



BANNERMAN
MINING RESOURCES NAMIBIA

Surviving the uranium downturn

Werner Ewald
8 August 2024

Location

N

20km



BANNERMAN
MINING RESOURCES NAMIBIA

Etango Uranium Project

- Bannerman ML250
- Uranium Mine
- Uranium Deposit
- Town
- Power Line
- Rail
- Water Pipeline
- Major Road

Desalination Plant
(20GL)



Swakopmund

B2

Walvis Bay
(Deep Water Port)

450000mE

B2

B2

B2

B2

B2

B2

B2

B2

B2

450000mE

500000mE

Norasa (FORSYS)

Rössing (CNNC)

Husab (CGN)

Etango

Garnet Valley (CGN)
Ongolo (DEEP YELLOW)

Langer Heinrich (PALADIN)

Tubas (DEEP YELLOW)

Tumas (DEEP YELLOW)



7500000mN

7450000mN



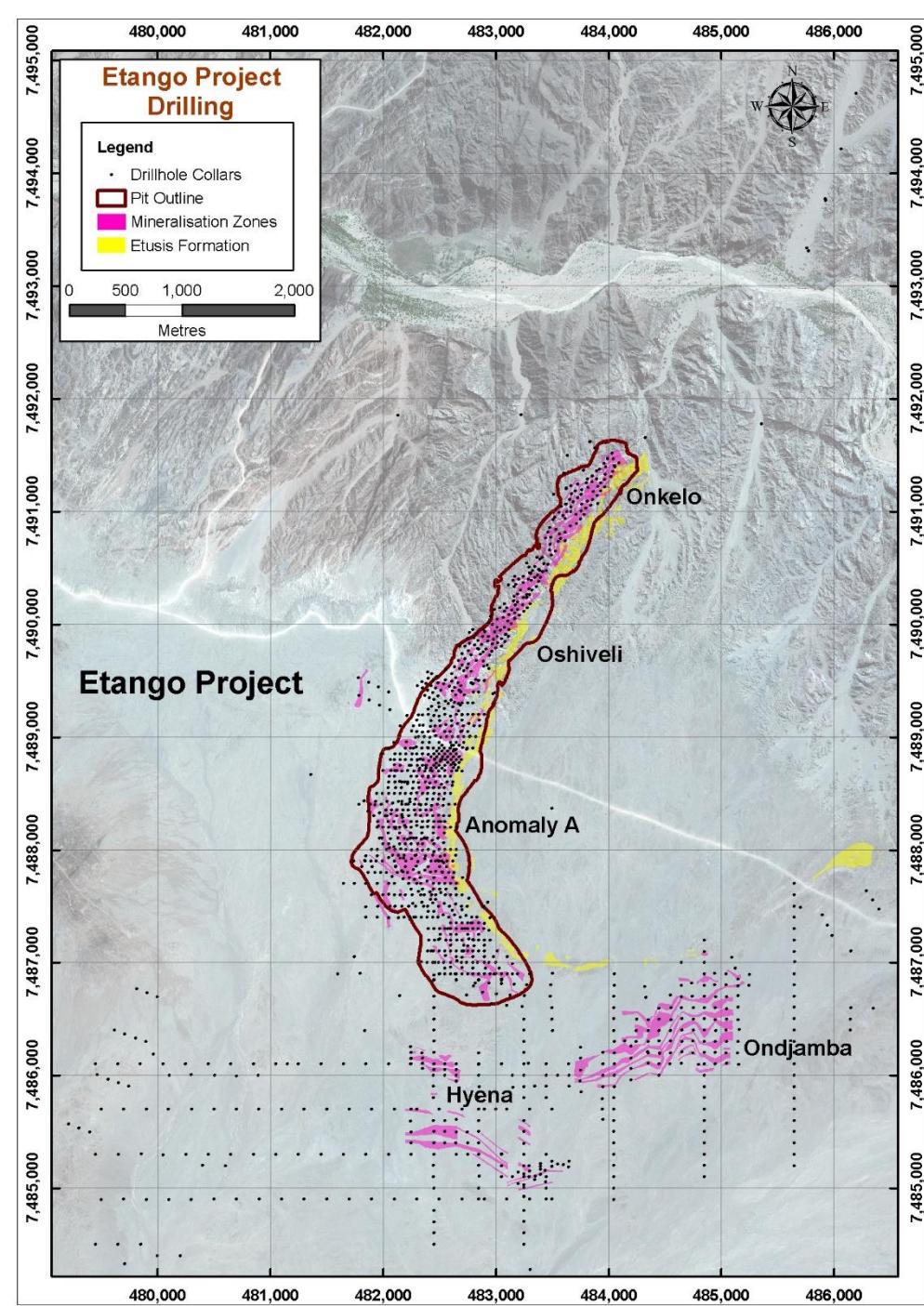
The 'journey formula'

$$Etango = R \left(\frac{P_1 P_2}{C^2} \right)$$

where $C \neq 0$



Bannerman
experience



P₁ = Prepared

Etango Resource

Etango Project Mineral Resource Estimate
November 2021

Reported at a cut-off grade of 100 ppm U₃O₈, Constrained within the resource pit shell

Resource Category	Tonnes (Mt)	Grade (U ₃ O ₈ ppm)	Contained U ₃ O ₈ Mlbs
Measured	26.6	226	13.3
Indicated	276.9	223	136.4
Inferred	112.5	230	57.1
Total	416.1	225	206.8

$$\text{Etango} = R \frac{(P_1 P_2)}{C^2}$$

P₁= Prepared

Fukushima

Etango DFS complete



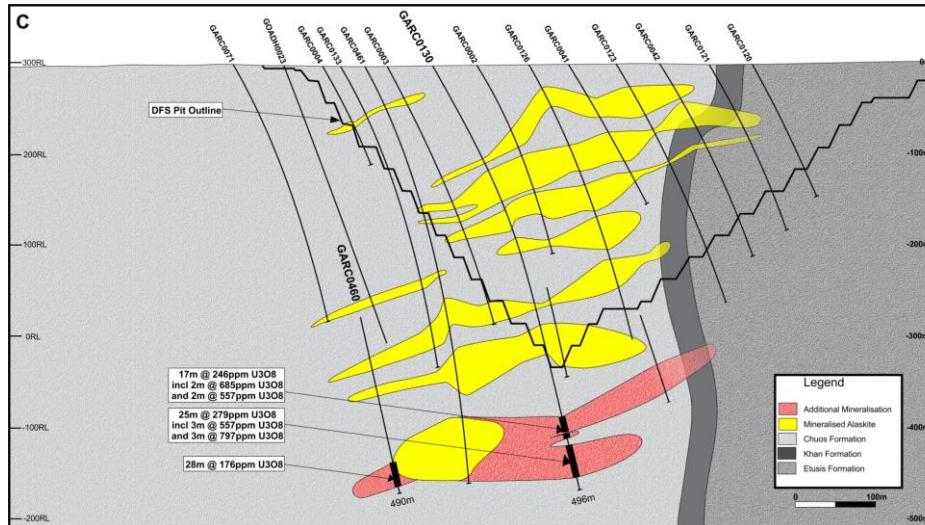
2011

2012

2013

Commence Etango DFS

Etango deep drilling



$$Etango = R \frac{P_1 P_2}{C^2}$$

P₁ = Prepared

P₂ = Patience

$$\text{Etango} = \frac{R(P_1 P_2)}{C^2}$$

Moon landscape
rehabilitation
Dune 7 clean-up

2013

2014

2015

Demonstration
Plant
construction
commences



P₁ – Prepared (Demonstration Plant)





BANNERMAN
TECHNOLOGIES

Demonstration Plant

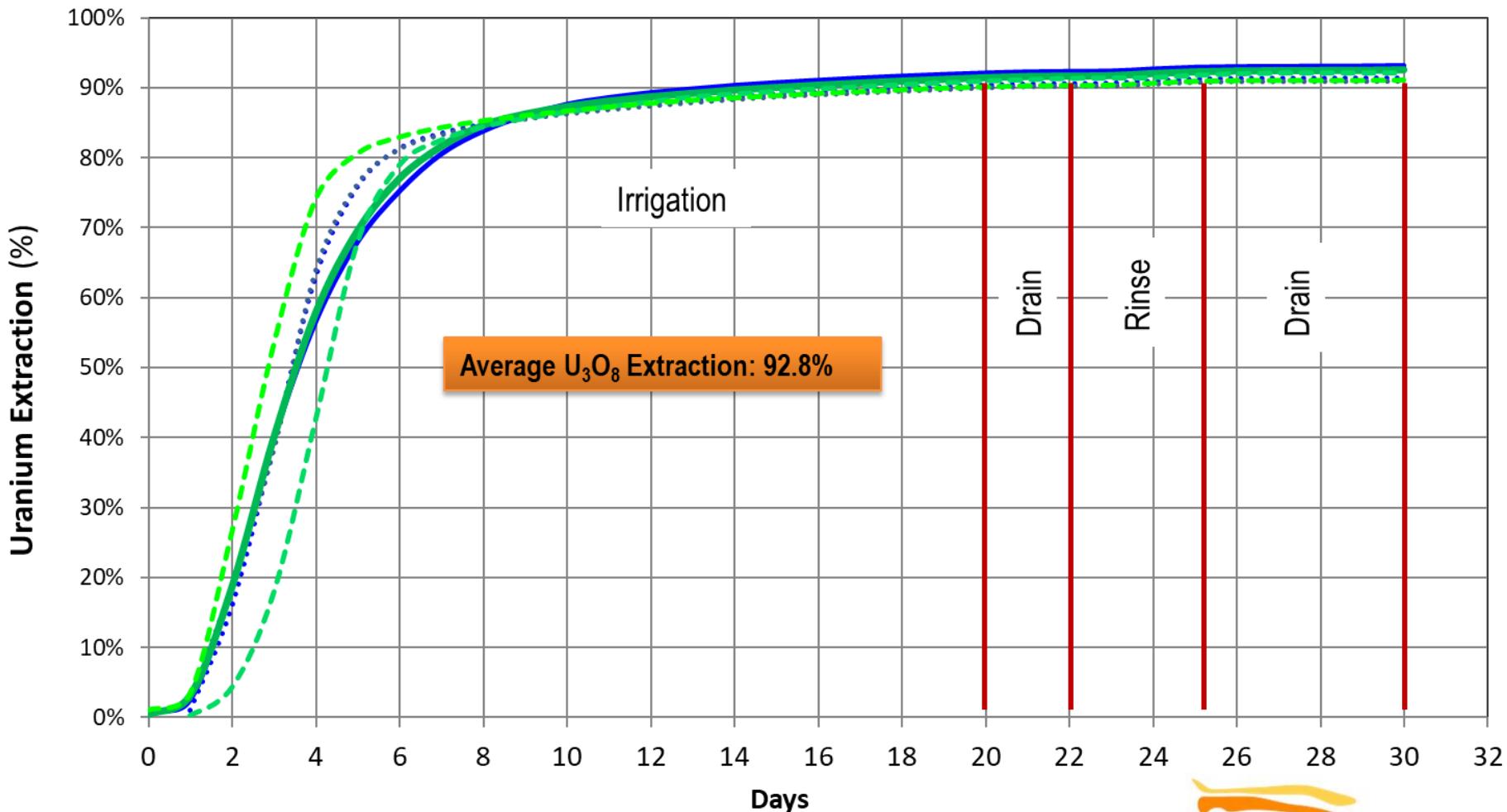
Minimum PPE Requirements
for this area



Etango – Heap Leach Demonstration Plant



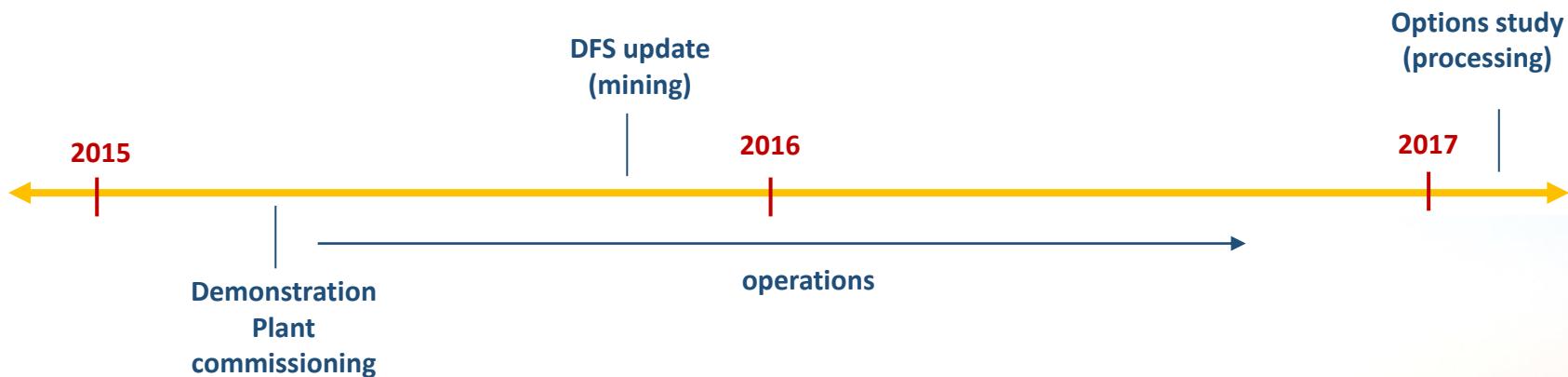
Uranium leach extraction curves



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P₁ - Prepared



$$\text{Etango} = R \left(\frac{P_1 P_2}{C^2} \right)$$

Testwork, testwork, testwork



Ion-exchange



P₁ – Prepared = P₂ - Patience?



P₁ - Prepared

EPL 3345 drilling

Etango-8 Scoping
Study

2018

2019

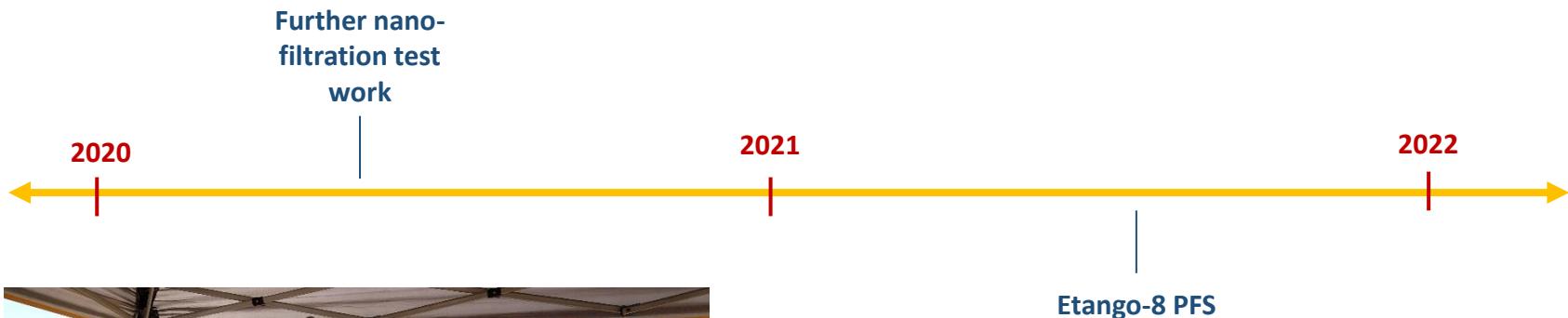
2020

Nano-filtration
testwork



Etango = R (P₁ P₂)
 C^2

P₁ - Preparedness



Key outcomes

15 years
Initial mine life

2.07 : 1
Strip ratio (waste:ore)¹

US\$65/lb
LOM U₃O₈ price

US\$222M
Post-tax NPV_{8%}

8 Mtpa
Throughput capacity

87.8%
Processing yield

20.3%
Post-tax IRR

3.8 years
Payback (post-tax)

3.5 Mlb U₃O₈
Average annual production

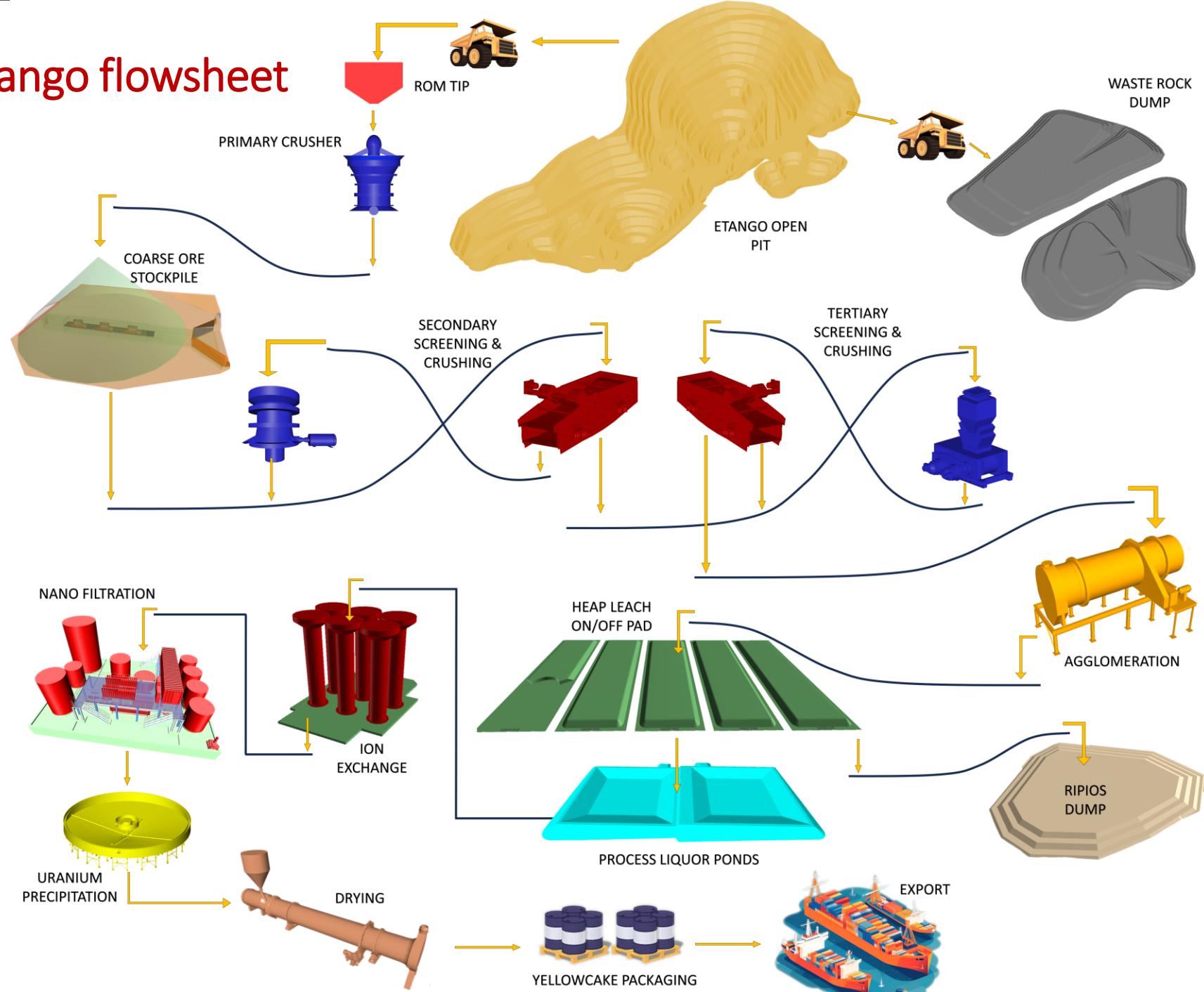
53 Mlb U₃O₈
Total production

US\$274M
Pre-production capex

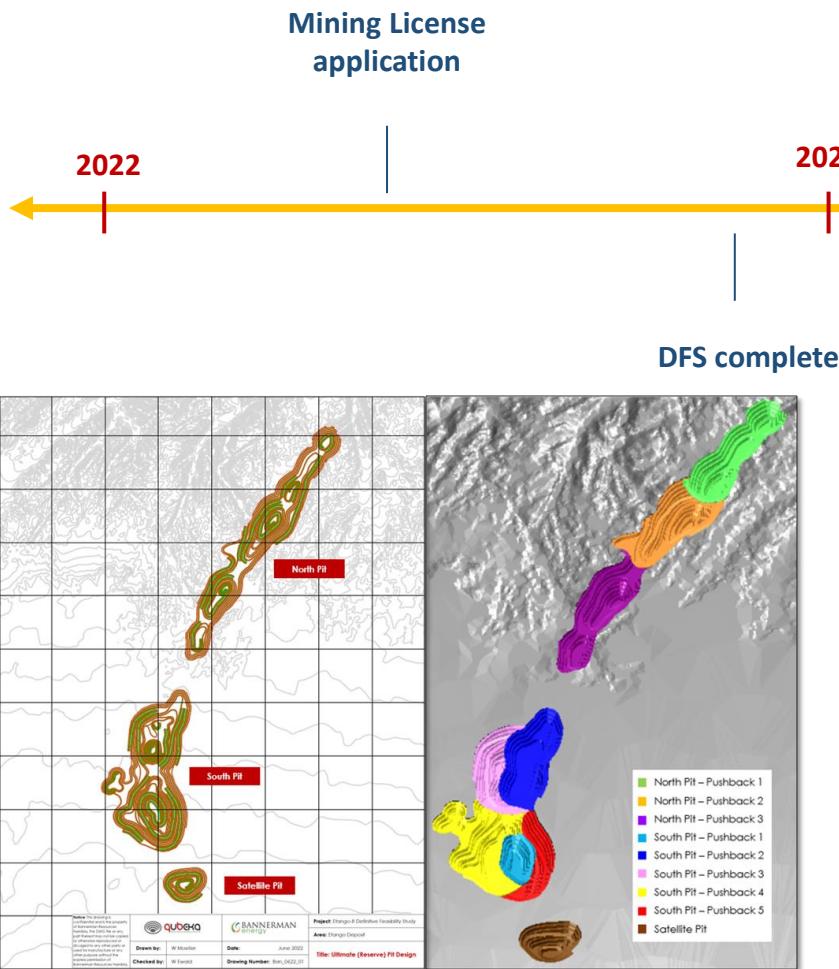
US\$39/lb
Cash opex (incl royalties)

Etango = R (P₁P₂)
C²

Etango flowsheet



P₁ - Prepared



$$\text{Etango} = R(P_1 P_2) C^2$$

C = costs

C² = lots of costs

**Etango = R (P₁, P₂)
C²**

C² > N\$ 800 million

What is R?

Relationships

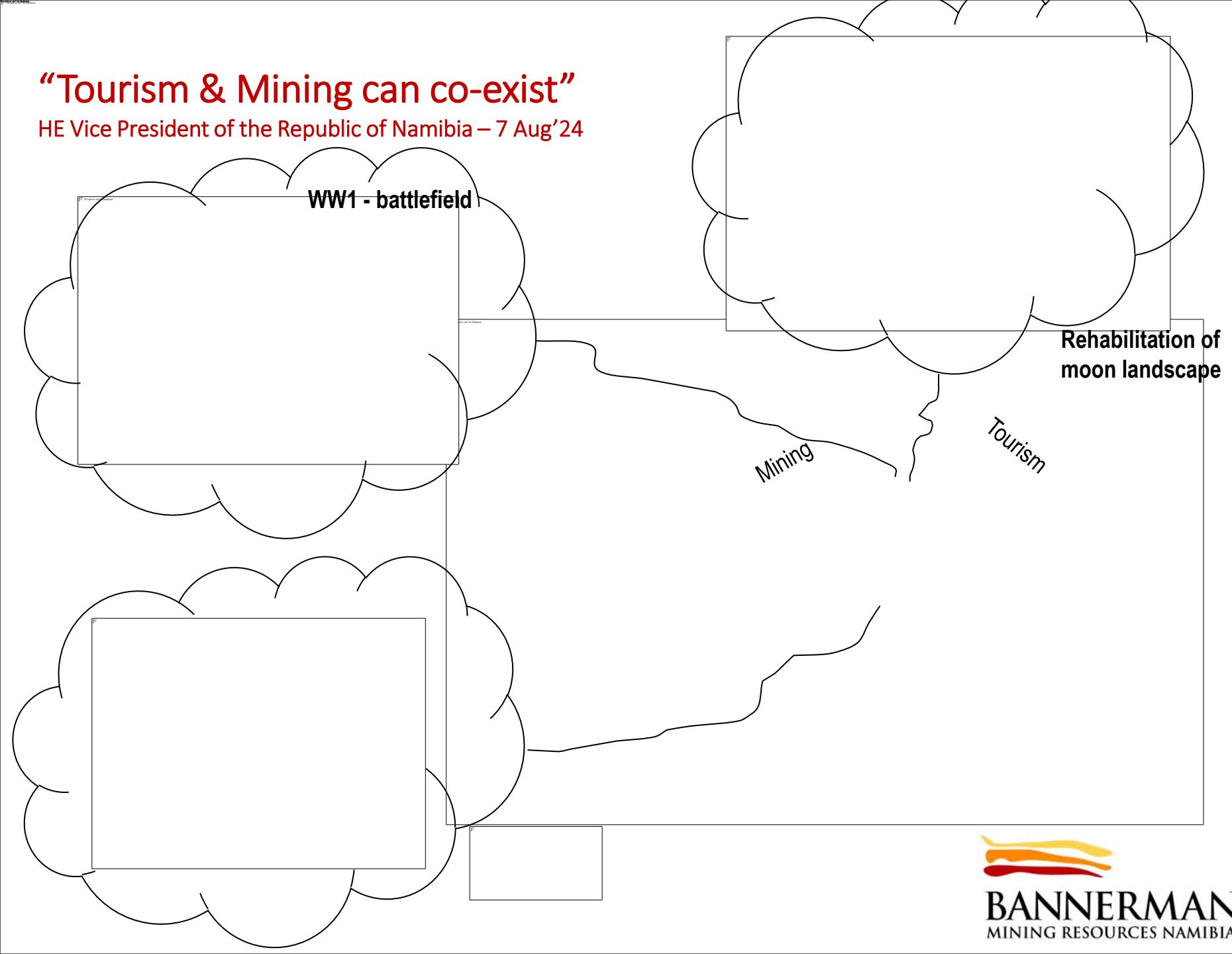


Ashby Associates cc

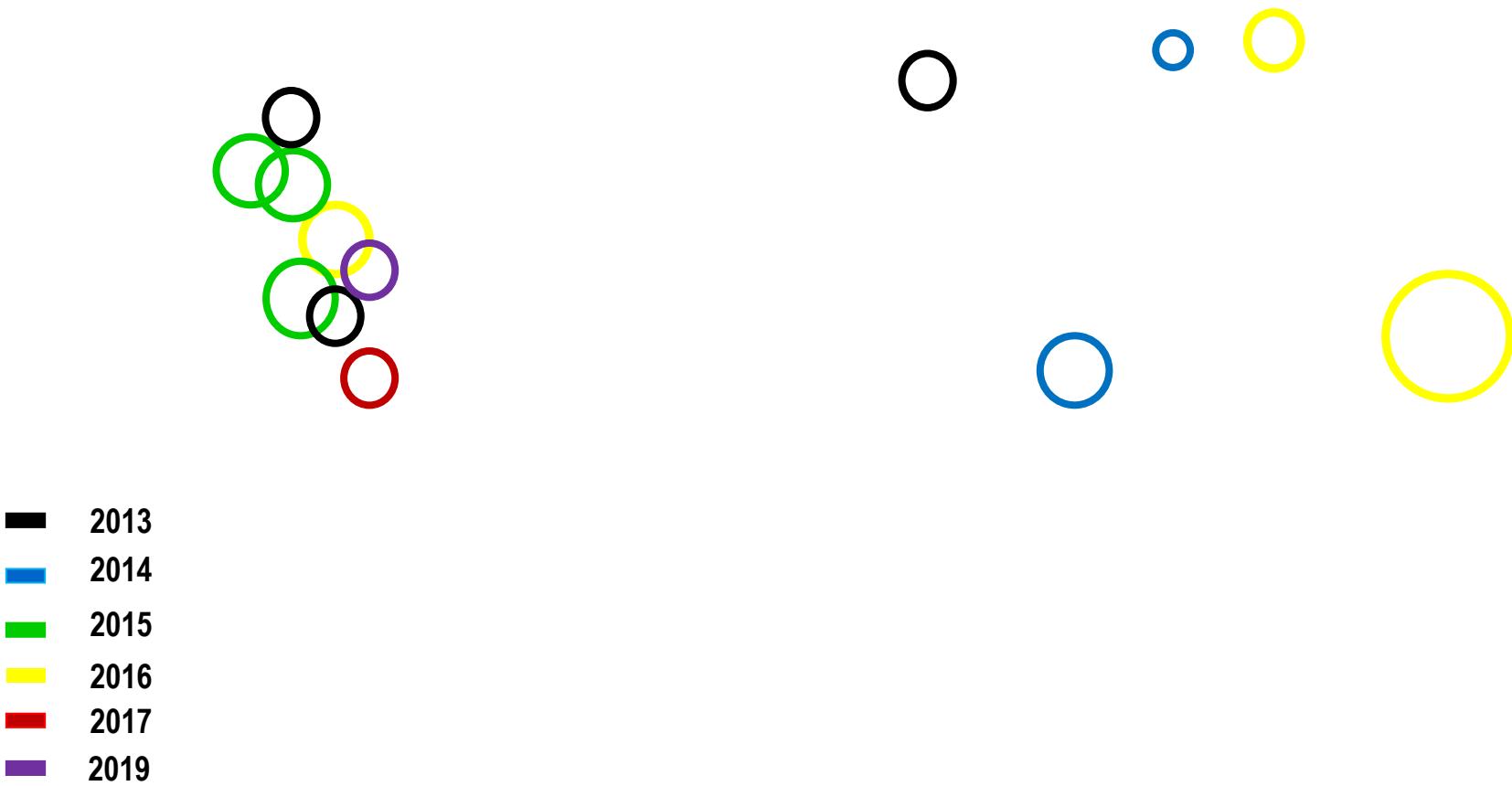


“Tourism & Mining can co-exist”

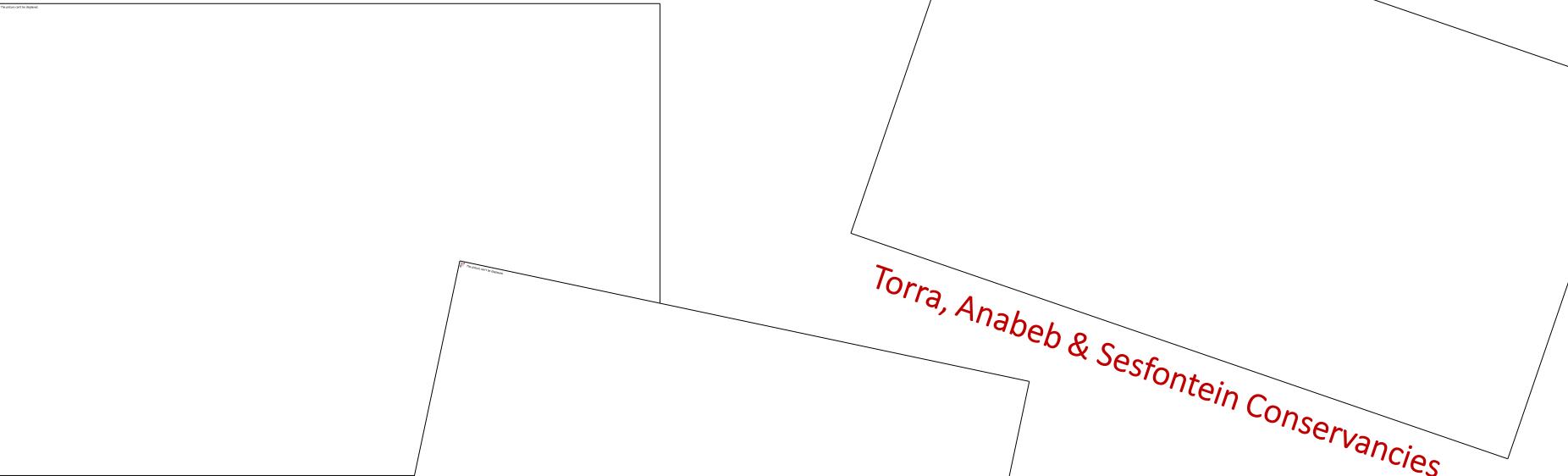
HE Vice President of the Republic of Namibia – 7 Aug'24



Working with the tourism industry



Conservancy skills development



Mashi Conservancy

#Khoadi //Hoas
Conservancy

Elephant - human
conflict training

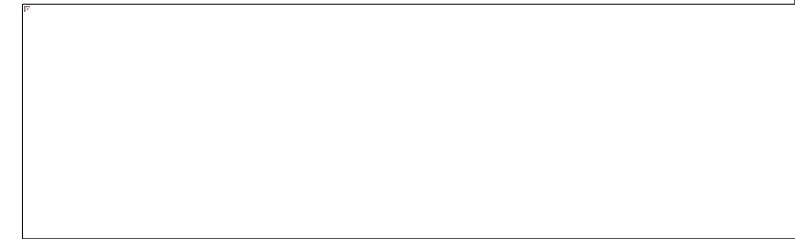
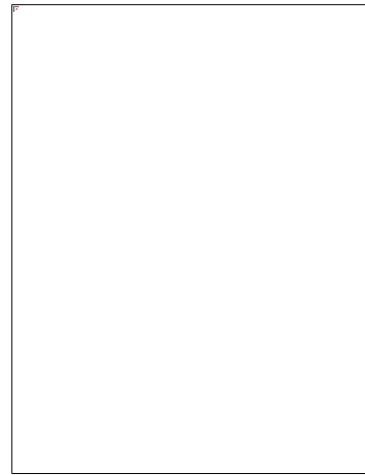
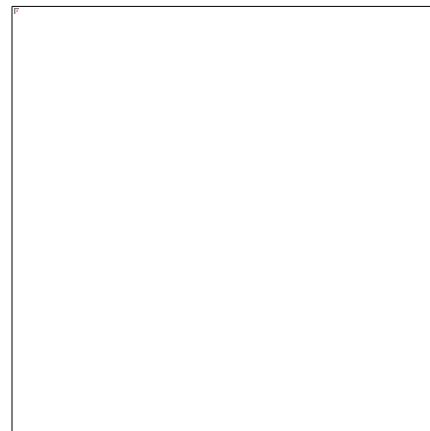
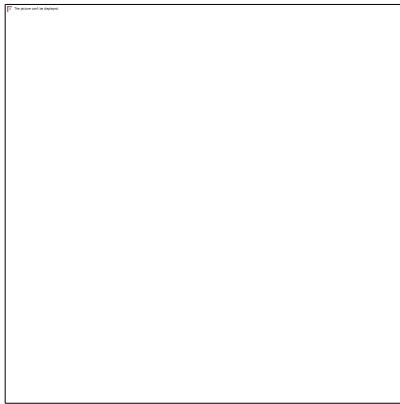
Tsiseb Conservancy

Torra, Anabeb & Sesfontein Conservancies

Xobo Xobos Team



Relationships have developed;
more opportunities exist



Etango-8 Project layout & infrastructure

Early works construction in progress



Construction water
pipeline & storage
tank - complete

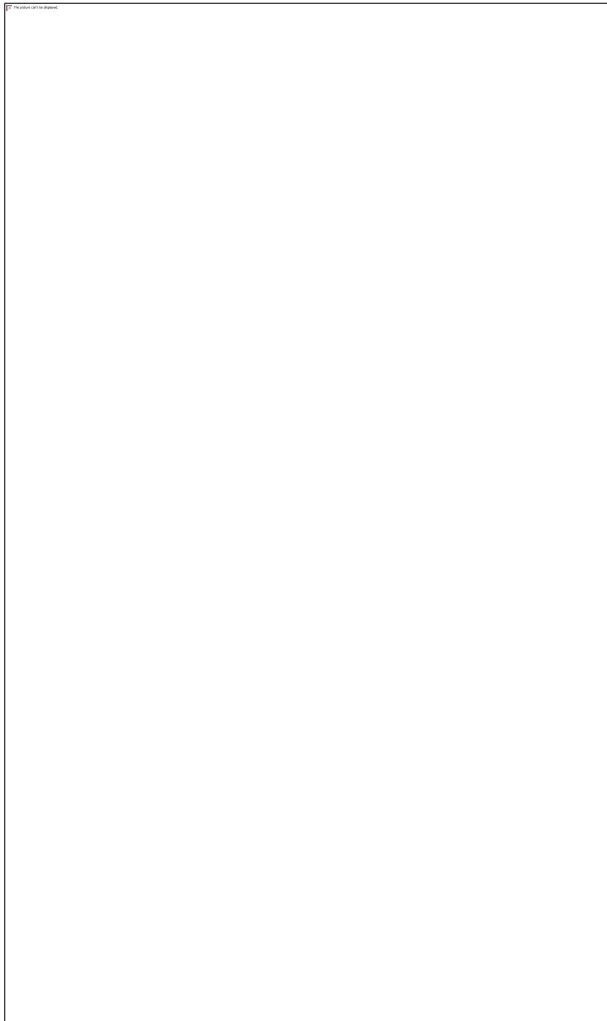
Early works construction in progress

**Etango Mine Access Road
complete**

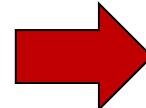
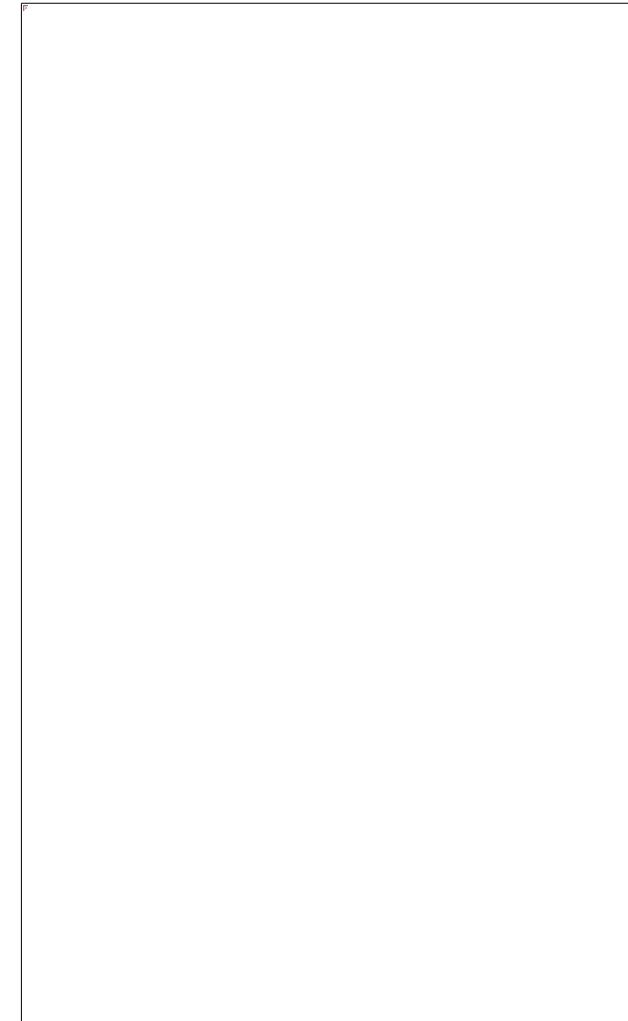
The way forward

ETANGO-XP AND ETANGO-XT SCOPING STUDY

Etango - 8

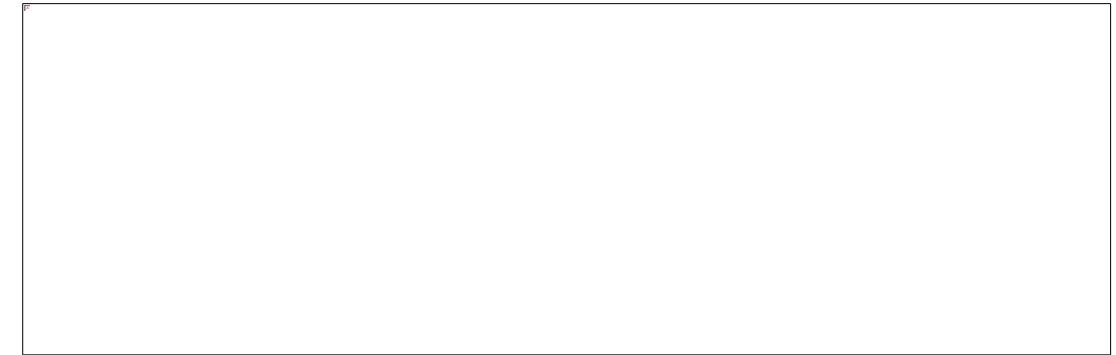
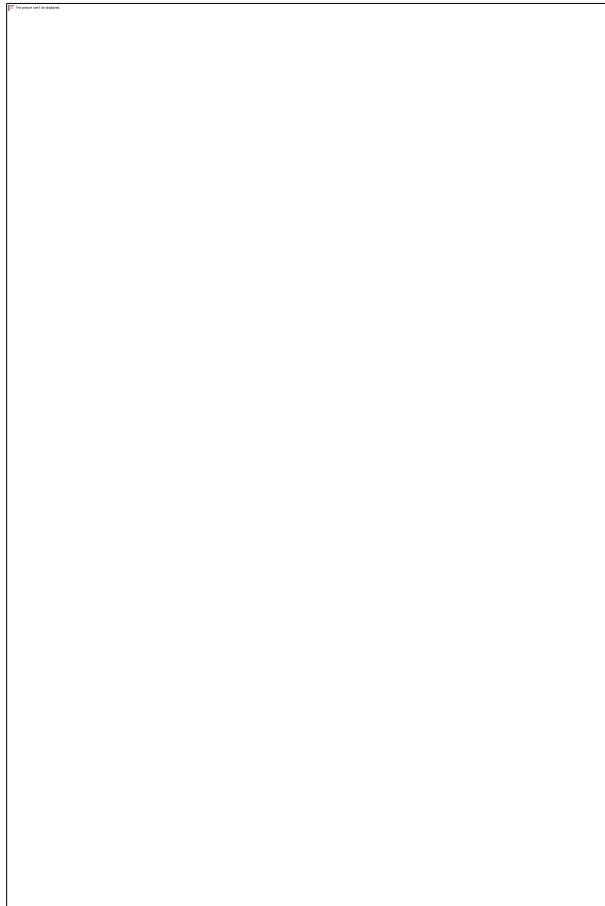


Etango – XP/XT



Increasing the value of Etango

**“Etango is successful if we can do it safely,
taking the environmental aspects into account
and working closely with our community”**



Etango-NA

