

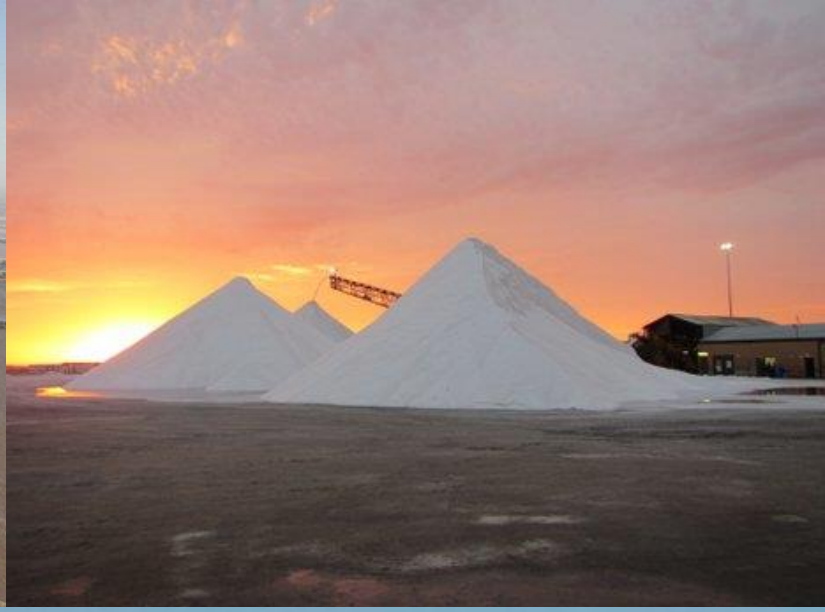
WALVIS BAY SALT HOLDINGS OVERVIEW

ANDRE SNYMAN

Managing Director



**WALVIS BAY
SALT HOLDINGS**







BUD GROUP



Bud Chemicals and Minerals

FERRO
a Bud Group Company

WALMS BAY SALT HOLDINGS
a Bud Group Company

IDWALA
INDUSTRIAL HOLDINGS LIMITED
a Bud Group Company

MCP CHLORCHEM
a Bud Group Company

gjp CHEMICALS
Driving Innovation and Excellence
a Bud Group Company

Business Ash Pty (Ltd) *

Cerebos
a Bud Group Company

FFS REFINERS *

Bud Industrial Services

GOSCOR | GROUP OF COMPANIES
a Bud Group Company

AFRIT
Quality on Time
a Bud Group Company

uni-span
Farmwork & Scaffolding
a Bud Group Company

AUTOCAST
SOUTH AFRICA

Augusta Steel
a Bud Group Company

Bud Fire Services
a Bud Group Company

Bud Rental Services
a Bud Group Company

prowalco
TATSUNO
a Bud Group Company

CONCORD CRANES
a Bud Group Company

Bud Building Materials

COROBRIK *

Bud Financial Services

ASSUPOL *

SERVING THOSE WHO SERVE SINCE 1913

Bud BEE Partner

KHULASANDE
CAPITAL

* Associates

BUDCHEM OPERATING STRUCTURE

BUD CHEMICALS AND MINERALS

MINERALS BENEFICIATION



IDWALA (82%)*



BOTASH (50%)*



WBSH (100%)



CEREBOS (100%)

CHEMICALS & COATINGS



NCP (100%)



FERRO (100%)



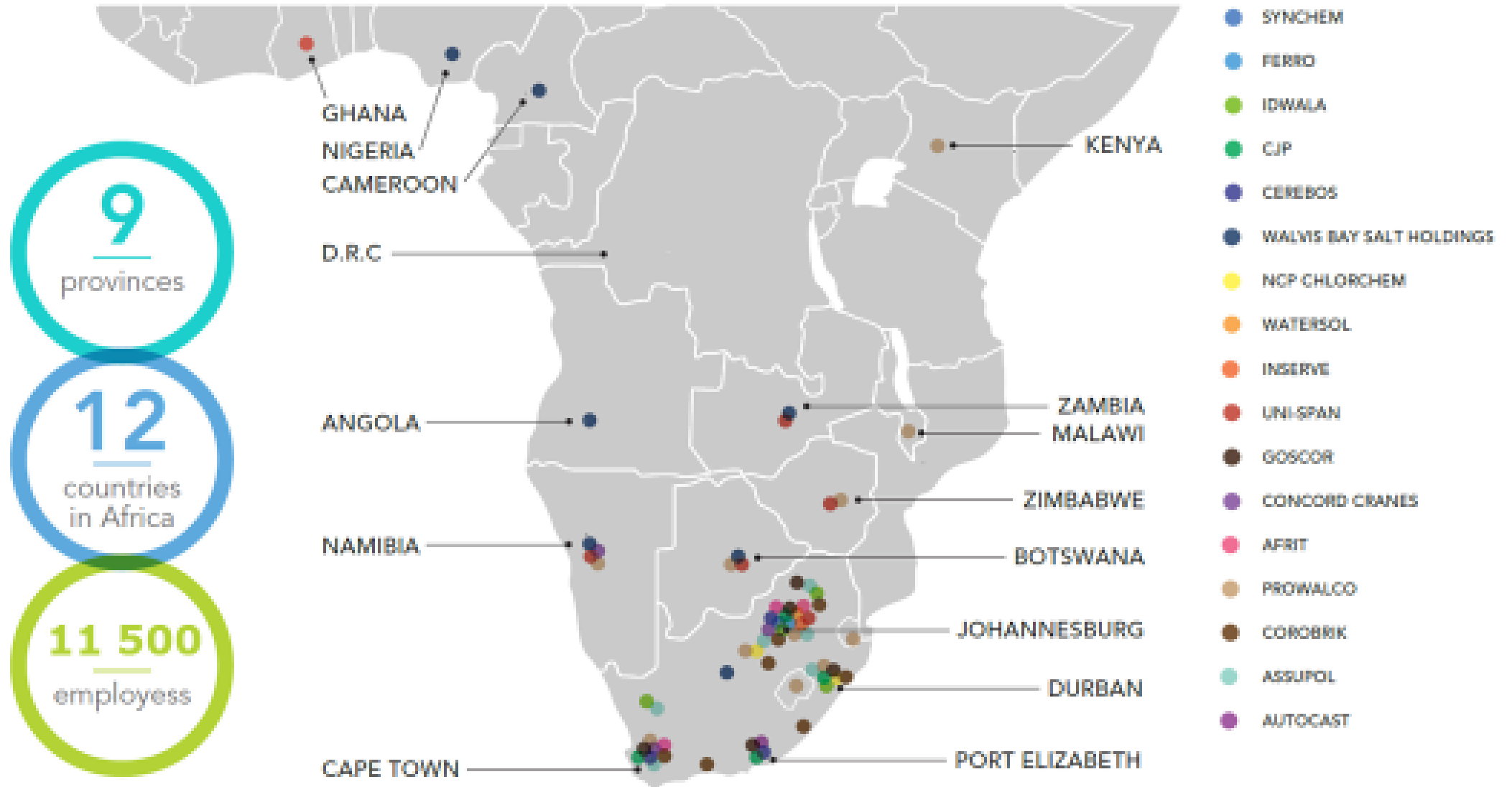
CJP (100%)

ENERGY SOLUTIONS



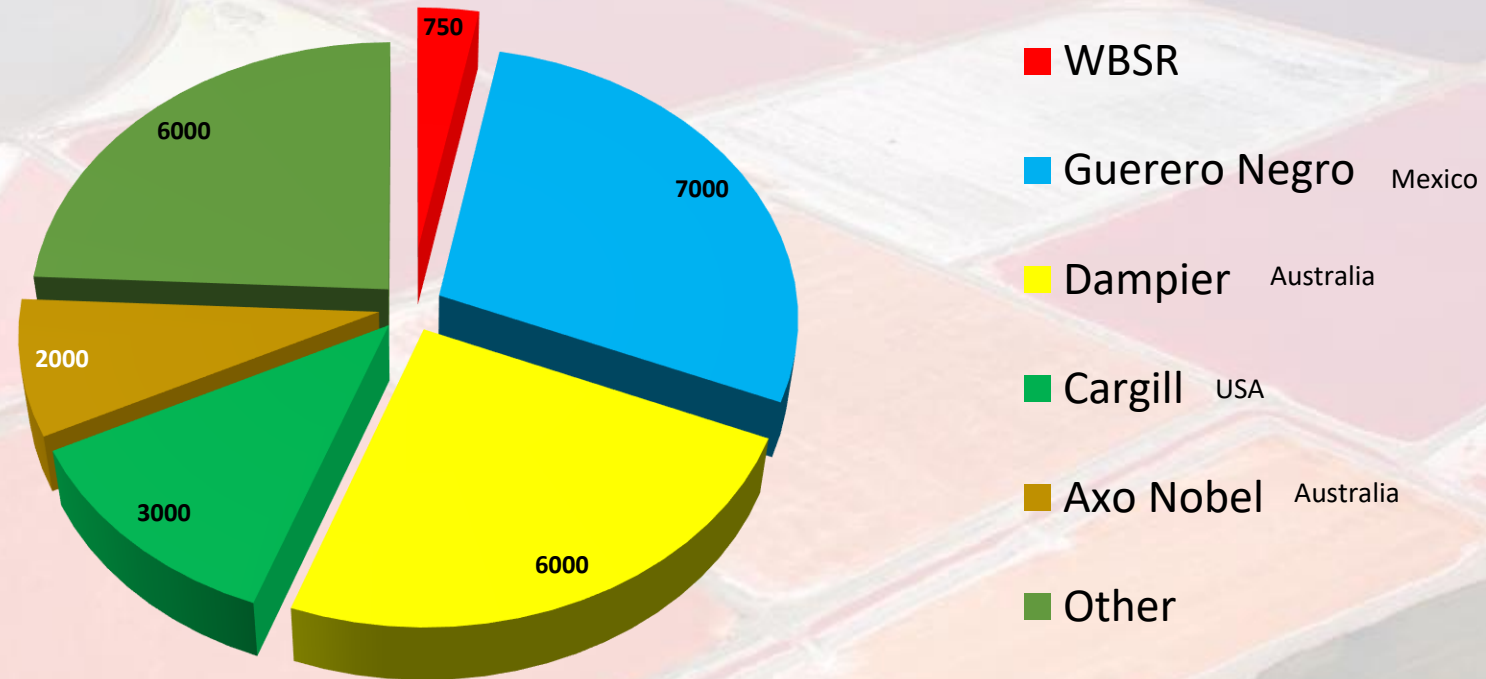
FFS REFINERS (43%)*

2.3 BUD FOOTPRINT

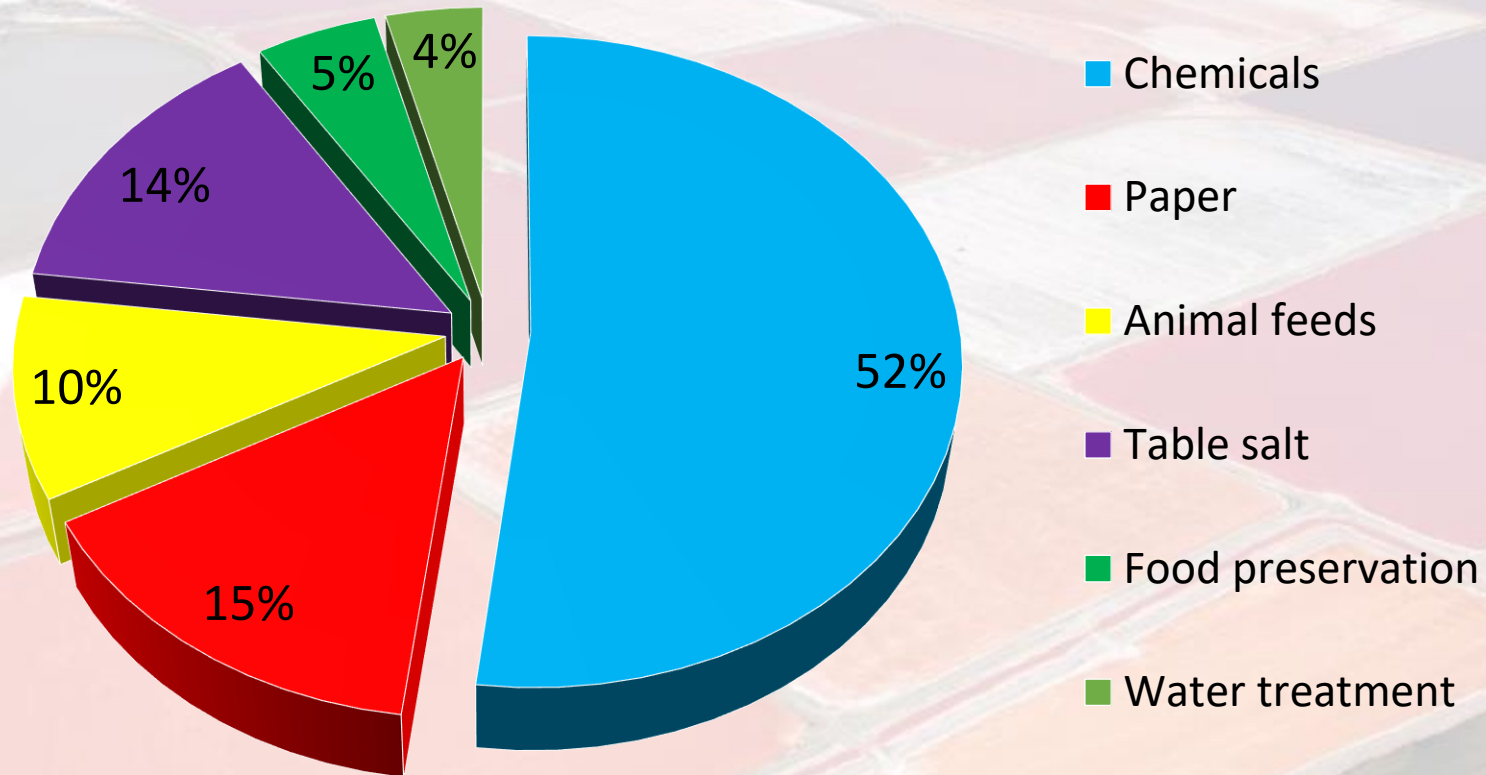


Key Global Solar Salt Producers

Volume (000's) per annum



Salt Demand by Sector in RSA



Total demand: 1.05 million tons per annum



It all starts with our people...

*"People rarely succeed unless they have fun in what they are doing." ~
Dale Carnegie*

*"People are not a Company's most important asset...
The RIGHT people is a Company's best asset..."*

Management Team



Andre Snyman
Managing Director



Gregory Swartz
Buss Dev Director



Stephan Anderson
Operations Director



Bernard Grové
Finance Director



Corrie Botha
Technical Director



Vazembua Tjizoo
SHERQ Manager



Brumilda Britz
HR Manager



Jaap Venter
Maint Manager



Kevin Brett
Bulk Sales Agent

“The ultimate test of a management team is performance” – Peter Drucker

Brief Background & Footprint

- Salt field operation based at Walvis Bay, within a RAMSAR proclaimed area
- One of largest solar evaporation facilities in Africa, comprising an area of 6,000 hectares.
- Owns Mining License, expires 2020
- Infinite Resource, mine with no terminal date
- Processes over 90 million m³ of seawater to produce in excess of 950kt of high quality salt pa (depending on evaporation levels).



WBSH Corporate Structure



Salt & Chemicals

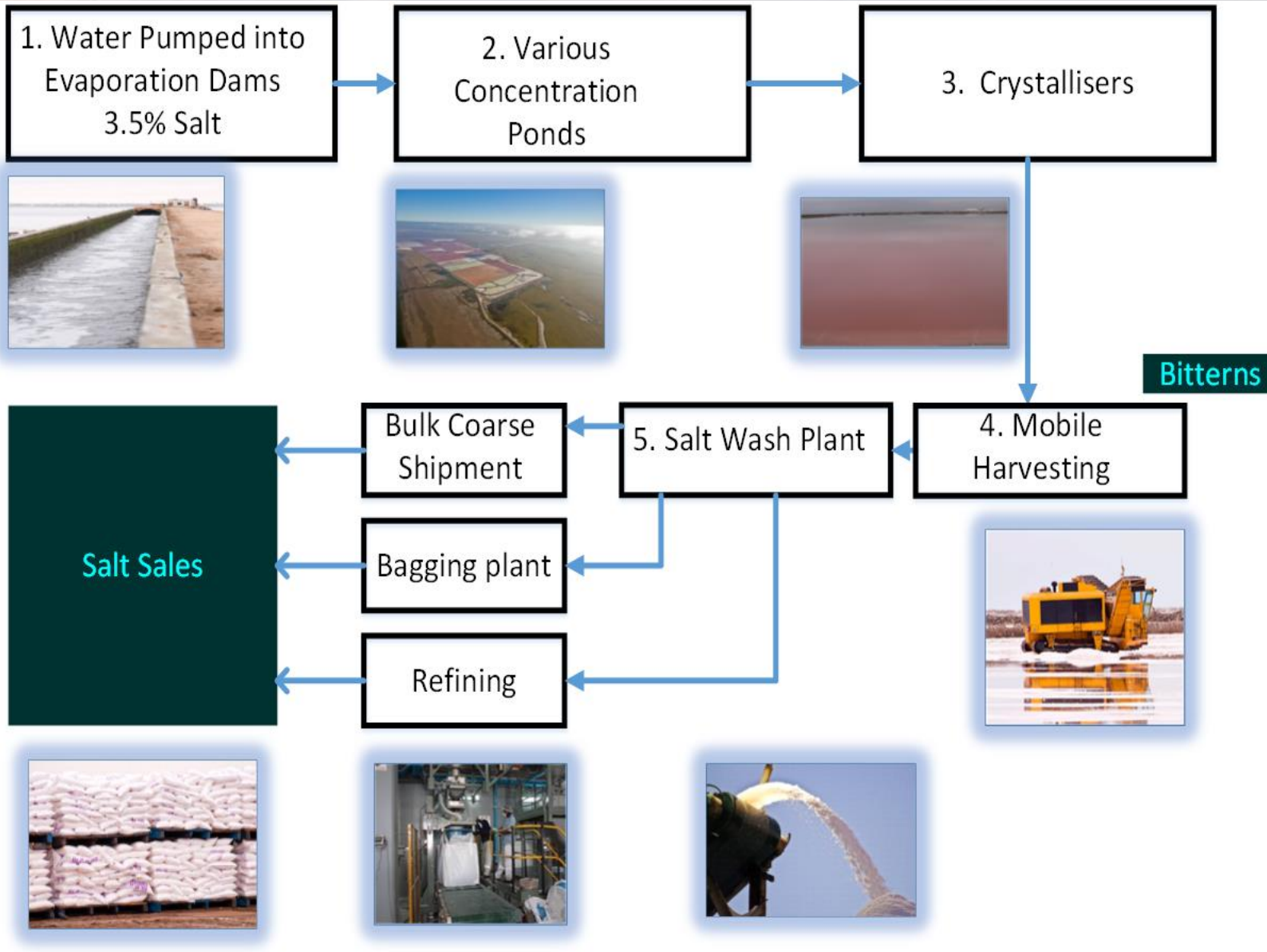


Walvis Bay Salt Refiners



Ekango Refinery

Sea Salt Manufacturing Process Flow:



- Salt content: % NaCl
 - Seawater: 3.0%
 - Exit Evaporation Dams: 14% (9 – 11 mths)
 - Exit Concentration Ponds : 25% (9 – 11 mths)
 - Crystallizing Ponds (10 – 11 mths)

SEA WATER AND BRINE FLOW (1)



NaCl content 2.7%

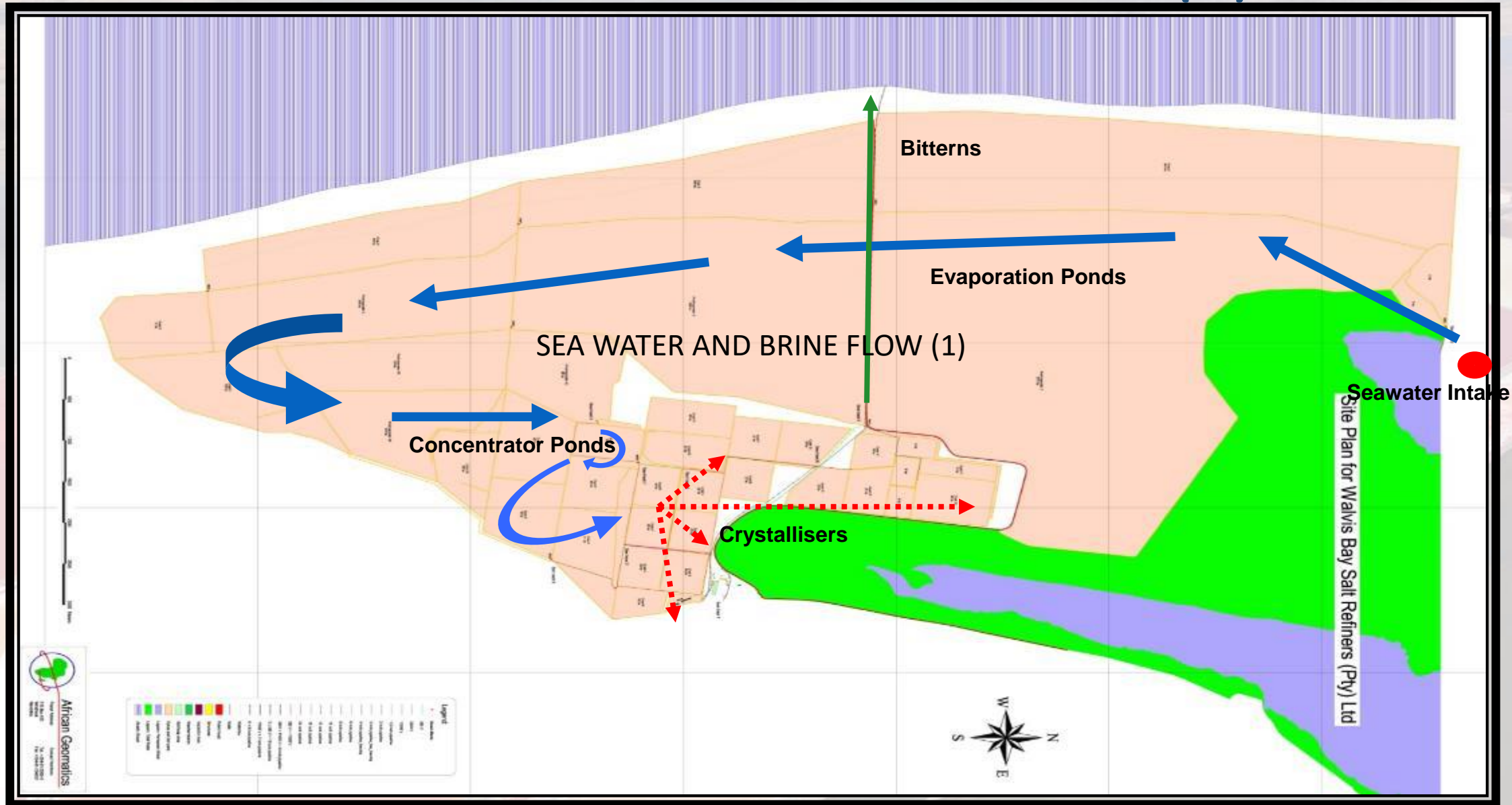
Evaporation of water
NaCl content 15-17%
Crystallisation of gypsum

Evaporation of water
Crystallisation of gypsum
NaCl content ~ 25%

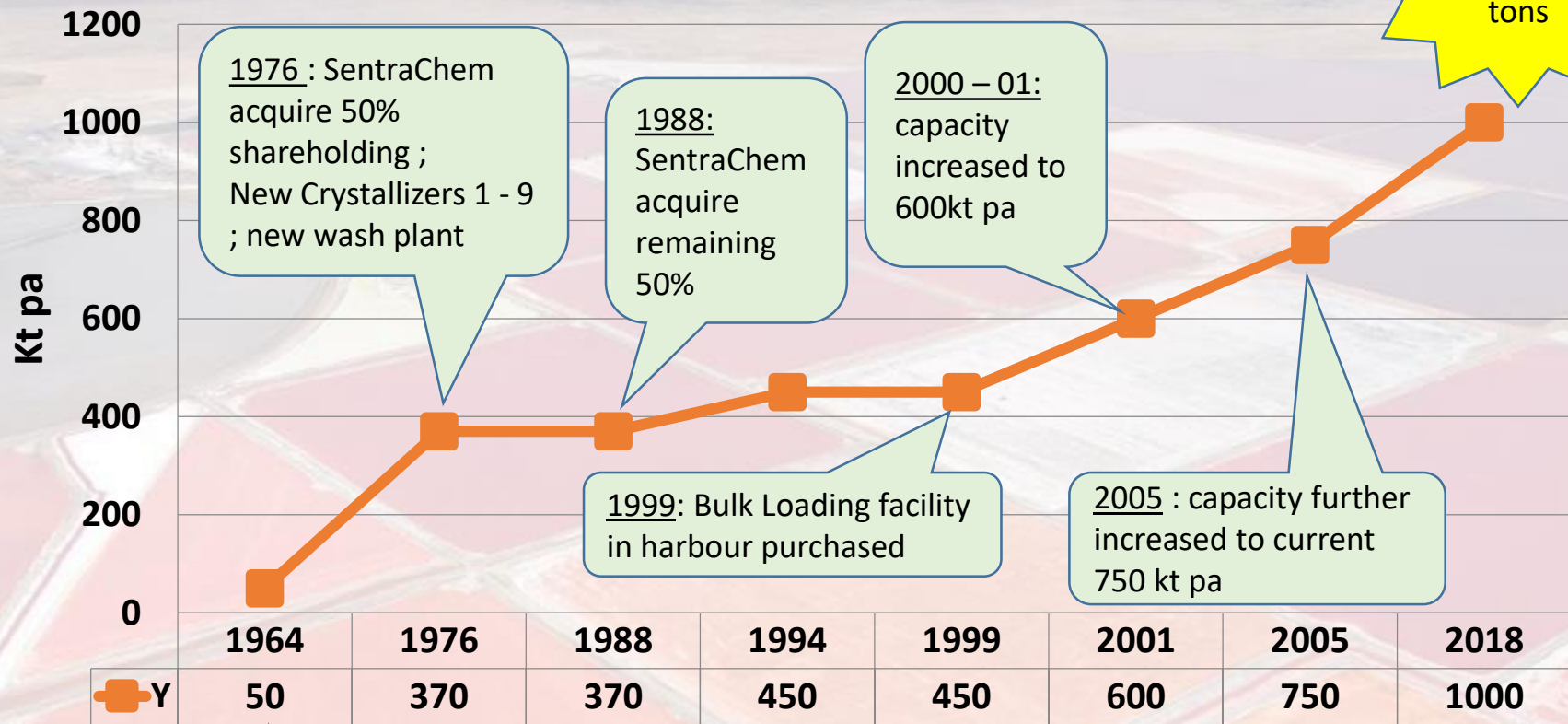
Crystallisation of
salt NaCl



SEA WATER AND BRINE FLOW (2)



Capacity Increase over years



**2020 :
1 Million
tons**

1976 : SentraChem acquire 50% shareholding ; New Crystallizers 1 - 9 ; new wash plant

1988: SentraChem acquire remaining 50%

2000 – 01: capacity increased to 600kt pa

1999: Bulk Loading facility in harbour purchased

2005 : capacity further increased to current 750 kt pa

1964 : Operation established, brine from boreholes, only crystallizers 16 & 17

1994 – 2000: Crystallizers 10 – 14 added

SALT FIELD EXPANSION

- Capital Expenditure at a cost of N\$65M
- Project successfully completed
- Additional 1200 ha of evaporators
- Additional 100 ha of crystallizers
- Additional Tonnage p.a.

2017 –	80kt
2018 –	156kt
2019 -	240 kt

THE CHALLENGE



THE CHALLENGE





Walvis Bay Harbour

○ Bulk Loading Terminal

○ Bulk Stockpile



Image © 2005 DigitalGlobe
Image © 2005 EarthSat

© 2005 Google

Pointer 23°00'18.43" S 14°29'37.12" E elev 27 ft

Streaming ||||| 100%

Eye alt 24.72 mi

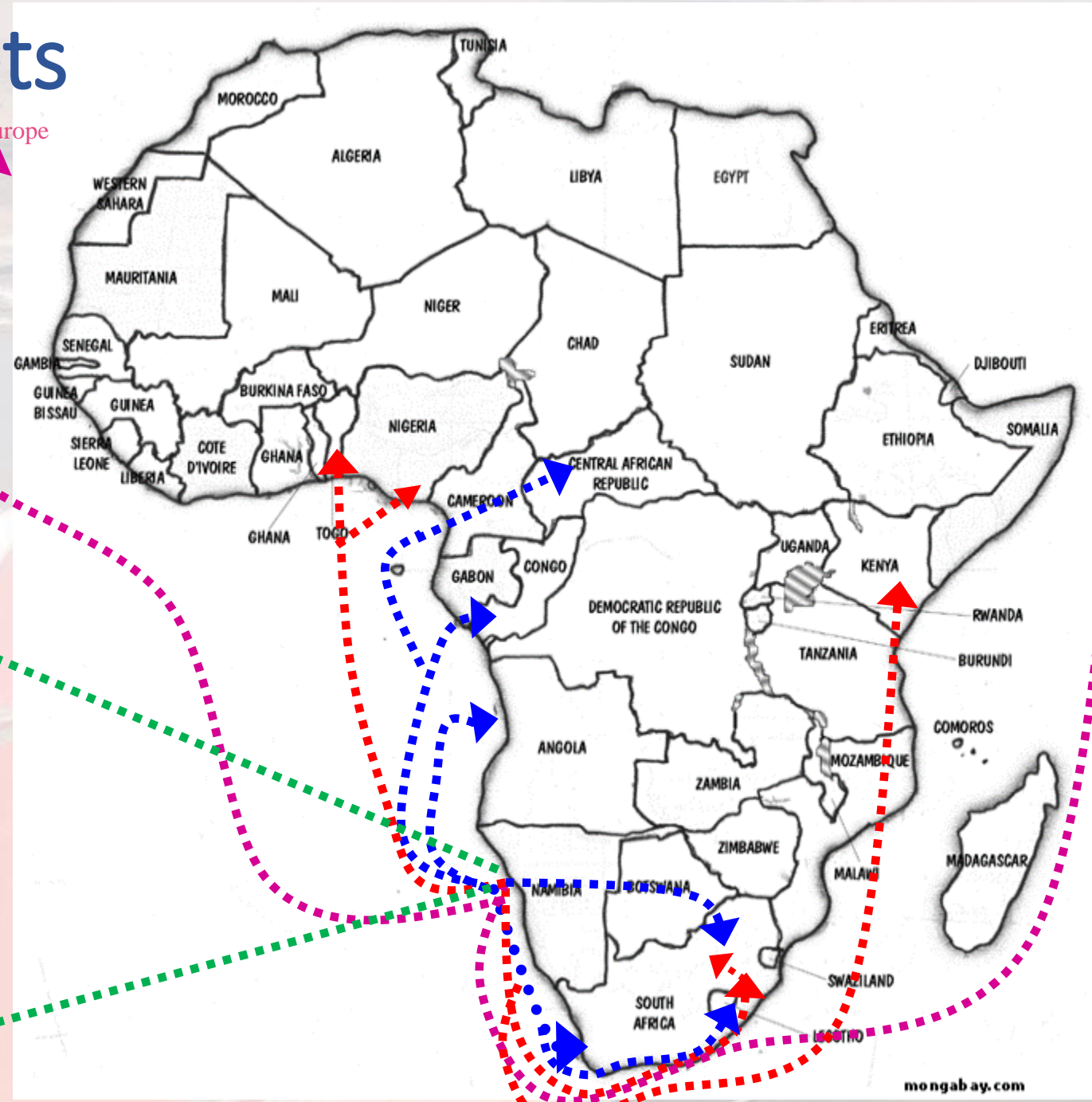
Loading Terminal @ Port



Markets Served



Salt Markets



Shipping Routes

- Bagged Salt
- Bulk Salt
- Supplied previously
- New Markets

To USA & Canada

To South America

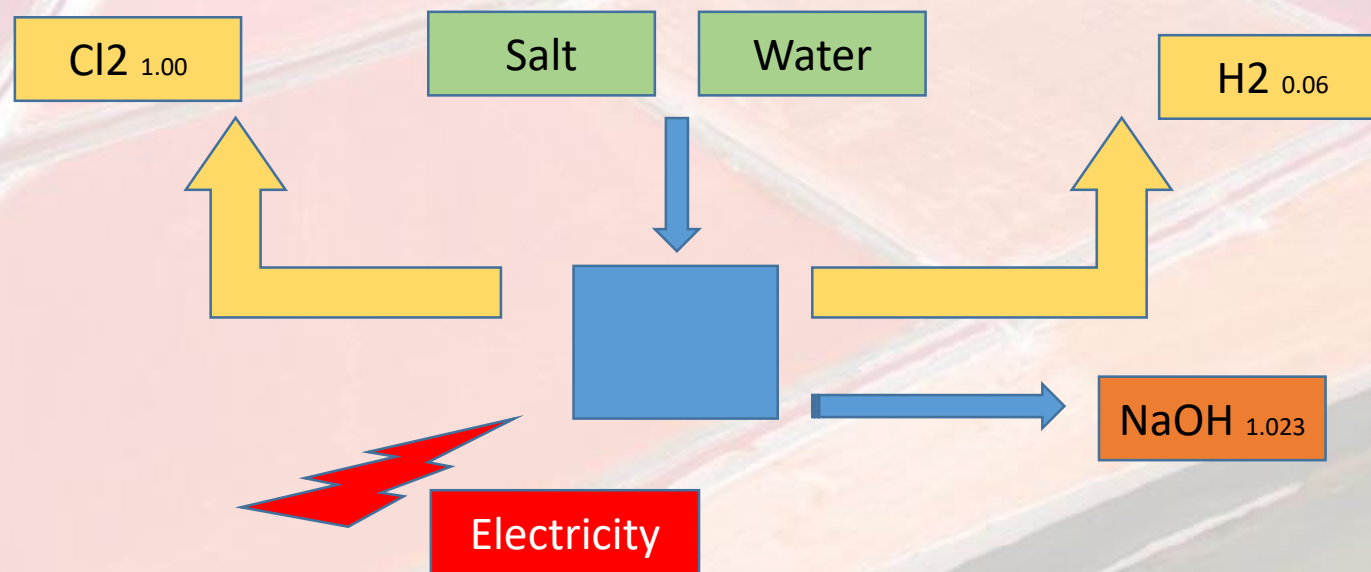
To Europe

To Qatar

General : Mineral Beneficiation

2. Salt Beneficiation Initiative

- Namibian government place huge focus on local mineral beneficiation.
- Local production of caustic soda from salt for Namibian mining industry an option
- Import levy of 20% outside SACU in place
- Namibian caustic soda market size : 30,000 ton per annum DMT = 60,000 ton per annum lye.
- Key Success Factors:
 - Electricity directly from NAMPOWER. 20MVA Connection is required.
 - Permit to dispose excess chlorine in sea, after being neutralized
 - Suitable land



General : Mineral Beneficiation

3. Ekango Refinery

- Produce refined salt for human consumption
- Commissioned during 2012
- 72,000 ton capacity per year
- Cerebos leading brand
- Local and export markets



Ekango
SALT REFINERS
(PTY) LTD

Value Addition : Ekango Salt Refiners



Ekango Salt Refiners :

- 25% local PDN Shareholding

☎ 0860 104 638
✉ info@cerebos.co.za
🌐 www.cerebos.co.za
📘 /see.how.it.runs

Packed for Cerebos Ltd:
Zone 7, Coega IDZ,
Coega, Port Elizabeth,
South Africa.



BE SALT WISE

CEREBOS SUPPORTS
HEALTHY EATING.



Cerebos® IODATED TABLE SALT

Cerebos®

IODATED TABLE
SALT

SEE HOW IT RUNS



1kg

Cerebos® IODATED TABLE SALT

Cerebos®
IODATED TABLE
SALT

Ingredients:
Salt, Anti Caking Agent
(E551,E535),
Potassium Iodate.

**Sal de nesa fino
iodizado**

Ingredientes:
Sal Iodina,
e Agenta De Fluxo Livre
Usar conforme requerido

Ingrédients: Sel (NaCl);
Agent anti-agglomérant
(E551,E535); Iodate de
potassium

STORAGE INSTRUCTIONS:
STORE IN A COOL,
DRY PLACE.

**GUARDAR EM LUGAR
SECO E FRESCO.**

**INSTRUCTIONS DE
STOCKAGE: À CONSERVER
DANS UN ENDROIT FRAIS
ET SEC**

Company Accreditations



Ekango
HACCP
Certification



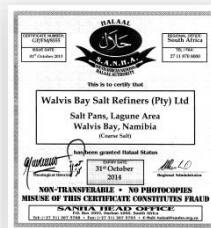
Ekango
Kosher
Certification



Walvis Bay
ISO
9001



Walvis Bay
OHSAS
Certification



Walvis Bay
Halaal
Certification



Walvis Bay
Kosher
Certification



Ekango Africa
Compliance
Certification

Walvis Bay Salt Holdings – Oyster Production



- Outsourced to BEE Company, under NAMSOV supervision.
- Commercial agreement with NAMSOV, but proceeds allocated to CSR budget.
- Over 800 000 units produced per year.
- Aiming for 2 million units per year.
- 50% exported to Asia and Hong Kong
- Project recently outsourced
- Focus on far east market



NOSA



GRADING AUDIT

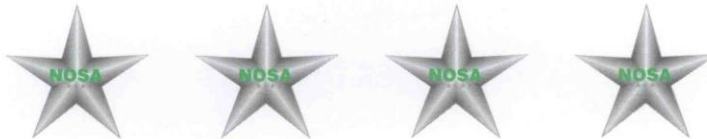
This is to certify that

**WALVIS BAY SALT REFINERS (PTY) LTD
AND SALT & CHEMICALS (PTY) LTD
NAMIBIA**

has been assessed by NOSA against the provisions of the

NOSA INTEGRATED FIVE STAR SYSTEM

Occupational Safety, Health and Environmental Management



The Star Rating above and the Seal below, were hereto affixed in the presence of:

Manager

Certificate No: CA400735

Date: 01 - 03 December 2015

Valid until: 30 November 2016



INAUGURATION



PORT & NEW CONTAINER TERMINAL



WALVIS BAY PORT / SALT LOADING FACILITY

- Walvis Bay Port

- New Container Terminal (Operational H1 2018)
- Berths 1,2 & 3 reduce to 2 Berths
- Reduced volume of ships to Berth 1

- Salt Loading Facility

- 14 m Draft @ 3 m from quayside fenders or listing
- Larger LOA vessels either turning or lengthening conveyor or skips
- Flooding mid holds required
- Adjustment of loading chute



THANK YOU



**WALVIS BAY
SALT HOLDINGS**

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www.wbsalt.com

Bulk Sales Agent:
Kevin Brett
Tel: +27 11 803 2904
kbrett@ilangasel.co.za





Bulk Transport Logistics



Bulk Loading Terminal











