### UNLOCKINGTEE FUTURE OF SEABED MINERALS SUSTAINABILITY THROU PROVEN INNOVATION







### WE ARE SMS; **OUR EVOLUTION**









COPPERGOLI



# **Sustainable Mining Solutions**





# MAGELLAN'S DEEP-WATER EXPERTISE DEPLOYED

» Magellan is experienced in deep and ultra deep-water seabed and hoisted operations.

» Solwara 1 is at 1,700 metres

» **SMS** is deploying proven technology through Magellan's experience. 









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### MAGELLAN'S DEEP-WATER EXPERTISE RE-DEPLOYED

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### **COMMUNITY ENGAGEMENT & LOCAL BENEFITS**

In partnership with Papua New Guinea's government and provinces, SMS has initiatives in place to ensure the local community benefit from the presence of SMS's operations, including:

- Commitment to local employment and skills training.
- Fresh provisions from Namatanai.
- Vessel re supply from Rabaul. •
- Using hotels and Airports (POM, Kavieng and Namatanai).
- Procuring spares locally.











## CASE STUDY LAWRENCE













### AN OPTIMAL SOLUTION FOR COPPERGOLD

» Deep-sea resources present an untapped opportunity for sustainable supply.

» Solwara1 grade is at least **12 higher that the grade** at Ok Tedi

» Higher grade ores deliver multiple sustainability **benefits** across the mineral extraction value chain.

#### Solwara 1's footprint



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### THE THREE STAGES OF THE SOLWARA 1 PROJECT

#### **STAGE 1: PROOF OF CONCEPT**

- » Designed and tested a system for Grab sampling.
- » Demonstrated operational viability.

#### **STAGE 2: BULK SAMPLING**

- » Conducted live sample recovery tests & environmental monitoring.
- » Continuously refined the enclosed Grab system design. Tested technology to its limits.







COPPERGOLD

#### **STAGE 3: COMMERCIAL MINING**

- » Planning in progress for the future commercial mining phase.
- » Commercial mining will continue to refine technical innovations to minimise environmental impacts.





#### **STAGE 3: COMMERCIAL MINING**



### MANAGING & MITIGATING ENVIRONMENTAL RISK

» CHALLENGING TO SCRUTINISE BECAUSE EXTENT OF MINING OPERATIONS CANNOT BE SEEN.

#### **MITIGATION:**

- Static & Realtime Environmental monitoring sensors
  and sampling
- Innovative sealed mining system minimises sediment and water exchange
- Stream live footage of mining to surface for constant transparency of activity





#### MANAGING & MITIGATING ENVIRONMENTAL RISK

» Independent environmental team onboard throughout.

» EMMP & Reporting

» Real-time profiling of live Grab operations











#### DIGITSATION OF LARGE SUBMERGED ASSETS PERFECTED.

- » Showcased capability by creating the Titanic Digital Twin.
  - SMS will deploy **Digital Twin capability** to provide the transparency required to operate a responsible mine.
- » Used by SMS at Solwara 1 to:
  - Calculate volume of orebody extraction.
  - Baseline for environmental mapping.
  - Transparent compliance reporting.



### WHY DIGITSE THE TITANCO

BELONGINGS OF THE PASSENGERS AND CREW SPREAD ACROSS A 3 MILE RADIUS





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# SMS' VISION: A SUSTAINABLE MINING SOLUTION

» Mining is not just about resources. It's about balancing sustainability, economic needs, and environmental stewardship.

» The Solwara 1 project showcases how prioritising technical and operational innovation can minimise negative sustainable impacts whilst meeting global mineral demands.





# THANK YOU YOUR QUESTIONS PLEASE? SMS IS COMMITTED TO TRANSPARENCY





