Please note that statements made in this handout, including statements regarding the outlook, company's objectives, projections, estimates, expectations or predictions, contain forward-looking information and statements within the meaning of applicable Canadian and U.S. securities laws. The company cautions that such information and statements involve risk and uncertainty, and that actual results could differ materially from those contained in them. In addition, certain material factors or assumptions were applied in drawing the conclusions or making the forecasts or projections reflected in them. Additional information about the material factors that could cause actual results to differ materially, and the material factors or assumptions that were applied, are contained at the end of this handout.

Rachelle Girard
Vice-President
Investor Relations
306.956.6403
rachelle_girard@cameco.com

www.cameco.com

Financial and outlook information as of February 7, 2019
Growing electricity demand
By 2040, global demand for electricity is expected to more than double 2017 levels

Source: IEA World Energy Outlook 2018 New Policies
Drivers for nuclear energy growth

- Global Energy Growth
- Baseload Electricity
- Climate Change
- Economic Development
- Energy Security
- Fuel Diversity

Strong nuclear growth
50 nuclear reactors under construction today, many more planned

Reactors Under Construction
Non-traditional markets

- China: 12
- India: 6
- UAE: 4

Fourth Quarter, 2018
China committed to nuclear
Slowed growth and reduced electricity demand in near-term; long-term prospects remain strong

China’s Nuclear Program on Track
- Mitigating air pollution
- Billions invested in new builds
- 58 GWe target
- Made in China 2025 policy – international growth
- Investing in uranium projects

Uranium market
Prices increasing but still low (since beginning of 2018)

Future growth
50 reactors under construction
Cyclical and driven by sentiment
Low price = abundant uranium – no urgency
High price = scarcity – active contracting

Origin disconnect
Gap is highlighted

*Based on estimated 2018 production and operable reactors
**Operable reactors in Asia include 36 in Japan, of which 9 have restarted
Signposts of a market shift
Meaningful contracting activity drives price and market improvement

Managing for the long-term
Focus on what we can control

- Focused on tier-one strategy
- Restructuring organization for efficiency
- Disciplined management of our production, inventory and purchases
- Protecting and extending value of contract portfolio
- Maximizing cash flow while maintaining our investment-grade rating
- Positioning company to self-manage risk and deliver long-term value
Focus on value
Well positioned for future demand with world-class, tier-one assets

- Extensive reserves and resources
  - 467 m lbs Proven & Probable Reserves
  - 423 m lbs Measured & Indicated Resources
  - 176 m lbs Inferred Resources

Please see Cameco’s most recent management’s discussion and analysis (MD&A) for more information about these reserves and resources.

Fourth Quarter, 2019

2019 outlook
Meeting our commitments

Uranium Required
28 - 30 million lbs*

Production
9.0 m lbs

Purchases* (committed & required)
18-21 m lbs

Inventory*

* We report our results and outlook based on a calendar year view, at a point in time. However, under our marketing framework, we plan on a rolling 12-month basis, which means our sales, inventory and purchases are all variables. Therefore, in accordance with market opportunities and as the year unfolds, we expect our actual sales, purchases and inventory will vary from what we are reporting in the 2019 Financial Outlook table in our Q4 MD&A.

Fourth Quarter, 2019
2019 outlook
Cameco upside

CRA Dispute
- Decision on application for costs of $38M

TEPCO Dispute
- Seeking damages of approximately $700M US plus interest and legal costs
- Arbitration hearing complete
- Number of post-hearing steps – expect completion by mid-May
- Final decision dependent on how long deliberations take

Fourth Quarter, 2018

Capital allocation
Decisions pivot on market

1. Navigate by investment-grade rating
2. Decisions based on run rate of our business
3. Not the savings account of our owners

Fourth Quarter, 2018
McArthur River
The world’s largest, high-grade uranium mine

Proven and Probable Reserves*  
273.6 million lbs
Average grade U₃O₈  
6.91%

Production
• 2018 production: 0.1 M lbs*
• 2019: indeterminate suspension

Cameco’s Share
69.8%

*Cameco’s share

Fourth Quarter, 2019

Cigar Lake
Uranium grades 100 times the world average

Proven and Probable Reserves*  
88.3 million lbs
Average grade U₃O₈  
14.48%

Production
• 2018 production: 9.0 M lbs*
• 2019 forecast: 9.0 M lbs*

Cameco’s Share
50%

*Cameco’s share

Fourth Quarter, 2019
**Inkai**

A significant low-cost source of uranium

**Proven and Probable Reserves**
- 104.6 million lbs
- Average grade U₃O₈: 0.03%

**Packaged Production**
- 2018 production: 6.9 M lbs (100% basis)
- 2019 forecast: 8.3 M lbs (100% basis)

**Cameco’s Share**
- 40%

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**Strong asset portfolio**

Including curtailed tier-two production due to current market conditions.

**Tier-Two Curtailed Operations**
- Rabbit Lake (production suspended)
- US ISR Operations (2018 production ceased resulting in < 100,000 lbs)

**Advanced Projects**
- Millennium
- Yeelirrie
- Kintyre

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*Values shown, including reserves and resources, represent our share only, unless indicated.
1 Effective January 1, 2018, our ownership interest in the joint venture dropped to 40% and we now account for our investment.
Due to the transition to equity accounting, our share of production is shown as a purchase.
Cameco

A deliberate strategy

- Well positioned to respond to changing dynamics
- Diversified portfolio, including tier-one assets
- Ability to restart and expand existing tier-one and tier-two assets
- Commercially motivated
- Best global exploration and advanced exploration portfolio
- Proven track record: licensing, permitting, operating, and community development

Conclusion

- Market uncertainty continues
- Strong long-term fundamentals remain
- Cameco positioned for success
Maps and Reference Figures
McArthur River - Raise Bore Mining System

- Freezing
- Pilot hole
- Reaming head
- Reaming head
- Backfill cement
- Staggered raises
Cigar Lake - Jet Bore Mining System (JBS)

- Orebody frozen prior to mining
- Ore removed using high-pressure water jet
- Cavity monitored using survey equipment
- Cavity backfilled with concrete
- Ore slurry contained to control radiation, eliminate dust
Cigar Lake - Underground Ore Processing

From Jet Boring Machine

Clamshell

To ore loadout on surface

Ore slurry hoisting pump

Ball mill

Crusher

Clarifier

Ball mill

Cigar Lake - New Austrian Tunneling Method (NATM)

Top-Heading Internal Support

Advantages

• Adaptive ground support, varies with rock strength
• Smaller amount of area open and unsupported ground at any given time
• Yielding elements absorb stress in a controlled, measured manner

Invert Internal Support

Comparison

• Overall time to develop a cross cut similar to tunnel boring
• NATM advance rate is slower, but setup and finish steps are faster
• Costs are similar between the two methods
Cigar Lake - Surface Freezing

Freeze hole specifications
- 462 m long, overburden to ~40 m
- ~8 - 10 days / drill hole
- required accuracy of ~1.5 m
- 100 - 120 holes / production panel

Timeline
- ~1.5 - 2 years to drill, outfit and activate a production panel
- freezing takes 2 - 5 years, depending on hole spacing and ground conditions
Caution About Forward-Looking Information

Statements contained in this handout include statements and information about our expectations for the future. When we discuss our strategy, plans and future financial and operating performance, or other things that have not yet taken place, we are making statements considered to be forward-looking information or forward-looking statements under Canadian and U.S. securities laws. They represent our current views, and can change significantly. These statements are based upon a number of material assumptions, which may prove to be incorrect. Actual results and events may be significantly different from what we currently expect because of the risks associated with our business. We recommend that you review our most recent annual and any subsequent quarterly management’s discussion and analysis for more information about these assumptions and risks. You should also review our current annual information form, which includes a discussion of other material risks that could cause actual results to differ significantly from our current expectations. Forward-looking information is designed to help you understand management’s current views of our near and longer-term prospects, and it may not be appropriate for other purposes. We will not necessarily update this information unless we are required to by securities laws.

Examples of forward-looking information that may appear in this handout include: our expectations regarding future world electricity consumption; our expectations regarding nuclear growth and uranium supply, demand, consumption, production, long-term contracting, prices and market conditions; our plans and outlook; production forecasts for uranium properties; mineral reserve and mineral resource estimates; and the outcome of litigation or other disputes.

The material risks that could cause actual results to vary include: uranium prices remain depressed by reduced demand for nuclear energy for a prolonged period or continue to decline; we are not successfully able to manage our costs, risks and operations; we are adversely affected by changes in currency exchange rates, interest rates, royalty rates, or tax rates; our production costs are higher than planned; necessary supplies are not available, or not available on commercially reasonable terms; our estimates of production, purchases, costs, cash flow, decommissioning, reclamation expenses, or our tax expense prove to be inaccurate; we are unable to enforce our legal rights under our existing agreements, permits or licences; we are subject to litigation or arbitration that has an adverse outcome; there are defects in, or challenges to, title to our properties; our mineral reserve and resource estimates are not reliable; there are unexpected or challenging geological, hydrological or mining conditions at uranium properties; we are affected by environmental, safety and regulatory risks, including increased regulatory burdens or delays; necessary permits or approvals from government authorities cannot be obtained or maintained; we are affected by political risks; we are affected by terrorism, sabotage, blockades, civil unrest, social or political activism, accident or a deterioration in political support for, or demand for, nuclear energy; we are impacted by changes in the regulation or public perception of the safety of nuclear power plants; government regulations or policies that adversely affect us, including tax and trade laws and policies; our uranium suppliers or purchasers fail to fulfil commitments; development, mining or production plans are delayed or do not succeed for any reason; the risk our estimates and forecasts prove to be inaccurate; the risk our strategies are unsuccessful or have unanticipated consequences; we are affected by natural phenomena, including inclement weather, fire, flood and earthquakes; operations are disrupted due to problems with facilities, the unavailability of reagents, equipment, operating parts and supplies critical to production, equipment failure, lack of tailings capacity, labour shortages, labour relations issues, strikes or lockouts, underground floods, cave-ins, ground movements, tailings dam failures, transportation disruptions or accidents, or other development and operating risks.

We have made material assumptions regarding: our ability to manage our costs, risks and operations; sales and purchase volumes and prices for uranium and fuel services; trade restrictions; that counterparties to our sales and purchase agreements will honour their commitments; the demand for and supply of uranium; the construction of new nuclear power plants in various countries and the relicensing of existing nuclear power plants not being more adversely affected than expected by changes in regulation or in the public perception of the safety of nuclear power plants; our ability to continue to supply our products and services in the expected quantities and at the expected times; production levels; costs, including production and purchase costs; the success of our plans and strategies; market conditions and other factors upon which we have based our plans and
outlook; spot prices and realized prices for uranium; tax rates and payments, royalty rates, currency exchange rates and interest rates; the successful outcome of any litigation or arbitration claims; our decommissioning and reclamation expenses; the reliability of our mineral reserve and resource estimates; our understanding of the geological, hydrological and other conditions at uranium properties; the success of development, mining and production plans; our and our contractors’ ability to comply with current and future environmental, safety and other regulatory requirements, and to obtain and maintain required regulatory approvals; and operations not being significantly disrupted as a result of political instability, nationalization, terrorism, sabotage, blockades, civil unrest, breakdown, natural disasters, governmental or political actions, litigation or arbitration proceedings, the unavailability of reagents, equipment, operating parts and supplies critical to production, labour shortages, labour relations issues, strikes or lockouts, underground floods, cave-ins, ground movements, tailings dam failure, lack of tailings capacity, transportation disruptions or accidents, or other development or operating risks.

Cautionary Note to Investors in the United States

Information contained in this handout regarding our mineral reserves has been prepared in accordance with the requirements of securities laws in effect in Canada. National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Unless otherwise indicated, all mineral reserve estimates contained in this handout have been prepared in accordance with NI 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum Classification System. These standards differ significantly from the requirements of the U.S. Securities and Exchange Commission, and mineral reserve information contained in this handout may not be comparable to similar information disclosed by United States companies.

Qualified Persons

Information of a scientific and technical nature concerning McArthur River was prepared under the supervision of Greg Murdock, general manager, McArthur River, concerning Cigar Lake was prepared under the supervision of Lloyd Rowson, general manager, Rabbit Lake/Cigar Lake, concerning Inkai was prepared under the supervision of Darryl Clark, consultant geologist and concerning our reserve and resource estimates was prepared under Scott Bishop, director, technical services. Each of these individuals is a qualified person for the purpose of NI 43-101.
**The nuclear fuel cycle**

1. **Mining**
   Once an orebody is discovered and defined by exploration, there are three common ways to mine uranium, depending on the depth of the orebody and the deposit's geological characteristics:
   - **Open pit mining** is used if the ore is near the surface. The ore is usually mined using drilling and blasting.
   - **Underground mining** is used if the ore is too deep to make open pit mining economical. Tunnels and shafts provide access to the ore.
   - **In situ recovery (ISR)** does not require large scale excavation. Instead, holes are drilled into the ore and a solution is used to dissolve the uranium. The solution is pumped to the surface where the uranium is recovered.

2. **Milling**
   Ore from open pit and underground mines is processed to extract the uranium and package it as a powder typically referred to as uranium concentrates (U$_3$O$_8$) or yellowcake. The leftover processed rock and other solid waste (tailings) is placed in an engineered tailings facility.

3. **Refining**
   Refining removes the impurities from the uranium concentrate and changes its chemical form to uranium trioxide (UO$_3$).

4. **Enrichment**
   Uranium is made up of two main isotopes: U-235 and U-238. Only U-235 atoms, which make up 0.7% of natural uranium, are involved in the nuclear reaction (fission). Most of the world's commercial nuclear reactors require uranium that has an enriched level of U-235 atoms. The enrichment process increases the concentration of U-235 to between 3% and 5% by separating U-235 atoms from the U-238. Enriched UF$_6$ gas is then converted to powdered UO$_2$.

5. **Fuel manufacturing**
   Natural or enriched UO$_2$ is pressed into pellets, which are baked at a high temperature. These are packed into zircaloy or stainless steel tubes, sealed and then assembled into fuel bundles.

6. **Generation**
   Nuclear reactors are used to generate electricity. U-235 atoms in the reactor fuel fission, creating heat that generates steam to drive turbines. The fuel bundles in the reactor need to be replaced as the U-235 atoms are depleted, typically after one or two years depending upon the reactor type. The used or spent fuel is stored or reprocessed.

**Spent fuel management**
The majority of spent fuel is safely stored at the reactor site. A small amount of spent fuel is reprocessed. The reprocessed fuel is used in some European and Japanese reactors.
Cameco will energize the world as the global leader of fuel supply for clean-air nuclear power.