

Gypsum Resources in Sultanate of Oman

&

Potential Opportunities

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Oman Natural Gypsum Resources

The major gypsum resources are found in southern region of Thumrait, Saddah, Thakabayat, Shuwaymiyah and the central region of Ghaba, and Saddah.

Presently, the gypsum resources in Thumrait have been considered commercially feasible for exporting, being closer to the large and well equipped port.

The gypsum resources in Shuwaymiyah and Thakabayat can be considered for commercially feasible after setting up the railway system.

Oman Gypsum Resources Locations



Probable Gypsum Resources in Oman

S No.	Location Name	Probable Resources in Million Tons	Remarks	Nearest Port Facility
1	Shuwaymiyah	> 500	> 90% Purity and usable for cement, gypsum board etc.	These resources shall be commercially feasible to export after the railway system
2	Thakabayat	> 100	> 90% Purity and usable for cement, gypsum board etc.	These resources shall be commercially feasible to export after the railway system
3	Thumrait (Salalah)	> 450	> 90% Purity and usable for cement, gypsum board etc.	75 Km
4	Suddah	> 100	> 90% Purity and usable for cement, gypsum board etc.	Over 350 Km
5	Ghaba	Very small resources		

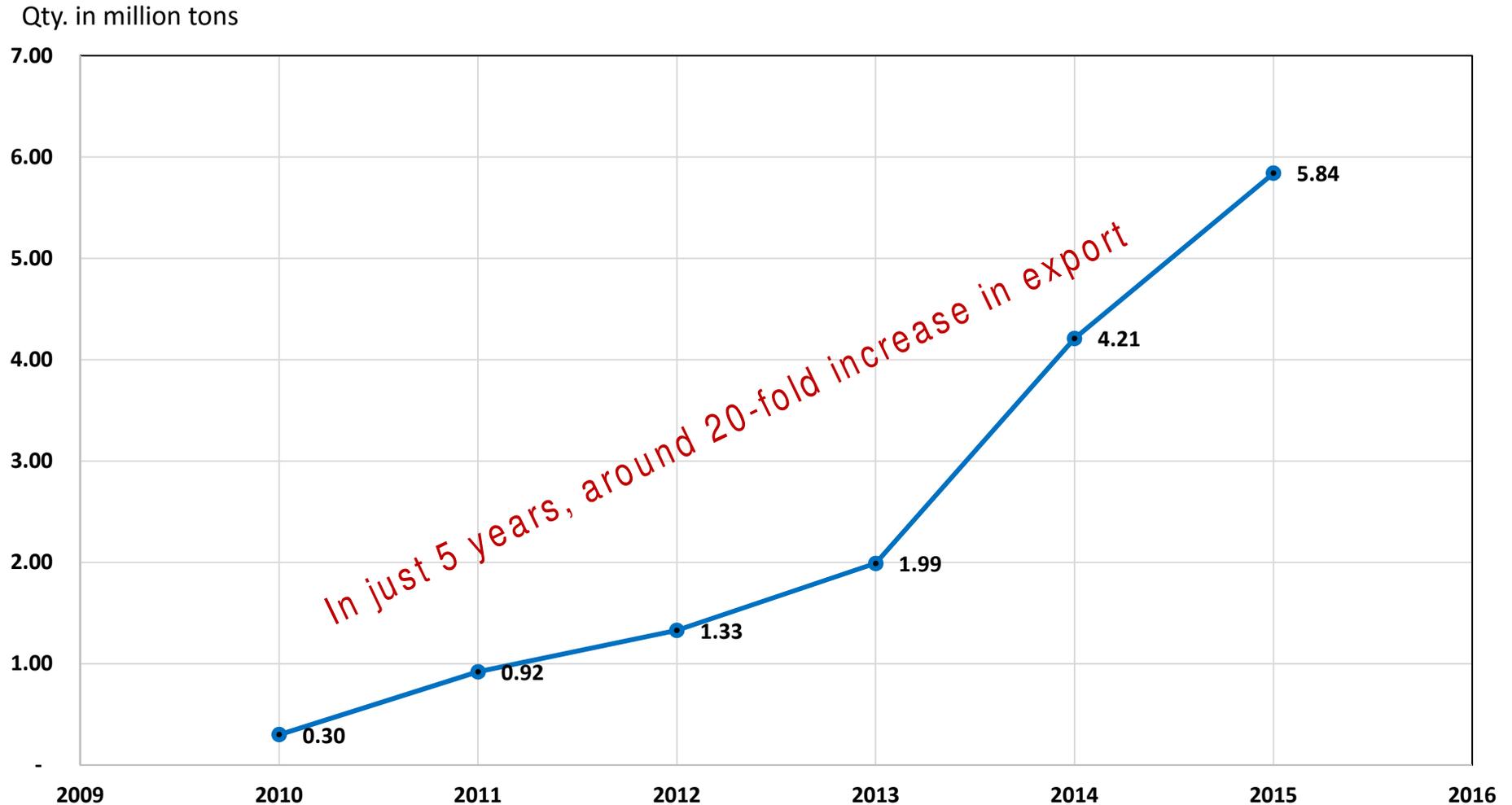
Gypsum Resources in Thumrait (Salalah)

1. As per BRGM (Bureau de Recherches Géologiques et Minières), France, Thumrait gypsum resources have been divided into “logical blocks” with **several gypsum hills of massive thickness situated on east side of Salalah – Thumrait highway road**. Gypsum deposits on the west side of the road are generally of very small thickness and scattered/isolated from one another interlaced with multiple wadis with limestone and clay.
2. The estimated gypsum resources in Thumrait is around 450 million tons, but substantial part of this occurs under Public places, Ministry of Defence training ranges etc.
3. Commercially exploitable gypsum resources in Thumrait area could be around 200 million tons only, after considering the environmental regulations and recommended set-back (distances) stipulated by the government authorities for the mining activities.

Existing Gypsum Mining Companies in Thumrait (Salalah)

Name of the mining company	Business Status
Zawawi Gypsum	Joint Venture with USG Corporation USA & Boral Australia
DM Minerals	Local
Global Mining	Local
Rawas & Salalah Mining	Local
Saint-Gobian Ruffah	Joint Venture with Saint-Gobian, France
Dhofar Cement	Local
Al Ketab	Local
Dhofar Marines	Local
Al Ruwiah	Local
Awam Ventures	Joint Venture with Birla Group, India

Gypsum exports from Oman have been growing at a phenomenal pace....



Sultanate of Oman may become the 3rd largest gypsum producer in the world by 2019/2020

Potential Export Opportunities for Omani Gypsum 2016 - 2030

Cement market research analysts estimate the global cement industry to grow at a steady CAGR of more than 9% from 2016 onwards, the key growing market shall be India, Bangladesh, Indonesia, Vietnam, Malaysia, Japan, Philippines, GCC and Africa

- Indian Cement Industry expected to consume over 425 million tons of gypsum and the local supply shall be restricted to below 150 million tons, the deficit in the domestic supply, over 275 million tons has to be dependence on imported gypsum.
- Existing Thai gypsum consumers like Indonesia, Vietnam, Malaysia, Japan, Bangladesh, Philippines are expected to import over 200 million tons of gypsum.
- Growing Construction industries in South Africa and East Africa shall be consuming around 10 million tons of imported gypsum.
- Construction industries in UAE, Qatar, Kuwait and Bahrain are estimated to import over 50 million tons of gypsum.

Zawawi Gypsum LLC

USG Zawawi Drywall LLC SFZ

(Joint venture between Zawawi Minerals LLC, USG Corporation USA & Boral Australia)

**Transcontinental Partnerships for Gypsum Mining &
Gypsum In Country Value (ICV) addition**



USG Boral ZML

A brief background

2009, Established Zawawi Minerals LLC for developing gypsum mining and Plasterboard manufacturing (In Country Value addition) projects in Sultanate of Oman.

2009 -2010, gypsum resources was identified and succeeded in securing a gypsum mining license with the largest reserve of over 50 million tons.

2012, Completed divestment of 55% shareholding in gypsum mining business (Zawawi Gypsum LLC) to USG Corporation, USA, one of the world's largest plasterboard manufacturing company.

2012, And struck a another 50:50 partnership deal with USG Corporation to set up Middle East's first SHEETROCK® brand plasterboard manufacturing (USG Zawawi Drywall LLC SFZ) facility in Oman.

2014, Gypsum mining project started exporting gypsum rocks to India, Japan, Taiwan, Vietnam, Bangladesh etc.

2014, USG Corporation divested their 50% shareholding in the above Joint Ventures to Boral Ltd, Australia, Asia's largest gypsum board manufacturing company.

2015, "SHEETROCK®" brand plasterboard manufacturing facility inaugurated, and started supplying to GCC markets.

Zawawi Minerals LLC's Profile

Zawawi Minerals LLC (ZML) is incorporated in 2009; for identifying and developing industrial minerals based projects in Sultanate of Oman. The company is mainly focused on developing international level high quality mining projects and “In Country Value (ICV)” addition projects across a range of minerals such as Gypsum, Limestone, Dolomite etc. ZML's primary objective is to operate in the safest environment possible through the implementation of world-class operating policies and procedures while generating a satisfactory support for the country's social-economic growth.

Since 2009, the company developed three major strategic joint ventures in Sultanate of Oman with global leaders in their field resulting in a diversified business portfolio that includes; Gypsum mining, Gypsum board manufacturing, Terrestrial Lidar & conventional survey etc.

www.zawawiminerals.com

USG Corporation's Profile

USG Corporation (USG) was incorporated in 1902 and listed in New York Stock exchange in 1931, USG is a multi-billion dollar manufacturer and distributor of high-performance building systems like plasterboard, joint compound and a vast array of related products for the construction and remodeling industries. USG's Industry Leading Brands are: SHEETROCK® Brand plasterboard, DUROCK® Cement Board and SECUROCK™ Glass-Mat Sheathing.

Warren Buffet's Berkshire is USG's largest shareholder, owns one-fourth of USG's shareholding, around 30%.

Overview of USG Corporation

- USD 3.10 billion market cap
- USD 3.80 billion revenue in FY 2015

www.usg.com

Boral Ltd.'s Profile

Boral Ltd is an international building and construction materials group established in 1946, listed in Australian stock exchange, with its headquarters in Sydney, Australia. Boral produces and distributes a broad range of construction materials, including plasterboard, cement, concrete roof tiles etc. Boral primarily serves customers in the building and construction industries with operations concentrated in three key geographical markets - Australia, the USA and Asia.

Overview of Boral Ltd

- AUD 4.35 billion market cap
- AUD 5.04 billion revenue in FY 2015

www.boral.com.au

Zawawi Gypsum LLC

Zawawi Gypsum LLC (ZGL) holds a gypsum mining license in Thumrait that covers 2 sq. km (500 acres) with estimated mineable gypsum reserves of over 50 million tons. ZGL's gypsum mining block is on east of the Salalah – Thumrait road with massively thick gypsum hills, which are most commercially favorable gypsum resources in Oman.

ZGL started its gypsum mining operation in 2014, presently exporting gypsum to the end users in India, Japan, Taiwan, Indonesia, Vietnam, South/East Africa, Bangladesh etc.. Out of all Oman gypsum exporters, USG Boral- Zawawi joint venture has the largest gypsum reserves and it managed with the most experienced and latest technology in the industry.

Investment: USD 15.50 million

Gypsum rocks production capacity: 800 TPH

Life of the mine: plus 15 years

Exported quantity in 2014: 0.50 million tons

Exported quantity in 2015: 1 million tons

USG Zawawi Drywall LLC SFZ

USG Zawawi Drywall LLC SFZ's "Middle East's first SHEETROCK® brand plasterboard manufacturing plant" at Salalah Free Zone started commercial production in May 2015, the facility is equipped to manufacture a wide range of USG's universally recognised SHEETROCK® plasterboard. Bearing the prestigious SHEETROCK® brand of USG Corporation, one of the oldest plasterboard manufacturers in the United States, plasterboard from the Salalah facility will be marketed across the Gulf and Indian Subcontinent.

The project adopted American environmental friendly manufacturing technology complying with all applicable national and international standards related to safety and environmental quality measures.

Total Investment: USD 37 million

Annual production capacity: 8 – 10 million sq. meter

Major market: Oman, UAE, Qatar, Africa etc.

USG Corporation's first plasterboard plant outside of North America on over 20 years

Published articles/interview

“Demand for Gypsum by the Indian Cement Industry & Asia”

- Global Cement Magazine, UK - April 2011
- World Cement Magazine, UK - May 2011
- Industrial Minerals Magazine, USA- August 2011
- India Cement and Construction Materials Magazine, USA - April 2012
 - ZGK Cement Lime Gypsum Magazine, Germany - July 2012
- Indian Cement Industry Review Magazine, India - December 2013
 - The Business Year Magazine - Sultanate of Oman 2014

“Oman set to become world’s fourth largest gypsum producer by 2018”

- Industrial Minerals Magazine, USA – November 2015

“Thai Gypsum Export Policy”

- Global Gypsum Magazine, UK - May 2011

“Middle East’s first SHEETROCK® brand gypsum board manufacturing plant ” – USG Zawawi Drywall LLC SFZ for Oman gypsum ICV project

- Global Gypsum Magazine, UK – May 2015

Thanks