



MESC

OFFICE OF MANUFACTURING AND ENERGY SUPPLY CHAINS

Critical Materials Market Dynamics Request for Information

Preliminary Findings

08/22/2024

Background

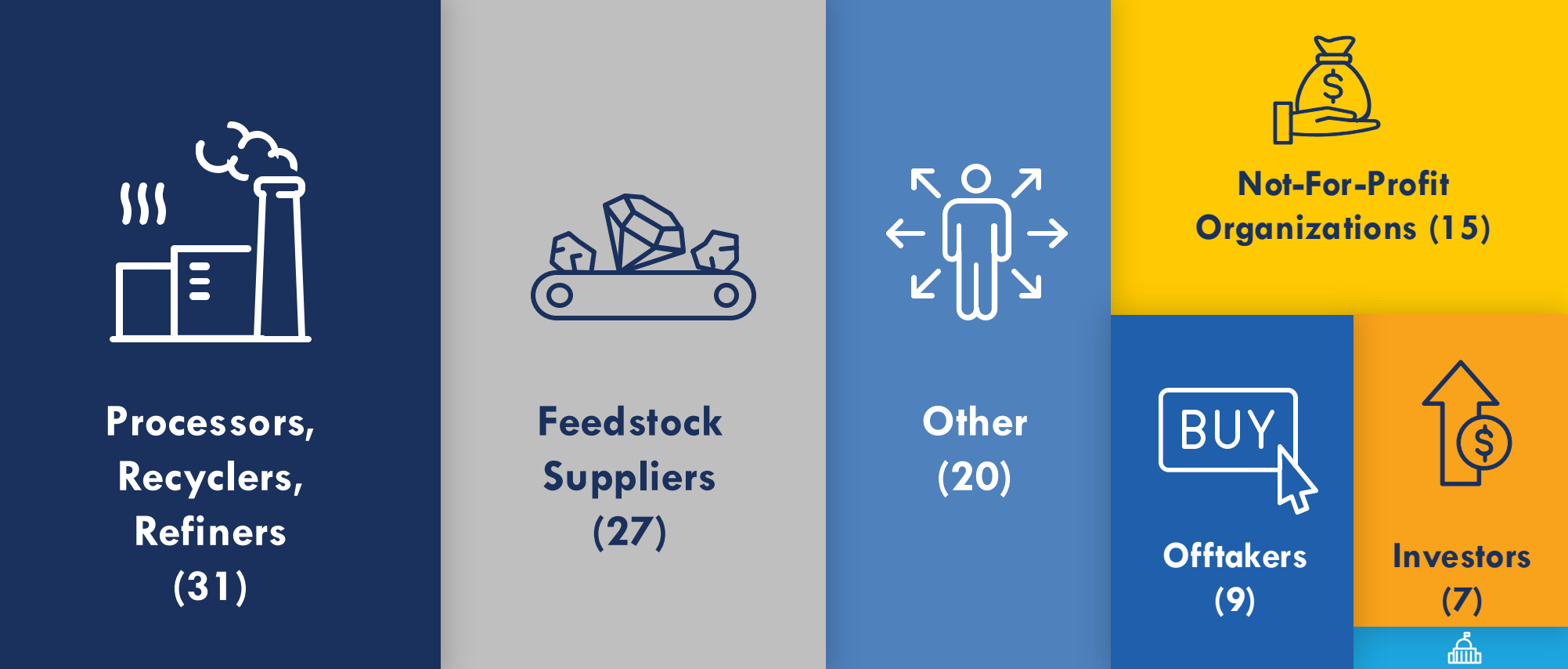
In April 2024, the Manufacturing and Energy Supply Chains office (MESCO) of the Department of Energy (DOE) released a Request for Information (RFI) on Critical Materials Market Dynamics to obtain industry and other stakeholder perspectives on:

- Market dynamics, including price volatility, in critical minerals and materials processing, refining, and recycling.
- Anti-competitive practices that may be creating hurdles to American critical materials companies seeking to compete in critical materials markets.
- How the federal government could help respond to anticompetitive practices.

This preliminary presentation provides an overview of the RFI responses.

Please note: This presentation is provided for informational purposes only. Quotations are offered as illustrative of respondents' perspectives, and do not necessarily reflect DOE views. DOE is not bound by any contents of this presentation.

Overview: Responses by Organization Type



Government
Entities (1)



RFI Questions

The RFI posed series of questions, which are summarized below:

1. For a given critical material, are there particular market dynamics DOE should be aware of?
2. What measures can DOE take to promote market stability within a given critical material market?
3. What indicators of market volatility demonstrate the need for support? What are effective measures DOE or the Federal Government could take to support critical materials?
4. What are the benefits and drawbacks of physical offtake of critical material products for stockpiling compared to other measures? What existing mechanisms could be used and what concerns should be considered in terms of implementation?
5. Would setting up alternative exchanges or indices with international partners for critical materials enable price transparency, market stability, or reduce emissions?
6. What other tools can support price transparency, market stability, or reduce emissions?

The full text of the RFI, and other RFI details, can be found [here](#):

<https://www.energy.gov/mesc/articles/request-information-critical-materials-market-dynamics-office-manufacturing-and>

Anticompetitive Practices Pose Significant Challenges to Domestic Critical Materials Companies

- Extreme volatility, with prices fluctuations of up to 5x, has negatively affected multiple critical material markets in recent years.
- Respondents attributed this volatility primarily to:
 - Anticompetitive practices by Foreign Entities of Concern (FEOC) that have cornered many of the critical materials markets, including below-cost and other price distortions as well as market oversupply.
 - Relatively small markets for some materials, particularly Rare Earth Elements (REE).
- Price volatility and below-market pricing deter investment, due to increased risk.



Overcapacity, the wide availability of subsidies, and price dumping... affect global pricing and product availability”

A metal and alloy manufacturer



Energy Subsidies and Low Environmental Social & Governance (ESG) Standards Impact Competitiveness

- Subsidized energy prices create competitive advantages for high-energy-intensive processing.
- Differentials in international prices due to labor, permitting speed, as well as lower environmental standards also create competitive advantages



The cost of production differs dramatically across the world, with the cost of labor, utilities, and subsidies all impacting the final cost of production... The foreign costs of virgin or mined materials do not always reflect their full or true costs, but instead may bear the geopolitical costs of a given country and its desire to corner the market for a given critical material... This is at a disadvantage to domestic companies, allowing foreign pricing to more easily undercut domestic pricing.

A battery recycling company



Strong Support for Additional DOE Tools to Address Market Concerns

- Developers, offtakers, and think tanks supported demand-side tools.
- Demand-side tools include contract-for-differences, fixed price floors, and loan guarantees to market makers.
- Several respondents emphasized DOE should explore additional authorities and potential consortia with other countries sharing commitments to free trade and high ESG standards.



We believe that providing offtake pricing support, whether structured as a contract-for-differences to mitigate commodity pricing volatility or as a fixed-price structure, will be beneficial for unlocking additional private capital investment across the supply chain.

A Private Equity Investor



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