

Indonesian Tin Outlook 2018

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Executive Summary



INDUSTRY

Indonesia Tin Mining stays flat and tend to decline in the last 5 years



MARKET

Indonesia's Domestic Tin Market is stable. Most of tin ingots are exported, more than 90%



REGULATIONS

Indonesia mining & trade regulations changes are very dynamic in 2018, lots of new ministry regulations ? Less bureaucracy, more practical and better support on good mining practice and towards downstream industries

1 Industry Overview

2 Reserve & Resources

3 Market Analysis

4 Government Regulation

5 Recent Development





Indonesia is The World's Second largest tin producer. About 69.600 MTon in 2017, or 25% from the global tin production



Tin export from Indonesia tend to decline in the last 5 years, slightly increase in 2017



Total tin ingots production 2017 is 10% higher than 2016. H1 2018 is similar with H1 2017



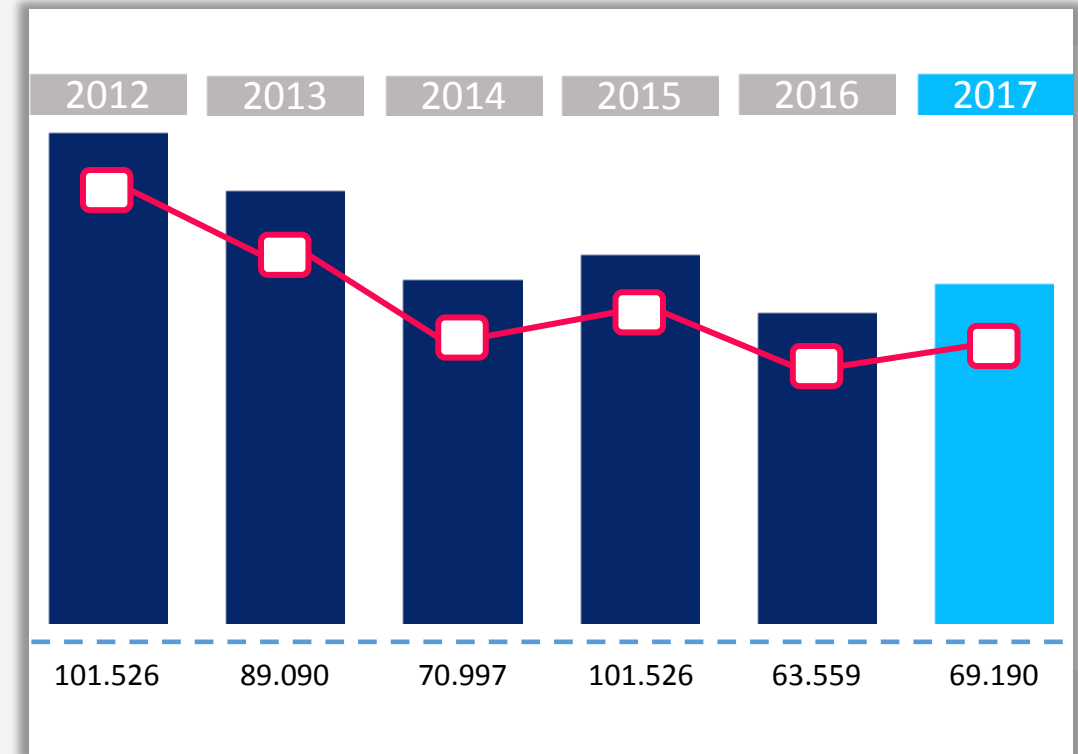
Forecast of Indonesian tin production in 2018 is around 75.000 ton



Abundant tin reserves plays important role in growth and development of tin industry in Indonesia

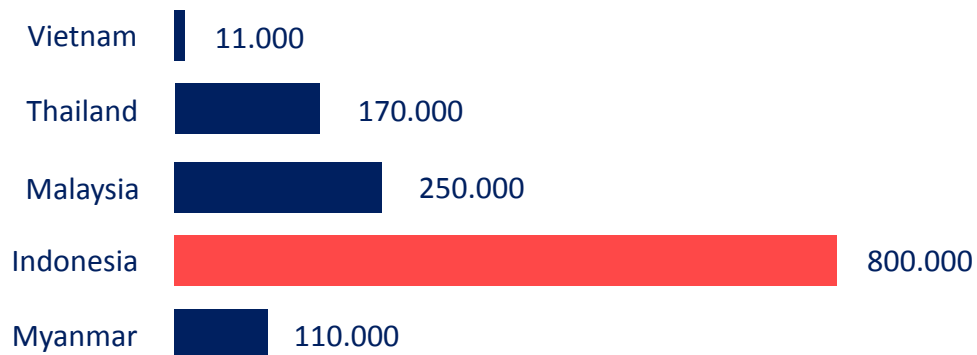


Increasing global demand and government support will drive tin mining industry in Indonesia



Source : BPS (Indonesian Statistics)

Southeast Asia Tin Reserves



South East Asia Tin Belt (54% from global) - Myanmar and Thailand to Malaysia's Peninsula and Indonesia



Indonesia Area - The Archipelago of Riau and Bangka Belitung Island (8,1% from global)



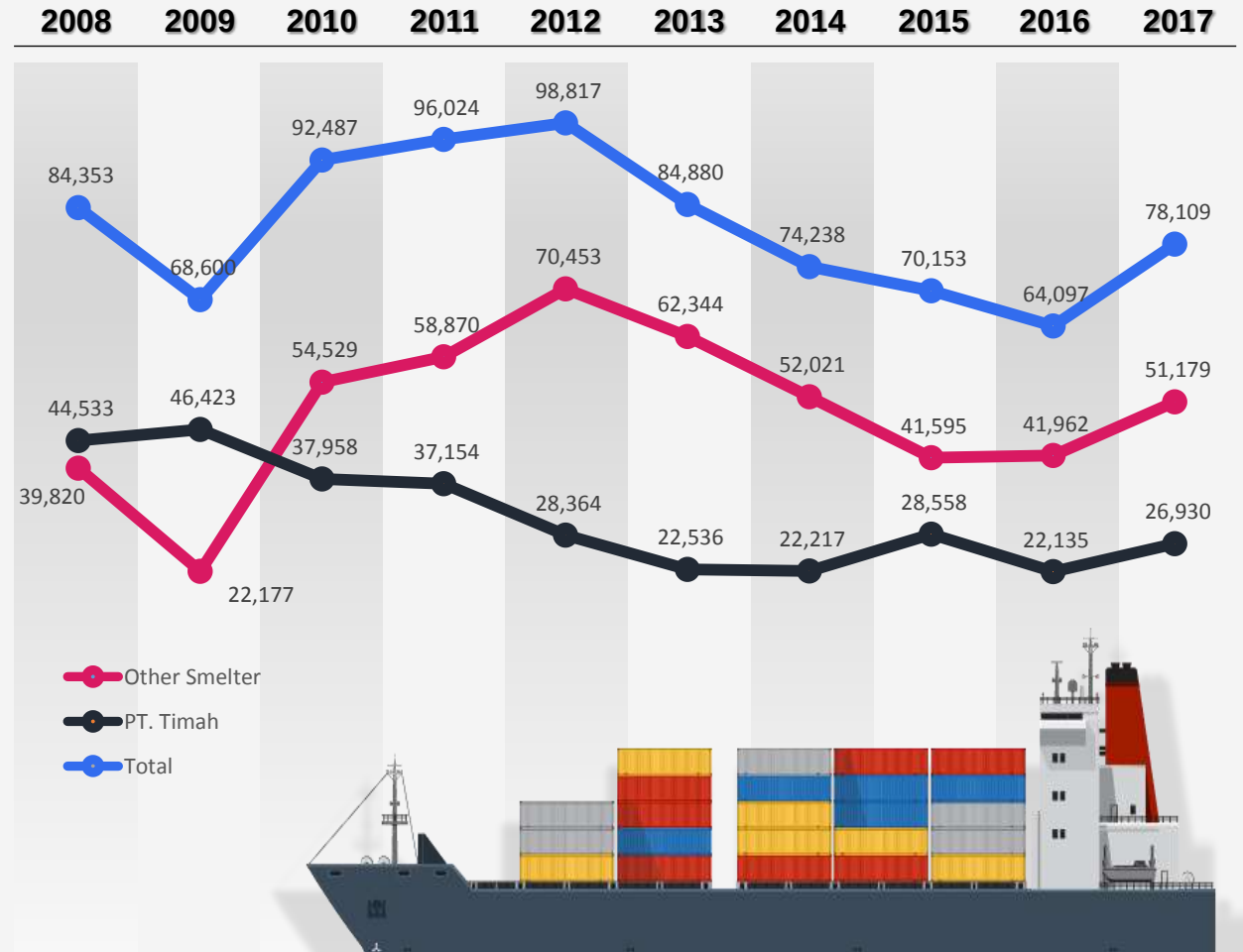
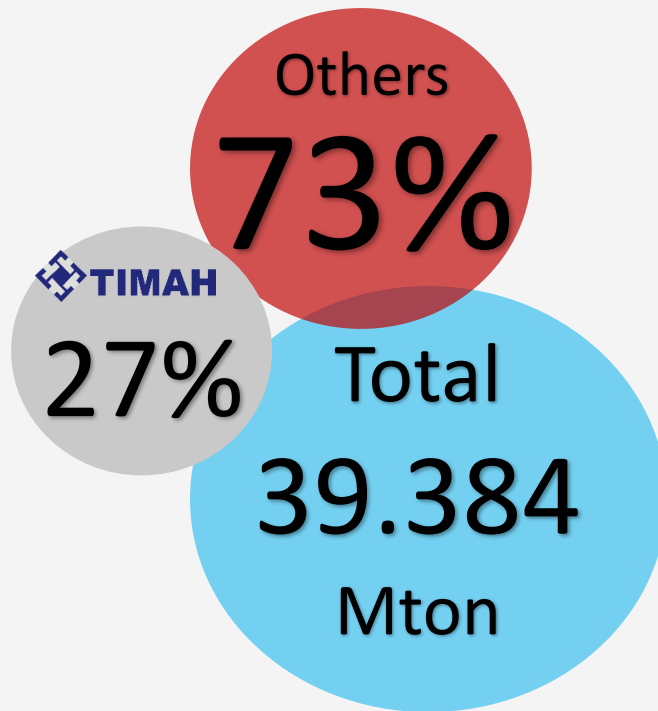
Total tin reserves of Riau Islands Province and Bangka Belitung Island Province belongs to PT TIMAH Tbk is about 377.584 Ton in 2017.



Total Tin reserved in Indonesia area is around 800.000 Ton in 2016, or 60% from total of South East Asia. (US Geological Survey)

Market Analysis : 10 years Indonesia Export Statistic

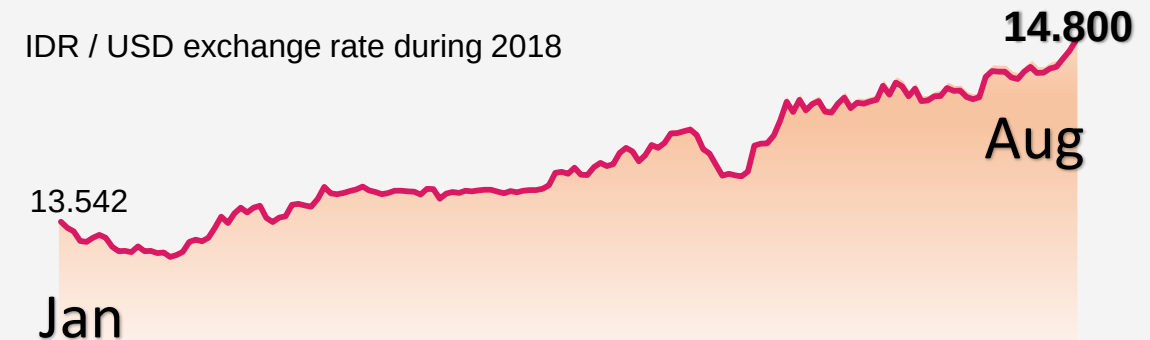
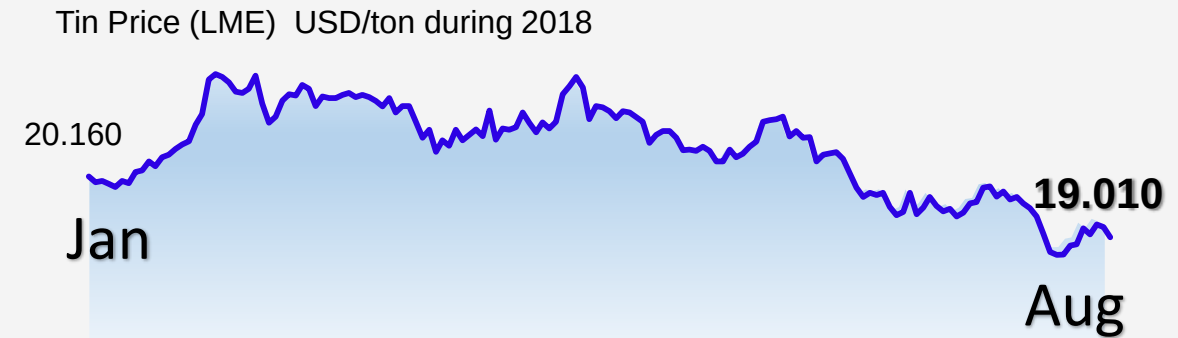
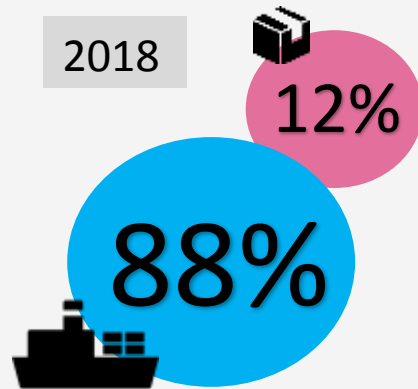
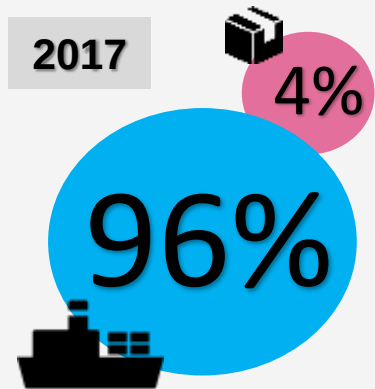
PT TIMAH contributes to 27% (10.795 Mton) of Indonesian total export in H1 2018.



3 Market Analysis : Effect of Global Situation

Indonesia 2018

- IDR Exchange Rate ↓ 10% of USD
- LME tin ingot ↑ 7%
- Oil price ↑ 12%
- Tin industry spending in IDR – stable
- Indonesian domestic Tin Consumption: TIMAH sells **1.470** MTon or about 12% from total sells.







“ TIMAH continuously doing research to find alternative technology to become more efficient “



Minimum impact to the environment



Short preparation time & high mobility



High safety and very low cost operation



Optimal ore excavation



Have a minimum mining area

8

Recent Development #1 : Subsurface Hydraulic Mining Concept

MINING
OPERATION

2018 : 160 Units



8 Recent Development #1 : Subsurface Hydraulic Mining Concept

ORE
GETTING



8

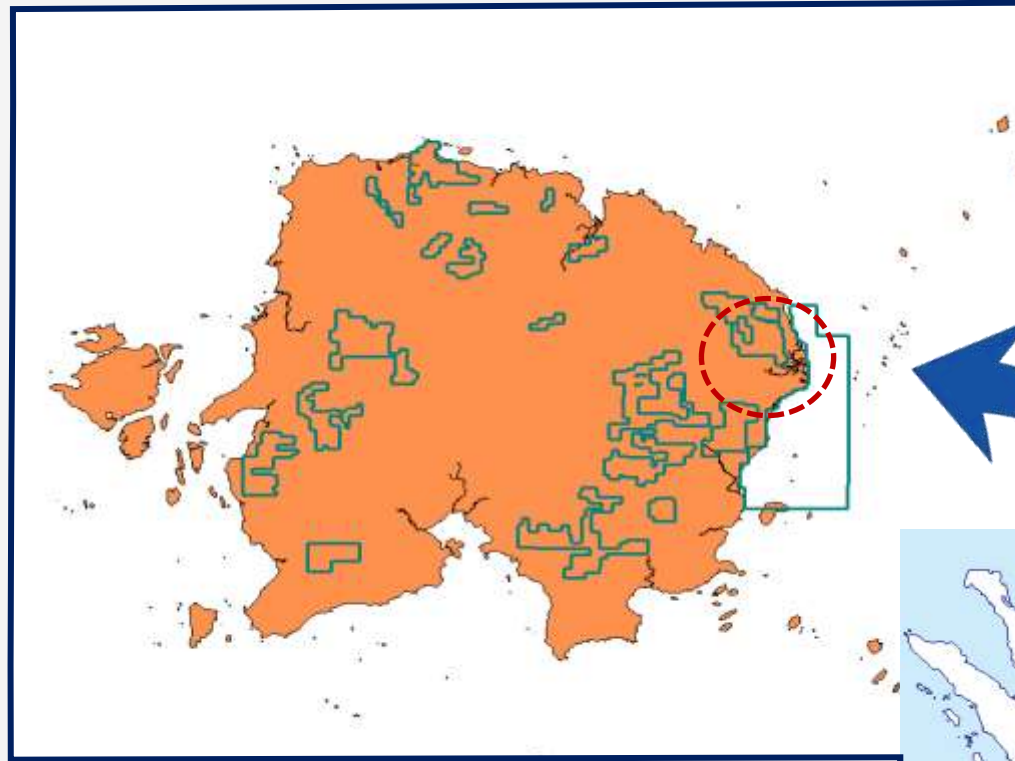
Recent Development #1 : Subsurface Hydraulic Mining Concept



POST MINING

DIRECT RECLAMATION

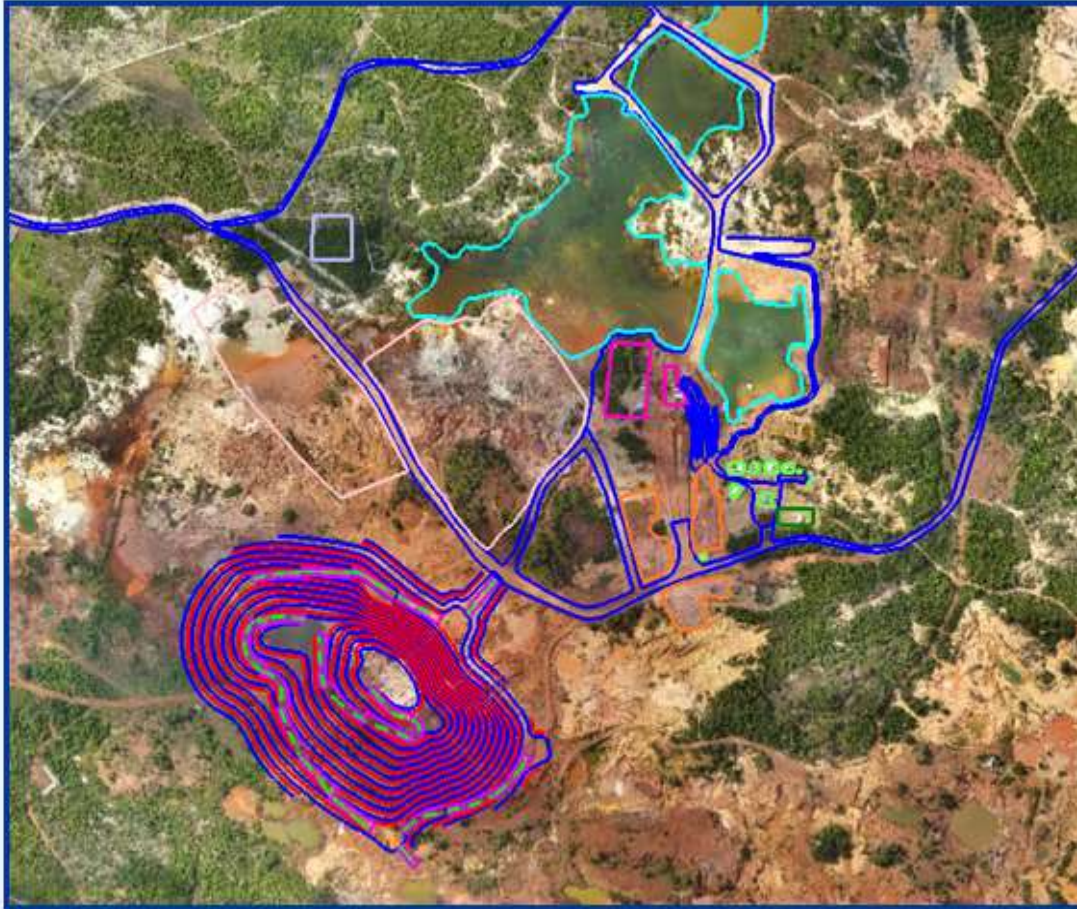




The new Super Pit will be in the Belitung Island







Legend :

- | | |
|---|---|
|  Pit Design |  Workshop |
|  Hauling Road |  Office Area |
|  Stockpile | |
|  Settling Pond | |
|  Jig Plant | |



Illegal Mining Activities
Good Mining Practice

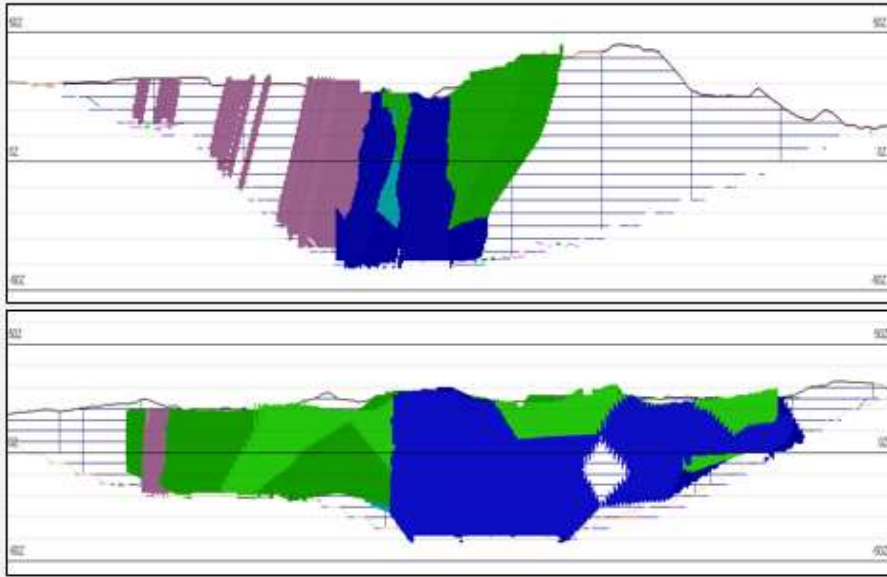
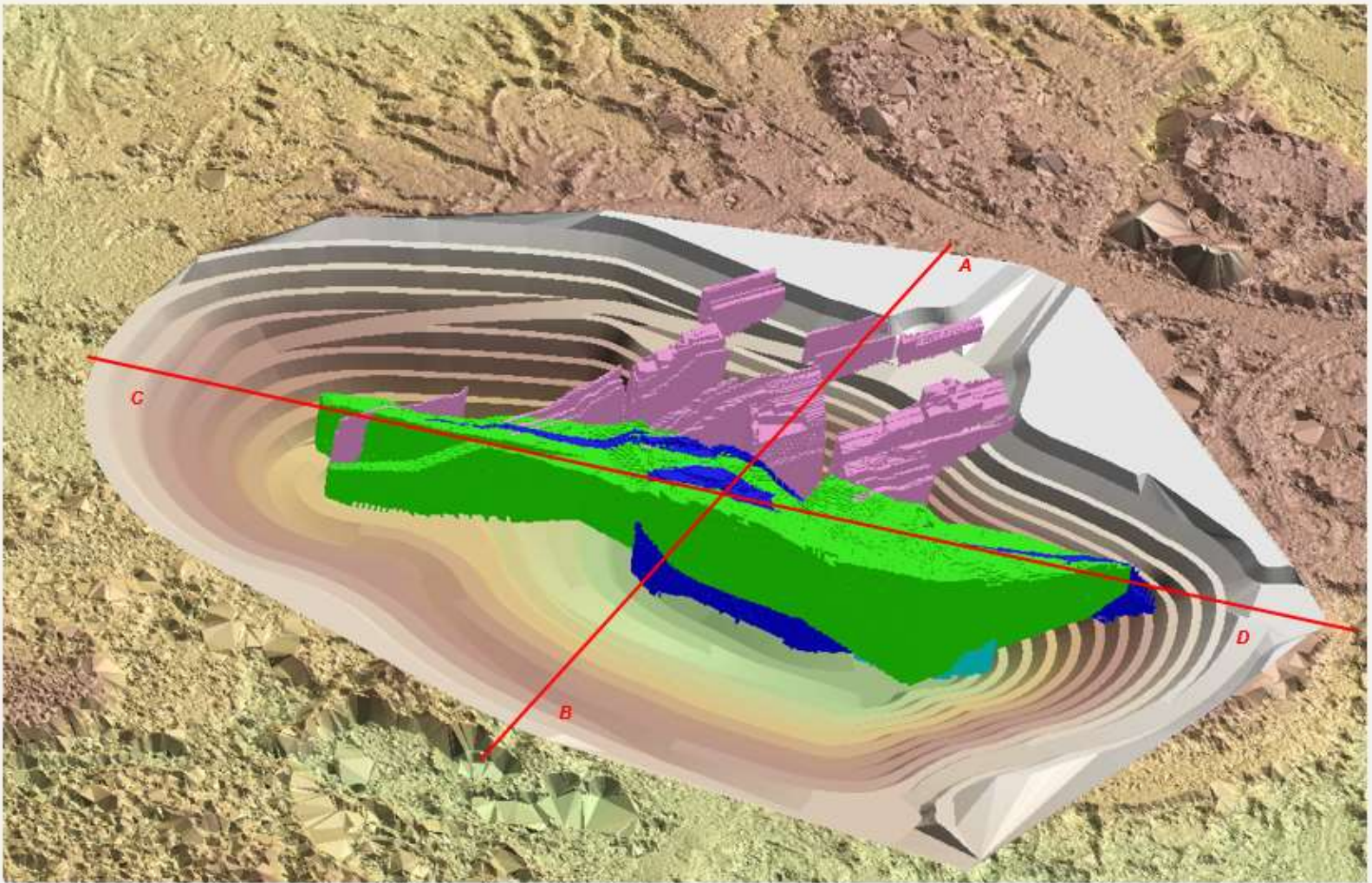


Mineral Processing Plant
Expertise in Managing
of Mineral Processing Operation



Open Pit Mining
To be a World Class Mining Company

8 Recent Development #2 : New Super Pit (TB Batu Besi 1)



Parameter	Volume (m ³)	Ton Sn
TOTAL PIT VOLUME	6,543,502	
* Volume OB	5,404,879	
* Volume Ore	1,138,623	15,452
- Greisen	178,790	1,293
- Oxide Clay	530,300	6,698
- Gr Oxide Clay	70,875	789
- Skarn	358,658	6,672

8 Recent Development #3 : Reclamation



Air Sumedang, Bangka (6,42 Ha)

1

2

3

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We try our best for environment & sustainability



RECLAMATION
UPDATE



**THANK
YOU**