

December 2009

# CANDU Inc

## Investment Summary



# Disclaimer

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Atomic Energy of Canada Limited (“AECL”) is a federal Crown corporation constituted under the Canada Business Corporations Act, the shares of which are held by the Minister of Natural Resources on behalf of the Crown. This Investment Summary is being furnished to parties who may be interested in submitting proposals to invest in AECL’s CANDU Reactor Division that contains the reactor projects, refurbishments and services business of AECL (the “CANDU Reactor Division”). It is currently contemplated that a new corporation (“CANDU Inc” or the “Company”) will be incorporated to carry on the business of the CANDU Reactor Division. This Investment Summary, prepared by N M Rothschild & Sons Canada Limited and Rothschild Inc. (together, “Rothschild”) with the assistance of the management of AECL, is being provided to you (the “Recipient”) to assist you in deciding whether to proceed with an in-depth assessment of the Company.

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# Contacts

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## **Rothschild (Canada)**

161 Bay Street, Suite 3150  
Canada, Toronto, Ontario M5X 1B1  
Tel: +1 (416) 369-9600

## **Rothschild (New York)**

1251 Avenue of the Americas  
New York, NY 10020, USA  
Tel: +1 (212) 403-3500

### **David Drinkwater**

Chairman

*Tel: +1 (416) 369-4676*

*Fax: +1 (416) 864-1261*

*E-mail: david.drinkwater@rothschild.com*

### **Roger Wood**

Managing Director

*Tel: +1 (212) 403-5405*

*Fax: +1 (212) 403-5492*

*E-mail: roger.wood@rothschild.com*

### **Peter Teti \***

Director

*Tel: +1 (416) 369-2656*

*Fax: +1 (416) 864-1261*

*E-mail: peter.teti@rothschild.com*

### **Simon Pratt \***

Vice President

*Tel: +1 (212) 403-3604*

*Fax: +1 (212) 403-5474*

*E-mail: simon.pratt@rothschild.com*

### **Lin Lei**

Analyst

*Tel: +1 (416) 369-2647*

*Fax: +1 (416) 864-1261*

*E-mail: lin.lei@rothschild.com*

### **Andrew Kirby**

Analyst

*Tel: +1 (212) 403-3781*

*Fax: +1 (212) 403-5491*

*E-mail: andrew.kirby@rothschild.com*

\* Designated principal points of contact

## Introduction

An extensive review of Atomic Energy of Canada Limited (“AECL”) was launched in November 2007. The review was led by Natural Resources Canada (“NRCan”), with the participation of the Department of Finance and the Department of Justice, and the full collaboration of AECL.

The purpose of the NRCan review was to determine whether AECL’s current structure enables the company, and ultimately the Canadian nuclear industry, to participate fully in the expanding global nuclear market. The review engaged a wide range of stakeholders and involved an analysis of the legal and policy implications of the restructuring, a review of market conditions, a financial evaluation of the business, and a careful study of the impact of possible options on the future of AECL.

Three policy objectives anchored the examination of options in the review:

- i. Canada requires safe, reliable and economic options to address its energy and environmental needs;
- ii. The costs of the Government of Canada’s (“GoC”) support of the nuclear industry need to be controlled and the return on its investment in the industry maximized; and
- iii. The final outcome and structure of AECL should position Canada’s nuclear industry to seize domestic and global opportunities.

Together, these policy considerations drive towards an outcome that will help Canada maximize opportunities in the global nuclear marketplace, manage more effectively the federal investment in AECL and reduce GoC’s exposure to financial risk.

On May 28, 2009 the Minister of Natural Resources announced that GoC is moving forward with the restructuring of AECL.

As part of the restructuring process, AECL is being reorganized into two separate divisions:

- i) CANDU Reactor Division – comprising the reactor new build, refurbishment, and ongoing service activities. It is currently contemplated that a new corporation (“CANDU Inc” or the “Company”) will be incorporated to carry on the business of the CANDU Reactor Division; and
- ii) Research and Technology Division – comprising scientific research and certain development activities, isotope production, and waste management and decommissioning activities.

The reorganization is being implemented in part to facilitate third party investment in CANDU Inc.

On December 17, 2009, the Minister of Natural Resources announced that GoC is inviting investors to submit proposals for CANDU Inc. GoC is seeking proposals from third party investors who will be able to contribute to the achievement of the policy objectives described above. The announcement will not affect the Research and Technology Division, which includes the Chalk River Laboratories. The top priority of this division continues to be re-starting the National Research Universal reactor. GoC will make a decision at a later date on the best management structure for the Research and Technology Division.

GoC, through Public Works and Government Services Canada acting on behalf of NRCAN, engaged Rothschild in May 2009 to recommend a restructuring plan for AECL and to provide external financial advice as required. This Investment Summary provides information relating to CANDU Inc to assist potential investors in deciding whether to proceed with an in-depth assessment of the Company.

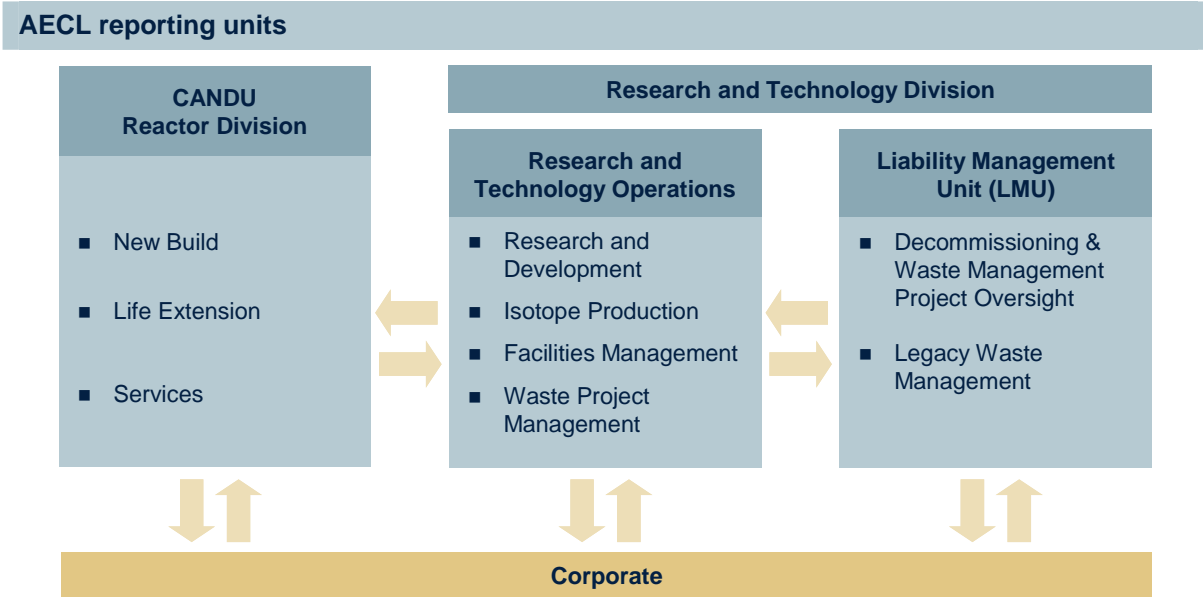
The figure below outlines the linkages between GoC's policy objectives, GoC's evaluative criteria for a successful CANDU Inc transaction, and GoC's desired outcomes for a successful CANDU Inc transaction.

Policy Objectives	Evaluative Criteria for Successful CANDU Inc. Transaction	Desired Outcomes for Successful CANDU Inc. Transaction
1. Safe, reliable and economic options to address Canada's energy and environmental needs	Enhance ability to efficiently deliver projects on time and on budget	<ul style="list-style-type: none"> <li>- Enhance commercially-driven project planning and management, and execution capacity</li> <li>- Maintain capacity to service the existing CANDU reactor fleet</li> </ul>
2. Control costs to the Government while maximizing return on investment	Reduce reliance on Government funding and taxpayer exposure to commercial risk	<ul style="list-style-type: none"> <li>- Provide access to private capital and debt</li> <li>- Transfer risk to private partner(s)</li> <li>- Limit Government backstopping of commercial risk</li> </ul>
	Maximize return on Canada's investment in nuclear energy	<ul style="list-style-type: none"> <li>- Obtain best value for CANDU Inc and its intellectual property</li> </ul>
3. Position Canada's nuclear industry to seize domestic / global opportunities	Strengthen and expand the Canadian nuclear industry	<ul style="list-style-type: none"> <li>- Expand access to key growing markets for Canadian nuclear industry and technology</li> </ul>
	Maintain and grow expertise and highly-qualified professionals	<ul style="list-style-type: none"> <li>- Maintain and grow the level of jobs and design and engineering activities in Canada</li> </ul>

This Investment Summary does not provide information on the Research and Technology Division, other than in the context of the relationship which is anticipated between it and CANDU Inc.

## Business description

The CANDU Reactor Division, based in Mississauga, Ontario, currently operates on a commercial basis as a part of AECL. Currently, AECL has two key reporting units: the CANDU Reactor Division and the Research and Technology Division, as shown in the figure below.



Source **AECL**

Note: This chart reflects AECL's reporting structure, and not its legal ownership

The CANDU Reactor Division – referenced here as “CANDU Inc” or the “Company” – generates value through its core activities, which include the management of nuclear reactor new-build construction, refurbishment or life extension of the existing CANDU fleet, and services projects. CANDU Inc also manages marketing and business development, and the development and commercialization of AECL’s ACR-1000 – an evolutionary, Generation III+, 1,200 MW hybrid heavy and light water reactor currently under development – as well as the Enhanced CANDU 6 (“EC6”), a Generation III evolution of the existing CANDU 6 reactor.

The Company currently employs approximately 1,800 full time staff members.

CANDU Inc is comprised of three business lines:

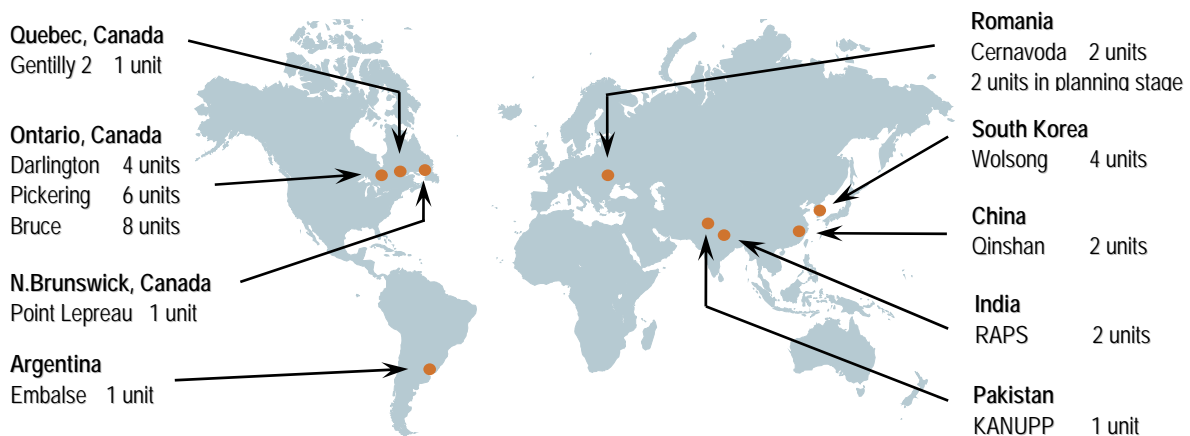
- New-build projects – activities related to the implementation of all new-build contracts, and to the development and commercialization of new reactor technologies, such as the EC6 and the ACR-1000;
- Life extension projects – CANDU reactor life extension or refurbishment projects, including the replacement of major reactor components. CANDU reactor life extensions allow CANDU operators to extend the life of reactors for an expected 25 to 30 years as opposed to decommissioning the reactor and building a replacement; and

- Services – the Services business provides a full range of engineering and technical products and services, including engineering, production, component supply, inspection and field services. The business supports operating CANDU plants by maximizing their useful lives through upgrades and improving customer productivity and competitiveness.

## CANDU technology

There are currently 32 CANDU (including 11 CANDU 6) reactors operating worldwide, including 20 in Canada, which represents approximately 7% of the installed base of nuclear plants globally:

### CANDU units worldwide

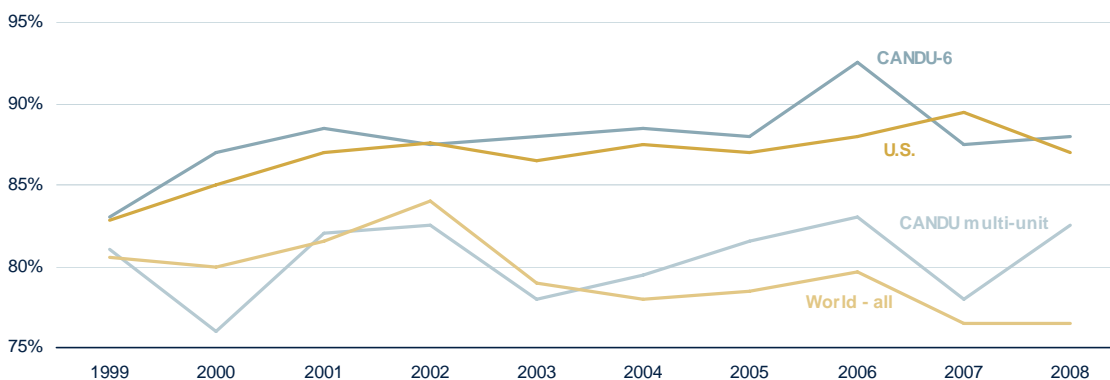


Source AECL

The CANDU 6 reactor, originally designed in the 1970s, is a pressurized heavy water reactor that has been sold for many years around the world. It is valued in Canada and globally for its reliability, efficiency, competitive capital and operating costs and ease of construction.

CANDU 6 reactors (between 600-730 MW in size), when compared to similar size and larger reactors, rank ahead of their competitors with an average lifetime capacity factor of 89% (pre-life extension outages). This is illustrated in the chart below, which is based on data for the last 10 years.

## CANDU 6 performance against competitors (by lifetime capacity factor)



Source CANDU Owners Group, 2009

As shown in the table below, AECL (CANDU Inc) has an outstanding record of bringing its new reactor projects on line. All of its most recent new build projects have been completed on or ahead of schedule, and on or below budget.

In Service Date	Plant	Status
1996	Cernavoda, Unit 1, Romania	On budget, on schedule *
1997/98/99	Wolsong Units 2, 3, and 4, South Korea	On budget, on schedule
2002	Qinshan Phase III, Unit 1, China	Under budget, 6 weeks ahead of schedule
2003	Qinshan Phase III, Unit 2, China	Under budget, 4 months ahead of schedule
2007	Cernavoda, Unit 2, Romania	On budget, on schedule

Source AECL

\* As per 1991 completion contract

### New Build

The business is pursuing the ACR-1000 and EC6 as leading edge nuclear technologies to be delivered safely, reliably, and economically, to the highest standards of quality and as products of choice for nuclear new build in Canada and around the world.

AECL (CANDU Inc) has a strong record in leading consortia, providing a business model whereby each of the partners takes on a share of project risk to deliver new CANDU power plants on a turnkey basis.

### Enhanced CANDU 6 (“EC6”)

The 750 MW EC6 maintains all of the proven features of the highly successful CANDU 6 reactor while delivering increased safety and security attributes that meet Generation III standards. Its size and ability to burn natural uranium give it a unique position in the marketplace where grid size and fuel are important considerations. It also continues the unique potential to utilize advanced fuels,

such as recovered uranium and thorium, and may be used to dispose of actinides. AECL estimates that the use of recovered uranium fuel from three light water reactors can keep a CANDU reactor running over its entire operational life. This presents a very attractive proposition for those countries that have light water reactor-based nuclear programs and access to recovered uranium. Recently an expert panel organized by China National Nuclear Corporation concluded that the thorium capable CANDU reactor is ideal for utilizing thorium resources and that the proposed engineering design is technically practical and feasible. The experts unanimously recommended that China consider new build of two more CANDU heavy water reactor units.

The target operating life for the EC6 will be 60 years, which will be achieved with replacement of certain critical equipment around mid life. In May 2009, the Canadian Nuclear Safety Commission (“CNSC”) commenced a review of the EC6 design and is expected to complete the high-level compliance review by February 2010.

## **ACR-1000**

The ACR-1000 is an evolutionary, Generation III+, 1,200 MW class hybrid heavy and light water reactor, designed to meet industry and public expectations for safe and reliable nuclear generation. The ACR-1000 is currently in development, and is designed for a 2018/19 in-service date. In September 2009, the CNSC completed Phase 2 of a Pre-Project Design Review, concluding that there are no fundamental barriers to licensing the ACR-1000 in Canada. The objective of a Pre-Project Design Review is to verify, at a high level, the acceptability of a nuclear reactor design with respect to Canadian safety requirements and expectations. The Engineering Design will be completed by March 2011.

ACR-1000 innovations include the following:

- The use of low enriched uranium, resulting in less refueling and lower spent fuel volume per MWh;
- Reduction in heavy water requirement relative to traditional CANDU reactors, cutting capital costs and reducing operating costs for environmental performance and occupational safety;
- Potential ability to burn alternate fuels such as mixed oxides and thorium;
- Simplified reactor control;
- Improved on-power maintenance and testing;
- Enhanced power maneuvering ability; and
- Higher overall thermal cycle efficiency, resulting from increased coolant and steam supply pressure and temperature.

On February 27, 2009, the Government of Ontario announced that it had received submissions from AECL (CANDU Inc), AREVA NP, and Westinghouse Electric Company for the construction of a new twin-unit nuclear power plant at Ontario Power Generation’s Darlington site. Infrastructure Ontario evaluated the submissions and announced on June 29, 2009 that, while AECL’s was the only submission that was deemed to be substantially compliant with the terms of the Request for Proposals (“RFP”), the Ontario Government was suspending the selection process citing concerns about pricing and uncertainty regarding AECL’s future.

Currently, the Research and Technology Division of AECL provides certain scientific research and development support for reactor development. Post-restructuring, this support will continue on the basis of a service agreement on commercial terms between CANDU Inc and the Research and Technology Division.

## ***Life Extension Projects***

With its Life Extension business, CANDU Inc is currently the provider of refurbishment capability for the existing CANDU fleet. Effective reactor refurbishment is the fastest, lowest cost and most sustainable power supply source available to customers with existing CANDU units. By replacing major reactor components and upgrading systems, CANDU Inc and its customers can extend the life of CANDU reactors by 25 to 30 years.

As with any first-of-a-kind project, there is a risk of encountering unforeseeable and unknown challenges. CANDU Inc has experienced a series of such challenges on the Bruce A and Point Lepreau projects, resulting in unexpected schedule delays. In response to these challenges, management and the Board have reorganized leadership of the projects, enhanced reporting and oversight capabilities, and actively pursued lessons learned through the newly created Retube Technology Group and Project Management Organizations.

CANDU Inc currently has four life extension contracts underway:

- **Bruce A, Units 1 and 2.** In October 2005, AECL (CANDU Inc) was awarded a life extension contract by Bruce Power A L.P. as part of the refurbishment of the Bruce A, Units 1 and 2 reactors (CANDU reactors each with capacity of 769 MW). CANDU Inc's project scope includes the removal and replacement of 480 pressure tubes and 480 calandria tubes in each of the two reactors, along with the associated hardware. Unit 2 is expected back on line in mid-2011, and Unit 1 in late-2011.
- **Point Lepreau 1.** In mid-2005, the decision was made to refurbish New Brunswick Power's 635 MW Point Lepreau reactor, which provides one quarter of the Province's power. It is the first CANDU 6 type reactor to undergo full refurbishment. Work began in April 2008, with CANDU Inc currently expected to finish its phase of the work by October 2010 and the plant projected to be back on line by February 2011. In addition to the life extension, this project will provide a 25 MW uprate to the Point Lepreau reactor. As with the Bruce A project, there have been cost overruns and timing delays at Point Lepreau, reflecting the technical complexity and first-of-a-kind nature of the project.
- **Wolsong 1.** Considerable refurbishment is being undertaken during an outage which began in April 2009 and is expected to last until late 2010, including pressure tube replacement. CANDU Inc is leveraging lessons learned from previous refurbishments in order to meet cost and schedule commitments. As of November 2009 the project was ahead of schedule. Experienced employees are being used from the Bruce and Point Lepreau projects wherever possible.
- **Gentilly 2.** Hydro Quebec decided in August 2008 to refurbish the 638 MW Gentilly 2 reactor. Most electricity in Quebec is generated from hydro power in the north of the Province. Gentilly, close to the Province's load center, has particular importance for grid stability and it also

provides energy security regardless of seasonal rainfall. The work is planned to be carried out in 2011-12.

Over the coming years, there will be a number of opportunities for CANDU Inc to capitalize on its life extension experience. Fifteen CANDU reactors worldwide are candidates for life extension between now and 2028, with the Embalse reactor in Argentina a near-term candidate.

## **Services Business**

CANDU Inc's CANDU Services business is a commercially driven organization that supports nuclear utility customers in the maintenance and operation of their nuclear power plants. It provides a comprehensive suite of products and services to its customers, including engineering services, component and equipment supply, and inspection and field services. CANDU Services works closely with engineering and technical delivery staff who perform the majority of the contracted projects. Areas of expertise include:

- **Engineering**  
Engineering expertise includes civil engineering; design drafting; electrical and control instrumentation; environmental qualification; fuel handling; plant computers; reactor engineering; safety analysis; and licensing support
- **Field services, specialized equipment and spare parts**  
CANDU Services provides a wide range of field services, including fuel channel and reactor core inspection and assessments; fuel channel replacements; feeder inspections and replacements; calandria tube-to-liquid injection nozzle gap inspections; steam generator primary side cleaning; calandria vault inspections and repairs; and 3D laser scanning and simulation.
- **Plant life management (life cycle management)**  
Plant life management programs are designed to help reactors achieve long life, high reliability and high predictability. Services are provided to promote plant life extension, return to service of laid up nuclear units, longer operating cycles, operations and maintenance cost reductions, and economic upgrades
- **Steam generator services**  
Steam generators are critical nuclear plant components and their high performance is essential for maximum thermal output and to successfully attain design life. The team provides periodic service and rehabilitation of worn components, and also provides inspections, analysis and tool repairs.
- **Waste storage**  
AECL developed MACSTOR (Modular Air-Cooled STORage) to provide on-site storage of dry spent fuel for CANDU utility customers around the world. Based on passive physics and engineering principles, MACSTOR modules provide highly efficient heat-rejection and shielding.

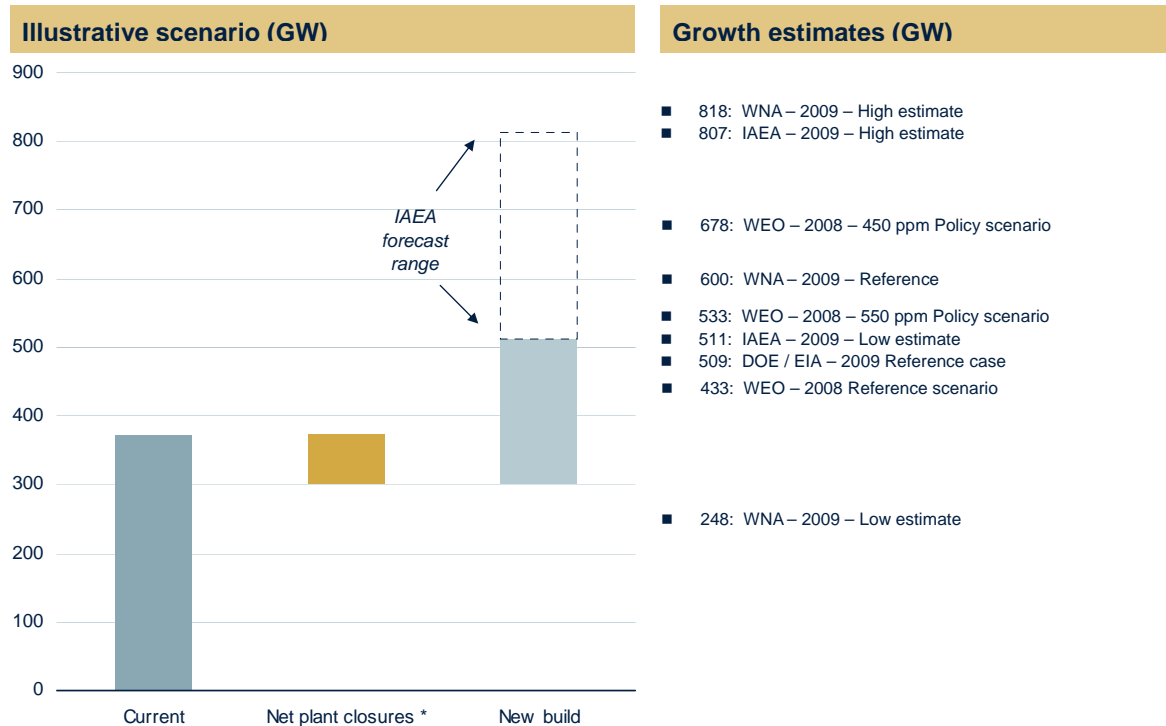
The CANDU Services business is an important component of CANDU Inc, with revenues consistently greater than \$100 million annually. The Research and Technology Division provides

support for many of the CANDU Services products and services. Post-restructuring, this support will continue on the basis of a service agreement on commercial terms between CANDU Inc and the Research and Technology Division.

## Market Overview – Reactor New Build

The International Atomic Energy Agency, in its 2009 report, significantly increased its projection of world nuclear generating capacity. It now anticipates between 511 and 807 GW in place by 2030. The change is based on specific plans and actions in a number of countries, including the U.S., U.K., China, India, Russia, Finland and France, coupled with the changed outlook due to climate change legislation.

### Nuclear reactor build market potential to 2030



#### Sources

WEO: World Energy Outlook

IAEA: International Atomic Energy Association

WNA: World Nuclear Association

DOE: U.S. Department of Energy

EIA: Energy Information Administration

\* An estimate of the number of plant closures relative to life extensions for the existing fleet of nuclear reactors

The drivers for new nuclear build are as follows:

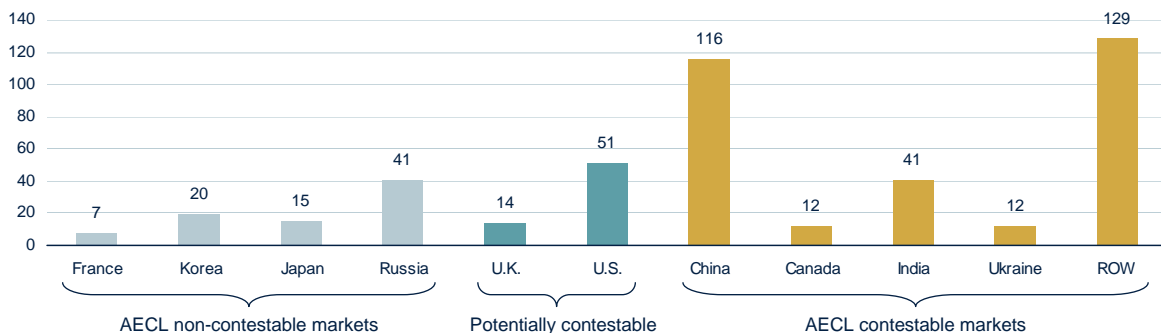
- Increasing energy demand:** Global population growth, in combination with industrial development, will lead to a doubling of electricity consumption by 2030, according to the World Nuclear Association. Besides this incremental growth, there will be a need to renew and/or replace a substantial portion of the current generation fleet in the U.S. and the E.U. over this period
- Climate change:** Increased awareness of the dangers and effects of climate change has resulted in decision makers considering policy options to reduce the use of fossil fuels and

increase the use of low-emission sources of energy, such as nuclear power (the only readily available large-scale alternative to fossil fuels for the production of baseload power)

- **Economics:** The high construction cost of nuclear reactors is currently a challenge in the development of new nuclear power. However, once built, nuclear power stations have lower fuel and operating costs than other sources of energy. A 2009 study by the Massachusetts Institute of Technology indicated that the introduction of a carbon charge of \$25/ ton, for example, could result in the levelized cost of electricity for nuclear power being competitive with fossil fuels at current prices
- **Insurance against future price exposure:** A long-term advantage of uranium over fossil fuels is the low impact that increased fuel prices have on the final electricity production cost for nuclear power, given the low portion of total nuclear production costs represented by fuel. This insensitivity to fuel price fluctuations offers a way to reduce the volatility in power prices in deregulated markets
- **Security of supply.** A re-emerging topic on many political agendas is security of supply and energy independence, due to many countries' vulnerability to interruptions in the supply of oil and natural gas. The abundance of naturally occurring uranium in politically stable countries (e.g. Canada and Australia) and the large energy yield per ton make nuclear power attractive from an energy security standpoint

CANDU Inc is well-placed to benefit from this global nuclear renaissance. Its heavy water technology is already present in large growth markets such as India and China. In Canada, Ontario's Integrated Power System Plan in August 2007 estimated that \$27 billion of investment in nuclear power would be needed in the years 2008–2027 to maintain nuclear's current 50% share of Ontario electricity generation. That investment includes building two to four new reactors. Elsewhere in Canada, Alberta and Saskatchewan are considering nuclear power as part of their energy mix, and nuclear new build in New Brunswick is also under consideration. CANDU Inc expects that markets in the "Rest of World" will be fruitful in the next five years, with live prospects in Romania, Argentina and Jordan, in addition to those prospects in China, India and the Ukraine.

## Global nuclear market growth forecast (GW capacity) – 2008 to 2080

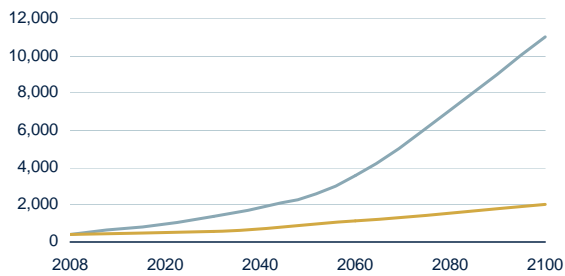


Source **World Nuclear Association, 2009; AECL**

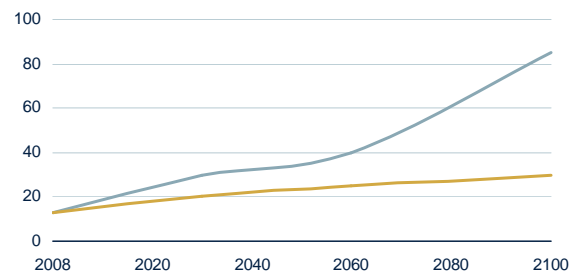
Contestable: markets where CANDU reactors have been previously sold, or where there is not a dominant incumbent reactor technology

Non-contestable: markets where there is a dominant incumbent reactor technology, and CANDU Inc does not have a marketing presence

## Global nuclear growth (GW)



## Canada nuclear growth (GW)



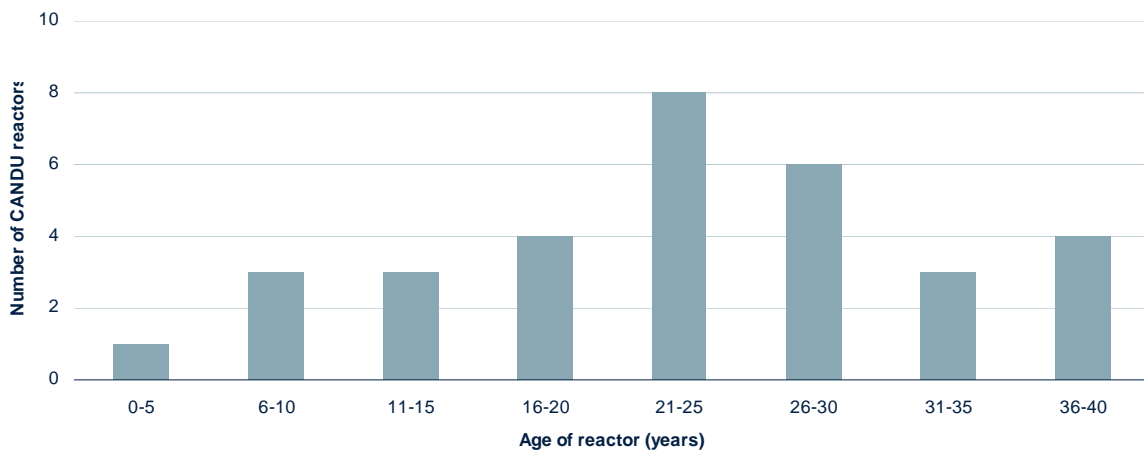
— High scenario — Low scenario

Source World Nuclear Association, 2009

## Market Overview – Refurbishments

After three decades of operation and relatively few recent new plant builds, the installed base of nuclear power plants has aged significantly. Approximately 65% of existing CANDU reactors are over 20 years old, providing a sizable market for major refurbishment projects over the next 10 to 20 years.

## Age of CANDU reactors worldwide



Source IAEA "Nuclear Power Reactors in the World, 2009"

## Financials

AECL does not have historical financial information for CANDU Inc. However, it has historically reported revenue and expenses for the CANDU Reactor Division, which closely approximates the CANDU Inc financials.

The table below provides the historical Income Statements for the CANDU Reactor Division. Note that the negative net income in 2009 is primarily a result of cost overruns on the refurbishment contracts.

### CANDU Reactor Division Income Statement (Year ended March 31)

\$ Millions	2009	2008	2007	2006	2005	2004
<b>CANDU Reactor Division</b>						
Revenue						
New-build & reactor life extension	183	407	390	180	179	326
Services	139	134	124	123	104	86
Interest on long-term receivables, investments & other	14	17	19	17	18	19
Parliamentary appropriations	100	-	-	-	-	-
	<u>436</u>	<u>558</u>	<u>533</u>	<u>320</u>	<u>301</u>	<u>431</u>
Expenses						
Cost of sales and operating expenses	(766)	(508)	(453)	(272)	(229)	(355)
<b>CANDU Reactor Division net income before investment in ACR</b>	<b>(330)</b>	<b>50</b>	<b>80</b>	<b>48</b>	<b>72</b>	<b>76</b>
Investment in ACR-1000 development						
Parliamentary appropriations	24	38	-	60	35	46
Development costs	(25)	(87)	(69)	(61)	(90)	(67)
	<u>(1)</u>	<u>(49)</u>	<u>(69)</u>	<u>(1)</u>	<u>(55)</u>	<u>(21)</u>
<b>CANDU Reactor Division net income</b>	<b>(331)</b>	<b>1</b>	<b>11</b>	<b>47</b>	<b>17</b>	<b>55</b>

Source **AECL Annual Report**

\* In Fiscal Year 2009, AECL had \$96 million of ACR development costs capitalized on the consolidated balance sheet

\*\* Parliamentary appropriations that are not in the nature of contributed capital are recorded as funding in the year for which they are appropriated, except as follows: appropriations restricted by legislation and related to expenses of future periods are deferred and recognized as funding in the period in which the related expenses are incurred, and appropriations used for the purchase of property, plant and equipment are recorded as deferred capital funding and amortized on the same basis as the related asset.

\*\*\* Development charges are expensed unless they meet the criteria for deferral: the product or process is clearly defined and the attributable costs are identifiable, technical feasibility of the product or process has been established, management intends to produce and either market or use the product or process, a market for the product or process is clearly defined or its usefulness to the enterprise has been established, and adequate resources exist, or are expected to be available, to complete the project.

## Investment highlights

### Entry into the Canadian nuclear industry

- CANDU Inc represents a rare opportunity for an investor to participate in the success of the leading player in the Canadian nuclear industry, as well as in the nuclear renaissance underway worldwide
- CANDU Inc is currently the only supplier of nuclear power reactor technology in Canada
- There is potentially strong demand for new nuclear capacity in Canada, with Ontario, New Brunswick, Alberta, and Saskatchewan all considering nuclear new builds
- CANDU Inc has a well-established supply chain and long-standing relationships with suppliers

### Highly experienced and innovative workforce

- Approximately 1,800 full time staff members working on commercial projects and ACR-1000 development projects. Of these employees, more than half have university degrees (approximately a quarter have graduate degrees). With half of the employee base comprising engineers, and a quarter of the employee base technical staff, CANDU Inc has in-depth qualifications in all aspects of the nuclear life cycle
- In addition, CANDU Inc is supported by scientists from the Research and Technology Division who are involved in research and development of CANDU technology. These scientists have been responsible for outstanding technological innovation throughout Canada's nuclear history
- CANDU technology and its scientists have received a number of national and international technological achievement awards (e.g. AECL scientist Bertram Brockhouse was awarded a Nobel prize for Physics in 1994, and in 1987 the CANDU reactor was named as one of Canada's top ten engineering accomplishments of the past century by the Canadian Engineering Centennial)

### Attractive product offerings

- ACR-1000
  - Independent reviews have confirmed the integrity of the ACR-1000 design. Pre-project design review by the Canadian Nuclear Safety Commission concluded there are “no fundamental barriers” to licensing the ACR-1000 design in Canada
  - A strong competitive position against AREVA's EPR and Westinghouse's AP-1000 was demonstrated in the Ontario RFP process – the most thorough and structured review of leading global nuclear Generation III+ technologies performed to-date. Only the submission from AECL (CANDU Inc) was substantially compliant with the terms of the RFP. However, Ontario has suspended the procurement process, citing concerns about pricing and uncertainty regarding AECL's future

- CANDU 6/ EC6
  - The strong operability and robust performance profile yields top capacity factors and best-in-class fuel integrity records
  - The EC6 is smaller than competitors' reactors, allowing access to emerging markets with capacity-constrained grids and/or to markets desiring a product with lower upfront capital costs than the ACR-1000 or competitors' products of similar size. The niche reactor market, while comprised of a variety of technologies, does not yet have a dominant supplier
  - CANDU is the only reactor that can burn natural uranium (and potentially thorium) and has the option to recycle uranium from spent light water reactor fuels

### **Global opportunities with CANDU technology**

- Several countries other than Canada have already embraced CANDU technology, such as China, South Korea, Romania, Argentina, India, and Pakistan
- AECL (CANDU Inc) has established joint ventures and Memoranda of Understanding with several countries, such as Argentina, China, India, and Ukraine
- Several institutions – e.g. World Nuclear Association, International Atomic Energy Association, World Energy Outlook, and Energy Information Administration – are all predicting large increases in nuclear capacity over the next twenty years. CANDU Inc is well-placed in several markets to benefit from this nuclear renaissance

### **Opportunities for refurbishment business**

- With a large proportion of the existing CANDU fleet due to reach its expected 30 year life over the next ten years, there will be significant refurbishment opportunities for CANDU Inc
- These projects are large and complex, and cannot effectively be undertaken by parties other than CANDU Inc, given the knowledge and experience of AECL in relation to the CANDU technology
- Improved efficiency and lessons learned at recent life extension projects bodes well for future projects, where improved practices and technology can be directly transferred from “first-of-a-kind” Canadian projects

### **Stable cash flow stream from CANDU Services business**

- The CANDU Services business consistently produces greater than \$100 million in revenues, and has had stable margins over the last decade
- The outlook for recurring service work is promising as utilities seek to enhance reliability, extend service life and optimize plant operations

## **Strong track record in new build project management**

- CANDU Inc has thirty years of experience building nuclear reactors and has an outstanding record of bringing nuclear new build projects on line: all of its most recent new build projects have been completed on or ahead of schedule, and on or below budget

## **Opportunity to partner with the Government of Canada**

- GoC will continue as an active participant in the government-to-government activity which underpins the marketing of nuclear reactors in many countries around the world