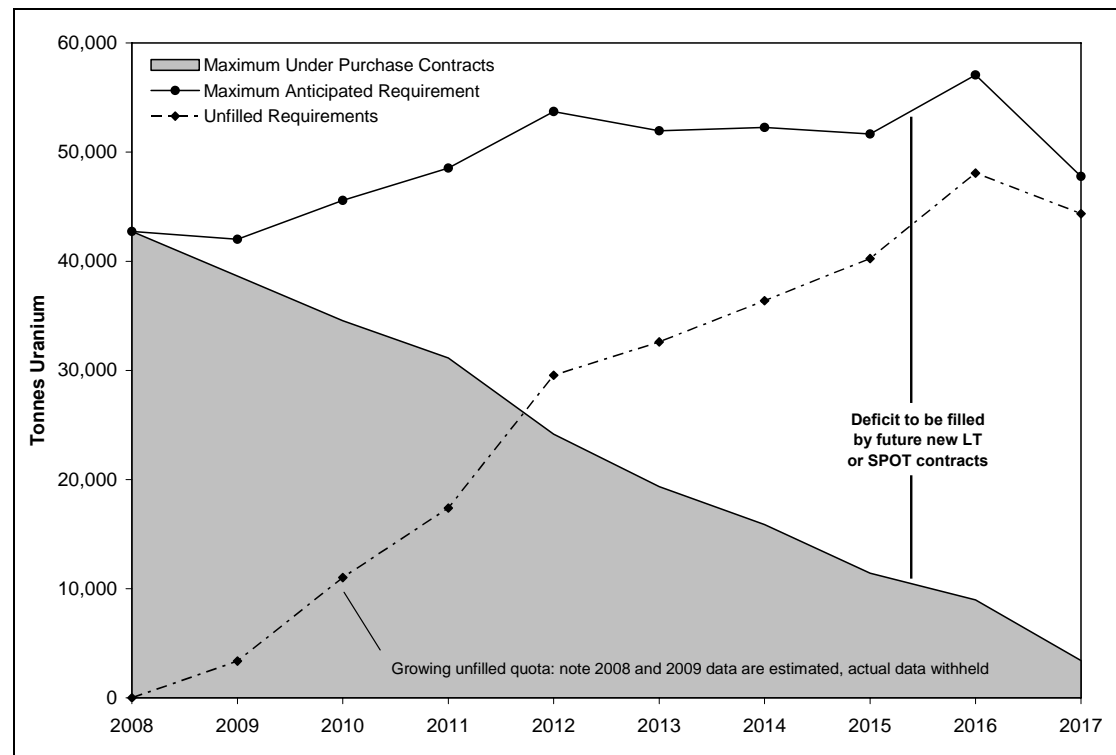


## Long Term Price: rationale

The picture for the LT price is driven by similar factors to the spot price, but the main point is that production and uranium price need equilibrium to allow for LT price sustainability for utilities and the producers, which also filters into exploration for new pipeline projects. The consideration for impacts on the projected LT contract prices include:

1. Global inflation leading to increasing **infrastructural and production costs**
2. U<sub>3</sub>O<sub>8</sub> price ultimately comprises **only a small component** of nuclear energy
3. **Primary production** sector is unlikely to see a significant increase in the number of new producers. These new producers will initiate production via small-scale operations, leading to the low egress of new supply.

**Exhibit 20: Estimated USA reactor requirements compared to future requirements covered by existing contracts.**



Source: EIA, Haywood Securities

Note that unfilled requirement data for 2008 and 2009 are estimates only.

## SUMMARY

**Underlying primary demand** growth has breadth (e.g., increase in reactor numbers) and depth (e.g., the increase in the number of countries investing in a nuclear future), which diversifies political, technological and financial risk. The fundamental leading indicators are strong for a rejuvenated uranium market, and should provide a solid foundation for uranium price. 439 reactor units are currently operating, and the WNA have identified another 36 under construction, 93 planned and 218 proposed across the globe. Future demand will also emanate from reactor power uprates and life extensions.

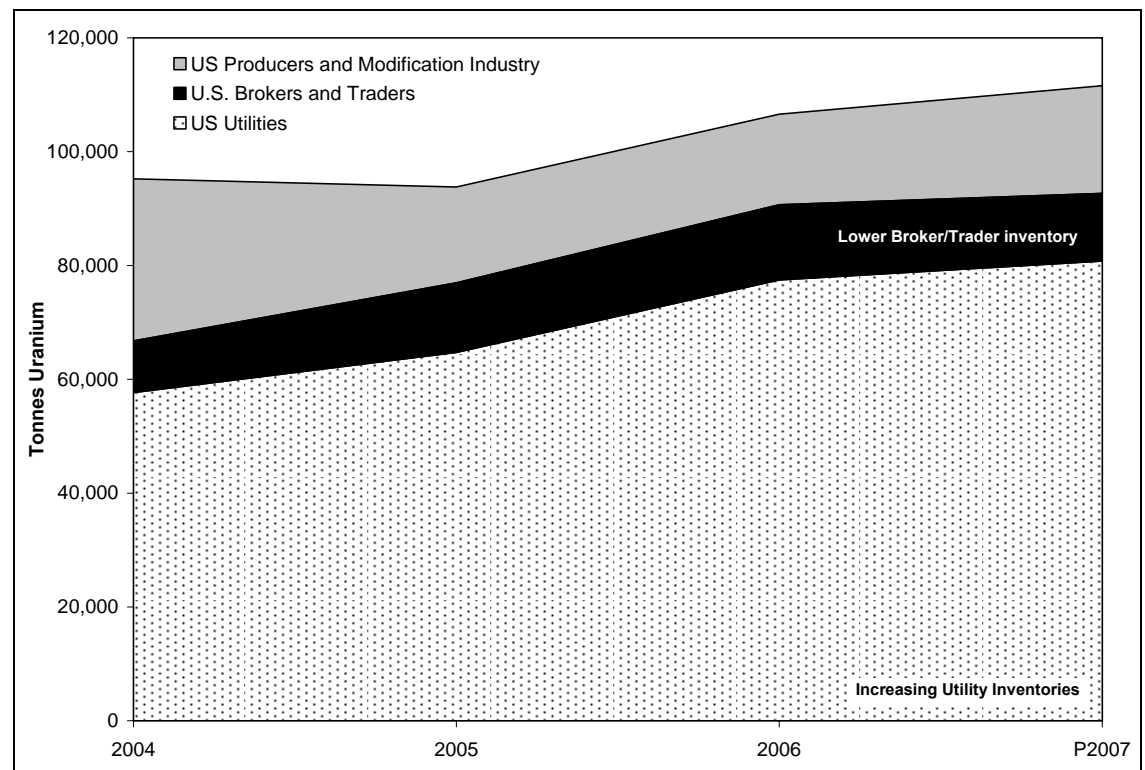


**Haywood Securities forecasts 113.5 million lb of U<sub>3</sub>O<sub>8</sub> primary production for 2008**, which is closest to the WNA lower forecast scenario. The rate of production atrophy from Q1/08 data shows that this issue is systemic across the industry. This production decline will lead to a greater reliance on ‘finite’ secondary material, which invariably puts pressure on the spot market.

**Primary production to 2015 will continue to rely on secondary supplies**, which is unsustainable, and particularly acute in an environment seeking to expand nuclear energy capacity. New production will originate largely from Kazakhstan, Africa, USA and Canada.

**The Spot and LT pricing scenario is unsustainable**, and is a short term phenomena related to buyer apathy despite apparent paring down of primary supply and near static utility inventories (Exhibit 21). Spot prices are near to actual production costs for some producers, and these prices are expected to re-establish equilibrium with the LT price by the end of 2008.

**Exhibit 21: Uranium inventories held by USA utilities, producers, brokers and traders as well as parties involved in product modification (e.g., enrichment) between 2004 and 2007.**



Source: EIA data.

Note that overall inventories have increased slightly, largely at the expense of that held by the Brokers/Traders.

**Neoproducers will originate only from the USA in the next three years.** Existing infrastructure and the presence of a regulated permitting regime in the USA means that this nation will be the next across the globe to witness the entrance of new producing companies that employ ISR and small-scale conventional mining practices to extract uranium (and vanadium) in Wyoming, Texas, Colorado and Utah.



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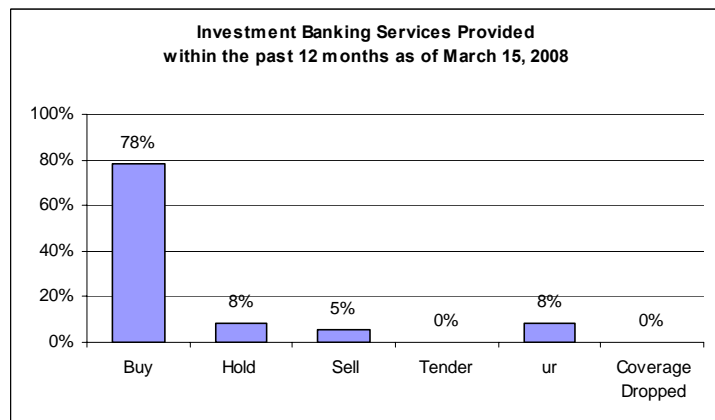
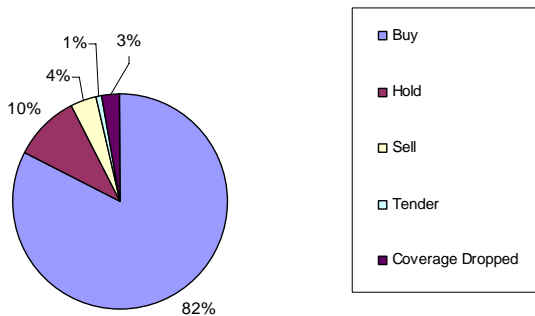
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