Diamond (Q4, 2013 and Q1, 2014)

Insight: Are synthetic diamonds a potential threat?

The focus of this bulletin revolves around the looming supply side gap in the diamond industry due to the lack of significant new diamondiferous kimberlite finds in the last 10 to 15 years. Although technology is improving recoveries of rough diamonds, this will not be sufficient enough to deal with the issue. The results are obvious with increased efforts being made on extending the life of mines of existing operations. For example, Debswana recently announced that both Orapa and Jwaneng will be able to produce at near current levels through to 2050, and an upswing in exploration activities.

> "The spectre of synthetic diamonds also continues to rear its head as a potential threat to the industry."
>
> **Nigel Dixon-Warren**
> KPMG in Botswana

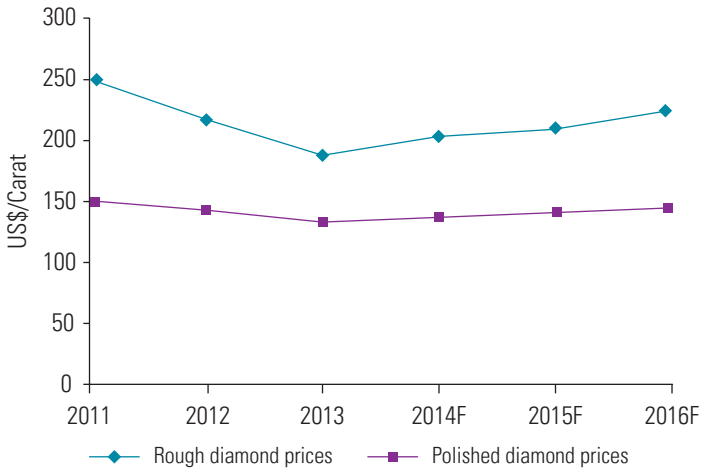
The spectre of synthetic diamonds also continues to rear its head as a potential threat to the industry. This issue will continue to gain prominence in light of the supply gap issues, and it is important that the industry develops a clear strategy to deal with it. This should include ensuring that there is a clear differentiation between 'natural' and 'synthetic' to avoid a loss of confidence and a potential erosion of the long-term value of diamonds.

Price outlook[1]

Rough diamond prices during 2H13 failed to maintain the positive momentum seen during 1H13, driven by lower demand from diamond manufacturers, particularly around the Indian festival of Diwali. This was supplemented by the weakness of the Indian rupee, which has been one of the major risks to the continued expansion of the industry, along with the decline in credit availability and manufacturing margins. Buyers were also assessing the impact of various banks reducing their finance for the purchase of rough diamond from 100 percent to approximately 70 percent.[2]

In 2014, prices are expected to remain relatively stable, with the potential for price increase due to a firmer US market and continued growth in China. Over the longer term, growth is expected to be increasingly dominated by the rising middle classes in China and India, which is expected to be supplemented by the Gulf States. A number of large mines are expected to come to their economic end over the next decade with global diamond production reaching its peak in 2017 before declining 2018 onward. With an increasing demand-supply gap, a lack of significant diamondiferous kimberlite discoveries and expected demand growth in India, China and the US, the diamond prices are expected to continue their growth trajectory.

Figure 1: Diamond price trends (2011–16F)



Source: BMO Capital Markets – Global Commodities Research – Commodity Canvas – Q2/14: Seasonal Challenges and Opportunities, 16 April 2014; Renaissance Capital – Global: Mining: Harvest Time – Cash Flowing Back to Shareholder, 24 March 2014; VTB Capital – VTB Capital: Base And Precious Metals Watch – September 2013; Growth Patterns Remains Volatile, October 15, 2013; Pamure Gordon & Company – A Diamond is Forever, but Especially for this Christmas, June 10, 2013, via Thomson research/Investext, accessed June 2014

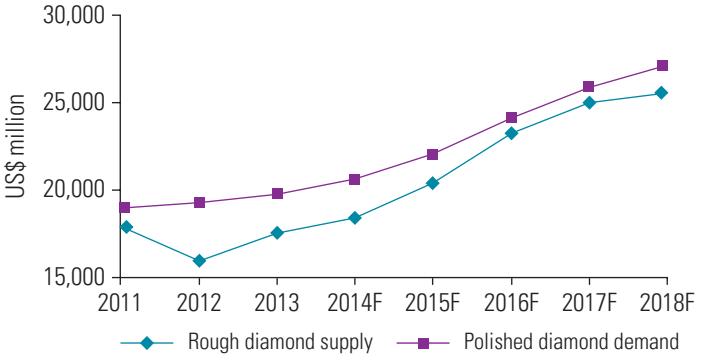
1 BMO Capital Markets – Global Commodities Research – Commodity Canvas – Q2/14: Seasonal Challenges and Opportunities, 16 April 2014; Charles Stanley – The Quarterly Carat Issue VIII, 22 January 2014; Barclays – European/Russian Mining, Diamonds: A crystal-clear investment case, 8 May 2014; Numis Securities – Bracing the Headwinds, 10 April 2014; via Thomson research/ Investext, accessed June 2014

2 Russell Shor, "Banks Move to Curb Rough Speculation", 28 October 2013, GIA, http://www.gia.edu/research-news-banks-move-curb-rough-speculation, accessed 27 June 2014

Supply and demand

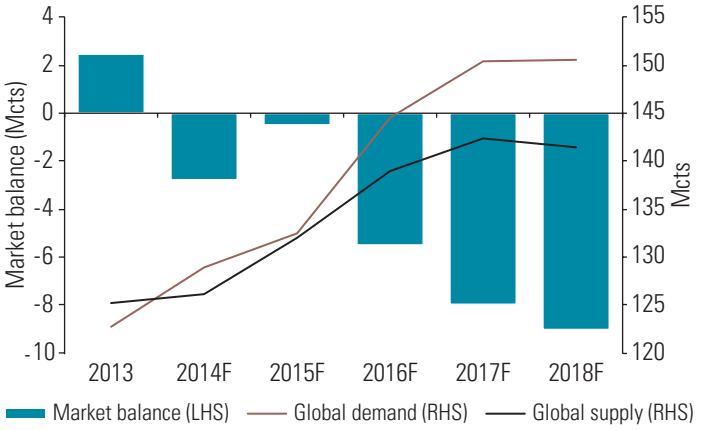
Demand[3]

Figure 2: Supply and demand of diamond (2011–18F)



Source: BMO Capital Markets – Global Commodities Research – Commodity Canvas – Q2/14: Seasonal Challenges and Opportunities, 16 April 2014, via Thomson research/Investext, accessed June 2014

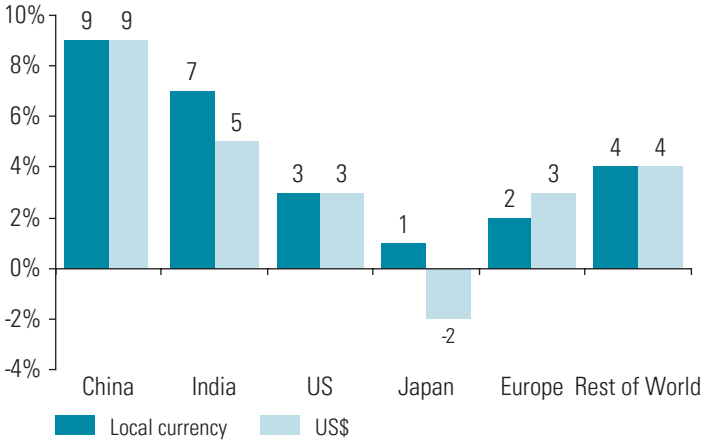
Figure 3: Global rough diamond demand-supply balance (2013–18F)



Source: Barclays – European/Russian Mining, Diamonds: A crystal-clear investment case, 8 May 2014; BMO Capital Markets – Global Commodities Research – Commodity Canvas – Q2/14: Seasonal Challenges and Opportunities, 16 April 2014, via Thomson research/ Investext, accessed June 2014

- Chinese demand for rough diamond has increased from about US$0.5 billion in 2005 to US$2.2 billion in real terms at a CAGR of 25 percent. This increased its share of global consumption from less than 3 percent in 2005 to about 15 percent in 2012. Chinese demand is expected to grow at a CAGR of 9 percent from 2012 to 2020 driven by its growing middle class, which is expected to support the luxury goods market in China. The Chinese diamond cutting and sorting industry is also growing influential as was supported by the takeover of the Antwerp Diamond Bank by the Chinese conglomerate Yinren Group in December 2013. The country is also the Chair of the Kimberley Process for 2014, a position that it could utilize to increase the importance of Shanghai and Beijing on the global diamond industry map.
- Major developed economies, namely the US, Europe and Japan, saw diamond consumption declining at CAGRs of 1 percent, 4 percent and 2 percent, respectively, in terms of their local currency, during 2005–12. This downtrend was primarily driven by economic uncertainty in these regions. Their market share eroded from about 65 percent in 2005 to about 50 percent in 2012. Japan delivered a CAGR of 2 percent real demand growth from 2005 to 2012 in US$ terms; however, if the currency effect is removed, it fell to a negative 2 percent growth rate in local currency. Going forward, the US demand for rough diamond is expected to grow at a CAGR of 3 percent from 2012 to 2020, while European and Japanese demand is expected to grow at a CAGR of 2 percent and 1 percent respectively in local currency.
- Rough diamond demand from India increased at a CAGR of 4 percent during 2005–12 in local currency terms. However, sizeable depreciation of the Rupee significantly reduced this achievement in US$ terms. India is expected to become a significant contributor to the global demand growth considering the expectations of an expanding middle class and high demand for jewelry. Indian demand for rough diamond is expected to grow at a CAGR of 7 percent from 2012 to 2020 in terms of local currency. However, the recent softness of the economy and currency devaluation risk could prove to be a downside risk to this scenario.
- Global demand for rough diamonds is expected to grow at a CAGR of 4 percent (real value terms) from 2012 to 2020. Increased demand from the developed world, primarily the US and Europe, returning to positive real growth rates, and continued demand growth from China are expected to drive this demand. However, slower economic growth in the US or China poses a significant downside risk to this demand growth.

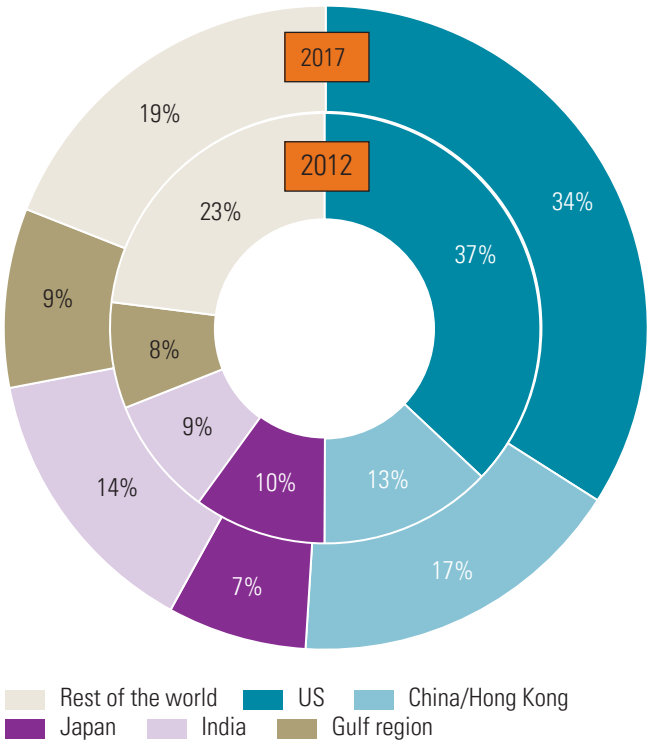
Figure 4: Rough diamond demand CAGR, by region (real terms) (2012–20F)



Source: Barclays – European/Russian Mining, Diamonds: A crystal-clear investment case, 8 May 2014, via Thomson research/ Investext, accessed June 2014

[3] Barclays – European/Russian Mining, Diamonds: A crystal-clear investment case, 8 May 2014, via Thomson research/Investext, accessed June 2014

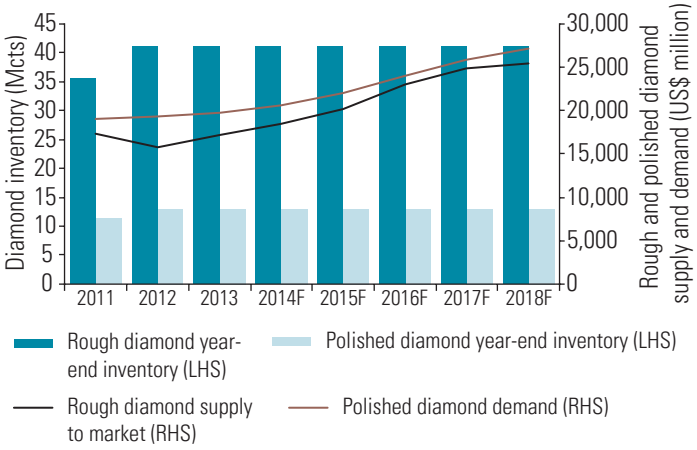
Figure 5: Comparison of diamond demand in 2012 vs. 2017F



Source: Numis Securities – Bracing the Headwinds, 10 April 2014, via Thomson research/ Investext, accessed June 2014

Supply[4]

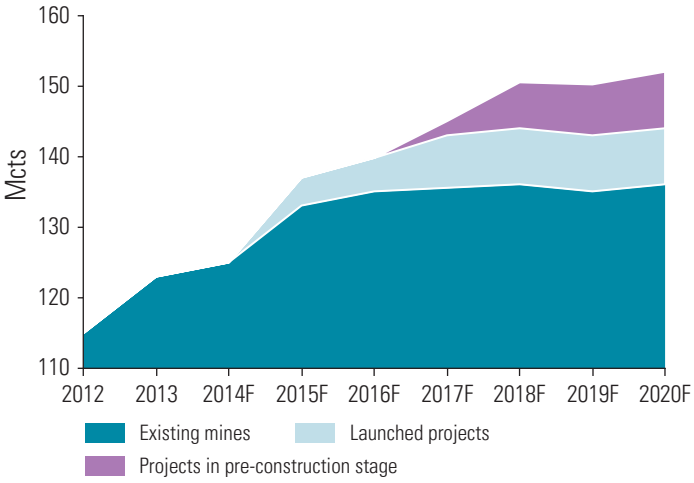
Figure 6: Diamond year-end inventory and demand-supply scenario (2011–18F)



Source: BMO Capital Markets – Global Commodities Research – Commodity Canvas – Q2/14: Seasonal Challenges and Opportunities, 16 April 2014, via Thomson research/Investext, accessed June 2014

- Availability of quality diamond deposits is the major challenge that the diamond industry currently faces. In the past 150 years, less than 7,000 kimberlites were discovered, of which only 20 percent were diamondiferous. In addition, there also has not been any major discovery in the previous decade. The last significant discoveries of diamond deposits were made in the late 1990s (Grib, Nyurbinskaya and Gahcho Kue).
- Another significant supply-side challenge that the diamond industry faces is long lead time in project development. These are often due to the remote location of the diamond deposit and complex construction of production and auxiliary infrastructure. The global diamond reserves have declined by 10 percent from 2.6 billion carats in 2000 to 2.3 billion carats now. In theory, the industry has sufficient reserves to maintain current production for the next two decades and there are a decent number of known/ operated mineralized areas offering decent exploration potential. However, the lack of fresh discoveries combined with reduced exploration budgets and the gradual reduction of open-pit reserves implies that miners would have to dig deeper to recover diamond from the current deposits. This will increase the cost of mining.
- The global diamond industry is concentrated with the 10 largest assets (four in Russia, three in Africa, two in Canada and one in Australia) accounting for 55 percent of the global rough production. These projects are Orapa, Argyle, Jwaneng, Nyurbinskaya, Diavik, Catoca, Jubilee, International, Udachnaya and Venetia diamond mines. The average age of these 10 diamond mines is almost 30 years with the average reserve-based life-of-mine of 10 years remaining at these mines. Any significant disruption of production at any of these mines could majorly affect the global rough diamond supply. Also, with falling diamond grades, it is becoming more costly to mine diamond from these mines. Currently, a majority of these mines are operating at rates below their historical peaks.
- The global diamond market is expected to witness marginal deficits in 2014, which is expected to decline to a very marginal deficit in 2015 as improving supply will offset demand growth. The demand-supply gap is expected to significantly widen from 2016 when demand is expected to significantly outpace supply. After 2017, the supply growth is expected to be largely offset by depletion of existing deposits with the demand expected to remain flat in 2018. This will further widen the demand-supply gap.

Figure 7: Global rough diamond supply forecast (2012–20F)



Source: Barclays – European/Russian Mining, Diamonds: A crystal-clear investment case, 8 May 2014, via Thomson research/ Investext, accessed June 2014

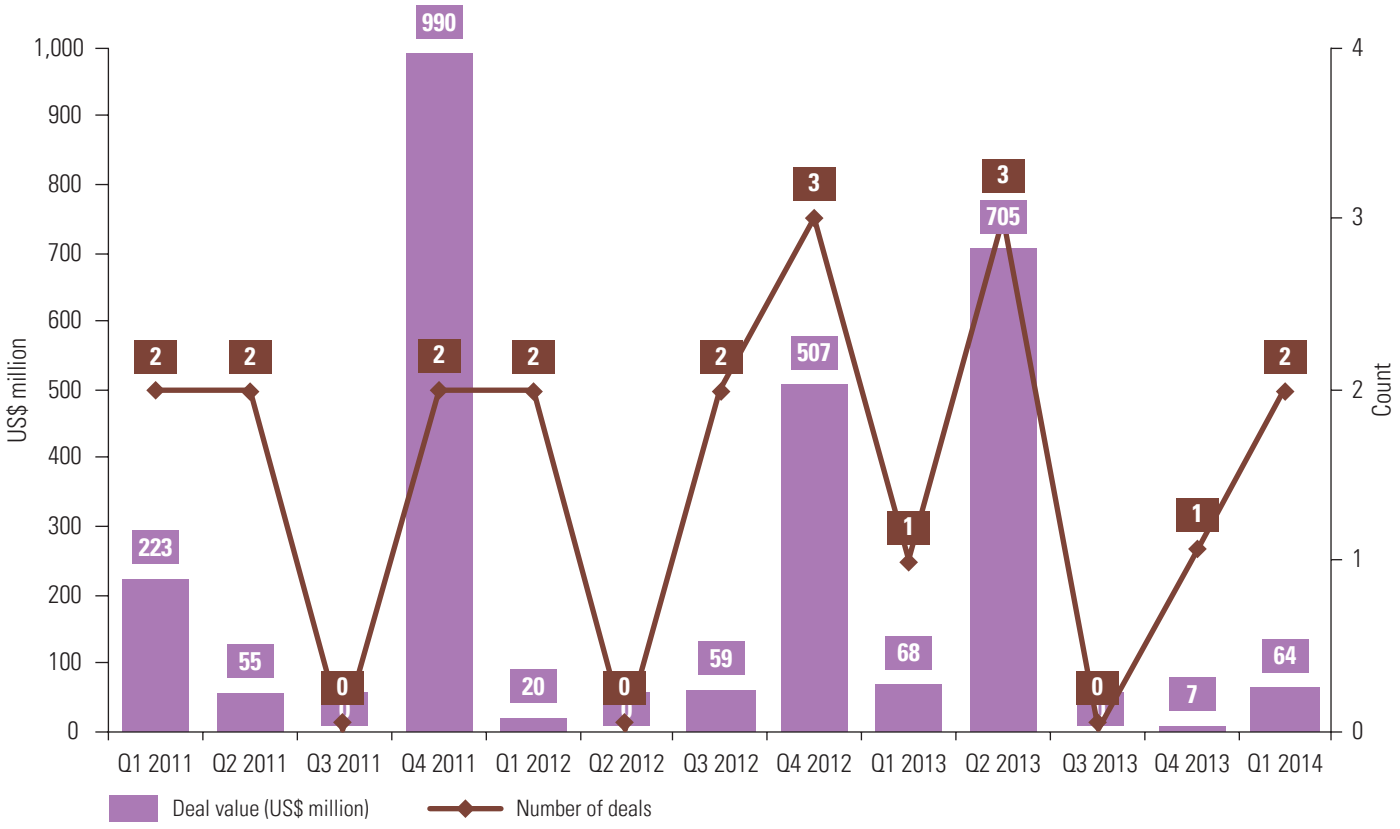
[4] Barclays – European/Russian Mining, Diamonds: A crystal-clear investment case, 8 May 2014, via Thomson research/ Investext, accessed June 2014

Key developments

Ownership changes[5]

In Q4, 2013, the total value of major deals announced in the diamond industry was US$7 million. The deal valuation subsequently increased to US$64 million during Q1, 2014, a q-o-q increase of 814 percent. The number of deals announced during Q1, 2014 increased to two, against one announced in Q4, 2013. Out of the three, two were successfully completed.

Figure 8: Value of major deals announced in Q4, 2013 and Q1, 2014



Source: Deals: Search, Mergermarket, accessed 24 June 2014; KPMG analysis

Table 1: Top diamond deals announced in Q4, 2013 and Q1, 2014

Quarter	Date announced	Target (Nation)	Acquirer (Nation)	Status	Value of transaction (US$ million)	Stake (%)
Q1, 2014	28-Feb-14	Merlin Diamonds Limited (Australia)	Blumont Group Ltd (Singapore)	Announced	51	93%
Q1, 2014	24-Feb-14	Mantle Diamonds Limited (United Kingdom)	Kimberley Diamonds Ltd (Australia)	Completed	13	100%
Q3, 2013	11-Dec-13	Nyota Minerals Limited (Ethiopia)	KEFI Minerals plc (Turkey)	Completed	7	75%

Source: Deals: Search, Mergermarket, accessed 24 June 2014; KPMG analysis

[5] Deals: Search, Mergermarket, accessed 24 June 2014

Regulatory updates

The regulations introduced in Q4, 2013 and Q1, 2014 were intended to ensure a reliable source of diamond supply for the gems and jewelry industry.

Table 2: List of recent regulations in the diamond industry

Country/Region	Regulation/topic	Description
India and Russia	Long term deal for diamond supply[6]	• Government of India has sought a long-term deal with Russian diamond miner Alrosa. • The deal would ensure steady supply of diamond for the Indian gems and jewelry export industry.

Projects

Table 3: Cross section of global project in diamond mining industry*

Project	Company	Location	Potential start up	Potential output (mctpa)	Potential life of mine (in years)
Finsch	Petra Diamonds	South Africa	2019	Expected increase from 1.4 to nearly 2 mctpa	25
Kimberley underground	Petra Diamonds	South Africa	2016	Expected increase from 0.068 to 0.135 mctpa	12
Voorspoed	De Beers	South Africa	2014	Expected increase from 0.7 to 0.8 mctpa	N/A
Williamson	Petra Diamonds	Tanzania	2017	Expected increase to 0.3 mctpa	50
Argyle underground development	Rio Tinto	Australia	2013	20	7 (Until 2020)
BK11	Firestone Diamonds (90%); Botswana Nationals (10%)	Botswana	2011	The mine was put under temporary care and maintenance in February 2012 and operations are yet to restart. Board is considering various strategic alternatives including disposal or joint venture.	
Liqhobong mine	Firestone Diamonds (75%); Government of Lesotho (25%)	Lesotho	2016	1.1	15
Grib	LUKoil	Russia, Arkhangelsk	2014	4.5 (from 2016)	N/A
Kao	Namakwa (62.5%); Kimberlite Investments (12.5%); Government of Lesotho (25%)	Lesotho	H112	0.15	21
Lace mine	Diamond corp. (74%); Sphere Holdings (Proprietary) Limited (13%); Shanduka Group (Proprietary) Limited (13%)	South Africa	2015	0.5	25

[6] "India Courts Russia's Alrosa For Steady Supply Of Diamonds (for the Indian gems and jewellery export industry)", 27 February 2014, via Factiva accessed 25 June 2014

Table 3: Cross section of global project in diamond mining industry* (continued)

Project	Company	Location	Potential start up	Potential output (mctpa)	Potential life of mine (in years)
Gahcho Kue	De Beers (51%); Mountain Province Diamonds (49%)	Canada	2016	N/A	11
Renard	Stornoway (100%)	Canada	December 2015	1.6	11
Mothae	Lucara Diamond (75%); Government of Lesotho (25%)	Lesotho	N/A	N/A	N/A
Bunder	Rio Tinto	India	2019	3.0	N/A
Brauna Diamond Project	Lipari Mineracao Ltda	Brazil	Q1, 2015	0.2	7
Diavik Diamond Mine	Diavik Diamond Mines Inc.	Canada	2003	100 million carats of diamond over its mine life of 16 to 22 years	16 to 22 years
Karowe Diamond Mine	Lucara Diamond Corp.	Botswana	2012	0.4	13
Lemphane Diamond Project	Paragon Diamonds Limited	Lesotho	2014	0.02	10
Star Diamond Project	Shore Gold Inc.	Canada	N/A	1.67	12
Tirisano Diamond Mine	Rockwell Diamonds Inc. (74%), Mogopa Minerals (26%)	South Africa	N/A	N/A	18
Wouterspan Diamond Mine	Rockwell Diamonds Inc. (74%)	South Africa	N/A	N/A	More than 10 years

*The list is not exhaustive and contains a limited number of projects

Source: Intierra database accessed June 2014; Company Reports accessed June 2014

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Publication number: 131551 Publication date: August 2014