

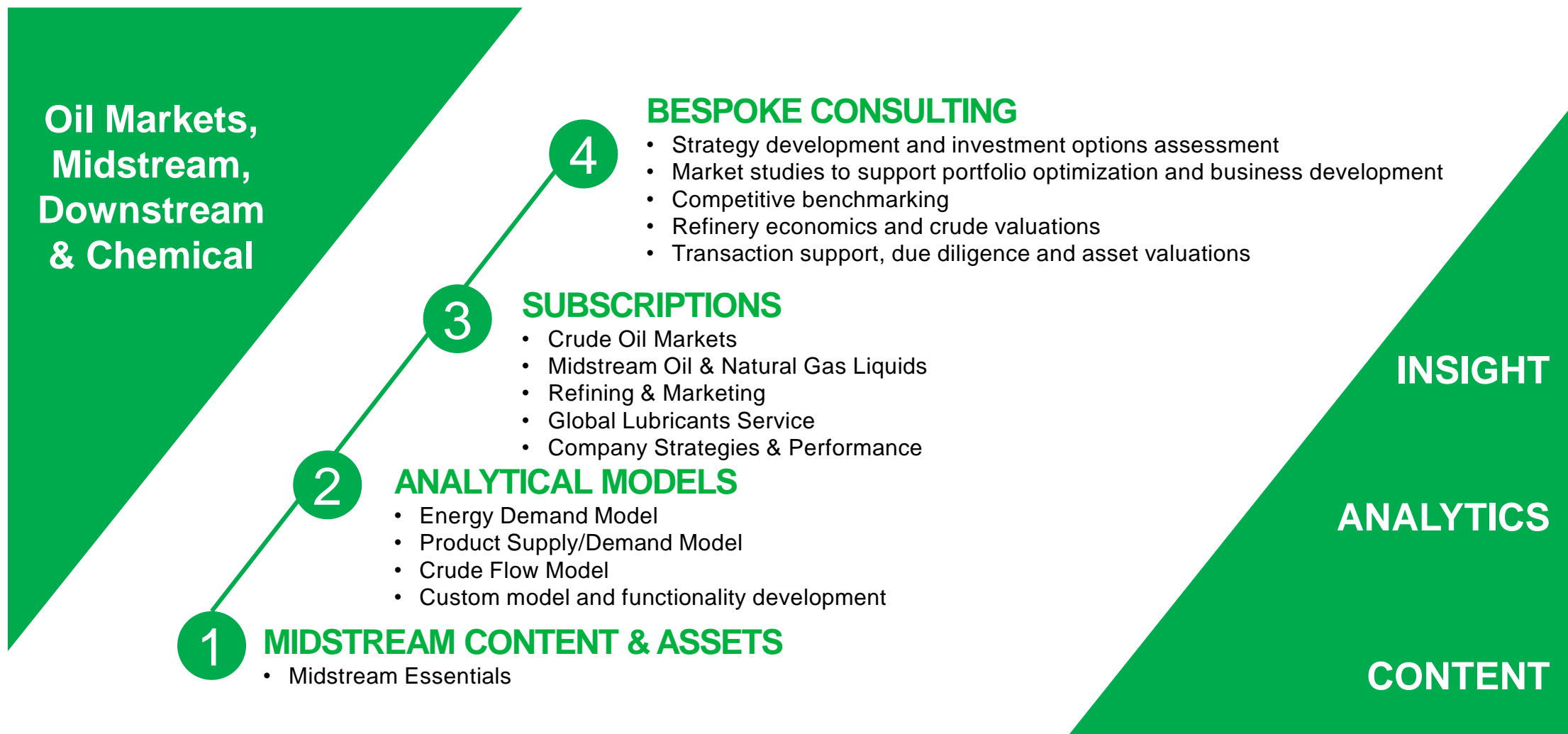
Downstream Landscape in SADC Opportunities for Namibia / Walvis Bay

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IHS Markit activities in the Oil Markets, Midstream, Downstream group



Consulting in Africa – Samples

- **Logistics**

- > Alternative supply routes for Botswana
- > Market Study for Storage Development: Mozambique, Tanzania, Djibouti, Ghana etc
- > Mozambique-Zimbabwe pipeline

- **Due Diligence – Buyer's side**

- > Major's integrated assets in South Africa
- > Major's assets in North Africa
- > Major's retail assets in Kenya

- **Presentation and support to the Board**

- > NOC, regional oil companies

- **Strategy**

- > NOC in Southern Africa
- > Major in Africa

- **Market Study for Refinery Project**

- > South Africa, South Sudan, Liberia, Nigeria etc

- **Portfolio Review**

- > Regional oil company

- **Review of Affiliate Performance**

- > Kenya, Tanzania, Malawi, Uganda etc

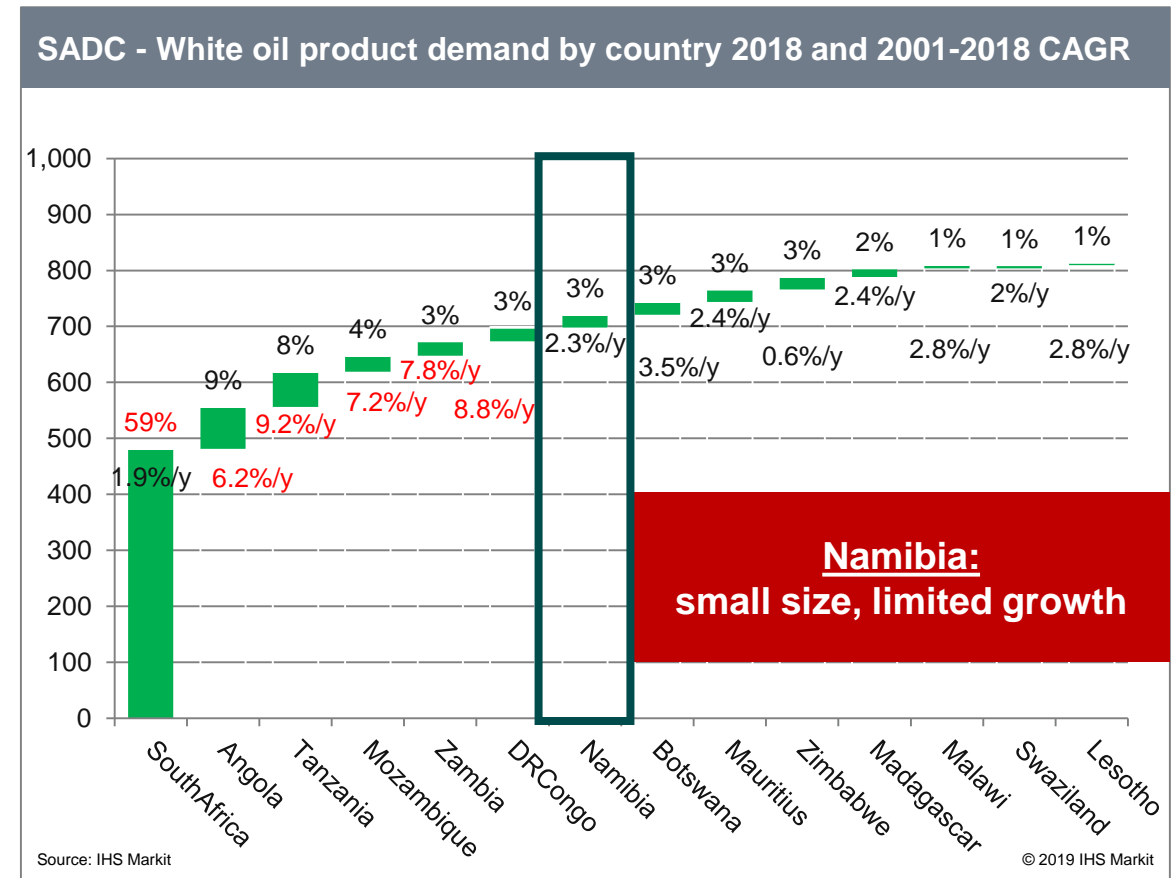
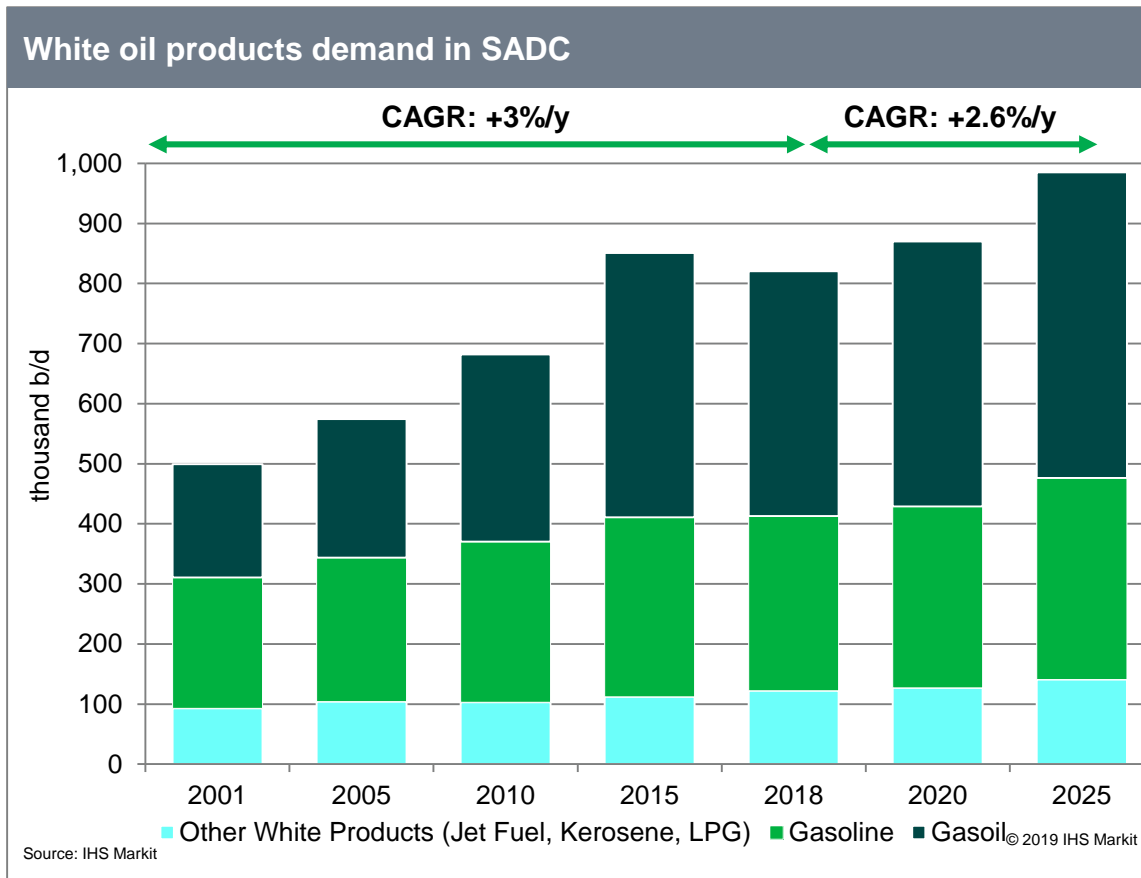
- **Market Entry Strategy**

- > Zimbabwe, Zambia, Mozambique, Liberia etc

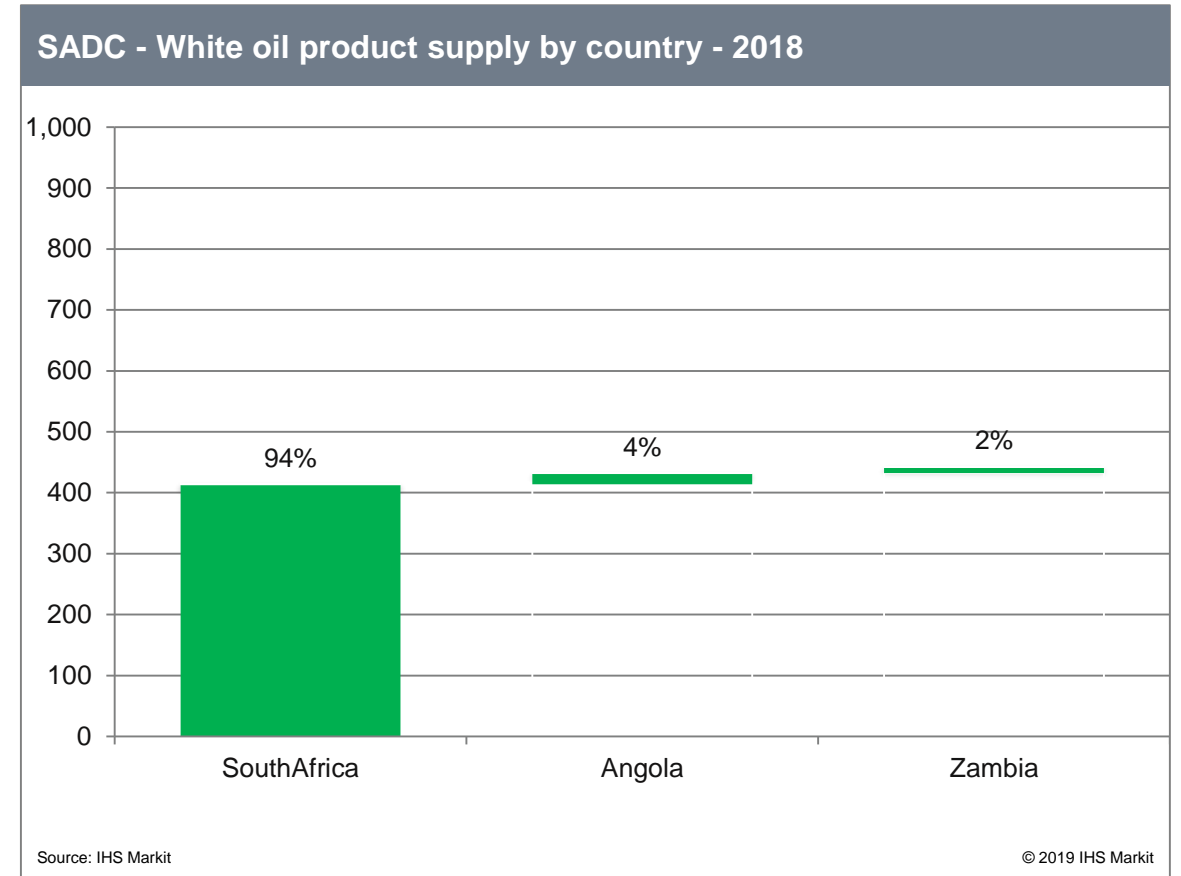
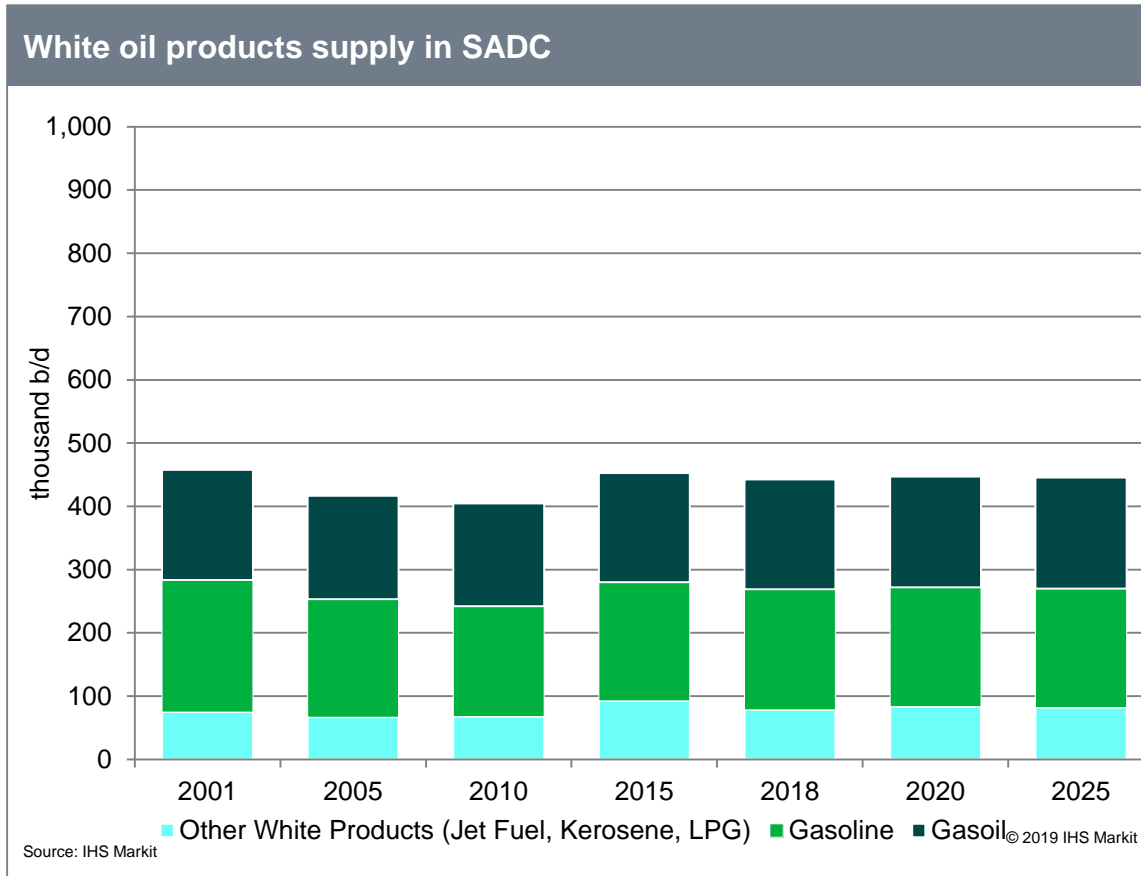
Regional Trends – SADC

SADC: South Africa the largest market by far

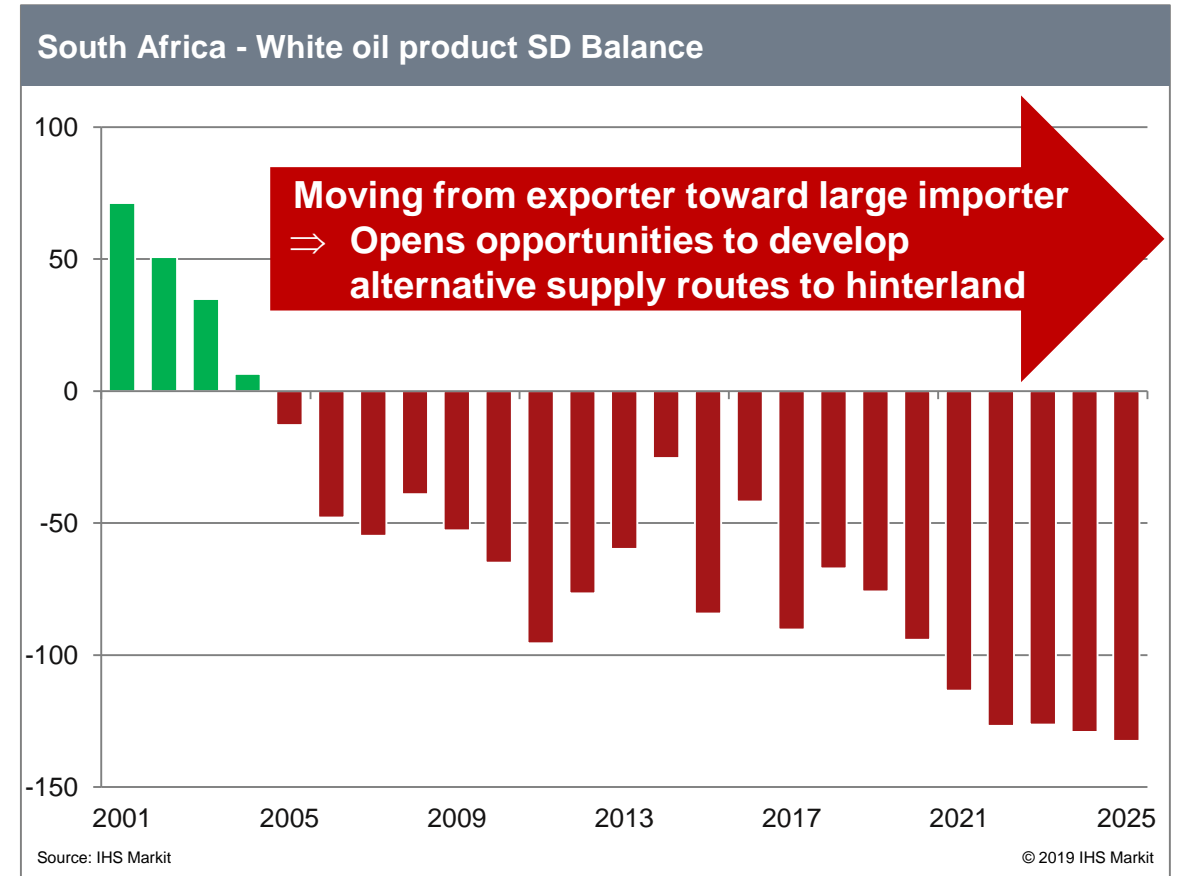
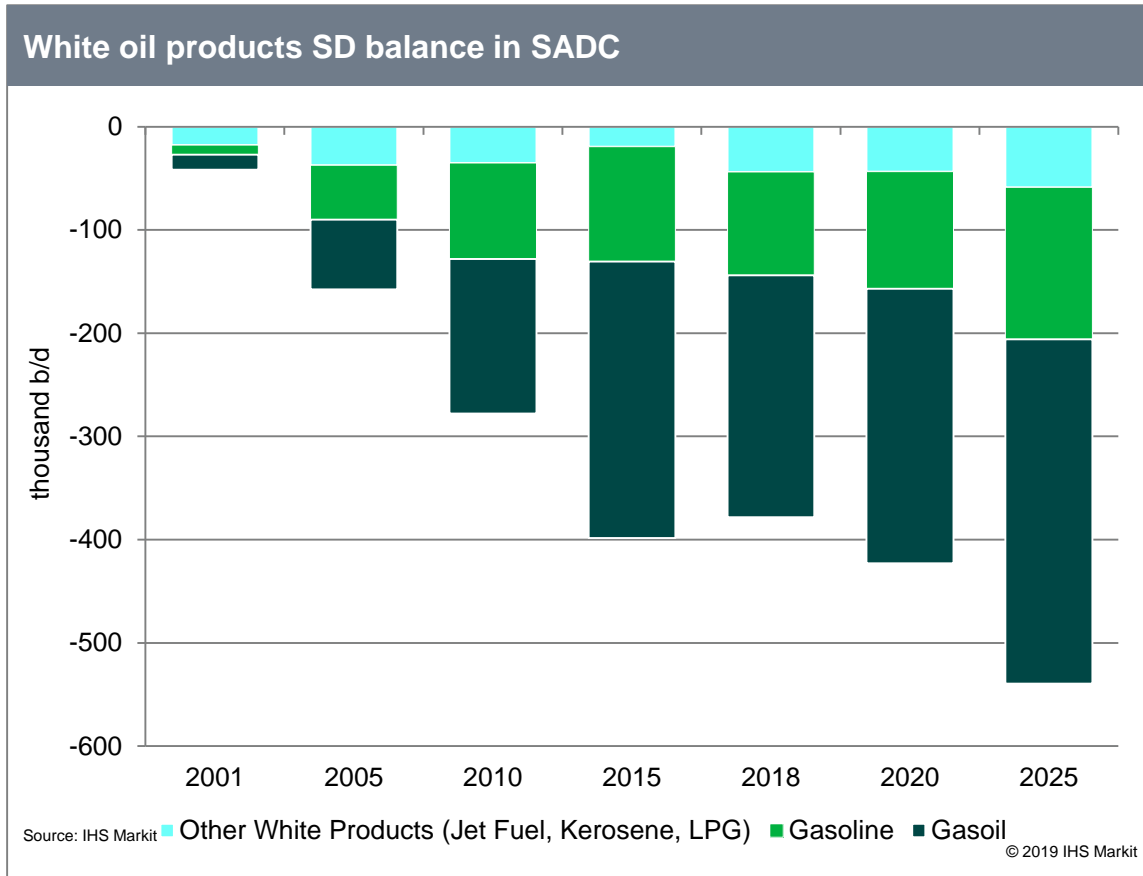
Strongest growths mostly beyond SACU/Islands



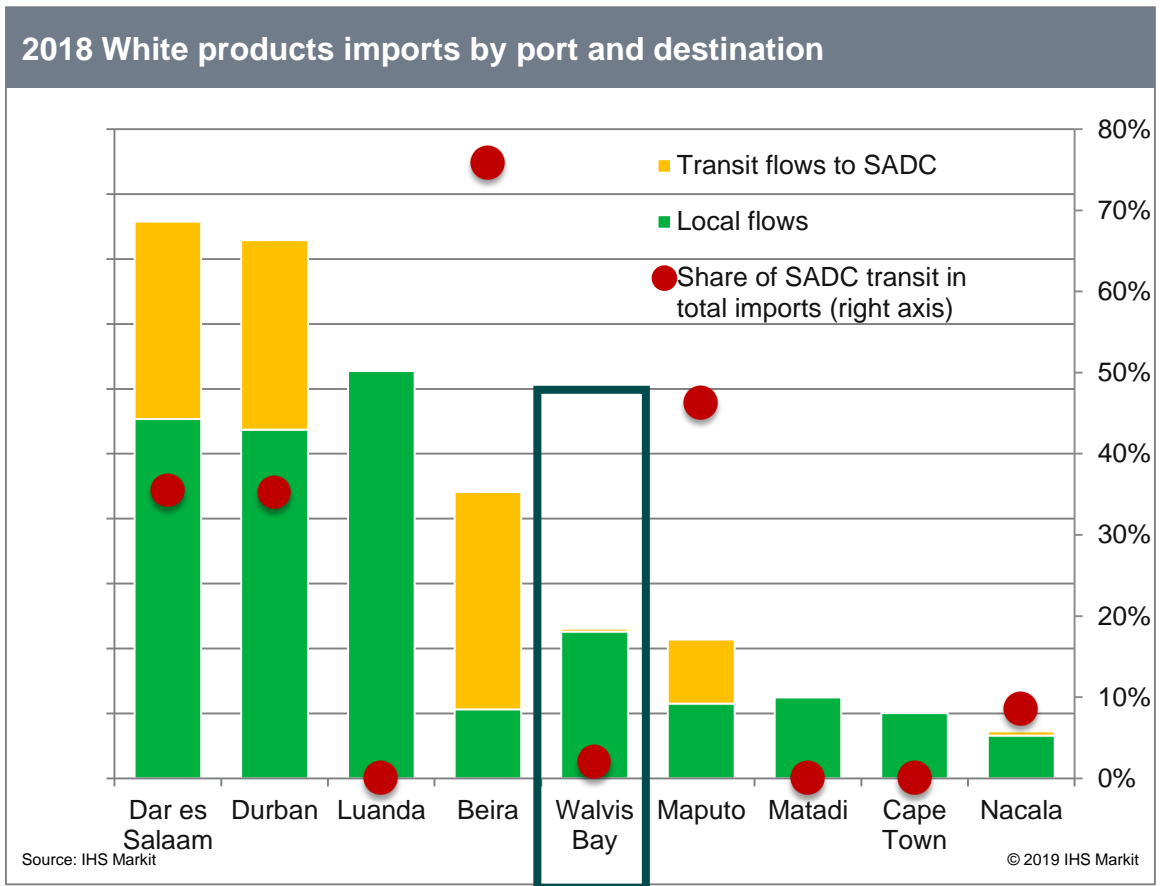
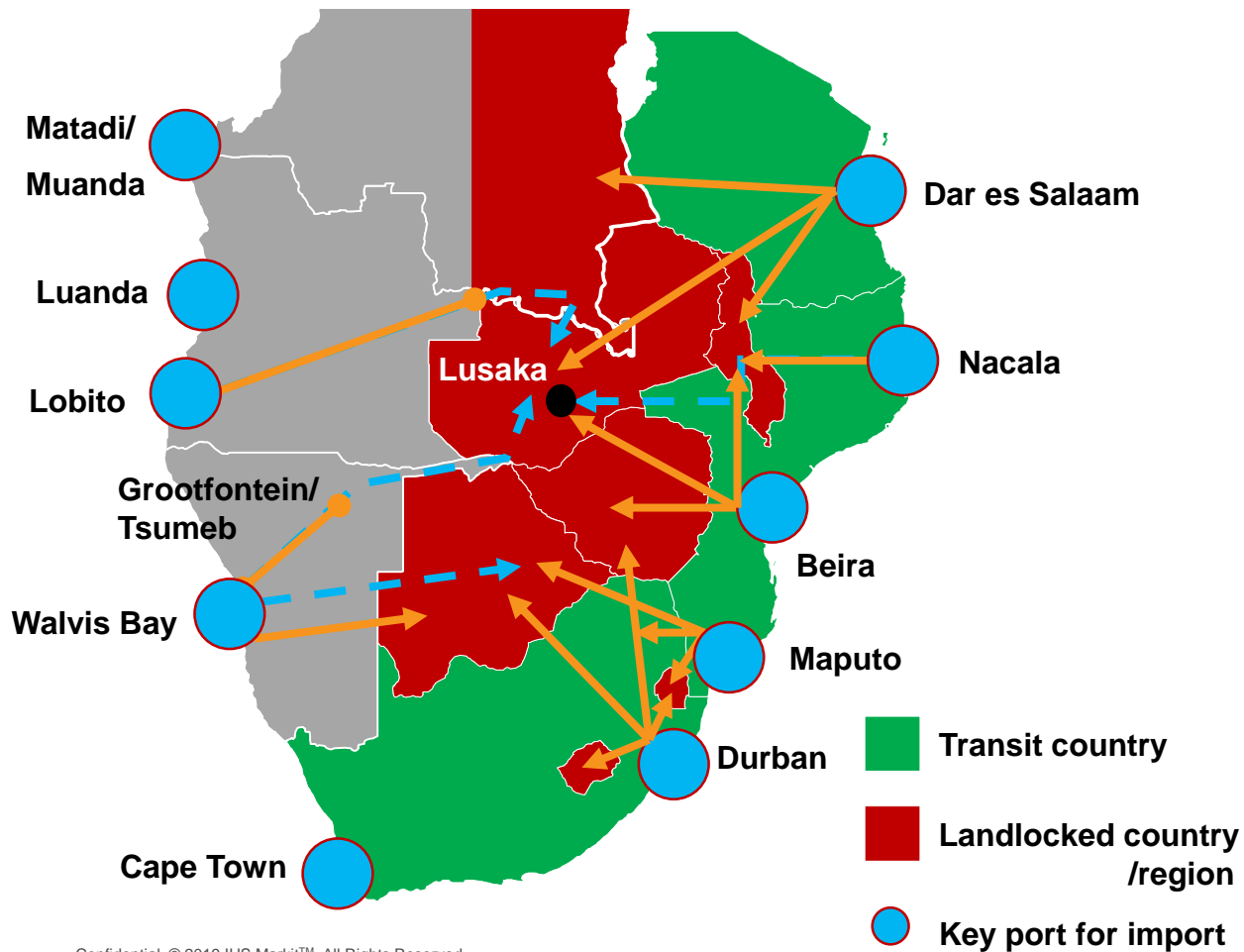
Refining production on slight decline, heavily concentrated in South Africa



Fast growing imports explain the growing appetite from traders for the region South Africa turned into a large net importer since 2005 – and will remain so



98% of fuel imported in Walvis Bay is for the local market – ie we are not a hub or even a corridor (yet?)



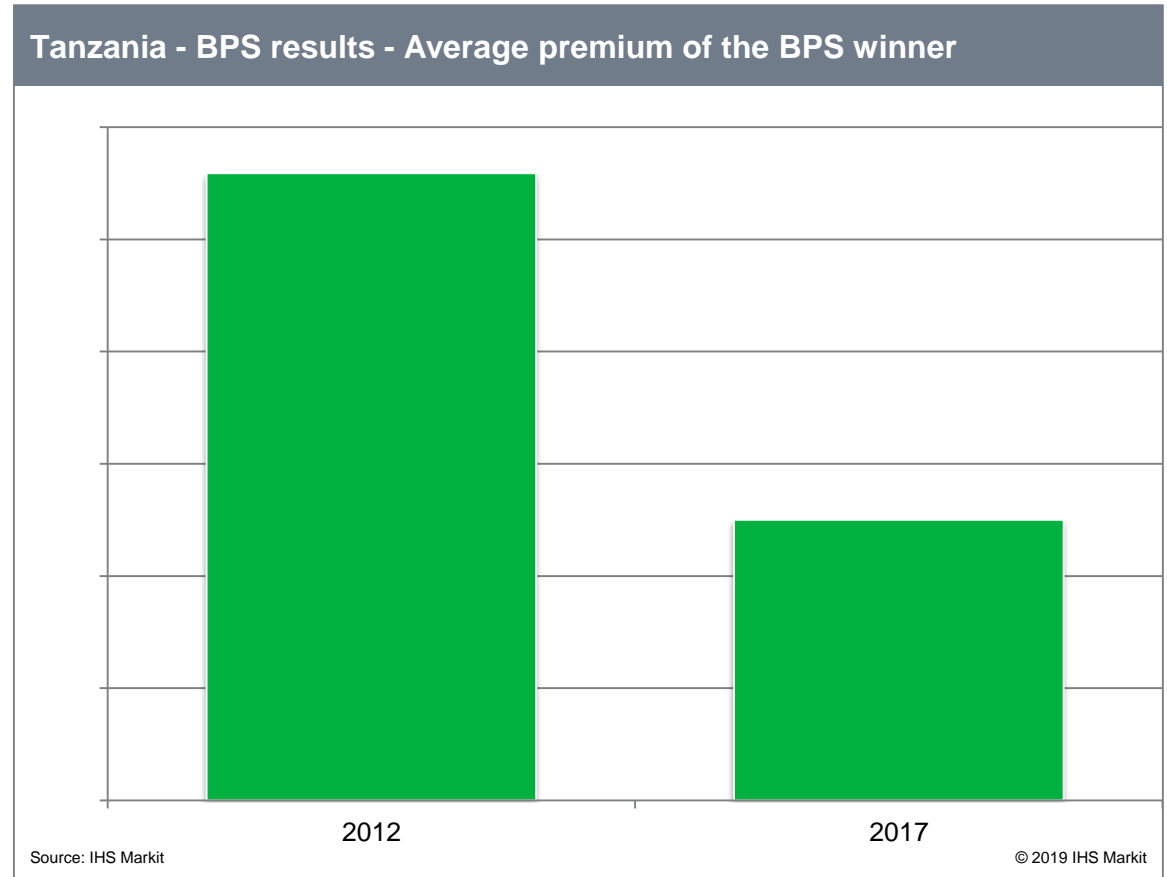
Namibia – What next?

How to import cheaply and reliably?

Is there a future for Walvis Bay as a hub / corridor?

If the objective is to import at the cheapest price...

- ... then implementing a **transparent BPS (Bulk Procurement System)** for **100% of volumes**, managed by an **independent** body, seems like a fair potential solution
- **Key stakeholders could include (non exhaustive list):**
 - > MME, MoF, MoTI, BoN
 - > Namport, TransNamib
 - > NAMCOR and private OMCs
- **Examples: Kenya, Tanzania or Mozambique**
- **Additional questions:**
 - > Why “50%” for NAMCOR’s mandate?
 - Economies of scale would be better with 100%...
 - > What’s different from last decade's context?



What makes a key fuel hub? Is Walvis Bay a hub?

What makes a key liquid storage hub? How does that apply to Walvis Bay?

<p>1 Strategic location</p> <ul style="list-style-type: none"> • Small local market size, limited upside • Far from hinterland markets – only accessible by road • No petrochemical, refining or sizeable bunker activity 	<p>2 Political stability/ open environment</p> <ul style="list-style-type: none"> • Namibia a relatively stable, open country • Strong support for port development from port/local authorities • A number of questions remain unanswered – uncertainties 	<p>3 Significant storage capacity</p> <ul style="list-style-type: none"> • Limited storage capacities and competition vs other ports in the region 	<p>4 Refining center</p> <ul style="list-style-type: none"> • No refinery currently (or in future)
<p>5 Significant oil flows</p> <ul style="list-style-type: none"> • At the end of fuel flows from NWE or Middle East • Not along fuel trading routes 	<p>6 Port infrastructure and competitive costs</p> <ul style="list-style-type: none"> • Port costs competitive with rivals • Investment in new jetty • But transport cost not competitive at all beyond port 	<p>7 Pricing center</p> <ul style="list-style-type: none"> • No crude and product price assessments based on WB 	

Source: IHS Markit

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Walvis Bay as a corridor – What it would take to increase transit volumes?

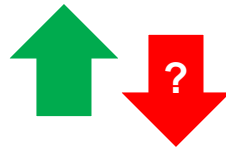
Operational aspects seem positive – but transport to markets is prohibitive and/or unreliable

- 1 Vessel Arrives at Port 2 Product Landed 3 Product Storage at Port 5 Product Exits Port

Import Location



End Market



Walvis Bay

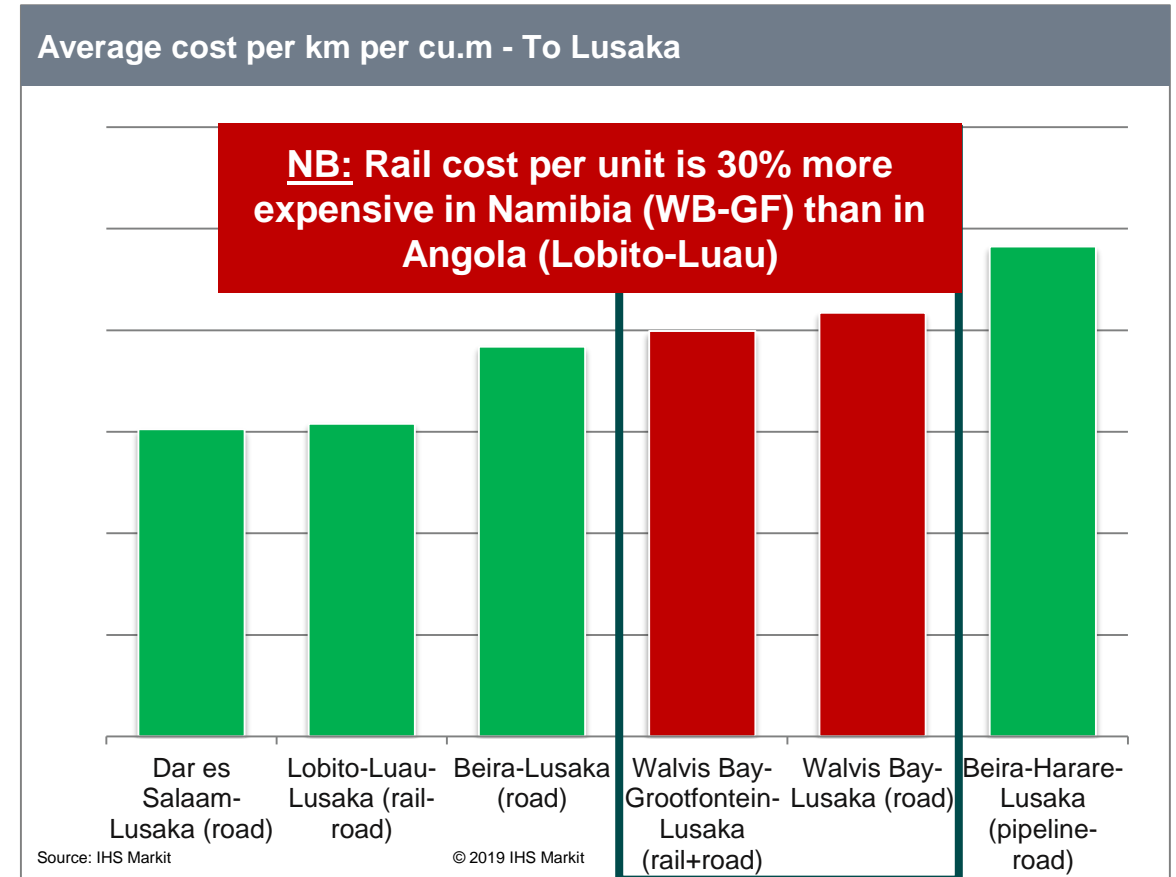
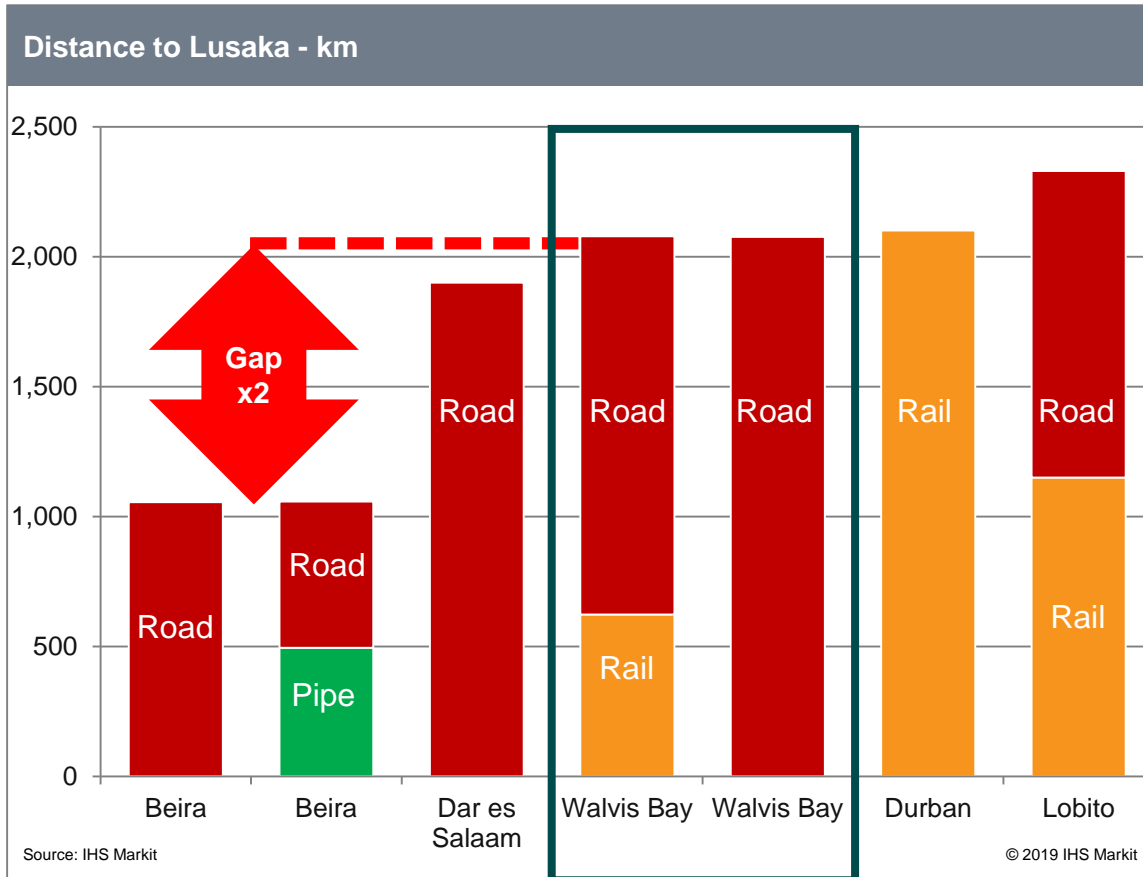
- New petroleum jetty coming onstream soon
- Deep sea port (2x60DWT only though, vs same in Beira and 150,000 DWT in Dar es Salaam)
- Operations smooth at the port
- Limited demurrage
- Port cost competitive (esp vs Mozambique)

- Free imports for now (handled by two OMCs)
- Impact of NAMCOR's potential mandate?
- Economies of scale are critical:
 - 100% "mandate"?
 - BPS?
 - Include neighbors?

- Reasonable storage fees
 - Excess storage capacities coming with MME/NAMCOR's depot coming onstream (ie will have less than 5 turnaround per year, or 80 days of reserves)
- ⇒ Might reduce storage costs

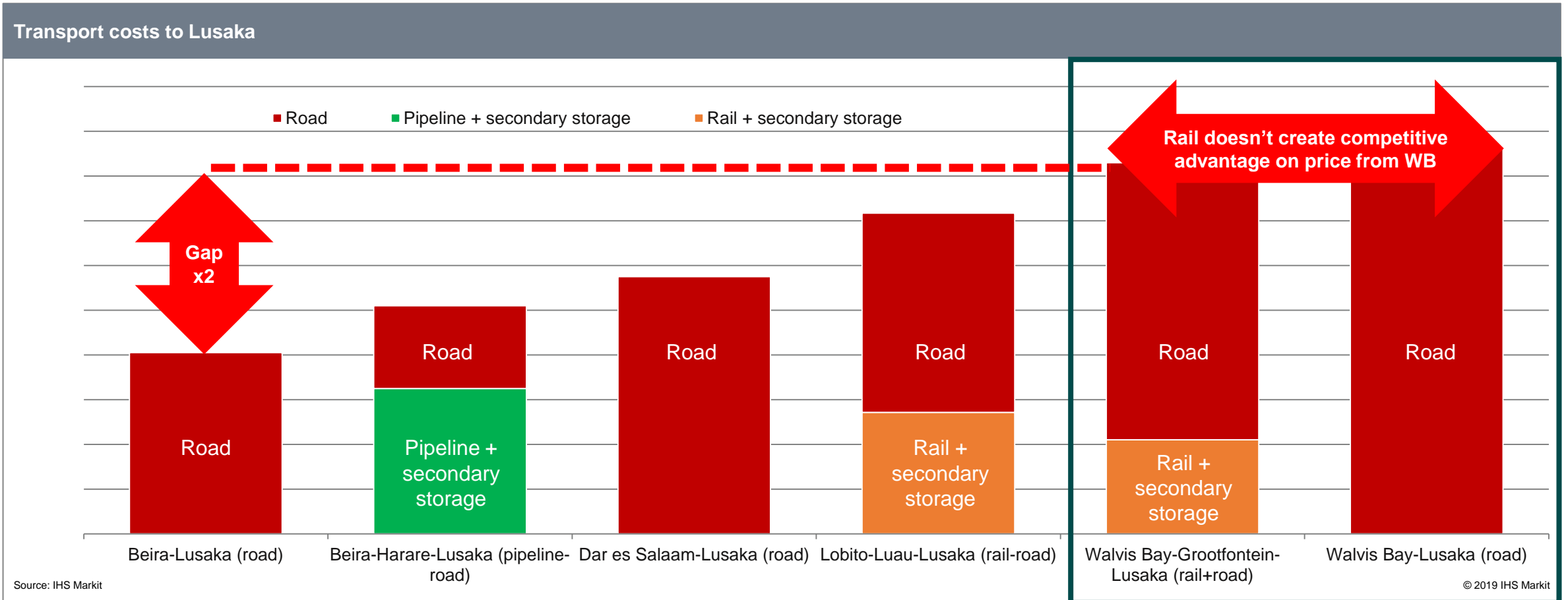
- Next markets beyond Namibia (Angola, Botswana, Copperbelt) are very far from WB – and would be supplied on non-competitive road/rail transport from WB
- Only cheap rail could make it competitive for WB, but 1) cost? 2) reliability?
 - Lower cost?
 - Enhance Transnamib capacities with potential secondary storage in Grootfontein/Tsumeb?
 - Expand rail network to Caprivi?

Walvis Bay is far from its key export markets – and transportation costs per unit are among the highest... The case of Lusaka

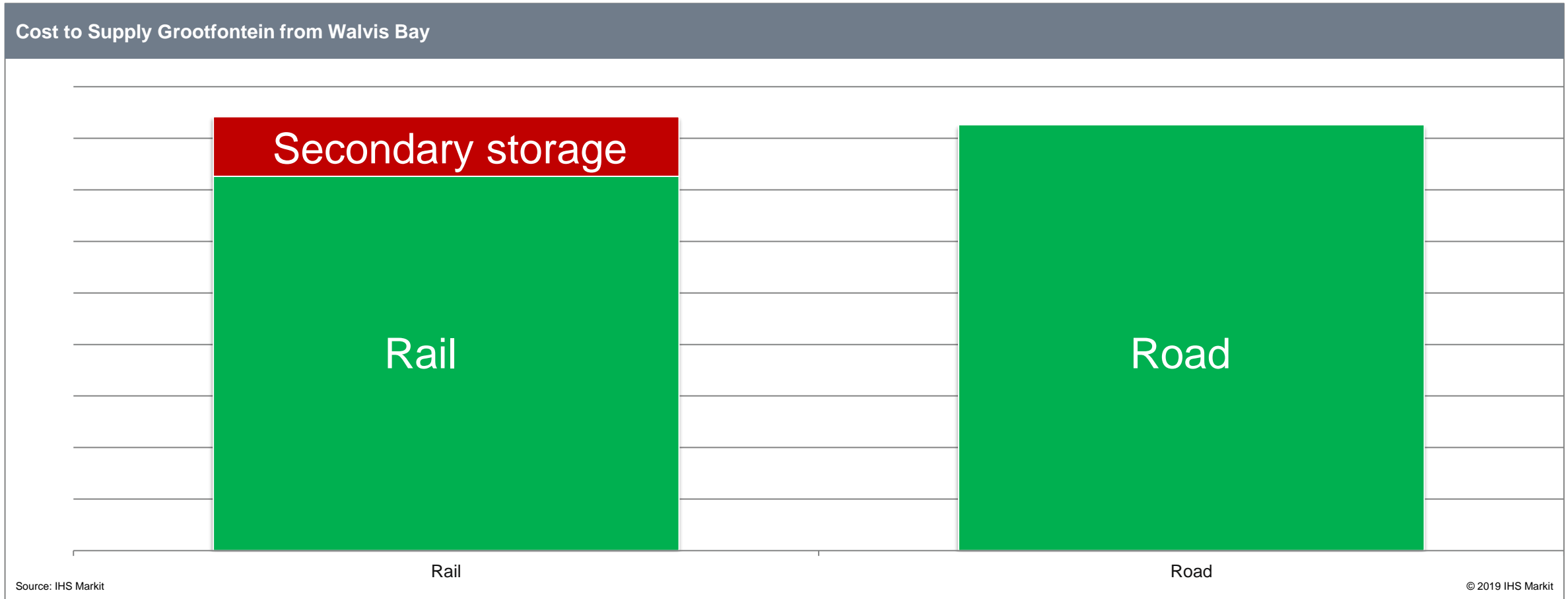


NB: Zambia is the main destination for Namport's transit (all goods)

As a consequence, Walvis Bay is not competitive to supply the hinterland at current transportation fees



And even within Namibia, rail appears less competitive than road....



Turning Walvis Bay as a regional corridor : Proposed approach for a strategy definition

Objective:

Establish Walvis Bay as the most competitive port in the region with regards to fuel supply for the hinterland

Approach:

1. Map the regional fuel supply chains from various ports to the hinterland markets
2. Understand the competitiveness of Walvis Bay against these competing ports from both a tangible (direct and indirect cost) and intangible (reliability, trustworthiness, safety) perspective
3. Identify and assess changes that could improve the competitiveness of Walvis Bay – clear, transparent cost benefit analysis
4. Select strategic and operational actions
5. Make strategic and operational recommendations and identify how implementation could be financed

Conclusion

A few questions ahead...

A few questions ahead...

How to ensure MME' storage use optimization, ie avoid white elephant syndrome?

- **Commercial vs strategic stocks balance? How to optimize throughput?**
 - Decapitalize, bring in other partners?
- **Who will operate the storage with NAMCOR?**
- **Subsidiary question – when is the last time we had a shortage?**

What import scheme for which ultimate objectives?

- **Ensure lowest prices and most reliable supply for consumers – critical objectives (?)**
 - Transparency critical
 - Fuel represents 1st item of Namibia's overall imports
- **How will the 50% mandate be organized, if confirmed?**
 - How to avoid the “G. experience” to happen again?
- **How to create trust among stakeholders?**

How to establish the Port of Walvis Bay as the preferred entry point for the hinterland?

- **Develop an Integrated Strategy that would establish the Port of Walvis Bay as the preferred entry point for traders and oil companies supplying the hinterland**
 - Seems like a number of actions have to be taken

Thank you

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Q&A

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