

# **Brief description and summary Saxony Minerals & Exploration AG**

A unique Cash Flow producing Mine for 30 years.

### 1. Introduction

Management: locally and internationally experienced and connected

## **Supervisory board**

#### Thomas Reissner

Founder and Chairman Pyral AG
Former CEO of two mining companies in Canada
Diploma in Business (Nürnberg), Law (Freiburg)

### o Dr. Horst Richter

Former Minister of Geology and Mining of the GDR
Shareholder G.E.O.S. GmbH
Dipl.-Geol. Bergakad. Freiberg, PhD Economy

#### Jan Richter

Managing Director G.E.O.S GmbH Dipl.-Geol. Bergakad. Freiberg BBA, TU Chemnitz

### Volker Kauder

Member of the German House of Parliament Former Chairman CDU/CSU fraction Law University of Freiburg

### Management

#### o Dr.-Ing. Klaus Grund

Member of the Board Planning & Strategy Deputy Mine Director "Reiche Zeche" Senior management SDAG Wismut Surveyor, Dr. Geology

### o Rolf Staudenmaier

Member of the Board Project Management Logistic expert

#### Shareholder

- o Thomas Reissner (64 %)
- o Horst Richter (7 %)
- Jan Richter (7 %)
- Remaining Shareholders (22 %)

Core assets: Mine Pöhla – Ore Mountain near Schwarzenberg

• Proven critical resources of ore: Tungsten, Fluorite, Tin

• Outlook to be expected:

Revenue per year: 118 Mio. € (> 2029) Mining costs per year: 40 Mio. €

Net earnings (profit) per year: 78 Mio. € (2029)



## 2. History of Mine

1957-1966 Development by Wismut

1974-1988 Exploration for tin and tungsten by GDR, Wismut

Key exploratory services:

> 125.000 m surface drilling of narrow mashed holes

> 16 km existing tunnel length (adits)

> 165.000 m³ horizontal / vertical exploration

Development costs at nowadays prices: 180 Mill. € (windfall profit)

Existing infrastructure in place: road, electricity, water

Reserves and resources according to NI 43-101 Report\*:

Tungsten (cutoff grade: 0,1%)				
	Ore	Grade	Concentrate	
Measured	3656 (Kt)	0,48%	17.549 t	
Indicated	1547 (Kt)	0,44%	6.807 t	
LTM Price APT: 35.000 \$/to.				
Fluorite (cutoff grade 10%)				
Measured	2232 (Kt)	55%	1.227.600 t	
Indicated	4859 (Kt)	15%	728.850 t	
LTM Price Fluorite: 97%: 560 \$/to.				
Tin (cutoff grade 0,1%)				
Measured	5280 (Kt)	0,35%	18.480 t	
Indicated	5301 (Kt)	0,34%	18.023 t	
LTM Price Tin 99%: 33.000 \$/to.				
		Total:	3.151 Mrd. \$	

<sup>\*</sup> Dr. Wolf-Dietrich Bock, Dipl.-Geol., 2qualified person" according to standard NI43-101

Plus over 400 Mill. \$ in inferred resources being recovered after.



# **SWOT Analysis SME**

Strengths:	Weaknesses:
Experienced management	Volatility of commodity prices
<ul> <li>Substantial hidden reserves under GAAP with historic investments and licenses</li> </ul>	
High average tungsten content	
<ul> <li>Cost efficiency through two cost- bearing products</li> </ul>	
<ul> <li>Attractive CAPEX scope due to existing infrastructure</li> </ul>	
Opportunities:	Risks:
Positive market outlook for critical resources	Potential delays until go-live
Tin deposits in Pöhla	<ul> <li>Substantial and parallel drop in resource prices</li> </ul>
Exploration fields in Saxony with critical resources	Unexpected discovery of new deposits with quick go-live of production

# 3. Milestones achieved within 11 years

05/2012	Permit for "Bewilligungsfeld Pöhla" granted by Mining agency of Saxony
05/2014	Own exploration drillings as confirmation
12/2016	Start of shaft 1 of Pöhla mine ("exploration shaft ")
05/2019	Target depth of shaft 1 of 180 m in deposit 4 reached Mining of sufficient raw ore for
	processing plant
10/2019	Pilot processing confirms tungsten and fluorite correspond to international quality
01/2020	Starting Mine permitting
05/2023	Mining agency of Saxony confirms the permit of mining license in spring 2024,
	confirmation that all mining applications are complete.
09/2024	Final receipt of mining permit, first company in Germany after war.

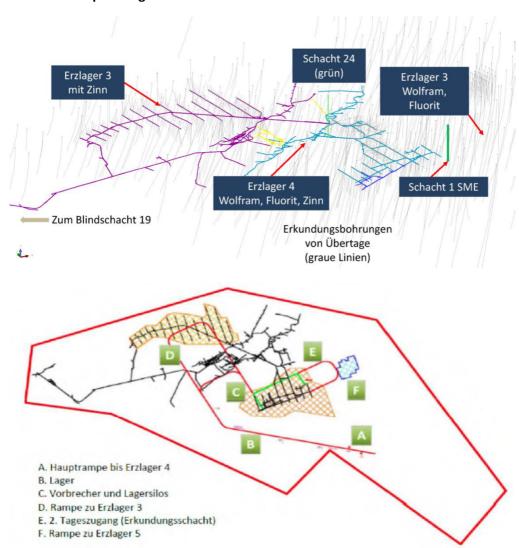
- Starting to build the ramp: March 2026 till December 2027
- Producing main operational plan 3 months, September December 2028
- Upscaling processing plant: September 2026 till September 2027
- Begin official production: 2029



# Essential key factors:

- More than 16 Mill € invested capital
- First successful mining and processing confirmation
- Finishing definitive feasibility study
- Results pilot processing plant: WO3 75%, CaF2 98%

# 4. Mine planning



# 5. Processing plant

- o Crushing (< 200 mm)
- o Presorting in 3 categories
- Sorting via x-ray
- o Gravimetric sorting via spiral separator
- o Flotation of scheelite, Cassiterite
- Dewatering of products
- o Drying of products via new infrared procedure, developed by SME AG











# 6. Laboratory

Analysis based on mineralogical, metallurgical and chemical methods.

- Microwave analysis
- ICP-OES
- RFA
- Photometric
- Microscope
- Redox potential electrical conductivity

## 7. Pro Forma calculation

Intended annual production: 400.000 to.

Tungsten about 1200 to. p.a. ≅ 47 Mio. € Revenue

Fluorite about 43.000 to. p.a. ≅ 30 Mio € Revenue

Tin about 1.200 to. p.a. ≅ 41 Mio € Revenue

Total ≅ 118 Mio. € Revenue p.a.



OPEX costs p.a. 40 Mio. €

Net earnings (profit) p.a. 78 Mio. €

## For more than 20 years accumulated profit expectation: > 1,0 Bill. €

**CAPEX** 

(Ramp building, upscaling processing mining equipment): 25 Mio. €

Working capital: 15 Mio. €

Capital needs, total: 40 Mio. €

Pay back capital: < 2 years

# 8. Competition / worldwide production tungsten

8.1 China: 88.000 to. 93%

8.2 Vietnam: 4.000 to. 4,2%

8.3 Spain: 1.200 to. 1,2%

8.4 Mittersill: 1.200 to. (Consumed by Sandvik, 1,2%)

Total  $\cong$  94.400 to.

## 9. Competition / worldwide production fluorite

9.1 China: 4 Mio. To. 67%

9.2 Mexico: 1,5 Mio. To. 25%

9.3 Rest of world: 0,5 Mio. To. 8%

# 10. Competition / worldwide production tin

10.1 China: 200.500 to. 60%

10.2 Indonesia: 72.400 to. 22%

10.3 Myanmar: 40.000 to. 12%

10.4 Peru/Brazil: 12.000 to. 4%



### 11. SME AG – Focus on supply – critical base metals

- SME AG Focus on supply critical base metals
- Tungsten is mainly controlled by China

There are only 2 producing mines in the world as of today other than China:

- Nui Phao (Vietnam)
- BHW Mittersill, Austria, owned by Sandvik
- Barruecopardo is marginal, in small volume producing
- Los Santos, Spain is marginal with low volume
- Panasqueira mine is depleted

#### Fluorite

Use for hydrofluoric acid. This is produced for metal fluoroborate (silicum wafer semiconductors, electronic devices)

- Calcium fluoroborate (aluminum alloys)
- Glass industries
- Activities for consumer goods

Annual production volume: 6 Mio. To.

#### Tin

- 60% demand for soldering process
- Demand as chemical application and alloy metal
- Considerable increase in demand due to renewable energy (battery) application.
- Strong monopoly in Indonesia, no export from concentrates any more. Value chain must be developed within country.
- No tin refinery in western countries
- Big scarcity of tin concentrates to be expected the next coming years.

### 12. Target for raising of funds

- 12.1 Strategic investor to acquire majority of the company (78,1%)
  - 40 Mio. € for investment and working capital purposes
- 12.2 Debenture/ equity investor for financing the required investment capital
  - 20 Mio. € equity financing
  - 20 Mio. € Debt financing (KfW)



## 13. Summery

- SME AG is a ready to mine company for tungsten, fluorite and tin.
- The base metal is getting more and more scare. Countries controlling the metals: China, Indonesia with more and more restriction to export.
- The mine Pöhla is highly explored with well-known proven reserves.
- The return of capital is less than 2 years.
- The accumulated return over 20 years is more than 1,0 Bill. €.
- The majority owners intend to sell their shareholdings before being diluted into minority to a strategic investor, taking over the company via buy out.