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8 February 2018

The Directors
Zentosa Capital Limited
C/o Perigeum Capital
Level 4, Alexander House
35 Cybercity
Ebene 72201
Mauritius

Dear Sirs

**Report of the Independent Financial Advisor**

Deloitte was appointed by Zentosa Capital Limited (the "Company") to review the business plan prepared by the Company in the context of its listing on the Development & Enterprise Market ("DEM") in accordance with Schedule 11 of the DEM Rules.

**Scope of work**

We have examined the forecasts of the Company as set out in the business plan for the period 28 February 2018 to 28 February 2021 in accordance with the *International Standard on Assurance Engagements 3400 – The Examination of Prospective Financial Information*. Management is responsible for the forecasts, as set out in the financial model, including the assumptions set out on pages 21, 22 and 23 of the business plan.

Our scope and limitations are set out in our engagement letter to the Company. We planned and performed our work to provide limited assurance with respect to the objectives of the engagement. Our examination is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance on all significant matters that might be identified in an audit.

We have undertaken the following procedures in our review of the Company's business plan:

- Obtained an understanding of the structure of Zentosa Capital Limited;
- Read the contents of the Company's business plan and checked the consistency of information included in the business plan;
- Reviewed the financial forecasts for the period from 28 February 2018 to 28 February 2021(the "Forecast Period") and the underlying assumptions;
- Held discussions with management of the Company on the contents of the business plan and the assumptions underlying the financial forecasts;
- Reviewed the reasonableness of the financial model driving the financial forecasts; and
- Reviewed the reasonableness of the material assumptions in the financial forecasts relating to income and the main expenditures.

**Opinion**

Based on our examination of the evidence supporting the assumptions, nothing has come to our attention which causes us to believe that these assumptions do not provide a reasonable basis for the forecasts covering the period 28 February 2018 to 28 February 2021 with regards to the financial viability of the Company. Further, in our opinion the forecasts are properly prepared on the basis of the assumptions provided.

Actual results are likely to be different from the forecasts since anticipated events frequently do not occur as expected and the variation may be material.

Deloitte assumes no responsibility whatsoever in respect of or arising out of or in connection with the contents of this certificate to third parties.

**Independence**

We confirm that we have no direct or indirect interest in the shares of Zentosa Capital Limited.

Yours faithfully

**Jean Noel Wong**
**Partner**

JW/NN/323/lf

# BUSINESS PLAN

# ZENTOSA CAPITAL LIMITED

**8 FEBRUARY 2018**

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# Executive Summary

***Profile***

Zentosa is an investment holding company focussed on the minerals and mining sector in developing markets. The company has been established with the objective of acquiring quality investments in mineral resources extraction, production and trading with the view to achieving significant capital appreciation and sustainable income returns over the medium to long-term. The company may also opportunistically consider investments in potential exploration assets.

Zentosa's only investment to date is that of a Chrome trading business, operating in Asia and Africa, called BBA Resources Pte Ltd (registration number 201313273M) incorporated in Singapore. BBA Resources, which is wholly owned by Zentosa, was acquired on 15 February 2018 as part of a group restructure to enable Zentosa's shareholders to eventually access a broad range of investment opportunities within the minerals and mining sector across developing markets. The nature of Zentosa will therefore be that of an investment holding company.

Supporting the Zentosa Board, is a strong operational management team who is responsible for the management of BBA Resources Pte Ltd. The operational team, details of which are available on page 17 has a successful track record in the Chrome trading industry, with longstanding relationships with reputable customers in Singapore and China.

***Strategy***

The Company's primary objective is to hold a diversified portfolio of mineral resources extraction, production and trading investments. In order to achieve its objective, the Company will initially focus on making BBA Resources a self-sustaining trading business. This will be achieved either by entering into long term supply agreements with chrome producers in Southern Africa (initially and predominantly South Africa) or through the acquisition of relevant mineral assets.

Over the medium term, Zentosa will focus on meeting all the conditions precedent as per the definitive agreement for the proposed acquisition of the Smokey Hills Group. The Smokey Hills Group is a Mauritian Group, who mainly owns platinum group metals (PGMs) and related commodities and Chrome mineral assets in South Africa. Over the medium term, the acquisition is anticipated to create an asset base from which to initiate target acquisitions in the South African mining sector.

Zentosa's long term objective is to become a geographically diverse investment holding entity, which is sufficiently diversified from any country specific and sub-sector specific risks.

Key to this investment strategy is the company's focus on quality mining assets with unlockable value through BBA Resources' marketing platform into Asia. Part of this strategy is to create value by ensuring the group's self-sustainability: from the extraction of commodities (target acquisitions) up to exporting to customers (BBA Resources) in Asia.

***Shareholding***

The majority shareholder of the Company is Atlas Holdings Enterprises Corp (BVI) (98%), who, with the exception of the nominee shareholder, Joe Lu (2%), owns all the issued share capital of Zentosa. The beneficial owner of Atlas Holdings Enterprises Corp, is Hong Yu, a resident of the Republic of China.

The spread of shareholders is expected to increase after listing in the event the acquisition of Smokey Hills Platinum Mining is completed, i.e. there will be an issue of new Zentosa shares to the shareholders of Smokey Hills Platinum Mining as consideration.

## 1. Corporate Information

1.1. *Name of Company:* Zentosa Capital Limited ("**Zentosa**" or "**the Company**")

1.2. *Registered Address:* c/o Intercontinental Trust (Singapore) Pte Ltd

51B Circular Road
Singapore
049406

*1.3. Regulatory Bodies: Singaporean Registrar of Companies and, once listed, the Stock Exchange of Mauritius Ltd ("SEM") and the Mauritian Financial Services Commission ("FSC")*

*1.4. Constitutive Document: Constitution*

*1.5. Date of incorporation: 27 July 2017*

## 2. Incorporation and listing

Zentosa was incorporated and registered in Singapore on 27 July 2017.

It is envisaged that the Company will seek to list its shares on the Development & Enterprise Market ("**DEM**") of the SEM, with a further potential secondary listing on an appropriate Common Monetary Area ("**CMA**") exchange in the future.

## 3. Overview of Zentosa

Zentosa is an investment holding company focussed on the minerals and mining sector in developing markets. The company has been established with the objective of acquiring quality investments in mineral resources extraction, production and trading with the view to achieving significant capital appreciation and sustainable income returns over the medium to long-term. The company may also opportunistically consider investments in potential exploration assets.

Zentosa's only investment to date is that of a Chrome trading business, operating in Asia and Africa, called BBA Resources Pte Ltd (registration number 201313273M) incorporated in Singapore. BBA Resources, which is wholly owned by Zentosa, was acquired on 15 February 2018 as part of a group restructure to enable Zentosa's shareholders to access a broad range of investment opportunities within the minerals and mining sector across developing markets.

The Company will follow a value-added strategy, initially focussing on building a strong asset base, followed by a focus on income generation through the integration of various business activities in the minerals and mining sector.

Supporting the Zentosa Board, is a strong operational management team (details of which are available on page 17 who are responsible for the management of BBA Resources Pte Ltd, the wholly owned subsidiary of Zentosa. The operational team has a successful track record in the Chrome trading industry, with longstanding relationships with reputable customers in

Singapore and China. BBA Resources has been in operation as a chrome trading entity since 2013.

The Company's reporting currency is USD, with the financial year-end of the Company being February each year.

It is envisaged that a listing on the DEM will provide the company with access to a global investor base of managed funds, high net worth individuals and other sources of capital who view Mauritius as an attractive investment destination. Additionally, Mauritius is well placed geographically in terms of its proximity to both Africa and Asia, with a favourable time-zone with either continent. A listing on the DEM will provide Zentosa with a platform and acquisition currency for further expansion and diversification, as well as increase the Company's public presence and profile.

To broaden its investor base and access additional sources of acquisition capital to fund growth aspirations, Zentosa will consider listing its shares on other recognised international stock exchanges to:

- enhance potential investors' awareness of the Company;
- improve the depth and spread of the shareholder base of the Company, thereby improving liquidity in the trading of its shares;
- provide invited investors, both institutional and private, the opportunity to participate directly in the income streams and future capital growth of the Company;
- provide invited investors with an additional market for trading the Company shares; and
- provide a potential additional source of capital to fund the growth aspirations of the Company over the long-term, if required.

## 4. Investment policy and strategy

### 4.1. *Objectives, Geographic and Sectoral Focus*

The Company's primary objective is to hold a diversified portfolio of mineral resources extraction, production and trading investments. In order to achieve its objective, the Company will initially focus on making BBA Resources a self-sustaining trading business. This will be achieved either by entering into long term supply agreements with chrome producers in Southern Africa (initially and predominantly South Africa) or through the acquisition of relevant mineral assets.

Over the medium term, Zentosa will be focussed on making investments in business which are involved in the exploration, mining and trading of commodities throughout Southern Africa and Asia.

Zentosa's long term objective is to become a geographically diverse investment holding entity, which is sufficiently diversified from any country specific and sub-sector specific risks.

Key to this investment strategy is the company's focus on quality mining assets with unlockable value through BBA Resources' marketing platform into Asia. Part of this strategy is to create value by ensuring the group's self-sustainability: from the extraction of commodities (target acquisitions) up to exporting to customers (BBA Resources) in Asia.

### 4.2. *Investment Criteria*

The following criteria will be applied to long-term supply agreements or acquiring unlisted mining assets:

- Quality declared Mineral Resources and Reserves, based on appropriate levels of mineral content. The grade of Minerals Resources and Reserves will impact the potential return and quality of the mining asset. The current return varies between USD140 and USD165 per ton for a 40% chrome product (fines).

- Accretive value for the group, by applying its current trading platform to these assets, thereby yielding a higher return to what these assets would have generated without a trading platform.

- Geographic location of mining assets. The geographic area impacts the risk of operating the mining assets and includes country specific risk (i.e. political instability, labour unrest etc.) as well as logistical challenges.

- Management team. The Company will also consider the impact of a strong operational management team with proven track record based on historic performance results. As part of this assessment, the Company will consider production output, quality of chrome and cost of production, compared to peer companies operating in the same industry, geographic areas and conditions.

### 4.3. *Investment Source*

Investments will be sourced through directors' networks, as well as through the networks of the executive teams of the entities into which Zentosa will invest. These networks currently include BBA Resources' current trading network into South Africa, Singapore and China.

Zentosa will also utilise the networks of all its service providers, including sponsors, corporate advisors and other consultants.

### 4.4. *Investment Process*

The Company's directors will establish the investment policy, parameters and objectives, and will review and approve each sale or purchase of investment assets. The

Board will also be responsible for establishing an Investment Panel which will evaluate whether investment opportunities adhere to the Company's investment policy and objectives.

The Investment Panel will in effect function as a sub-committee of the Board of the Company and will be chaired by the Zentosa's CEO. The purpose of the Investment Panel will be to facilitate and provide structure around the decision-making process in respect of the Company's acquisitive growth strategy ensuring that same does not affect the underlying core operations (BBA Resources). This flows from the Company's dual growth strategy of driving both organic growth in the core BBA Resources asset and inorganic/acquisitive lead growth which will seek provide synergistic growth opportunities for the Company. The Panel will initially comprise of the current Board of Directors however, the Company has a strategic imperative to grow the Panel's permanent members as and when, in the Boards view, such capacity is required to deliver on the Panel's mandate of driving the acquisitive growth of the business.

Operationally, the Investment Panel will thus manage after the appraisal, origination and closing of transaction outside of the core operations of the Company's principal asset being BBA Resources and will act as the core liaison between the shareholders of the Company and Board in driving and providing decision making governance as regards the Company inorganic growth ambitions. The result is that the Investment Panel will be responsible for negotiating the terms of the investments and for the ongoing management of the investment assets. The ongoing management of the investee companies' operations will be the responsibility of the investee companies' management team.

4.5. *Short and Medium Term Goals*

Zentosa's short term goals are to secure a listing onto the DEM and ensure that BBA Resources is transformed into a self-sustaining trading business, as previously documented.

Over the medium term, Zentosa will focus on meeting all the conditions precedent as per the definitive agreement for the proposed acquisition of the Smokey Hills Group. The Smokey Hills Group is a Mauritian Group, who mainly owns platinum group metals (PGMs) and related commodities and Chrome mineral assets in South Africa. Over the medium term, the acquisition is anticipated to create an asset base from which to initiate target acquisitions in the South African mining sector. See **Annexure B** for more detail on this transaction.

The longer-term goals of Zentosa are dependent on the proposed DEM listing, such that Zentosa shares can be utilised as acquisition currency for potential future acquisitions.

Once the next transaction (other than Smokey Hills and anticipated to be in respect of assets similarly located within Southern Africa) is executed, Zentosa will aim to conclude a secondary listing on the most suitable exchange within the Common Monetary Area ("**CMA**").

4.6. *Exchange rate policy*

The foreign currency exposure of the Company is limited as insignificant transactions are executed in currencies other than USD. These other currencies are restricted to some logistic costs in BBA Resources. Hence, an exchange rate policy is not deemed to be required at this stage. This will be reconsidered on annual basis or as soon as Zentosa enters into investments which significantly expose the Company to currency risk.

4.7. *Dividend policy*

Over the short to medium terms, Zentosa will be focussed on expansion and will therefore invest excess cash generated instead of declaring dividends. This policy will be reviewed on an annual basis.

## 5. Shareholders

The majority shareholder of the Company is Atlas Holdings Enterprises Corp (BVI) (98%), who, with the exception of the nominee shareholder, Joe Lu (2%), owns all the issued share capital of Zentosa. The beneficial owner of Atlas Holdings Enterprises Corp, is Hong Yu, a resident of the Republic of China.

The spread of shareholders is expected to increase after listing in the event the acquisition of Smokey Hills Platinum Mining is completed. As noted in the investment policy, future transactions will be structured such that Zentosa will issues shares to target company shareholders, which will further increase the spread of shareholders of Zentosa over the long-term up to a range of 15%-20%.

As highlighted above, the Company will seek a listing on the DEM, with a potential future secondary listing on an appropriate exchange within the CMA. The DEM is a well-regulated and efficient stock market. These listings will provide the Company with the ability to issue shares to both international and CMA investors including to vendors of potential acquisitions, having regard to the strength of managements' relationships and the known interest of investors in the targeted geographical jurisdictions.

The cross listing on the DEM and the CMA Exchange will provide Zentosa with access to a global investor base of institutional investors, managed funds, high net worth individuals, retail investors and other sources of capital who view Mauritius as an attractive investment destination.

## 6. Capital Raises on Listing on the DEM

The Company does not intend to raise capital in the short and medium term, but intends on using the listing as a platform and as acquisition currency for future expansion and diversification, on a similar basis to that utilised in the proposed Smokey Hills Group transaction.

## 7. Debt Funding

Zentosa is not currently considering using debt funding for acquisitions or expansions. However, it may consider the use of debt to benefit from the various advantages of debt funding and improve returns to investors in the future. Debt will only be used if the cost of debt and associated risk is at an acceptable level to the investment committee and board of directors.

## 8. Market Research

### Sectors of focus and Industry Trends

Refer to **Annexure C** for SFA Oxford's Chrome Market Analysis

### Anticipated demand for the Zentosa Shares

Current BBA Resources customers in Asia are seeking investment opportunities in the Chrome industry to secure and hedge the Chrome supply in their businesses. This will make Zentosa an attractive investment opportunity for predominantly Chinese customers to ensure the sustainability of their businesses.

Additionally, South African investors are continually seeking to increase their exposure to hard-currency investments, particularly in light of the Rand's continual volatility.

In light of the increasing investor appetite for quality offshore counters, management believes that there will be a significant demand from investors wanting to subscribe for Zentosa shares. The Company is therefore committed to meeting the demands of this market, and taking advantage of the business relationships, skills, market knowledge and experience of its management team, to fulfil its business objectives.

Around 2% of the Company's shares will be made available to the market on the day on which the Company is listed onto the DEM.

### Competitive Advantage

Management is of the opinion that Zentosa is relatively unique, due to its investment focus and offering being different from similar funds listed on the DEM. Whereas other funds are focussed on acquisitions in similar jurisdictions to those targeted by Zentosa, such as property in South Africa, management believes Zentosa value-proposition differentiates itself through its strategic, sectoral, income and value-added focus.

**Conclusion**

Whilst undertaking its market analysis, a number of possible investment opportunities have been identified by Zentosa, following the acquisition of BBA Resources Pte Ltd. Discussions with the relevant parties are still at an early stage. As discussions are at an early stage, and the details are highly confidential, details of these potential investments cannot be disclosed at this stage, as their outcome is highly uncertain.

Note that the proposed listing of Zentosa on DEM is not dependent on the conclusion of these potential investments.

## 9. Investments

Zentosa's stated investment strategy is to invest in well thought through and strategically planned acquisitions, in line with the Company's investment policy.

On 15 February 2018, Zentosa acquired BBA Resources Pte Ltd, a chrome trading business by virtue of a share-for-share transaction. BBA Resources focusses on sourcing chrome from South Africa, mainly through a procurement agent with which BBA Resources has a standing agreement, and selling these resources to customers in Asia (refer to section 9.1 below for more information on BBA Resources).

The Company has also entered into definitive agreements with African Thunder Platinum for the acquisition of the Smokey Hills Group. This transaction will also take the form of a share for share transaction, once the relevant approvals are granted. These approvals and the date on which they will be granted remains uncertain.

In anticipation of the approval to list on the DEM, the Company has identified a number of investment opportunities in line with Zentosa's investment policy.

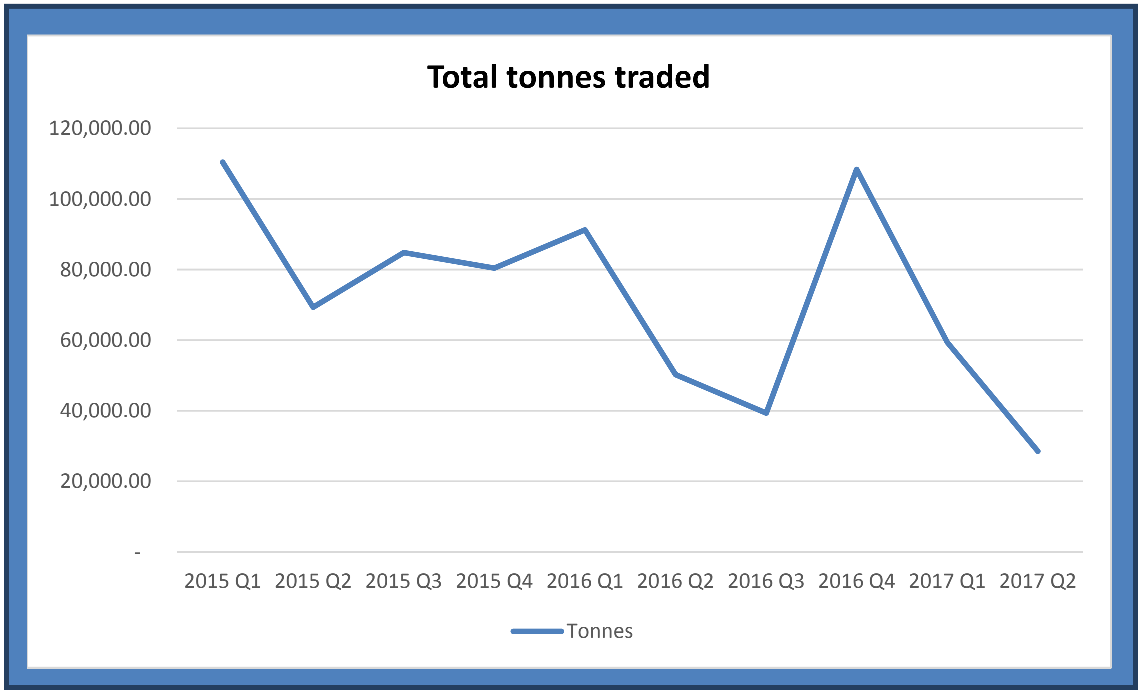
### *9.1. BBA Resources business overview*

BBA Resources' operational model focusses on sourcing chrome from South Africa, by virtue of a procurement agent, and selling the chrome to its customers in Asia, predominantly China. Since its incorporation in 2013, BBA Resources has been able to build significant rapport and consequently a reliable client base in Asia.

There are long-term risks and uncertainty relating to the availability of chrome from the procurement agent. Over the medium term, these risks are mitigated through the procurement agent's right to a specific chrome reserve. BBA Resources in turn has a right of first refusal for any export quality chrome from its procurement agent.

Zentosa is looking to make BBA Resources self-sustaining by either entering into long-term supply agreements with chrome producers in South Africa or acquiring mineral assets.

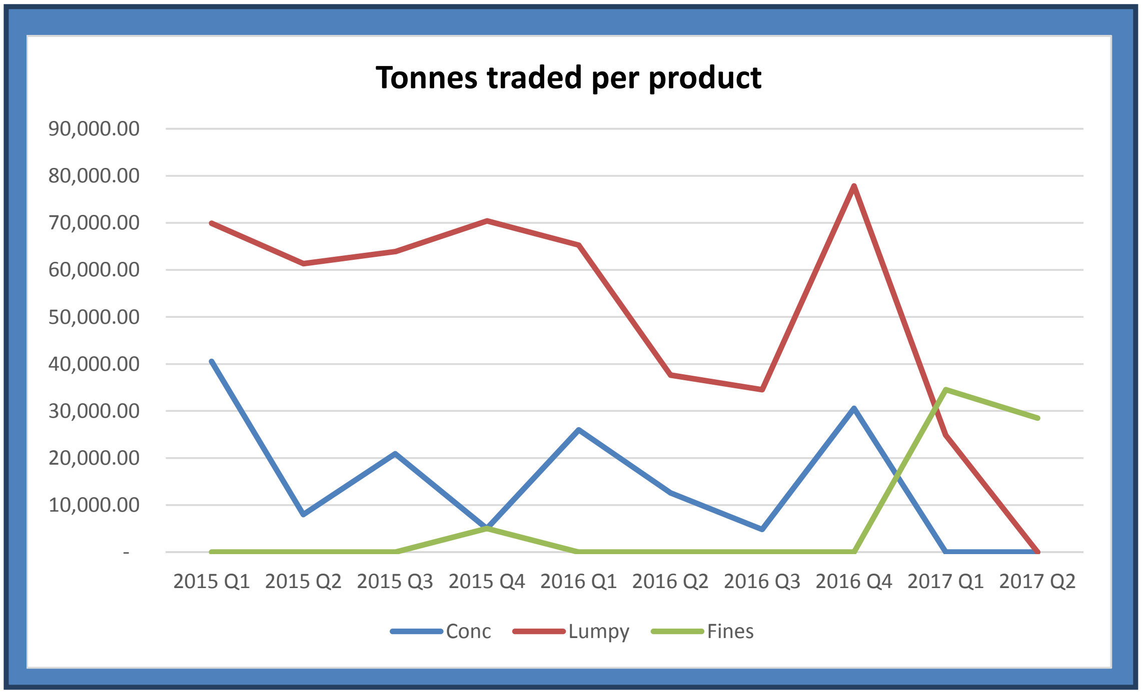
The below table illustrates the tonnages traded by BBA Resources between March 2015 and July 2017:




*Source: Generated by the Company*

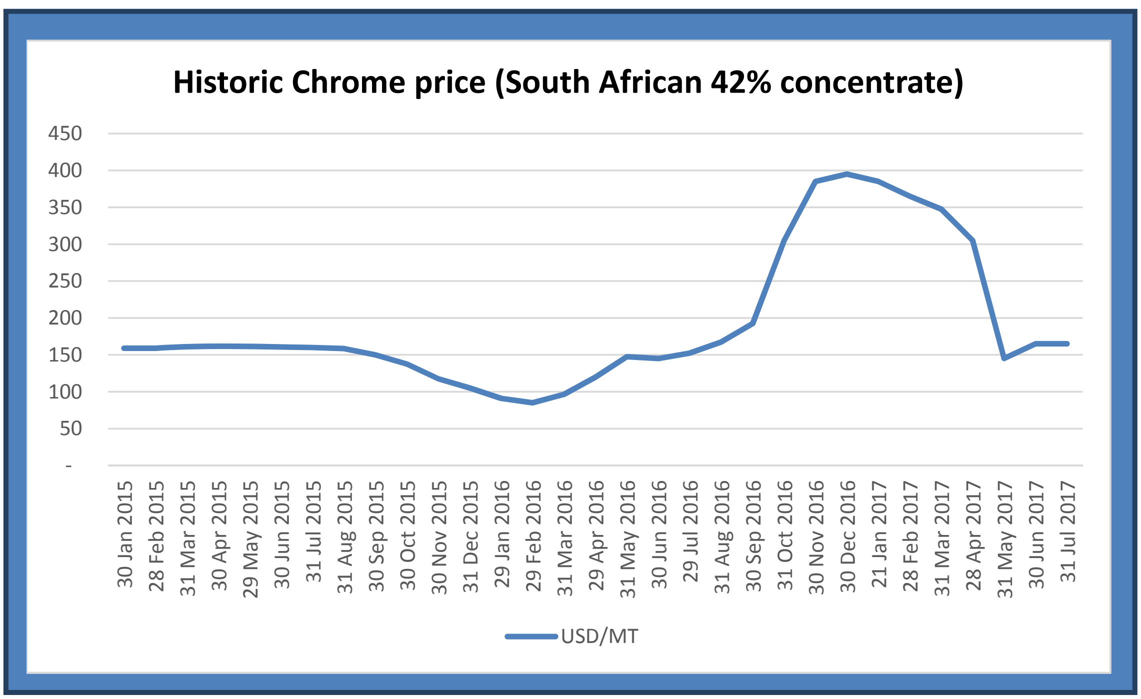
Included in these tonnes are 3 different types of product (chrome concentrate, chrome fines and chrome lumpy/run-of-mine). Over the last 6-9 months, BBA Resources had focussed on sourcing and selling 40% chrome fines, which generates a higher profit margin than chrome concentrate and lumpy, due to having a lower cost of production. Other than in Q4 of 2016, where there was a spike in tonnes sold due to the significant spike in the chrome price leading to significant supply of chrome, the tonnes have gradually decreased while chrome fines sold has increased. This shift in types of product is focussed on improving profitability.

After the spike in the Chrome market during 2016 Q4, the price dropped significantly in 2017 Q1 and Q2, which lead to a lower supply of product and lower quantities sold.




*Source: Generated by the Company*

The Chrome market has been extremely volatile over the past couple of years, which is illustrated through the below historic chrome prices for the period between Jan 2015 and July 2017:




*Source: Generated by the Company*

As at 31 July 2017, chrome selling price varied between USD140 and USD165 per ton CIF (Cost Insurance Freight) for a 40% chrome product (fines). The price of 40% chrome fines is derived from the price of a 42% chrome concentrate.

Current cost of chrome (based on 40% fines) ranges between USD71 and USD90 per ton. The logistical costs incurred to export product to Asia is approximately USD61 per ton.

**10. Risks**

The risks of the Company are all of the risks that would typically be associated with investing in the commodities industry. The board of Zentosa understands these inherent risks and will take reasonable and appropriate steps to mitigate such risks where possible.

10.1. *Capital and Portfolio Risk*

The acquisition of assets, whether listed or unlisted securities, carries the investment risk of a loss of capital and there can be no assurance that the Company will not incur losses. Returns generated from the investments of the Company may not adequately compensate shareholders for the business and financial risks assumed. An investor should be aware that it may lose all or part of its investment in the Company. Many unforeseeable events, including actions by various government agencies and domestic and international economic and political developments may cause sharp market fluctuations which could adversely affect the Company's portfolios and performance both in the short and long term.

10.2. *Currency Risk*

Most of the investments that the Company will seek to acquire are located in foreign jurisdictions other than Mauritius and denominated in USD, with the exception of future investment in South African, which may be denominated in South African Rand. For those investors whose base or home currency is not the same as the relevant foreign currency, there is a risk of currency losses if the foreign currency depreciates against the investors' base currency.

10.3. *Commodity price risk*

Changes in supply and demand in the Company's markets and across the wider market may impact the anticipated prices of Chrome. These changes may result in a reduction or increase in the revenue, income and ultimately the cash flows generated by the Company in respect of the volume of Chrome traded by the Company.

The Company is exposed to fluctuations in commodity prices and to deterioration in economic and financial conditions. The revenue and earnings of the Company's activities are dependent upon prevailing commodity prices. Chrome prices are influenced by a number of external factors, including the supply and demand for commodities, speculative activities by market participants, global political and economic conditions and related industry cycles and production costs in major producing countries of which South Africa is a material component. Fluctuations in the price of commodities produced or marketed by the Company could materially impact the Company's business, results of operations and earnings. The Company does not engage in meaningful hedging against declines in commodity prices, its business and results of operations could also be impacted by volatility in commodity prices.

*10.4. Commodity supply and demand risk*

Fluctuations in the volume of Chrome marketed by the Company could materially impact the business, results of operations and earnings of the Company. The Company is exposed to fluctuations in the expected volumes of supply and demand for Chrome. Given the Company's primary focus on the South African market in terms of product sourcing, the risk associated with changes in resource availability, government policies and regulation, costs of production, global and regional economic conditions are primarily those of South Africa.

Demand in end markets for products in which the commodities are used, technological developments, including commodity substitutions, fluctuations in global production capacity, global and regional weather conditions, natural disasters and diseases, all of which impact global markets and demand for commodities are principally those related to the Company's activities in the Asian market the primary geography of demand for the Company's trading activities.

10.5. *Liquidity Risk*

The Company may invest in securities for which no liquid market exists. The market prices, if any, for such securities tend to be volatile and may not be readily ascertainable and the Company may not be able to sell them when it desires to do so or to realize what it perceives to be their fair value in the event of a sale. The sale of restricted and illiquid securities often requires more time and results in higher brokerage charges or dealer discounts and other selling expenses than does the sale of securities eligible for trading on national securities exchanges or in the over-the-counter markets. The Company may not be able to readily dispose of such illiquid investments and, in some cases, may be contractually prohibited from disposing of such investments for a specified period of time. In addition, in certain circumstances, governmental or regulatory approvals may be required for the Company to dispose of an investment. Restricted securities may sell at a price lower than similar securities that are not subject to restrictions on resale.

10.6. *Leverage and Financing Risk*

Although not currently leveraged, the capital of the Company may in future be leveraged so as to achieve a higher rate of return. Accordingly, the Company may pledge its securities in order to borrow additional funds for investment purposes. While leverage presents opportunities for increasing the total return of the Company, it has the effect of potentially increasing losses as well. Accordingly, any event which adversely affects the value of an investment by the Company would be magnified to the extent the Company is leveraged. The cumulative effect of the use of leverage by the Company in a market that moves adversely to the Company's investments could result in a substantial loss which would be greater than if the Company were not leveraged.

10.7. *Global Political, Economic and Financial Risk*

As the Company will invest internationally, it may be exposed to adverse political, economic and financial events both locally and globally. The value of the investments could decline as a result of economic developments such as poor or negative economic growth, poor balance of payments data, high interest rates or rising inflation. A similar situation would prevail due to political instability in certain jurisdictions.

Mining operations in South Africa are subject to legislation regulating mineral rights. Any future investments in this industry will be subject to these requirements. This includes Broad-Based Black Economic Empowerment ("**BBBEE**") legislation designed to effect the entry and participation of Historic Disadvantaged South Africans ("**HDSAs**") into the mining industry and increase their participation in the South African economy. Additionally, with the proposed Mining Charter III in the process of being implemented, this may have an adverse impact on the mining industry of South Africa.

Specific to investing in South Africa, the already negative sentiment around the political instability of South Africa, deteriorated after Mining Charter III was gazetted by the Mineral Resources Minister on 15 June 2017, which will force current shareholders of mining entities to dilute their current interests. Subsequently on 19 July 2017, the Minister gazetted a notice that he proposed restricting the granting of new mining and prospecting rights and the transfer of mineral rights between companies. The deteriorating sentiment contributes to poor economic performance.

Organised labour dynamics in the mining sector, particularly in South Africa, are volatile and uncertain and as such, may in the future have, a material adverse impact on any operations, including production and financial performance, in South Africa.

Prolonged labour strikes in South Africa, may adversely impact the supply to BBA Resources and adversely affect the Group's profitability.

Any adjustment to the ownership structure of future investments in the mining industry of South Africa, in order to meet BBBEE requirements could have a material adverse effect on the value of such investments.

The Company will take reasonable steps to mitigate against these risks, including diversified investments, not limited to one jurisdiction.

10.8. *Regulatory change*

Legal or regulatory change may affect the Company and impose potential limits on the Company's flexibility in implementing its strategy. Any change to landlord and tenant, planning, trust, tax (including stamp duty and stamp duty land tax) or other laws and regulations relating to the areas in which the Company operates may have an adverse effect on the Company.

The levels of, and relief from, taxation may change, adversely affecting the financial prospects of the Company and/or the returns to shareholders.

The Company is subject to the tax authorities within the jurisdictions it operates and taxes and tax dispensations accorded to the Company may change over time.

The nature and amount of tax payable is dependent on the availability of relief under tax treaties in a number of jurisdictions and is subject to changes to the tax laws or practice in any other tax jurisdiction affecting the Company. Any change in the terms of tax treaties or any changes in tax law, interpretation or practice could increase the amount of tax payable by the Company and could affect the value of the investments held by the Company or affect its ability to achieve its investment objective and alter the post-tax returns to shareholders. The level of dividends the Company is able to pay would also be likely to be adversely affected.

10.9. *Estimated Mineral Resources and Reserves*

Applicable to any future investments in the mining sector. Mineral reserves are estimates based on a number of assumptions, which, if changed, may require lowering the estimated mineral reserves. Assumptions include amongst other things: costs, expenditures, commodity prices, exchange rates, metallurgical and mining recovery assumptions, which may prove inaccurate due to a number of factors, many of which will be beyond the Company's control. In the event that these assumptions (that underlie the Company's mineral reserves) are adversely revised, it may result in a revision of mineral reserves. In addition, mineral reserve estimates depend to some extent on statistical inferences drawn from limited drillings sample, which may prove to be unreliable or unrepresentative. Any downward revision in mineral reserves may have a material adverse effect on the investment, including its business, operating results, life of operations and financial condition.

10.10. *Market Risk*

Currently, the Group's revenue is only generated through the sale of Chrome. Chrome prices have historically been volatile and are affected by numerous external factors which the Group cannot control. Such factors include the general supply and demand of chrome, speculative trading activity and global economic drivers. A sustained period of significant Chrome price volatility may have an adverse effect on the Group's future profitability and its ability to undertake new investment opportunities.

10.11. *Failure to raise capital and meet the financial forecasts*

The financial forecasts set out in the Business Plan are conservative and have not taken into consideration any further acquisitions. In the unlikely event whereby insufficient funds are raised, the Company would either envisage using complementary bank lending to still achieve its investments or would eventually decline such opportunities.

## 11. Personnel

11.1. *Board of Directors*

The board of Zentosa will be responsible for the management of the Company and strategic decision making and implementation. **Annexure A** contains the curriculum vitae of the Company's board members. Attention is drawn to the significant experience and expertise of the board members.

The majority of the directors are resident in Singapore and the board has ensured that each member has the requisite advisory and management experience and expertise. The Company will at all times seek to uphold corporate governance standards commensurate with international best practice.

It is further anticipated that the Board will set up an Investment Committee that will comprise of directors and other members as may be appointed by the board. The Investment Committee's primary role will be to assess identified investment opportunities and to make recommendations to the Board.

It is expected that the investments of the Company will integrate highly qualified and experienced human resources into the group. The Company will seek to capitalise on the know-how and contacts of the new personnel to identify further investment opportunities.

11.2. *Management and Operational Teams of Investee Companies*

A key component to the ultimate success of Zentosa is the current management and operations team managing the BBA Resources investment, comprising Jun Lu, Han Jie, Wang Hui and EnBao Liu.

The team jointly has over 20 years of extensive trading experience. Collectively, management's experience provides the company with deep rooted expertise in:

- Marketing and trading in Singapore and China;
- Longstanding relationships with reputable customers in China; and
- Logistical management.

Their careers have provided them with first-hand experience of managing businesses through wide ranging economic cycles and across varying geographic locations including Zentosa's targeted geographical customers.

## 12. Key Service Providers

### 12.1. *Company Secretary*

It is anticipated that the board will leverage off existing operations within its duly appointed Company Secretary in Singapore, Intercontinental Trust (Singapore) Pte Ltd ("**ITL**") and its associated companies.

ITL provides a comprehensive range of financial and fiduciary services to international businesses. All administrative business functions of the Company shall be carried out by ITL in Singapore, and they will also act as the Company Secretary to Zentosa.

### 12.2. *SEM authorised representative & sponsor and Mauritian Transaction Advisor*

The Company has appointed Perigeum Capital Ltd ("**Perigeum Capital**") as its SEM authorised representative and sponsor. Perigeum Capital holds an Investment Advisor (Corporate Finance Advisory) licence issued by the Mauritius Financial Services Commission.

Perigeum Capital shall handle the DEM listing application process and has been engaged to advise the Company and its directors on compliance with ongoing DEM listing obligations.

### 12.3. *Other Third-Party Service Providers*

In addition, it is envisaged that the Company will outsource a number of functions to specialist third-party service providers. Such service providers may include without limitation: investor relations managers; company administrators; legal counsel; accountants and auditors; and bankers.

In this regard, the board of Zentosa will engage only with reputable, internationally-recognised institutions with established track records for the provision of such services.

## 13. SWOT Analysis

An analysis of the Company's strengths, weaknesses, opportunities and threats is detailed below:

**Strengths:**

- The Company will have a strong and experienced Board of Directors in place, with significant experience in the Mauritian corporate environment, having completed numerous SEM listings;
- Zentosa is differentiated through its focus on specific sectors and geographic locations;

- The management and operational team of BBA Resources is an experienced team with a proven track record in the chrome trading industry; and
- In the Chrome industry, the Group has a competitive edge through its trading platform into Asia, team of experienced traders and longstanding relationships with reputable customers.

**Weaknesses:**

- The different legal and tax frameworks in the targeted geographical jurisdictions will require specialist technical expertise. Whilst the Company's management does have the necessary experience and skills to deal with these challenges, specialists are also readily available and accessible to management;
- Zentosa, being a recently incorporated entity, does not have an institutional track record of making successful acquisitions. Management are however sufficiently experienced and have a solid track record of making and integrating acquisitions; and
- Communication as a result of the different languages in the targeted geographical jurisdictions.

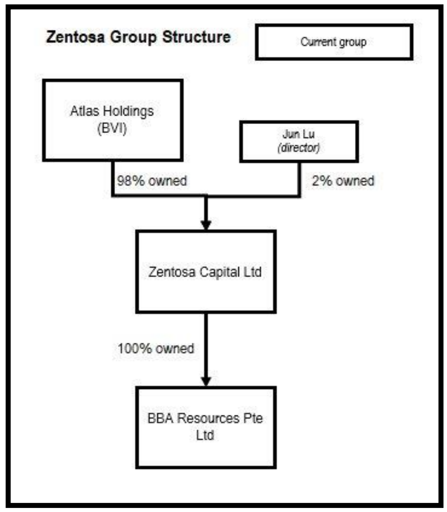
**Opportunities:**

- There are various opportunities to acquire discouraged companies as a result of the instability within the South African political and mining environment;
- Furthermore, the South African political environment is a significant barrier to entry, limiting the threats of new competitors entering the market in which Zentosa will be operating. This provides Zentosa with a competitive edge, after the completion of the Smokey Hills Group acquisition;
- The existing trading platform secures a good pipeline for investment opportunities as a combination of engagement with chrome producers (supplying BBA Resources) and customers in Asia, looking to invest to guarantee sufficient supply for their needs; and
- Combining BBA Resources' trading platform with mining assets without a similar platform, will assist with the realisation of value inherent in these sometimes distressed assets.

**Threats:**

- Economic slowdown and deflation in the targeted geographical jurisdictions;
- The volatility of the ZAR against the USD, on the back of potential South African acquisitions; and
- Geo-Political instability in South Africa and the mining industry, specifically referring to proposed changes in the mining charter.

### 14. Structure Diagram




*The beneficial owner of Atlas Holdings Enterprises Corp (BVI), is Hong Yu, a resident of the Republic of China.*

### 15. Financial Data

The Company will be wholly financed by its shareholders and, in due course, third party funding, and will generate sufficient cash-flow to meet expenses as they arise.

The financial data is a representation of the expected statement of financial position, statement of comprehensive income and statement of cash flows of the Company for the next four financial years ending 28 February 2018, 28 February 2019, 28 February 2020 and 28 February 2021.

The projected forecasts are reasonable given the assumptions. The key assumptions in respect of the financial forecasts are also set out after the forecast financial information.

**Zentosa Capital Limited - Group**
(Registration number 201721225K)
Management Accounts to 28 February 2021 (FORECAST)

## Statement of Comprehensive Income

| | FY18 (forecast) 28 Feb 18 (8 months) US$ | FY19 (forecast) 28 Feb 19 (12 months) US$ | FY20 (forecast) 28 Feb 20 (12 months) US$ | FY21 (forecast) 28 Feb 21 (12 months) US$ |
|---|---|---|---|---|
| Revenue | 36,941,600 | 88,156,250 | 90,675,000 | 90,675,000 |
| Cost of sales | (28,551,731) | (68,134,938) | (70,081,650) | (70,081,650) |
| **Gross profit** | **8,389,868** | **20,021,313** | **20,593,350** | **20,593,350** |
| Other income | - | - | 200,000 | 340,000 |
| Operating expenses and depreciation | (1,164,455) | (2,286,899) | (2,286,040) | (2,286,500) |
| **Profit before tax** | **7,225,413** | **17,734,413** | **18,507,310** | **18,646,850** |
| Taxation | (722,541) | (1,773,441) | (1,850,731) | (1,864,685) |
| **Net Profit for the period** | **6,502,872** | **15,960,972** | **16,656,579** | **16,782,165** |

**Zentosa Capital Limited - Group**
(Registration number 201721225K)
Management Accounts to 28 February 2021 (FORECAST)



## Statement of Financial Position

| | FY18 (forecast) | FY19 (forecast) | FY20 (forecast) | FY21 (forecast) |
|---|---|---|---|---|
| | 28 Feb 18 (8 months) US$ | 28 Feb 19 (12 months) US$ | 28 Feb 20 (12 months) US$ | 28 Feb 21 (12 months) US$ |
| **Assets** | | | | |
| **Non-Current Assets** | **13,439** | **10,006,540** | **17,230,500** | **24,565,500** |
| Property, plant and equipment | 13,439 | 6,540 | 30,500 | 25,500 |
| Deposits | - | 10,000,000 | 17,200,000 | 24,540,000 |
| **Current Assets** | **22,743,241** | **32,141,601** | **41,765,318** | **51,226,437** |
| Trade and other receivables | 299,945 | 715,779 | 736,230 | 736,230 |
| Related party receivables | 9,684,658 | 9,684,658 | 9,684,658 | 9,684,658 |
| Cash and cash equivalents | 12,758,638 | 21,741,163 | 31,344,430 | 40,805,549 |
| **Total Assets** | **22,756,680** | **42,148,141** | **58,995,818** | **75,791,937** |
| **Equity and Liabilities** | | | | |
| **Equity** | | | | |
| Share capital | 13,794,261 | 13,794,261 | 13,794,261 | 13,794,261 |
| Retained earnings | - | 6,502,872 | 22,463,844 | 39,120,423 |
| Net profit for period | 6,502,872 | 15,960,972 | 16,656,579 | 16,782,165 |
| | **20,297,133** | **36,258,105** | **52,914,684** | **69,696,849** |
| **Liabilities** | | | | |
| **Current Liabilities** | **2,459,547** | **5,890,035** | **6,081,134** | **6,095,088** |
| Trade and other payables | 1,737,006 | 4,116,594 | 4,230,403 | 4,230,403 |
| Tax Payable | 722,541 | 1,773,441 | 1,850,731 | 1,864,685 |
| **Total Liabilities** | **2,459,547** | **5,890,035** | **6,081,134** | **6,095,088** |
| **Total Equity and Liabilities** | **22,756,680** | **42,148,140** | **58,995,818** | **75,791,937** |

**Zentosa Capital Limited - Group**
(Registration number 201721225K)
Management Accounts to 28 February 2021 (FORECAST)

## Statement of Cash Flows

| | FY18 (forecast) 28 Feb 18 (8 months) US$ | FY19 (forecast) 28 Feb 19 (12 months) US$ | FY20 (forecast) 28 Feb 20 (12 months) US$ | FY21 (forecast) 28 Feb 21 (12 months) US$ |
|---|---|---|---|---|
| **Cash flow from operating activities** | | | | |
| Cash generated from operations | | | | |
| - operating profit before tax, depreciation and working capital movements | 7,229,868 | 17,741,313 | 18,313,350 | 18,313,350 |
| - movement in working capital | (1,763,623) | 1,963,754 | 93,358 | - |
| Tax paid | (1,491,300) | (722,541) | (1,773,441) | (1,850,731) |
| **Cash flow from operating activities** | **3,974,944** | **18,982,525** | **16,633,266** | **16,462,619** |
| **Cash flow from investing activities** | | | | |
| Additions to PPE | (1,500) | - | (30,000) | (1,500) |
| Advances to related parties | - | - | - | - |
| Investment made | - | (10,000,000) | (7,000,000) | (7,000,000) |
| **Cash flow (used in)/ from investing activities** | **(1,500)** | **(10,000,000)** | **(7,030,000)** | **(7,001,500)** |
| Net increase in cash and cash equivalents | 3,973,444 | 8,982,525 | 9,603,266 | 9,461,119 |
| Cash and cash equivelents at beginning of the year | 8,785,193 | 12,758,638 | 21,741,163 | 31,344,430 |
| **Cash and cash equivelents at end of the year** | **12,758,638** | **21,741,163** | **31,344,430** | **40,805,549** |

**Key Assumptions**

The forecast assumptions have been provided in real terms (as opposed to nominal terms), due to the volatility of the industry in which the group is currently invested. The Smokey Hills Group acquisition has not been taken into account in these forecasts, due to the commercial and legislative uncertainties in relation to the conditions precedent (refer to **Annexure B**). As Zentosa has not definitively entered into any other agreements, no other acquisitions have been included in these forecasts.

Set out are the key assumptions:

<u>Balance sheet assumptions:</u>

- Income will mainly be received in cash, trade debtors is recognised in the same proportion to revenue as the actual results as of 30 June 2017.
- The cash balance will be managed at a balance of approximately USD 8 million, any excess cash will be invested in cash deposits. It is assumed that these deposits will carry a return of 2%.
- Once property, plant and equipment have been fully depreciated, new additions are made to ensure property, plant and equipment remain in a workable order.
- Any investments exceeding 50% is consolidated. The following key financial statement line items of the subsidiary have been consolidated:
    - Property, plant and equipment
    - Cash deposits
    - Inventories
    - Trade and other receivables
    - Cash and cash equivalents
    - Trade and other payables
    - Tax payable
- BBA Resources is 100% owned by Zentosa.
- The acquisition of BBA Resources, was effected by the BBA Resources shareholders who also had control over Zentosa. The identifiable assets and liabilities were therefore accounted for at carrying value and not revalued at acquisition date. Consequently, BBA Resources currently represent the entire group, until further investments are effected and the forecast has been prepared to show the position of the Company as if it were in existence since the original acquisition of BBA Resources by Zentosa's shareholders.

<u>Income statement assumptions:</u>

- Chrome sales is recognised at USD155 per ton.
- Tonnes sold is based on the forecasted tonnes deliverable from BBA Resources' procurement agent
- Cost of sales is calculated based on the following pricing:

| | **USD/ton** |
|---|---:|
| - Product | 59.61 |
| - Freight | 20.00 |
| - Transport | 27.00 |

| | |
|---|---|
| - FOB | 11.49 |
| - Sampling | 2.31 |

- Other cost represent all expenditure excluding cost of sales and based on current actual expenditure levels.
- Other income represent a 2% yield on cash deposits.
- Tax rate used for Singapore is 10%, applicable to BBA Resources.
- Breakdown for operating expenses:

| **Operating expenses** | **USD ‘000** |
|---|---|
| Consulting fees | 400 |
| Salaries (BBA and Zentosa) | 400 |
| Audit | 200 |
| Listing fees | 200 |
| Travel | 100 |
| Legal fees | 100 |
| Other (general) | 100 |
| Directors fees | |
| - BBA | 200 |
| - Zentosa | 200 |
| | 1,900 |
| Unforseen | 386 |
| Total | 2,286 |

**Annexure A – Curricula vitae of Board Members**

| Director Name | Role | Qualifications | Profile |
|---|---|---|---|
| Joe Lu | Executive director | MBA | Mr Lu completed his MBA at Macau University of Science and Technology in China. He has over 4 years of experience in the Chrome Trading industry.<br><br>In addition to his experience in logistics and procurement, his fluency between English and Mandarin has made him a key component to the success of the trading business into China. |
| Richard Charrington | Non-executive director | GCE O Level from Oxford; A UK Security & Futures (SFA) accredited corporate finance specialist with a particular focus on structured products in trade, project and shipping finance. | Richard has extensive commodity trading and financing experience in Europe and emerging markets, having worked since 1980 at C. Czarnikow, Mindo Resources and Creditanstalt Bankverien Trade finance.<br><br>In 1992, Richard joined Ceres Capital International, which specialises in South African debt/equity conversions and corporate restructurings. Ceres has successfully restructured US$ 1.5bn of RSA moratorium debt. In 1997, Richard established and ran an Emerging Market Sovereign Debt Fund for Rand Merchant Bank of South Africa. The fund grew substantially up until 2001 when it was securitised in a US$ 350mn CDO by Deutsche Bank.<br><br>Richard then established and ran a Ceres Capital International's joint venture with Mettle in 1998. He managed the acquisition of Greenwich Securities through the London office. In 2005 he established and ran a joint venture between Ceres Capital International and Mettle called Serec Investments Pty Ltd. Since 2005 Serec successfully teamed up with Morgan Stanley and acted as principal in some ZAR<br>5bn of acquisitions and Black Empowerment transactions. During 2005 |

| | | | |
|---|---|---|---|
| | | | Richard also established and runs a joint Venture with the Bravura group of companies.<br><br>He currently sits on the Mauritian boards of several JSE listed companies and four Funds with Assets under management of some US$ 800m and advises on their international operations and expansion.<br><br>In 2014, Richard advised, structured and executed the $20m takeover of Xceed Resources, an ASX listed Company, by Keaton Mining (a company listed on the JSE).<br><br>In 2015 he was granted a Management company licence by the FSC of Mauritius to set up Griffon solutions. |
| Kalaidevi Prahaladan | Non-executive director | Diploma in Business Accounting | Ms Devi completed her Diploma in Business Accounting at Nanayang Polytechnic in Singapore. She has over 7 years of experience in the Corporate Secretarial industry.<br><br>In addition to his experience in corporate secretarial, her fluency between English and Tamil & Malay has made her able to relate to the clients according to the rules & regulations in Singapore. |

**Annexure B**

**Investment opportunities currently under consideration – Smokey Hills Group**

**Background**

On 14 July 2017, BBA Resources entered into a definitive agreement with African Thunder Platinum Limited ("ATP") for acquisition of the Smokey Hills Group (namely Smokey Hills Platinum Mining (Mauritius) and all of its subsidiaries). On 27 July 2017, after the incorporation of Zentosa Capital Limited ("Zentosa"), BBA Resources ceded all of its rights and delegated all of its obligations under the agreement with ATP to Zentosa. The Smokey Hills Group consists of a number of holding structures and one operation, which is currently under care and maintenance, held by Phokathaba Platinum (Pty) Ltd ("Phokathaba"). Phokathaba owns a PGM and related commodities and Chrome mining right. In addition to the mining right, Phokathaba also owns a PGM processing plant.

Per the definitive agreement, upon meeting all the conditions precedent, Zentosa will take ownership of the Smokey Hills Group in exchange for a shareholding in Zentosa equal to USD24 million, subject to the applicable put and call options (see below for more detail).

**Conditions precedent**

The provisions of the definitive agreement are subject to the fulfilment or waiver of the following conditions precedent on or before 30 months from 1 July 2017 all conditions of which are the obtaining of third party regulatory approvals which are outside of the control of the Parties. This date shall be automatically extended for further periods of 12 months commencing on such date, unless any Party gives notice (prior to the expiry of the then current date) that the date should not be extended further, in which case the date would be 31 December of that year (or such later date as the Parties may agree in writing):

- Ministerial consent is obtained for the change in ownership over the Phokathaba mining right, in terms of the Mineral and Petroleum Resources Development Act, 28 of 2002 ("MPRDA")
- All mandatory or appropriate merger control filings and notifications in respect of the transactions having been made to the competent Competition Authority in each relevant jurisdiction and all approvals, consents or clearances necessary or appropriate for completion of the transactions having been obtained from such Competition Authority (whether by lapse of time or express confirmation of the relevant Competition Authority).
- The renewal application in respect of the Phokathaba mining right is lodged, in accordance with section 24(1) and 24(2) of the MPRDA and granted by the Minister of Mineral Resources in accordance with section 24(3) of the MPRDA.

Additionally, all mandatory or appropriate merger control filings and notifications in respect of the transactions, shall be made by ATP, to the competent Competition Authority, within 20 Business days of the Holdco incorporation date.

Given that the acquisition of the Smokey Hills Group is subject to meeting numerous conditions precedent which are outside of the control of the Company and of the various Parties involved and that these conditions precedent are not likely to be met prior to the financial year ending 28 February

2021, the financial forecasts included in Section 15 have not taken into account the proposed investment into the Smokey Hills Group.

**Put option**

In terms of the definitive agreement, Zentosa granted to ATP the right (but not the obligation), exercisable in its absolute discretion, by written notice to Holdco to be received at any time during the Option Period, to require Holdco to purchase from ATP, in return for the payment to it of US$22,000,000 (Twenty Two Million United States Dollars) ("Put Option Price"), the Subscription Shares (the "Option Shares") (the "Put Option").

Upon the Put Option having been validly exercised ("Put Option Exercise Date"), ATP shall sell and Holdco shall purchase the Option Shares free of any Encumbrances.

**Call option**

In terms of the definitive agreement, ATP granted to Holdco a right (but not the obligation), exercisable in its absolute discretion, by notice to ATP to be received at any time during the Option Period to purchase from ATP, in return for the payment to it of US$26,000,000 (Twenty Six Million United States Dollars), the Subscription Shares (the "Call Option").

Upon the Call Option having been validity exercised ("Call Option Exercise Date"), ATP shall sell and Holdco shall purchase the Option Shares free of any Encumbrances.

The Call Option Price shall be paid by Holdco to ATP within 90 Business Days of the Call Option having been exercised.

**“Option Period**" is defined in the definitive agreement as a period of 3 (three) calendar months commencing from the earlier of:

(a) 18 (eighteen) completed calendar months from the day of the last of the following to occur:
   a. the new integrated water licence for the Phokathaba Mining Right issued to Phokathaba by the Department of Water and Sanitation of the Republic of South Africa, in terms of the National Water Act, 1998, based on the combined business (Combined Group), is obtained;
   b. the environmental authorisation issued to Phokathaba by the Department of Environmental Affairs of the Republic of South Africa and/or the Department of Mineral Resources, in terms of the National Environmental Management Act, 1998, (Combined Group) is obtained; and
   c. Holdco becoming a Party to this Agreement in accordance with Clause 3.3 above; or

(b) 6 (six) completed calendar months from the date on which the taking over certificate, or similar document indicating the final completion, is provided to Holdco in relation to the construction of the Chrome Plant;

provided that, in the event Completion has not occurred by the earlier of (a) or (b) above, the “Option Period” shall be a period of 3 (three) calendar months following Completion.

Consulting analysts in mining, metals and commodities

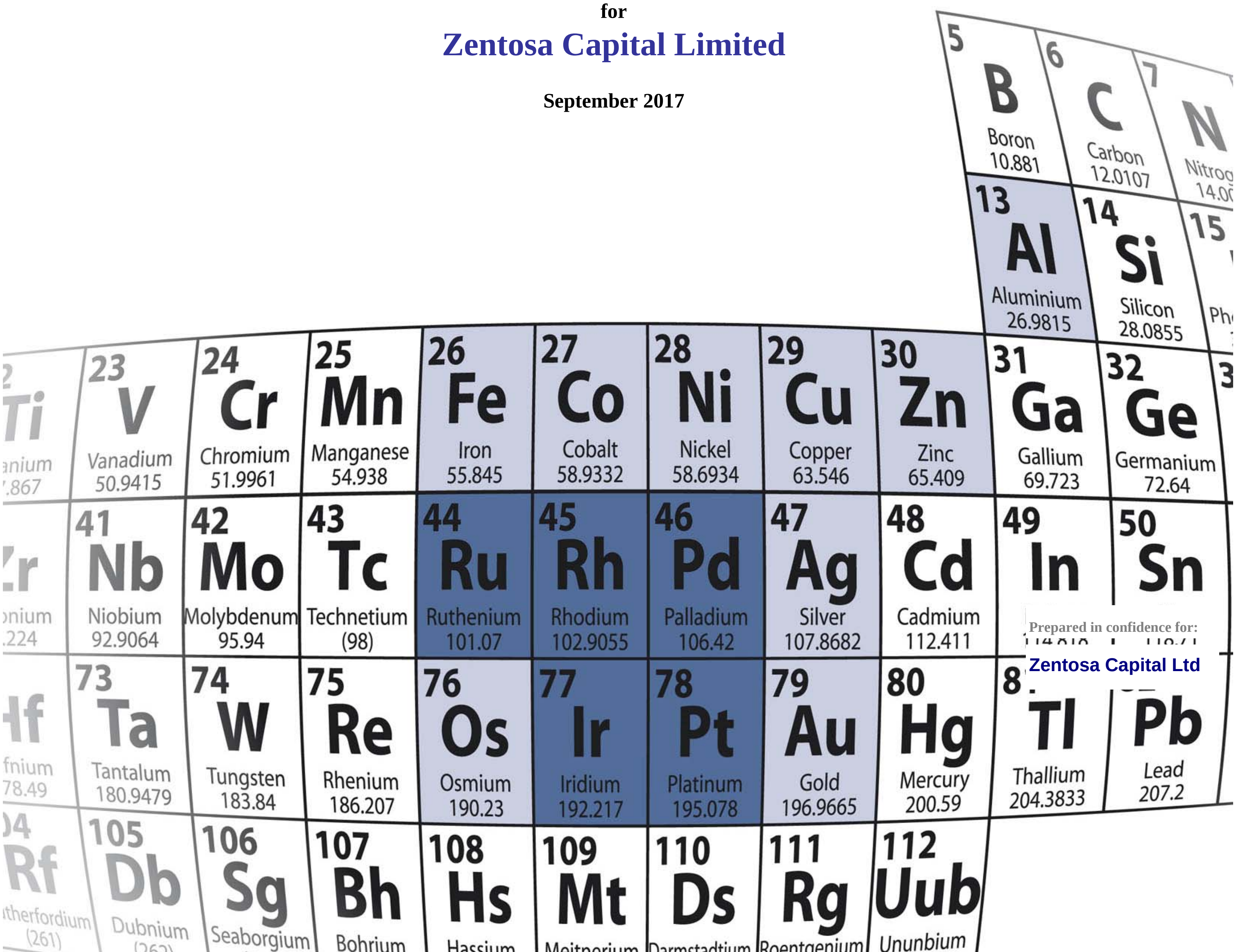
The Oxford Science Park

# Annexure C
# Chrome Market Analysis

**for**

## Zentosa Capital Limited

**September 2017**




Prepared in confidence for:
Zentosa Capital Ltd

*The aim of this report is to provide an independent appraisal of the chrome market. The report is based on published statistics, company information and grass roots data collection and analysis.*
*All statistics and their analyses are accurate as of September 2017. Metals market statistics, political bearings and economic influences are fluid and dynamic; after this date, market fundamentals, company valuations and company direction may alter. Changes in political leadership or in company shareholding and management need to be closely monitored.*



Please note: Some tabulated data may not sum owing to rounding of individual numbers.

## Authors


**Stephen Forrest,** *Principal Consultant Analyst & Engineer, Director & Chairman – SFA (Oxford)*

**Beresford Clarke,** *Managing Director, Head of Research – SFA (Oxford)*

**Samantha Trickey,** *Principal Analyst: Supply, Geology and Mining – SFA (Oxford)*

**Alex Biddle,** *Mining Analyst – SFA (Oxford)*

## Chrome industry and market overview

### Introduction

#### *Background on the chrome industry*

*Geology*

There are three major types of chrome ore deposit: stratiform, podiform and beach sands. Stratiform deposits were formed during magmatic differentiation in slow-cooling magma chambers where heavy minerals settled to form layers. Stratiform chrome ore deposits are found in layered ultramafic intrusions; examples include: the Bushveld Complex in South Africa, the Great Dyke in Zimbabwe, the Stillwater Complex in Montana, the Kemi Complex in Finland, and the Orissa Complex in India. Stratiform deposits are typically mined via underground mining techniques due to their occurrence in narrow seams (<1.5 m thick).

Chrome ore deposits also occur in podiform deposits formed as slabs of oceanic lithosphere which were thrust onto continental lithosphere, known as ophiolites. In podiform chrome ore deposits, mineralisation is disseminated through the rock rather than located in defined layers. The largest podiform chrome ore deposits are found in Kazakhstan, Russia, the Philippines, Zimbabwe, Cyprus and Greece. Open-pit mining is typically applied initially, but can progress to underground as podiform orebodies are exploited further.

Lastly, deposits can also be found in the form of beach sands, which are derived from the weathering of nearby chrome-bearing rocks. These deposits can sometimes be rich and large enough to become economically viable to mine.

*Global resources*

The US Geological Survey (USGS) currently estimates there are more than 12 billion tonnes of chrome resources (shipping-grade chrome ore) in the World in 2017; this equates to several centuries of demand at current levels of consumption. Around 90% of the World's chrome resources are found in Southern Africa (South Africa and Zimbabwe) in both stratiform (Bushveld Complex, Great Dyke) and podiform (Selukwe and Belingwe) deposits. Other significant resources of chrome (~5%) are found in podiform deposits in the Ural Mountain region of Kazakhstan.

*Mining and processing*

Chrome ore mining in South Africa (the largest producer) predominantly takes place along the LG6, MG1 and UG2 layers of the Bushveld Igneous Complex. The majority of mining at primary chrome mines takes place on the LG6 layer. However, a significant proportion of chrome ore from South Africa now originates from PGM producers mining the UG2 Reef, producing chrome as a by-product. Chrome is either removed during processing of run-of-mine ore in chrome spirals, or recovered from reprocessing tailings dams.

Friable chrome ores and chrome ore derived from UG2 processing is recovered as very fine material. Ferrochrome production requires the use of hard lumpy ores. Therefore an agglomeration, briquetting or pelletisation stage is required in order for chrome ore fines to be used for ferrochrome production.

*Key uses of chrome ore*

The majority of chrome ore (>90%) is used in the metallurgical industry in stainless steel production (ferrochrome production), alloyed steel and other nonferrous alloys. Metallurgical grade chrome ore typically contains more than 46% $Cr_2O_3$ content and has a Cr:Fe ratio of more than 2:1.

A small proportion of chrome ore (~5%) goes into refractories and foundries where it is used as a foundry sand in the production of iron and steel, cement, glass and ceramics. Refractory grade chrome ore contains 32-38% $Cr_2O_3$, requires a very low silica content (~0.7% SiO2), has a high concentration of Al2O3, and has a Cr:Fe ratio of 2:1.

The remaining portion of chrome ore (~5%) is used in the chemical industry in sodium dichromate and other chemicals for wood treatment, leather tanning, wood preservation, pigments and metal plating. Chemical-grade chrome ore is iron-rich with a Cr:Fe ratio of less than 2:1 and typically contains 40-46% $Cr_2O_3$.

*Ferrochrome*

Around 50% of the chromium metal used in steelmaking is derived from scrap. The remaining chromium is supplied in the form of ferrochrome. In the conventional production of stainless steel, chromium from ore or scrap is introduced to produce Cr-Fe-C-Si alloys (principally high carbon ferrochrome or ‘charge chrome’ - a lower C alternative to HCFeCr). Carbon and silicon levels are important, especially during refining, in order to obtain the desired composition of stainless steel.

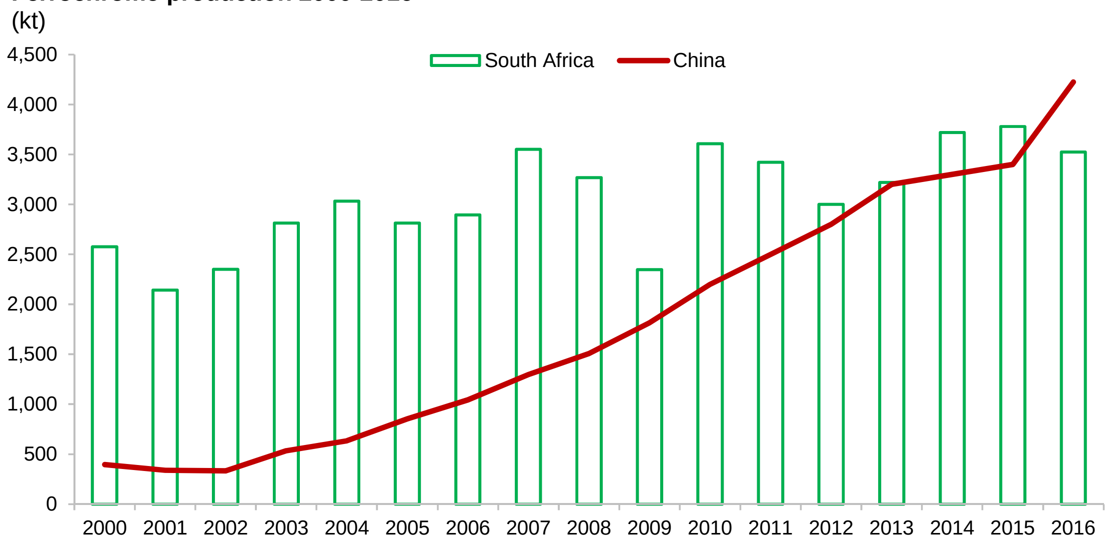
Ferrochrome is classified by the ratio of chrome to carbon it contains. Charge chrome has a lower Cr:C ratio than high carbon ferrochrome (HCFeCr). Charge chrome is produced from chrome ores with a low carbon content (Southern Africa) and is the type most commonly used in stainless steel production. The use of charge chrome over HCFeCr in stainless steel production has increased in recent years owing to the reduced availability of high Cr:Fe ores and the lower cost of low Cr:Fe ratio ores from South Africa. This has made charge chrome production more attractive to FeCr producers and forced the steel industry to make the change to the widespread use of charge chrome. HCFeCr is produced from high-grade ore (Kazakhstan) and is now predominantly used in specialist applications where a high Cr:Fe ratio is specifically required.

Low carbon ferrochrome (LCFeCr) typically contains a Cr content of at least 60% and a C content ranging from 0.03% to 0.15%. LCFeCr is used for trimming additions in stainless steel production and is added during the last stages of production to add precise amounts of Cr without affecting carbon levels. Another type of LCFeCr is ferrochrome silicon, which is used in electric arc furnaces to maintain silicon levels in the bath to prevent Cr oxidation.

HCFeCr and charge chrome are produced in a conventional smelting process by carbothermic reduction where chrome ores are reduced by coal and coke to form the iron and chromium alloy. This is achieved in an AC submerged-arc furnace or a DC open-arc electric furnace. Ferrochrome alloys are predominantly produced in AC submerged-arc furnaces. Electrodes are buried in the burden of lumpy materials comprised of chromite ores and/or pellets along with reductants and fluxes. However, recently Mintek has developed and patented the process of smelting chrome ores in DC electric open-arc furnaces, processing ore fines of sizes less than 1 mm without the need for agglomeration. This method could become more prevalent in the future as chrome ore from South Africa is increasingly derived from UG2 tailings which is fine material due to milling in PGM concentrators.

Historically, the largest producer of ferrochrome in the world was South Africa because of its proximity to chrome ore supply. However, recently China has overtaken South Africa to be the biggest producer in order to supply its infrastructure projects and gain additional market share and control. Southern African chrome ore traders can also achieve greater profits by selling to Chinese ferrochrome producers than selling to Southern African operations.

**Ferrochrome production 2000-2016**




*Source: SFA (Oxford), World Bureau of Metal Statistics*

Apart from the stainless steels, ferrochrome is also used in other ferrous materials such as carbon steels, full alloy steels, bearing and high-speed steels, high-strength low-alloy steels and tool steels, and in some cast irons, superalloys and welding materials. Similar to stainless steel, the addition of Cr into these materials improves hardness and resistance to corrosion, abrasion and impact.

*Stainless steel*

Around 90% of ferrochrome is consumed in stainless steel production. Significantly, chromium has no substitute in stainless steel where it improves hardness, toughness and resistance to corrosion. Consequently, growth is almost totally dependent on stainless steel melt production. To be defined as ‘stainless’ the steel must contain at least 11-12% chromium (Cr). However, Cr content in stainless steel can vary, depending on type. The most common types of stainless steel are:

- Austenitic (Series 300 steels) – Ni and Cr rich, 18% Cr.

- Ferritic (Series 400 steels) – low carbon, low Ni, 13-17% Cr.
- Martensitic (Series 400 steels) – low Ni, 12% Cr.
- Precipitation hardening (Series 600 steels) – 17% Cr, 4% Ni.
- Duplex (50% ferrite, 50% austenite).

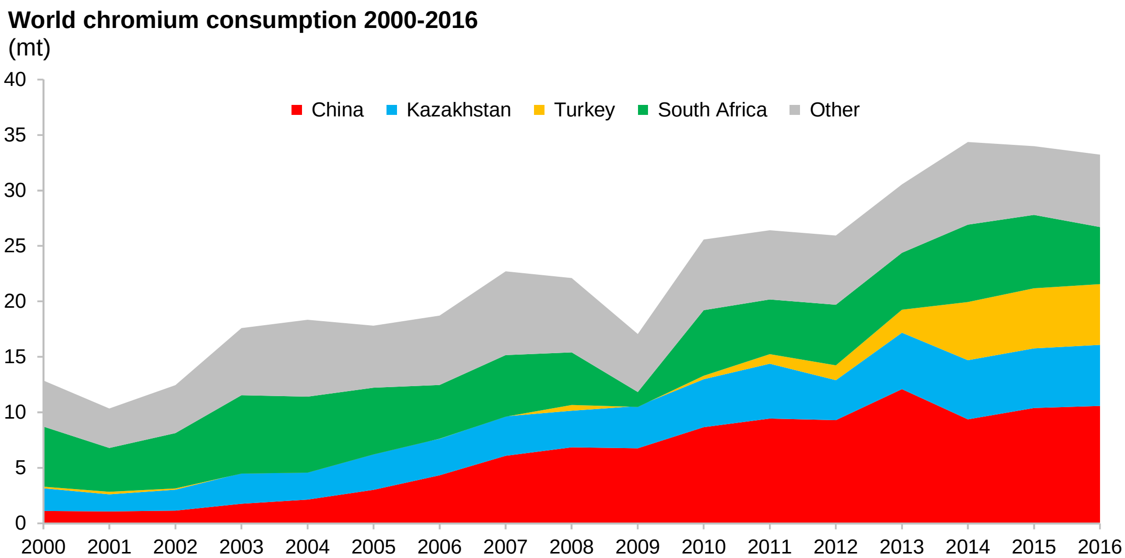
Stainless steel is made by melting carbon steel and stainless steel scrap in a furnace. High-carbon ferrochromium (charge chrome) is added to achieve the desired Cr levels. Nickel is also added along with minor amounts of Mo, Ti, Nb and low-carbon ferrochrome to achieve the desired grade of stainless steel.

## Demand

### *Demand drivers*

*Chinese stainless steel production has influenced the chrome market in recent years*

World chromium consumption has increased from 12.9 mt in 2000 to 33.2 mt in 2016 at an average annual growth rate of 9.9%. A large proportion of this growth has come from China which has invested heavily in infrastructure projects. Chromium consumption in China multiplied by more than 7.8 times from 2000-2010 and has grown by a further 22.1% from 2010-2016 to



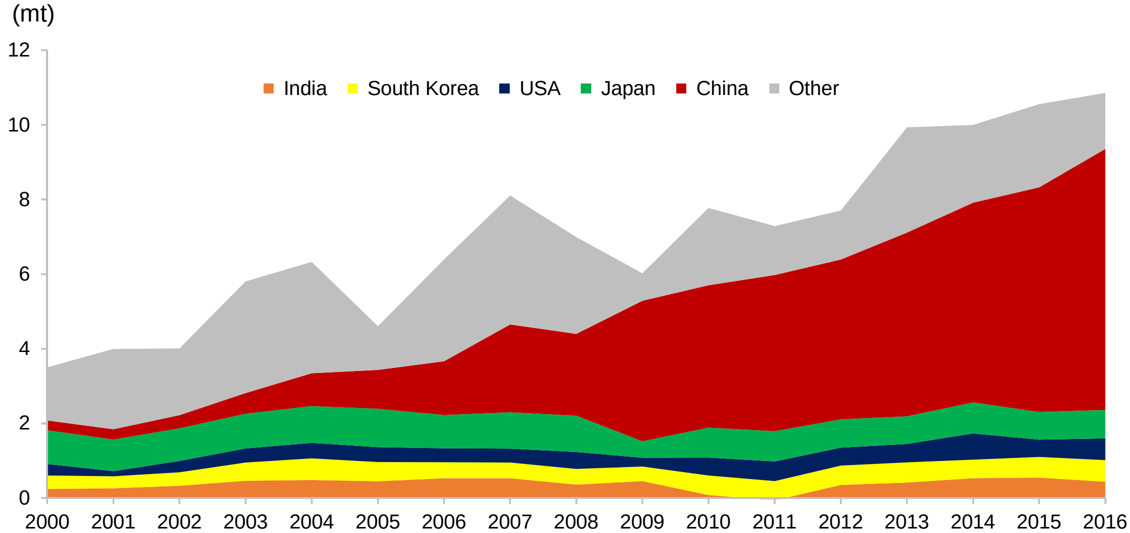

10.6 mt.

*Source: SFA (Oxford), World Bureau of Metal Statistics (WBMS). Note: WBMS defines 'consumption' as the net total of production and imports, minus exports.*

In 2000, China accounted for 8.6% of the world's chromium consumption, but by 2016 that had risen to 31.8% of the market.

The influence of Chinese stainless steel production on the market can be clearly seen in ferrochrome consumption which grew in China from 0.3 mt in 2000 to 3.8 mt in 2010, and has jumped by a further 83.4% to 7.0 mt in 2016. In all other regions of the world ferrochrome consumption grew by 22.2% from 3.2 mt in 2000 to 4.0 mt in 2010 and has subsequently remained relatively flat (3.9 mt in 2016).

**World ferrochrome consumption 2000-2016**

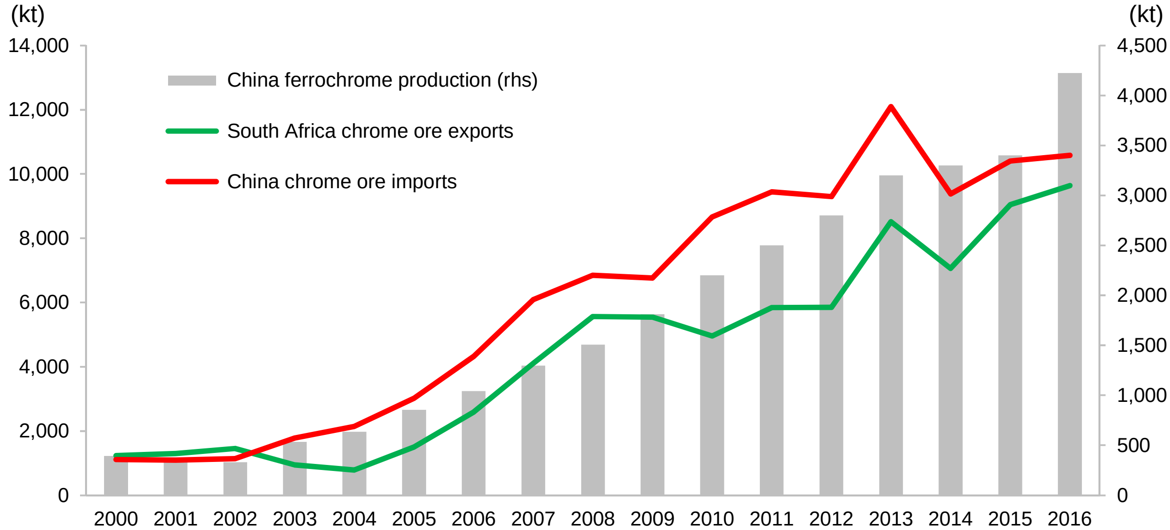



*Source: SFA (Oxford), World Bureau of Metal Statistics (WBMS). Note: WBMS defines 'consumption' as the net total of production and imports, minus exports.*

Significantly, China has little to no chromium resources. To supply the growth in stainless steel output, China has had to increase ferrochrome production. Volumes of chrome ore imports into China have consequently escalated from 1.1 mt in 2000 to 10.6 mt in 2016. Exports of chrome ore from South Africa have increased at a similar rate over the same period, rising from 1.2 mt in 2000 to 9.6 mt in 2016.

The supply of South African chrome ore to China has been aided by growth in South African chrome by-product producers. Traditional chrome mining companies in South Africa are integrated ferrochrome producers but the emergence of chrome recovery by PGM producers has enabled access to chrome ore for Chinese ferrochrome producers, for which they offer good

**Chrome ore trade flows and ferrochrome production 2000-2016**



prices.

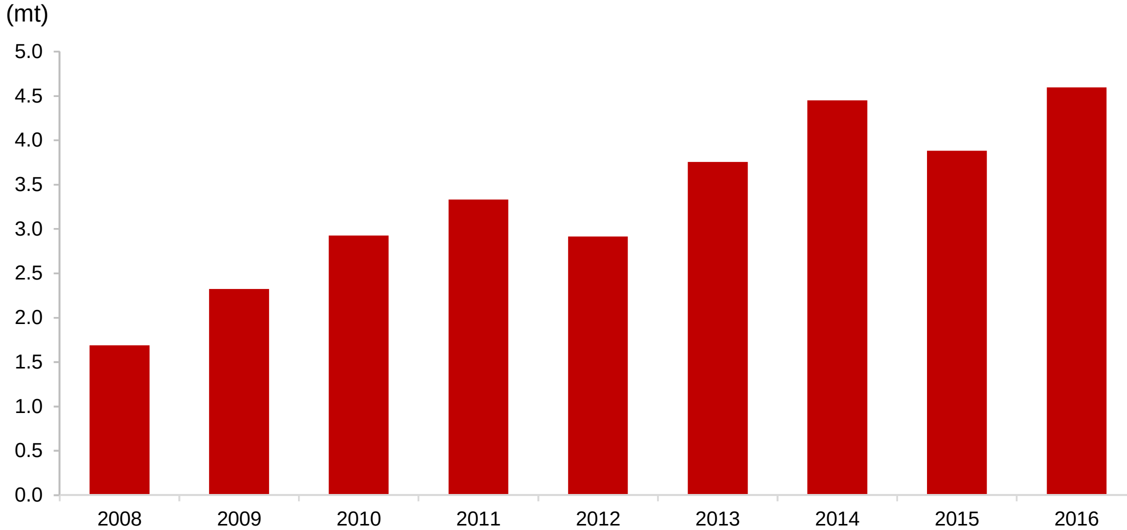
*Source: SFA (Oxford), World Bureau of Metal Statistics*

***Stainless steel market***

*Steady growth in stainless steel demand*

China's stainless steel production is the most important demand driver for the chrome market. Since 2007, Chinese crude stainless steel production has expanded at an average annual growth rate of 24.6%.

**China chromium based stainless steel production 2008-2016**




*Source: SFA (Oxford), Bloomberg*

Chinese stainless steel production was significantly higher than expected in 2016, driven by an increase in new infrastructure projects. However, beyond 2017 growth in demand for stainless steel in China is uncertain. Infrastructure projects appear to be front-loaded in China's 13th five-year plan. The Chinese economy is slowing which could affect domestic demand for stainless steel in the region.

In the medium term, global demand for stainless steel is forecast to grow at a rate of 4% in 2017 and 3.8% in 2018, according to the International Stainless Steel Forum, but this growth is much lower than in recent years – in 2016 demand rose by 9.9% y-o-y.

## Chrome ore supply

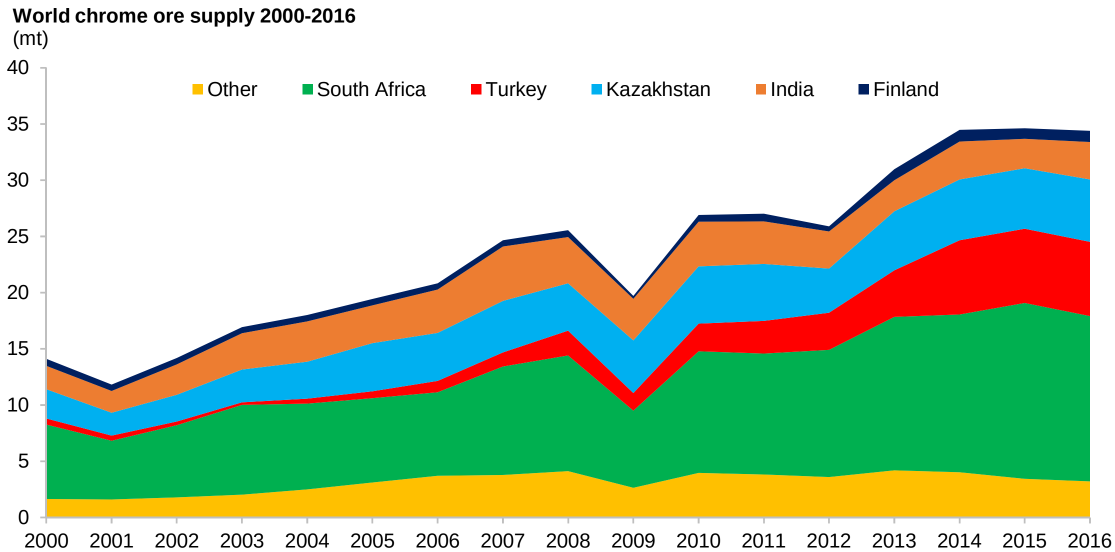
***Global primary production***

*The largest suppliers of chrome ore are South Africa, Turkey, Kazakhstan and India*

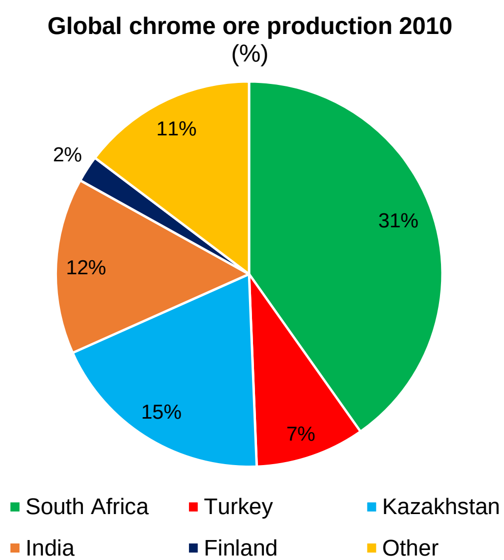
World chrome ore supply has increased at 8.9% p.a., from 14.1 mt in 2000 to 34.4 mt in 2016. South Africa is the largest producer of chrome ore in the world and equated to 42.7% of supply (14.7 mt) in 2016. Other significant producers include Turkey (19.1%), Kazakhstan (16.1%) and India (9.7%).

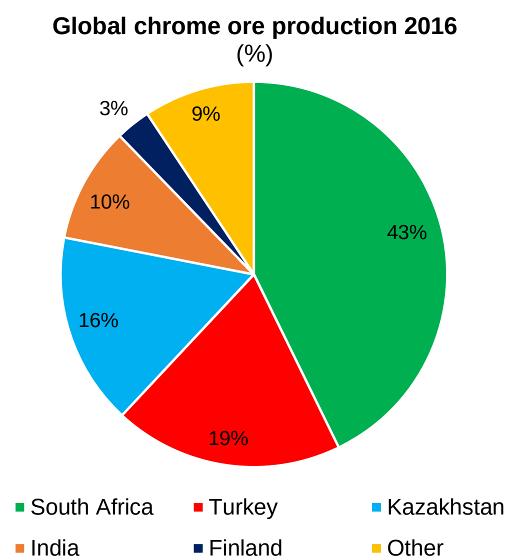
South Africa dominates the global supply of chrome ore and is also the fastest growing region. From 2010 to 2016 supply of chrome ore from South Africa has risen by 35.9%. Turkey is the second-fastest growth region for supply which has jumped from 2.5 mt in 2010 to 6.6 mt in 2016

(+168%). Output from Kazakhstan has grown marginally to 5.5 mt from 5.1 mt in 2010, but from India supply has fallen to 3.3 mt in 2016 from 4.0 mt in 2010, while Finnish supply has climbed to 1.0 mt from 0.6 mt over the same period. In all other regions supply has been dwindling, falling by an average of 3.2% p.a. from 4.0 mt in 2010 to 3.2 mt in 2016.




*Source: SFA (Oxford), World Bureau of Metal Statistics*




*Source: SFA (Oxford), World Bureau of Metal Statistics*

### *South African chrome ore UG2 by-product supply*

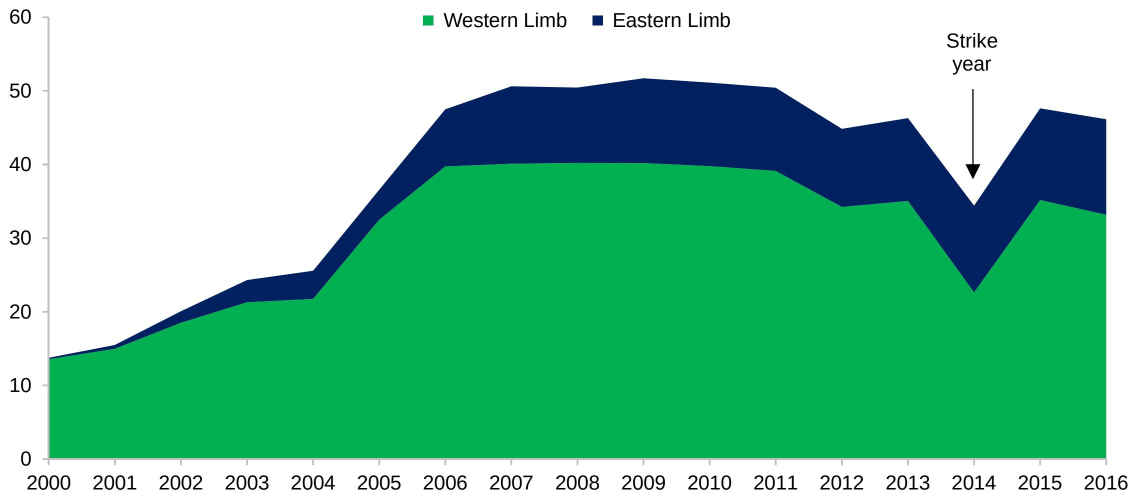
*UG2 Reef contains high quantities of chrome that are exploited by PGM producers*

The prevalence of recovering chrome within the PGM industry has increased in recent years owing to the higher volume of UG2 mining relative to Merensky mining in the Bushveld. The

UG2 orebody contains 15-18% $Cr_2O_3$ grades and requires a beneficiation stage to achieve metallurgical-grade specifications for ferrochrome production (42-44% $Cr_2O_3$).

Mining of the UG2 Reef in the platinum industry has grown from 13.8 mt in 2000 to 46.2 mt in 2016, as reserves of Merensky ore have depleted and mining has become deeper. The UG2 basket price for platinum producers is inferior compared to the traditional Merensky basket (base-metal rich); the platinum industry is therefore striving to source additional revenue, of which chrome ore is becoming increasingly popular to offset rising production costs.

**UG2 tonnes milled 2000-2016**
(mt)




*Source: SFA (Oxford), company reports*

A chrome recovery plant has relatively low capital requirements and is a simple addition to the complex PGM process, providing the producer with an attractive revenue stream. Moreover, tailings retreatment (post-chrome recovery) through a secondary concentrator circuit improves overall PGM recoveries by up to 2%, dramatically raising the investment returns of UG2 tailings retreatment.

Chrome ore from UG2 tailings can be recovered into a metallurgical-grade chrome concentrate stream using gravity separation via spirals. It has a typical size distribution of 80% less than 75 microns, and typical analysis of 42% chromite and 3% silica.

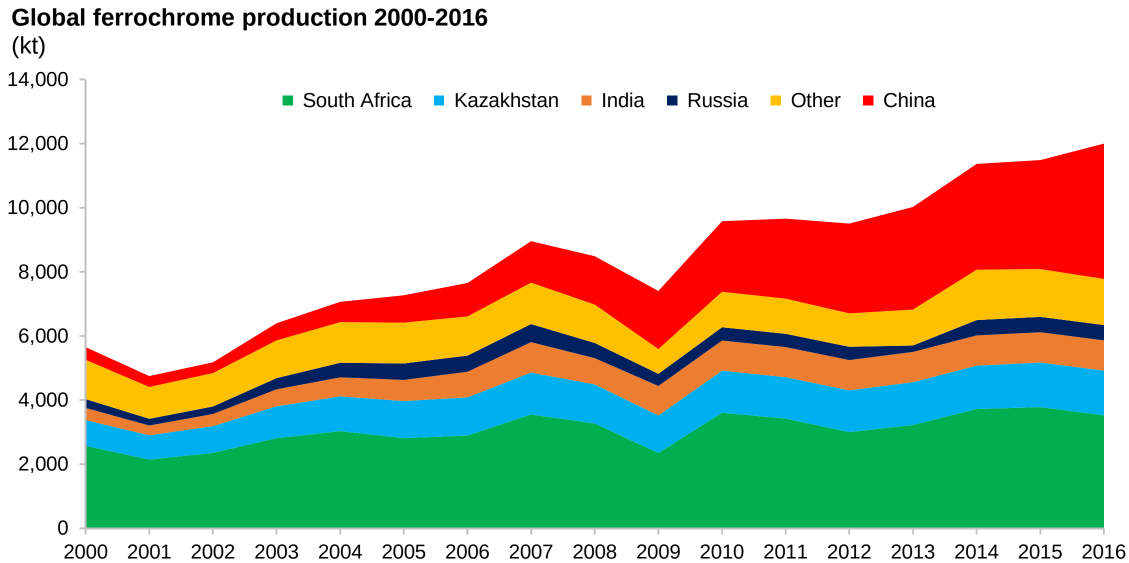
UG2 chrome concentrate is too fine to be treated in conventional open-arc ferrochrome furnaces. These furnaces are fed with lumpy chrome ore. Closing the ferrochrome furnaces and operating closed submerged-arc furnaces has enabled the ferrochrome industry to tolerate some fines. However, the fine UG2 chromite concentrate needs to be agglomerated into pellets before it can be used in large quantities in the arc furnaces.

***Global ferrochrome production***

*China has become the largest ferrochrome producer*

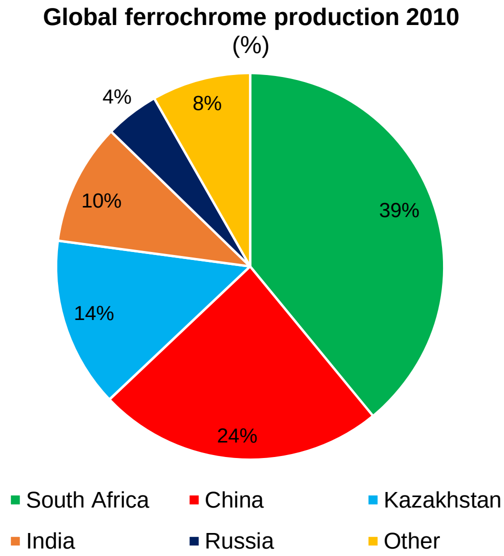
Global ferrochrome production has increased from 9.2 mt in 2010 to 11.6 mt in 2016 (+4.3% p.a.). Ferrochrome producers are typically located in regions where chrome ore is supplied (South Africa, Kazakhstan, Russia and India) – China being the exception.

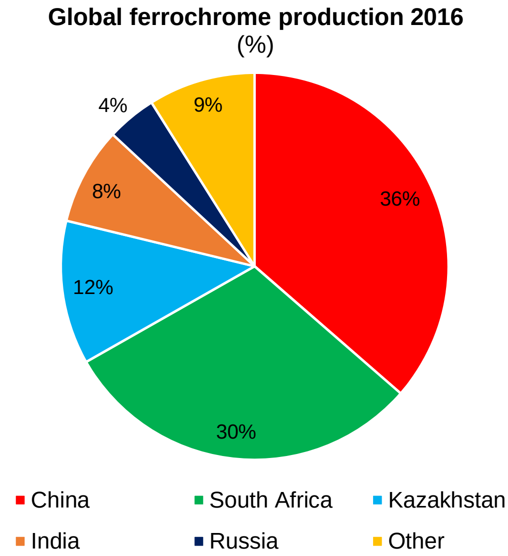
China has recently overtaken South Africa to be the largest ferrochrome producer, equating to 36% (4.2 mt) of global production in 2016. Since 2010, Chinese production of ferrochrome has almost doubled (+92%), but over the same period South African production has decreased by




2.3% to 3.5 mt.

*Source: SFA (Oxford), World Bureau of Metal Statistics*



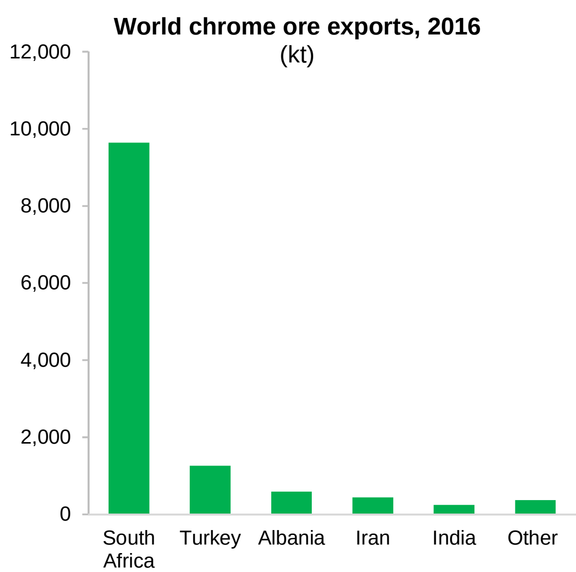



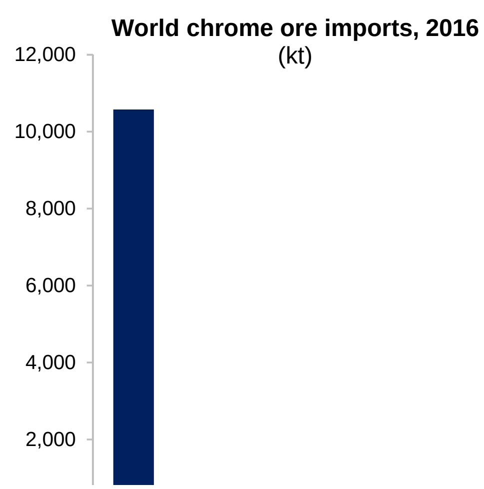

*Source: SFA (Oxford), World Bureau of Metal Statistics*

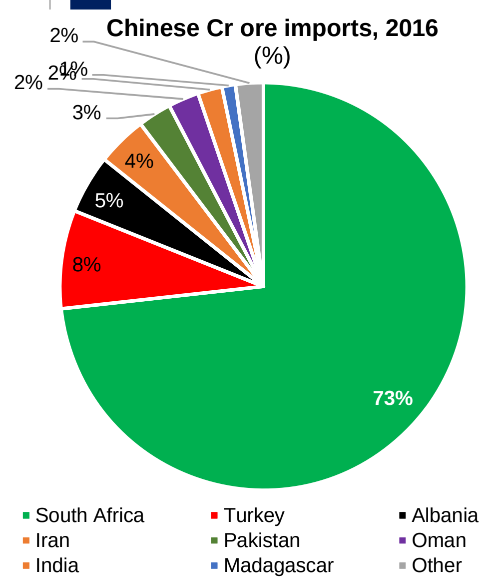
## Global trade

### ***Chrome ore trade flows***

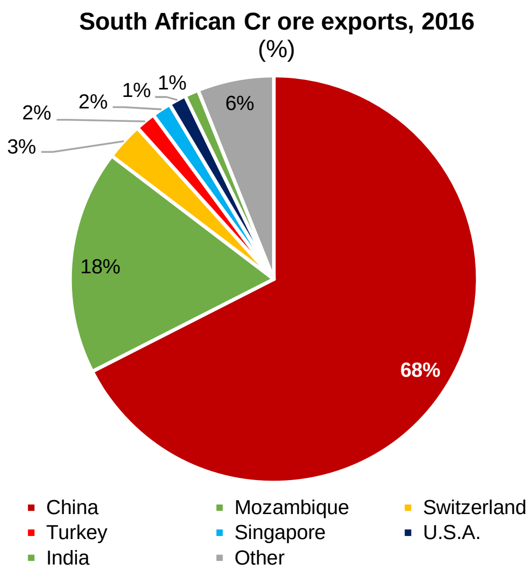
*South Africa and China dominate chrome ore trade*




*Source: SFA (Oxford), World Bureau of Metal Statistics*



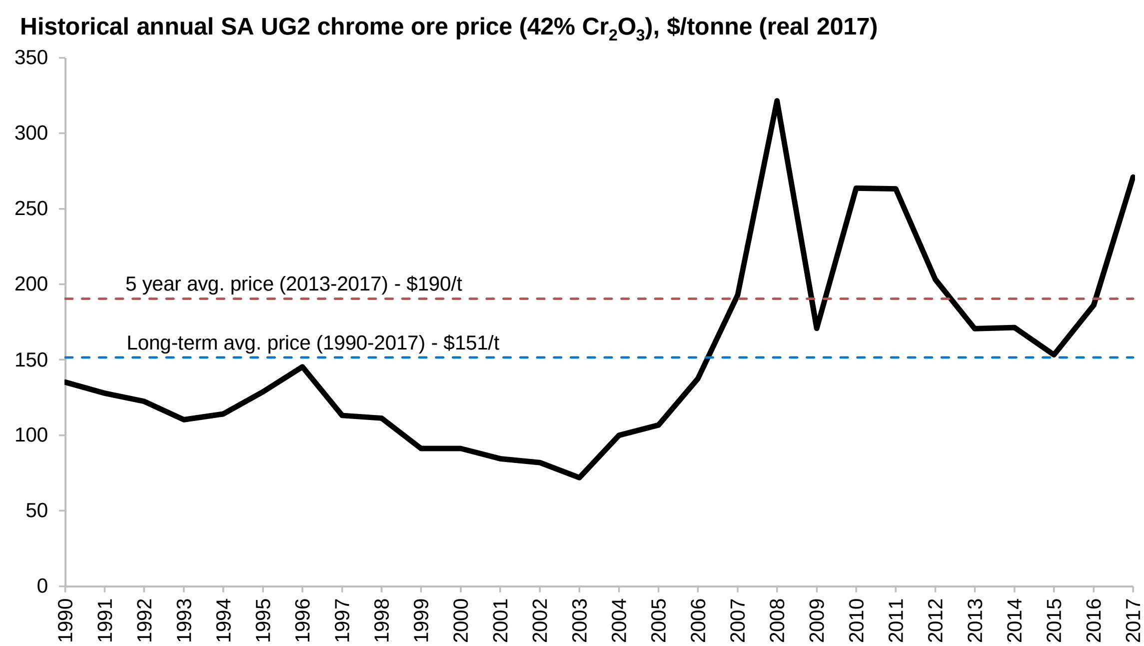

*Source: SFA (Oxford), World Bureau of Metal Statistics*

## Price trends and forecasts

### *Historical price trends*

*The chrome ore market has been prone to boom-bust price cycles*

The chrome ore market is prone to experiencing boom-bust cycles between long periods of flatlining prices. Typically, the period between peak chrome ore prices is around 6-7 years. Peak-to-trough periods average around 3-4 years, and trough-to-peak periods average around 2-3 years. Chrome ore prices are driven by stainless steel demand which can be difficult to forecast and supply tends to react slowly to the market, resulting in price spikes. This is particularly true for South Africa where chrome is increasingly produced as a by-product from PGM mining, which operates outside the demand requirements for chrome ore.




*Source: SFA (Oxford), Bloomberg.*

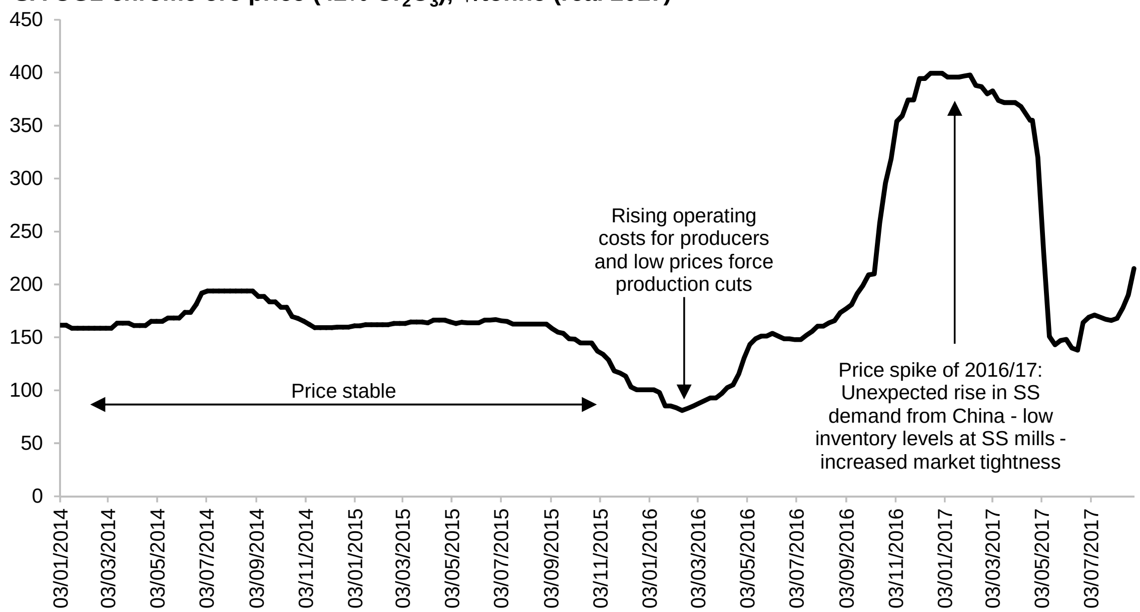
*Note: The price shown is CIF China; the price for 2017 is a year-to-date average.*

***Recent price trends***

*Recent price volatility was caused by higher stainless steel production and market speculation*

There has been some price volatility in 2016/2017 caused by an unexpected rise in stainless steel production in China. The unexpected expansion in production led to increased tightness in the market which was exacerbated by a slow reaction from chrome producers in South Africa. Port stocks in China fell to a 10-year low and caused a scramble for supply, causing prices to rise to $395/t. Following the stabilisation of the market, the price has since fallen back to the stable levels seen in 2014/2015.

**SA UG2 chrome ore price (42% $Cr_2O_3$), $/tonne (real 2017)**




*Source: SFA (Oxford), Bloomberg. Note: The price shown is CIF China.*

Recently, however, speculators in China have been attempting to push up the price for chrome ore by taking out large forward positions at low prices to stimulate a tight market by removing large volumes of available supply. These 'squeeze' traders have recently (July 2017) amassed more than 0.5 mt of chrome ore (bought at $130-$150/t) which they plan to sell at higher prices when port stocks dwindle. It is unclear if this speculative activity will have the same effect on the chrome ore price as it did on the manganese price in mid-2016 where traders amassed more than 1 million tonnes of manganese ore at bargain prices.

***Sources of information***

SFA (Oxford), with its expertise in the chrome and PGM industries, has been engaged to provide reports for use in whole or in part in this prospectus.

The research and writing of SFA (Oxford)'s reports were desktop exercises carried out by experienced professionals who have extensive knowledge of the chrome and PGM industries. SFA (Oxford) uses in-house databases, independent third-party reports and publicly available data from reputable industry organisations to gather and prepare information about the chrome and PGM markets and their respective prices and other relevant information.

In preparation of the report, SFA (Oxford) has assumed the completeness and accuracy of the information and data relied on, and the company confirms that it is not aware of anything which could possibly lead it to believe that this assumption is unfair, unreasonable or incomplete.