10 July 2012 | 16 pages

Coal & Consumable Fuels (GICS) | Metals & Mining (Citi)
**Australia/NZ | Australia**

# Resource Generation (RES.AX)

## Green Signal for Rail – Full Steam Ahead

- Company Update
- Target Price Change
- Estimate Change

- **Maintain Buy** — The recent approval of a 10-year offtake agreement with Transnet moves the development of the Boikarabelo project closer to fruition. We have reviewed our model in light of the agreement and current coal prices and now believe that it is prudent to only assume value for the Stage 1 project for which we derive an NPV of $0.60/share. Consequently we have reduced our target price to $0.60/share and retain our Buy/High risk recommendation on the stock.
- **Stage 1: the base case** — The current rail deal with Transnet provides 6mtpa of rail access over 10 years (the tenure can easily be extended when production starts). Whilst no negotiations have been reached with Eskom for domestic offtake yet, we believe that this will be likely in due course. Thus we see Stage 1 of the Boikarabelo project delivering 3mt of domestic and 3mt of export coal from 2015 onwards at a capital cost of c$800m (higher than company guidance) with a mine cost including washing of ZAR190/t and a rail & port cost of ZAR290/t. On those metrics we estimate Stage 1 delivers an NPV of $0.60 per share and a post tax IRR of 19.7%.
- **Stage 2: the upside** — We see potential to expand the project to 50mtpa of RoM coal (12mt domestic and 12mt export). However given the lack of domestic offtake for Stage 1, the current uncertainty in global coal markets and the large capital cost (c$800m), we do not assume any value for stage 2 in our base case value. On our assumptions the project delivers an IRR of 24% and an NPV of $2.06 per share. We see stage 2 as a long term potential upside rather than core value for RES.
- **Funding** — We anticipate that funding will be split equally between debt and equity with a total funding package of c$900m. An equity raising of c$450m will be challenging in the current environment and thus some form of cornerstone partner in either the equity or the assets is likely needed to ensure financing, in our view.
- **Steps to delivery** — Now that the rail has been signed off, banks can complete their due diligence. We would expect funding to occur around October/November, markets permitting. Thus construction could start as early December this year, but more than likely early 2013. On that timeframe first coal would be expected end of 2014 to early 2015 and full production levels hit in 2H15.

| RES.AU revisions (Y/E Jun) | 2010A | 2011A | 2012E | 2013E | 2014E |
|---|---|---|---|---|---|
| Sales (A$m) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| % revision | 0.0% | 0.0% | na | na | -100.0% |
| EBIT (A$m) | -4.2 | -6.3 | -5.8 | -7.5 | -17.6 |
| % revision | 0.0% | 0.0% | 0.0% | 1.0% | -163.0% |
| Core Net Profit (A$m) | -3.3 | -5.1 | -5.2 | -7.3 | -12.3 |
| % revision | 0.0% | 0.0% | 0.0% | -2.3% | -247.2% |
| Core EPS (A¢) | -2.1 | -2.0 | -2.0 | -2.8 | -4.8 |
| % revision | 0.0% | 0.0% | 0.0% | -2.3% | -247.2% |
| EPS Growth (%) | 89.5 | 4.4 | -3.1 | -40.5 | -67.2 |
| PE Ratio (x) | -14.6 | -15.3 | -14.8 | -10.5 | -6.3 |
| Dividend Yield (%) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Company Reports and dataCentral, Citi Research.

| Buy/High Risk | 1H |
|---|---|
| Price (09 Jul 12) | A$0.30 |
| Target price | A$0.60 |
| *from A$1.40* | |
| Expected share price return | 103.4% |
| Expected dividend yield | 0.0% |
| **Expected total return** | **103.4%** |
| Market Cap | A$78M |
| | US$79M |

**Price Performance**
**(RIC: RES.AX, BB: RES AU)**


**Craig Sainsbury**
+61-2-8225-4871
craig.sainsbury@citi.com

**Clarke Wilkins**
+61-2-8225-4858

**Daniel Seeney**
+61-2-8225-4862

**Meredith Schwarz**
+61-2-8225-4892

| RES.AX: Fiscal year end 30-Jun | | | | | |
|---|---|---|---|---|---|
| **Profit & Loss (A$m)** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
| Sales revenue | 0.0 | 0 | 0 | 0 | 293.2 |
| Cost of sales | -0.1 | 0 | 0 | -10.0 | -179.3 |
| **EBITDA** | **-6.2** | **-5.8** | **-7.5** | **-7.6** | **113.3** |
| Depreciation/Amortization | -0.1 | 0 | 0 | -10.0 | -15.0 |
| **EBIT** | **-6.3** | **-5.8** | **-7.5** | **-17.6** | **98.3** |
| Net interest | 1.2 | 0.6 | 0.2 | -6.0 | -15.6 |
| **Earnings before tax** | **-5.1** | **-5.2** | **-7.3** | **-23.6** | **82.7** |
| Tax Recurring | 0.0 | 0 | 0 | 0 | -24.8 |
| Exceptional/Other | 0 | 0 | 0 | 11.4 | -22.1 |
| **Reported net profit** | **-5.1** | **-5.2** | **-7.3** | **-12.3** | **35.8** |
| Core NPAT | -5.1 | -5.2 | -7.3 | -12.3 | 35.8 |
| **Balance Sheet (A$m)** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
| Cash & cash equiv. | 25.3 | 6.3 | 646.0 | 241.7 | 275.7 |
| Net fixed & other tangibles | 113.2 | 112.2 | 362.2 | 752.2 | 841.8 |
| **Total assets** | **139.5** | **119.5** | **1009.1** | **994.8** | **1118.4** |
| Short-term debt | 0 | 0 | 0 | 0 | 0 |
| Long-term debt | 0.9 | 0.9 | 450.9 | 450.9 | 450.9 |
| **Total liabilities** | **5.4** | **5.4** | **455.4** | **455.4** | **455.4** |
| Shareholders' equity | 134.1 | 114.1 | 553.7 | 539.4 | 663.0 |
| **Total equity** | **134.2** | **114.1** | **553.7** | **539.4** | **663.0** |
| **Net debt** | **-24.4** | **-5.4** | **-195.0** | **209.3** | **175.2** |

| **Cashflow (A$m)** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
|---|---|---|---|---|---|
| **Operating cashflow** | **-2.2** | **-6.5** | **-7.7** | **-1.6** | **141.3** |
| Capex | -12.0 | -10.0 | -250.0 | -400.0 | -104.6 |
| Net acq/disposals | -0.7 | -0.7 | -0.7 | -0.7 | -0.7 |
| Exploration exp/Other | -6.8 | -1.8 | -2.0 | -2.0 | -2.0 |
| **FCF ex acqns & explor exp** | **-21.7** | **-19.0** | **-260.4** | **-404.3** | **34.0** |
| **Net change in cash** | **19.2** | **-19.0** | **639.6** | **-404.3** | **34.0** |

| **Per share data** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
|---|---|---|---|---|---|
| Reported EPS (¢) | -2.0 | -2.0 | -2.8 | -4.8 | 13.9 |
| Core EPS (¢) | -2.0 | -2.0 | -2.8 | -4.8 | 13.9 |
| DPS (¢) | 0 | 0 | 0 | 0 | 0 |
| CFPS (¢) | -0.8 | -2.5 | -3.0 | -0.6 | 54.8 |
| BVPS (¢) | 52.0 | 44.2 | 214.7 | 209.2 | 257.1 |
| Wtd avg ord shares (m) | 258 | 258 | 258 | 258 | 258 |
| Wtd avg diluted shares (m) | 258 | 258 | 258 | 258 | 258 |

| **Valuation ratios** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
|---|---|---|---|---|---|
| PE (x) | -15.3 | -14.8 | -10.5 | -6.3 | 2.2 |
| EV/EBIT (x) | -10.1 | -10.9 | 2.8 | -4.9 | 2.8 |
| EV/EBITDA (x) | -10.3 | -10.9 | 2.8 | -11.3 | 2.4 |
| FCF yield (%) | -18.3 | -21.3 | nm | nm | 47.5 |
| Dividend yield (%) | 0 | 0 | 0 | 0 | 0 |
| Payout ratio (%) | 0 | 0 | 0 | 0 | 0 |
| **Operating performance** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
| EBITDA margin (%) | nm | na | na | na | 38.6 |
| Operating ROE (%) | -4.6 | -4.2 | -2.2 | -2.2 | 6.0 |
| Operating ROIC (%) | -6.4 | -5.2 | -3.2 | -3.2 | 9.2 |
| Net debt to equity (%) | -18.2 | -4.7 | -35.2 | 38.8 | 26.4 |
| Debt to total capital (%) | 0.7 | 0.8 | 44.9 | 45.5 | 40.5 |

**Price:$0.30; TP:$0.60; # Shares: 263m; Market Cap: A$79m; Recomm: Buy/High Risk**

| **Comdty & FX Forecasts** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
|---|---|---|---|---|---|
| Thermal coal price (US$/t) | 109.5 | 108.7 | 97.8 | 116.3 | 124.5 |
| AUDUSD (analyst) (x) | 0.99 | 1.03 | 1.00 | 0.92 | 0.90 |
| ZARUSD (analyst) | 7.3 | 7.9 | 8.5 | 8.9 | 9.3 |
| **Long Term Forecasts** | | | | | |
| Thermal Coal (US$/t) | | | | | 105.0 |
| AUDUSD average | | | | | 0.80 |
| **Production Volumes** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
| Thermal coal (mt) (mt) | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 |
| **Production Costs** | **2011** | **2012E** | **2013E** | **2014E** | **2015E** |
| Cash Costs (US$/t) | 0.0 | 0.0 | 0.0 | 0.0 | 41.1 |

| **Reserves & Resources** | Reserves | | Resource | |
|---|---|---|---|---|
| | Amount | Grd.() | Amount | Grd.() |
| Total Coal (mt) | 458.1 | | 2,357.4 | |

| **Valuation** | | |
|---|---|---|
| WACC (%) | | 14.0 |
| **NPV Valuation** | **US$M** | **A$/sh.** |
| Boikarebelo | 138.3 | 0.66 |
| Exploration & Other | 0.0 | 0.00 |
| Corporate Costs | -15.8 | -0.08 |
| Net (debt) / cash | 4.3 | 0.02 |
| **Total** | **126.8** | **0.60** |

For further data queries on Citi's full coverage universe please contact Citi Research Data Services at CitiRsch.DataServices.Global@citi.com

Powered by: dataCentral

## A refresh on the project

The recent announcement from RES stating it has signed a 10-year take-or-pay deal with rail provider Transnet moves the Boikarabelo project a step closer to delivery. Whilst the next major milestone in the evolution of the project, an offtake arrangement with Eskom is yet to be completed; the provision of rail access now allows the banks who would look to finance RES to complete their due diligence, which we believe will likely be completed around September/October. After the debt and equity funding is in place, construction could start as early as the end of this year or early 2013.  RES has made significant progress on the project and now has received:

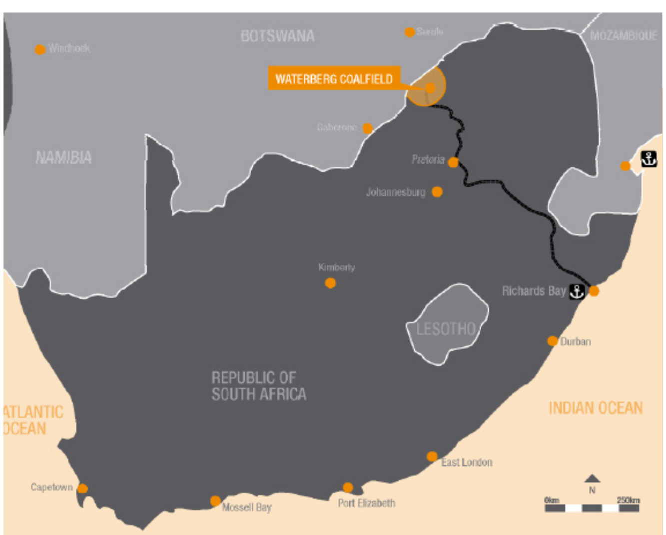
- Mining rights
- Water license
- Development consent
- Rail agreement

Given the progress that RES has achieved to date, we have dusted off our model and take a fresh look at the project and update our assumptions and valuation.

The Boikarabelo project is a c6.4bnt coal resource (745mt of reserve) located in the Waterberg region of South Africa.

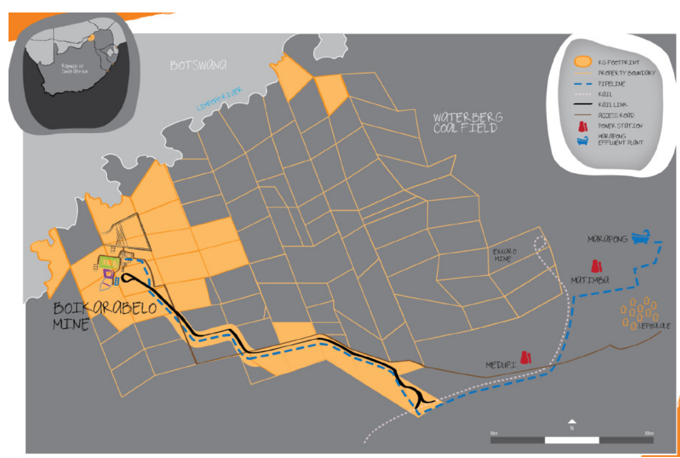
- Stage 1: 14mt of RoM coal delivering 3mt of export and 3mt of domestic coal.
- Stage 2:  50mt of Rom coal delivering 6mt of export and 6mt of domestic coal.

**Figure 1. Location of assets**




Source: Company reports

**Figure 2. Location of coal fields**




Source: Company reports

The company has provided relatively clear guidance to the market in terms of the main operational metrics it believes the project will operate to.  The table below highlights the key operational assumptions that the company expects alongside our modeling assumptions.  As the table indicates, we have been overly conservative in terms of our assumptions which we believe is a fair caution given the challenging operational environment in South Africa.

**Figure 3. Assumptions – Stage 1**

| | Citi Assumptions | Company Guidance |
|---|---|---|
| Capital Cost | A$850m | A$750m |
| ROM Coal production | First Production start 2015<br>Phase 1: 12mt RoM (2016 full capacity) | First Production end 2014<br>Phase 1: 14mt RoM (2015 full capacity) |
| Yield | 43% | 43% |
| Coal split | 50% Thermal export<br>50% Domestic | 50% Thermal export<br>50% Domestic |
| Mine Cash cost | ZAR190/t<br>Comprised of ZAR140/t mine and ZAR50/t plant & SGA | N/A |
| Transport Cost - export | ZAR 300/t<br>Comprised of ZAR260/t rail and ZAR40/t port and handling | N/A |
| Long term export coal price | $95/t | N/A |
| Long term domestic coal price | ZAR 250/t | N/A |

Source: Company reports, Citi Research

From a production perspective we have a slower ramp-up than RES assumes. Whilst RES may well hit its milestones, we have seen numerous mines around the world miss its ramp-up schedules over the past decade and law of averages leads us to believe that RES could succumb to some slippage as well. We have pushed back our assumed start date which has resulted in a decrease to our 2014 earnings profile for RES.

Stage 2 is likely to be developed from internal cash flows post the commencement of the Stage 1 operation. As we discuss later in the report, we do not include Stage 2 in our base case valuation given the uncertainties over long term domestic offtake, export coal prices and the dependency on Stage 2 from Stage 1 funding. However the table below profiles our assumptions for Stage 2 in our stretch case scenario.

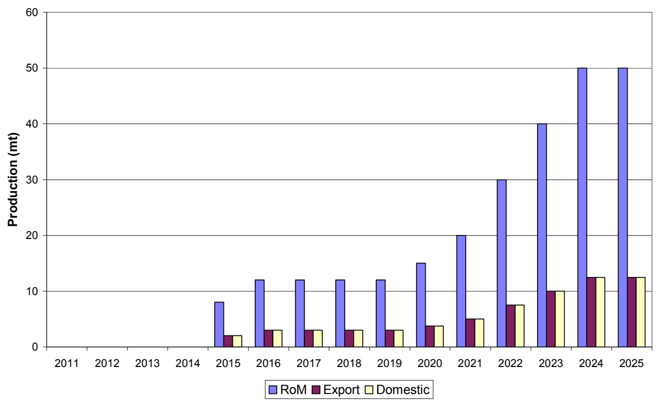
**Figure 4. Assumptions – Stage 2**

| | Citi Assumptions | Company Guidance |
|---|---|---|
| Capital Cost | A$800m | n/a |
| ROM Coal production | First Production 2021<br>Phase 2: 50mt (2025 full capacity) | First Production 2020<br>Phase 1: 50mt (2023 full capacity) |
| Yield | 50% | 50% |
| Coal split | 50% Thermal export<br>50% Domestic | 50% Thermal export<br>50% Domestic |
| Mine Cash cost | ZAR190/t<br>Comprised of ZAR140/t mine and ZAR50/t plant & SGA | N/A |
| Transport Cost - export | ZAR 300/t<br>Comprised of ZAR260/t rail and ZAR40/t port and handling | N/A |
| Long term export coal price | $95/t | N/A |
| Long term domestic coal price | ZAR 250/t | N/A |

Source: Company reports, Citi Research

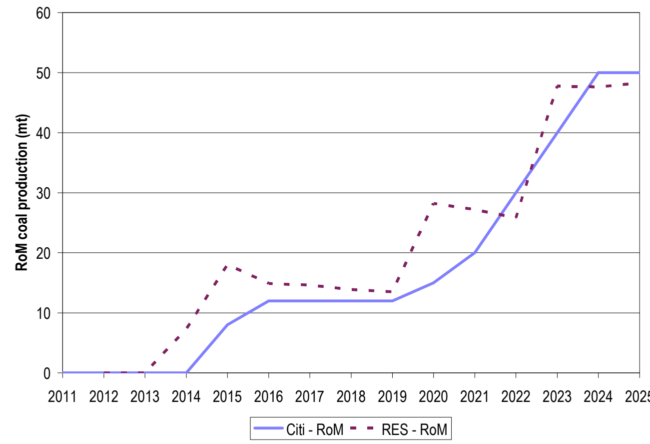
The charts below look at our production assumptions versus the ramp-up timeframe from RES.

**Figure 5. Coal production (Stage 1 & 2) – Citi assumptions**




Source: Citi Research

**Figure 6. Coal production – Citi vs RES profile**




Source: Company reports, Citi Research

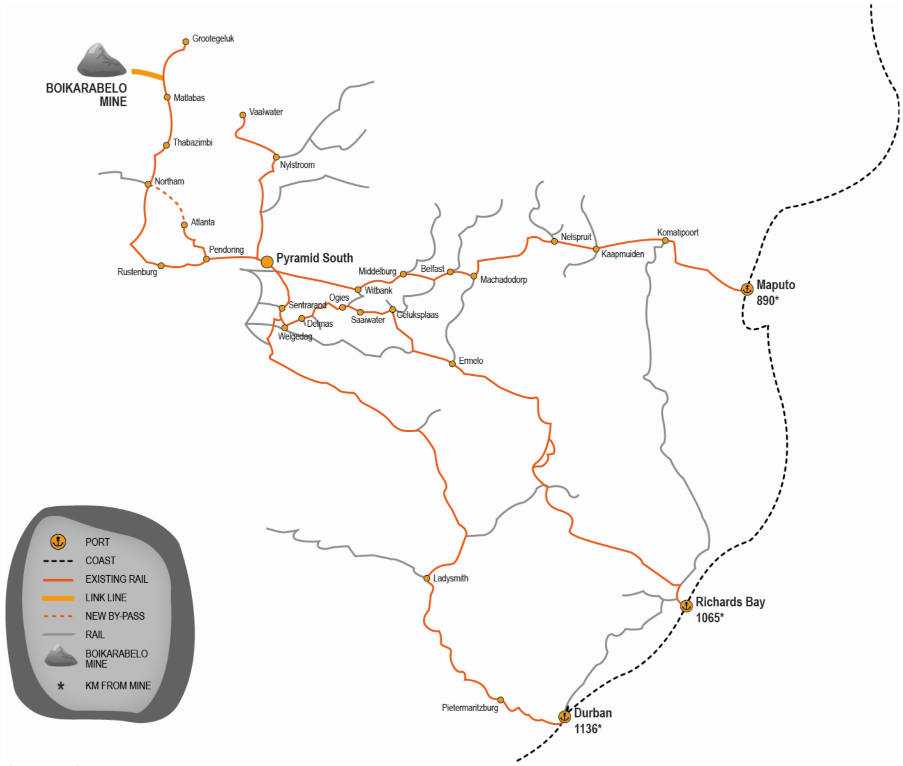
## Rail Approval

In late June RES announced that it had secured a 10-year take-or-pay contract with Transnet to haul up to 6mtpa of coal. Whilst the initial contract is for 10 years, we believe that once in production, RES could look to extend this timeframe for a longer tenure, or have a rolling 10-year contract with Transnet. RES released the following terms for the contract:

- The initial term is for 10 years with provision to extend for a further 10 years.
- The contract allows for 4 million tonnes in the first year, 5 million tonnes in the second year and 6 million tonnes per annum thereafter. Should Eskom elect to contract directly with TFR (which is Eskom's intention) for the proposed domestic purchases (currently under negotiation), the take-or-pay quantities in the contract will reduce to export tonnage only.
- The contract specifies an indicative tariff for the current year. The actual tariff will be determined annually by negotiation

We believe that as yet there is no stipulation in the contract as to which port the coal will be delivered to with Transnet likely preferring Richards Bay and RES preferring either Durban or RBCT (Durban would be a cheaper port for RES to access).

**Figure 7. Regional rail links to port**




Source: Company reports

Again whilst there has been no disclosure on the cost of rail, our analysis indicates that the cost would be in the vicinity of ZAR260/t for the rail. Given the haulage distances are around 1000km the cost is around ZAR0.26/t/km or cUS$0.04/t/km which is on par with prices paid in Australia.

However given that disparity in pricing power parity between the regions ('The Economist' estimated the level at 0.6 in 2011), and the oligopolistic nature of rail in South Africa, there is the potential for the coal tariff to possibly come down in the long run if there was to be any form of economic reform in South Africa.

To put the sensitivity on rail into context, every ZAR10/t saving on the rail would lift our NPV of Stage 1 by $0.06/share (or 9%).

The rail link will still require RES to build a 36km spur line from the mine to main line with the capex for this already included in the overall capital estimate.

## Still no deal with Eskom

Dealing with Transnet and Eskom has been the ultimate chicken and egg scenario. Before signing the offtake agreement Eskom wanted to see that RES were able to deliver coal to them along the Transnet chain; and before committing tonnage Transnet wanted to see domestic offtake agreements.

The deal with Transnet has been done and now hopefully a deal with Eskom will follow which will commit the domestic component of coal production from Boikarabelo.

However we understand an offtake from Eskom is not critical for the viability of the project nor is it (or likely to be) a condition from the banks for funding. If Eskom were to delay/decline purchasing the 3mtpa of domestic coal production from Stage 1 of the project, that coal could be directed into the export market given the 6mtpa of capacity that Transnet has provided. If the coal were diverted into the export market it would need to be washed which would reduce the overall yield from the plant. If all of the initial 14mt of RoM coal were to be washed, we believe that the yield would fall to around 30-35% which would equate to c4.5mtpa of export coal being available.

As we discuss in the valuation section, the project still delivers viable economic returns on a no-Eskom basis. Thus we do not believe that the lack of Eskom offtake would jeopardise funding and thus development of the project.

## Valuation

Our base case NPV for RES is based upon Stage 1 only and assumes an equal blend of export versus domestic coal exports. We use a 14% discount rate to take into account the early stage of the project as well as the sovereign risk. Whilst the discount rate is high, it's not dissimilar to rates we use for other non-producing African mining companies. Our assumption of the long term coal price that RES receive is $95/t for its export coal and ZAR250/t for domestic coal (both real 2012 figures).

**Figure 8. Resource Generation NPV – Base case**

| WACC | 14.0% | A$m | Ownership | A$m Equity | A$/share |
|---|---|---|---|---|---|
| Boikarebelo | | 234 | 74.0% | 187 | 0.66 |
| Corporate Costs | | -20 | | | -0.08 |
| Cash/(Net Debt) | | 5 | | | 0.02 |
| Total | | 219 | | | 0.60 |

Source: Citi Research

Our base case of just Stage 1 delivers an NPV of $0.60/share and an IRR of 20.2%.

If we assume that no contracts are signed with Eskom and coal production falls to 4.5mt of export coal, our NPV would fall to $0.34/share as the table below demonstrates. The IRR under this scenario would fall to 15.3%.

**Figure 9. Resource Generation NPV – No domestic contracts scenario**

| WACC | 14.0% | A$m | Ownership | A$m Equity | A$/share |
|---|---|---|---|---|---|
| Boikarebelo | | 140 | 74.0% | 187 | 0.40 |
| Corporate Costs | | -20 | | | -0.08 |
| Cash/(Net Debt) | | 5 | | | 0.02 |
| Total | | 126 | | | 0.34 |

Source: Citi Research

If we assume the development of Stage 2, the NPV would jump to $2.15/share on an un-risked basis delivering the overall project (Stage 1 & 2) and IRR of 24.6%.

**Figure 10. Resource Generation NPV – Stage 2 scenario**

| WACC | 14.0% | A$ | Ownership | A$ Equity | A$/share |
|---|---|---|---|---|---|
| Boikarebelo | | 783 | 74.0% | 579 | 2.20 |
| Corporate Costs | | -20 | | | -0.08 |
| Cash/(Net Debt) | | 5 | | | 0.02 |
| Total | | 768 | | | 2.15 |

Source: Citi Research

## NPV Sensitivity

Our commodities team explicit coal price forecasts extend out to 2020 and are considerably higher than current spot prices as the table below shows

**Figure 11. Citi coal price forecasts**

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|
| Coal price (US$/t) | 109 | 98 | 116 | 125 | 128 | 127 | 134 | 141 | 135 |

Source: Citi Research

To show the sensitivity of the project to coal price assumptions we have looked at what the NPV and IRR of the project would be if we assumed long term commodity price assumptions from today onwards. In the scenario we have assumed that domestic coal prices stay at a 2012 real price of ZAR250/t.

**Figure 12. NPV**

| | Export coal price (US$/t) | | | |
|---|---|---|---|---|
| | 80 | 90 | 100 | 110 |
| Stage 1 | -0.65 | -0.24 | 0.2 | 0.64 |
| Stage 1 - export only | -1.52 | -0.91 | -0.3 | 0.31 |
| Stage 2 | -0.6 | 0.28 | 1.16 | 2.04 |

Source: Citi Research

**Figure 13. IRR**

| | Export coal price (US$/t) | | | |
|---|---|---|---|---|
| | 80 | 90 | 100 | 110 |
| Stage 1 | 7% | 12% | 16% | 20% |
| Stage 1 - export only | n/a | 2% | 11% | 18% |
| Stage 2 | 10% | 16% | 21% | 25% |

Source: Citi Research

If contracts are settled with Eskom, domestic coal sales will represent a significant portion of group NPV on our forecasts. The table below looks at the NPV of the project if we keep our export coal prices stable on the base case (as per Figure 11) and shift our domestic coal prices by ZAR10/t.

**Figure 14. NPV**

| | Domestic coal price (ZAR$/t) | | | |
|---|---|---|---|---|
| | 150 | 200 | 250 | 300 |
| Stage 1 | 0.02 | 0.31 | 0.6 | 0.89 |
| Stage 2 | 0.8 | 1.43 | 2.06 | 2.69 |

Source: Citi Research

**Figure 15. IRR**

| | Domestic coal price (ZAR$/t) | | | |
|---|---|---|---|---|
| | 150 | 200 | 250 | 300 |
| Stage 1 | 14% | 17% | 20% | 22% |
| Stage 2 | 18% | 22% | 24% | 27% |

Source: Citi Research

## Funding – is it possible?

RES is going to require in the vicinity of $800-$900m of financing to fund the development of the project. The slightly large figure than our capex provides for contingencies as well as working capital etc.

Looking at historic transactions of similar nature in the mining space we believe that funding would likely come from half bank debt and half equity. Thus at the upper end of the funding range, the equity/debt component would be c$450m each. We do not see significant risk on the debt tranche of the funding given the cash flows that the project will generate.

However a $450m equity raising on a company with a sub $100m market cap may prove to be a challenge. We believe that cornerstone partners would need to take up to 50% of the equity component, thus leaving around $200-225m to be raised on market. Given that RES has not locked in all of the coal, a cornerstone stake with coal offtake is a possibility.

The Indian power company CESC (on the register at 11% through its vehicle Integrated Coal Mining) already provide a strong cornerstone partner that may look to increase its stake through the equity raising, in our view.

Other funding options could focus on a sell down of the underlying assets. This practice is common in Australia with many of the recent coal mines such as Narrabri and Maules Creek seeing pattern take up to 30% stake in the project as prices significantly beyond the equity value at that time.

The recent example is the sale of 10% stake in Maules Creek to J-Power for $370m. This was a 70% premium to our NPV on the asset at the time. If RES were to sell a 10% stake in Boikarabelo (keeps its ownership at c64% after BEE participation) then we think it could raise in the order of $50m if only Stage 1 was assumed or c$130m with Stage 2. Any asset sale would reduce the size and risk surrounding any on market equity raising. However given that RES owns 74% of the project now, a sale of an asset stake looks to be an option of last resort.

The charts below shows RES cash generation under Stage 1.

**Figure 16. RES cashflow generation – Stage 1 only (US$m)**

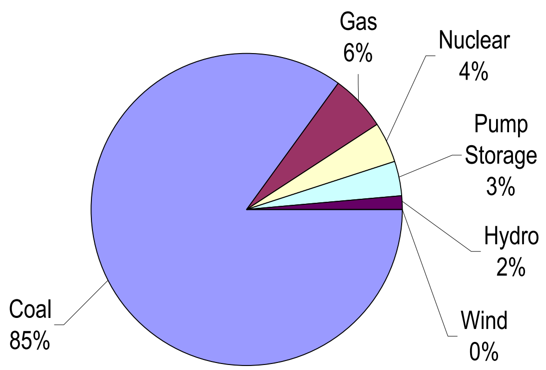
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|---|---|---|---|
| Op Cash Flow | -2 | -6 | -8 | 4 | 151 | 225 | 231 | 228 | 220 | 211 |
| Capex | -12 | -10 | -250 | -400 | -105 | -7 | -7 | -8 | -8 | -9 |
| Free Cash Flow | -22 | -19 | -260 | -398 | 44 | 215 | 220 | 218 | 209 | 200 |

Source: Citi Research

## Eskom's long term need for coal

Whilst Eskom has yet to sign an offtake agreement, we believe that is a function of bureaucracy rather than demand requirements. In a recent presentation Eskom highlighted that it plans to add over 10,000MW's of coal fired capacity to the grid by FY19. At an 80% capacity utilization rate, that additional tonnage would require c30mtpa of coal. That's on top of the existing c40,000MW of power in the country, so the additional coal requirements are substantial.

**Figure 17. Eskom power split 2011**



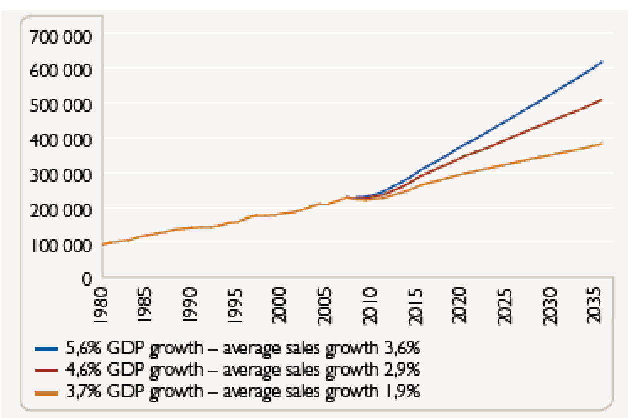

Source: Eskom

**Figure 18. Eskom power additions**

| Project | Projections | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 11/12 FY | 12/13 FY | 13/14 FY | 14/15 FY | 15/16 FY | 16/17 FY | 17/18 FY | 18/19 FY | Total |
| Grootvlei (return to service) | 160 | 30 | | | | | | | **190** |
| Komati (return to service) | 225 | 200 | | | | | | | **425** |
| Arnot capacity upgrade (coal fired) | | 30 | | | | | | | **30** |
| Medupi (coal fired) | | | 794 | 794 | 1588 | 794 | 794 | | **4 764** |
| Kusile (coal fired) | | | | 800 | 800 | 800 | 800 | 1600 | **4 800** |
| Ingula (pumped storage) | | | | 1 332 | | | | | **1 332** |
| Sere wind farm (renewable) | | | 100 | | | | | | **100** |
| **TOTAL (MWs)** | **385** | **260** | **894** | **3 387** | **2 388** | **1 594** | **1 594** | **1 600** | **11 641** |

Source: Eskom

**Figure 19. Eskom electricity sales forecast**




Source: Company reports

**Figure 20. South Africa power capacity - 2009**

| Type | Number | Net max capacity |
|---|---|---|
| Coal-fired | 13 stations | 34 294 MW |
| Gas/liquid fuel turbine | 4 stations | 2 409 MW |
| Hydroelectric | 6 stations | 600 MW |
| Pumped storage | 2 stations | 1 400 MW |
| Nuclear | 1 station | 1 800 MW |
| Wind energy | 1 station | 3 MW |
| **TOTAL** | **27 stations** | **40 503 MW** |

Source: Company reports

Our domestic coal price is effectively ZAR250/t or US$25/t which is a fraction of our long term export price of US$95/t. On an export parity price (export less freight) our long term price of US$95/t would derive a domestic price of cUS$60/t (i.e less c$30/t of freight and port handling).

## Earnings revision

In our updated model, we have also lowered our earnings forecasts to reflect new coal prices as well as the evolution of the project now that mining licence, water rights and rail approval has been has been received.

# Resource Generation

## Company description

RES is a ‘concept coal’ company with assets in the Waterberg region of South Africa. The main development is the Boikarebelo project. It has 3Bt of coal resources and 745Mt of reserves. RES initially plans an open pit producing c6Mtpa of washed coal with a 50:50 split between domestic and export.

## Investment strategy

We rate RES shares as Buy/High Risk. RES is very high risk but potentially a highly rewarding prospect. The company has a huge resource position in the mainly untapped Waterbank coal region of South Africa. Its resource base, build out of domestic South African power capacity and demand for coal from emerging markets such as India is likely to see RES evolve into a 6mtpa coal producer.

## Valuation

Our target price of $0.60/share is set at our NPV of $0.60 for just stage one of the project. Our NPV is based on DCF analysis using a 14% discount rate and a US$95/t long term thermal coal price. We believe a 14% discount rate in our NPV is appropriate given the early stage of the project.

## Risks

We rate RES High Risk given the non producing nature of its assets. Key risks to achieving our target price are as follows:

Commodity price: Coal prices have become more volatile over the past 5 years as the historically bulk traded market has moved to a more terminal market approach. At the same time China has been swinging from importers to exporters to importers of coal which has had a significant effect on the supply-demand balance of the seaborne market. Given the big coal resources that China has, there is always the risk that it could increase domestic production and turn again to a net exporter of coal, having a negative influence on the coal price.

Political Risk: South Africa has had a revolution in its minerals industry in the past decade with the implementation of Black Economic Empowerment.

If the impact on the company from any of these factors proves to be greater than we anticipate, the stock will likely have difficulty achieving our target price. However, should they be less than anticipated, the stock could trade above our target price.

# Appendix A-1

## Analyst Certification

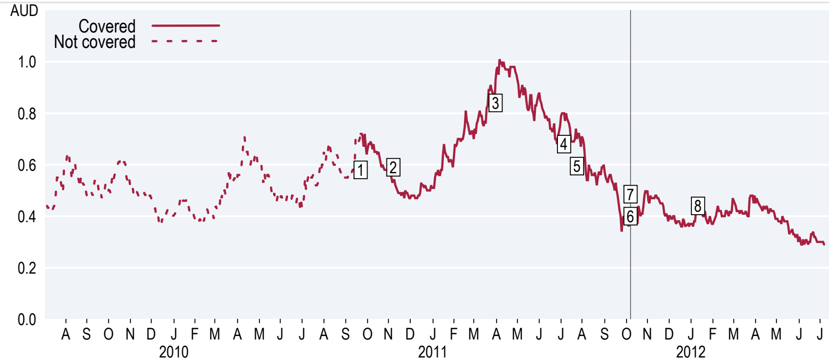
**The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.**

# IMPORTANT DISCLOSURES

## Resource Generation (RES.AX)

**Ratings and Target Price History**
**Fundamental Research**

Analyst: Craig Sainsbury
Covered since February 9 2012




| Date | Rating | Target Price | Closing Price |
|---|---|---|---|
| 1 22-Sep-10 | *1S | *1.00 | 0.72 |
| 2 8-Nov-10 | 1S | *0.95 | 0.54 |
| 3 31-Mar-11 | 1S | *1.40 | 0.93 |
| 4 6-Jul-11 | 1S | *1.50 | 0.80 |
| 5 25-Jul-11 | 1S | *1.45 | 0.70 |
| 6 7-Oct-11 | Stock rating system changed | | |
| 7 7-Oct-11 | *1H | 1.45 | 0.40 |
| 8 11-Jan-12 | 1H | *1.40 | 0.44 |

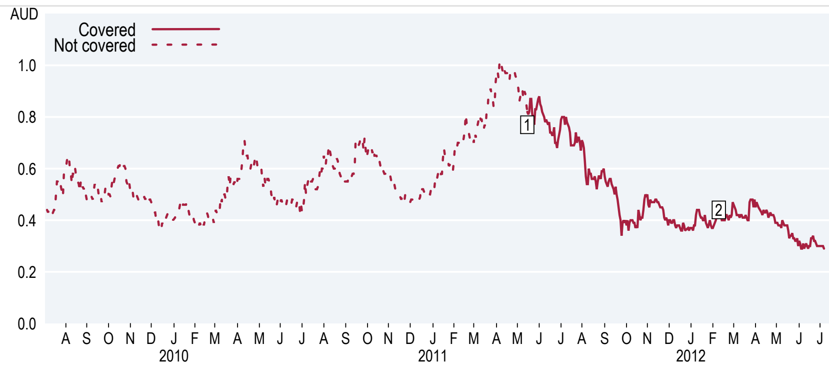
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

## Resource Generation (RES.AX)

**Ratings and Target Price History**
**Best Ideas Research**
**Relative Call (3 Month)**

Analyst: Craig Sainsbury
Covered since February 9 2012




| Date | Rating | Target Price | Closing Price |
|---|---|---|---|
| 1 15-May-11 | *ADD MP | - | 0.85 |
| 2 9-Feb-12 | *REM MP | - | 0.42 |

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Resource Generation in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: Resource Generation.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability which includes investment banking revenues.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

**Citi Research Ratings Distribution**

| | *12 Month Rating* | | | *Relative Rating* | | |
|---|---|---|---|---|---|---|
| ***Data current as of 1 Jul 2012*** | **Buy** | **Hold** | **Sell** | **Buy** | **Hold** | **Sell** |
| Citi Research Global Fundamental Coverage | 53% | 37% | 10% | 10% | 80% | 10% |
| *% of companies in each rating category that are investment banking clients* | 44% | 43% | 40% | 48% | 43% | 45% |

**Guide to Citi Research Fundamental Research Investment Ratings:**
Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.
**Risk rating** takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.
**Investment Ratings:** Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and,

thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation. **Relative three-month ratings:** Citi Research may also assign a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may highlight a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) will indicate the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of NASD/NYSE ratings-distribution-disclosure rules, most preferred calls correspond to a buy recommendation and least preferred calls correspond to a sell recommendation. Any stock not assigned to a most preferred or least preferred call is considered non-relative-rated (NRR). For purposes of NASD/NYSE ratings-distribution-disclosure rules we correspond NRR to Hold in our ratings distribution table for our 3-month relative rating system. However, we reiterate that we do not consider NRR to be a recommendation.

Prior to October 8, 2011, the firm's stock recommendation system included a risk rating and an investment rating. **Risk ratings,** which took into account both price volatility and fundamental criteria, were: Low (L), Medium (M), High (H), and Speculative (S). **Investment Ratings** of Buy, Hold and Sell were a function of the Citi Research expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating. Additionally, analysts could have placed covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and/or trading in the company's securities (e.g. trading suspension). Stocks placed "Under Review" were monitored daily by management and as practically possible, the analyst published a note re-establishing a rating and investment thesis. For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings were:Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return). For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings were:Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

**NON-US RESEARCH ANALYST DISCLOSURES**

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

| | |
|---|---|
| Citicorp Pty Ltd | Craig Sainsbury; Clarke Wilkins; Daniel Seeney; Meredith Schwarz |

## OTHER DISCLOSURES

The subject company's share price set out on the front page of this Product is quoted as at 09 July 2012 04:00 PM on the issuer's primary market.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ('FAA') through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold//Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in **Spain** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. 29 Jose Ortega Y Gasset, 4th Floor, Madrid, 28006, Spain. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations.

The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted.

Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount