

Renergen Ltd
Share Price Disconnected from Underlying

Share Code: REN – Market Cap: R3.7bn – PE: -105x – DY: 0.0%

12m Target Price	8000cps
Share Price	2834cps
Implied Return	182%

Resources | [South Africa](#)

H1:23 Results: Delayed but moving swiftly forward

- Renergen's revenue was flat at R1.2m and the Group reported a loss of -19.31cps (H1:21 -21.05cps) as it neared production status.
- Phase One is moments from producing gas and, although delayed against the original timeframe, this will be an exciting moment as the Group transitions from a developer to a producer.
- Phase Two funding is progressing well, having issued shares to Ivanhoe Mines (though the larger equity deal expired), the CEF has agreed to inject R1bn into the Project, & various blue chip debt funders have expressed interest in funding up to \$1.2bn of debt for the project.

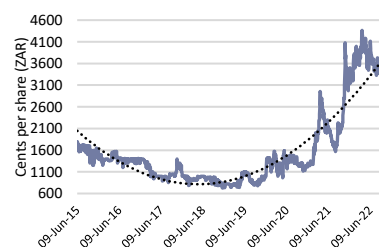
Our Thoughts: Enviable Position

- While Phase One delays are disappointing, the underlying fundamentals and attractive economics of the Virginia Gas Project remain and are further highlighted by the interest in funding Phase Two.
- The conclusion of the well-priced CEF R1bn equity investment is a strong positive and, we believe, the expiry of the Ivanhoe equity deal is a net positive by avoiding expensive dilution.
- Furthermore, the large pool of interested debt funders into Phase Two means that Renergen has both time to find the appropriate equity funding *and* the flexibility to pick terms.
- All in all, we believe that Renergen is in an enviable position for a developer as it transitions into a fully-fledged gas producer.

Valuation and Implied Return: Share Price Disconnected from Value

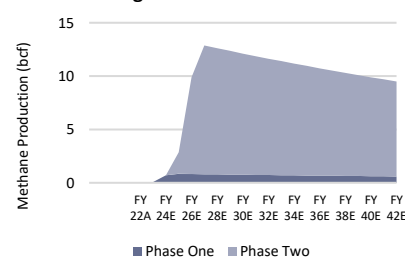
- We see Renergen's fair value at c.6700cps (previously: 6337cps) and 12m TP c. 8000cps (previously: 7491cps).
- With a range of fair values from c.5000cps to c.6700cps (CEF deal implies c.6600cps for REN shares), what is clear is that REN's share price deviates substantially from even the low-end of fair value.

Renergen's Share Price



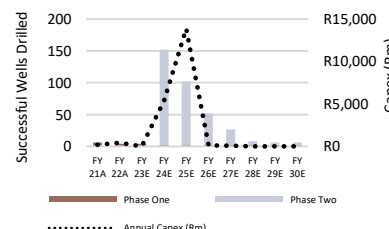
Sources: Profile Media, Blue Gem Research

Renergen's Forecast Production Profile



Source: Blue Gem Research

Renergen's Forecast Capex Profile



Source: Blue Gem Research

	FY 19A	FY 20A	FY 21A	FY 22A	H1:23A	FY 23E	FY 24E	FY 25E	FY 26E
Production:									
LNG - Phase One (Giga Joules)	-	-	-	-	-	76,042	760,417	912,500	894,250
LNG - Phase Two (GJ)	-	-	-	-	-	-	-	2,190,000	9,855,000
Helium - Phase One (thousand cubic feet)	-	-	-	-	-	1,944	19,436	23,324	22,857
Helium - Phase Two (mcf)	-	-	-	-	-	-	-	64,872	291,922
Gas Reserves:									
Natural Gas - 1P (billion cubic feet)	40.8	40.8	215.1	215.1	215.1	215.0	214.3	211.5	201.6
Helium - 1P (bcf)	1.0	1.0	7.2	7.2	7.2	7.2	7.0	6.9	6.6
Financials (R'000's):									
Revenue	2,987	2,635	1,925	2,637	1,234	45,382	453,817	2,122,916	7,636,202
Net Profit (Parents)	-44,976	-52,619	-42,620	-33,750	-24,533	-29,280	149,182	508,287	2,128,720
HEPS (cps)	-47.3	-46.0	-36.3	-27.7	-19.3	-22.3	60.2	141.1	590.8
Price Earnings (x)	-59.9x	-61.7x	-78.1x	-102.2x	-109.0x	-126.9x	47.1x	20.1x	4.8x
Return on Assets (%)	-19%	-8%	-5%	-3%	-1%	0%	2%	8%	23%

Sources: Renergen, Profile Media, BLM, MHA, various company reports & Blue Gem Research workings & assumptions



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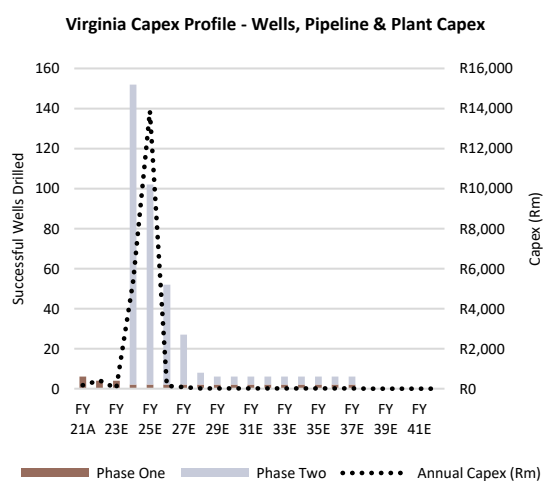
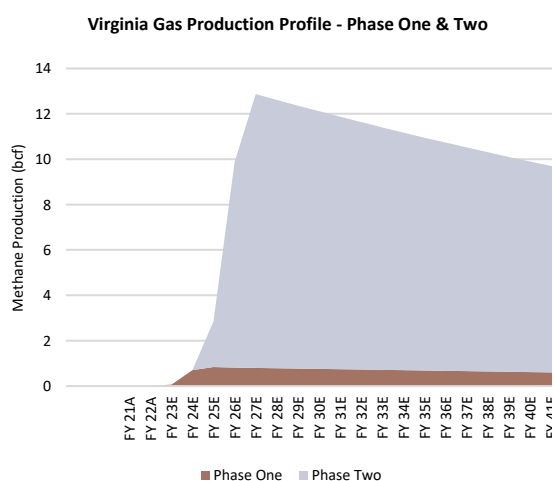
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BLUE GEM RESEARCH

Summary & Forecast:	FY 20A	FY 21A	FY 22A	H1:23A	FY 23E	FY 24E	FY 25E	FY 26E
Production:								
LNG - Phase One (Giga Joules)	-	-	-	-	76,042	760,417	912,500	894,250
LNG - Phase Two (GJ)	-	-	-	-	-	-	2,190,000	9,855,000
Helium - Phase One (thousand cubic feet)	-	-	-	-	1,944	19,436	23,324	22,857
Helium - Phase Two (mcf)	-	-	-	-	-	-	64,872	291,922
Gas Reserves:								
Natural Gas - 1P (billion cubic feet)	40.8	215.1	215.1	215.1	215.0	214.3	211.5	201.6
Natural Gas - 2P (bcf)	139.0	407.0	407.0	407.0	406.9	406.2	403.4	393.5
Natural Gas - 3P (bcf)	284.2	600.1	600.1	600.1	600.0	599.3	596.5	586.6
Helium - 1P (bcf)	1.0	7.2	7.2	7.2	7.2	7.0	6.9	6.6
Helium - 2P (bcf)	3.4	13.6	13.6	13.6	13.6	13.4	13.3	13.0
Helium - 3P (bcf)	6.9	20.0	20.0	20.0	20.0	19.8	19.8	19.4
Financials (R'000's):								
Revenue	2,635	1,925	2,637	1,234	45,382	453,817	2,122,916	7,636,202
Gross Profit	-667	-917	-775	-333	41,153	411,258	1,822,435	6,457,820
Operating Profit	-67,305	-46,773	-38,361	-28,383	513	369,121	1,762,811	6,350,661
Net Profit (Parents)	-52,619	-42,620	-33,750	-24,533	-29,280	149,182	508,287	2,128,720
Issued Shares (000's)	117,427	117,427	123,934	135,122	135,122	360,316	360,316	360,316
Weighted Shares (000's)	109,799	117,427	121,709	127,024	131,073	247,719	360,316	360,316
EPS (cps)	-47.9cps	-36.3cps	-27.7cps	-19.3cps	-22.3cps	60.2cps	141.1cps	590.8cps
HEPS (cps)	-46.0cps	-36.3cps	-27.7cps	-19.3cps	-22.3cps	60.2cps	141.1cps	590.8cps
Dividend Per Share (cps)*	-	-	-	-	-	-	-	561.3cps
Price Earnings (x)	-61.7x	-78.1x	-102.2x	-109.0x	-126.9x	47.1x	20.1x	4.8x
Total Assets	626,491	780,271	1,164,694	1,573,693	2,380,712	15,079,052	15,696,941	18,212,646
Property, Plant & Equipment	350,824	475,558	807,027	1,121,483	1,436,003	6,830,165	20,444,932	19,558,107
Intangible Assets	89,223	112,155	154,023	203,609	214,329	621,689	895,049	1,034,409
Equity	247,230	206,408	286,312	616,349	1,544,468	1,717,832	2,332,557	4,837,298
Return on Equity (%)	-21%	-21%	-12%	-4%	-2%	9%	22%	44%
Total Liabilities	379,261	573,954	878,382	957,344	836,244	13361,219	13364,384	13375,348
Total Debt	351,182	534,293	773,056	802,213	802,213	13326,413	13326,413	13326,413
Return on Assets (%)	-8%	-5%	-3%	-1%	0%	2%	8%	23%
Return on Capital (%)	-11%	-6%	-3%	-2%	0%	3%	5%	17%

Production & Revenue Profile:



Sources: Renergen, Profile Media, Bloomberg, BLM, MHA, various company reports & Blue Gem Research workings & assumptions; * A hypothetical dividend at a 95% payout ratio once Phase Two steady-state is reached, though management may apply these cash flows to further exploration of the Virginia Gas Rights Area as only 14% of it has been captured in the Group's gas reserves (amongst other uses for the cash flows). I.e. Dividend merely illustrative.

H1:22 Results

Renergen (REN) released their H1:22 results showing the following key financial metrics:

- The Group's revenue was flat at R1.2m as the existing pilot project continued operating and an interim loss of -19.31cps (H1:21 - -21.05cps) was reported.
- As the Group remains on the cusp of Phase One production and Phase Two is entering focus, the more important figures lie on its balance sheet, cash flow statement and statement of changes of equity:
 - A further R364m was invested into Property, Plant & Equipment (including intangibles and capitalized borrowing costs) to get Phase One to the point where they are now (just pre-gas), &
 - Capital of R351m was raised during the period to fund this and, along with debt, sees a well-capitalized Phase One and almost doubled the Group's Equity or Net Asset Value to R616m (FY 21: R330m).
- Qualitatively, the Group had a busy period with some large announcements, events & keen underlying interest shown into (debt and/or equity) funding its Phase Two of the Virginia Gas Project:
 - **Funding:** Progressing well
 - Renergen issued shares to Ivanhoe Mines injecting equity, giving Ivanhoe a 4.35% stake in the Group, lining up a potential future gas offtake agreement and adding an Ivanhoe director to its Board. The larger, ratchetting up equity portion of this partnership lapsed due to slow Competition Commission approval but (given the low share price and the deal's pricing based off a discount to the share price) this is likely to be a good thing for existing shareholders and avoids some hefty dilution.
 - On the other hand, the equity investment directly into the project-level by the Central Energy Fund (CEF) was successfully concluded. This deal has lined up the CEF for a 10% stake in the Project for a R1bn, implying a Project value of > R10bn and Renergen's 90%-holding at over 6600cps versus REN's current share price of < 3000cps.
 - Finally, a \$500m debt retainer letter was signed with the US International Development Finance Corporation (DCF). Other debt funders totalling up to \$700m also expressed interest in funding Phase Two of the project.
 - **Phase One:** Delayed but likely to be producing very soon
 - On 8 July 2022, Renergen successfully introduced natural gas to the plant.
 - During October 2022, the plant's LNG system was started up and, while performing tests and optimisation, 190 tons of LNG has been produced. Onsite storage and mobile storage tanks are full. Commercial deliveries of LNG will begin in November 2022.
 - Unfortunately, in the ramp-up towards helium production, the conduction oil system needed correcting and this has delayed full production by a couple of weeks. This has been corrected and the plant restarted on the 27th of October 2022 (LNG should be produced from early November) with focus shifting to helium production thereafter.
 - This final delay allowed a further drilled wells to be connected into the pipeline and boosted through-put to 60% of nameplate capacity (if you recall, Renergen front-loaded this Phase One plant to handle capacity from Phase Two, hence capacity will not be at 100% yet).
 - **Phase Two:** Coming into focus
 - Note the above potential funding lines that have expressed interest in the Group's Phase Two project. Management is targeting a 65% debt ratio and, thus, will need to raise 35% via equity (we have taken this into account in our valuation).
 - Front End Engineering Studies (FEES), additional exploration of the Group's production rights (gas reserves only cover c.14% the Group's rights area) and increasing

crystallization of contracted, non-contracted and related pricing/yields of offtakes are starting to occur.

- At this point, we believe that 34~36,000 GJ of LNG and 5,000kg a day of helium should be produced from Phase Two with a total capex bill of c.\$1bn.
- We have spent some time with management to understand how inflation may put this \$1bn *future* capex budget at risk and they have several observations:
 - Only c.40% of this budget relates to plant and equipment (as opposed wells drilled and connected, labour and so forth), and steel and other commodities make up a smaller subset of this balance of plant.
 - The funding lines (at least the debt quoted above) are likely in USD's and, thus, create a natural hedge pre-build against USD-based commodity prices. Post-build, the LNG and helium output is USD-linked (or, at least, influenced) and, thus, furthermore creates a natural currency hedge.
 - A large balance of the remaining 60% of the capex is Rand-denominated and, indeed, a fair portion of this is sourced from domestic suppliers.
 - The \$1bn price tag is not yet contracted and has been arrived at via uncompetitive mechanisms. Once the FEES can build required specs and a formal tender process can be offered out to the market, there is a chance that competition brings the final price down for the Group.
- While there remain plenty of outstanding key variables, we expect the next twelve months to resolve some of the key ones, not least of which may be how much equity dilution will Phase Two demand.
- In summary, while Phase One delays are disappointing, the underlying fundamentals and attractive economics of the Virginia Gas Project remain and are further highlighted by the interest in funding Phase Two. The conclusion of the well-priced CEF R1bn equity investment is evidence hereof. On the other hand, the expiry of the Ivanhoe equity deal is a net positive by avoiding expensive dilution to shareholders at a critical time while the large pool of interested debt funders into Phase Two means that Renergen has both time to find the appropriate equity funding *and* the flexibility to pick and choose the debt terms they prefer. All in all, an enviable position.

Changes to Model Assumptions

Phase One

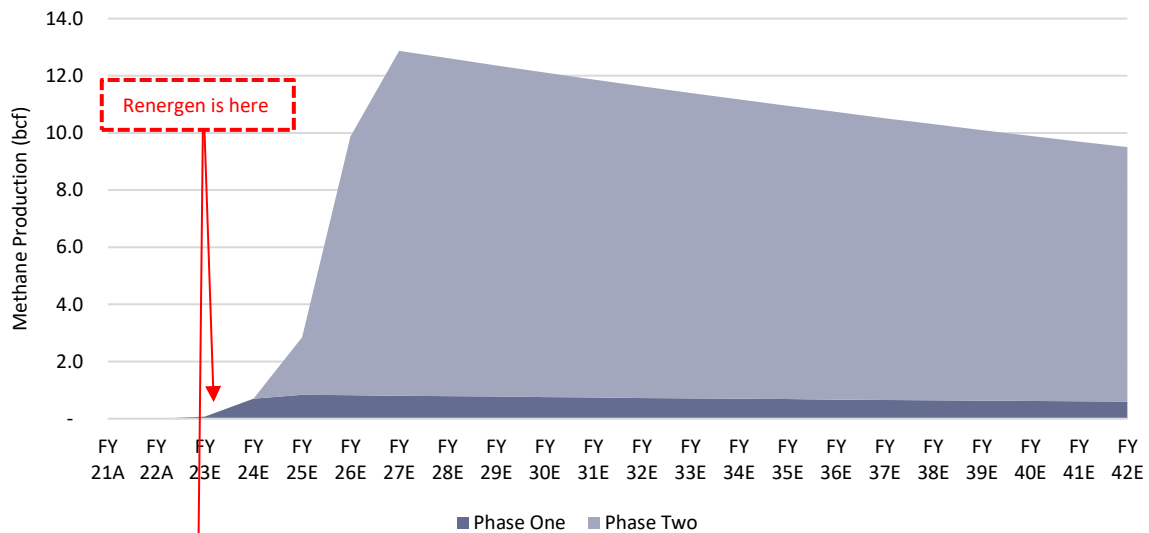
- Due to the above noted plant delays, we have pushed out production expectations for H2:23E, see the ramp-up into FY 24E as contributing the equivalent of nine months of full production and have a first full-year contribution in FY 25E.
- We have factored in a refined maintenance capex budget, adjusted overheads to the current run-rate and added the capex from new wells noted above and adjusted for the 1% lower future corporate tax rate in South Africa.
- The following key spot prices, yields and assumptions have been updated in our Phase One model:
 - **Diesel price:** Updated to 2418.3cents/litre (previously 2241.5c/l)
 - **USD/ZAR:** Updated to R18.10 (previously R15.35)
 - **AUD/ZAR:** Updated to R11.66 (previously R11.08)
 - **South African 10-year bond yield:** Updated to 10.70% (previously 9.97%)
 - **Inflation:** 7.5% (previously 7.4%)

Phase Two

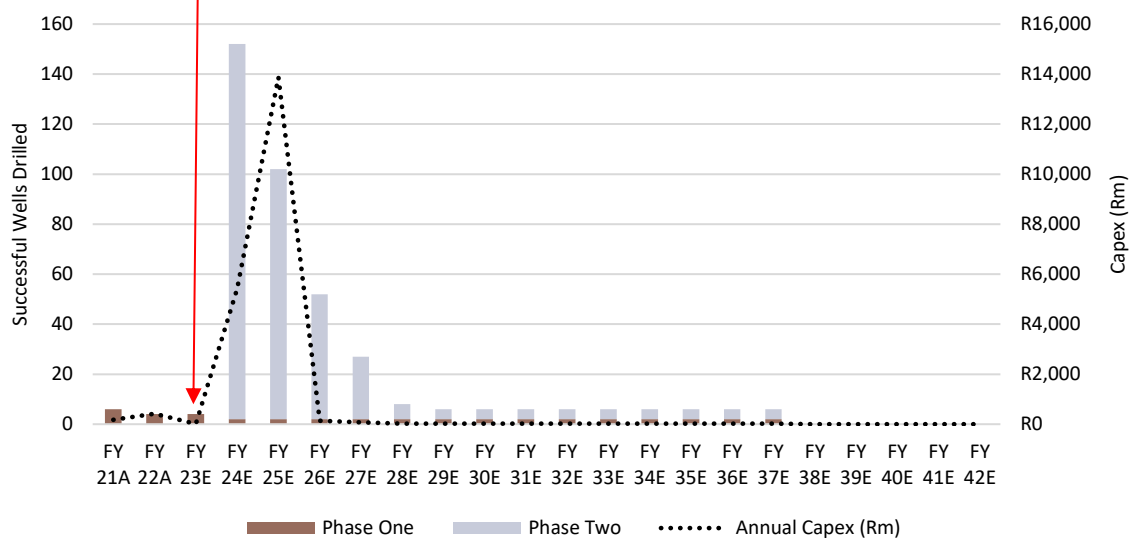
- We have adjusted expected output to be in line with current management guidance.

- Likewise, we see ramp-up starting late in FY 25E and going into FY 26E with the first full-year full-capacity production being seen in FY 27E.
- Other than the above assumptions around spot variables that have been updated, we have assumed the following around LNG and helium pricing:
 - **LNG:** A blended average discount of c.11% for the product mix being sold, based on logistics, industrial and energy customer uptake, existing agreements and volume left up to spot.
 - **Helium:** We have assumed that the ArgHe token price is a *future* price indicating the market’s current extrapolation of the *current* spot price, discounted at Reenergy’s equity discount rate, from 2026 production (i.e. when these tokens could be exchanged for actual Helium). The current token price’s 2026 implied spot price is c.\$236mcf, which we believe is conservative but, at least, gives us a baseline spot price on an arms-length basis.
- We have handled likely Phase Two dilutionary funding by assuming that 35% of Phase Two’s \$1bn capex is funded via equity. We have taken the R1bn from CEF into account and assumed at the balance is raised via a REN share issue at a 10% discount to the current share price.

Figure 1: Our Expected (Methane) Production Profile, & Expected Capex Profile for the Virginia Gas Project



Sources: Reenergy, MHA, & Blue Gem workings and assumptions



Sources: Reenergy, MHA, & Blue Gem workings and assumptions

Forecast & Valuation

Methodology & Universal Assumptions

Other than the spot price adjustments noted in the “Phase One” and “Phase Two” sections above, we have not adjusted any assumptions around our methodology or models.

See our “Initiation of Coverage” ([LINK](#)) for more details on our valuation approach & universal assumptions (other than the changes noted above and below).

We have updated our Cost of Equity (CoE), Cost of Debt (CoD) and Weighted Average Cost of Capital (WACC) to reflect current bond yields, spots and management’s communicated 65% target gearing. The Group’s CoE has risen with the South African 10-year bond yield to 18.95% (previously: 18.22%) and its WACC has followed to 7.8% (previously 6.9%).

The Virginia Gas Project: Phase One

We see Phase One’s NPV at c.R2.6bn, but note that this does *not* include the equity dilution that we expect nor does it control for the 10% minority stake taken out for the CEF’s direct stake. Both of these we account for in the Group’s Sum-of-the-Parts (SOTP).

Table 1: Virginia Project Phase One’s Summarized Discounted Free Cash Flow (DCF) Model

Phase One	FY 23E	FY 24E	FY 25E	FY 26E	FY 27E	...	FY 42E
LNG GJ's Produced (GJ)	76,042	760,417	912,500	894,250	876,365	...	647,256
Helium Produced (mcf)	1,944	19,436	23,324	22,857	22,400	...	16,544
Revenue	45.38	453.82	544.58	533.69	523.01	...	386.28
EBITDA	39.05	437.84	526.45	515.82	505.40	...	371.90
Tax	-15.15	-164.18	-197.20	-193.14	-189.17	...	-138.71
Capex	-10.72	-5.36	-5.36	-5.36	-5.36	...	-
Maintenance Capex	-	-7.75	-7.75	-7.75	-7.75	...	-7.75
Working Capital	-3.63	-36.31	-43.57	0.87	0.85	...	0.63
Assessed Loss	15.15	164.18	-	-	-	...	-
Free Cash Flow	24.70	388.42	272.57	310.43	303.97	...	226.07
Discount Rate	0.93	0.86	0.80	0.74	0.69	...	0.22
PV	R22.91	R334.23	R217.57	R229.86	R208.79	...	R50.32
NPV							R2,598.47

Sources: Reenergy, various company reports, MHA, Profile Media, Bloomberg, & Blue Gem Research assumptions and workings

The Virginia Gas Project: Phase Two

We see Phase Two’s NPV at c.R24.7bn, but note that this does *not* include the equity dilution that we expect nor does it control for the 10% minority stake taken out for the CEF’s direct stake. Both of these we account for in the Group’s SOTPs.

Table 2: Virginia Project Phase Two’s Summarized Discounted Free Cash Flow (DCF) Model

Phase Two	FY 23E	FY 24E	FY 25E	FY 26E	FY 27E	...	FY 42E
LNG GJ's Produced (GJ)	-	-	2,190,000	9,855,000	13,140,000	...	9,704,798
Helium Produced (mcf)	-	-	64,872	291,922	389,230	...	287,473
Revenue	-	-	1,578.34	7,102.51	9,470.02	...	6,994.26
EBITDA	-	-	1,534.70	6,905.01	9,205.10	...	6,778.00
Tax	-	-	-542.99	-2,441.28	-3,253.39	...	-2,395.77
Capex	-	-5,402.00	-13,866.00	-134.00	-67.00	...	-
Maintenance Capex	-	-	-	-278.97	-278.97	...	-278.97
Working Capital	-	-	-126.27	-568.20	-757.60	...	11.42
Assessed Loss	-	-	542.99	2,441.28	3,253.39	...	-
Free Cash Flow	-	-5,402.00	-12,457.56	5,923.83	8,101.53	...	4,114.68
Discount Rate	0.93	0.86	0.80	0.74	0.69	...	0.22
PV	-	-R4,648.39	-R9,943.88	R4,386.31	R5,564.65	...	R915.84
NPV							R24,781.19

Sources: Reenergy, various company reports, MHA, Profile Media, Bloomberg, & Blue Gem Research assumptions and workings

Sum-of-the-Parts (SOTP), 12m TP, Implied Return & Sensitivity Matrix

After considering head office costs, CEF’s R1bn injection and 10% minority stake at Project-level, and giving a zero value to Cryovacc and Evander, we see Renegen’s current fair value at c.6700cps (previously: 6337cps) and 12m TP as a little over 8000cps (previously: 7491cps).

Table 3: Renegen’s Sum-of-the-Parts (SOTP) Valuation

Sum-of-the-Parts (ZAR)	Value
Virginia Gas Project (Estimated NPV)	
- Phase One	R2,598,471,026
- Phase Two	R24,781,191,041
Add: Central Energy Fund equity injection (R1bn)	R1,000,000,000
Less: Central Energy Fund minority stake (10% of Phase 1, Phase 2 & injected R1bn)	-R2,837,966,207
Head Office NPV (i.e., Discount to SOTP)	-R266,855,126
Enterprise Value	R25,274,840,734
Less: Net Debt	-R878,790,000
Equity Value (undiluted)	R24,396,050,734
<i>Issued Share Capital</i>	<i>135,122,000</i>
<i>Potential Phase Two Dilution*</i>	<i>225,194,072</i>
Fair Value (ZAR cps)	6,771cps
Add: Cryo-Vacc Option	-
Add: Evander Speculative Resource	-
Fair Value (ZAR cps)	6,771cps
12m TP (ZAR cps)	8,053cps

Sources: Renegen, various company reports, MHA, Profile Media, Bloomberg, & Blue Gem Research assumptions and workings; * Assuming 35% equity needed to fund Phase Two, less R1bn via CEF, thus leaving the balance through REN share issues at the current share price less a 10% discount.

Alternative Model (Dividend Discount Model) & Discussion on REN’s Discount to Intrinsic Value

Using the above noted assumptions and assuming a 95% HEPS payout ratio for dividends (once Renegen reaches Phase Two steady-state production), we have constructed the below Dividend Discount (DD) Model:

Table 4: Renegen’s Dividend Discount (DD) Valuation

	FY 24E	FY 25E	FY 26E	FY 27E	FY 28E	FY 29E	FY 30E	...	FY 42E	Terminal Year
HEPS (cps)	60cps	141cps	591cps	890cps	885cps	944cps	954cps	...	990cps	-
<i>Dividend Payout Ratio (%)</i>	<i>0%</i>	<i>0%</i>	<i>95%</i>	<i>95%</i>	<i>95%</i>	<i>95%</i>	<i>95%</i>	...	<i>95%</i>	-
Gross DPS (cps)	-	-	561	845	841	897	906	...	940	-
DWT (20%)	-	-	-112	-169	-168	-179	-181	...	-188	-
Net DPS (cps)	-	-	449cps	676cps	673cps	718cps	725cps	...	752cps	-
<i>Discount Factor</i>	<i>0.86</i>	<i>0.80</i>	<i>0.74</i>	<i>0.69</i>	<i>0.64</i>	<i>0.59</i>	<i>0.55</i>	...	<i>0.22</i>	-
Discounted Net DPS (cps)	-	-	332cps	464cps	429cps	424cps	397cps	...	167cps	-
NPV (cps)										5,156cps
Share Price (cps)										2834cps
Implied Upside (%)										82%

Sources: Renegen, various company reports, MHA, Profile Media, Bloomberg, & Blue Gem Research assumptions and workings

The DD Model has a nil terminal year beyond 2042 and takes 20% Dividend Withholding Tax (DWT) out of the dividends before present valuing them at our Cost of Equity-based discount rate. While this conservative approach arrives at a lower valuation than the SOTP-driven NPV, the fair value for Renegen shares is comfortably over 5000cps versus the current share price of 2834cps.

In other words, while a range of fair values for REN shares from c.5000cps to c.6700cps can be argued, what is quite clear across these valuation models is that REN’s share price deviates quite substantially from even the low-end of this fair value range.

Why is there such a deviation from our view of intrinsic value?

There may be several reasons individually or collectively for this disconnect:

- **Renegen is in the risky development stage of its lifecycle:** While this attracts a risk premium that should depress its valuation, we have attempted to capture this in our upwards adjustment to our discount rate. Furthermore, if this is the *only* reason for REN’s discount, the Group’s Phase One will shortly go into full production and within about six months should be at steady-state. Thus, one could

argue that Renergen will soon *not* be a pure development company but a *producing* one. If this is true and this is how the market sees it, we would expect the share price to react strongly positively to this.

- **Complexity of valuation due to numerous variables:** While this may be true for many investors and, despite management’s openness to engage and the numerous reports in the market that have done interpretative “heavy lifting” (Sproule and ours, amongst others), there are further simple yardsticks produced by those with privileged access and a sophisticated view that reveal versions of fair value: the CEF’s due diligence was satisfied and their R1bn valuation for a 10%-stake in the Project implies a Project value of > R10bn and Renergen’s 90%-holding at a fair value of 6600cps (notably close to our SOTPs fair value of c.6700cps). Thus, we believe that “complexity” is not a good enough reason for this discount and should be a transient one as Phase One and Two hopefully deliver attractive cash flows that the market cannot ignore or disbelieve.
- **Small cap discount / South African discount:** While this may be somewhat of a reason for the depressed valuation, our WACC takes this into account utilizing the South African 10-year bond yield (capturing the so-called “SA Inc” discount) and Renergen’s underlying resource is USD-priced with a global potential market. Finally, if we use the fair value range of c.5000cps to c.6700cps, Renergen’s current market cap should be between R7bn to R9bn *before* it raises a further c.R6bn in equity (35% of the \$1bn Phase Two funding), thus leaving it with a implied market cap of c.R13bn to R15bn. In the context of the South African market, this market cap would move it well into the upper echelons of *mid* caps, if not *large* caps (depending on how an investor defines this). And, thus, we believe that these reasons for REN’s discount are weak and unpersuasive.
- **Market is “waiting to see” the dilution for Phase Two:** While this is a fair argument and the dilution may be relatively large, it *has* been well communicated and should not be a surprise. Furthermore, our SOTP valuation *includes* this anticipated dilution and does so at *today’s share price* (we hope that it happens at a *higher future* share price, but we have taken the conservative route). Thus, once again, we believe that this is not a justifiable reason for the discount.
- **We could be wrong in our assessment:** The market may be correct and our view of Renergen’s underlying and our valuation thereof could be wrong. This is the nature of the market and existing in a world with an unknown future. We wholeheartedly acknowledge this as a risk. That said, the use of an inflated risk premium in our discount rate exists for precisely this reason and tries to “price” for the unknown. Thus, while this is always a risk, we believe we have risk-adjusted accordingly. Indeed, as Renergen approaches Phase Two steady-state and “mature producer” lifecycle, we expect to lower the risk-adjusted discount rate and see a valuation *uplift* as the risk lowers.

Thus, in conclusion, we cannot accurately explain the disconnect between Renergen’s current 2834cps share price and our implied fair value range of c.5000cps to c.6700cps.

Key risks to our valuation

The key risks to our above valuation methodology, its related assumptions & its resulting answer are:

- **Spot prices:**
 - The Rand exchanges rate against major currencies,
 - The Oil price & how it affects the domestic diesel price (*including* taxes) and LNG prices (especially their geographic spreads), &
 - The Helium price and our, admittedly creative, use of the ArgHe token as a pre-production future price to derive a current, floating spot price for Helium.
- **Yields, flow-rates & resource risk:**
 - The purity & flow-rates (we have assumed a 2.0% y/y decline from point of peak production over the life of the gas right, though indications are that the gas is biogenic/sustainable and well flow rates may not decline) of natural gas from the Virginia Gas Project,

- And, how much of it is methane (we have assumed 90%) relative to helium (we have assumed 3%), &
- If all the resource that we *think* is there is *actually* there (i.e. the so-called ‘below the ground’ risk).
- **Other risks:**
 - Phase Two size, production, timing, capex and potential funding variables,
 - Inflation and how it may affect both future opex and future capex costs,
 - Interest rates and how it may change borrowing costs and discount rates, &
 - South African sovereign risk.

Disclaimer

Confused by this report? View our [methodology](#), [FAQ](#) and [this disclaimer](#).

**Market prices in this report predominantly set to Closing Price for REN shares, exchange rates, token prices and interest rates noted during the week ending 31 October – 4 November 2022*

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