

MZConsulting New Year's Message 2012



2011 was dominated by the accident at Fukumisha in Japan. As the year ended, the reactors achieved cold shutdown and for 2012, the recovery will focus on decontamination and returning as many displaced people to their homes as possible. With new build decisions expected in the UK, US and possibly Canada, 2012 may be a turning point as nuclear expansion takes hold in the west adding to the already active programs in Asia.

While the spot price of uranium has stabilized at a little over \$50/lb from a pre-Fukushima high of over \$70/lb, stock prices of uranium companies have continued to decline reflecting continued uncertainty in the nuclear power sector, particularly in Europe and Japan. Importantly, 2011 also had positive developments for uranium including movement on the Olympic Dam expansion, the takeovers of both Hathor and Extract and agreement to allow the sale of uranium from Australia to India.

Company	Price CDN\$ Dec 30/11	1yr (%) 2011	1yr (%) 2010	1yr (%) 2009	1yr (%) 2008
Cameco CCO-T	18.41	-54.3	+18.8	+44	-46.8
Denison DML-T	1.27	-62.8	+158	-37.1	-83.6
Forsys FYS-T	0.73	-75.9	-26.9	-30.3	+72.4
Hathor HAT-T	4.69	+51.8	+70.7	-41.6	+320
Mega MGA-T	0.20	-81.7	+43.4	-24.0	-72.0
Toro TOE-AX	0.10	-28.6	+3.7	+35.0	-63.0
Paladin PDN-T	1.42	-71.7	+28.1	+66.4	-61.5
Powertech PWE-T	0.085	-72.1	-23.7	+2.6	-78.4
Pitchstone PXP-T	0.09	-77.5	+5.3	+26.7	-87.4
Strathmore STM-T	0.345	-73.0	+88.2	+54.5	-86.0
Uranium 1 UUU-T	2.16	-54.6	+57.6	+59.8	-79.7
Titan TUE-X	0.165	-66.3	+113	-41.0	-65.3
Tournigan TVC-X	0.07	-78.1	+36.2	-6.0	-84.0
Ur Part U-T	5.62	-29.0	+20.0	-14.0	-31.9
UEX UEX-T	0.66	-70.7	+105	+20.9	-90.0
Ur Energy URE-T	0.87	-70.8	+268	0.0	-80.5
Uranerz URZ-T	1.85	-53.6	+186	+66.7	-76.3
First Uranium FIU-T	0.165	-87.7	-41.7	-3	-75

2011 – A difficult year for uranium companies

Uranium companies saw a huge loss of value in 2011. In our Mid-year 2011 report, we noted that all companies were down significantly because of Fukushima. The Year-end numbers show further decline. The Uranium Participation Fund and large producers like Cameco and Uranium 1 and near producers like Uranerz

dropped less than exploration juniors, many of which are down 70-80%.

This reflects the immediate and lingering effect of Fukushima on uranium demand. With only 5 operating units in Japan and the seven shutdown units in Germany, almost 15% of the world's reactors are not operating for the short term with a longer term sustained demand reduction of about 5% due to plants not expected to go back into operation as a result of the accident.

Fukushima impact greatest in Europe

In December, Europe issued its Energy Roadmap 2050 which clearly reflects the post-Fukushima shift in thinking in Europe. All scenarios presented show a large increase in renewables and a decline in nuclear. The International Energy Agency World Energy Outlook 2011 released in November also considers a low nuclear scenario to account for a possible post-Fukushima shift away from nuclear power but its reference case is actually very similar to its 2010 report. In the reference case, global nuclear power is expected to rise 70% by 2035 with China, Korea and India leading the growth. Of more importance is the underlying message in these reports that nuclear power is definitely needed to meet both economic and carbon reduction targets.

Positive U supply developments

The entry of the world's second largest mining company into the Athabasca Basin through the purchase of Hathor is seen by many as good for the industry and region. It is anticipated that Rio Tinto will look to purchase other assets in the Athabasca. Meanwhile, the region's major producer, Cameco, is making good construction and regulatory progress with its delayed Cigar Lake project and has arranged a more economic processing agreement. In eastern Canada, the Nunatsiavut Assembly in Labrador has lifted a uranium mining moratorium in Inuit land after three years.

Supply side will also be significantly enhanced with the BHP plan to increase annual production at Olympic Dam in Australia from 4000t to 19000tpa progressively.

China Guangdong Nuclear Power Corp (CGNPC) is extending its reach in Africa by offering to buy Extract Resources for \$2.2B providing its deal to buy top shareholder, Kalahari Resources, proceeds. Extract's Husab uranium project is said to be the fifth largest uranium-only deposit in the world.

Countering the supply increases is the reduction in secondary supply from the down blending of Highly Enriched Uranium (HEU) from the Russian nuclear weapons program which will come to an end in 2013. This supply represents some 18% of

uranium mining. While a new multi-year supply agreement for Russian LEU will partially offset this, the end of the Megatons to Megawatts program should see prices rising again.

And finally, the recent decision by Australia to sell uranium to India is a welcome development by the nuclear industries in both countries.

Nuclear new build in Asia continuing

Today, China and India have 3% of nuclear plants in operation yet they have more than 50% of plants under construction on order or planned. China will meet its original 2020 target of 40GW by 2015 and will reach about 75GW by 2020. And this is only the beginning as they push for even faster growth in the future. Korea is increasing its domestic electricity share from nuclear and is targeting to become a major nuclear exporter having had its first success in the UAE.

None of these countries have adequate indigenous uranium to fuel these programs and are putting in place strategies to purchase uranium from abroad and invest in the resource itself.

Nuclear new build in the west expanding

Of most importance, progress is being made in the UK and North America. In the UK, the regulators have granted interim design acceptance of both Areva/EDF's UK EPRTM and Westinghouse's AP 1000 and planning application from EDF Energy for Hinkley C was accepted late in 2011. While the issue in North America is cost competitiveness with shale gas, not Fukushima; in the US, the NRC has approved the AP1000 design and the combined Construction and Operating licenses (COLs) are expected to be issued for projects in Georgia and in South Carolina in 2012. And In Canada, Ontario is likely to make a decision on new units.

About MZConsulting

MZConsulting offers services to the energy industry with a focus on project/business development, energy economics and energy policy development advising governments, utilities and others interested in new build nuclear and investment in uranium companies.