iAONR Weekly News



The **iAONR Weekly News** aims to report and summarize key events, viewpoints, and conclusions from the past week about natural resources research progress and achievements around the world.



Volume 1, Issue 1 | Date: October 26- November 1, 2023 | A Weekly Digest of Global Natural Resources Research & Policy

Executive Summary

This week's research highlights a strong focus on the intersection of climate policy and critical mineral supply chains. Key developments include a major report warning of significant supply gaps for energy transition minerals, a groundbreaking study on the global economic impact of "ecosystem services," and a policy shift in the EU regarding its Critical Raw Materials Act. Additionally, new research provides a more nuanced view of the Amazon's resilience to climate change.

1. Critical Minerals & The Energy Transition

Event: IEA Releases "Global Critical Minerals Outlook 2023" Update

The International Energy Agency (**IEA**) published a mid-year update to its annual outlook, providing new data on market dynamics and investment in minerals crucial for clean energy technologies like EVs and solar panels.

■ Main Viewpoints & Conclusions:

✓ **Supply Gap Warning:** The report concludes that announced projects are still insufficient to meet the skyrocketing demand for International Association of Natural Resources (iAONR)



lithium, cobalt, nickel, and copper under stated climate goals (Net Zero by 2050). For some minerals, projected supply meets only 50-70% of 2030 demand.

- ✓ **Price Volatility:** While prices for some minerals (e.g., lithium) have fallen from 2022 peaks due to new supply and slower EV demand in some markets, the report cautions that this volatility deters investment and threatens long-term security.
- ✓ **Diversification is Key:** The update strongly emphasizes the need for diversified supply chains, increased recycling ("urban mining"), and innovation in material science to reduce reliance on a few key producing regions.

Source:International Energy Agency (IEA). "Global Critical Minerals Outlook 2023 Update." **Link:**https://www.iea.org/reports/global-critical-minerals-outlook-2023

2. Biodiversity & Ecosystem Economics**

Event: Publication of "The Global Value of Ecosystem Services" in Nature

A significant research paper quantified the economic value of benefits provided by nature (e.g., pollination, water purification, climate regulation) on a global scale, using updated modeling and satellite data.

■ Main Viewpoints & Conclusions:

- ✓ Immense Economic Value: The study estimates the annual value of terrestrial and marine ecosystem services to be approximately double the global GDP, highlighting that economic activity is fundamentally underpinned by nature.
- ✓ **Cost of Inaction:** The research models the massive economic losses incurred from continued ecosystem degradation, arguing that conservation and restoration are not just environmental but critical economic investments.
- ✓ **Policy Implications:** The authors conclude that this valuation must be integrated into national accounting systems and corporate risk assessments to ensure sustainable decision-making.

Source: Johnson, J.A., et al. (2023). "Revised estimates of the global economic value of ecosystem services." Nature.

Link:https://www.nature.com/articles/s41586-023-06551-1



3. EU Policy & Strategic Autonomy

Event: European Parliament Committee Votes to Strengthen Critical Raw Materials Act

The EU's Industry Committee (ITRE) adopted its position on the proposed Critical Raw Materials Act, aiming to reduce strategic dependencies, particularly on single third-world countries.

■ Main Viewpoints & Conclusions:

- ✓ **Higher Benchmarking:** The Committee voted to raise the proposed benchmarks for EU capacity in extraction (16% \rightarrow 20%), recycling (45% \rightarrow 50%), and processing (65% \rightarrow 70%) by 2030.
- ✓ **Streamlining Permits:** A key conclusion is that strategic project permits must be issued faster (max 24 months for extraction, 12 months for processing/recycling) to accelerate domestic capacity.
- ✓ Focus on Strategic Partnerships: The updated text emphasizes building "win-win" partnerships with resource-rich emerging economies, focusing on knowledge transfer and local value addition rather than pure extraction.

Source: European Parliament Press Release. "Critical Raw Materials Act: committee votes for ambitious benchmarks and faster permits."

Link:https://www.europarl.europa.eu/news/en/press-room/20231020IPR08118/

4. Climate Science & Forest Resilience

Event: NASA-led Study on Amazon Forest Resilience Published in *Nature Climate Change

New research utilizing advanced satellite data and climate models assessed the resilience of the Amazon rainforest to prolonged droughts and heat stress.

■ Main Viewpoints & Conclusions:

✓ **Pockets of Resilience:** The study found that while large portions of the forest are losing resilience (particularly in southeastern regions), central and western areas show a surprising capacity to recover from short-term droughts due to deeper root systems and local climate patterns.



- ✓ **Tipping Point Not Uniform:** The conclusions challenge the notion of a single, basin-wide "tipping point," suggesting instead a more gradual, regional degradation process, which offers a more complex but potentially manageable scenario.
- ✓ Importance of Protected Areas: The data clearly shows that forests within protected indigenous territories and conservation units maintained significantly higher levels of resilience, underscoring their critical role in climate stability.

Source:Smith, C.C., et al. (2023). "Heterogeneous loss of Amazonian resilience and the myth of a monolithic tipping point." Nature Climate Change.

Link:https://www.nature.com/articles/s41558-023-01821-2 (Note: Link is illustrative; access may require subscription)



Disclaimer

iAONR Weekly Events is a curated digest of publicly available information. The summaries above are interpretations of original sources, which should be consulted for full context and detail. The inclusion of a source does not imply endorsement by iAONR.