



**ANNUAL  
STATEMENT  
OF RESERVES**

**2020**

## DISCLAIMER

The reserves and contingent resources shown in this report are estimates only and should not be construed as exact quantities. Estimates may increase or decrease because of market conditions, future operations, changes in regulations, or actual reservoir performance.

It should be recognized that the results of any recent drilling and testing may justify revisions that could be material. Therefore, actual developments may vary materially from what is stated in this report.

## INTRODUCTION

The report complies with the disclosure requirements established by Oslo Børs. The estimates in this report have been prepared in accordance with the definitions and guidelines set forth in the 2018 Petroleum Resources Management System (PRMS) approved by the Society of Petroleum Engineers (SPE). As presented in the 2018 PRMS, petroleum accumulations can be classified, in decreasing order of likelihood of commerciality, as reserves, contingent resources, or prospective resources.

Reserves are those quantities of petroleum anticipated to be commercially recoverable from known accumulations by application of development projects from a given date forward under defined conditions. Reserves must be discovered, recoverable, commercial, and remaining as of the evaluation date based on the planned development projects to be applied.

Proved reserves are those quantities of oil and gas which, by analysis of engineering and geoscience data, can be estimated with reasonable certainty to be commercially recoverable; probable and possible reserves are those additional reserves which are sequentially less certain to be recovered than proved reserves.

Contingent resources are those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from known accumulations, but for which the applied project or projects are not yet considered mature enough for commercial development because of one or more contingencies.

Development pending contingent resources are those of a discovered accumulation where project activities are ongoing to justify commercial development in the foreseeable future. Development unclarified contingent resources are those of a discovered accumulation where project activities are under evaluation and where justification of commercial development is unknown based on available information.

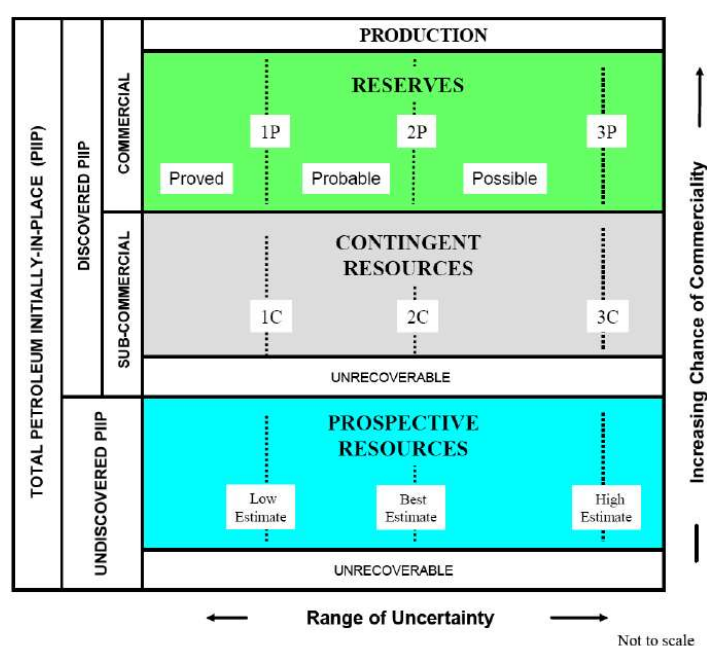


Fig 1.1 Overview of SPE reserves and resources classification system

## PORTFOLIO

BW Energy holds two licenses with reserves and resources currently under development and planning stages. The Dussafu Marin Permit, offshore Gabon, and the Maromba Block, in the Campos Basin offshore Brazil.

### Dussafu Marin Permit

BW Energy currently hold 73.5% of the license. Tullow Oil owns 10%, Gabon Oil Company (GOC) owns 9% and Panoro Energy hold the remaining 7.5% in the license.

The Dussafu Marin Permit and the associated Ruche Autorisation Exclusive d'Exploitation ("Ruche EEA") production license are located approximately 50 kilometres off the coast of Gabon. The Ruche EEA covers an area of around 850 square kilometres. The water depth within the Ruche EEA ranges from approximately 80 metres in the northeast corner to approximately 650 metres in the southwest corner. Six oil discoveries have been made on the licence to date: Tortue, Hibiscus, Ruche, Ruche NE, Moubenga and Walt Whitman. The area comprising the Tortue, Hibiscus, Ruche and Ruche NE fields has an average water depth of approximately 116 metres.

Figure1 a: Dussafu and the surrounding area.

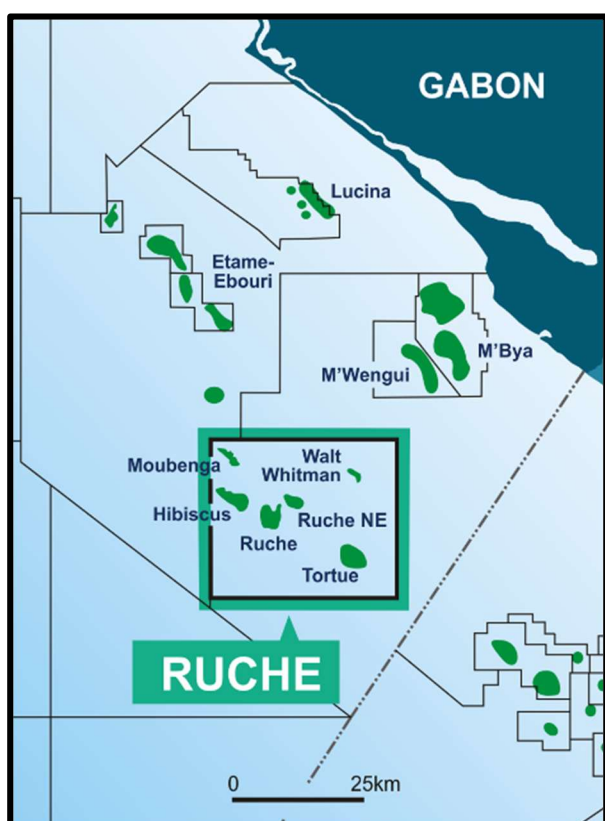
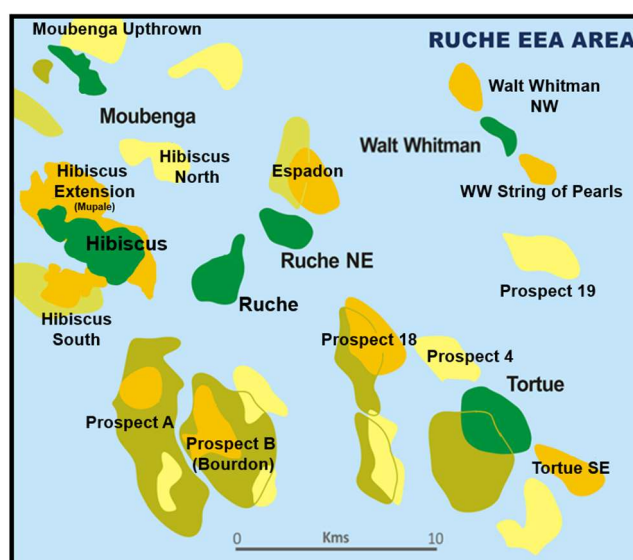


Figure1 b: Discoveries, prospects and leads within the Ruche EEA.



Tortue Phase 1 development commenced in 2017 with first oil achieved in September of 2018. Tortue Phase 1 included the drilling of two subsea production wells at the Tortue field tied back to FPSO Adolo. Tortue Phase 2 planned for the drilling of four additional subsea production wells at the Tortue field tied back to the FPSO. Tortue Phase 2 commenced in 2019 with two additional wells brought online in March of 2020. A third well was drilled but the drilling campaign was suspended due to the global pandemic. In 2021, the restart of Tortue Phase 2 is expected to commence in 2Q 2021 with the final two Tortue wells being brought on production by 2H 2021.

BW Energy is currently preparing to execute a third development phase in the Dussafu block, Ruche Phase 1, with the Hibiscus and Ruche fields, which lie approximately 15 to 20 kilometres northwest of the Tortue field. The current plan is to drill six horizontal production wells that will be connected to a converted MODU to Offshore

Installation (OI) production unit, Hibiscus Alpha. Four of the wells will be drilled at the Hibiscus field, all targeting the Gamba reservoir. Two wells will be drilled at the Ruche field targeting the Gamba reservoir. Hibiscus Alpha will be tied back to BW Adolo FPSO, which will continue to serve as the hub for production in the Dussafu licence. First oil from Ruche Phase 1 is expected in late 2022, adding up to 30,000 bopd to gross production from the Dussafu block once fully ramped up. The Ruche Phase 1 development is expected to recover gross 2P reserves of approximately 47.9 mmbbls. Ruche Phase 2 will add another six or more production wells to the Hibiscus, Ruche, and Ruche NE fields. It is expected to recover gross 2P reserves of approximately 22.4 mmbbls.

## DUSSAFU RESERVES AND RESOURCES

BW Energy has used the services of Netherland, Sewell & Associates, Inc. (NSAI) for estimating Dussafu reserves. Estimated oil reserves by NSAI for oil properties located in the Tortue, Ruche, Ruche NE, and Hibiscus fields, as of December 31, 2020:

As of 31.12.2020	BW Energy Interest	1P - Gross (Proved)	1P – Net (Proved)	2P – Gross (Proved + Probable)	2P - Net (Proved + Probable)	3P - Gross (Proved + Probable + Possible)	3P – Net (Proved + Probable + Possible)
		mmbbl*	mmbbl*	mmbbl*	mmbbl*	mmbbl*	mmbbl*
<b>Dussafu Marin Permit</b>	73.5%	73.5	54.0**	104.9	77.1**	134.8	99.1**

\*The oil volumes shown include crude oil only. Oil volumes are expressed in millions of barrels (mmbbl).

\*\* The Net volumes reflect BW Energy's interest.

NSAI has estimated gross 1P reserves of 73.5 mmbbls and gross 2P reserves of 104.9 mmbbls in the Tortue, Ruche, Ruche NE, and Hibiscus fields as of 31.12.2020. BW Energy's net entitlement 1P reserves are 54.0 mmbbls and 2P reserves are 77.1 mmbbls. The 3-year 2P reserve replacement ratio for Dussafu is 761%.

Aggregate reserves, production, development and adjustments for Dussafu:

	Developed assets		Under Development (Transitional assets)		Non-developed assets		Total	
	1P	2P	1P	2P	1P	2P	1P	2P
<b>Balance as of 31.09.2019</b>	29.6	42.4	47.3	70.0	-	-	<b>76.9</b>	<b>112.4</b>
Production	(6.2)	(6.2)	-	-	-	-	<b>(6.2)</b>	<b>(6.2)</b>
Revision	1.8	(1.5)	0.9	0.2	-	-	<b>2.7</b>	<b>(1.3)</b>
<b>Balance as of 31.12.2020</b>	25.2	34.7	48.2	70.2	-	-	<b>73.5</b>	<b>104.9</b>

All figures shown are mmbbls. Developed assets include Tortue field. Assets Under Development include Ruche Phase 1 and 2. Estimated gross oil contingent resources by NSAI for oil properties located in the Walt Whitman, Moubenga, Tortue, Ruche, and Ruche NE fields as of December 31, 2020:

Contingent Resources							
As of 31.12.2020	BW Energy Interest	1C - Gross	1C – Net	2C – Gross	2C - Net	3C - Gross	3C – Net
		mmbbl*	mmbbl*	mmbbl*	mmbbl*	mmbbl*	mmbbl*
<b>Dussafu Marin Permit</b>	73.5%	15.6	11.5**	36.2	26.6**	65.0	47.8**

\*The oil volumes shown include crude oil only. Oil volumes are expressed in millions of barrels (mmbbl).

\*\* The Net volumes reflect BW Energy's interest.



NSAI has estimated gross 1C reserves of 15.6 mmbbls and gross 2C reserves of 36.2 mmbbls in the Tortue, Ruche, and Ruche NE fields as of 31.12.2020. BW Energy's net entitlement 1C reserves are 11.5 mmbbls and 2C reserves are 26.6 mmbbls.

The oil volumes shown include crude oil only. Oil volumes are expressed in millions of barrels (mmbbl). Reserves categorisation conveys the relative degree of certainty; reserves subcategorization is based on development and production status. The estimates of reserves included herein have not been adjusted for risk.

Oil prices are based on Platts Dated Brent prices and are adjusted for market differentials. Oil prices, before adjustments, are shown in the following table:

Period ending	31.12.2021	31.12.2022	31.12.2023	31.12.2024	Thereafter
	(US\$/Barrel)	(US\$/Barrel)	(US\$/Barrel)	(US\$/Barrel)	(US\$/Barrel)
Oil Price	51.92	58.33	64.00	72.00	75.00

## Maromba Block

The Maromba discovery is in the southern part of the Campos Basin offshore Brazil, approximately 100 kilometres southeast of the city of Cabo Frio. The water depth in the area is approximately 160 metres. Nine wells were drilled in the licence between 1980 and 2006, and oil was found in eight of these across various reservoirs including in the Eocene, Maastrichtian, Albion, Aptian and Barremian levels. BW Energy currently holds 100% of the license. Magma Oil holds a 5% back-in right in the Maromba license which they are expected to execute upon first oil.

Following the success at Dussafu, BW Energy plans to develop the Maromba licence in phases, thereby minimising up-front capital expenditure, accelerating time to first oil, and allowing the production and the supporting organisation to grow organically. Phasing will provide reservoir performance data which will be used to optimise future development phases.

Figure1 a: Maromba and the surrounding area.

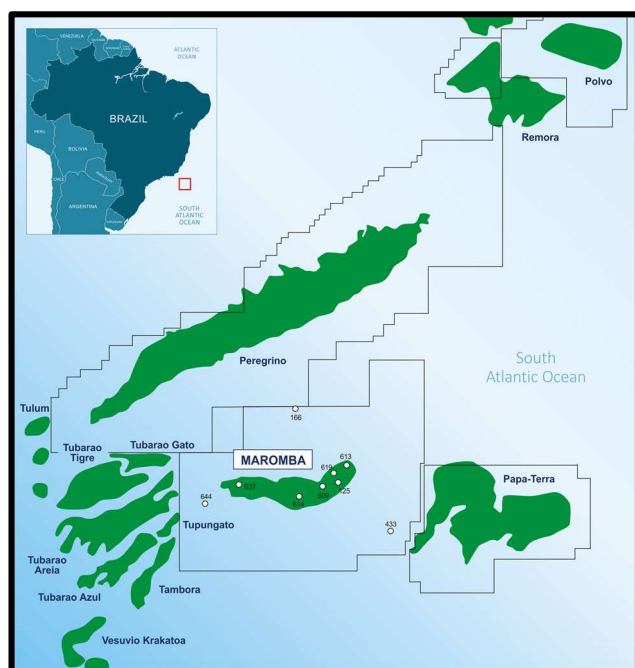
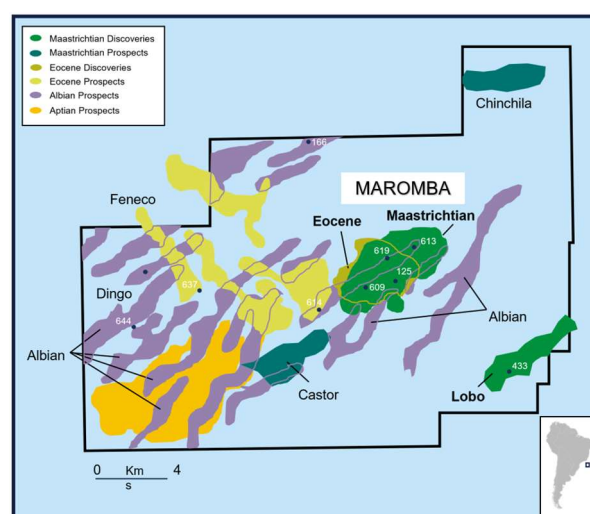


Figure1 b: Discoveries, prospects and leads within the Maromba Block.



BW Energy is planning the first phases of development in the Maromba Block. In the first phase, three horizontal subsea production wells will target the Maastrichtian reservoir and be tied to an FPSO that will serve as the hub for Maromba production. The second phase of development will bring on three additional production wells. The development plan has been submitted and was approved by ANP in 2020. First oil is expected in 2024. This first phase of development will recover gross 2C resources of approximately 62.2 mmbbls while the second phase will recover 2C resources of approximately 35.8 mmbbls.

## MAROMBA RESERVES AND RESOURCES

BW Energy has used the services of Netherland, Sewell & Associates, Inc. (NSAI) for estimating Maromba reserves. Estimated contingent oil resources by NSAI for oil properties located in the Maromba BC-20A Block, as of December 31, 2020:

Maromba BC-20A Block							
As of 31.12.2020	BW Energy Interest	1C - Gross	1C – Net	2C – Gross	2C - Net	3C - Gross	3C – Net
		mmbbl*	mmbbl*	mmbbl*	mmbbl*	mmbbl*	mmbbl*
<b>Development Pending</b>	95.0%	70.4	66.9**	98.0	93.1**	131.3	124.7**
<b>Development Unclassified</b>	95.0%	31.2	29.6**	48.2	45.7**	74.9	71.2**

\*The oil volumes shown include crude oil only. Oil volumes are expressed in millions of barrels (mmbbl).

\*\* The Net volumes reflect BW Energy's interest after future farm-out.

In the Development Pending category, NSAI have estimated gross 1C resources of 70.4 mmbbls and gross 2C resources of 98.0 mmbbls in the Maromba Block as of 31.12.2020. BW Energy's net entitlement—after Magma back-in at first oil—1C resources are 66.9 mmbbls and 2C resources are 93.1 mmbbls. In the Development Unclassified category gross 1C resources are estimated at 31.2 mmbbls and gross 2C resources of 48.2 mmbbls in the Maromba Block as of 31.12.2020. BW Energy's net entitlement—after Magma back-in at first oil—1C resources are 29.6 mmbbls and 2C resources are 45.7 mmbbls.

The oil volumes shown include crude oil only. Oil volumes are expressed in millions of barrels (mmbbl). For contingent resources, oil prices were used only to confirm economic viability and determine economic limits for the properties. Oil prices are based on Brent Crude futures prices and are adjusted for quality, transportation fees, and market differentials. Oil prices, before adjustments, are shown in the following table:

Period ending	31.12.2021	31.12.2022	31.12.2023	31.12.2024	Thereafter
	(US\$/Barrel)	(US\$/Barrel)	(US\$/Barrel)	(US\$/Barrel)	(US\$/Barrel)
Oil Price	51.92	58.33	64.00	72.00	75.00

## MANAGEMENT DISCUSSION AND ANALYSIS

BW Energy has used the services of Netherland, Sewell & Associates, Inc. (NSAI) for estimating and certifying the reserves and resources.

Evaluations have been based on standard petroleum engineering and evaluation principles. This include use of standard engineering and geoscience methods, or a combination of methods, including performance analysis (in Dussafu), volumetric analysis, analogy, and reservoir modelling, considered to be appropriate and necessary to classify, categorize, and estimate volumes in accordance with the 2018 PRMS definitions and guidelines. The reserves and contingent resources in this report have been estimated using deterministic methods.

As in all aspects of oil and gas evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, conclusions necessarily represent only informed professional judgment.

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