

13:37:22 From Dave Dougherty To Art Hunter CACOR(Privately):

Do you want to go on mute?

13:37:30 From David Pollock To Everyone:

Please feel free to share your questions or comments here and I will recognize you during our dialogue time.

13:58:30 From Anitra Thorhaug To Everyone:

To Julia: Thanks for a most illuminating set of images about disturbance of the deep sea . Question to be taken as answers by TEd MAnning: How much of the sea floor will be taken in the next 40 years by deep sea mining? The organic carbon to be released back to the atmosphere will be how much?

13:58:59 From Ted Manning To Everyone:

What are the alternatives to extraction of these for human use -- taking the materials seen as valuable from other ecosystems.....or ?????? If these are provably essential to human survival in the face of fossil fuels are there other places to get them and with what ecological, social or economic costs?

14:01:55 From Anitra Thorhaug To Everyone:

Is the industry itself being forced or recommended to find ways of cutting turbidity and by product slag of their operations by nations involved in the major areas of mining.

14:02:43 From Dave Dougherty To Everyone:

Related to the news story from last fall.

<https://news.mit.edu/2022/sediment-deep-sea-mining-0921>

14:03:11 From Jon Legg To Everyone:

Question: In the time frame of 20 to 40 years ago, Canada had a disproportionately high influence in discussions about The Law of the Sea. One of our respected officials at that time was Alan Beesely. Do you have a feel for how well the Canadian government is respected in those circles these days?

14:03:33 From Dave Dougherty To Everyone:

Story about sampling in and out of the plume.

<https://miningwatch.ca/news/2023/1/10/undercover-video-and-scientist-testimonies-show-deep-sea-mining-tests-tainted#:~:text=In%20addition%2C%20scientists%20allege%20that%20attempts%20were%20made,samples%20in%20clear%20water%20outside%20the%20plume%E2%80%99s%20path.>

14:05:26 From Samrat Bharadwaj To Everyone:

Hi John - Law of the Sea, Maritime Law, is an extension of European and North American colonialism in terms of domination and regulations.

14:08:22 From Anitra Thorhaug To Everyone:

You may say that Samrat because you were not at the Law of the Sea meetings which were led by a Sri Lankan Shirley Amersinghe. Robust discussions by island nations in Pacific, Caribbean, Indian Ocean, and SE Asia were part of many of the negotiations and decisions.

14:11:28 From Raymond Leury To Everyone:

How is this different from trawling for fish as happens regularly on the continental shelves? Doesn't bottom trawling also create enormous plumes?

14:11:30 From Samrat Bharadwaj To Everyone:

Hi Anita - I am citing writers (Across The Oceans Of Law by Renisa Mawani) + those who have widely studied maritime law, how the colonized people were shipped across the world by colonizers, as well as Canada's role in that. Perhaps it can get better in places and with people you have mentioned.

14:12:10 From Dave Dougherty To Everyone:

Related story on scientists criticizing deep sea mining. Mention of Woods Hole Oceanographic Institute.

<https://www.whoi.edu/oceanus/feature/with-deep-sea-mining-do-microbes-stand-a-chance/#:~:text=In%20response%20to%20Nauru%E2%80%99s%20triggering%20of%20the%20two-year,functioning%20that%20would%20be%20irreversible%20on%20multi-generational%20timescales.%E2%80%9D>

14:12:49 From Samrat Bharadwaj To Everyone:

Question - Deep Sea Mining for minerals and new resources is not ecological? In a simple sense?

14:13:14 From Dave Dougherty To Everyone:

The scientists' statement.

<https://seabedminingsciencestatement.org/#page>

14:14:23 From Dave Dougherty To Everyone:

Deep sea mining: Here's which countries oppose and support the controversial practice.

<https://www.euronews.com/green/2023/08/02/deep-sea-mining-heres-which-countries-oppose-and-support-the-controversial-practice>

14:15:20 From Dave Dougherty To Everyone:

A growing number of countries are calling for a temporary suspension of deep sea mining, saying they are concerned about the potential environmental impact. They want more scientific studies to be done first.

Brazil, Canada, Costa Rica, Chile, Finland, Germany, Portugal, Switzerland and Vanuatu were among the 21 countries that support a ban, moratorium or precautionary pause on deep sea mining.

China, Norway, Nauru, Mexico and the UK, meanwhile, were in support of fast-tracking licences for deep sea mining.

The next meeting of the Assembly will take place in mid-2024.

14:23:11 From Claude Buettner To Everyone:

Question: How does Overshoot Denial affect the debate over this kind of mining? Second question: has the collection of the nodules by AI driven water drones instead of using massive tracked units been studied?

14:30:27 From Dave Dougherty To Everyone:

It seems to me that the huge difference between trawlers and deep-sea extractors is that the latter release a plume of sediment somewhere close to the surface that will then rain down through the water column below (and may get lifted toward the surface by currents).

14:31:09 From Art Hunter CACOR To Everyone:

Q. I may have missed it but what is the position of the UNJ on deepsea mining?

14:32:15 From Ted Manning To Everyone:

I would note that in most of the world the seabottom is not considered to be owned =- andy therefore many consider it "free" and they do not have to buy it from anyone - this is a major issue under changes to law of the sea.

14:32:26 From Dave Dougherty To Everyone:

Q from Jean D: As the abyssal planes are in international waters, who will receive any royalties from the mining companies.

14:32:27 From Vic Buxton To Everyone:

Sea Mining was an issue during the negotiation of the Law of the Sea and several countries refuse to sign on because they were planning on sea mining and this LOS could be a serious impediment. The driver then is the same for an expanded LOS.

14:36:47 From Claude Buettner To Everyone:

Q: How about a Nodule Tax?!

14:37:43 From Art Hunter CACOR To Everyone:

Q I expect the settlement of the plumes takes time and is based on temperature, currents , turbulence and others. Are there any studies done on this that gives us a sense of how long it takes for this plume to cesase to be an issue?

14:38:48 From Claude Buettner To Everyone:

Replying to "Q I expect the sett..."

Depending on what depth the plume is released it might be transported across the world if it winds up in the deep currents.

14:46:06 From Dave Dougherty To Everyone:

<https://oceanexplorer.noaa.gov/facts/marinesnow.html#:~:text=The%20particles%20of%20marine%20snow%20grow%20as%20they,couered%20by%20marine%20snow%20within%20a%20few%20years.>

14:51:41 From Dave Dougherty To Everyone:

<https://www.deepseadefenders.org/>

14:53:10 From Claude Buettner To Everyone:

Link to the movie Bright Green Lies where Julia contributes a lot of the voice over:
<https://www.youtube.com/watch?v=HEOjZgWoQAc>

14:53:33 From Dave Dougherty To Everyone:

<https://www.investmentmonitor.ai/sectors/extractive-industries/is-it-now-or-never-for-deep-sea-mining/?cf-view>

14:53:49 From Dave Dougherty To Everyone:

BMW, Volvo, Google and Samsung have all signed a petition calling for a moratorium on deep sea mining. Battery producers Tesla and Panasonic have previously said that they intend to develop cobalt-free batteries in the future due to human rights concerns linked to its extraction.

14:54:58 From Raymond Leury To Everyone:

@Dave, 50% of the cars built by Tesla use LFP batteries which have no cobalt. Their NMC chemistry use 90% less cobalt than 10 years ago.

14:55:48 From David Pollock To Everyone:

Thanks all and thanks again Julie perhaps we will be in touch later on. Nice job today Must leave now. David

14:58:50 From Dave Dougherty To Everyone:

There has never been any commercial mining in Antarctica, there are no current plans to mine Antarctica and mining is currently completely banned by the Antarctic Treaty until 2048. There are no known future plans by any of the Antarctic Treaty nations to reverse this decision.

https://www.coolantarctica.com/Antarctica%20fact%20file/science/threats_mining_oil.php#:~:text=There%20has%20never%20been%20any%20commercial%20mining%20in,the%20Antarctic%20Treaty%20nations%20to%20reverse%20this%20decision.

15:00:56 From Samrat Bharadwaj To Everyone:

♥ Thanks Julia. Great presentation. Kudos to CACOR ♥ For Hosting Another Amazing Session. Best to you all!

15:06:25 From Dave Dougherty To Everyone:

In Qatar they are now air conditioning OUTDOOR spaces.

<https://www.washingtonpost.com/graphics/2019/world/climate-environment/climate-change-qatar-air-conditioning-outdoors/>