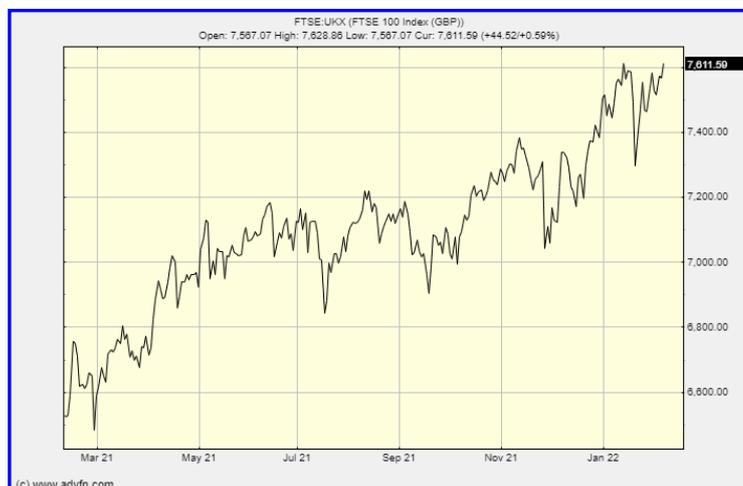


# Uraniumletter INTERNATIONAL

the international independent information and advice bulletin for uranium resource investments

## Special Situation – February 2022 Update

www.deeptyellow.com.au



## Deep Yellow Limited (A\$ 0.75)

ASX : DYL  
OTCQX Best Market : DYLLF

H+L prices (12 months) : A\$ 1.37 – 0.585

Issued shares : 387.0 million  
Fully diluted : 382.8 million

Market capitalization : A\$ 303.8 million  
(US\$ 216.5 million)

**2022 share price target: A\$ 1.50**

## Company Profile

**Deep Yellow** is an advanced-stage uranium exploration company in pre-development phase with a cornerstone suite of projects in **Namibia, Africa**, which provided 5,413 tonnes U in 2020 or approximately 12% of world uranium mining output in 2020.

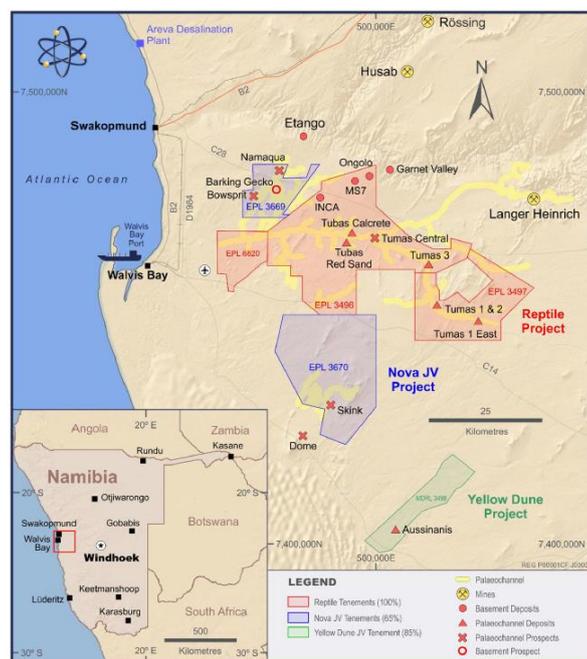
The Company holds 4 key contiguous Exclusive Prospecting Licences (EPLs) covering 1,590 km<sup>2</sup> within the heart what is a world recognized, prospective uranium province of high significance.

The tenements are strategically located amongst the major uranium mines of this region – 20 km south of CCN/CGN's of China Husab/Rössing deposits and 40 km southwest of Paladin's Langer Heinrich mine.

**Deep Yellow** has a two-pronged growth strategy involving the growing of existing uranium resources in **Namibia**.

In early 2021 a **Pre Feasibility Study** ("PFS") was completed on the Company's **Tumas Project** and a **Definitive Feasibility Study** ("DFS") commenced February 2022 and remains on schedule for completion in the 2022 December quarter.

The primary objective of **Deep Yellow's** strategy is to establish a multi-platform production in aggregate of 5-10 million pounds U<sub>3</sub>O<sub>8</sub> per annum, with the expectation of each project achieving a minimum 2-3 million pounds per annum production capacity.



► **Significant increase in forecast Project economic outcomes using the PFS model assumptions and the updated Ore Reserves**

- o Life of Mine (Production) increased to 25.75 years from 11.5 years
- o Operating Margin (EBITDA) (U<sub>3</sub>O<sub>8</sub> @ US\$65/lb & V<sub>2</sub>O<sub>5</sub> @ US\$7/lb) up 114% from US\$1,035M to US\$ 2,215M
- o Project NPV8.6: Post tax and ungeared up from US\$207M to US\$412M
- o Project IRR: Post tax, ungeared and real, up from 21% to 23%
- o All-in Sustaining Costs (AISC) down from US\$30.69/lb U<sub>3</sub>O<sub>8</sub> to US\$30.37 (for the first 20 years of production)

► **Upgraded ore reserves**

During work undertaken to date, the Ore Reserves available to the Project have been increased by an impressive 120%, to 68.4Mlb U<sub>3</sub>O<sub>8</sub> at an average grade of 345ppm U<sub>3</sub>O<sub>8</sub>, using a cut-off grade of 150ppm U<sub>3</sub>O<sub>8</sub>.

Significant potential remains to further expand Ore Reserves in the Project area, by utilising the 48.6Mlb Inferred Resources available for upgrade and importantly (see JORC Resource Table - Appendix 1), additional exploration upside exists with approximately 40% of the highly prospective Tumas Palaeochannel system remaining to be adequately tested.

*Table 1: Tumas Project Expanded Ore Reserves*

<b>Classification</b>	<b>U<sub>3</sub>O<sub>8</sub> Cut-off ppm</b>	<b>Tonnes Mt</b>	<b>U<sub>3</sub>O<sub>8</sub> ppm</b>	<b>U<sub>3</sub>O<sub>8</sub> Metal Mlb</b>
Probable	150	89.8	345	68.4
<b>Total</b>	<b>150</b>	<b>89.8</b>	<b>345</b>	<b>68.4</b>

The upgrade to the Ore Reserve and Mining Study undertaken were important areas of work and have fulfilled a critical DFS target, after the PFS outlined the sensitivity of the Project to mine life and indicated a doubling of the NPV could be achieved by increasing mine life beyond 20 years at PFS production rates. This important milestone has now been achieved.



## Deep Yellow Group: *Strategically Positioned, Well-Funded*

- Continue dual-pillar growth strategy to establish a multi-platform, 5-10Mlb per annum, low-cost, tier one uranium producer
- Project portfolio located in Namibia
- Excellent progression and growth of Tumas Project, with DFS progressing as planned
- Led by a standout and proven uranium team
  - Highly-credentialed and experienced team (majority ex-Paladin Energy)
  - Majority of team successfully built and operated **Langer Heinrich**, Namibia and **Kayelekera**, Malawi
  - Grew Paladin from a market capitalisation of US\$2M to US\$4Bn – pre-Fukushima
- Well-funded with cash balance of A\$51M
- Nuclear energy becoming the moral imperative, with positive momentum building globally

## ► Metallurgical Recovery

The overall metallurgical recovery assumed for the PFS was critically dependent on recovery from two process units that required further assessment to achieve DFS accuracy. These two processes are the beneficiation and leach extraction steps.

The PFS assumed recoveries for these two steps to be 97.7% and 97.0% respectively, with a further 1% soluble loss resulting in an estimated overall recovery of 93.8%. In the case of beneficiation, the PFS also assumed that 35% of the ore mass processed could be discarded prior to leaching as a coarse tailing from the beneficiation circuit.

The beneficiation testwork has been completed on the bulk composite (diamond core) from **Tumas 3**, representing approximately the first 15 years of ore feed for the Project. This work has been very successful and the Company believes that the PFS assumptions have been confirmed as prudently conservative and the DFS process design will be based on 98% beneficiation recovery, with between 50% and 60% mass rejection to a coarse tailing.

This conclusion is highly significant for the Project outcome.

## ► Updated Project Economic Analysis

The DFS work undertaken to date has confirmed that principal assumptions of the PFS in terms of infrastructure, utilities, regulatory approvals, process recovery, tailings management, long-term rehabilitation, operating costs and capital costs were reasonable and, in the work concluded to date, have been shown to be prudently conservative. This validates the 5 ASX releases dated 10 February 2021 and 5 October 2021 underlying assumptions of the financial model used to forecast Project economic outcomes in the PFS.

Consequently, there is a reasonable basis to report revised forecast outcomes for the Project utilising the PFS model, its validated assumptions, relevant findings of the DFS and updated Ore Reserves.

Furthermore, based on the optimisation work completed, the Company believes that the DFS is likely to establish a net improvement on the assumptions and relevant findings of the PFS, but for the purposes of this analysis, assumptions and relevant findings of the PFS have been retained, with the exception of the Ore Reserves available to the Project and associated mining schedules.

This model has now been re-run, using the assumptions and findings of the PFS and incorporating the mine schedule developed for the updated, 68.4Mlb U<sub>3</sub>O<sub>8</sub> Ore Reserves<sup>6</sup> now available to the Project.

The outcome of this work is consistent with that indicated in the PFS<sup>7</sup>. Importantly, the forecast NPV for the Project, once updated Ore Reserves are incorporated, increases the operating mine life from 11.5 years to over 20 years and almost doubles the PFS NPV forecast to US\$ 412M.

Forecast outcomes and material assumptions are summarised in the table below:

*Table 2: Updated Financial Forecasts*

<b>Forecast Project Outcomes with PFS Model Assumptions and Updated Ore Reserves</b>			
<b>Item</b>	<b>Units</b>	<b>PFS</b>	<b>Reserve update</b>
<b>Plant Capacity</b>	<b>Mlb U<sub>3</sub>O<sub>8</sub> pa</b>	<b>3</b>	<b>3</b>
<b>Life of Mine (Production)</b>	<b>Years</b>	<b>11.5</b>	<b>25.75</b>
<b>Development Period</b>	<b>Years</b>	<b>1.5</b>	<b>1.5</b>
<b>Operating Margin (EBITDA) (U<sub>3</sub>O<sub>8</sub> @ US\$65/lb &amp; V<sub>2</sub>O<sub>5</sub> @ US\$7/lb)</b>	<b>US\$M</b>	<b>1,034</b>	<b>2,215</b>
<b>Initial CAPEX (incl pre-production)</b>	<b>US\$M</b>	<b>320</b>	<b>333</b>
<b>Project NPV<sub>8.6</sub>: Post tax, ungeared</b>	<b>US\$M</b>	<b>207</b>	<b>412</b>
<b>Project IRR: Post tax, ungeared, real</b>	<b>%</b>	<b>21%</b>	<b>23%</b>
<b>Project Payback Period from Production Start: Real</b>	<b>Years</b>	<b>3.8</b>	<b>3.8</b>
<b>Breakeven U<sub>3</sub>O<sub>8</sub> Price: ungeared, real</b>	<b>US\$/lb U<sub>3</sub>O<sub>8</sub></b>	<b>47.33</b>	<b>42.40</b>

## ► Tumas Project – Namibia

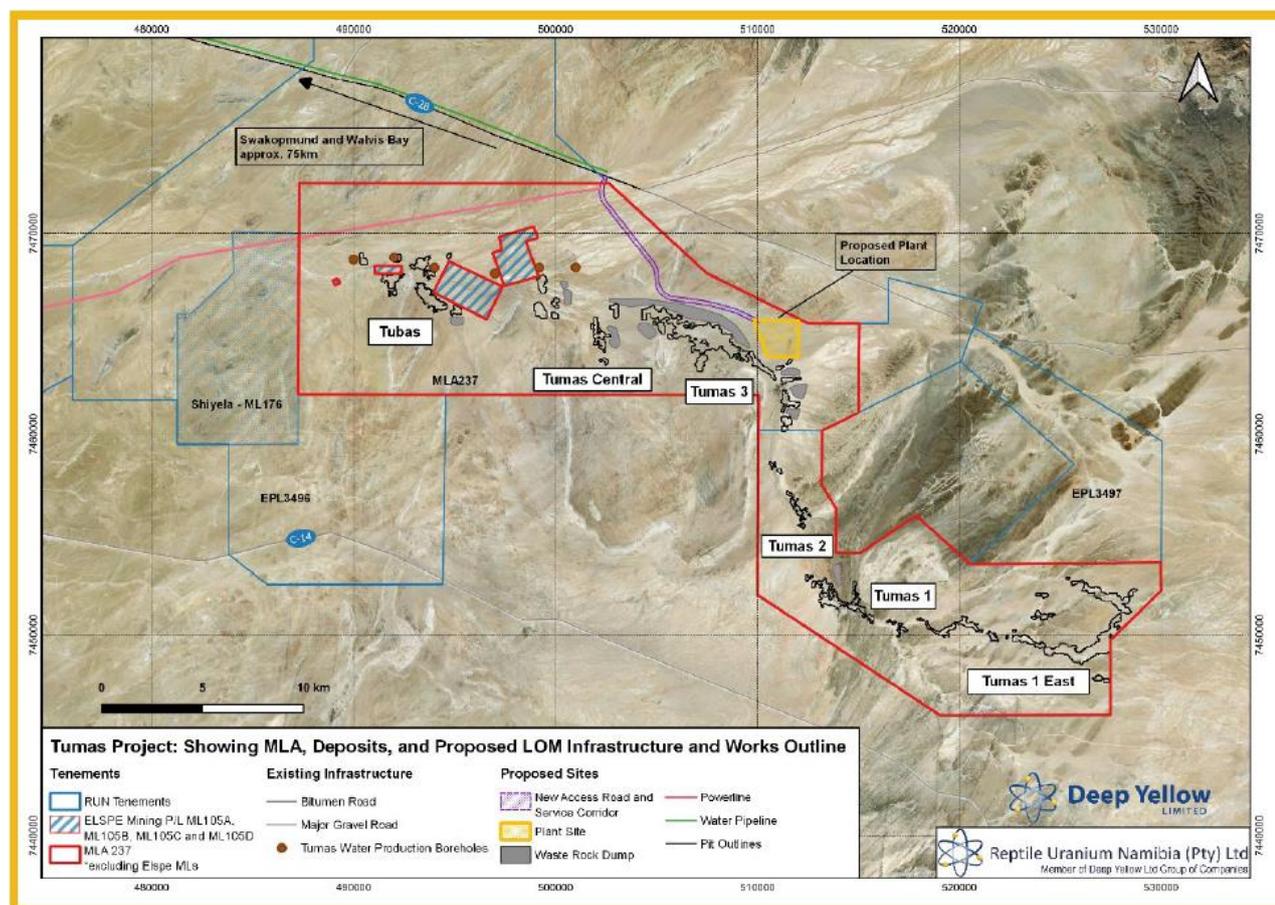
### Ore Reserve Upgrade

The DFS is targeting a minimum 20-year LOM at an annual production rate of 3Mlb pa. Following the successful completion of the resource upgrade drilling program undertaken in 2021, which resulted in an increase to the overall Indicated and Measured Mineral Resource base at a 100ppm eU<sub>3</sub>O<sub>8</sub> cut-off from 52.6Mlb to a total of 98.7Mlb eU<sub>3</sub>O<sub>8</sub> a (see Appendix 1), a new Ore Reserve Estimate was undertaken in conjunction with a Mining Study as announced to ASX on 5 October 2021.

The Mining Study used economic parameters determined in the Tumas Pre-Feasibility Study (PFS) and the successful completion of this key piece of work delivered an impressive 121% increase to the previous Ore Reserve Estimate (ORE) as shown on Table 1. The upgraded ORE is a significant milestone and is now sufficient for a LOM greater than 20 years to be considered in the DFS, involving the Tumas 1 East, Tumas 1, Tumas 2 and Tumas 3 orebodies as depicted in Figures 1 and 2.

**Table 1: Tumas Project Expanded Ore Reserves**

Classification	U <sub>3</sub> O <sub>8</sub> Cut-off ppm	Tonnes Mt	U <sub>3</sub> O <sub>8</sub> ppm	U <sub>3</sub> O <sub>8</sub> Metal Mlb
Probable	150	89.8	345	68.4
<b>Total</b>	<b>150</b>	<b>89.8</b>	<b>345</b>	<b>68.4</b>



## ► Barking Gecko prospect - Namibia

The **Barking Gecko prospect** is part of the **Nova Joint Venture (NJV)** located within EPL 3369 in **Namibia** (Figure 1). **Japan Oil, Gas and Metals National Corporation (JOGMEC)** completed its 39.5% earn-in obligation through expenditure of A\$4.5M in October 2020.

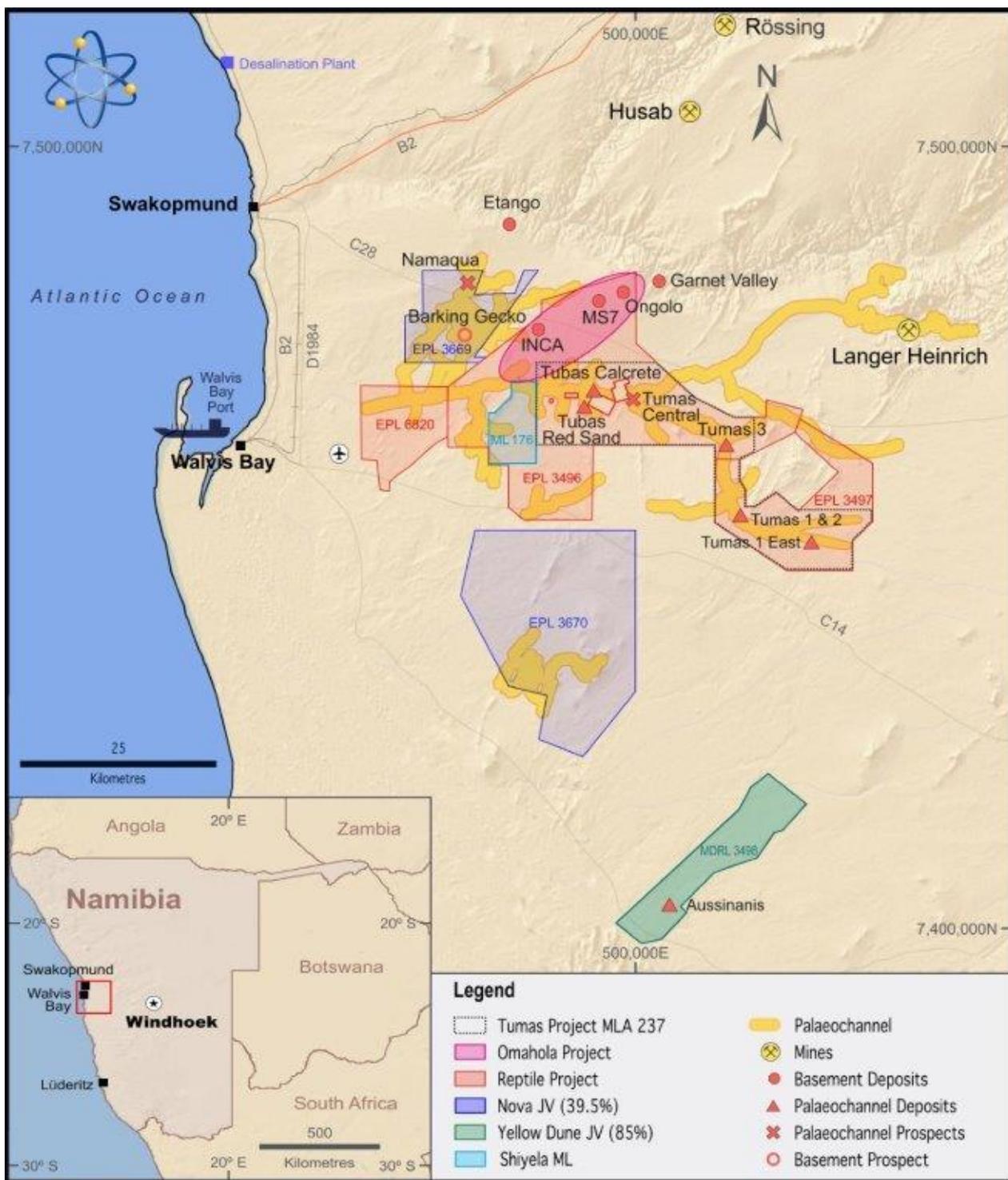
Since completion of the earn-in, the NJV parties are now jointly contributing in accordance with their equity holdings as follows:

Reptile Mineral Resources & Exploration (Pty) Ltd - <i>Manager</i> ( <i>Subsidiary of Deep Yellow Limited</i> )	39.5%
Japan Oil, Gas and Metals National Corporation (JOGMEC)	39.5% (Right to equity)
Nova Energy (Africa) Pty Ltd ( <i>Subsidiary of Toro Energy Ltd</i> )	15%
Sixzone Investments (Pty) Ltd <i>Namibia</i>	6% (Carried interest)

On 18 January 2022, **Deep Yellow** announced that the **Phase 2** follow-up drilling program at the **Barking Gecko North prospect** (EPL 3669) was initiated on 18 November 2021, through the commencement of the program's first diamond drill hole TN270DDT. This hole was successfully completed on 15 December reaching a depth of 266 metres (m).

### Highlights:

- **Phase 2 follow-up drill program at Barking Gecko North was initiated on 18 November 2021 through commencement of diamond drill hole TN270DDT and was successfully completed on 15 December 2021**
- **TN270DDT reached a depth of 266m and returned cumulative intersections of 118 metre at 352 ppm eU3O8 from eight intersections between 75m and 265m. Best individual intersections include:**
  - 9m at 954ppm eU3O8 from 88m
  - 60m at 304ppm eU3O8 from 150m
  - 30m at 382ppm eU3O8 from 235m
- **The excellent results from TN270DDT will be integrated with previous results from Phase 1 drilling to identify optimal positioning of RC holes planned for the next stage of Phase 2 drilling**
- **Next stage of the drill program has commenced on 24 January 2020 and will comprise of 10 RC holes for ~2,500m, with results expected by early/mid-March**



## **Management**

**John Borshoff, B.Sc. (Geology), Managing Director, CEO**, is an experienced mining executive and geologist with more than 30 years of uranium industry experience. He spent more than a decade at the start of his career as a senior geologist and manager of the Australian activities of German uranium miner Uranerz. In 1993, following the withdrawal of Uranerz from Australia, Mr Borshoff founded Paladin Energy. He built the company from a junior explorer into a multi-mine uranium producer with a global asset base and valuation of more than US\$5 billion at its peak. Mr. Borshoff was appointed Managing Director in October 2016.

**Chris Salisbury, BEng, FAICD, Chairman**, is a highly experienced mining executive, with over 30 years of global experience across senior strategic and operational roles for the Rio Tinto Group. He is a qualified metallurgical engineer and brings extensive uranium experience having led operating companies in Australia and in Namibia. Mr. Salisbury was Chief Executive of Energy Resources Australia (ERA) between 2004-2008, a significant global uranium business and during his time an ASX 100 company. He also served as Non-Executive Director of ERA. From 2011-2013 Mr Salisbury was Managing Director/Head of Country for Rio Tinto's Rössing Uranium Mine and was based in Swakopmund Namibia.

**Gillian Swaby, B. Bus. (Corporate), FCIS, AAusIMM, Executive Director**, is an experienced mining executive with a broad skillset across a range of corporate, finance and governance areas. She has spent more than 30 years working with natural resources companies in numerous roles including Chief Financial Officer, Company Secretary, Director and corporate advisor. Ms Swaby had a key role in managing Paladin Energy's growth through mine development, operation, acquisition and exploration. During the past three years Ms Swaby has also served as a Director of Comet Ridge and Birimian.

**Greg Meyerowitz, BCom, FCA, F Fin, FAICD, Non-Executive Director**, is a chartered accountant with 35 years of experience in the professional services industry and commerce. As a senior audit partner at the international accounting firm of EY, and head of the Perth Audit Division for 10 years, he has acted as the lead audit signing partner for five ASX 100 companies, including two ASX 20 companies. He has worked across a diverse range of sectors and has extensive experience working with mining and energy companies with global operations in countries such as Australia, Brazil, Finland, Indonesia, Italy, Malawi, Mauritania, Namibia, Sweden and the USA. This includes time spent in the uranium sector.

Mr Meyerowitz joined the Board of Deep Yellow on 1 December 2021.

**Justin Reid, B.Sc. (Geology), M.BA., Non-Executive Director**, is a geologist and capital markets executive with more than 20 years of experience focused exclusively in the mineral resources sector. He has held a number of senior executive roles, including President, CEO and Director of Sulliden Gold, until its acquisition of Rio Alto Mining in 2014, He is now CEO of Troilus Gold a development stage resource company focusing in Northern Quebec and remains an advisor to Sulliden.

**Mervyn Greene, Masters in Mathematics, Bachelor in Engineering and Masters of Business Administration, Non-Executive Director**, is an experienced investment banker and entrepreneur who has been working in investment markets in Africa, Europe and the United States for more than 30 years. His most recent experience has focused on private equity investment in a range of sectors, including property and he currently serves as Managing and Museum Director of EPIC. From 1997 – 2005 Mr Greene was the London-based partner of Irwin Jacobs Greene, one of Namibia's premier stockbroking, private equity and corporate finance advisory firms.

**Mark Pitts, B.Bus., CFO, Company Secretary**, is a Chartered Accountant with more than 30 years' experience in business administration, statutory reporting and corporate compliance. He is a partner in the advisory firm Endeavour Corporate where he provides company secretarial, accounting, finance and compliance services to publicly listed companies in the resources sector, including Deep Yellow. Mr Pitts has previously worked at a senior management level in a variety of commercial and consulting roles across a range of industries and started his career at accounting firm KPMG.

## Finance

Consolidated statement of cash flows as at	
(in A\$ million)	Year to date 31 Dec. 2021 (6 months)
Cash used in operating activities	0.99
Cash flow from investing activities, of which:	(4.40)
exploration and evaluation	4.28
Net cash from financing, of which:	(24.99)
proceeds from issue of convertible debt securities	21.04
Cash and cash equivalents at 31 December 2021	71.98

### Investment Comments:

**Deep Yellow** has a two-pronged growth strategy involving the growing of existing uranium resources in **Namibia**, which country is ranked 4<sup>th</sup> among the world's top 10 uranium countries and the highest ranked African country.

Innovative operation undertaken by **Deep Yellow** over the past three years has resulted in a remarkable three-fold increase in the resource base of the deposit type within the highly prospective **Tumas** palaeochannel to **98.7 million pounds U<sub>3</sub>O<sub>8</sub> grading 268 ppm U<sub>3</sub>O<sub>8</sub>**.

**The maiden Indicated Mineral Resource of 19.6 million eU<sub>3</sub>O<sub>8</sub> at 245 ppm is sufficient to support the key objectives of Tumas' DFS to achieve a minimum 20-year Life of Mine.**

Importantly, with the Company's stated Exploration Target, thereby considering that only approximately 65% of the existing **Tumas 1E** Mineral Resource has been tested, there remains strong upside for further discovery with supportable expectations that this calcrete-associated uranium in **Mineral Resource could be increased to between 100 million pounds and 150 million pounds U<sub>3</sub>O<sub>8</sub> in the grade range of 300 to 500 ppm U<sub>3</sub>O<sub>8</sub>**.

Rated as **Namibia's** top-ranked exploration/development company by market valuation, based on the quality and further expansion potential of its prospective **Reptile Project, Deep Yellow** has already been featured by me as a **Special Situation** since October 2018 and included in my Shortlist of uranium investment recommendations.

Having eight-folded from a 2020 low of A\$ 0.11 to a current price of A\$ 0.81, representing a current market valuation of approximately US\$ 216.5 million, including a cash position of A\$ 71.98 million, **Deep Yellow**, in my view, is substantially undervalued, thereby considering a Definitive Feasibility Study to be expected in the 2022 December quarter based on the outcomes underpinning the favourite PFS model assumptions.

**I maintain my 2022 upgraded share price target of A\$ 1.50.**

**World's top 10 listed uranium exploration/development companies  
focused on emerging countries** (by market valuation)

	<b>Country focus</b>	<b>Trade symbol</b>		<b>Share price Feb. 9 2022</b>	<b>Share price Year-end 2021</b>	<b>Change to Year-end 2021 in %</b>	<b>Market valuation (US\$ million)</b>
Global Atomic *	1) Niger	TSX.V	GLO	C\$ 3.73	C\$ 4.19	-11	513.0
Deep Yellow *	Namibia	ASX	DYL	A\$ 0.81	A\$ 0.86	-6	218.0
Lotus Resources	2) Malawi	ASX	LOT	A\$ 0.25	A\$ 0.31	-19	209.2
Bannerman Energy	3) Namibia	ASX	BMN	A\$ 0.21	A\$ 0.27	-22	184.0
GovEx *	Niger/other African countries	TSX.V	GXU	C\$ 0.34	C\$ 0.36	-6	154.2
Forsys Metals	Namibia	TSX	FSY	C\$ 0.79	C\$ 0.85	-7	121.3
Aura Energy	6) Mauritania	AIM	AEE	GBX 15.50	GBX 13.50	15	87.1
Elevate Uranium	4) Namibia	ASX	EL8	A\$ 0.45	A\$ 0.47	-4	85.1
Berkeley Energia	5) Spain	ASX	BKY	A\$ 0.24	A\$ 0.23	4	76.0
Blue Sky Uranium *	7) Argentina	TSX	BSK	C\$ 0.20	C\$ 0.20	0	29.2
<b>Total market capitalization</b>							<b>1,677.1</b>

\* featured as a **Special Situation** and included in the **2021 Shortlist of investment recommendations**

1) also 49% interest in operating zinc project in Turkey

3) name change from Bannerman Resources effective July 13, 2021

2) acquired 85% stake in major uranium project in Malawi from Paladin Energy; also cobalt project in NSW Australia

4) name change from Marenica Energy effective June 8, 2021

5) On November 19, 2021, the Company announced it has received notification from the Ministry for Ecological Transition and the Democratic Challenge ("MITCO") that it has rejected the Authorization for construction of its Salamanca deposit

6) also world-class vanadium and battery project in Sweden

7) uranium-vanadium project