DEBSWANA DIAMOND COMPANY (PROPRIETARY) LIMITED

Overview and introduction to Jwaneng
Albert Milton
Overview: Debswana, a 50/50 joint venture between the GRB and De Beers comprises two of the world’s most valuable diamond mines, Jwaneng and Orapa Regime.

- **Orapa Mine**
  - c.2,300 employees
  - c.2,000 contractors
  - 2015 production 9.9m carats
  - Life of Mine 2029*
  - Reserves 151.4M; 171.9Mt*
  - Resources 365.0M; 370.0Mt*

- **Jwaneng Mine**
  - c.2,000 employees
  - c.3,000 contractors
  - 2015 production 9.8m carats
  - Life of Mine 2035*
  - Reserves 149.2M; 113.0Mt*
  - Resources 224.0M; 250.9Mt*

- **Damtshaa Mine**
  - c.300 employees
  - 2015 production 0.2m carats
  - Life of Mine 2032*
  - Reserves 4.7M; 25.1Mt*
  - Resources 6.1M; 23.3Mt*

- **Letlhakane Mine**
  - c.400 employees
  - 2015 production 0.5m carats
  - Life of Mine 2040 (tailings)*
  - Reserves 8.5M; 35.4Mt*
  - Resources 21.1M; 76.2Mt*

*Based on the Anglo American Ore Reserves and Mineral Resources Report 2015.
Our company leadership live our values by setting the highest standards, encouraging innovation and pursuing brilliance in all areas, while creating a great place to work.
Jwaneng Mine management is committed to making Jwaneng the world’s leading diamond mine in every respect.
Safety: our focus is to achieve zero harm at our operations through our behaviour-based programmes and focus on critical controls.
Meeting shareholder and customer needs: Debswana continues to improve its efficiency and is delivering strong shareholder returns. Debswana’s performance is crucial for the GRB, as the Botswana economy relies on diamond revenues.

* Data Source: Debswana and World bank
Production: In 2015 Debswana reduced production in line with demand

Production down 9% in H1 2016 with planned reductions at Orapa (plant 1 on partial care and maintenance) and Damtshaa (on care and maintenance)
Jwaneng Mine Resource: nicknamed the “Prince of mines”, Jwaneng Mine has one of the richest kimberlite ore bodies, by value, in the world

- Three main pipes (Centre, North and South)
- Life of mine 2035*
  - Open pit reserves 149.2M$ from 113Mt of ore, grade 132.0cpht\(^{(1)}\)
  - Open pit resource 207.5M$ from 187.5Mt of ore, grade 110.7cpht\(^{(1)}\)
  - Cut-6/7 and 8
  - Cut-8 accounts for 93M$ from 84Mt of ore
  - Tailings 16.5M$ from 35.8Mt of ore
- Average revenue per carat H1 2016 US$196/§ (100% of SSV)
- Average cash cost per carat recovered H1 2016 US$19/§\(^{(2)}\)
- Anglo American operating model launched at Jwaneng in September 2016
- Potential life extension projects post Cut-8 to extend life of mine to well beyond 2040

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\(\text{cpht} = \text{carats per hundred tonnes of ore}\)

\(\text{§} = \text{Total cash cost per carat recovered ($/ct). This represents the total production and operating costs before operating special items (excluding depreciation and capex), divided by carats recovered}\)

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\(^{(1)}\) Based on the Anglo American Ore Reserves and Mineral Resources Report 2015

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\(^{(2)}\) Total cash cost per carat recovered ($/ct). This represents the total production and operating costs before operating special items (excluding depreciation and capex), divided by carats recovered

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*Based on the Anglo American Ore Reserves and Mineral Resources Report 2015*
**Cash Containment**: By focusing on operational efficiencies and other cost containment opportunities, management has saved US$60 million (100% basis) YTD October 2016, of which US$42 million is from Jwaneng

**Operating model**
Improved scheduling and resourcing of planned activities resulting in improved operational stability and efficiency
- YTD pula/tonne cost moved 10% favourable to target
- YTD production cash costs 10% favourable to target

**Operational efficiency**
Improved pit conditions and standards
- Tyre life 17% improvement versus 2015
- Shovel t/h 10% improvement versus 2015
- Truck ton-km/hr 10% improvement versus 2015

**Total opex savings YTD**
- Efficiency improvements – US$11 million
- Cut-9 waste dump redesign – US$14 million
- Cut-8 schedule optimisation – US$5 million
- Cut-8 North east corner rates – US$4 million
- Cut-8 contractor management (tyres) – US$8 million
Jwaneng efficiency improvements

**Shovels (t/hr)**

- **2015**: 1,514
- **Target**: 1,700
- **Actual**: 1,672
- **Change**: +12%

**2016 YTD**

- **Target**: 1,700
- **Actual**: 28
- **Change**: -0.1

**Loading cycle (mins)**

- **2015**: 4.2
- **Target**: 3.5
- **Actual**: 3.6
- **Change**: -0.1

**2016 YTD**

- **Target**: 4.2
- **Actual**: 3.5
- **Change**: -17%

**Average tyre life (hours)**

- **2015**: 4,940
- **Target**: 5,787
- **Actual**: 6,000
- **Change**: +21%

**2016 YTD**

- **Target**: 5,787
- **Actual**: 213
- **Change**: -0.1
Cut-8: ~80% of the 500 million tonnes of waste stripping required to expose first ore (in 2017) has been mined.

Jwaneng tailings plant commissioned in 2014, increasing flexibility.
**Investing in the future:** development for future production through waste capitalisation forms a major part of capital expenditure, primarily at Jwaneng.

- **Capitalised waste will tail off as the Jwaneng Cut-8 stripping ratio declines, with first ore achieved in 2017. With long life of mines, stay in business capital expenditure will remain relatively stable over the medium term, following a short term increase related to Cut-8 once first ore is reached. Current approved expansion project expenditure will tail off as projects reach completion, including the Lethakane tailings facility in 2017. Potential expansion opportunities post Jwaneng Cut-8 and Orapa Cut-2 may result in increased capital expenditure, once studies reach an acceptable level of confidence.**

**Capex overview (100% basis)**

<table>
<thead>
<tr>
<th>US$m</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>H1 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stay in Business (SIB)</td>
<td>318</td>
<td>212</td>
<td>81</td>
</tr>
<tr>
<td>Waste</td>
<td>220</td>
<td>240</td>
<td>96</td>
</tr>
<tr>
<td>Expansionary</td>
<td>57</td>
<td>72</td>
<td>43</td>
</tr>
<tr>
<td>Total</td>
<td>595</td>
<td>524</td>
<td>220</td>
</tr>
</tbody>
</table>

**Waste capitalised driven by Jwaneng Cut-8**

<table>
<thead>
<tr>
<th>US$m</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>H1 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jwaneng</td>
<td>205</td>
<td>215</td>
<td>95</td>
</tr>
<tr>
<td>Orapa</td>
<td>15</td>
<td>25</td>
<td>96</td>
</tr>
<tr>
<td>Total</td>
<td>220</td>
<td>240</td>
<td>220</td>
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</tbody>
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**SIB driven by Orapa**

<table>
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<th>H1 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orapa</td>
<td>82</td>
<td>72</td>
<td>21</td>
</tr>
<tr>
<td>Morupule</td>
<td>146</td>
<td>110</td>
<td>39</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>318</td>
<td>212</td>
<td>81</td>
</tr>
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**Capex evolution**

Capital funding is based on the same pre-tax profit share of GRB 80.8%/19.2% De Beers.
**Production flexibility:** Tailings Processing Plants provide ability to respond effectively to market conditions at lower cost

**Jwaneng Modular Tailings Plant**
- Commissioned in 2014
- A total of US$103m (100% basis) worth of CAPEX incurred in the development of the plant
- Processes old tailings deposited between 1982 and 1992
- Processes up to 2 million tonnes, recovering up to 900,000 carats per annum
- Offers flexibility to increase or reduce production to respond to changes in the market
- Payback period = 3-4 years (from first capital)

**Letlhakane Modular Tailings Plant**
- Funding for construction approved in Nov 2014
- A total of US$236m worth of CAPEX will be incurred in the development of the plant
- Construction started in Q1 2015 and will be commissioned by end of Q2 2017
- Recovers diamonds from tailings through the use of new and improved recovery technologies
- Capacity of up to 800,000 carats per annum
- Extends the life of the mine by 20 years
- Payback period = 2-3 years (from first capital)
Your tour: Following the diamonds

Diamond Trading Company Botswana

Open pit

Main treatment plant

Recrush plant

Tailings dumps and slimes dams

Aquarium

Orapa, Letlhakane and Damtshaa Mines Sources