



Panoro Energy



# Creating One of the World's Leading Independent Listed African E&Ps

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ANNUAL STATEMENT  
OF RESERVES 2020

APRIL 2021

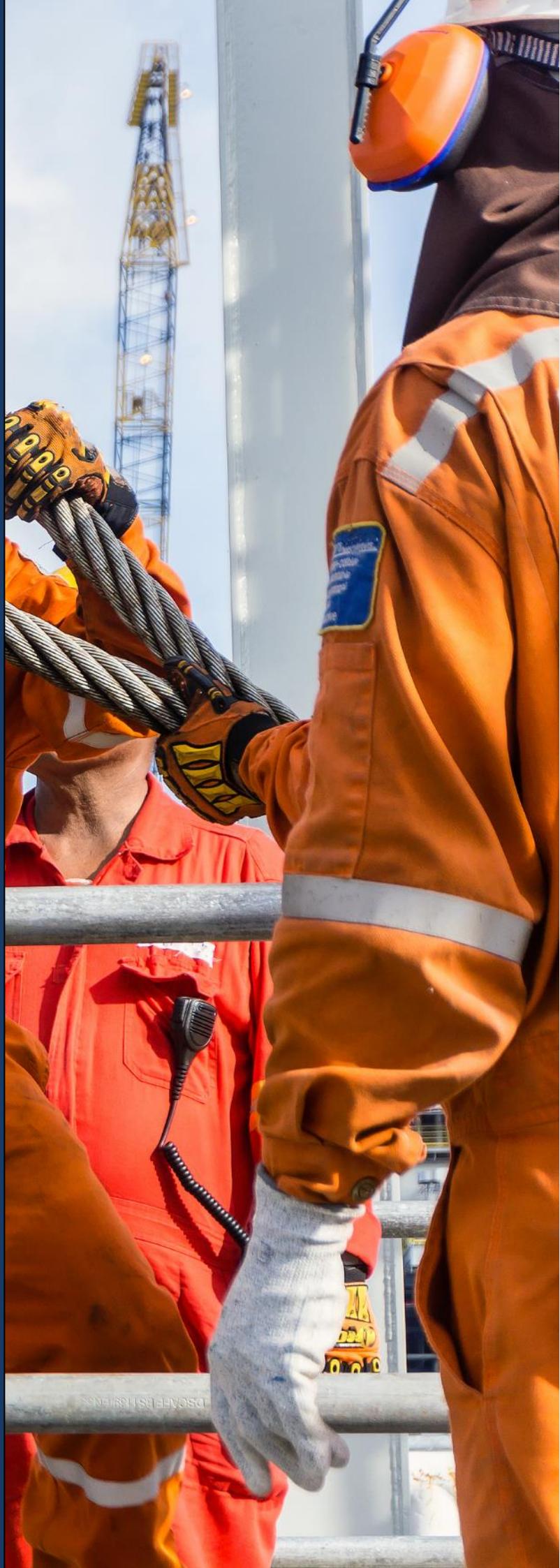
## DISCLAIMER

The information provided in this report reflects reservoir assessments, which in general must be recognised as subjective processes of estimating hydrocarbon volumes that cannot be measured in an exact way.

It should also be recognised that results of recent and future drilling, testing, production and new technology applications may justify revisions that could be material.

Certain assumptions on the future beyond Panoro's control have been made. These include assumptions made regarding market variations affecting both product prices and investment levels. As a result, actual developments may deviate materially from what is stated in this report.

The estimates in this report are based on third party assessments prepared by Netherland Sewell and Associates Inc. (NSAI) in March 2021 for Dussafu and by Gaffney Cline & Associates Limited (GCA) in March 2021 for the TPS assets.



# INTRODUCTION

Panoro's classification of reserves and resources complies with the guidelines established by the Oslo Stock Exchange and are based on the definitions set by the Petroleum Resources Management System (PRMS), sponsored by the Society of Petroleum Engineers/ World Petroleum Council/ American Association of Petroleum Geologists/ Society of Petroleum Evaluation Engineers (SPE/WPC/AAPG/SPEE) as issued in June 2018.

Reserves are the volume of hydrocarbons that are expected to be produced from known accumulations:

- On Production
- Approved for Development
- Justified for Development

Reserves are also classified according to the associated risks and probability that the reserves will be actually produced.

**1P** – Proved reserves represent volumes that will be recovered with 90% probability

**2P** – Proved + Probable represent volumes that will be recovered with 50% probability

**3P** – Proved + Probable + Possible volumes that will be recovered with 10% probability.

Contingent Resources are the volumes of hydrocarbons expected to be produced from known accumulations:

- In planning phase
- Where development is likely
- Where development is unlikely with present basic assumptions
- Under evaluation

Contingent Resources are reported as 1C, 2C, and 3C, reflecting similar probabilities as reserves

## PANORO ASSETS PORTFOLIO

The Panoro portfolio reported here for year end 2020 is considered to comprise two assets with continuing operations with reserves and contingent resources, these are: the Dussafu Permit and the TPS Assets. The Aje field is held for sale and is not included in this report. A summary description of these assets with status as of year-end 2020 is included below. For additional background information on the assets, refer to the company's website. Unless otherwise specified, all reserves figures quoted in this report are net to Panoro's working interest.

### DUSSAFU:



Offshore Gabon

Operator:

**BW Energy, Panoro 7.4997%**

Dussafu is a development and exploitation licence covering an area containing several oil fields, the most recent discovery being the Hibiscus field. In 2014 an Exclusive Exploitation Authorisation (EEA) for an 850.5 km<sup>2</sup> area within the Dussafu PSC was awarded. A Field Development Plan for the EEA area was subsequently approved and a final decision to start developing the licence was taken in 2017. The first field in the EEA area, Tortue, started oil production in 2018. The second set of fields, Ruche, Hibiscus and Ruche North East is scheduled to start oil production by the end of 2022.

Production from the Tortue field during 2020 amounted to 5.2 MMbbls gross.

In February 2021 NSAI certified (3rd party) reserves and resources for the Dussafu licence. As of the end of December 2020, the Dussafu licence contained gross 1P Proved Reserves of 73.5 MMbbls in the Tortue, Ruche, Ruche North East and Hibiscus fields. Gross 2P Proved plus Probable Reserves amounted to 104.9 MMbbls in the same fields. Gross 3P Proved plus Probable plus Possible Reserves in these fields amounted to 134.8 MMbbls.

In addition to these Reserves NSAI also certified gross 1C Contingent Resources of 15.6 MMbbls, gross 2C Contingent Resources of 36.2 MMbbls, and gross 3C Contingent Resources of 65.0 MMbbls in the Dussafu licence area.

These evaluations yield the following Reserves net to Panoro's working interest of 7.5%. 1P Proved Reserves of 5.51 MMbbls, 2P Proved plus Probable Reserves of 7.87 MMbbls and 3P Proved plus Probable plus Possible Reserves of 10.11 MMbbls. Additional unrisked Contingent Resources net to Panoro's working interest of 7.5% are approximately 1.2 MMbbls 1C, 2.7 MMbbls 2C and 4.9 MMbbls 3C. These Reserves and Contingent Resources are Panoro's net working interest volumes before deductions for royalties and other taxes.

### TPS ASSETS:



Onshore and Offshore Tunisia

Operator:

**TPS, Panoro 29.4%**

The TPS Assets comprise five oil field concessions in the region of the city of Sfax, onshore and shallow water offshore Tunisia. The concessions are Cercina, Cercina Sud, Rhemoura, El Ain/Gremda and El Hajeb/Guebiba.

The oil fields were discovered in the 1980's and early 1990's and have produced a total of around 56 million barrels of oil to date. The current production is stable at around 4,700 barrels of oil per day gross.

Production from the TPS assets amounted to 1.42 MMBbls gross, which is approximately 0.42 MMBbls net to Panoro's working interest share.

In March 2021 GCA certified (3rd party) reserves and resources from the fields as of end December 2020. These reserves amount to 1P Proved Reserves of 8.63 MMBbls, 2P Proved plus Probable Reserves of 15.08 MMBbls and 3P Proved plus Probable plus Possible reserves of 21.61 MMBbls. Panoro's net working interest 1P Proved reserves are 2.54 MMBbls, 2P Proved plus Probable are 4.43 MMBbls and 3P Proved plus Probable plus Possible are 6.35 MMBbls.

In addition to these reserves, GCA also certified gross 1C Contingent Resources of 1.6 MMBbls, 2C Contingent Resources of 5.3 MMBbls and 3C Contingent Resources of 10.0 MMBbls, all assigned to the Cercina oil field. Panoro's net working interest 1C Contingent Resource is 0.5 MMBbls, net working interest 2C Contingent Resource is 1.6 MMBbls and net working interest 3C Contingent Resource is 2.9 MMBbls. These Reserves and Contingent Resources are Panoro's net volumes before deductions for royalties and other taxes.

## MANAGEMENT DISCUSSION AND ANALYSIS

Panoro uses the services of NSAI and GCA for third party verifications of its reserves and resources.

All evaluations are based on standard industry practice and methodology for production decline analysis and reservoir modelling based on geological and geophysical analysis. The following discussions are a comparison of the volumes reported in previous reports, along with a discussion of the consequences for the year-end 2020 ASR:

**Dussafu:** In 2020, the Tortue field continued production from four wells. An additional two production wells, postponed for operational reasons in 2020, are to be brought on to production in 2021. The next development phase, consisting of the development of the Ruche and Hibiscus fields, has commenced and is expected to start production by year end 2022. The NSAI reserves report takes these field development plans into account and assumes production from a total of 6 development wells in Tortue, and from a total of 12 wells in Hibiscus/Ruche phase 1 and phase 2. A minor revision was made to the Dussafu reserves to account for the delays experienced in executing the projects in 2020.

The remaining fields in Dussafu (Walt Whitman and Moubenga) and extensions to the other fields are classified as Contingent Resources. A decision to develop these fields will trigger a re-assignment of these resources as reserves and a possible re-determination of their volumes.

**TPS:** Minor modifications were made to TPS reserves based on 2020 well performance. There are Contingent Resources associated with the Cercina field in the TPS assets. These resources may be re-assigned as reserves if a development

decision is taken to drill certain un-drilled compartments within the Cercina field.

## ASSUMPTIONS:

The commerciality and economic tests for the Dussafu reserves volumes were based on an average oil price over the field life of USD71/Bbl.

The commerciality and economic tests for the TPS assets reserves volumes were based on an average oil price over the life of the field of USD64/Bbl.

## 2020 – 2P DEVELOPMENT (Working Interest)

| 2P Reserves Development                             | (MMBOE)     |
|---|-------------|
| Balance (previous ASR –31 December 2019)            | 13.4        |
| Production 2020                                     | (0.8)       |
| Revisions of previous estimates                     | (0.2)       |
| <b>Balance (revised ASR) as of 31 December 2020</b> | <b>12.3</b> |

Panoro's total 1P working interest reserves at end of 2020 amount to 8.05 MMBbls. Panoro's 2P reserves amount to 12.30 MMBbls and Panoro's 3P reserves amount to 16.46 MMBbls.

Panoro's Contingent Resource base includes discoveries of varying degrees of maturity towards development decisions. By end of 2020, Panoro's assets contained a total un-risked 2C working interest volume of approximately 4.3 MMBbls.

30 April 2021

**John Hamilton**

CEO

# Annex Reserves Statement

AS OF 31 DECEMBER 2020

| Interest %                      | 1P (Low Estimate) |              |       |              | 2P (Base Estimate) |               |       |               | 3P (High Estimate) |               |       |               |
|---------------------------------|-------------------|--------------|-------|--------------|--------------------|---------------|-------|---------------|--------------------|---------------|-------|---------------|
|                                 | Liquids           | Gas          | Total | Net          | Liquids            | Gas           | Total | Net           | Liquids            | Gas           | Total | Net           |
|                                 | MMbbls            | Bcf          | MMBOE | MMBOE        | MMbbls             | Bcf           | MMBOE | MMBOE         | MMbbls             | Bcf           | MMBOE | MMBOE         |
| <b>ON PRODUCTION</b>            |                   |              |       |              |                    |               |       |               |                    |               |       |               |
| Tortue Field                    | 7.5               | 20.87        | -     | 20.87        | 1.57               | 30.51         | -     | 30.51         | 2.29               | 38.41         | -     | 38.41         |
| TPS Fields                      | 29.4              | 8.63         | -     | 8.63         | 2.54               | 15.08         | -     | 15.08         | 4.43               | 21.61         | -     | 21.61         |
| <b>Total</b>                    |                   | <b>29.50</b> | -     | <b>29.50</b> | <b>4.11</b>        | <b>45.59</b>  | -     | <b>45.59</b>  | <b>6.72</b>        | <b>60.02</b>  | -     | <b>60.02</b>  |
| <b>APPROVED FOR DEVELOPMENT</b> |                   |              |       |              |                    |               |       |               |                    |               |       |               |
| Hibiscus/Ruche                  | 7.5               | 52.58        | -     | 52.58        | 3.94               | 74.42         | -     | 74.42         | 5.58               | 96.41         | -     | 96.41         |
| <b>Total</b>                    |                   | <b>52.58</b> | -     | <b>52.58</b> | <b>3.94</b>        | <b>74.42</b>  | -     | <b>74.42</b>  | <b>5.58</b>        | <b>96.41</b>  | -     | <b>96.41</b>  |
| <b>TOTALS</b>                   |                   |              |       |              |                    |               |       |               |                    |               |       |               |
| <b>Total Reserves</b>           |                   | <b>82.09</b> | -     | <b>82.09</b> | <b>8.05</b>        | <b>120.01</b> | -     | <b>120.01</b> | <b>12.30</b>       | <b>156.43</b> | -     | <b>156.43</b> |
|                                 |                   |              |       |              |                    |               |       |               |                    |               |       | <b>16.46</b>  |

## Reserves Development

|   |             |
|---|-------------|
| 2P Reserves Development                             | (MMBOE)     |
| Balance (previous ASR – 31 December 2019)           | 13.4        |
| Production 2020 <sup>1</sup>                        | (0.8)       |
| Revisions of previous estimates <sup>2</sup>        | (0.2)       |
| <b>Balance (revised ASR) as of 31 December 2020</b> | <b>12.3</b> |

1. Represents TPS and Tortue field production in 2020

2. Revision to TPS Assets and Dussafu reserves estimates

## Contingent Resources summary

| Asset         | 2C MMBOE (as of YE2019) | 2C MMBOE (as of this report) |
|---------------|-------------------------|------------------------------|
| Dussafu       | 2.7                     | 2.7                          |
| Cercina       | 1.6                     | 1.6                          |
| <b>Totals</b> | <b>4.3</b>              | <b>4.3</b>                   |

## Supplementary Information on Acquisitions

In February 2021 Panoro announced the acquisition of 14.25% working interest in Block G in Equatorial Guinea and an additional 10% working interest in the Dussafu Marin Permit in Gabon. The acquisition of Block G was completed in March 2021 and the acquisition of the additional 10% working interest in Dussafu is pending completion.

Had the acquisitions completed on 31 December 2020, the reserves position of Panoro would have been as follows:

| Interest %                       | 1P (Low Estimate) |            |                |              | 2P (Base Estimate) |            |                |              | 3P (High Estimate) |            |                |              |
|----------------------------------|-------------------|------------|----------------|--------------|--------------------|------------|----------------|--------------|--------------------|------------|----------------|--------------|
|                                  | Liquids<br>MMbbls | Gas<br>Bcf | Total<br>MMBOE | Net<br>MMBOE | Liquids<br>MMbbls  | Gas<br>Bcf | Total<br>MMBOE | Net<br>MMBOE | Liquids<br>MMbbls  | Gas<br>Bcf | Total<br>MMBOE | Net<br>MMBOE |
| <b>ON PRODUCTION</b>             |                   |            |                |              |                    |            |                |              |                    |            |                |              |
| Tortue Field                     | 17.50             | 20.87      | -              | 20.87        | 3.65               | 30.51      | -              | 30.51        | 5.34               | 38.41      | -              | 38.41        |
| TPS Fields                       | 29.40             | 8.63       | -              | 8.63         | 2.54               | 15.08      | -              | 15.08        | 4.43               | 21.61      | -              | 21.61        |
| Block G                          | 14.25             | 29.74      | -              | 29.74        | 4.24               | 58.62      | -              | 58.62        | 8.35               | 92.34      | -              | 92.34        |
| <b>Total</b>                     | <b>59.24</b>      | -          | <b>59.24</b>   | <b>10.43</b> | <b>104.22</b>      | -          | <b>104.22</b>  | <b>18.12</b> | <b>152.37</b>      | -          | <b>152.37</b>  | <b>26.24</b> |
| <b>APPROVED FOR DEVELOPMENT</b>  |                   |            |                |              |                    |            |                |              |                    |            |                |              |
| Hibiscus/Ruche                   | 17.50             | 52.58      | -              | 52.58        | 9.20               | 74.42      | -              | 74.42        | 13.02              | 96.41      | -              | 96.41        |
| Block G                          | 14.25             | 6.77       | -              | 6.77         | 0.96               | 14.52      | -              | 14.62        | 2.07               | 23.36      | -              | 23.36        |
| <b>Total</b>                     | <b>59.35</b>      | -          | <b>59.35</b>   | <b>10.16</b> | <b>88.94</b>       | -          | <b>89.04</b>   | <b>15.09</b> | <b>119.77</b>      | -          | <b>119.77</b>  | <b>20.20</b> |
| <b>JUSTIFIED FOR DEVELOPMENT</b> |                   |            |                |              |                    |            |                |              |                    |            |                |              |
| Block G                          | 14.25             | 6.32       | -              | 6.32         | 0.90               | 20.72      | -              | 20.72        | 2.95               | 36.15      | -              | 36.15        |
| <b>Total</b>                     | <b>6.32</b>       | -          | <b>6.32</b>    | <b>0.90</b>  | <b>20.72</b>       | -          | <b>20.72</b>   | <b>2.95</b>  | <b>36.15</b>       | -          | <b>36.15</b>   | <b>5.15</b>  |
| <b>TOTALS</b>                    |                   |            |                |              |                    |            |                |              |                    |            |                |              |
| <b>Total Reserves</b>            | <b>124.92</b>     | -          | <b>124.92</b>  | <b>21.49</b> | <b>213.87</b>      | -          | <b>213.97</b>  | <b>36.17</b> | <b>308.28</b>      | -          | <b>308.28</b>  | <b>51.59</b> |

## Reserves Development

|  |             |
|--|-------------|
| 2P Reserves Development                                | (MMBOE)     |
| Balance (previous ASR – 31 December 2019)              | 13.4        |
| Production 2020 <sup>1</sup>                           | (0.8)       |
| Acquisitions/disposals since previous ASR <sup>2</sup> | 23.9        |
| Revisions of previous estimates <sup>3</sup>           | (0.2)       |
| <b>Balance (revised ASR) as of 31 December 2020</b>    | <b>36.2</b> |

1. Represents TPS and Tortue field production in 2020

2. Acquisition of Block G, Equatorial Guinea and 10% interest in Dussafu PSC in 2021

3. Revision to TPS Assets and Dussafu reserves estimates

## Contingent Resources summary

| Asset         | 2C MMBOE (as of YE2019) | 2C MMBOE (as of this report) |
|---------------|-------------------------|------------------------------|
| Dussafu       | 2.7                     | 6.3                          |
| Cercina       | 1.6                     | 1.6                          |
| Block G       | -                       | 25.6                         |
| <b>Totals</b> | <b>4.3</b>              | <b>33.5</b>                  |

## COMPANY ADDRESSES

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