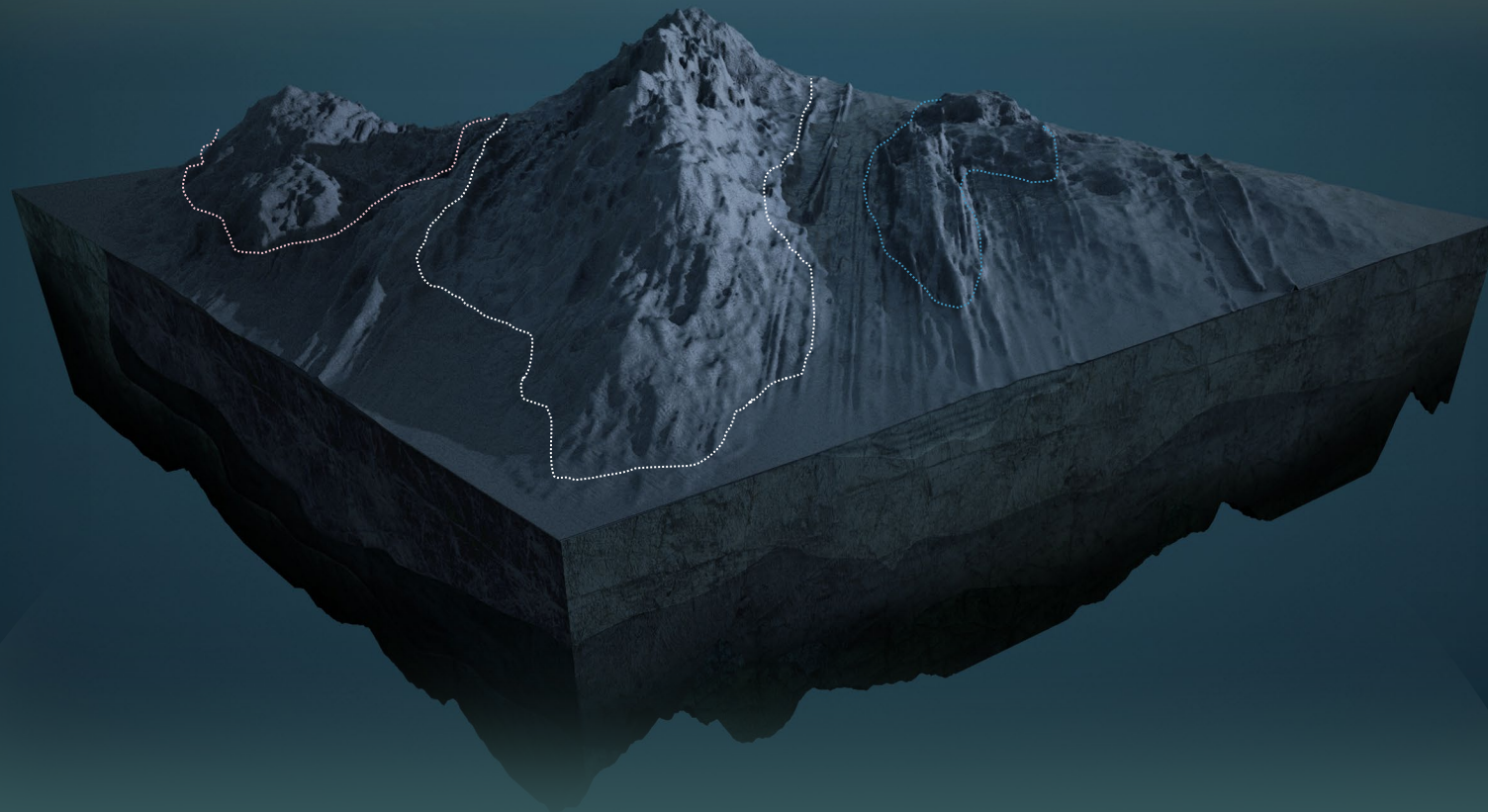


ARENDALSUKEN 2022



ET OVERBLIKK FRA NYE INDUSTRIAKTØRER INNEN HAVBUNNSMINERALER

loke



GREEN MINERALS

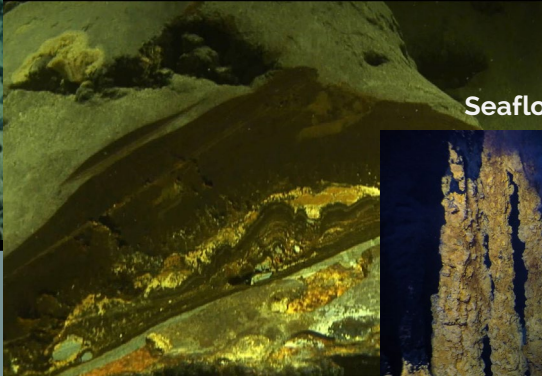
^M
Adepth
minerals

HAVBUNNSMINERALER – HVA ER DET?

Manganese nodules



Manganese crust



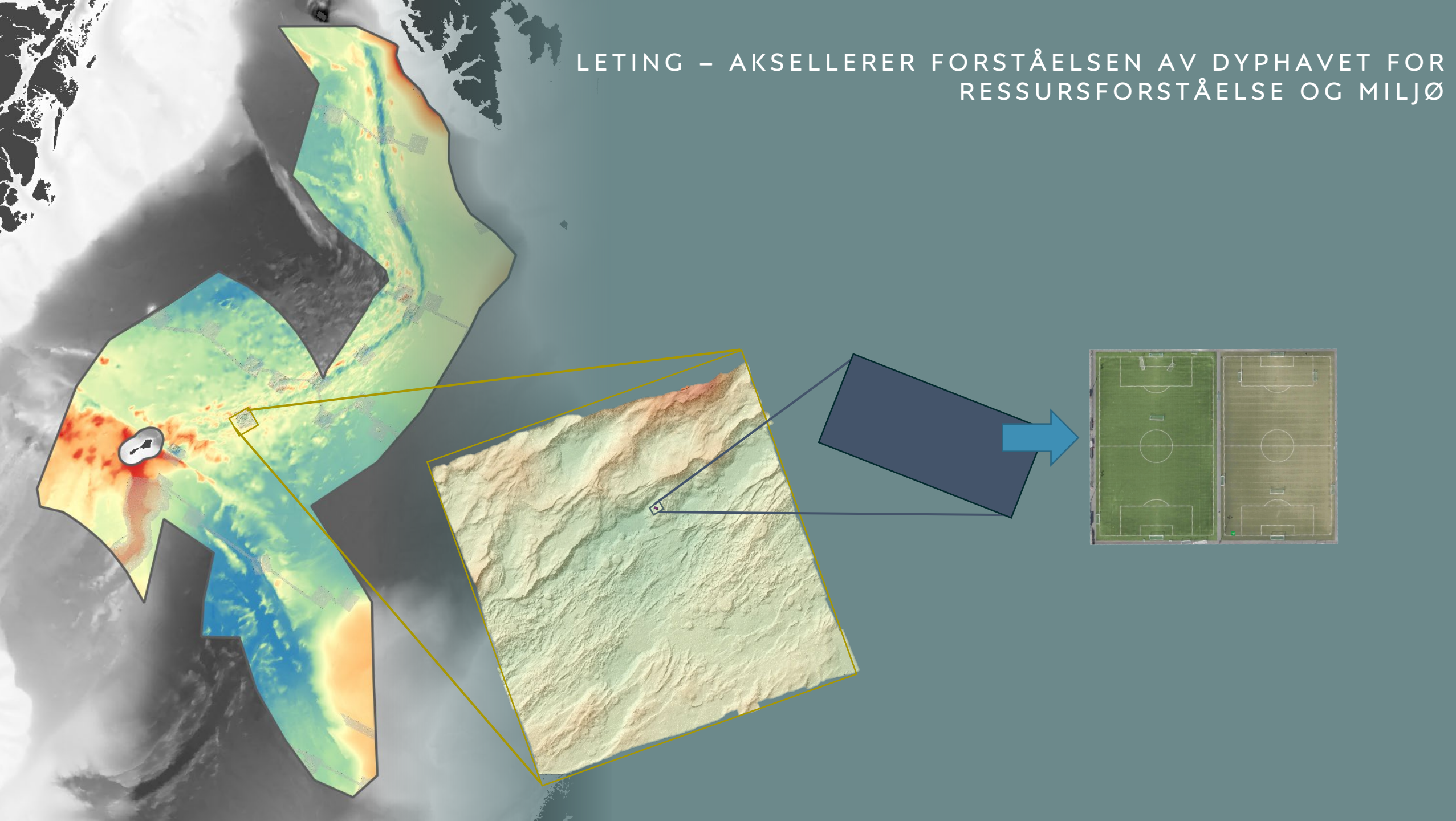
Seafloor massive sulfide deposit



Pedersen et al., 2019



LETING – AKSELLERERER FORSTÅElsen AV DYPHAVET FOR
RESSURSFORSTÅELSE OG MILJØ



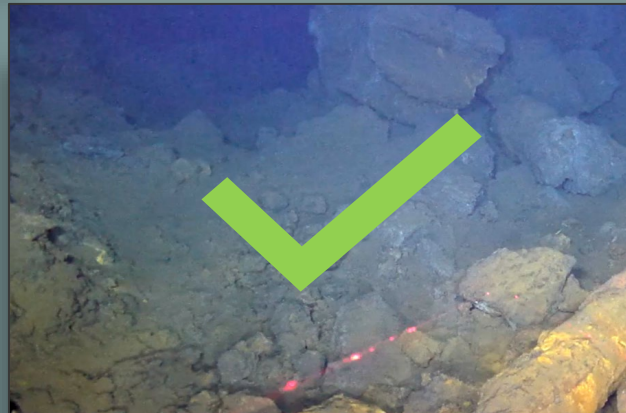
MILJØKARTLEGGING ER EN VIKTIG DEL AV LETEPROSESSEN OG DATAINNHEENTINGEN

ACTIVE

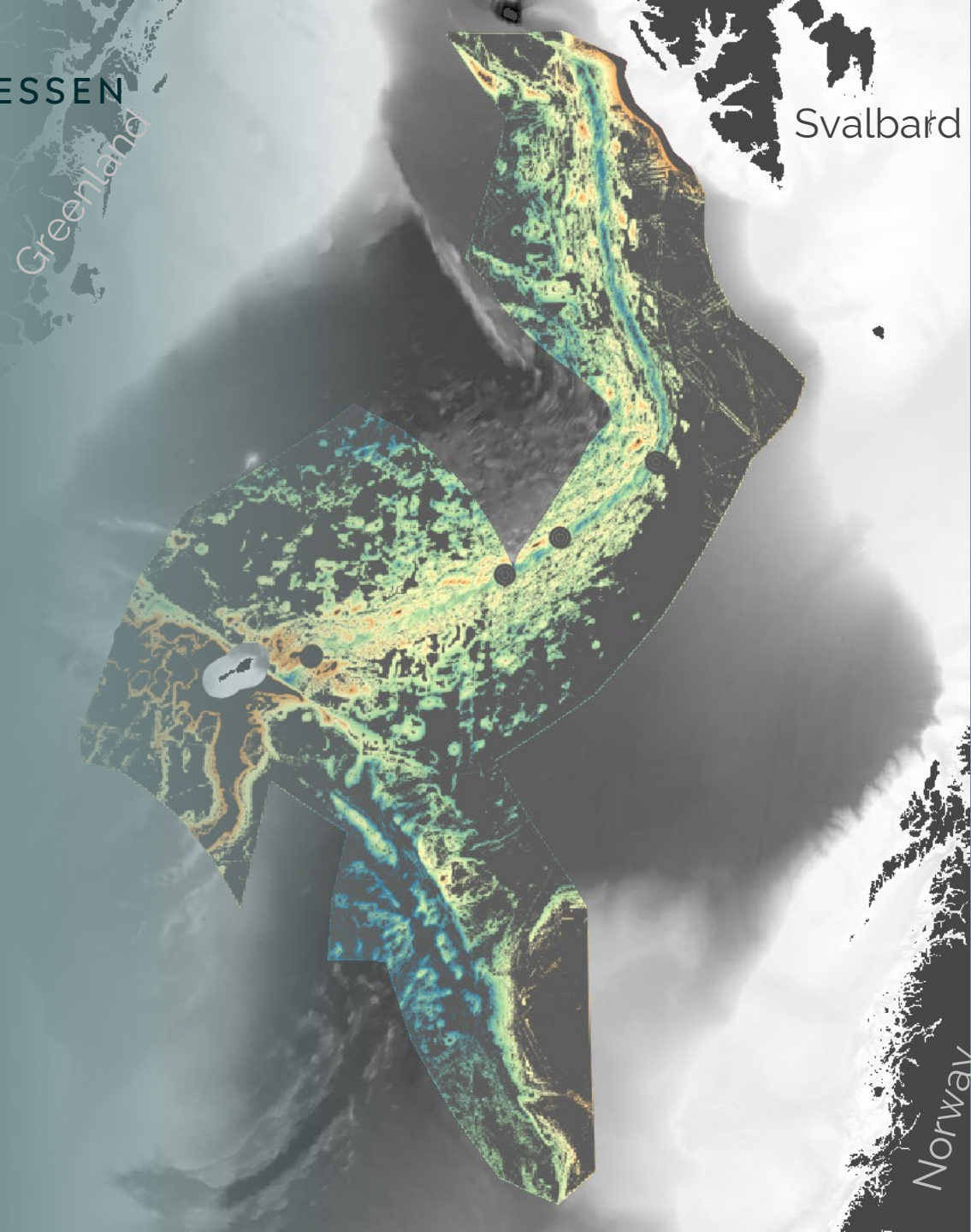


Video from UiB & K.G. Jebsen Centre for
Deep Sea Research

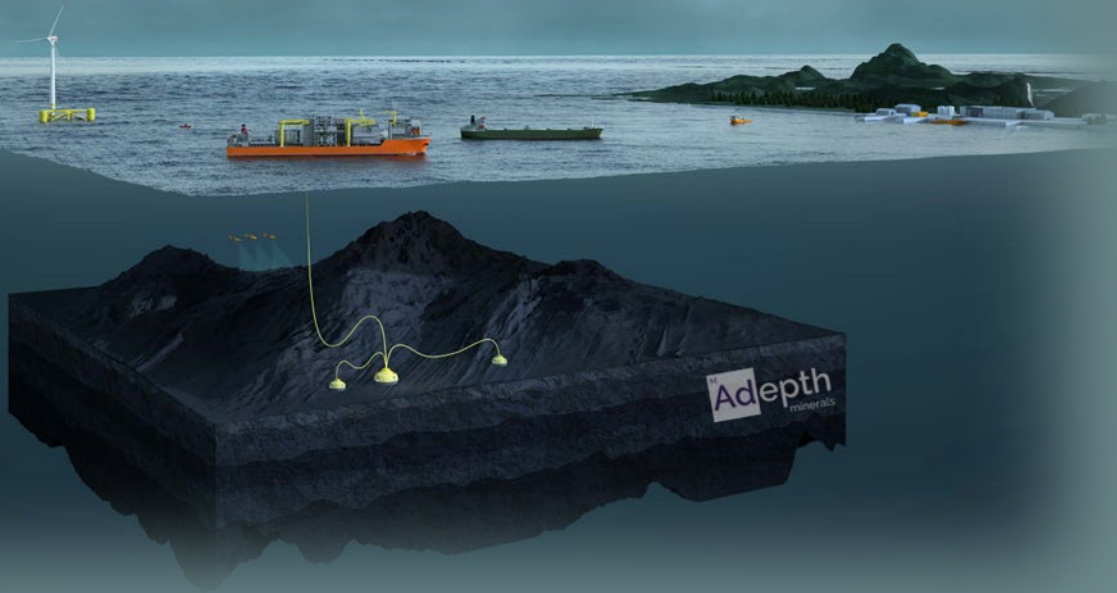
IN-ACTIVE



From NPDs research expedition 2019
Photo: UiB & K.G. Jebsen Centre for Deep
Sea Research



EN NY INDUSTRI FOR NORGE – FRA LETING TIL BATTERI VI MÅ SE PÅ HELE VERDIKJEDEN



Leting

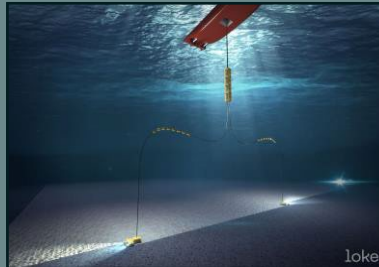
Forskning

Produksjon

Transport

Prosessering

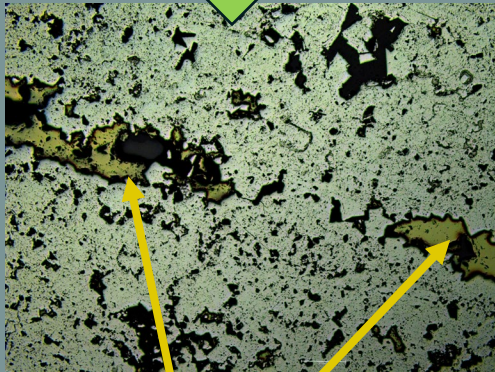
Batteri



PROSESSERING



Pågående karakteriseringsstudie
på SMS prøve fra Atlanterhavet



Kobberkis
(kobber + jern
+svovel)

Målet er å demonstrere at
SMS materiale kan
prosesseres sammen med
kobbermalm fra gruver på
land i eksisterende
anlegg i Norden....

....som f.eks



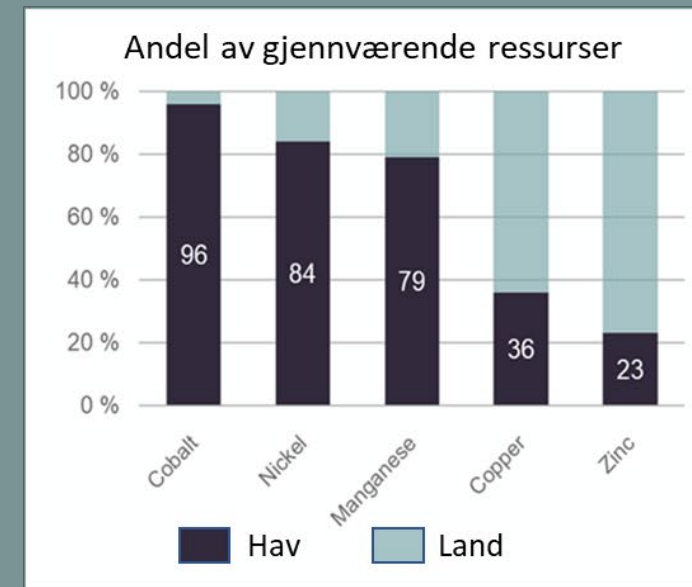
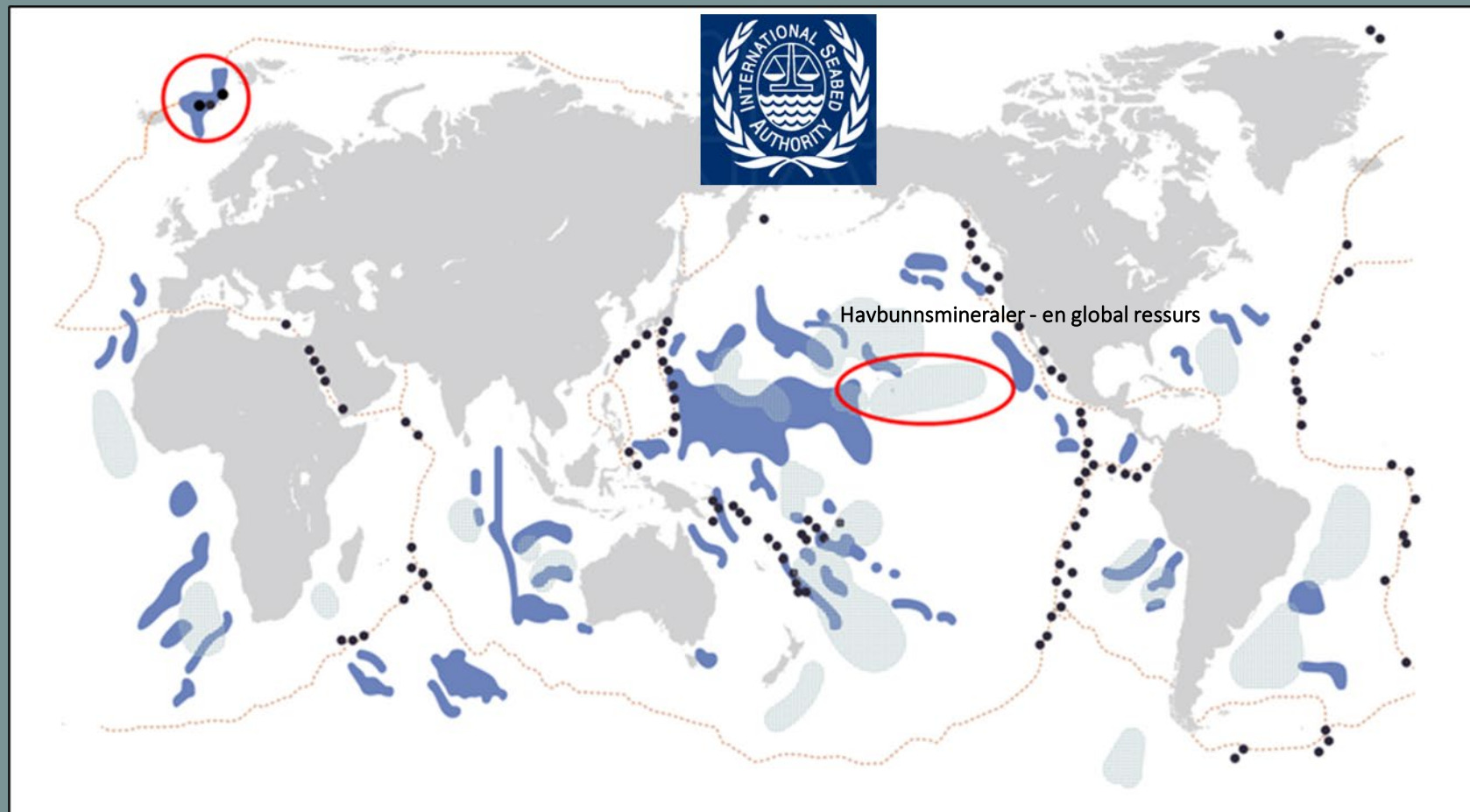
Joma Gruver, Trøndelag



Boliden Skellefteå, Sweden

Ny industri → Arbeidsplasser! Norge leder vei!

Havbunnsmineraler - en global ressurs



- Lofoten focus area
- Manganese Nodules
- Manganese Crust
- SMS

Europa / Norge ignorerer fundamentet i det grønne skiftet



Gruvedrift



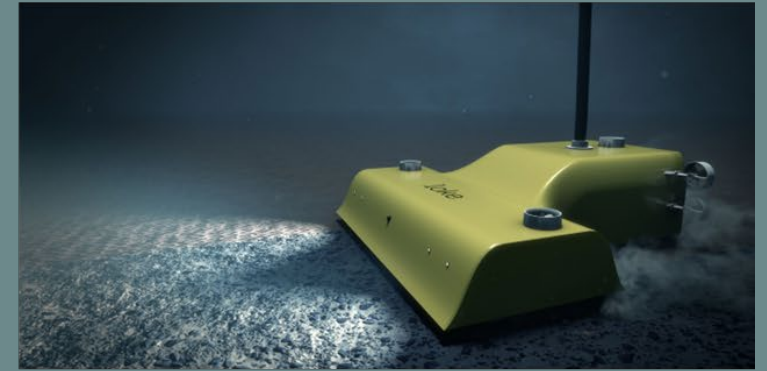
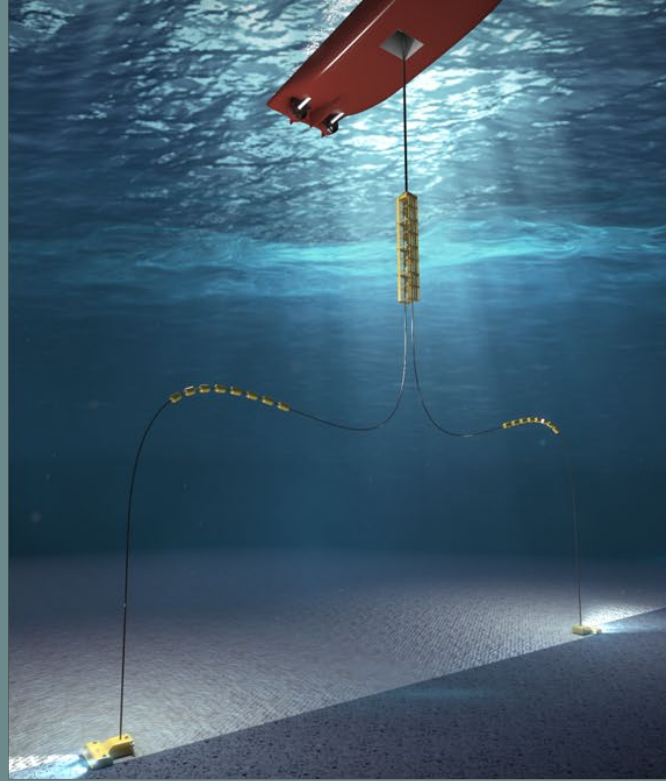
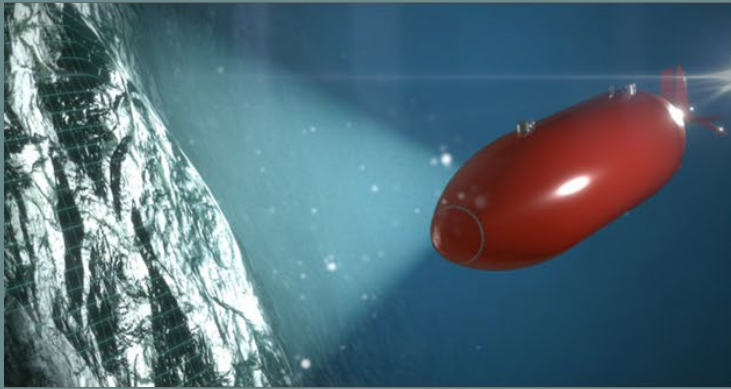
Prosess industri



Batteri fabrikker



Slutt brukere



Norsk Olje og Gass teknologi

Bærekraftig teknologi for leting, utvinning og prosessering av havbunnsmineraler

loke



GREEN MINERALS



TUSEN TAKK FOR OSS



Walter Sognes
CEO Loke Marine Minerals
walter@lokemm.com



Ståle Monstad
CEO Green Minerals
staale.monstad@greenminerals.no



Anette Broch Mathisen Tvedt
CEO Adepth Minerals
abmt@adepthminerals.no