



**Kasbah Resources (ASX: KAS) – Initiation Report**

**Tin Stockpiles Decreasing, Kasbah Poised for Project Development**

**Speculative Buy**

**Target Price 4.1c**

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**Security Details (post retail entitlement offer)**

Ordinary Shares	1.04b
Unlisted Options	6.5m
Market Capitalisation (m, undil.)	\$15.6
Cash & equivalents	~\$6.8m
Share Price (10/7/2017)	\$0.015
52 week high/low	\$0.063/\$0.014

**Share Price Graph**



**Directors and Management**

Richard Hedstrom	CEO
Evan Spencer	COO
Keith Pollocks	CFO
John Gooding	Non-Exec. Chairman
Graham Freestone	Non-Exec. Director
Hedley Widdup	Non-Exec. Director
Stephen Gill	Non-Exec. Director

**Major Shareholders (post retail entitlement offer)**

Pala Investments Ltd.	19.90%
Lion Manager Pty Ltd.	12.56%
Acorn Capital Ltd.	4.80%

**Investment Highlights**

- The Achmmach Project is a large, primary tin deposit in Northern Morocco with granted Mining Permits and an approved ESIA. The Joint Venture ownership consists of Kasbah (75%), Toyota Tsusho (20%) and Nittetsu Mining (5%).
- The 2012 JORC-Compliant Ore Reserves stand at 6.56Mt @ 0.85% Sn for 55,500t of contained tin. Significant exploration potential remains to be tested at depth, along strike and regionally.
- Pala Resources and Lion Selection are both substantial shareholders along with tin trading companies Thaisarco (4.6%) and Traxys (4.3%). The Achmmach Project also has strategic partners, with both Toyota Tsusho and Nittetsu Mining remaining committed to the Achmmach Tin Project.
- AMC’s recommendations have been adopted by Kasbah and incorporated into the on-going works program for the development of the Achmmach project. As a result of the recommendations from the AMC Technical Report, the capital cost estimate and financial model for the Achmmach project will be revised and updated and the results released later this year.
- A new Board and management team has been appointed, with a focus to optimise and finance the Achmmach Tin Project in 2017/18.
- Based on the low Capex/Opex aspects of the Achmmach Project, we view Kasbah Resources as a company with good exposure in an improving tin market and initiate coverage with a Speculative Buy.

**Achmmach Tin Project NPV (TC Estimates)**

Reserve	6.56Mt @ 0.85% Sn (55,500t of contained tin)
Mine Life (years)	10.5
Tin Price (US\$/t)	20,000
Capex (US\$m)	78.5
AISC (US\$/t tin)	11,507
Tin Production (p.a)	3,970t Sn (only accounts for 1.5% of global production)
Tin in Concentrate	55%
Payable Tin	88.8%
Exchange Rate (AUD/USD)	0.75
NPV (AUD\$m) – 10.2% DR (nominal)	121
Project Ownership (KAS)	75%
Attributable NPV (AUD\$m)	91
P/NAV	0.36x
12mth Price Target (based on above calculations and prior to equity component construction funding)	4.1c

**Sensitivities to Tin Price**

Tin Price (US\$/t)	Attributable NPV (\$AUD)
15,000	(1)
16,000	17
17,000	36
18,000	53
19,000	72
20,000	91
21,000	109
22,000	127
23,000	145
24,000	164
25,000	183



Tin Spot Price at US\$20,050/t  
(as at 10/7/2017)

**Executive Summary**

Kasbah Resources (KAS) has had a transformational period in 2017. As communicated in December, Kasbah's Board restructuring plan aimed to identify additional high-quality directors commensurate with the goals of the company going forward. This was timed with the cash and debt injection from strategic investor Pala Resources at the end of 2016 and positions Kasbah in a much stronger position going forward in 2017. Kasbah also has tin trading companies Thaisarco (4.6%) and Traxys (4.3%) as significant shareholders. The Achmmach Project has strategic partners, with both Toyota Tsusho and Nittetsu Mining remaining committed to a mining development.

Achmmach is a low capital, low cost, long life mine of greater than 10 years. The Achmmach Project is well understood following numerous project studies and due to the low cost profile (compared to other

deposits) we see this as a unique deposit that provides healthy margins (particularly at the current spot tin price of US\$20,050/t). LME tin stockpiles continue to dwindle and this has seen an increase in the tin price over the past six months. This provides an opportunity for established deposits (that could prove economic in the current price climate) to get into production, with few options available due to a lack of exploration expenditure in recent years.

The Moroccan tenements (on existing mining permits) owned by Kasbah also have substantial exploration upside in multiple directions. Once a pathway to production is established, Kasbah will look to further explore the area and build upon the current JORC Resource of 14.9Mt @ 0.85% Sn (127.3kt of contained tin).

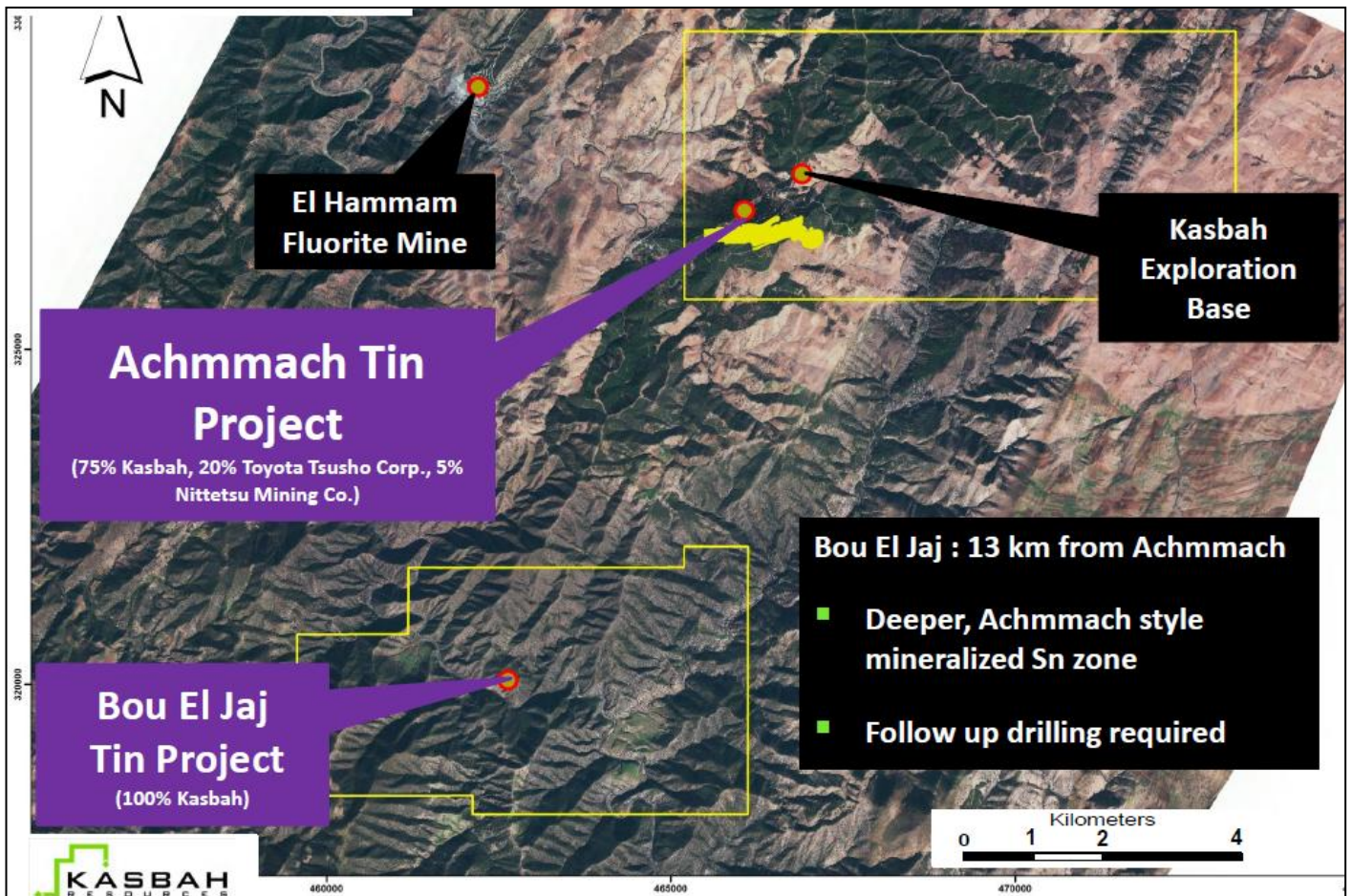


Figure 1 – Kasbah’s Tenements in Morocco (source: KAS Investor Presentation)

Morocco is viewed as a mining-friendly jurisdiction. The country has a long history of mining activity, dominated by phosphates (75% of the world’s reserves). Mining accounts for 10% of total GDP and the government’s goal is to triple mining industry revenue by 2025 (a new Mining Code aims to expand resource development).

Kasbah plans to make a decision-to-mine by early 2018 and be in production within a 12-month period from that point. We view this as ideal timing and see Kasbah Resources as a unique opportunity to get exposure to the foreseeable growth in the tin market. Achmmach is considered a globally significant Reserve (based on the Committee for Mineral Reserves International Reporting Standards – or CRIRSCO) with the 3<sup>rd</sup> largest undeveloped tin deposit reported.

Deposit	Country	Company	Reserve (contained tin)
Bisie	DRC	Alphamin Resources	114,366t
Rentails	Australia	Metals X	94,343t
Achmmach	Morocco	Kasbah Resources	55,500t

It is interesting to note that Alphamin Resources Corp. (AFM: TSXV) entered into an agreement with Sprott Capital Partners, Tamesis Partners LLP and Tremont Master Holdings Limited to raise gross proceeds of approximately C\$51.3 million. Alphamin currently has an undiluted market capitalisation of ~C\$167.6m, which highlights the appetite for quality tin resources in a depleted market.

### **Technical Review – Achmmach Project**

An independent technical review was conducted by AMC Consultants on the Achmmach Tin Project in Morocco. The review considered the Small Start Option Definitive Feasibility Study published in August 2016. The aim of was to receive independent assessment of the Definitive Feasibility Study and construction readiness of the Achmmach project, to identify opportunities for project optimisation, and to highlight areas for additional study required to de-risk key technical areas. Key recommendations released in June 2017 include:

#### **Mining**

- Review of the mine geotechnical data and model in regards to mine design and stoping parameters
- Review of the recommended assumptions and schedule relating to cemented rock fill
- Review of development ramp-up rates for stoping activities and ore trucking at peak production rates

#### **Processing Design**

- Impact of the primary grind size increasing from 100µm to 150µm in the DFS
- The inclusion of Imhoflot cells as part of the flotation circuit
- The use of EDS mills as a replacement for rod mills in the grinding circuit

### **Small Start Option (SSO) DFS – August 2016**

Kasbah Resources released a Definitive Feasibility Study (DFS) and new Ore Reserve for the Small Start Option (SSO) at the Achmmach Tin Project in August 2016. As a point of reference, this report uses the results from that study as a baseline, but these figures will change as the AMC review items (refer above) are implemented in a DFS revision to be released at the end of 2017.

The Achmmach SSO DFS was premised upon a hard rock underground tin mine with a ten year life that would be developed in two stages. Stage 1 production initially commenced at 0.5Mtpa for 42 months

then expanded in Stage 2 to 0.75Mtpa for 80 months (the remainder of the mine life). This staged approach utilised contract mining, contract crushing and modular plant design.

### Exploration/Resource

There is substantial exploration upside at the Achmmach Tin Project, with a number of reported outcropping satellite deposits with depth potential. One of these targets includes Bou El Jaj (BLJ), which is 13km SW of the Achmmach Tin Project. The exploration target is part of a 3km wide / 12km long mineralised corridor and BLJ has a strong surface geochemical signature with outcropping tin mineralisation evident along 2km of strike. Importantly (from a production perspective) BLJ represents a potential deposit that could act as a supplementary feed to the current Resource base. Initial drilling identified potential deeper mineralisation and this will be followed-up in exploration programs going forward.

Apart from the satellite deposits, the mineralised lenses (Meknes Trend and the Western Zone) at Achmmach also have potential significant depth extensions that are yet to be properly tested. Drilling results outside of the current Resource suggest a continuation of the ore body and this will be investigated through on-going exploration programs. This could become an important factor if Kasbah looks to increase the throughput; as an increased Reserve will be needed to support a 10+ year mine life in the increased production scenario. The current Resource (will need further drilling for conversion to Reserve) reported by Kasbah Resources (see Figure 2) shows there is plenty of upside to further increase the mining inventory if warranted.

Category	M Tonnes	Sn %	Contained Tin (Kt)
<b>Measured</b>			
Meknes Trend	1.6	1.00%	16.1
Western Zone	-	-	-
<b>Indicated</b>			
Meknes Trend	13.0	0.80%	107.0
Western Zone	0.3	1.25%	4.2
<b>Inferred</b>			
Meknes Trend	-	-	-
Western Zone	-	-	-
<b>Total</b>	<b>14.9</b>	<b>0.85%</b>	<b>127.3</b>

Figure 2 – Achmmach Project Resource (source: KAS Investor Presentation)

### Mining

The DFS completed in August 2016 focussed on a bottom-up longhole open stoping method with the use of rock fill, cemented rock fill (CRF) and residual pillars. There was also a plan for mine access to be from two main portals for direct access to both the Eastern and Western Zones of the ore body.

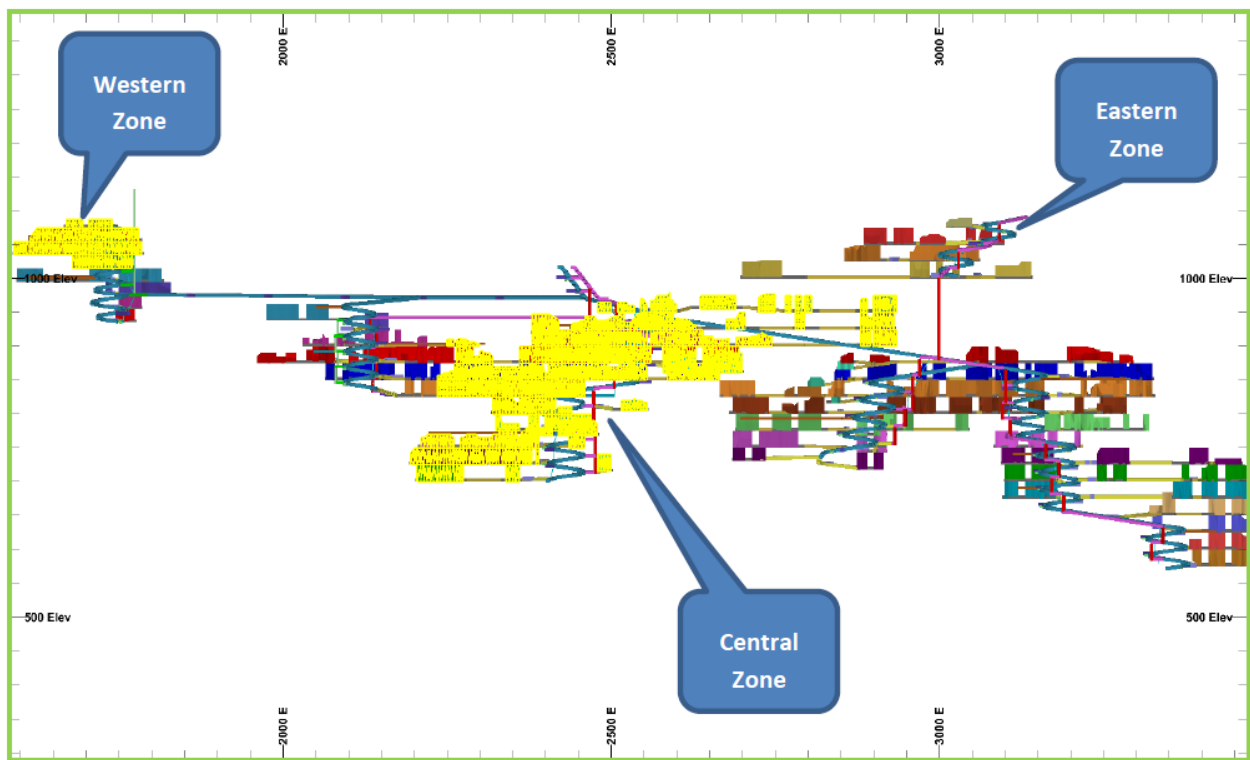


Figure 3 – Mining methods by zone: CRF highlighted in yellow (source: KAS Achmmach Feasibility Study 2016)

The DFS looked at maintaining a contractor mining operation throughout the life-of-mine (LOM). The mining schedule included a two-stage mining approach, with a reduction of the cut-off grade in Stage 2 as throughput is increased. The staged mining approach is premised upon a 0.8% Sn mine cut-off grade in Stage 1 delivering run of mine grades of approximately 0.96% Sn. The return to a 0.55% cut-off grade in Stage 2, which sees production expand to 0.75Mtpa, will see tin production maintained at a consistent level (average of ~3,970 tonnes of tin in concentrate per annum) over the LOM (10.5 years), as shown in Figure 4.

DFS Metrics	Stage 1	Stage 2
Cut-off grade	0.8% Sn	0.55% Sn
ROM tonnes and grade	1.89Mt @ 0.96% Sn	4.67Mt @ 0.80% Sn
Delivering	18,235t contained tin to mill	37,310t contained tin to mill
Processing	0.5Mtpa over 42 months	0.75Mtpa over 80 months
Total tin in concentrate produced	12,255 tonnes (292tpm)	28,114 tonnes (351tpm)

Figure 4 – DFS: Staged Mining Metrics (source: KAS Achmmach Feasibility Study 2016)

## Metallurgy

Stage Recoveries:

- Stage 1: 73.4% for 12,255 t tin
- Stage 2: 72.2% for 28,114 t tin

The processing layout is based on the installation of 2 x 250ktpa modular process streams while providing sufficient space for a third 250ktpa treatment plant for the Stage 2 expansion.

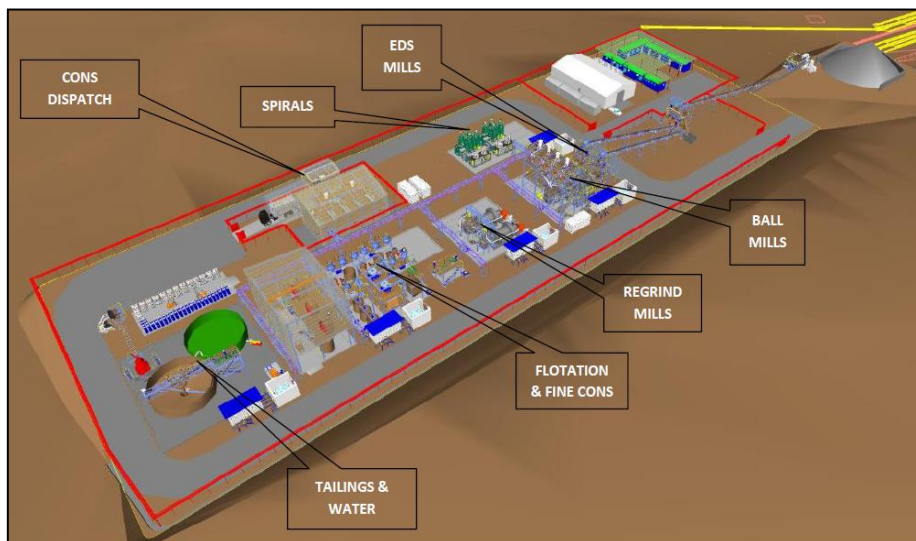
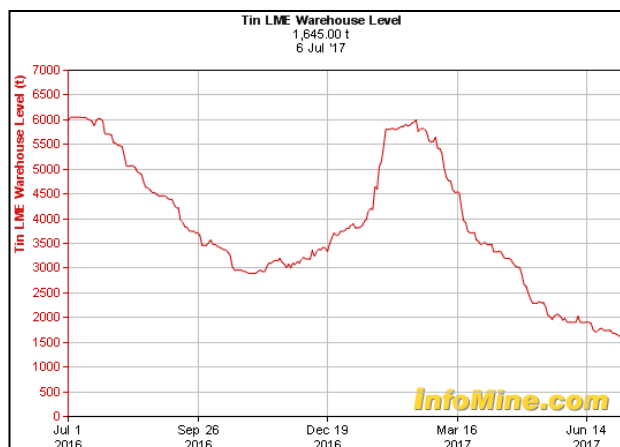


Figure 5 – Layout of Process Plant (source: KAS Achmmach Feasibility Study 2016)

The principal ore flow is from the mine to the plant via the ROM pad and crushing plant (not shown above) to the rod mill. Then via secondary ball mills to the spiral plant and regrind mills, which together comprise the gravity circuit. A series of Falcon centrifugal concentrators operating in cleaner/re-cleaner configuration will upgrade fine flotation concentrate to approximately 50% tin content. Falcon cleaner tails will report to the tailings thickener. The final fine concentrate will report to concentration filtration and dispatch, where it will be blended with the final gravity concentrate. The Achmmach Tin Project will produce 55% tin in concentrate. The DFS was premised upon sale of tin concentrates to an Asian based tin smelter, with Atlas Tin SAS recovering 88.8% net smelter return (NSR).

### Tin Market

In June 2016, the CRU Tin Monitor (the CRU Group offers business intelligence on the global metals/mining industries through market analysis) stated that...“the CRU is still forecasting a marginal decline in global refined tin use this year, although trade sources mostly report improved or at least steady demand in the current quarter. If this continues, there may be a stronger under-pinning for higher prices by the year end. In the meantime, the recent range of \$15,500 - \$17,500 could be maintained.” This comment proved conservative as the tin price had strong rise to end CY16 at ~US\$21,100/t. Since then the price has remained relatively stable and currently sits at ~US\$20,050/t.



Figures 6/7 – Tin LME Stockpiles (as at 6<sup>th</sup> July) and Tin Price (source: InfoMine.com and Iress)

World tin production (from primary sources) has been stable in recent years at between roughly 270ktpa – 310ktpa. The International Tin Research Institute (ITRI) has stated that they “expect a gradual upward trend in primary tin demand well into the future, although for many, a rise in tin prices or development of far more efficient exploration and mining technologies will likely be required to make the economic case for their development.”

The Achmmach Project is currently economic (based on the Feasibility Study) and compared to other development opportunities in the tin market, is in the lower half of the cost curve. Market analysts suggest that a price of ~US\$25,000/t Sn will be required to trigger significant new development and current production is predominantly coming from unpredictable sources such as China, Indonesia and Peru (account for circa 78% of world production).

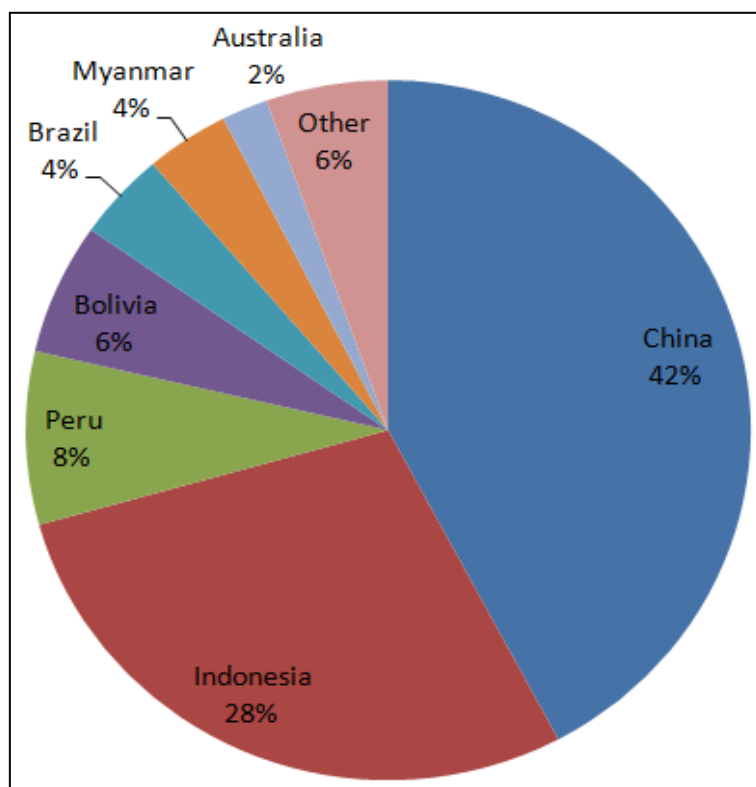


Figure 8 – Tin Production by Country (source: 2014 USGS Data)

**Kasbah Resources’ Potential Milestone Timeline**

Technical Independent Review by AMC	<b>Released</b>
Review AMC Recommendations	<b>H2 2017</b>
Recommence pre-project activities	<b>H2 2017</b>
Decision to Mine + Financing	<b>1Q 2018</b>
Construction	<b>2018</b>
First Ore Production	<b>1H 2019</b>



## **Directors and Management**

### **Mr Richard Hedstrom**

#### **Chief Executive Officer**

Richard has over 25 years' experience in the resources industry in both corporate and finance roles. Prior to joining Kasbah at the end of 2016, Richard was Head of Corporate Development for OZ Minerals where he was responsible for the business development and exploration activities of the company resulting in a number of major acquisitions such as Carrapateena.

### **Evan Spencer**

#### **Chief Operating Officer**

Evan is a highly experienced mining executive and has held a wide range of executive, senior management and operational roles in mining, both domestically and internationally over 25 years. Evan has held senior roles in Barrick Gold, Kagara, Goldfields of South Africa, Aditya Birla Minerals and GBF Mining Contractors. He was most recently Chief Executive of Asian Mineral Resources. In addition Evan has worked on asset integration in Saudi Arabia and led the strategic development and implementation of Barrick's Kalgoorlie and Papua New Guinea Operations.

### **Keith Pollocks**

#### **Chief Financial Officer and Company Secretary**

Keith is currently the CFO of the Newcastle Coal Infrastructure Group, a consortium of major coal producers, including BHP, which owns and operates one of Australia's largest coal export terminals and has turnover of A\$400m. Prior to this, Keith was General Manager Treasury, Taxation and Business Evaluation at MMG Limited, a dual listed globally diversified base metals company, where he was responsible for those functions. Before this, Keith held senior finance / Company Secretary positions with Lyondellbasell (formerly Shell Chemicals). Keith is a qualified accountant (CPA) and Chartered Corporate Treasurer (MCT).

### **Mr John Gooding**

#### **Independent Non-executive Chairman**

Mr Gooding is a mining engineer with over 40 years of experience in all aspects of gold and base metals operations including mining, exploration, smelting and refinery, sales and marketing and major capital expansion projects. He most recently served as the Managing Director and Chief Executive Officer of Highlands Pacific and prior to this held executive management positions with Normandy Mining, MIM, Xstrata, Ok Tedi Mining and Roche Mining.

### **Mr Graham Freestone**

#### **Independent Non-executive Director**

Mr Freestone has over 40 years of experience in the natural resources industry. He has a broad finance, corporate and commercial background obtained in Australia and internationally through senior positions with the Shell Group, AngloGold and Acacia Resources where he served as Chief Financial Officer and Company Secretary.

**Mr Hedley Widdup**

**Non-executive Director**

Hedley Widdup graduated as a geologist with first class honours from the University of Melbourne in 2000 and has extensive experience across mine and resource geology having worked at Mt Keith (WMC), Olympic Dam (WMC), Mt Isa (Xstrata) and the St Ives Gold Mine (Gold Fields).

**Mr Stephen Gill**

**Non-executive Director**

Mr. Gill is currently Portfolio Manager at Pala Investments Ltd. Mr. Gill has been at Pala since 2008, during which time he has been involved in many of Pala's principal investments covering a range of commodities, as well mining services and consumables sectors. Mr. Gill has also supported many of Pala's investee companies in defining and implementing strategic initiatives. Mr. Gill is also involved in the oversight of Pala's liquid investments portfolio. Prior to joining Pala, Mr. Gill was at AMEC Plc., an engineering consulting firm, where he advised on a range of natural resources transactions.

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