



TCM – Matola Coal Terminal
9th Indian Ocean Ports & Logistics
22nd January 2015



Agenda

1. Terminal History
2. Export History
3. Current Terminal Infrastructure
4. Expansion Plans
5. Phase 4A magnetite concept



Aerial View of Maputo Port



Terminal History

- **2005 :** Grindrod purchased API Holdings, took over the TCM sub concession
- **2006 – 2010:** **Phase 1 & 2**



- Create a reliable throughput capacity of **4Mtpa**
- Improve integrity by optimizing layout of existing storage Rail yard,
- Rebuild and refurbish stacker/ reclaimer no.2
- Re-instate central stockpile conveyor
- Refurbish the existing Ship loader,
- Ability to load Handysize vessels with coal at a 9,000 ton per day

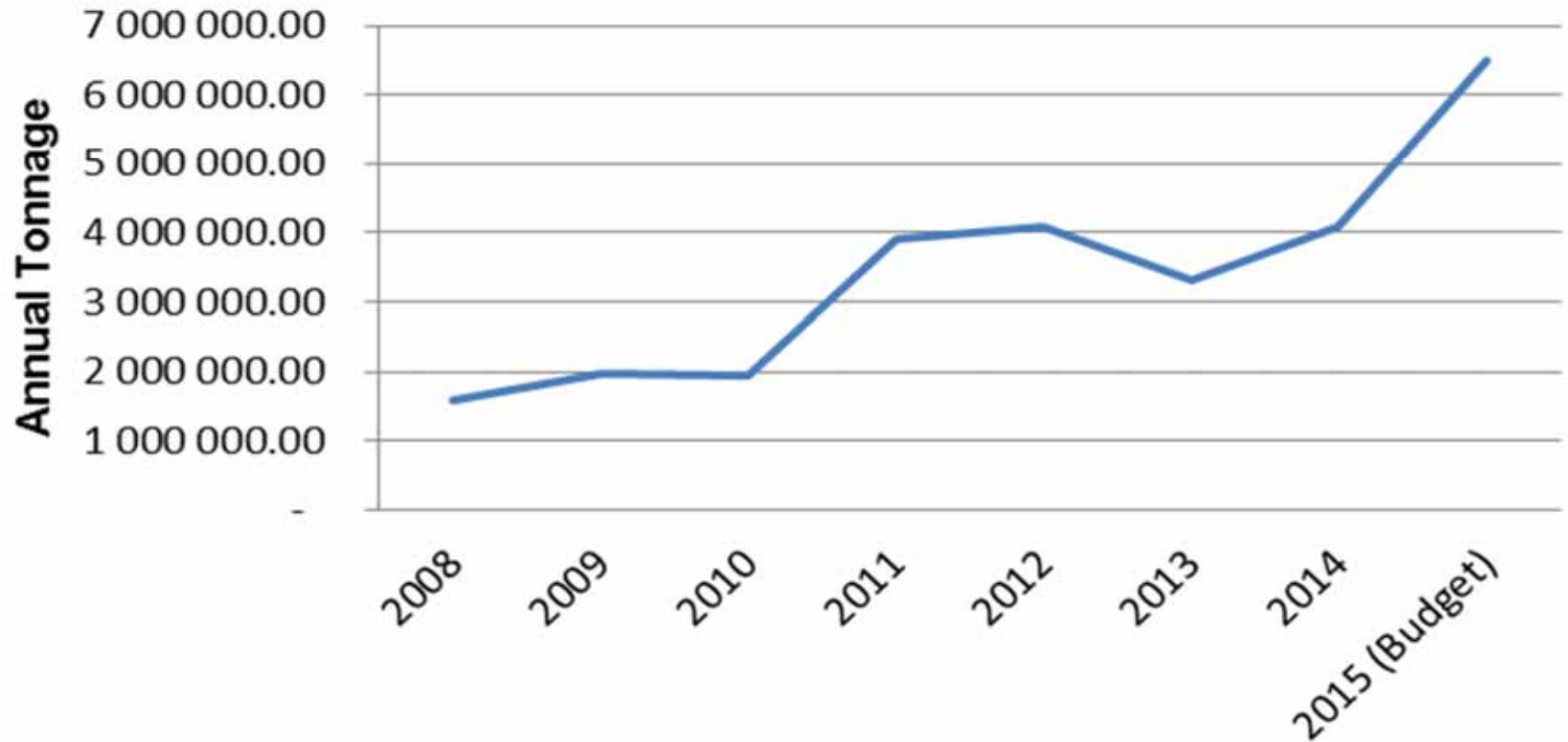
Phase 3

- Create a reliable throughput capacity of **6Mtpa**
- New 2500 ton per hour shiploader and new stacker / reclaimer
- Storage capacity to 400 000 tons

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Export History

Export History



Current Terminal Infrastructure



- Capacity of 7.5Mt / annum
- 36 x storage bins – capable of storing about 300,000 tons coal plus 200,000mt magnetite.
- 2 x refurbished stacker / reclaimers which can stack / reclaim coal at 650mt per hour.
- 1 x New stacker / reclaimer can stack / reclaim coal at 1 250mt per hour.
- 2 Shiploaders
 - Original ship loader 650mt coal
 - New ship loader capacity 1250mt coal per hour



Current Terminal Infrastructure





Phase 4 – Expansion Plans



Phase 4 Expansion

The Phase 4 Terminal expansion has identified the following target market for the utilisation of the facility:

- **South Africa**

 - Coal – 5Mt from Witbank / Mpumalanga Coalfields

 - Magnetite – 15Mt through the Ressano Garcia line

- **Zimbabwe / Botswana**

 - Coal – \pm 10Mt through the Chicualacuala line

The Terminal expansion will create dedicated Port capacity for BEE/Junior minors who are geographically well positioned to take advantage of the facility.

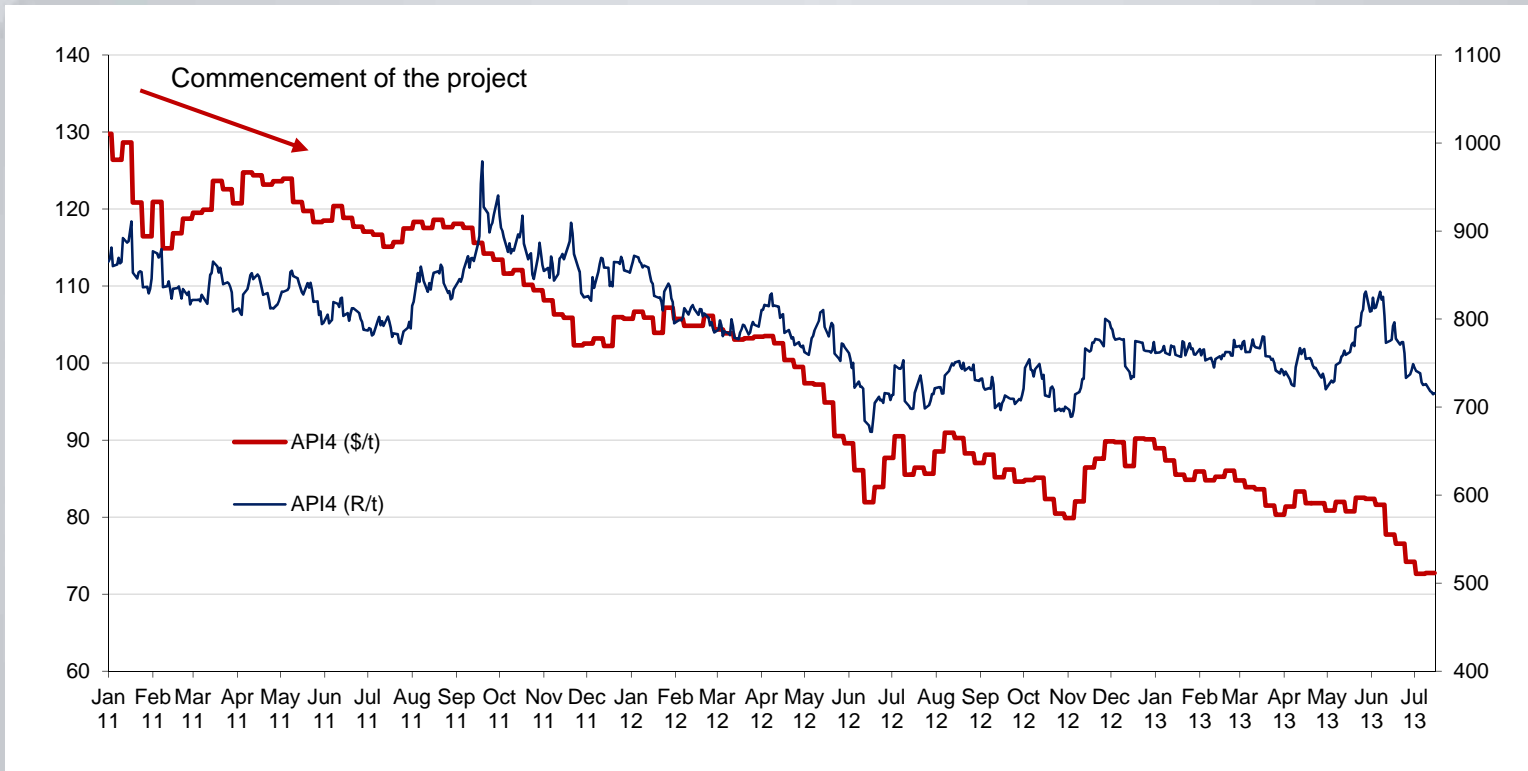


Introduction

- TCM Phase 4 Project rescoped as a staged development driven by market conditions resulting in:
 - a shift in commodity mix to magnetite / iron oxide with less coal by tonnage; and
 - a need to service fully laden Panamax vessels.
- The Project now comprises:
 - an initial development of a Brownfields modernisation of the existing terminal with the replacement of material handling equipment, upgrade and extensions of conveyors, additional rail arrival lines, deepening of the existing berth and construction of a new berth (referred to as “Phase 4A Brownfields Development”); and
 - a future development of a new Greenfields magnetite stockyard, tipplers and associated rail infrastructure.
- Ultimately, on completion of the Greenfields Development (Stage 3) the total terminal capacity will be 20 - 22 mtpa split between the existing and new stockyards

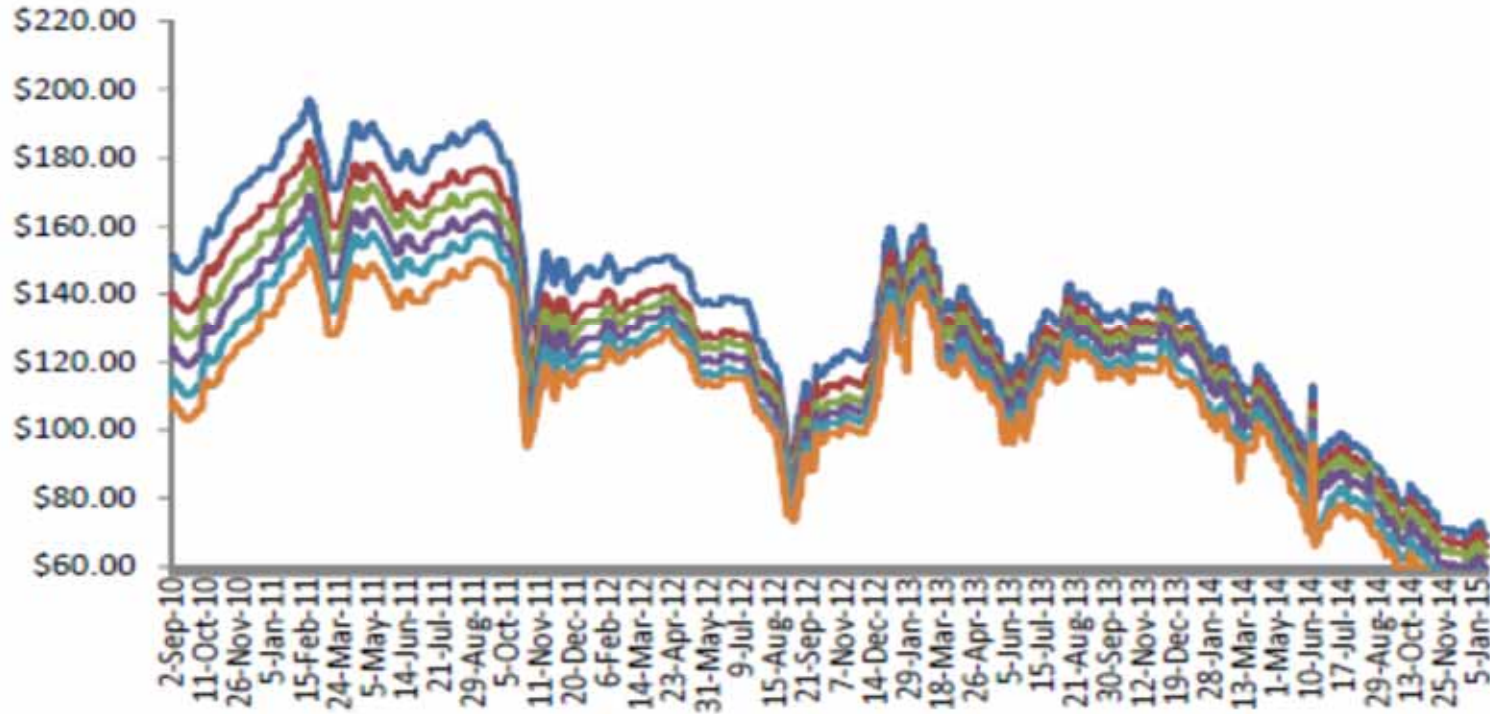


Coal market dynamic

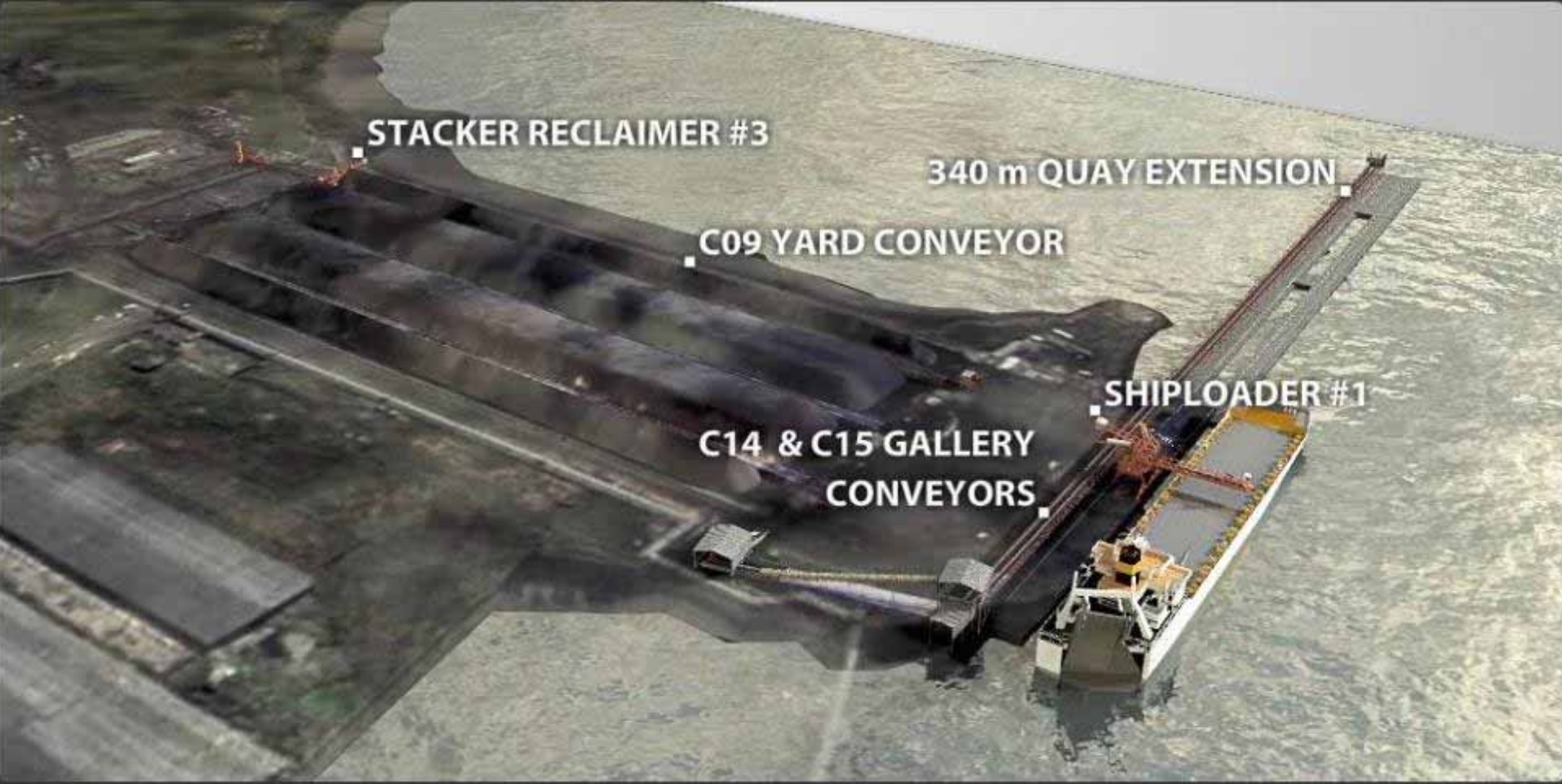


Iron Ore market dynamic

CIF China Import Prices (US\$)



Phase 4A Brownfields layout



Previous layout - Phase 4A and 4B



Phase 4A Greenfields layout options



Option 1



Option 4.1

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Staged development benefits

Description	Phase 4A Brownfields	Phase 4A Greenfields
Scope of work	<ul style="list-style-type: none"> i) Stacker/reclaimer #3 ii) Export conveyor system iii) Dredge work iv) Berth #1 modifications v) Berth #2 skeletal quay vi) New ship loader #1 vii) Quay conveyors/gantry viii) Rail system partial 	(Stockyard – wetlands or inside rail loop) <ul style="list-style-type: none"> i) Tipplers (x2 dual cells) ii) Stacker/reclaimers (x2) iii) Rail system complete
Mix ratio (Mag/coal)	75/25	75/25
Terminal capacity	12 mtpa	~20-22 mtpa
Capacity increase	4.7 mtpa	~8-10 mtpa
Development time	28 months	~36 months
Capex spend (\$'m)	161	275 – 343*

Note: * - Order of magnitude capex for Option 4.1 (inside rail loop) versus Option 1 (Wetland) based on a Concept study

