PAC PARTNERS

EQUITY RESEARCH

Invictus Energy Limited | IVZ

25 July 2023
Analyst: Lawrence Grech
lgrech@pacpartners.com.au
+61 3 9114 7419

Mukuyu-2 drilling starts Sept – potential to prove up a big gas & liquids discovery

Event: Update Report – DecH'2023 activity ramps-up

KEY POINTS

Invictus Energy Limited (IVZ) is an Australian listed group focussed on exploring plus developing petroleum with carbon-offset projects to sustainably supply energy to Africa's energy-hungry, fast-growing economy and population. It is the early mover in petroleum in Zimbabwe.

- SepQ2023 – Mukuyu-2 well starts late September for a ~55-day drill program seeking to obtain fluid samples and reservoir quality data for multiple zones of gas and petroleum liquids shows observed in the Cabora Bassa Basin's first "wildcat" well, Mukuyu-1.
- Mukuyu-2 is 6.8 km north-east from, and 400 metres up-dip of Mukuyu-1. It seeks to appraise the 13 zones of shows found in Mukuyu-1. It is also an exploration well as it drills a discrete horst block on the giant >200 km² structure and aims to penetrate an added target – the Lower Angwa Formation.
- Discovery of an active petroleum system and learnings from drilling the first well considerably reduce risks for this drilling campaign.

KEY DRIVERS

While risks remain as the Mukuyu-2 play relies upon fault-seal closure and finding quality reservoirs within a hydrocarbon column, the upside is potentially large. There is multi-trillion cubic feet of wet-gas potential at Mukuyu and also in other Central Fairway and Basin Margin structures.

- IVZ has sole-risked 829 km seismic and the drilling of Mukuyu-1 and has raised equity capital to drill Mukuyu-2 to retain 80% equity and its Cabora Bassa, Basin-master position. It is leveraged to success.
- A successful Mukuyu-2 would assist IVZ to negotiate favourable farmout of one or more of its three exploration blocks. *IVZ's aim would be to retain the rig for rapid resource delineation drilling*.
- A farmout may be on conclusion of the Petroleum Production Sharing Contract with Zimbabwean authorities, hopefully this year.

INVESTMENT VIEW

- Confirmation that some hydrocarbons shows are capable of producing in commercial quantities both upgrades Mukuyu structure and may upgrade several other identified structures.
- A ~425 km seismic survey to be completed by mid-August has potential to add to its exploration leads and prospects to the east of Mukuyu to considerably add value and farmout appeal to its newly acquired exploration licences EPO 1848 and 1849.
- A farmout would place both a value and 3rd party endorsement of IVZ's petroleum assets, while advancing the project's development.

We re-affirm our recommendation of **Speculative Buy, high risk rating**. Our risked NPV valuation has risen and offset dilution of 2023 capital raise of ~$35m resulting in an unchanged price target of **$0.30/share**.

RISKS – see Page 12, and added disclosures on the final page

Zimbabwean petroleum assets are in exploration and delineation phase and IVZ has no operation revenues. Risks include but are not limited to:

- Drilling and testing may be problematic as well geological failure.
- IVZ relies upon equity capital and/or farmout to fund activities.

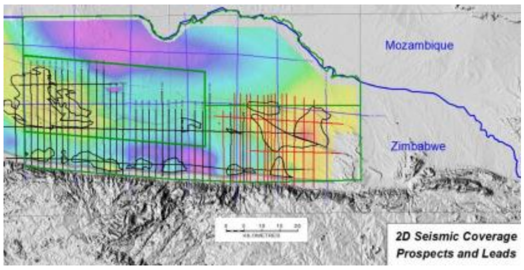
Recommendation - Speculative Buy

Report Type	Update Report
Current Share Price	$0.15/share
Market Capitalisation $m	$177.0m
Valuation $0.33/share	**Target Price $0.30/sh**
Methodology for valuation	Risked NPV
Risk Rating	Very High
Liquidity $/day	5.2m sh/day; $0.67m/day
Top 20	14.1% ownership

IVZ Risked-NPV Valuation & Unrisked

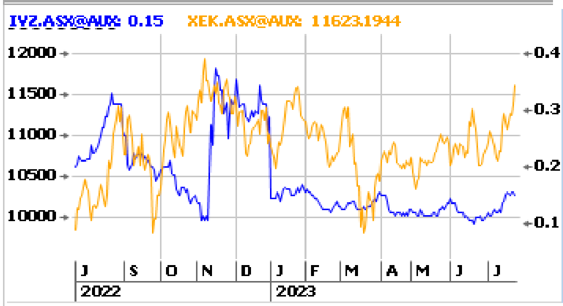
NPV Valn A$ Post-Risked	Risked A$m	Valn A$/sh	Risked Factor	Unrisked A$/sh
1.0 TCF Case	213.3	**0.17**	33%	0.53
1.5 TCF Case	154.8	**0.13**	20%	0.63
Basin Margin leads	58.2	**0.05**	20%	0.12
Net Cash	-8.0	**-0.01**	100%	-0.01
Net corporate	-16.7	**-0.01**	100%	-0.01
Total	401.7	**0.33**	24%	1.38

The giant Mukuyu structure delineated in West; with new seismic underway to extend the fairway East.



Source: PAC Partners estimates

12-mth Share Price (blue) v. S&P ASX 300 Energy Index



Source: Iress

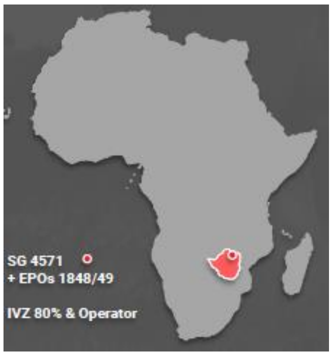
Table of Contents

IVZ – Mukuyu-1 opens up a frontier basin with world class potential

COMPANY PROFILE

Dominant basin position in Zimbabwe

Invictus Energy Limited (IVZ) is an Australian listed group focussed on acquiring, exploring and developing upstream petroleum and carbon-offset projects to sustainably provide energy to Africa's fast-growing economies and population.



IVZ has a dominant 80% holding in three exploration licences: SG 4571, EPO 1848 & 1849 covering prospective portions of the Cabora Bassa Basin in northern Zimbabwe.

WORK COMPLETED

Two major play types identified with 5.5 and 1.2 billion barrels of oil equivalent (boe) potential

Mukuyu-1 wildcat well finds active hydrocarbon system

Primarily a gas play with strong indications of LPG's, condensate and helium.

Required hydrocarbon fluid samples to declare discovery were unable to be recovered

In 2021 – IVZ sole risked an 839 km 2D seismic program that delineated the giant >200km² Mukuyu prospect within the basin's central fairway.

Mukuyu has a potential Prospective Resource containing 20 trillion cubic feet (TCF) of gas and 845 million barrels (mm bbl) of petroleum liquids on an unrisked basis, according to ERCE, an independent resource estimation group. This is ~ 5 billion bbl oil equivalent (boe).

Also identified are five drill ready Basin Margin prospects of ~1.2 billion boe. These are prolific producers in similar rift basin environments in Uganda and in Kenya.

Mukuyu-1 – basin opening well sees hydrocarbon system, but short of a discovery

In 2022, IVZ operated the first deep well in the Basin, Mukuyu-1. It encountered gas and liquid indications in a number of discrete horizons cumulating to hundreds of meters from depths of ~800 metres down to its 3,603 metres measured total depth.

Mukuyu-1 encountered technical difficulties preventing acquisition of comprehensive logs and failure to recover hydrocarbon fluid samples to surface, meaning a hydrocarbon discovery could not be declared.

WORK REQUIRED

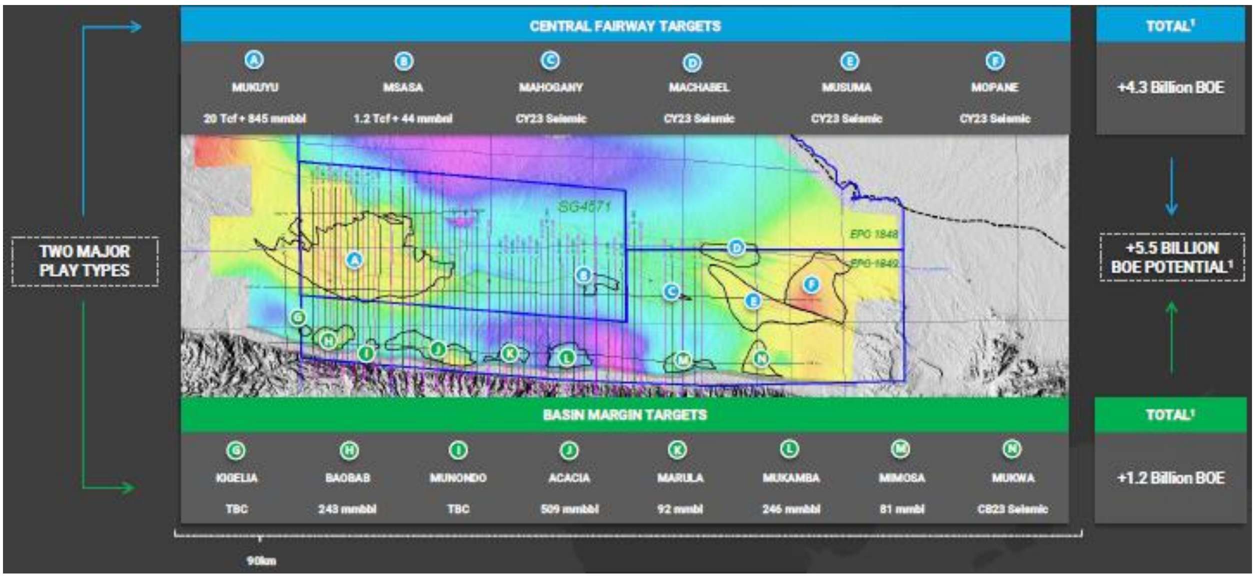
A Mukuyu-2 appraisal well is required to test if this prospect has potentially commercial gas and liquids accumulations

IVZ's Mukuyu-1 well has partially de-risked the Cabora Bassa Basin by proving up thick source rocks intervals and an active hydrocarbon system.

While primarily a gas play, recovered sidewall cores, cuttings and mud returns revealed fluorescence and readings consistent with liquid hydrocarbons, including condensate.

However, further drilling is required to determine reservoir quality and hydrocarbon saturations of shallow Post Dande reservoir and progressively deeper, the Pebbly Arkrose and Upper Angwa horizons to determine if they are of commercial significance.

Leads and Prospects Inventory of Central Fairway (sited similarly as Mukuyu) and Basin Margin targets



Source IVZ May 2023

Mukuyu-1 drilling result – active hydrocarbon system

HYDROCARBONS INDICATED

Gas shows of up to 135-times natural background levels were recorded.

Florescence observed in drill cutting and sidewall cores from the Pebbly Arkrose down to the Upper Angwa.

Indicative of liquid hydrocarbons.

13 potential hydrocarbon zones were observed in Mukuyu-1.

These included within the <u>Post Dande 200 level</u> – but reservoir was poor that may have been impacted by closeness to a major fault.

<u>Pebbly Arkrose 500 level</u> saw gas interpreted from logs and fluorescence perhaps indicating liquids.

<u>Upper Angwa 600-650 levels</u> were the primary targets with significant gas in mud and in measurement-while-drilling systems.

Some 225 metres gross interval.

However deteriorating hole conditions prevented acquisition of full suite of logs nor obtain fluid samples.

Measurement-while-drilling indicators suggested the Mukuyu-1 well terminated with continuing gas shows.

This indicates downdip potential.

KEY ACHIEVEMENTS

IVZ announced on the 8th May 2023, Managing Director Scott Macmillan is quoted: *"Results from the mud gas compositional analysis <u>definitively proves the presence of hydrocarbons in multiple reservoirs</u> pay zones at Mukuyu-1 consistent with the wireline log interpretation, fluorescence, and elevated mud gas readings."*

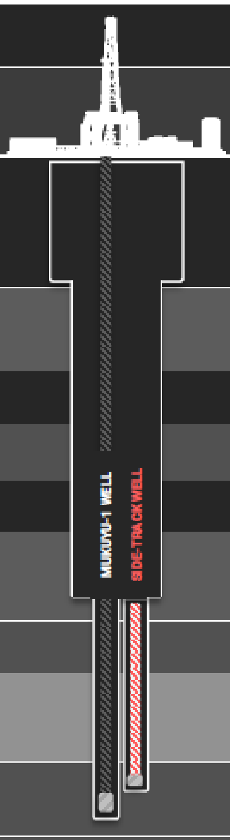
"Analysis shows the presence of light oil and rich natural gas-condensate, with condensate gas ratios estimated at between <u>30 to 135 barrels per million cubic feet</u>."

"The analysed samples demonstrate a consistent, high-quality natural gas composition, [and] <u>containing less than 1% CO_2</u>… [and] presence of [~0.1%] <u>helium gas</u> in commercial concentrations in multiple reservoir units… provides an additional high value byproduct."

Total well penetration was 3,603 meters, intersecting six postulated major reservoir target horizons. The well design included a challenging deviation of well path up to 33 degrees from vertical. Lack of sample recovery means Mukuyu-1 is not a "discovery".

Schematic of Mukuyu-1 well and Mukuyu Sidetrack-1 wells drilled in DecQ'2022

Each of the target formations prospective Resource, approximate depth encountered, each horizon's allocated number and formation name are indicated below.



MUKUYU-1	Approximate Depth to Top Structure	Horizon	Target Formation
1.9 Tcf + 77 mmbbls	750m	200	Post Dande
4.5 Tcf + 181 mmbbls	1,200m	250-350	Dande
4.5 Tcf + 183 mmbbls	1,800m	400	Forest
2.5 Tcf + 102 mmbbls	2,300m	500	Pebbly Arkose
4.1 Tcf + 182 mmbbls	2,800m	600-650	Upper Angwa
Additional Upside	3,600m	650+	Intra Upper Angwa
2.6 Tcf + 120 mmbbls	4,300m	700	Lower Angwa
20.0 Tcf + 845 mmbbls (gross mean un-risked)	Total		

Mukuyu-1 was sited in a position that was not favourable to test the Lower Angwa 700 level, and this remains an untested exploration target. Mukuyu-2 will seek to test the 700 level.

DecH'2023 Activity Ramps Up – Mukuyu-2 drilling

Environmental approvals extended for two years to undertake seismic & drilling

Mukuyu-1 provided many operational lessons in drilling.

Specialists like SLB and Geolog to join Baker Hughes for key operations to maximise Mukuyu-2 operational effectiveness

Well pad for Mukuyu-2 prepared and the rig will be soon moved the 6.8 km from Mukuyu-1

PREPARATIONS FOR DRILLING MUKUYU-2

In May 2023 IVZ received Environmental Impact Assessment renewal approved by the Zimbabwe Environmental Management Agency. It provides a two-year period to May 2025 for Geo Associates (Private) Ltd, IVZ's 80% owned subsidiary and holder of SG 4571, EPOs 1848 and 1849, permission to operate in accordance with the Environmental Management Act with specified conditions. This encompasses seismic and exploratory drilling.

In June 2023, IVZ awarded the well services contracts for drilling Mukuyu-2 well to the following groups:

- SLB (i.e. Schlumberger) was awarded the open-hole wireline logging contract;
- Geolog International has been awarded the mudlogging contract;
- Baker Hughes in combination with NOV have been awarded the directional drilling and logging while drilling (LWD) contracts;
- Baker Hughes retains the cementing, drilling fluids & mud engineering, tubular running, fishing & abandonment, liner hangers, reservoir technical services and project management.

The Exalo Rig 202, stacked at Mukuyu-1 site has undergone maintenance and will install a new mud tank system. This is important for new formulation mud to reduce reservoir damage and mud losses encountered in Mukuyu-1, while still providing drilling efficiency, control and safely.

Preparations for the rig move 6.8 km north-east and well pad clearing are well advanced.

MUKUYU-2 TO START DRILLING SEPTEMBER 2023

On the 13th July IVZ announced the location for the Mukuyu-2 well, as shown below.

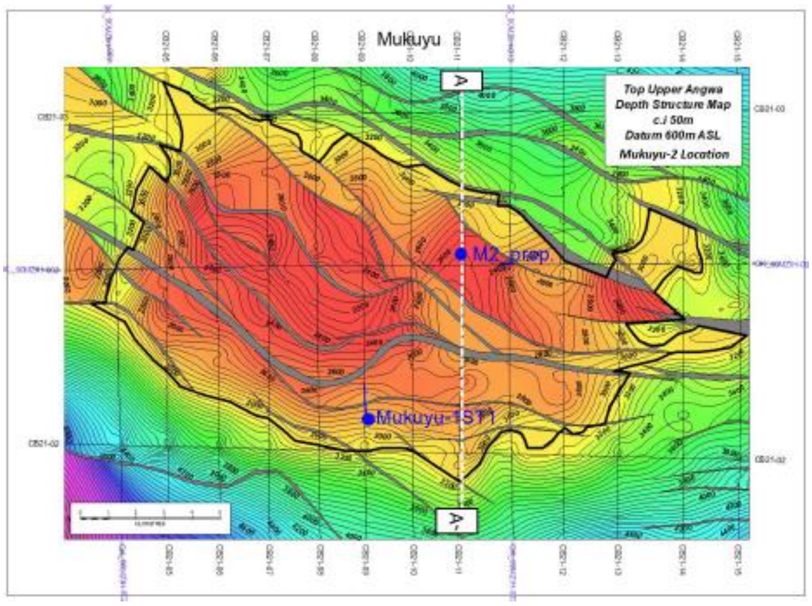
Big 6.8 km step out provides an indication of the Mukuyu structures enormous size

The map, left, shows progressively higher elevations as warm to red colours.

Mukuyu-2 is interpreted to be higher on the greater structure than at the Mukuyu-1 location in the yellow-orange shaded region.

Mukuyu-2 is to be 6.8 km north-east from Mukuyu-1 and over 400m updip at the primary Upper Angwa target, with a planned depth of 3,700 metres.

Mukuyu-2 aims to penetrate all the horizon's found in the initial well, plus access the Lower Angwa.



The large in-field distance and vertical displacement of sedimentary sequence provides an idea of the huge scale of the Mukuyu structure.

Starting September, drilling is scheduled for 50 to 60 days and drill to 3,700 metres

Mukuyu-2 drilling start-up will likely be in the 2nd half of September 2023, with the well operations of 50 to 60 days.

Timing of start-up will be governed by delivery to site of all equipment and personnel to ensure smooth and timely drilling, sampling/logging and HSE operations.

MUKUYU-2 AND RISK REDUCTION

Mukuyu-2 is both an appraisal and an exploration well

This means it has somewhat moderated risk compared to the Mukuyu-1 'wildcat' well

Plus has the added upside of exploring the deeper Lower Angwa target for the first time.

Leanings from Mukuyu-1 and a structurally higher location lowers drilling risks to reach the main target –the Upper Angwa Formation.

<u>Mukuyu-2 is an appraisal well</u> that has the benefit of valuable leanings from the Mukuyu-1 well, which was a true "wildcat" well - the first deep drilling undertaken in the entire Cabora Bassa. Chief among the lessons was the discovery of an active petroleum system. Additionally, valuable information was gathered on rock compositions, pressures and conversion of time-to-depth observation has enabled refinement of IVZ's seismic interpretation.

<u>Mukuyu-2 also has features of an exploration well</u> as it is to test a discrete fault block within the greater Mukuyu structure. The structurally higher location enables the Exalo Rig 202 to reach the Lower Angwa Reservoir target that was not drilled in Mukuyu-1.

Elements of risk reduction we see at Mukuyu-2 are as follows:

- Lower drilling risk to reach and test the primary objective Upper Angwa Formation. This is due to this formation being 400 metres shallower than at the Mukuyu-1 location.
- Mukuyu-2 appraisal well's structurally higher position than the original well generally reduces risk of falling below gas/liquids to water contacts.
- The well is slated to drill 3,700m. While this is marginally deeper than Mukuyu-1's 3,603m (measured depth, not true depth) the Mukuyu-2 well should be less risky to drill as the original well provides much data to better design the new well bore.
- The Mukuyu-2 well design is to be in a near vertical drillhole with a maximum 12 degree deviation from vertical. This is less demanding compared to Mukuyu-1's deviation from vertical was up to 33 degrees.
- The drilling trajectory appears to be roughly equi-distant from interpreted fault boundaries. This may reduce localised pressures and potentially avoids contaminated reservoir rocks observed in Mukuyu-1 where the well-bore came close to major fault. This was observed at the Post Dande level.

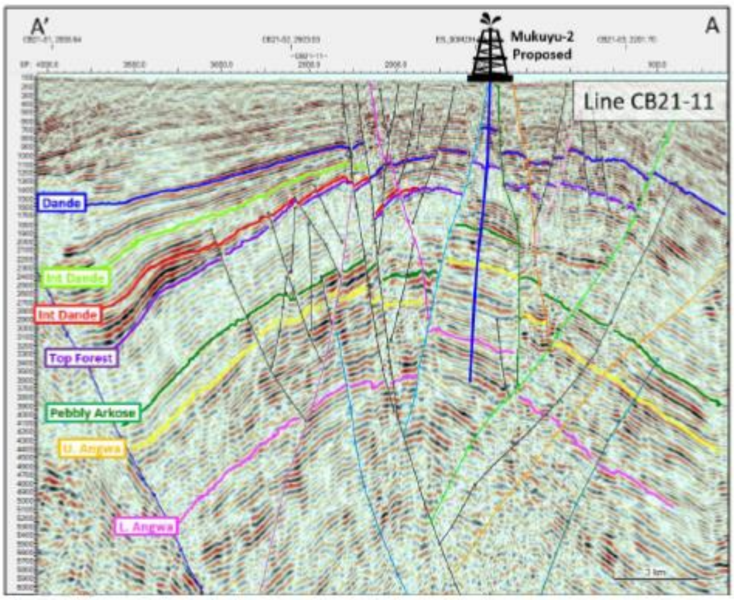


Figure 2 - Mukuyu-2 planned well trajectory and seismic cross section

- IVZ have reviewed drilling operations of Mukuyu-1 to improve operational effectiveness in the drilling of Mukuyu-2. We believe new procedures, supervision and introduction of specialist mud-controller and logging operator will provide more operational uptime and more data to make assessments of the commerciality of any hydrocarbon finds that Mukuyu-2 makes.

However, risks remain including:

- *on reservoir quality,*
- *fault-dependant seal and*
- *overall columns or volumes of hydrocarbons in reservoirs intersected at Mukuyu-2*

Key Risks Remain – fault seal, reservoir quality and hydrocarbon column

- Mukuyu-2 is testing a different fault block to Mukuyu-1. There is risk that hydrocarbon migration paths have been altered and so impacting reservoir fill.
- Mukuyu-2 relies upon fault-seal to create gas and liquid hydrocarbons trap. It remains to be seen if the main horst block-bounding fault is an effective barrier.

- Mukuyu-2 aims to appraise the reservoir quality and hydrocarbon saturation levels in up to seven named major reservoir units. There is no guarantee that adequate quality reservoirs with high hydrocarbon saturations will be found.

DecH'2023 Activity – Additional Seismic Program

IVZ has initiated line clearing and data collection for 425 km of 2-Dimensional seismic program announced on the 17th of July, with planned lines are depicted below in red.

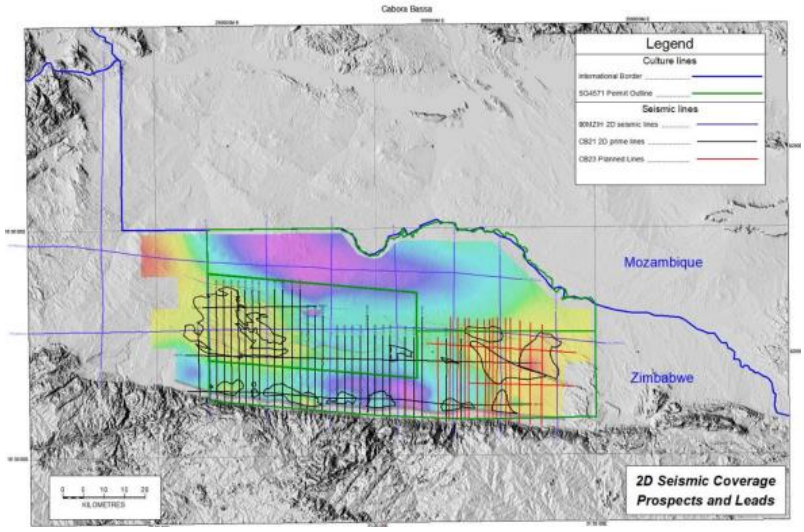
IVZ expect seismic acquisition to be complete by mid-August.

Data processing will take some months to complete with initial output may be available towards the end of 2023.

425 km of new seismic to be acquired east of Mukuyu structure by late August 2023

Both the Central Fairway and Basin Margin play types are to be possibly added to IVZ's existing leads and prospects

This seismic program is the second initiated by IVZ with a 2021 survey gathering 839 km efficiently and without safety incident.



The seismic programs provided both training and employment opportunity locally, in an economically disadvantaged part of Zimbabwe.

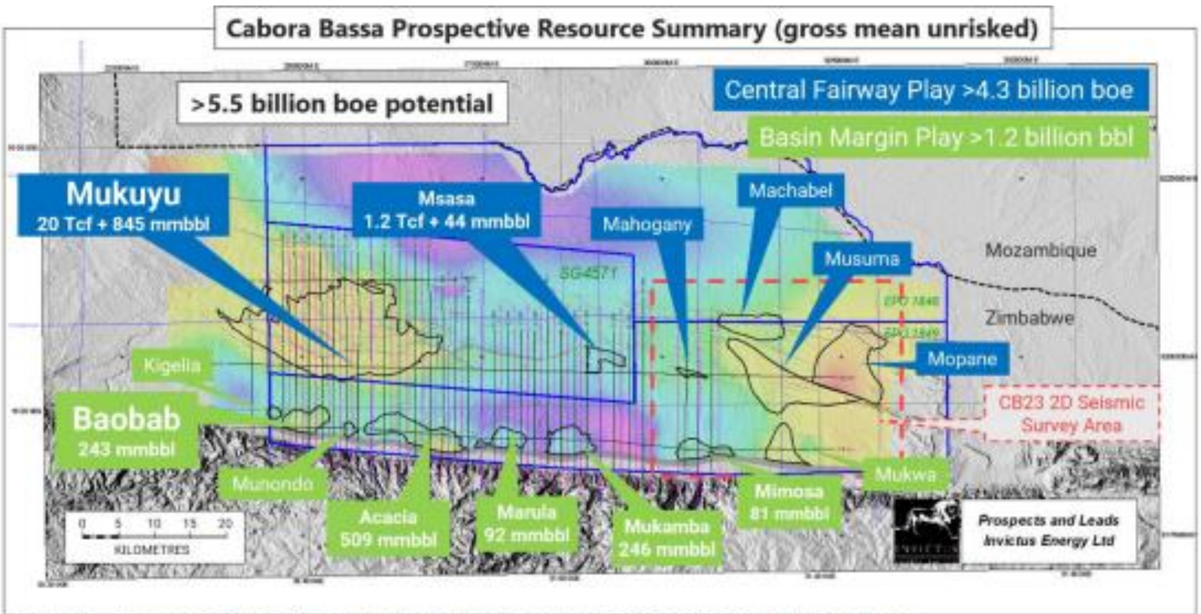


Figure 1 - Cabora Bassa Prospect & Lead Map and CB23 Seismic Survey Area

UPGRADING EXPLORATION PROSPECTIVITY EPO 1848 AND EPO 1849

Addition of prospects can add value to IVZ's 80% owned exploration licences EPO 1848 and EPO 1849

The seismic survey will be acquired in EPO 1848 and EPO 1849 exploration licence areas. These lie immediately to the East of IVZ's original block SG 4571, which contains the Mukuyu structure. A small number of widely spaced seismic lines within EPO 1848 and EPO 1849 suggested additional Central Fairway and Basin Margin structures.

To assess structure validity requires added density of seismic data acquisition. We see survey success as being measured by the addition of drillable targets. This can lead to an increase in the farmout value of EPO 1848 and EPO 1849 exploration licences.

Amplitude anomolies on earlier sesmic will be more closely scrutinised with the current seismic survey.

IVZ has been keen to follow up seismic amplitude anomalies such as "flat spots" (often indicative of hydrocarbon on water contacts) and velocity interval slowdowns, which correlate with the hydrocarbon bearing intervals intersected in the Mukuyu-1/ST1 well.

One such example was released by IVZ on the 14th June 2023 on the Machabel Lead in EPO 1848, that on earlier seismic exhibited a very substantial ~10 km flat spot.

We are confident that additional drilling propspects will emerge for future exploration drilling.

The current program to obtain closer density seismic coverage can assist IVZ in transforming leads to prospects and ranking future exploratory drilling.

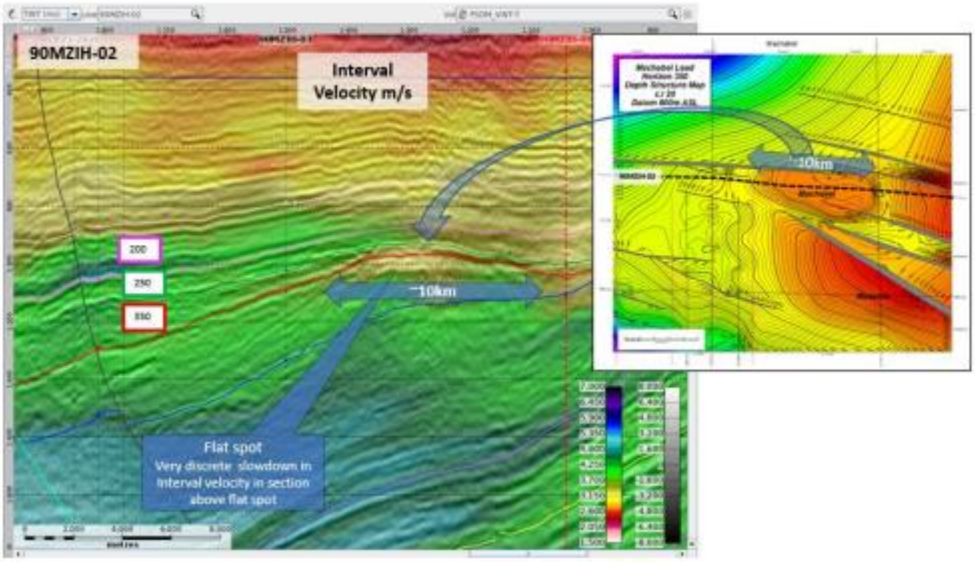


Figure 2 - Machabel Lead Example: flat spot & interval velocity slowdown showing conformance to structure

GAS ANALYSIS AND FUTURE DEVELOPMENT IMPLICATIONS

Some African Rift Basins have been host to hydrocarbons finds and sometimes helium.

It has been recognised for decades that African rift Basins could be productive for hydrocarbons. This has proved to be the case in Uganda's Lake Albert Region and in Kenya's Lokichar Basin where oil and associated methane has been discovered. In Tanzania, the rift at Lake Rukwa has seen numerous seeps of high helium content gas.

Cabora Bassa Basin gas appreas to have low carbon dioxide and attractive liquids by-product levels in some horizons.

International oil major Mobil in the 1990's saw potential in northern Zimbabwe's rift system that formed the Cabora Bassa Basin. However, after reconnaissance work and a seismic program, Mobil concluded the Basin was gas prone. With little local market and absence of infrastructure, it decided not to drill. However, gas markets now exist.

We agree that the Cabora Basin is likely to have generated large volumes of methane.

We have not yet factored in black oil resource into our scenario.

Similarly, we have not included any upside to our analysis if Helium is extractable as a valuable by-product.

IVZ's 8th May 2023 announcement provided additional conclusions from examination of Mukuyu-1's drill cuttings, mud gas, sidewall cores and logs as follows:

- Presence of light oil, gas-condensate and helium confirmed from Mukuyu-1 mud gas compositional analysis.
- Results confirm multiple oil and gas pay zones in sandstone reservoirs consistent with wireline log interpretation.
- The Upper Angwa reservoirs contain liquids rich gas with condensate-gas-ratio (CGR) estimated between 30 to 135 bbls/MMscf.
- High quality gas with minimal CO_2 content of less than 1%.
- Helium content [indicated at ~0.1% of gas] is consistent with some gas producers that produce commercial volumes of helium as by-products.

We have boosted our liquids ratios in our scenario valuations.

These findings have had impact upon our risked valuation, which we discuss in the next section. Specifically, we have revised up our estimation of the liquids content of gas.

We ascribe no value to helium occurrences as it is too early to extrapolate whether the shows are prevalent; or whether it is economic to extract helium. However, helium does provide additional upside potential to our valuation.

Valuation and Recommendation – Update

Speculative Buy with Very High-Risk Rating; Price target $0.30/share.

Our updated price target and recommendation remained unchanged from early 2023.

VALUATION CHANGES – FROM JANUARY 2023 TO NOW

The unchanged target price arises takes account of the discovery of an active hydrocarbon system by Mukuyu-1 well, but still with key assessments to be made about its commercial significance. Our work also took account of the following findings:

Mukuyu appears to have more liquids in the gas stream than our earlier estimate.

Discovery of an active hydrocarbon system partly de-risks Mukuyu as a potential development.

We accounted for IVZ's capital raising in the JunH'2023 and its extra spending on Mukuyu-2 in our updated valuation.

- Positive on higher liquids content of a Mukuyu in our development scenario.
- Smaller Basin Margin developments due to some ambiguous results in upper reservoirs. *Discussed in more detail below.*
- A delay in our development scenario impact on valuation was partly offset by 10% higher oil price of (Real-2028) US$79/bbl and 2% rise in gas prices to US$4.85/GJ, still cheap versus high costs for imported diesel and feedstocks.
- Our Mukuyu 1.0 TCF first development's risk adjustment was increased from 1-in-4 to a 1-in-3 chance. That is our confidence level rose from 25% to 33% of gross unrisked valuation. This scenario sees the gas sold within Zimbabwe.
- Our Mukuyu 1.5 TCF second development was reduced from 25% to 20% of gross unrisked valuation. This reflects the greater risk and cost of exporting the gas from Zimbabwe to secure markets for this bigger 2nd development.
- We incorporated the cost of the Mukuyu-2 well and current seismic program.
- We also rolled forward our estimates for the 6 months elapsed.
- We accounted for IVZ's issuance of ~$35m in equity during the JunH'2023 which on a fully diluted basis added ~90 million securities (shares plus the then near-to-the-money options) on our scenario from earlier this year.

While our valuation rose $0.03/share to $0.33/share over January 2023 levels, extra issuance of options may see dilution back to $0.30/share as options come into the money.

Overall, these amendments resulted in an **updated valuation of $0.33/share**.

However, this equity was raised with currently out-of-the-money options. As the share price rises, our $0.33/share valuation falls to $0.30/share on dilution impact. **We therefore have set our 12-month target price at $0.30/share.**

Our Price Target remains $0.30/share – unchanged from our January 2023 evaluation.

Changes in our valuation and target price are summarised in the table below.

DCF BASED VALUATION

DCF after project risking		A$M	$/share	Risked % (	Net & gross resource		
1.5 TCF Case	50%	9.8	$0.00	-5%	8	16	mmboe
1 TCF Case	50%	91.4	$0.07	8%	5	10	mmboe
Basin Margin C	50%	-0.9	$0.00	0%	-4	-8	mmboe
Basin Margin D	50%	-0.9	$0.00	0%	-4	-8	mmboe
Projects Valuation	**50%**	**99.4**	**$0.06**	**1%**	**5**	**10**	mmboe
Net Cash	est.	-10.2	-$0.01	0%			
Net ST Liabilities	est.	-6.5	-$0.01	0%	**Prices nominal as at 2028**		
Options Exercise	est.	-19.5	-$0.02	0%	Brent Oil	US$/bbl	US$8.0
Other incl. Corporate Cost		-1.7	$0.00	0%	Zimbab Gas US$/GJ		US$0.12
Total Valuation		**61.5**	**$0.03**	*0%*	AUD/USD		-US$0.03
					Cost of Debt %pa		0.0%
Price Target: 12-months			**$0.000**		Shares fully dilut. m.		90.1

Table Source: PAC Partners estimates

CHANGES TO OUR ASSESSMENT OF RESOURCE

Our project scenario sees unchanged gas development, though with higher liquids content as a valuable by-product at Mukuyu.

During the latter part of drilling of Mukuyu-1 in the December 2022 to January 2023 period, our risk-adjusted valuation and 12-month price target was $0.30/share.

The analysis was dependent upon discovery and development of around 530 million bbl of oil equivalent (including 2.5 trillion cubic feet of gas - TCF) in the greater Mukuyu structure. We also ascribed 102 mm boe finds in Basin Margin Prospects. To this analysis we then provided risk adjustment to a fraction of gross project valuation.

While Mukuyu-1 was an inconclusive result in declaring a hydrocarbon discovery, it crucially indicated that an active hydrocarbon system existed, with multiple horizons having dry gas and in some gas with gas-liquids shows.

Revised Development Scenario for valuation – more liquids, a little less Basin Margin

The Mukuyu-1 well indicated a much thicker Upper Angwa Formation and greater combined thickness of source rocks. There appears to be higher liquids content than our earlier expectation. This led us to a modest upgrade of 2% to 539 mm boe for our Mukuyu development scenario ascribed to higher levels of valuable liquids. Gas volumes developed in our scenario work was unchanged at ~2.5 TCF.

Upper reservoirs yielded inconclusive results in Mukuyu-1 well.

We dial back our expectation of resource in Basin Magin plays by 15% to 85 mm boe.

However, the shallow upper sections in Mukuyu-1 proved to have complex reservoir rock characteristics. While this is perhaps a localised issue as the Mukuyu-1 well was drilling close to a major fault, we have downgraded our assessment of Basin Margin Resource scenario by 15% to 86 mm boe. This is due the preponderance of upper reservoirs in the Basin Margin plays with either fewer or absent lower reservoir targets.

Our current valuation scenario is based upon the following:

We see our scenario analysis as developing a small fraction of the indicated pre-drill Prospective Resource.

- *At Mukuyu – our scenario develops 12% of pre-drill assessment.*
- *At Basin Margin plays – our scenario develops 7% of pre-drill estimate.*

- Mukuyu Development Scenario of 539 mm boe – including 2,492 bcf of gas. This represents only 12% of the pre-drill Prospective Resource.
- Basin Margin Development Scenario of 86 mm boe. This is just 7% of pre-drill Prospective Resource.

PAC Valuation Inputs versus Pre-drill Estimates	% prospect	Total mmboe	Gas only bcf	PAC as % of Pre-drill
Pre-drill				
Mukuyu Prospects	100.0%	4,279	20,012	
Mukuyu - PAC assumption		539	2,492	12%
Pre-drill				
Basin Margin plays	100.0%	1,171		
Basin Margin - PAC assumption		86		7%

Sources: IVZ announcements in 2022 on Prospective Resource and PAC Partners estimates

DETAILED VALUATION – AND $0.30/SHARE PRICE TARGET

IVZ is leveraged to success.

Risked valuation of $0.33/share, Price Target is $0.30/share – incorporating dilution

Confirmation of a large producable liquids rich gas discovery upgrades not only Mukuyu, but numerous other prospects within its 3 licences.

Note that as IVZ achieves various project milestones, risk declines and our confidence factor rises leading to generally higher valuation. For example our 1.0 TCF wet gas development, risked valued is $213m, but unrisked is worth $646m or A$6/boe. *Our total unrisked valuation of IVZ is assessed at A$1.7 billion or A$1.38/share.*

IVZ has 80% project equity, though we assume it conducts a 25% farmout on a development decision. In addition the Zimbabwean Sovereign Wealth Fund has a right to obtain 10% equity in return for repaying its share of development cost from cashflow.

Our Price Target incorporates exercise of currently out-of-the-money options.

If IVZ's share price rises towards our valuation, currently out-of-the-money options are likely to be execrcised and accounting for this dilution the valuation settles at $0.30/share. We use this level of valuation as our 12-month Price Target.

Invictus Energy Ltd Diluted No. sh. mil. 1,229	$0.150 Ownership %	Petroleum Sales - Net mm boe	Gas Sales Only - Net bcf	Confidence Factor %	Risked Valuation A$m.	Risked Valuation A$/sh	Deliveries Valuation A$/boe	Unrisked Valuation Valn A$m.	Unrisked Valuation A$/sh	Deliveries Valuation A$/boe
1.0 TCF Case	49.5%	107	493	33%	213.3	0.17	2.00	646.5	0.53	6.06
1.5 TCF Case	49.5%	160	741	20%	154.8	0.13	0.97	774.2	0.63	4.83
Baobab Basin Margi	49.5%	21	99	20%	29.1	0.02	1.36	145.5	0.12	6.82
Basin Margin other	49.5%	21	99	20%	29.1	0.02	1.36	145.5	0.12	6.82
Projects Valuation	*49.5%*	310	1,430	25%	426.4	0.35	1.38	1,711.6	1.39	5.53
Net Cash				100%	-7.7	-0.01		-7.7	-0.01	
Net ST Liabilities				100%	-7.2	-0.01		-7.2	-0.01	
Options Exercise				100%	6.5	0.01		6.5	0.01	
Other incl. Corporate Cost				100%	-16.4	-0.01		-16.4	-0.01	
Financials & Corporate		NetDeliveries			-24.7	-0.02		-24.7	-0.02	
Total Valuation - current dilutic		310	1,430	24%	**401.6**	**0.33**		**1,686.8**	1.37	
Total Valuation - dilution at TP				25%	**425.1**	**0.30**		**1,710.3**	1.23	
Target Price $/share					401.6	**0.30**				

Source: PAC Partners estimates

CAPITAL STRUCTURE

Invictus Energy Ltd Capital Structure	No. of Securities # mil.	Close to In-money # mil.	Strike Price A$/unit	Share Price A$/share	Options Exercise A$m.	Capital- isation A$m.
Issued: fully paid shares	1,180.181	1,180.181		$0.150		177.0
Options Series						
IVZAM 30/03/2024	22.286	22.286	$0.17		3.8	3.3
IVZAK 31/01/2025	26.331	26.331	$0.14		3.7	3.9
IVZAN 23/07/2024	12.000	0.000	$0.2355		0.0	0.0
IVZOA: Opts 7Jun26	156.397	0.000	$0.20		0.0	0.0
IVZAR opts Aug27	108.696	0.000	$0.40		0.0	0.0
IVZAA Opts 1Feb26	13.587	0.000	$0.46		0.0	0.0
IVZAO 26/07/2023	37.516	0.000	$0.35	*Expiring*	0.0	0.0
IVZAP Perf Rghts 31Dec24 $0.50	*22.500*	*0.000*	*$0.50*	*hurdle pr.*	*0.0*	0.0
IVZAQ Perf Rghts 31Dec26	*22.500*	*0.000*	*$0.75*	*hurdle pr.*	*0.0*	0.0
Total Options	421.813	48.617			7.5	7.3
Total Securities & Fully diluted	1,601.993	1,228.798			7.5	184.3

Source: IVZ company announcements

Note that 37.516 m options with $0.35/share strike are likely to expire at the end of July 2023. Performance Rights are geared to shareholder alignment with 22.5 m requiring a share price hurdle of $0.50/share and 22.5 m need a $0.75/share traded price for free vesting.

Success in the Mukuyu-2 program may see options with strike prices of $0.14/unit, $0.17, $0.20 and $0.2355/share trade into the money. We have accounted for this dilution in our Target Price analysis.

Investment Thesis and Investment Catalysts

OUR INVESTMENT THESIS

IVZ's dominant equity position in the Cabora Bassa Basin in Zimbabwe means that it has immense leverage to exploration success.

While risks remain as the Mukuyu-2 play relies upon fault-seal closure and finding quality reservoirs within a hydrocarbon column, the upside is potentially large.

There is multi-trillion cubic feet of wet-gas potential at Mukuyu and in other Cemtral Fairway and also in Basin Margin structures.

IVZ has a strong track record of achievement

IVZ has sole risked and funded activities to preserve this leverage.

IVZ has proven to be both adept at securing assets and adding value to those assets while retaining a dominant 80% equity holding. It has achieved this by effective strategies to raise equity capital, and to boldly sole-risk activities.

Success at Mukuyu-2 well is crucial for its business plan.

Its achievements to date include the efficient acquisition of 829 km seismic and the drilling of Mukuyu-1. In addition, it has raised equity capital to drill Mukuyu-2 to retain 80% equity and its Cabora Bassa, Basin-master position. It is leveraged to success.

Farmout on drilling success and PPSA finalisation

If this proves the case, IVZ will have strong ability to either raise more capital or conduct farmouts to continue value adding drilling.

A successful Mukuyu-2 would assist IVZ to negotiate favourable farmout of one or more of its three exploration blocks. IVZ's aim would be to retain the Exalo rig for rapid resource delineation drilling.

Timing of a farmout may also be dependant upon conclusion of the Petroleum Production Sharing Contract with Zimbabwean authorities. Timing of this event is unknown, though hopefully during this year.

We note that on the 23rd August 2023, Zimbabwe will hold general elections for the position of President and also for members of both Houses of Parliament. This suggests to us that important Ministerial decisions including finalisation of the PPSA would be be made some time after the elections have been decided and Ministerial responsibilities have been allocated to Governing party members of the senior cabinet.

*IVZ has been forward thinking on securing an opportunity to generate carbon-offset certificates (**See Appendix-2**).*

Sustainability – IVZ well placed to offset carbon emissions *(See Appendix-2 for details)*

IVZ believes its forestry project would neutralise its Scope 1 and Scope 2 carbon footprints at a Mukuyu field development.

In 2022, IVZ entered into a 30-year contract with the Forestry Commission of Zimbabwe ("FCZ") for the development of the Ngamo-Gwayi-Sikumi ("NGS") REDD+ project, which is renewable for a further 30 years. This scheme is part of IVZ's sustainable plan to manage emissions with internationally accredited certificates.

Sustainability credentials open up additional avenues for carbon-aware funding.

INVESTMENT CATAYSTS

Mukuyu-2 well result is crucial for:

- *Attracting farminees or other funding sources;*
- *The development path of a Mukuyu discovery;*
- *and drilling an increasing number of prospects perhaps identified with the new seismic program..*

DecQtr'2023 – Confirmation that some hydrocarbons shows are capable of producing in commercial quantities not only upgrades Mukuyu structure, but may upgrade the eight other identified structures. It opens up funding opportunities for development.

DecQtr'2023 – A 425 km seismic survey to be completed by mid-August has potential to add to IVZ's exploration leads to the east of Mukuyu. We think it could add considerable add value and farmout appeal to its newly acquired exploration licences EPO 1848 and 1849.

DecQtr'2023 to MarQtr'2024 – Refresh existing, and adding new MOU's for gas offtake.

Fiscal year 2024 – A farmout would place both a value and 3rd party endorsement of IVZ's petroleum assets, while advancing the project's development.

- A farmout of SG 4571 would be geared to raising capital to do follow-up drilling on the greater Mukuyu structure and for starting development studies.
- Farmouts of EPO 1848 and EPO 1849 would be geared to exploration.

This would likely see drilling activity rise from one well per annum to multpile wells p.a.

Risks Of Investment

IVZ is an oil and gas exploration and development company. At this stage it has yet to make a commercial discovery capable of development.

Below we outline some risk factors though risks are not limited to these factors.

For added risk factors we refer investors to Invictus Energy's Prospectus dated 3rd May 2023 and Supplemental Prospectus' dated 1st and 12th June 2023.

EXPLORATION, DEVELOPMENT AND OPERATING RISKS

Exploration is inherently risky, and investors should be aware of the following risks which include, but are not limited to:

Exploration is inherently risky

Mukuyu-2 is 6.8km from Mukuyu-1 representing a big stepout and testing a different fault block

Drilling, logging and testing operations can encounter problems

- While Mukuyu-1 indicated multiple levels of hydrocarbon shows, it has yet to be determined that there are adequate quality reservoirs with high saturations of hydrocarbons.
- Target reservoirs at the Mukuyu-2 location may be better or worse in thickness, porosity and permeability to Mukuyu-1. Interpreted from seismic, the reservoirs appear to rely upon horst block fault-seal to complete hydrocarbon traps at Mukuyu-2.
- Drilling operations at Mukuyu-1 and its sidetrack well demonstrated there are drilling and data retrieval difficulties. Operational timetables and anticipated sub-surface features represent best estimates from the operator in a still frontier basin. While IVZ has the benefit of deep level penetration drilling at the Mukuyu-1 site, risks still remain at the Mukuyu-2 location.
- Multiple logging and recovery to surface of samples, or production testing are the key methods to determine if commercial volumes of hydrocarbons are present and in a recoverable configuration. There are risks that these procedures fail.
- The Basin's early stage of exploration means that even appraisal wells have an exploratory component. They may prove on tests to have an absence of hydrocarbons or have shows that are insufficient to warrant development.
- IVZ operates in Zimbabwe, which has little experience of petroleum exploration and development. While its new fiscal and operating codes appear competitive with peer African petroleum producing countries, its Petroleum Production Sharing Agreement has yet to be finalised in regulation. Changing Ministers or Governments in forthcoming elections may present unanticipated changes.

FUNDING AND ASSOCIATED RISKS

- IVZ relies primarily upon equity capital raisings to fund operations and administration of the company as it owns no cash generating business.
- Expensive drilling is required to discover, appraise and develop IVZ's growing prospect inventory. Unforeseen issues can prolong drilling and operations cost beyond IVZ's cash resources.
- The signing of the Petroleum Production Sharing Agreement may be subject to further delays for administrative or governmental priorities or policy reasons. This may impact upon IVZ's ability to raise capital or attract farmout parties.
- There are no guarantees that a commercial development proposal will be able to attract funding or debt at reasonable costs.

Also, please refer to Disclaimers and Disclosure of PAC Partners Corporate Involvement on the final page of the report.

Board – African experience is a key company advantage

	IVZ has considerable African foccussed business and petroleum sector experience.
John Bentley *Non-Executive Chairman*	John Bentley has more than 40 years' experience in international natural resource development, including 30 years focus on Africa's upstream oil and gas industry. He was instrumental in the formation of Energy Africa Ltd. This led the group's growth in 12 African countries and several important hydrocarbon discoveries laying groundwork for Tullow Oil's successful US$500m takeover of Energy Africa in 2004. John has held executive and board roles in numerous E&P companies over the past 20-years, with the majority focused on Africa. These include Vanco Energy Company, FirstAfrica Oil plc, Rift Oil plc, Caracal Energy Inc, Faroe Petroleum plc, Wentworth Resources Ltd, and most recently Africa Energy Corp. which made the significant Brulpadda and Luiperd play opening discoveries offshore South Africa.
Joe Mutizwa *Deputy Chairman and Non-Executive Director*	Joe Mutiza is the chairman of Mangwana Capital, a major shareholder of the Company. He served for ten years as Chief Executive of Delta Corporation, one of Zimbabwe`s largest listed companies until 2012. He sits on the Presidential Advisory Council (PAC), a body appointed by Zimbabwe's President, His Excellency CDE E.D Mnangagwa, and is comprised of experts and leaders drawn from diverse sectors to advise the President in formulating key policies. Joe served on the board of the Reserve Bank of Zimbabwe (2015-2019) and currently chairs the boards of Star Africa Corporation Zimbabwe (ZSE: SACL), a local sugar refiner; and the Infrastructure Development Bank of Zimbabwe (IDBZ). Joe has a BSc degree (first class honours) from The London School of Economics; an MBA from University of Zimbabwe and an MSc from HEC – Paris and Oxford University.
Scott Macmillan *Managing Director*	Scott Macmillan is a Reservoir Engineer and founder of Invictus Energy Resources. He is a member of the Society of Petroleum Engineers (SPE) with over 15 years experience in exploration, field development planning, reserves and resources assessment, reservoir simulation, commercial valuations and business development. Mr Macmillan was previously a Senior Reservoir Engineer at Woodside Energy on large offshore Oil & Gas field developments and Business Advisor in the Global New Ventures team focused on Africa exploration. He was a Senior Reservoir Engineer for AWE working on the Waitsia Gas Field; Austalia's largest onshore gas discovery in 40 years. He has extensive business experience in Zimbabwe.
Robin Sutherland *Non-Executive Director*	Robin Sutherland has worked in the African E&P sector for nearly four decades. He played a key role in the development of Energy Africa, joining as a specialist geophysicist in 1997 and involved in several key hydrocarbon discoveries. Following the acquisition of Energy Africa by Tullow in 2004, he led Tullow's exploration team through the discovery and appraisal of the Jubilee and TEN fields in Ghana, and in the Lokichar Basin in Kenya before becoming Tullow's GM Exploration Africa in 2015. In 2020, Robin launched a successful consultancy business, assisting companies with exploration, appraisal and development of Africa's extensive natural resources.
Gabriel Chiappini *Non-Executive Director & Co-Secretary*	Mr Chiappini is an experienced ASX director and has been active in the capital markets for over 17 years assisting in raising +$450m and providing investment and divestment guidance to a number of companies and been involved with 10 ASX IPO's. He is also a member of the AICD and CA ANZ. Mr. Chiappini is a director of Black Rock Mining, (ASX: BKT)

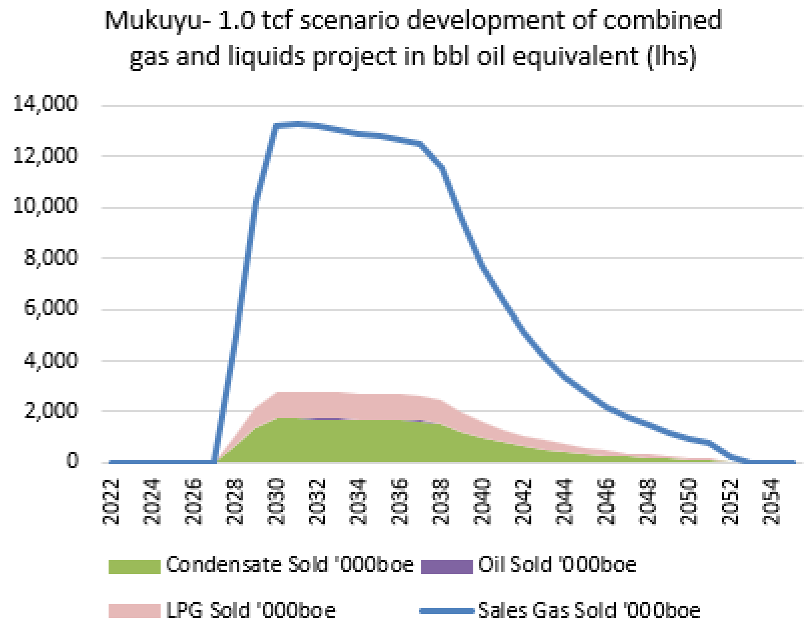
APPENDIX 1: Project Scenarios and Scoping For Valuation

Below we outline PAC Partner' Research's key project parameters that form the basis of our valuation.

The approach is to take developmental scenarios to follow project capex, petroleum sales, operating costs and apply the complex fiscal terms to arrive at a project level valuation.

PRODUCTION PROFILE

Below we depict the 1.0 tcf Development Scenario production in barrels of oil equivalent. The project in terms of energy delivered is envisaged as being gas-dominated. Liquids output is tied to gas production. *Should discrete oil reservoirs be encountered, oil production can be accelerated ahead of gas sales, with significant uplift in NPV's.*



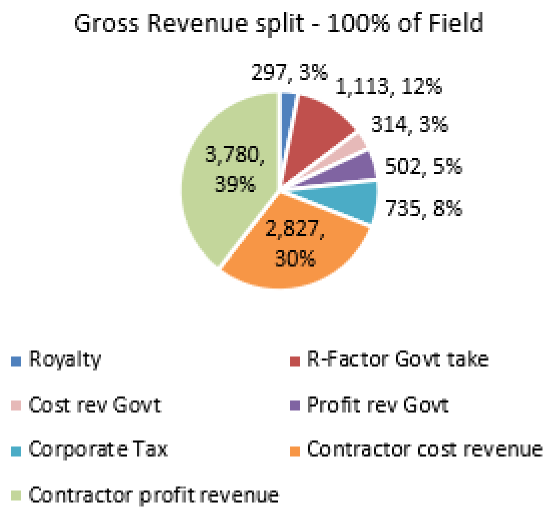
Source: PAC Partners estimates

FISCAL SPLIT – complexity is a reason for our Scenario based valuation approach

Our 1.0 TCF Development Scenario sees the private contractors retaining 69% of total revenues. From this pool, private contractors need to pay for all capex, operating and interest costs.

The Governemnt takes its entitlements for Royalty, R-factor, its field costs, profit share and corporate tax.

The complexity of fiscal arrangements, while not unusual by African peer countries standards, makes it imperative in our view to adopt a scenario approach to valuing potential Reserves into the future.



Source: PAC Partners estimates for the 1.0 TCF Scenario

KEY PROJECT PARAMETERS

The 1.0 TFC and 1.5 TCF Scenarios are depicted in this table.

We have assumed 42 bbl of liquids (condensate and LPG's) per million cufit feet of raw gas.

Liquids yields are a key item for the Mukuyu-2 exploration program to uncover.

This is along with hydrocarbon volumes and potential rates of production.

Our analysis see liquids production essentially tied to gas sales as co-products.

Project: Reserves & Life-of-field Sales	100% of field	**1.0 TCF Case**	**1.5 TCF Case**	**Change %**
IVZ Ownership - now	%	80.0%	80.0%	
Post ZWF & farmout	%	49.5%	49.5%	
Gross Reserves - Gas	bcf	1,088	1,632	50.0%
Gross Reserves - Total Liquids	mm bbls	46	69	50.0%
Gross Reserves - Total	mm boe	233	349	50.0%
Fuel gas & flare	bcf	-73.5	-110	50.3%
Sales - Gas	**bcf**	**995.5**	**1,496**	**50.3%**
Sales - Gas	PJ	1,071.2	1,610	50.3%
Sales - Gas	'000boe	177.8	267.2	
Sales - Liquids	mm bbls	44.9	67.5	50.3%
Sales - total	mm boe	215.4	323.7	50.3%
Capex start		MarQ'25	MarQ'25	
Production start		DecQ'27	DecQ'27	
Production Life	Years	24.5	28.0	14.3%
Project Scale		1.0 TCF Case	1.5 TCF Case	
Total Capex & Exploration	US$m	-1,042.3	-1,401.9	34.5%
Zim Sov Wealth Fund - carry	US$m	-99.7	-130.8	31.2%
Maximum raw gas & product sales - daily rates		Max Rate	Max Rate	
Raw gas	mm scfg/d	223.0	258.9	16.1%
Sales: Gas	mm scfg/d	205.7	239.9	16.7%
Sales: Liquids	bbl/d	9,281	10,819	16.6%
Liquids sales: Oil Equiv.	boe/d	7,776	9,064	
Sales total: Oil Equiv.	boe/d	44,515	51,921	16.6%

Indicative year of revenue and earnings in total amounts and on unit basis.

Revenue, Margin & NPV	**Fiscal Year**	**2030**	**2030**	
Gross Revenue - Total	US$m	645	742	
Net Total Revenue	US$m	618	710	14.9%
EBITDA	US$m	503	580	15.2%
Pre-tax Profit	US$m	377	434	15.3%
Net Total Revenue	US$/boe sold	$38.46	$38.30	-0.4%
Total Opex	US$/boe sold	-$7.13	-$7.03	-1.3%
Total Royalty	US$/boe sold	-$1.25	-$1.24	-0.2%
EBITDA	US$/boe sold	$31.34	$31.27	-0.2%
EBITDA Margin	%	81.5%	81.6%	0.2%
Depreciation	US$/boe sold	-$5.10	-$4.59	-9.9%
Project Debt cost	%pa	10.0%	10.0%	0.0%
Discount rate - nominal	%pa	13.00%	13.00%	0.0%
IRR	%pa	42.9%	41.0%	-1.9%
Discount rate - nominal	%pa	13.0%	13.0%	0.0%
NPV	**US$m**	**887**	**1,082**	**21.9%**
NPV	US$/boe	$4.12	$3.34	-18.9%

Source: PAC Partners estimates.

Appendix 2: Carbon Offset Project

NGS REDD+ PROJECT ZIMBABWE AWARDED IN AUGUST 2022

Invictus have been awarded three carbon offset projects for a 30-year term, covering a combined 301,565ha collectively known as Ngamo, Gwayi & Sikumi (NGS) REDD+ project.

NGS REDD + project has potential to generate >30 million carbon credits over the initial 30-year project life. Some features include:

- 1 carbon credit equates to 1 tonne of CO_2 removal (1 t-CO_2e).
- It potentially generates enough carbon credits to offset Cabora Bassa Project Scope 1 & 2 emissions – from its beginning to conclusion of production.
- A 5 year pilot REDD+ project funded by World Bank was completed in 2020 to provide proof of concept and valuable experience.

Excess credits will be sold on the Voluntary Carbon Market (VCM). IVZ sees a strong pricing outlook of US$80-150 per t-$CO_2$e# (i.e. per carbon credit).

The project can provide IVZ with the ability to sell carbon neutral oil and gas cargoes, increasing the attractiveness to buyers of hydrocarbons.

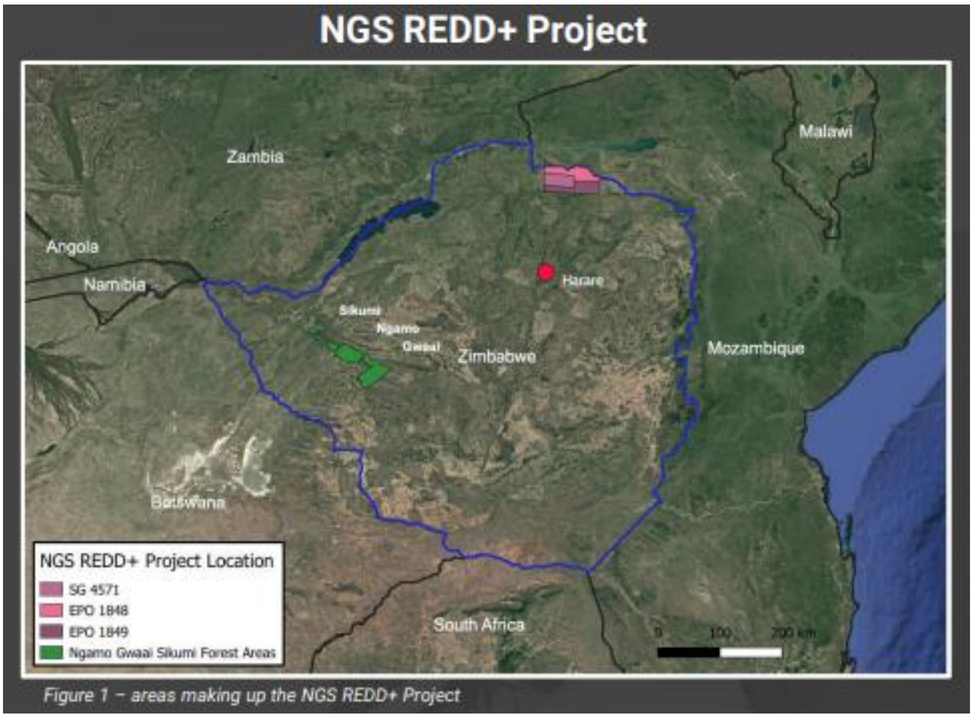
Miombo Forest Carbon Investments

Invictus has created a division called Miombo Forest Carbon Investments ("MFCI") to develop and manage NGS REDD+ project and carbon credits, with plans to be certified through Verra's Verified Carbon Standard (VCS) program.

Certification allows carbon credits to be registered as Verified Carbon Units (VCUs) and sold on VCM. It is anticipated accreditation and verification of credits may be effected by late 2023.

IVZ have stated that profits from the sale of carbon credits to be shared with the Forestry Commission of Zimbabwe and local community to fund the protection of forests. This helps with providing community alignment and active protection of the Forests involved.

The carbon offset projects' forests are South-West of the Zimbabwean Capital, Harare. IVZ's exploration licences are located North of Harare and adjacent to the border with Mozambique.



Source: IVZ Presentation Sept 2022

Contact Information

CORPORATE FINANCE		RESEARCH		DEALING	
BROOKE PICKEN *Chief Operating Officer / ECM* bpicken@pacpartners.com.au	03 9114 7402	**CRAIG STRANGER** *Executive Chairman* cstranger@pacpartners.com.au	03 9114 7405	**JAMES WILSON** *Institutional Sales* jwilson@pacpartners.com.au	02 9134 9111
SEAN KENNEDY *Corporate Finance* skennedy@pacpartners.com.au	03 9114 7403	**STEPHEN SCOTT** *Head of Research* sscott@pacpartners.com.au	02 9134 9195	**ANDREW MANCHEE** *Institutional Sales* amanchee@pacpartners.com.au	02 9134 9155
ANDREW SHEARER *Technical Consultant* ashearer@pacpartners.com.au	0411 720 516	**JAMES GURRY** *Senior Analyst* jgurry@pacpartners.com.au	0451 349 688	**MARK PASHLEY** *Sales Trading* mpashley@pacpartners.com.au	02 9134 9177
PETER WARD *Corporate Broking* pward@pacpartners.com.au	03 9114 7409	**SHANE BANNAN** *Senior Research Analyst* sbannan@pacpartners.com.au	0422 588 635	**MOISHE AMZELAK** *Equities Advisor* mamzalak@pacpartners.com.au	0433 116 286
JOSH GORDON *Corporate Finance* jgordon@pacpartners.com.au	0430 191 640	**PHIL CARTER** *Senior Analyst* pcarter@pacpartners.com.au	0400 252 465	**RYAN GALE** *Advisor* rgale@pacpartners.com.au	03 9114 7404
WILL CROSS *Corporate Finance* wcross@pacpartners.com.au	0447 699 950	**LAWRENCE GRECH** *Senior Equities Analyst* lgrech@pacpartners.com.au	0404 052 913	**PATRICK GIBSON** *Equity Sales / Senior Broking Operations* pgibson@pacpartners.com.au	03 9114 7401
		CALEB WENG *Analyst* cweng@pacpartners.com.au	0416 861 165	**DANIEL GADALLA** *Senior Broking Operations* dgadalla@pacpartners.com.au	03 9114 7400
		MAX ANDREWS *Analyst* mandrews@pacpartners.com.au	03 9114 7414	**JAMES HOLYMAN** *Equity Sales/Operations Manager* jholyman@pacpartners.com.au	02 9134 9133
SYDNEY Level 26, Governor Phillip Tower, 1 Farrer Place, Sydney **+61 2 9134 9133**		MELBOURNE (Head Office) Level 29, 360 Collins Street, Melbourne **+61 3 9114 7400**		PERTH Suite 2.1, 9 Havelock Street, West Perth **+61 8 6372 7900**	

RECOMMENDATION CRITERIA

Investment View
PAC Partners Investment View is based on an absolute 1-year total return equal to capital appreciation plus yield. A Speculative recommendation is when a company has limited experience from which to derive a fundamental investment view. **Speculative buy** = We expect the stock's total return (nominal yield plus capital appreciation) to exceed 20% over 12 months. The investment may have strong capital appreciation but also has a high degree of risk and there is a significant risk of capital loss.

Buy	Hold	Sell
>20%	20% – 5%	<5%

Risk Rating

PAC Partners has a four tier Risk Rating System consisting of: Very High, High, Medium and Low. The Risk Rating is a subjective rating based on: Management Track Record, Forecasting Risk, Industry Risk and Financial Risk including cash flow analysis.

Disclosure of Economic Interests
The views expressed in this report accurately reflect the personal views of Lawrence Grech about the subject issuer and its securities. No part of the analyst's compensation was, is or will be directly or indirectly related to any recommendation or view expressed in this report.
The following person(s) **does hold an economic interest** in the securities covered in this report or other securities issued by the subject issuer which may influence this report:

- the author of this report, **Lawrence Grech**.
- a member of the immediate family of the author of this report

*PAC Partners Securities Pty Ltd. ("**PAC Partners**", "**PAC**" or "**PPS**") is a Corporate Authorised Representative of PAC Asset Management Pty Ltd holder of an Australian Financial Services Licence (AFSL No. 335 374).*

Disclaimer

The information contained in this report is provided by PAC Partners to Wholesale Investors only. **Retail investor and third-party recipients should not rely, directly or indirectly, on this report.** Users of this research report should not act on any content or recommendation without first seeking professional advice. Whilst the report has been prepared with all reasonable care from sources which we believe are reliable, no responsibility or liability is accepted by PAC Partners, for any errors or omissions or misstatements however caused. Any opinions, forecasts or recommendations reflect our judgement and assumptions at the date of publication or broadcast and may change without notice. This report is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. This publication contains general securities advice. In preparing our Content it is not possible to take into consideration the investment objectives, financial situation or particular needs of any individual user. Access of this report does not create a client relationship between PAC Partners and the user. Before making an investment decision on the basis of this advice, you need to consider, with or without the assistance of a securities adviser, whether the advice in this publication is appropriate in light of your particular investment needs, objectives and financial situation. PAC and its associates within the meaning of the Corporations Act may hold securities in the companies referred to in this publication. PAC believes that the advice and information herein is accurate and reliable, but no warranties of accuracy, reliability or completeness are given (except insofar as liability under any statute cannot be excluded). No responsibility for any errors or omissions or any negligence is accepted by PAC or any of its directors, employees or agents. Any content is not for public circulation or reproduction, whether in whole or in part and is not to be disclosed to any person other than the intended user, without the prior written consent of PAC Partners.

Disclosure of Corporate Involvement

PAC Partners acted as Joint Lead Manager to the April 2023 and August 2022 Placements by Invictus Energy and has received fees on commercial terms for its services. In addition, PAC Partners and its associates received approximately 6.25m unlisted options (exercisable at $0.46/share with 5-year expiry) as part of its fee arrangement. PAC Partners and direct associates additionally own various classes of other unlisted options.

The information contained in this report is provided by PAC Partners to Wholesale Investors only. The information contained in this report is to be read in conjunction with other important disclosures at the end of this document.

PAC Partners does not own listed securities of the Company described in this report. PAC Partners associates may own securities of the Company described in this report. PAC Partners does and seeks to do business with companies covered in the research. PAC may receive commissions from dealing in securities associated with the Company. As a result, investors should be aware that PAC Partners may have a conflict of interest that could affect the objectivity of this report.

For more information about PAC Partners please visit www.pacpartners.com.au