



Conversion & Enrichment Supplier Assessments



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Table of Contents

Introduction & Overview	3
• Companies Profiled in this Report	4
• Compendium to Conversion and Enrichment Market Outlooks	4
Structure of Report	4
1 – Conversion Supplier Profiles	5
Cameco Corporation	6
• Company Overview	6
• Operations	6
• Market Strategy	7
Honeywell/ConverDyn	8
• Company Overview	8
• Operations	8
• Market Strategy	9
Orano	10
• Company Overview	10
• Operations	10
• Market Strategy	11
TVEL/TENEX	12
• Company Overview	12
• Operations	12
• Market Strategy	14
China National Nuclear Corporation (CNNC)	16
• Company Overview	16
• Operations	16
• Market Strategy	17
Other Suppliers	18
• Industrias Nucleares do Brasil	18
• Urenco	18
• Centrus Energy	18
• Traders and Financials	18
• Potential New Suppliers	19
• Westinghouse –Springfields Fuels Ltd	19
• Global Laser Enrichment	19
Global Capacities and Market Shares	20
• Production Capacities	20
• Market Shares	21
• Supplier Shares in the Open Market	22
2 – Conversion Supplier Risk Assessments	23
UxC Conversion Supplier Risk Assessment Methodology	23
• Company-Level Risks	23
• UF ₆ Production Facility and Operational Risks	23
UxC Conversion Supplier Risk Matrix	25
Discussion of Converter Risk Ratings	26
• Cameco	26
• ConverDyn	26
• Orano	27
• TVEL/TENEX	28
• CNNC	29
3 – Enrichment Supplier Profiles	30
Orano	31
• Company Overview	31
• Operations	31
• Market Strategy	32
Urenco	33
• Company Overview	33

• Operations.....	33
• Market Strategy.....	34
TVEL/TENEX	36
• Company Overview.....	36
• Operations.....	36
• Market Strategy.....	37
Centrus Energy	40
• Company Overview.....	40
• Operations.....	40
• Market Strategy.....	41
China National Nuclear Corporation (CNNC).....	43
• Company Overview.....	43
• Operations.....	43
• Market Strategy.....	44
Other Suppliers	45
• Japan Nuclear Fuels Limited.....	45
• Industrias Nucleares do Brasil	45
• Traders.....	46
• Potential New Suppliers.....	46
• Global Laser Enrichment.....	46
Global Market Shares.....	47
• Market Shares.....	48
• Supplier Shares in the Open Market.....	49
4 – Enrichment Supplier Risk Assessments	50
UxC Enrichment Supplier Risk Assessment Methodology.....	50
• Company-Level Risks	50
• SWU Production Facility and Operational Risks.....	51
UxC Enrichment Supplier Risk Matrix	52
Discussion of Enricher Risk Ratings	53
• Orano	53
• Urenco.....	53
• TVEL/TENEX	54
• Centrus Energy	54
• CNNC.....	55

List of Figures

Figure 1. Uranium Conversion Market Shares (Primary Only).....	21
Figure 2. Uranium Conversion Market Shares (Including Secondary).....	21
Figure 3. Open Market Conversion Supplier Shares	22
Figure 4. Uranium Enrichment Market Shares (Primary Only).....	48
Figure 5. Uranium Enrichment Market Shares (Including Secondary).....	48
Figure 6. Open Market Enrichment Supplier Shares.....	49

List of Tables

Table 1. World Conversion Capacity vs. 2022 & 2023 Estimated Production	20
Table 2. Conversion Supplier Risk Matrix in 2023	25
Table 3. Changes in Conversion Supplier Risk Ratings since 2022	25
Table 4. Urenco's Enrichment Plants and Capacities in 2023	33
Table 5. TVEL's Enrichment Plants and Capacities in 2023.....	36
Table 6. CNNC's Enrichment Plants and Capacities in 2023	43
Table 7. World Enrichment Capacity vs. 2022 & 2023 Estimated Production	47
Table 8. Enrichment Supplier Risk Matrix in 2023	52
Table 9. Changes in Enrichment Supplier Risk Ratings since 2022	52

Introduction & Overview

UxC, LLC (UxC) is pleased to present this fourth edition of our annual report on the topic of **Conversion & Enrichment Supplier Assessments (CESA)**. In this report, we evaluate the supply sectors for the second and third steps of the nuclear fuel cycle. Specifically, these represent the services for the supply of uranium hexafluoride (UF₆) conversion and enrichment of the ²³⁵U isotope from the 0.711^w% level found in natural uranium (i.e., through the supply of separative work units or SWU).

Following Russia's military invasion of Ukraine in 2022, it has become abundantly clear that the conversion and enrichment sectors are crucial to nuclear fuel supply sustainability and significantly affect other parts of the fuel cycle, including the uranium market. Conversion and enrichment also represent important parts of the overall cost of finished nuclear fuel and are critical aspects of the procurement considerations for operators of nuclear power plants around the world that rely on enriched uranium fuel. Thus, while there are fewer global suppliers of conversion and enrichment compared with the more diverse uranium industry, utilities must make critical decisions when evaluating their supply options for these services.

The CESA report has two main objectives:

- 1) Providing concise profiles of each of the suppliers in the conversion and enrichment markets with an emphasis on issues that affect their current state in the industry and ability to supply in the coming years. This also includes a comparative analysis of each supplier's relative standing in the market in terms of market shares based on current sales estimates.
- 2) Assessing risks for each supplier based on ten distinct factors that affect their operations and ability to consistently perform as suppliers. These assessments are intended to be completely unbiased and based on UxC's independent review and comprehensive understanding of each company's performance and potential risk profile.

To support utilities active in these markets and interested in evaluating their current and possible prospective suppliers, CESA offers a unique set of data and information to evaluate each supplier and inform procurement decisions. This report can also help utilities perform comparative supplier risk evaluations.

For suppliers active in either conversion or enrichment, the CESA report provides a unique tool to evaluate competitive strengths and weaknesses in comparison to their competitors.

Finally, for any entity interested or engaged in any aspect of these two market segments, such as financial investors, government policymakers, commodity traders, or others, CESA presents fresh insights and quantitative data to make informed business decisions.

• Companies Profiled in this Report

The active and prospective international suppliers profiled in this report and assessed on the basis of overall risks in their respective fuel markets include the following:

- Cameco Corporation (conversion)
- Centrus Energy (enrichment)
- China National Nuclear Corporation (conversion and enrichment)
- ConverDyn/Honeywell International (conversion)
- Global Laser Enrichment (conversion and enrichment)
- Orano (conversion and enrichment)
- Urenco (enrichment)
- TVEL Fuel Co. and TENEX (conversion and enrichment)
- Westinghouse – Springfield Fuels Ltd. (conversion)

• Compendium to Conversion and Enrichment Market Outlooks

The CESA report is intended to supplement UxC's *Conversion Market Outlook* (CMO) and *Enrichment Market Outlook* (EMO) reports. Both the CMO and EMO reports provide detailed coverage of their respective markets, including updated contracting activity, supply and demand outlooks, market trends, and price forecasts through 2040.

Structure of Report

The CESA report includes the following chapters:

Chapter 1 – Conversion Supplier Profiles provides profiles of all the suppliers currently active in the UF₆ conversion market and includes an analysis of their respective market shares as of 2023.

Chapter 2 – Conversion Supplier Risk Assessments presents UxC's latest risk assessments for conversion suppliers based on current market and operating conditions through a comprehensive risk matrix. Also included is an explanation of UxC's methodology for assessing conversion supplier risks as well as a review of the key considerations that impact each company's current risk ratings.

Chapter 3 – Enrichment Supplier Profiles provides profiles of all the suppliers currently active in the enrichment market and includes an analysis of current market shares as of 2023.

Chapter 4 – Enrichment Supplier Risk Assessments presents UxC's latest risk assessments for enrichment suppliers based on current market and operating conditions through a comprehensive risk matrix. Also included is an explanation of UxC's methodology for assessing enrichment supplier risks as well as a review of the key considerations that impact each company's current risk ratings.