

# Table toppers

Paul Zimmisky  
New York, US

Botswana's Orapa mine set to remain atop global diamond mine league standings in 2014

The world's largest diamond mines

According to recent analysis, 127Mct of rough diamonds, valued at US\$18 billion, will be mined in 2014, representing a year-on-year decrease of 2.1% in carat production, but an increase of 2.6% in terms of value.

The mines itemised in the table are estimated to account for 90% of global rough-diamond supply in 2014, with the balance coming from private or small-scale operations, where production data is unreliable or simply unavailable.

The Marange diamond fields, an alluvial deposit spanning more than 480km<sup>2</sup> in

Project name	Location	Production (ct)*	Production (US\$m)**	LOM (y)	Project ownership
Orapa	Botswana	12,800,000	1,856	13	De Beers (50%), govt. of Botswana (50%)
Jubilee	Russia	9,300,000	1,442	17	Alrosa (100%)
Jwaneng	Botswana	9,090,000	1,318	15	De Beers (50%), govt. of Botswana (50%)
Nyurbinskaya	Russia	8,300,000	1,287	9	Alrosa (100%)
Aikhal	Russia	5,300,000	860	28	Alrosa (100%)
Catoca	Angola	7,160,000	953	30	Alrosa (32.8%), govt. of Angola (32.8%), LLI (18%), Odebrecht (16.4%)
International	Russia	5,500,000	853	10	Alrosa (100%)
Diavik	Canada	6,100,000	695	9	Rio Tinto (60%), Dominion Diamonds (40%)
Udachniy	Russia	4,300,000	667	48	Alrosa (100%)
Debmarmine Namibia	Namibia (Offshore)	1,200,000	660	53	De Beers (50%), govt. of Namibia (50%)
Venetia	South Africa	3,230,000	500	27	De Beers (74%), Ponahalo Holdings (26%)
Marange (A)	Zimbabwe	12,000,000	444	5	Various owners, see detail here
Argyle	Australia	9,800,000	392	14	Rio Tinto (100%)
Almazy Anabara Placers (A)	Russia	2,500,000	388	12	Alrosa (100%)
Nizhne-Lenskoye Placers (A)	Russia	2,500,000	388	n/a	Alrosa (100%)
Ekati	Canada	900,000	258	18	Dominion Diamond Corp (80%), Stewart Blusson and Charles Fipke (20%)
Victor	Canada	560,000	240	7	De Beers (100%)
Karowe	Botswana	460,000	225	26	Lucara Diamond Corp (100%)
Letseng	Lesotho	110,000	223	33	Gem Diamonds Ltd (70%), govt. of Lesotho (30%)
Cullinan	South Africa	750,000	192	57	Petra Diamonds Ltd (74%), Thembinkosi (14%), Petra Employee Trust (12%)
Finsch	South Africa	1,850,000	191	23	Petra Diamonds Ltd (74%), Senakha (21%), Petra Employee Trust (5%)
Kimberly (Tailings)	South Africa	640,000	191	12	De Beers (74%), Ponahalo Holdings (26%)
Mir	Russia	1,100,000	171	128	Alrosa (100%)
Voorspoed	South Africa	970,000	145	12	De Beers (74%), Ponahalo Holdings (26%)
Mining Area 1	Namibia	260,000	144	5	De Beers (50%), govt. of Namibia (50%)
Mirny Placers (A)	Russia	840,000	129	n/a	Alrosa (100%)
Nyurba Placers (A)	Russia	820,000	126	28	Alrosa (100%)
Elizabeth Bay	Namibia	220,000	121	2	De Beers (50%), govt. of Namibia (50%)
Arkangelskaya	Russia	850,000	112	42	Severalmaz (ALROSA/Arkhangelsk) (100%)
Snap Lake	Canada	1,040,000	99	15	De Beers (100%)
Baken	South Africa	60,000	78	7	Trans Hex (100%)
Lethakane	Botswana	530,000	76	12	De Beers (50%), govt. of Botswana (50%)
Grib	Russia	500,000	60	19	Lukoil (100%)
Middle Orange River (A)	South Africa	<50,000	60	10	Rockwell Diamonds Inc & various owners
Kao	Lesotho	120,000	59	33	Namakwa Diamonds (62.5%), govt. of Lesotho (25%), local investors (12.5%)
Williamson	Tanzania	180,000	56	30	Petra Diamonds Ltd (75%), govt. of Tanzania (25%)
Kimberly	South Africa	140,000	45	12	Petra Diamonds Ltd (74%), Sedibeng (26%)
Orange River	Namibia	80,000	44	6	De Beers (50%), govt. of Namibia (50%)
Somiluana (A)	Angola	80,000	41	44	Endiama (67%), Trans Hex (33%)
Damts'haa	Botswana	220,000	32	20	De Beers (50%), govt. of Botswana (50%)
Ellendale	Australia	120,000	31	1	Kimberly Diamonds Ltd 100%
Zarnitsa	Russia	190,000	30	64	Alrosa (100%)
Koidu	Sierra Leone	110,000	26	64	Octéa Diamond Group/Beny Steinmetz (100%)
Murowa	Zimbabwe	280,000	18	15	Rio Tinto (78%), Riozim (22%)
Koffiefontein	South Africa	<50,000	15	20	Petra Diamonds Ltd (74%), Re-Tang (26%)
Merlin	Australia	<50,000	9	18	Merlin Diamonds (100%)
Lerala	Botswana	150,000	8	20	Kimberly Diamonds Ltd 100%
Ghaghoo	Botswana	<50,000	6	34	Gem Diamonds Ltd. (100%)
Komsomolskaya	Russia	<50,000	4	31	Alrosa (100%)
Krone-Endora	South Africa	<50,000	3	10	Diamcor Mining Inc (70%), Nozala Investments (30%)
Mothae	Lesotho	C&M	C&M	n/a	Lucara Diamond Corp (75%), govt. of Lesotho (25%)
Namaqualand	South Africa	C&M	C&M	n/a	Trans Hex (100%)
Klipspringer	South Africa	C&M	C&M	n/a	Mwana Africa Plc (65%), Naka Diamond Mining (35%)
Liqhobong	Lesotho	C&M	C&M	n/a	Firestone Diamonds (75%), govt. of Lesotho (25%)
Fissures	South Africa	C&M	C&M	n/a	Petra Diamonds Ltd (74%), Sedibeng (26%)
BK11	Botswana	C&M	C&M	n/a	Firestone Diamonds (90%), local investors (10%)
<b>Not yet in production</b>					
Lace (2015)	South Africa	500,000	80	26	DiamondCorp (74%), Sphere (13%), Shanduka (13%)
Botuobinskaya (2015)	Russia	1,500,000	195	57	Alrosa (100%)
Gahcho Kue (2016)	Canada	5,000,000	745	15	De Beers (51%), Mountain Province Diamonds (49%)
Renard (2017)	Canada	1,700,000	306	26	Stornoway Diamond Corp (100%)
Bunder (2017)	India	700,000	35	39	Rio Tinto (100%)
Star-Orion South (TBD)	Canada	1,700,000	411	20	Star: Shore Gold (100%); Orion: Shore Gold (67%), Newmont Mining Corp (33%)
Karpinskogo-1 (TBD)	Russia	2,000,000	260	16	Severalmaz (ALROSA/Arkhangelsk) (100%)
Chidiak (TBD)	Canada	n/a	n/a	n/a	Peregrine Diamonds Ltd (100%)
Lulo (TBD)	Angola	n/a	n/a	n/a	Lucara Diamond Co (40%) Endiama (60%)

(A) Alluvial deposit.

C&M Denotes mines currently under care and maintenance and where production is suspended

\*2014 estimated production for project in terms of carats produced

\*\*2014 estimated production for project in terms of millions of US dollars generated. Calculated as (estimated production in carats \* estimated average carat price), represented in millions of dollars (i.e. \$1,877 = \$1,877,000,000).

LOM: Life of mine in years of remaining production. Calculated as (estimated reserve / estimated annual production)

Source: Company data; Government data; Kimberly Process; Paul Zimmisky analysis

Orapa processing plant Photo: De Beers Group

Zimbabwe, was ranked the world's largest source of diamonds in 2013 in terms of total carats produced, with an estimated production of almost 17Mct, equivalent to 13% of global supply.

Yet it appears 2013 production levels will not be sustained in 2014 as grades have fallen and easily mineable loose gravel has been rapidly depleted, leaving conglomerate stone that is more difficult to mine.

While Marange is a relatively new project with formal mining starting only five years ago, alluvial projects such as Marange tend to have a much shorter life-span than open-pit or underground diamond mines, as the economic resource is limited to the easily accessible surface stones; in many cases, mining deeper, solid conglomerate rock is simply not economic.

None of the seven private companies operating in Marange provides specific production guidance, but representatives of the companies have publically expressed frustration with decreased operating

**"Gahcho Kué is the most anticipated diamond development project in the world"**

economics resulting from depleted resource. In 2014, it is estimated that Marange production could drop as low as 8Mct, or even less.

In 2013, Botswana's Orapa mine was the world's largest diamond mine in terms of total value of carats produced. The mine is expected to repeat this success in 2014, with estimates suggesting it will produce US\$1.9 billion worth of diamonds. It is also tipped to be the world's largest diamond mine in terms of carats produced, estimated to produce 12.8Mct in 2014.

The mine is operated by Debswana, a 50-50 joint venture between De Beers and the Botswana government. Debswana's portfolio

experienced a 17% fall in production in last year's December quarter, largely down to higher grades realised at Orapa and the resumption of operations at the Orapa One processing plant following unplanned maintenance in the September quarter. Debswana also operates the Letlhakane, Damtshaa and Jwaneng mines in Botswana.

Australia's Argyle mine is known as the world's largest producer of fancy-coloured diamonds, including elusive pink and red diamonds. It is expected to produce 9.8Mct in 2014, which would make it the second-largest diamond mine in the world in terms of carats produced.

While Argyle has a history of producing some of the most precious coloured diamonds in world, unpopular brown





# Mining Journal

## iPad Edition

Immediate access  
to news, insight  
and analysis





Visit [app.mining-journal.com](http://app.mining-journal.com)