

NUCLEAR FUEL MARKET ISSUES & INSIGHTS

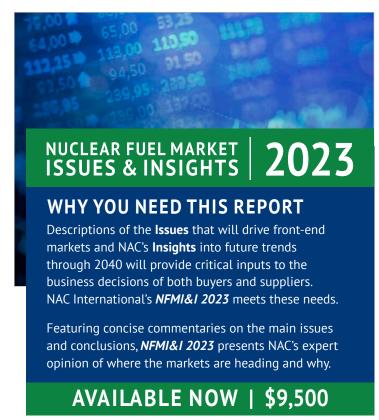
NAC International's annual front-end market analysis report, *Nuclear Fuel Market Issues & Insights*, is available now.

Throughout the world, new nuclear is gaining prominence as an attractive option for meeting future electricity needs, which is creating momentum for the advancement of SMRs and advance reactors. In parallel, a major restructuring of the nuclear fuel markets is underway due to the war in Ukraine. Swift changes in utility procurement strategies and risk management practices are pulling demand forward, which is impacting inventories and influencing decisions to expand production capacity throughout the fuel cycle. This is further complicated by the increasing involvement of investment funds and the uncertainty of their decisions to buy and sell.

With these concurrent shifts underway, difficult decisions are required to navigate the uncertainties that lie ahead. To better prepare market players to make well informed decisions, NAC performs robust country-by-country assessments to derive a long-range forecast of nuclear generation (MWe). This underpins NAC's analysis of each sector of the fuel cycle, which provides the basis for the most likely projection of future demand, leading to conclusions that result in important insights into the future direction of the front-end markets.

Some of the key issues addressed in the report include the following:

- What are market impacts of Russian sanctions in the nearterm and long-term?
- How is enrichment underfeeding likely evolve?
- When is new production needed in each sector of the fuel cycle?
- Will deployment of SMRs and advanced reactors have a meaningful impact on the nuclear fuel markets?
- Will primary U308 producers, particularly Kazatomprom, continue to limit near-term production?
- What is the outlook for the uranium market with the announced and expected increases in production?
- How will China handle its excess uranium inventory?
- How will the influx of financial investors and funds influence market prices and affect the competitive landscape?



- What is the outlook for the conversion market now that Honeywell has restarted the Metropolis Works facility?
- What are the price forecasts for uranium, conversion, and enrichment?
- How will fabrication facilities be affected by the interest in qualifying alternate VVER fuel suppliers?
- What market developments are likely to influence the degree of competition in fabrication markets, including VVERs?
- What are the challenges for having a secure and sustained supply of HALEU?

Overall, our market analyses and price forecasts, which make use of detailed supply demand models together with cost of production benchmarks, provide a solid evaluation tool in support of planning and developing strategy, whether for buyers, sellers or investors.

Continued

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KEY TOPICS FOR THE 2023 EDITION OF NUCLEAR FUEL MARKET ISSUES & INSIGHTS

NUCLEAR GENERATING CAPACITY

Nuclear Capacity Expansion Trends in China

Export Trends of Russian-designed Plants

Trends in Capacity of Unique Reactor Designs

New Construction Trends in Other Countries

Shutdown Trends Based on Reactor Licensing

Megawatt Forecasts

U₃O₈ MARKET

Key Issues Affecting the Market

Current Market Overview

Review of Primary Supply

Review of Secondary Supply

Initial Supply/Demand Comparisons

Worldwide Cost Trend Analysis

Cost Trends

Outlook for Future Prices

U₃O₈ -TO-UF₆ CONVERSION MARKET

Overview of Major Converters

Conversion Capacities and Secondary Supply

Supply/Demand Comparisons

Outlook for Future Prices

NFMI&I 2023 evaluates the worldwide markets for U₃O₈, UF₆ conversion and enrichment services, and nuclear fuel fabrication including demand, the status of major suppliers, as well as projected ranges of and general trends for spot and long-term price movements. The report addresses the relative sensitivity of the price forecasts to changes in supply-demand balance driven by plausible future scenarios. It also assesses the market and technical drivers for the fabrication market.

NUCLEAR FUEL MARKET ISSUES & INSIGHTS

2023

ENRICHMENT MARKET

Uncommitted Demand

Capacity, Projects and Financial Performance

Supply/Demand Analyses

Enrichment Production Costs

Market Competition

Outlook for Future Prices

FABRICATION

Market Drivers

Fabrication Industry

Expanding and Declining Market Segments

Developments and Price Trends

Fabrication Facility Shop Loads

SMALL MODULAR AND ADVANCED REACTORS

Categories

Complete List of SMR and AR Designs Under Construction

Analysis of Design Types by Country

SMRs and ARs: Evolutionary vs. Revolutionary Concepts

SMRs and ARs: Impacts to the Fuel Cycle Including HALEU

APPENDICES

Appendix A: U₃O₈ Price Forecasting Methodology