

TIMELINE OF A FAILING INDUSTRY: NARRATIVE SHIFTS, STRATEGIC PIVOTS, AND MOUNTING DESPERATION

The deep-sea mining industry, once touted as a game-changing solution for the clean energy transition, is now grappling with mounting setbacks, fractured legitimacy, and fading momentum. Over a century after polymetallic nodules were first discovered during the HMS *Challenger* expedition, the arc of deep-sea mining—from Cold War-era intrigue to speculative commercial ventures—has reached a critical inflection point.

Companies like The Metals Company (TMC), which once marketed itself as a climate champion, have increasingly adopted a national security rhetoric—reframing seabed minerals as critical to securing supply chains for defense technologies and strategic autonomy. In its most brazen move to date, TMC announced plans to bypass the International Seabed Authority entirely by seeking a U.S. exploitation license under the long-dormant Deep Seabed Hard Mineral Resources Act (DSHMRA), directly courting favor with the Trump campaign and undermining multilateral governance.

This pivot comes amid rapidly advancing battery recycling technologies, weakening market interest, growing environmental opposition, and widespread calls for caution. With over 30 ISA member states supporting a moratorium or precautionary pause, leading insurers refusing to underwrite DSM activities, and TMC recently surrendering a third of its CCZ claim area, the sector's viability is under deep scrutiny. Confidence has further eroded with the March 2025 bankruptcy of Norway's Loke Marine Minerals—until recently seen as DSM's most viable private player.

As TMC pivots from the ISA to pursue licensing through the U.S. government, the industry is increasingly seen not as a frontier of sustainability or security—but as one grasping for relevance. Having failed to justify its existence through environmental benefit or commercial promise, deep-sea mining now leans heavily on geopolitical fear to open a door the world is not ready—or willing—to walk through.

