OVERVIEW OF OPERATIONS

HIGHLIGHTS FOR THE COMPANY DURING THE 2022 FINANCIAL YEAR WERE:

Pavo oil discovery with a material 43mmbl (gross, 2C) (see page 18) contingent resource being declared.

Dorado Front End Engineering Design (**FEED**) materially progressed for the project, including Wellhead Platform and Floating Production Storage and Offloading vessel.

Production Licence granted for the Dorado Field, allowing the Dorado Joint Venture to produce petroleum from the Dorado Licence Area.

Additional 3D seismic surveys acquired over the Bedout Sub-basin to unlock further prospectivity over the acreage.

Commitment to achieving net zero emissions by 2050, if not earlier.

Commencement of a renewable diesel Joint Venture officially launched as FutureEnergy Australia.

FEED commenced on FutureEnergy Australia's first renewable diesel biorefinery which has been awarded a \$2m Clean Energy Future Fund grant.

 Pepper Project

 EP 509
 100%

 TP/29
 100%

Onslow

Outtrim Project WA-155-P 100%



Dorado Project Background

Carnarvon secured its interests in the Bedout Sub-Basin permits (WA-435-P, WA-436-P, WA-437-P and WA-438-P) in 2009. The offshore permits cover an expansive area of 21,652km² which is located approximately 110km from the coast, offshore of Port Hedland in Western Australia.

Historically, the Bedout Sub-Basin was significantly underexplored in comparison to the prolific Carnarvon Basin to the south-west and the Bonaparte Basin to the north-east. Exploration drilling within the area was limited to a string of four wells in the 1970's, which were followed by the Phoenix-1 and Phoenix-2 wells drilled in the early 1980's. At the time, the Phoenix wells were considered gas discoveries and were not pursued further. The unexplored potential across this vast area and the presence of hydrocarbons within the region, led to Carnarvon's initial interest in the basin.

Carnarvon's preliminary work on the permits involved an extensive geological study and the acquisition of modern 3D seismic data which was a marked upgrade to the existing legacy 2D seismic. The 3D seismic acquisition confirmed two significant prospects in Phoenix South within WA-435-P and Roc in WA-437-P. As a result, interest in the permits grew and the Joint Venture farmed out equity in the project to new partners who funded the exploration drilling costs to test the Phoenix South and Roc targets.

The Phoenix South-1 well was drilled in 2014, discovering light oil within a high-quality reservoir. The discovery at Phoenix South was followed by the discovery and appraisal of a condensate rich gas in the Roc field. These results proved to be the catalyst for this region which warranted further exploration.

In 2018, the Dorado-1 exploration well discovered a significant light oil column and condensate rich gas in three additional reservoirs. The subsequent appraisal of the Dorado discovery was successfully completed with the well test results exceeding pre-test expectations and confirming the high quality of the reservoirs in Dorado. Dorado is a world class discovery which has ignited interest in the Bedout Sub-basin and has proven to be transformational for the Company.



Figure 2: Nobel's Tom Prosser rig on site during the Dorado Appraisal campaign.

Dorado Development (WA-437-P)

(Carnarvon 20%, Santos is the Operator)

The scale and quality of the Dorado Project has enabled the Joint Venture to progress the project through the development planning phase. Key milestones towards the Dorado Field Development were achieved during the year, as the project progressed through the Front End Engineering Design (FEED) process.

Production of the large quantities of valuable hydrocarbons at Dorado are planned over a multiphased development, with the initial development (Phase 1) involving the extraction of the liquids (oil and condensate). The field's gas and LPG's will be re-injected before being assessed for subsequent production in a second stage of development (Phase 2). The reinjection of gases during Phase 1 is expected to considerably enhance the recovery of liquids from the field. As a result, the initial gross oil production rate from the field is targeted for 100,000 barrels per day.

Plans for the Phase 1 development will consist of a single Wellhead Platform (WHP) in 90 meters of water depth, connected to a nearby Floating Production Storage and Offloading (FPSO) vessel via sub-sea flowlines and control lines.

The FPSO is planned to be located around two kilometres from the WHP and will be connected to the seabed by a disconnectable turret mooring system. The FPSO includes the processing facilities for the oil and gas being delivered from the reservoir via the wells and the WHP. It also allows for storage of oil and condensate as well as offloading to a separate oil transport tanker.

The FPSO is the project's largest component, comprising engineering, procurement of equipment, bulk materials, services, construction, installation, commissioning and testing of the facility. The WHP will have the capacity to accommodate up to 16 individual wells from a single drill centre. The initial development will have 10 wells, meaning the WHP will have the capacity to accommodate production from future infill drilling.

The FPSO is also being designed with flexibility to allow tie backs following future exploration successes within the area such as the recent Pavo oil discovery. FEED contracts for both the FPSO and WHP were awarded during the period with significant and detailed design work being substantially completed following the end of the period.



Figure 3: Proposed Dorado Field Development Layout.

Towards the end of the period, the Dorado Joint Venture was granted a production licence for the Dorado Field, WA-64-L. The production licence enables the Joint Venture to produce hydrocarbons from the licence area, as well as continue to explore for, and appraise, any additional hydrocarbons within this area. The grant of the production licence represents a key regulatory approval for the Dorado project.

Carnarvon has also commenced a formal process to fund its share of the Dorado development. The Company, along with its financial advisor, has been progressing a range of potential sources of capital. These include traditional reserve-based nonrecourse senior debt facilities, alternative funding options (including junior debt, offtake prepayment and royalties), and divestment of a portion of the Company's share of the Dorado project and associated exploration acreage. At the end of the financial period, both the debt and equity funding processes were well advanced. The Company is considering all funding options to deliver the optimal balance of capital management while maximising value for shareholders.

In August 2022, the Joint Venture, with consideration of the current inflationary cost environment and period of supply chain uncertainties, adopted a prudent approach which does not support a Final Investment Decision (FID) in 2022.

Pavo Oil Discovery (WA-438-P)

(Carnarvon 30%, Santos is the Operator)

In February 2022, Carnarvon and Joint Venture partner Santos commenced the Pavo-1 exploration well, located 46 kilometres east of Dorado in a water depth of approximately 88 metres. The well tested the northern culmination of the greater Pavo structure, a structural/stratigraphic trap underpinned by the Dorado Canyon, observed also at the Dorado Field. The Caley Member was the primary reservoir target, which is also the primary hydrocarbon bearing interval in the Dorado Field.

The Pavo-1 well encountered a 60-meter gross hydrocarbon column within the Caley Member reservoir. Subsequent wireline data confirmed a 46-meter net oil pay, with an oil-water contact intersected at 3,004 metres measured depth (**MD**), or 2,960 metres sub-sea (**mss**). The oil column is wholly contained within the northern culmination of the Pavo structure (**Pavo North**) (Figure 4).

Excellent Caley Member reservoir quality was interpreted from wireline logs, with 19% average porosity, permeabilities in the 100 to 1000 milliDarcy range and hydrocarbon saturations averaging 80%. This represents a similar reservoir quality to those encountered in the Dorado Field. Oil samples collected from Pavo-1 indicate that the crude is a light, sweet oil (~52 degrees API) with a relatively low Gas/ Oil Ration (**GOR**) (~300scf/bbl) compared to the Dorado fluids, however, the GOR is high enough to suggest that sufficient gas is available on production to ensure efficient lifting of fluid from the reservoir.

The recovery factors are inferred to be extremely good due to the excellent reservoir parameters, the light nature of the fluid, and the very likely strong aquifer drive. The Pavo-1 well drilled ahead in the 8.5 inch hole to a total depth of approximately 4,235 metres MD, which provided valuable additional information on the Early Triassic and Upper Permian stratigraphy which had not previously been intersected in the basin. As expected, no commercial hydrocarbons were encountered in these deeper sections; however, the Joint Venture has acquired key information to de-risk and enhance the geological understanding of a significant number of existing prospects in the wider basin.

A 2C contingent resource for Pavo North is assessed at 43 million barrels of oil (**mmbl**) gross, of which, 13mmbl is net to Carnarvon (page 18).

The Pavo oil discovery lies within industry standard ranges for tie-back distance and could be delivered to the Dorado facilities at a time and rate that enables very efficient utilisation of the Dorado facility, extending the period of time at which the Dorado project can produce at capacity.

Given the excellent reservoir quality in the Caley Member, the Pavo North field could be developed with a relatively low number of production wells and tiedback to the Dorado FPSO.

The Pavo North oil discovery proves the extension of a working petroleum system some 46 kilometres east of Dorado and demonstrates that quality reservoir and trapping mechanisms are effective in this area, which hosts a suite of other exploration targets. These will now warrant further assessment for drilling.



Figure 4: Schematic illustrating the North and South culminations of the greater Pavo structure.



Figure 5: Illustration depicting potential FPSO tie-backs of Pavo North and South

Exploration – Greater Bedout Area (WA-435-P, WA-436-P, WA-437-P and WA-438-P)

(Carnarvon 20%-30%, Santos is the Operator)

The recent Pavo-1 oil discovery has further derisked numerous prospects within the Company's considerable Bedout Sub-basin acreage such as the Pavo South prospect.

Given its close proximity to Pavo North, and near identical prospect elements demonstrated by seismic, the Pavo South structure is interpreted to have an excellent geological chance of success. Indications of a deeper, residual or paleo-oil-water contact in the Pavo-1 well at around 3,045 metres MD, or 3,001 metres mss (Figure 4) may indicate that the two Pavo culminations were connected at a previous point in time. If this was the case, a common deeper contact supports the charging of both structures with the same oil that was discovered in the Pavo North structure.

The Pavo South resource (once drilled and confirmed) could also be tied-back with additional wells potentially being connected to the Pavo facilities (Figure 5).

During the year, the Company also progressed work to assist in finding the next material drilling targets. This includes the Joint Venture undertaking an extensive 3D seismic acquisition campaign across the Bedout acreage. The Keraudren Extension 3D (**KE-3D**) seismic survey acquisition was completed in February 2022, which provided an additional 3,360 square kilometres over the southern and central portions of the WA-436-P permit and the northern area of WA-438-P permits, in close proximity to the Pavo discovery. The survey covers a large group of relatively shallow structural and stratigraphic leads over multiple play intervals in the eastern play fairway of the Bedout Subbasin (Figure 6).

These prospects had previously been identified on 2D seismic data and are expected to be enhanced by the improved granularity provided by contiguous 3D seismic. This could result in the identification of a greater number of prospects and leads within this proven hydrocarbon basin as well as the possible merging together of currently identified leads. The previous 2D data was on a grid of 8 square kilometres, meaning fields such as Pavo (approximately five square kilometers²) and Dorado (approximately nine square kilometres in the Caley Member) could exist in the gaps between the seismic lines.

At the end of the period, the Company had commenced seismic interpretation of a preliminary fast-tracked volume of the KE-3D. The KE-3D seismic survey acquisition was completed over two phases, with the initial phase acquired in mid-2021 and the latter phase acquired in early 2022. The survey has infilled a 3D seismic data gap between the Keraudren

3D to the south and the Zeester 3D seismic survey to the north. As a result, the WA-436-P permit is now 97% covered by 3D seismic data which allows the Joint Venture to de-risk and identify prospects on the eastern play fairway in greater detail, especially those on trend and nearby the recent Pavo discovery.

At the beginning of the period, the Joint Venture also acquired the Archer 3D seismic survey. A fast-track seismic volume for the Archer 3D seismic volume, was received during the year which is currently being interpreted. The Archer 3D encompasses the Dorado Field and the immediate exploration area to the southwest at an alternative acquisition azimuth and which complement the pre-existing Keraudren and Capreolus 3D seismic surveys.

Following the seismic acquisitions over the recent years, 68% of the Bedout acreage is now covered by modern 3D seismic, which is significantly enhancing the Company's understanding of the Bedout Subbasin's prospectivity.



Figure 6: Bedout acreage map highlighting the recently drilled Pavo-1 and Apus-1 wells as well as the Keraudren Ext, Keraudren Extension Phase II and Archer 3D seismic volumes.

Apus-1 Exploration Well (WA-437-P)

(Carnarvon 20%, Santos is the Operator)

Following the significant oil discovery at Pavo, Carnarvon and Joint Venture partner Santos immediately drilled the Apus-1 well, 27 kilometres southwest of Dorado in 84 meters water depth. The Apus-1 well was targeting a structural stratigraphic trap situated on the Apus Island, an erosional remnant segmented on either side by the Dorado and Apus shale-filled canyons. The erosional remnant creates the same trapping geometry observed at both the Dorado and Pavo discoveries. However, the two canyons subsequently isolate Apus and associated prospects from both Pavo and Dorado. The primary target was the Caley Member, the same reservoir intersected in the Dorado and Pavo Fields with the Milne Member a secondary reservoir target.

Excellent reservoir quality was encountered while drilling in both the Caley and Milne Members. However, despite there being direct evidence for hydrocarbon shows at Apus-1 over several stratigraphic intervals, a commercial hydrocarbon pool was not intersected. The likely reasons for well failure have been attributed to insufficient hydrocarbons migrating to the prospect, or insufficient retention of hydrocarbons in the structure.

Despite the well result, highly valuable geological information was acquired, which has enhanced the geological understanding of the region.

Renewable Fuels

(Carnarvon 50%)

The development and production of advanced biofuels was identified by Carnarvon as an attractive opportunity to deploy modern technology to produce lower carbon intensity renewable diesel capable of use in currently available machinery, build a profitable, growth orientated business outside of the core oil and gas operations, and source future carbon offsets.

The Company chose renewable diesel (an advanced biofuel) as its growth business because, unlike biodiesel, it can be used as a "drop-in" replacement for petroleum diesel. Renewable diesel is chemically identical to petroleum diesel, but it has a lifecycle carbon intensity of 80 - 90% lower than petroleum diesel. End-users of the fuel would see immediate carbon reductions without having to invest in new capital for alternative energy solutions.

The Company made its first investment into the biofuels sector in July 2021 through the creation of a Joint Venture with Frontier Impact Group under the name FutureEnergy Australia (**FEA**).

Carnarvon's investment, which consisted of \$2.6 million, would see the Joint Venture move its first biorefinery project to an FID ready state which is planned for early 2023.

The objective of FEA is to establish Australia's first commercial scale renewable diesel biorefinery utilising waste woody biomass as its feedstock. On success of its first project, FEA plans to scale production capacity to at least 500 million litres annually in Western Australia by 2030.

In March 2022, an exclusive option agreement for the purchase of a 65-Ha parcel of land was obtained near the town of Narrogin, Western Australia. Whilst the project site would only require less than 10% of the land, the size provides growth optionality to expand the operations.

The following month, the Department of Water and Environmental Regulation announced FEA's Narrogin renewable diesel project was awarded \$2 million from the Clean Energy Future Fund grant. The state government funding, which will be received following FID, would go towards project development and construction costs. FEA have engaged Technip Energies to commence engineering and design of the Narrogin facility. Technip's work is expected to be completed at the end of Q3 2022. In parallel, work commenced on both environmental and development approvals, which are expected to be received prior to FID.

Towards the end of the year, FEA secured 75% of its base feedstock requirements with a 10-year plus supply agreement. The balance of the feedstock requirements is planned to be finalised later in 2022.

FEA also held its first community event at Narrogin with strong support from the local community and Shire of Narrogin.



Figure 7: 3D Model of proposed Narrogin biorefinery.



Figure 8: Site visit – Narrogin, Western Australia.

Following the end of the period, FEA announced it had signed a Memorandum of understanding with West Australian regional power company, Horizon Power, to progress evaluation of a strategic partnership. This partnership may include investment into multiple renewable diesel projects, offtake, and power purchase agreements.

The project continues to receive strong interest domestically and internationally for renewable diesel offtake. FEA is actively engaging with companies from the mining, construction, fuel distribution and power generation sectors.

Pepper Project (EP509 & TP29)

(Carnarvon 100% and operator)

EP509 and TP29 (**Pepper Project**) are located in the Barrow Sub-basin of the Northern Carnarvon Basin, within State waters. Both permits sit within shallow water depths (less than 50 meters) and lie adjacent to each other, immediately south-west of Barrow Island, offshore Western Australia

The permit was acquired in June 2021 and contains several wells which encountered non-commercial hydrocarbon-bearing intervals. This includes the Pepper-1 well, which intersected a live hydrocarbon column in tight thinly-bedded turbidite sands of the Late Jurassic Dupuy Member within a mapped structural closure. Additionally, net hydrocarbon pay was also recorded in topsets of the Early Cretaceous Lower Barrow Group.

Based on sparse, poor quality 2D seismic data, it is possible the Pepper-1 well was not drilled in a crestal location for reservoir within the turbidite depositional system.

During the year, Carnarvon progressed several studies to predict likely locations for improved reservoir quality. These include seismic reprocessing of pre-existing 2D seismic lines across the permit and investigatory reservoir studies. As this project progressed, it has the potential to provide significant resources to the Company's portfolio.

Condor and Eagle Projects (AC/P62 and AC/P63)

(Carnarvon 100% and operator)

Carnarvon was awarded the AC/P62 (Condor) permit in November 2017 and the AC/P63 (Eagle) permit in February 2018, both located within the Vulcan Subbasin. Carnarvon identified the opportunity to secure these assets whilst developing its extensive regional database across the North-West Shelf of Australia.

The Vulcan Sub-basin is a proven liquids-rich subbasin containing numerous oil and gas fields. The acquisition of brand new MC3D Cygnus PSDM seismic data has been instrumental for both the AC/P62 and AC/P63 permits, which were previously covered by sparse, poor quality 2D seismic data.

With considerable assistance from the improved data, Carnarvon has identified several exciting prospects across the Condor and Eagle projects. Within the Condor project, four substantially sized Late Permian carbonate reef prospects have been identified, a new play type for the North-West Shelf of Australia. Of the four prospects, Moa is the preferred target at 132 square kilometers and 350 meters relief.

During the year, rock physics and acoustic seismic inversion studies were completed over the Permian stratigraphic interval to gain further insights into reservoir variability. With both studies completed Carnarvon has now satisfied all primary work program commitments.



Figure 9: Outline of the AC/P62 and AC/P63 permits including identified prospects and leads.

The technical work on AC/P63 to date has also successfully de-risked the reservoir, presence of oil and the quality of hydrocarbons within the Eagle project. The recent Orchid discovery, nearby to the Eagle permit, has also enhanced the potential of the identified prospects.

The standout target identified to date within AC/P63 is the Toucan prospect. Toucan is a large, Middle Jurassic, fault bounded structure with seven square kilometers areal extent and 140 meters structural closure. The structure sits on the north-east flank of the Skua Trough, with access to migration of hydrocarbons generated by the proven Middle and Late Jurassic (Malita, Plover and Lower Vulcan) oil-prone source rocks.

The nearby discoveries of Skua, Talbot, Cassini and Challis oil fields confirm effective migration from the Skua Trough and other surrounding kitchens which enhances the Toucan prospect.

During the year, Carnarvon reprocessed a small portion of the Onnia 3D seismic survey, which was then merged with the recently acquired MC3D Cygnus PSDM seismic survey. This provides contiguous 3D seismic coverage over the permit. From this, an acoustic 3D seismic inversion project was performed over the permit to gain further insights into reservoirseal pairs within the Jurassic and deeper stratigraphy.

For both the Condor and Eagle projects, Carnarvon is currently seeking farm-in interest to progress the exciting prospects both permits contain.

Buffalo Project (TL-SO-T 19-14 PSC)

(Carnarvon 100% and operator)

On 31 December 2021, the Company, along with its 50% Joint Venture partner at that time, Advance Energy, spudded the Buffalo-10 appraisal well with Carnarvon as operator. The well aimed to test an interpreted undrilled structural attic within the Elang reservoir of the Buffalo Field, highlighted by Full-Waveform-Inversion ("FWI") seismic reprocessing of the Legacy 3D seismic datasets.

Upon entering the reservoir, the top Elang Formation was encountered 80 metres low to prognosis which was outside of the pre-drill range of expectation. The result subsequently disproved the presence of an unproduced structural attic. Wireline logging recorded an approximate 12 metre gross oil column within the Elang Formation, with the oil column subsequently deemed residual and uncommercial.

This demonstrated that the seismic processing techniques employed on this project did not resolve the underlying seismic velocity distortion or imaging resolution issues that are present over this field.

While the results from the Buffalo-10 well are disappointing, Carnarvon is pleased to report that its first offshore well as operator was drilled safely and without environmental incident which is a credit to the operations team.

Following the Buffalo-10 well outcome, Carnarvon has requested to relinquish the TL-SO-T 19-14 PSC area to the regulator in Timor-Leste. Prior to the end of the financial period, Carnarvon and Advance Energy terminated the Joint Venture agreement, meaning Carnarvon retains a 100% interest in the PSC until the PSC is formally relinquished.



Taurus Project (WA-523-P)

(Carnarvon 100% and operator)

The WA-523-P exploration permit was awarded to Carnarvon in May 2016 and sits adjacent to Carnarvon's Buffalo permit in the Bonaparte Basin, albeit in Australian waters. Carnarvon's exploration rationale for WA-523-P was to identify attractive prospects and leads within tie-back distance of the Buffalo Field which could then be linked via subsea tie-back. Due to the outcome of Buffalo-10 well, the Company does not intend to progress the identified prospects within WA-523-P as stand-alone targets and is preparing to surrender this permit.



Outtrim Project (WA-155-P)

(Carnarvon 100% and operator)

The Outtrim project, WA-155-P, is in the Exmouth Sub-Basin, within the Carnarvon Basin of the North-West Shelf of Australia. The Outtrim permit contains three graticular blocks, one of which contains the Outtrim oil discovery, with a north-east graticular block containing the Late Triassic Palmerston gas prospect; a fault bounded late Triassic structure which sits on the eastern side of the Alpha Arch.

An 18 month Suspension and Extension was granted and, as a result, Permit Year 3 will now end on the 13th December 2022. Permit Year 4 and 5 consist of the drilling of a further well and associated planning and analysis. As the Company is focused on delivering the Dorado development and progressing its high-graded exploration targets, Carnarvon is preparing to divest its equity in this permit.

Labyrinth Project (WA-521-P)

(Carnarvon 100% and operator)

WA-521-P ("Labyrinth Project") is located in the Roebuck Basin in the North-West Shelf of Western Australia. This frontier acreage, which lies directly to the north of the Company's Bedout permits, was acquired by Carnarvon in 2016 and has been de-risked following the Bedout discoveries. Carnarvon holds 100% equity in the WA-521-P permit, comprising an area of approximately 5,057 square kilometres.

Despite the technical work demonstrating that the WA-521-P exploration permit is prospective for liquid hydrocarbons, the Company does not consider these prospects as core exploration targets due to their critical risks of hydrocarbon source and migration, which requires definitive data from a well to reduce this risk.

On this basis, the Company submitted a request to surrender the WA-521-P permit to the regulator, with consent to surrender received following the end of the period.



RESERVE ASSESSMENT

Petroleum Resource Classification, Categorisation and Definitions

Carnarvon calculates reserves and resources according to the Society of Petroleum Engineers' Petroleum Resource Management System ("SPE-PRMS") definition of petroleum resources. Carnarvon reports reserves and resources in line with ASX Listing Rules.

Reserves

Reserves represent that part of resources which are commercially recoverable and have been justified for development, while contingent and prospective resources are less certain because some commercial or technical hurdle must be overcome prior to there being confidence in the eventual production of the volumes.

Carnarvon does not yet have any reported reserves.

Contingent Resources

Contingent resources are less certain than reserves. These are resources that are potentially recoverable but not yet considered mature enough for commercial development due to technological or business hurdles. For contingent resources to move into the reserves category, the key conditions, or contingencies, that prevented commercial development must be clarified and removed. As an example, all required internal and external approvals should be in place or determined to be forthcoming, including environmental and governmental approvals. There also must be evidence of firm intention by a company's management to proceed with development within a reasonable time frame (typically 5 years, though it could be longer).

Based on the results of drilling and testing to date, the following Contingent Resource estimates are provided.

Gross Contingent Resources (100%)

FINANC	GIAL REV	VIEW) >)							
		Light C)il and Con	densate	Free &	& Associate	d Gas	Barrels	s of Oil Equ	ivalent
Gross at 30 June	e 2021	MMSTB	MMSTB	MMSTB	BSCF	BSCF	BSCF	MMBOE	MMBOE	MMBOE
	Permit	1C	2C	3C	1C	2C	3C	1C	2C	3C
Dorado	WA-437-P	86	162	285	367	748	1,358	176	344	614
Roc	WA-437-P	12	20	35	204	332	580	48	78	137
Phoenix South	WA-435-P	7	17	30	-	-	-	7	17	30
Phoenix	WA-435-P	2	7	16	-	-	-	2	7	16
Buffalo	TL-SO-T 19-14	15	31	48	-	-	-	15	31	48
Total		122	236	413	571	1,080	1,938	248	477	844

		Light Oil and Condensate			Free &	& Associate	d Gas	Barrels of Oil Equivalent		
Technical Revision		MMSTB	MMSTB	MMSTB	BSCF	BSCF	BSCF	MMBOE	MMBOE	MMBOE
	Permit	1C	2C	3C	1C	2C	ЗC	1C	2C	3C
Dorado	WA-437-P	-	-	-	-	-	-	-	-	-
Pavo	WA-438-P	26	43	62	6	11	17	27	45	65
Roc	WA-437-P	-	-	-	-	-	-	-	-	-
Phoenix South	WA-435-P	-	-	-	-	-	-	-	-	-
Phoenix	WA-435-P	-	-	-	-	-	-	-	-	-
Buffalo	TL-SO-T 19-14	15	31	48	-	-	-	15	31	48
Total		11	12	14	6	11	17	12	14	17

		Light Oil and Condensate			Free 8	& Associate	ed Gas	Barrels of Oil Equivalent		
Gross at 30 June 2022		MMSTB	MMSTB	MMSTB	BSCF	BSCF	BSCF	MMBOE	MMBOE	MMBOE
	Permit	1C	2C	3C	1C	2C	3C	1C	2C	3C
Dorado	WA-437-P	86	162	285	367	748	1,358	176	344	614
Pavo	WA-438-P	26	43	62	6	11	17	27	45	65
Roc	WA-437-P	12	20	35	204	332	580	48	78	137
Phoenix South	WA-435-P	7	17	30	-	-	-	7	17	30
Phoenix	WA-435-P	2	7	16	-	-	-	2	7	16
Buffalo	TL-SO-T 19-14	-	-	-	-	-	-	-	-	-
Total		133	249	428	577	1,091	1,955	260	491	862

Net Contingent Resources (Carnarvon's Share)

Net at 30 June 2022		Light O	il and Cond	densate	Free & Associated Gas			Barrels of Oil Equivalent		
		MMSTB	MMSTB	MMSTB	BSCF	BSCF	BSCF	MMBOE	MMBOE	MMBOE
	Permit	1C	2C	3C	1C	2C	3C	1C	2C	3C
Dorado	WA-437-P	17	32	57	73	150	272	35	69	123
Pavo	WA-438-P	8	13	19	2	3	5	8	13	19
Roc	WA-437-P	2	4	7	41	66	116	10	16	27
Phoenix South	WA-435-P	1	3	6	-	-	-	1	3	6
Phoenix	WA-435-P	-	1	3	-	-	-	-	1	3
Buffalo	TL-SO-T 19-14	-	-	-	-	-	-	-	-	-
Total		29	54	92	116	219	393	54	103	179



Notes on Petroleum Resource Estimates and Competent Persons Statement

Unless otherwise stated, all petroleum resource estimates are quoted as at 30 June 2022 at standard oilfield conditions of 14.696 psi (101.325 kPa) and 60 degrees Fahrenheit (15.56 deg Celsius).

Carnarvon is not aware of any new information or data that materially affects the information included in the Reserves Statement. All the material assumptions and technical parameters underpinning the estimates in the Reserves Statement continue to apply and have not materially changed.

Carnarvon uses both deterministic and probabilistic methods for estimation of petroleum resources at the field and project levels. Unless otherwise stated, all petroleum estimates reported at the company level are aggregated by arithmetic summation by category.

Conversion from gas to barrels of oil equivalent is based on Gross Heating Value. The conversion is based on composition of gas in each reservoir and is 4.07 Bscf/MMboe, 3.85 Bscf/MMboe, 4.16 Bscf/MMboe, 4.45 Bscf/MMboe, and 3.87 Bscf/MMboe for the Upper Caley, Caley associated gas, Crespin, Baxter and Milne reservoirs, respectively, that make up the Dorado Contingent Resource. For all other gas resources the Company uses a constant conversion factor of 5.7 Bscf/MMboe. Volumes of oil and condensate, defined as 'C5 plus' petroleum components, are converted from MMbbl to MMboe on a 1:1 ratio. The estimates of petroleum resources are based on and fairly represent information and supporting documentation prepared by qualified petroleum reserves and resources evaluators. The estimates have been approved by the Company's Chief Operating Officer, Mr Philip Huizenga, who is a fulltime employee of Carnarvon. Mr Huizenga has over 30 years' experience in petroleum exploration and engineering. Mr Huizenga holds a Bachelor Degree in Engineering and a Master's Degree in Petroleum Engineering and is a member of the Society of Petroleum Engineers. Mr Huizenga is a Competent Person in accordance with ASX Listing Rules and has consented to the form and context in which this statement appears.

There are numerous uncertainties inherent in estimating reserves and resources, and in projecting future production, development expenditures, operating expenses and cash flows. Oil and gas reserve engineering and resource assessment must be recognised as a subjective process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact way.

FINANCIAL REVIEW

The Group reports an after-tax loss of \$53,753,000 for the financial year ending 30 June 2022 (2021: profit: \$17,136,000).

Carnarvon's balance sheet remains strong with cash and cash equivalents of \$112,424,000 (2021: \$98,436,000), with no debt and minimal commitments going forward.

During the financial year, Carnarvon successfully raised \$67,194,000 after fees through a placement of 234,806,987 new shares to professional and institutional investors. The proceeds of the placement contributed to the strong current financial position and are expected to contribute to the Dorado field liquids development.

Following the completion of the Buffalo-10 well, Carnarvon recognised a \$30,120,000 loss in relation to its investment in the Buffalo Joint Venture which primarily included the write-off of previously capitalised exploration costs in relation to the Buffalo-10 well. As the Company was free carried for the first US\$20 million of the Buffalo-10 well costs, this does not reflect the cash outlay by the Company during the period and includes impairment of the accounting fair value adjustment of \$23,635,000 that was recognised in the prior year.

In July 2021, Carnarvon formed the FutureEnergy Australia Joint Venture with Front Impact Group, investing \$2,592,000 to fund a biorefinery project. The Company recognised it's 50% share of the loss of \$513,000 incurred by the Joint Venture during the year as the Joint Venture commenced Front-End Engineering and Design (**FEED**) work for its first biorefinery.

During the period, the Company invested \$38,598,000 on exploration and evaluation assets. These costs were primarily in relation to the drilling costs for the Pavo-1 and Apus-1 exploration wells, acquisition of 3D seismic within the Bedout basin permits and FEED activities for the Dorado development.

The Company also wrote off \$10,724,000 (2021: \$0) of exploration expenditure which was previously capitalised. This expenditure related to the TL-SO-T 19-14 production sharing contract and the WA-523-P, WA-521-P, WA-155-P, AC/P62 and AC/P63 permits.

This prudent accounting position was taken because it is not certain that these costs will be recovered, particularly as the Company focuses its resources on the proven and highly prospective Bedout Subbasin, which contains the Dorado development, the recent Pavo oil discovery and a significant number of attractive prospects.

During the financial year there was an unrealized gain on foreign exchange of \$3,800,000 (2021: loss \$1,224,000) due to the effect of a depreciation of AUD against the Carnarvon's USD cash and financial assets.

The Company does not currently use derivative financial instruments to hedge financial risk exposures and therefore it is exposed to daily movements in the international oil prices, exchange rates, and interest rates. The Company manages its cash position in US Dollars and Australian Dollars to naturally hedge its foreign exchange rate exposures having regard for likely future expenditure.

RISK MANAGEMENT

Carnarvon recognises the importance of risk management in order to deliver the Company's strategies and to provide sustainable growth to shareholders. Carnarvon manages its risks in accordance with its risk management policy to ensure critical risks are identified, managed and monitored.

Carnarvon's risk management framework is overseen by the Risk, Governance and Sustainability Committee. Oversight of the effectiveness of the risk management processes and activities provides assurance to the Board and shareholders and supports the Company's commitment to continuous business improvement.

MATERIAL BUSINESS RISKS

Safety, Environment and Sustainability:

Health, Safety and Environment

Oil and gas exploration, development and production activities involve a variety of risks which may impact the health and safety of Carnarvon's people, communities, and the environment. These impacts could also damage Carnarvon's reputation or lead to fines and other penalties.

Carnarvon's projects are subject to various laws and regulations regarding the environment. Oil and gas exploration, development and production can be potentially environmentally hazardous giving rise to substantial costs for environmental clean-up and rehabilitation.

Carnarvon maintains high standards for health, safety, and environmental ("**HSE**") management. HSE risks are embedded in Carnarvon's operations and risk management framework and actively managed. Appropriate insurance is also maintained, and regularly reviewed to ensure adequate coverage.

Where Carnarvon does not directly manage exploration and development activities, Carnarvon ensures its operating partners maintain equally high standards for HSE management.



Climate Change

Climate change and management of carbon emissions may affect Carnarvon's operations, markets for oil and gas and the funding and insuring of projects. Potential risks arising from physical changes caused by climate change include increased severe weather events and rising sea levels which may impact Carnarvon's operations. There are also risks arising from policy changes by government which may result in increased regulation and costs which could have a material adverse impact on Carnarvon's operations.

Carnarvon recognises climate-related risks and the need for these to be managed effectively. As a result, the Company actively monitors current and potential areas of climate change risk.

Carnarvon has committed to net zero carbon emissions from its operations by 2050, if not earlier. Carnarvon currently offsets all its Scope 2 emissions, which at this time are derived from Carnarvon's head office.

In terms of future developments, like Dorado, Carnarvon is committed to working with its Joint Venture partners to reduce emissions from the project facilities and will continue to develop appropriate plans to offset emissions from future projects as they mature.

Carnarvon is also seeking to diversify its portfolio by potentially developing lower carbon intensive assets which provide appropriate returns to shareholders. This includes Carnarvon's Joint Venture, FEA, to develop a renewable diesel business in Western Australia. Carnarvon is also examining the potential of other renewable biofuels, including sustainable aviation and marine fuels, as well as other 'new energy' opportunities.

Economic and Financial Risks:

Oil Price

The financial performance, future value and growth of Carnarvon is dependent upon the prevailing oil price. The price of oil is subject to fluctuations and is affected by numerous factors beyond the control of Carnarvon.

A sustained period of low or declining oil prices could adversely affect the carrying value of Carnarvon's assets and the commercial viability of future developments.

Carnarvon monitors and analyses oil markets and seeks to reduce the price risk where reasonable and practical. Carnarvon will develop a hedging strategy upon sanction of future projects. Due to the early stage of Carnarvon's projects, Carnarvon does not currently have any active hedges against the price of oil. Once Carnarvon's projects develop further, the Company may enter hedging contracts to mitigate against fluctuations in the price of oil.



Additional information on financial risks is contained in Note 25 to the Financial Statements.

Foreign Currency Exchange

Carnarvon's financial report is presented in Australian dollars, however, Carnarvon holds funds in both AUD and USD. The retention of US dollars influences Carnarvon's reported cash holdings due to AUD / USD exchange rates at each reporting period year end which may result in foreign exchange gains or losses in each period. Carnarvon also incurs some costs in foreign currencies, typically US dollars, which means Carnarvon is subject to fluctuations in the rates of currency exchanges.

To mitigate against these foreign currency exchange fluctuations, Carnarvon holds a balance between USD and AUD as a natural hedge to committed future expenditures denominated in both USD and AUD. Once Carnarvon's projects develop further, the Company may enter into hedging contracts to mitigate against fluctuations in foreign currency exchanges.

Funding Risk

The nature of Carnarvon's business involves significant capital expenditure on exploration, appraisal, and potential development activities. Carnarvon's business and the development of projects which Carnarvon pursues relies on access to debt and equity funding.

Limitations on Carnarvon's ability to access funding could result in the postponement or reduction of capital expenditures, the relinquishment of rights in relation to assets, adversely affect Carnarvon's ability to take advantage of opportunities and restrict the expansion of the business. These could result in a material adverse effect on Carnarvon's business, financial condition, and operations.

Carnarvon establishes funding plans for its material projects to ensure that the optimal funding is obtained to maximise shareholder value. This includes an economic and commercial analysis of projects and funding and ensuring that potential funding complies with Carnarvon's risk management framework. Carnarvon also prepares short and long-term budgets and financial models which are monitored monthly in order to identify and manage any potential risks.

Operational Risks:

Exploration

Exploration is a speculative activity with an associated risk of discovery to find any oil and gas in commercial quantities and a risk of development. The future profitability of Carnarvon directly relates to the results of exploration, development, and production activities. If Carnarvon is unsuccessful in locating and developing new reserves and resources that are commercially viable, this may have a material adverse effect on Carnarvon's future business, operations, and financial conditions.

Carnarvon utilises well-established prospect evaluation and experienced personnel to identify and evaluate prospects in order to manage exploration risks. Carnarvon also has a process to ensure major decisions are subject to assurance reviews which include external experts and contractors where appropriate.

Joint Venture Operations

Carnarvon participates in a number of joint ventures. This is a common business arrangement employed to share the benefits, costs and risks associated with projects. Subject to any sole risk development rights which may exist in joint venture agreements, Carnarvon may require the agreement of other joint venturers to proceed with its activities, including a development project. Failure to agree on these matters may have a material adverse effect on Carnarvon's business.

To the extent that Carnarvon is not the operator of a joint venture, it is reliant on the efficient and effective management of the company acting as operator. The objectives and strategies of the operator may not always be consistent with the objectives and strategies of Carnarvon. However, operators must act in accordance with the directions of the relevant voting majority or by the voting principles in the joint venture agreement.

Carnarvon must also pay its percentage interest share of all costs and liabilities incurred by the joint venture as required under the relevant joint venture agreement. If Carnarvon fails to meet these obligations it may experience a dilution or loss (via a buy-out) of its interest in the joint venture or may not gain the benefit of joint venture activities, except at a significant cost penalty later in time.

Carnarvon manages joint venture risks through careful joint venture partner selection, stakeholder engagement and relationship management. Commercial and legal agreements, including industry standard joint operating agreements (JOA), are in place across all joint ventures to define the responsibilities and obligations of the joint venture.

Resource Estimates

Oil and gas resource estimates are expressions of judgement based on knowledge, experience, and industry practice. Estimates which are valid when originally calculated may alter significantly or become uncertain when new information becomes available. Material changes to resource estimates may result in Carnarvon altering its plans which could have a positive or negative effect on its operations.

Carnarvon prepares its reserves and contingent resources estimates in accordance with the definitions and guidelines in the Society of Petroleum Engineers 2018 Petroleum Resources Management Systems. Carnarvon engages personnel with an appropriate level of skill and experience to prepare and review its resource estimates. The assessment of Reserves and Contingent Resources may also undergo independent audit and review.

Development

The development of Carnarvon's projects is subject to a range of risks and uncertainties. These developments are exposed to the risk of low side reserve outcomes, cost overruns, timing delays, technical issues and production decreases. A significant poor development outcome could result in material adverse impacts to reserve and production forecasts, future revenues, and operating costs.

Carnarvon mitigates these risks through the careful selection of joint venture partners, ensuring the utilisation of high quality and experienced contractors throughout the development process, conducting assurance and other reviews during development, as well as comprehensively assessing all developments prior to making any commitment to participate.

Regulatory

Carnarvon operates in highly regulated industries and jurisdictions. Changes in regulations or enforcement actions could have material adverse impacts on Carnarvon. Changes in government, monetary, taxation, operational and other laws in the countries in which Carnarvon operates may also impact Carnarvon's operations.

Carnarvon holds interests in permits which are governed by the granting of contracts, licences, permits, or leases by the appropriate government authorities. Carnarvon may lose title to or its interest in a permit if licence conditions are not met, or insufficient funds are available to meet expenditure commitments.

Carnarvon monitors changes in relevant regulations and engages with regulators and industry bodies to ensure the impact of policy changes are understood, and the company continues to comply with all regulatory requirements.



Foreign Operations

Some countries within which Carnarvon transacts in are developing countries that have political and regulatory structures that are maturing and have potential for future change. There is the risk that certain events could have a material impact on the investment and security environment within those countries which could impact the assets held by Carnarvon.

Carnarvon closely monitors political developments and events in the countries in which it transacts. Carnarvon engages with stakeholders in those countries and maintains local offices which are staffed by in-country personnel who can liaise directly with regulators and provide appropriate local expertise.

Key Personnel

Skilled employees and consultants are essential to the successful delivery of Carnarvon's business strategy. Carnarvon relies on the services of certain key management personnel, including its executive officers, other key employees, and consultants. The loss of any of these key personnel could have a material adverse effect on Carnarvon's business.

Carnarvon ensures it maintains competitive remuneration practices relative to its industry, including long and short-term incentive schemes, to ensure it maintains the services of its key personnel and has the ability to attract additional personnel as required.

Carnarvon maintains clear and regular updates on strategy and business planning to provide clarity on the company's future plans. Guidance and opportunities are provided for staff to further their careers, and staff training and development seeks to ensure individual development goals align with Carnarvon's strategy. Succession planning for key management personnel and other key employees is also undertaken on a periodic basis.

Permit Interests

			Joint Venture	Partner	Indicative
Permit	Basin	Equity	Partner(s)	Interest	Forward Program
Australia					
AC-P62	Bonaparte	100%	-	-	G & G studies
AC-P63	Bonaparte	100%	-	-	G & G studies
EP509	Carnarvon	100%	-	-	G & G studies
TP29	Carnarvon	100%	-	-	G & G studies
WA-521-P	Roebuck	100%	-	-	Relinquishment
WA-523-P	Bonaparte	100%	-	-	Relinquishment
WA-435-P	Roebuck	20%	Santos Limited ⁱ	80%	G & G studies
WA-436-P	Roebuck	30%	Santos Limited ⁱ	70%	G & G studies
WA-437-P	Roebuck	20%	Santos Limited ⁱ	80%	G & G studies
WA-438-P	Roebuck	30%	Santos Limited ⁱ	70%	G & G studies, appraisal
WA-64-L	Roebuck	20%	Santos Limited ⁱ	80%	Development and production
WA-155-P	Carnarvon	100%	-	-	G & G studies
Timor-Leste					
TL-SO-T 19-14 PSC	Bonaparte	100%	-	-	Relinquishment

Note:

ⁱ Denotes operator where Carnarvon is non-operator partner.