

Powering the Nation for 20 years and beyond

Celebrating 20 powerful years of Independence and
20 more towards the realisation of Vision 2030



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THE KUDU POWER PROJECT

Downstream Structure:

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❖ **Power Station developers/partners:**

- ❖ NamPower: 51%
- ❖ Strategic Equity Partners: 49%

❖ **Location of power plant:** Uubvley (25km north of Oranjemund)

❖ **Technology:** CCGT

❖ **Power Output:** 800MW (nominal)

❖ **Main Off-taker:** NamPower

❖ **Secondary off-takers:** Zambia & South Africa

NamPower's key role in the Kudu Power Project:

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Current key role of NamPower in the project:

- ❖ To remain lead developer of the Kudu Power Station,
- ❖ Busy farming-out 49% equity in KuduPower to strategic partners,
- ❖ NamPower will off-take 800MW from the Kudu Power Station,
- ❖ NamPower will on-sell 400MW to regional off-takers:
 - CEC to off-take 300MW - negotiations advanced
 - Eskom to off-take 100 – 300MW - negotiations on-going

Location of Kudu Power Station



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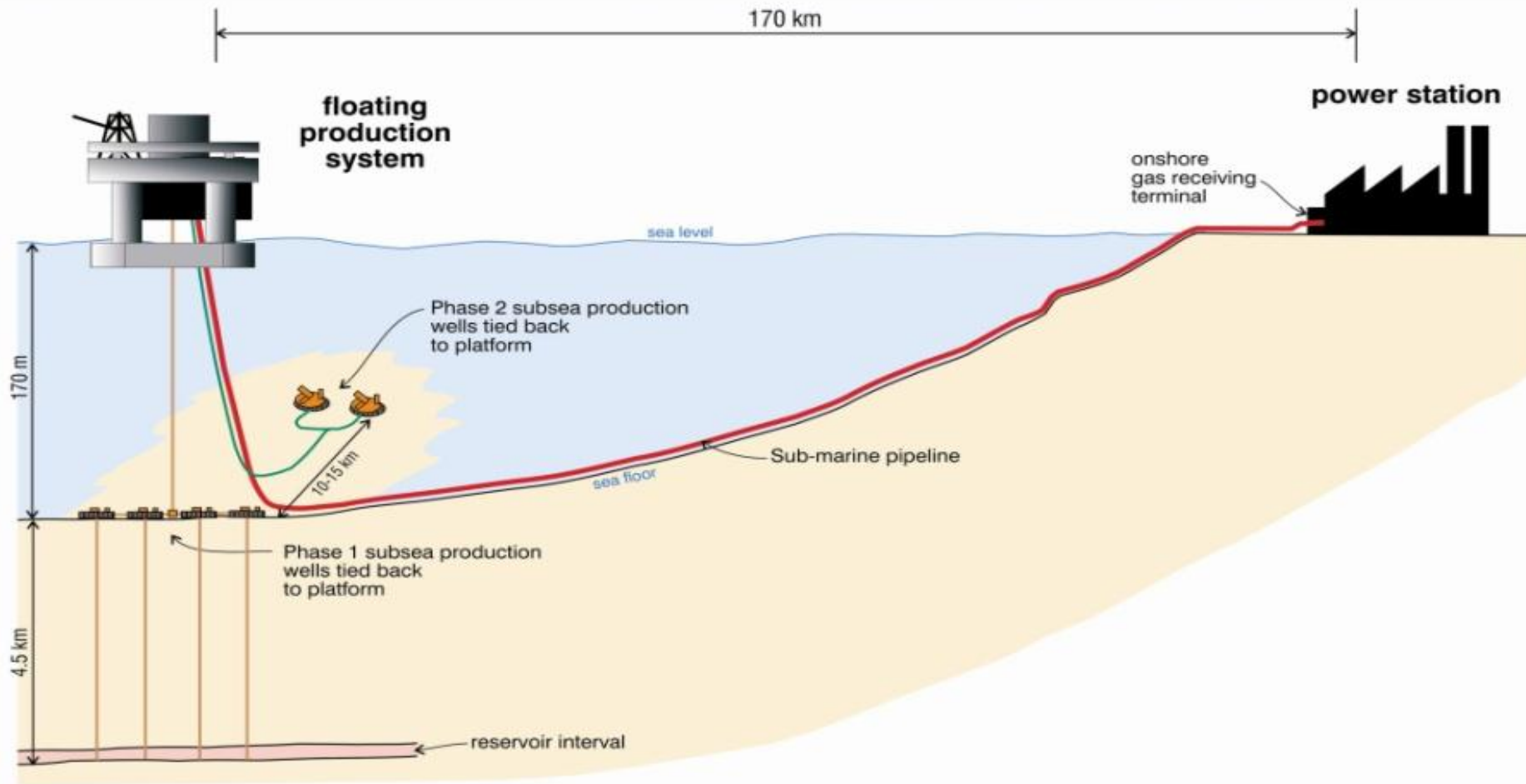


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- Strictly Confidential -

Gas Field – Power Station scheme

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November 2004 KUDU DEVEL SCHEMATIC FPS 2 CDR



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❖ Kudu Gas Field developers (owners):

❖ Namcor	-	54%	(in the process of securing a carry partner)
❖ Tullow Oil	-	31%	
❖ ITOCHU	-	15%	

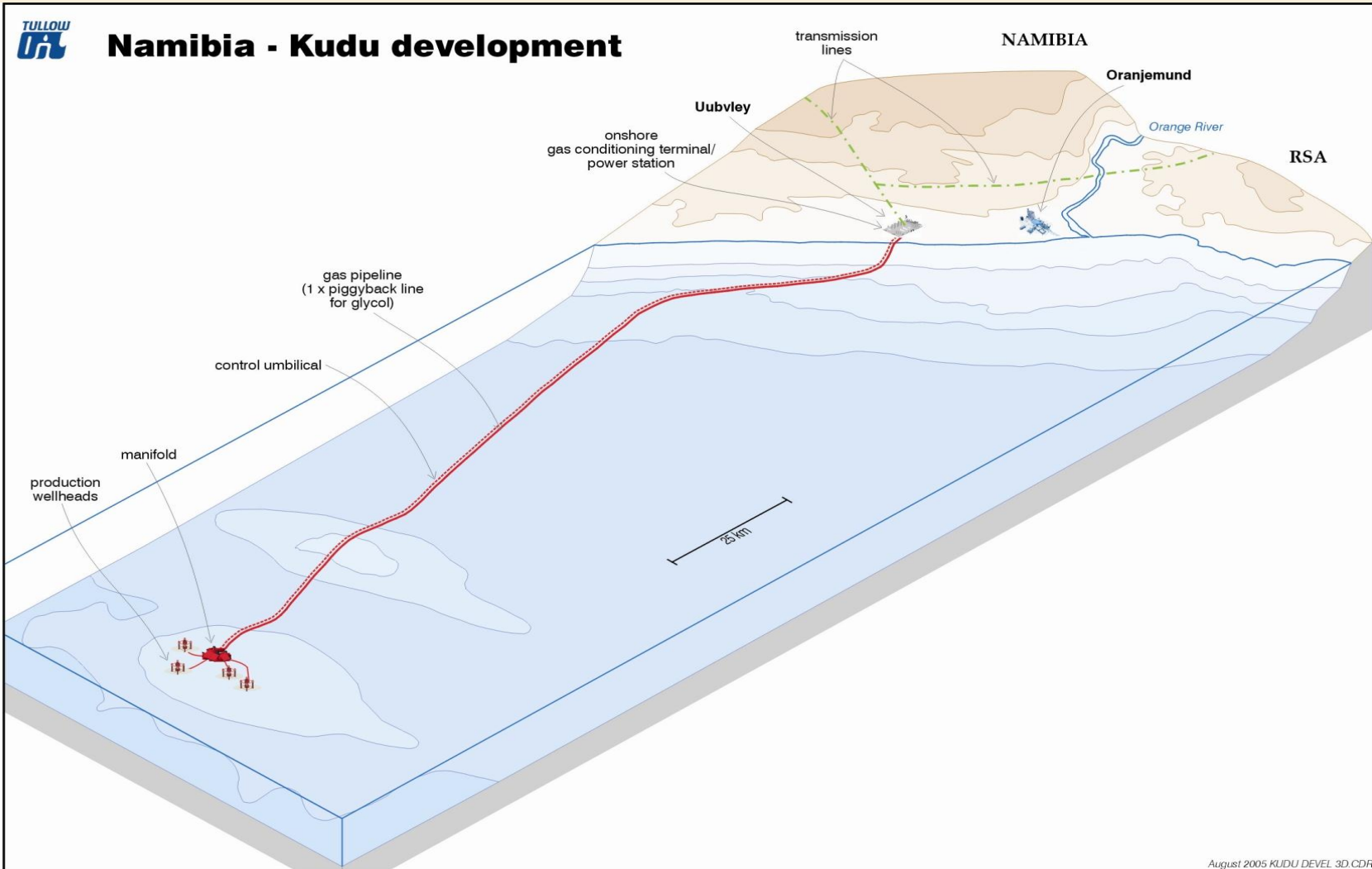
❖ **Location of gas field:** 170km off-shore

❖ **Proven reserve:** - 1.3tcf

❖ **Off-taker of the gas:** KuduPower (Pty) Ltd

Upstream project concept

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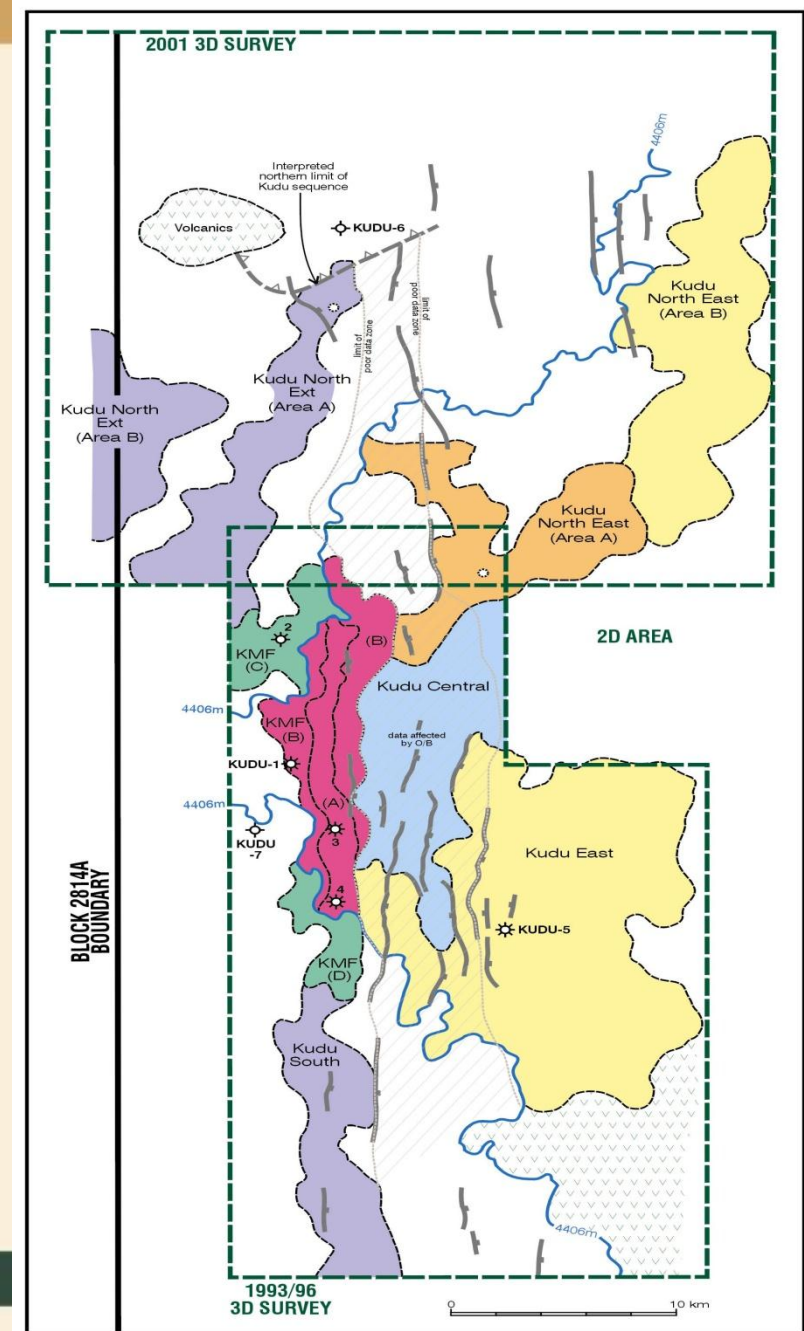
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Kudu Gas field reserve & location

- ❑ Water depth : 170m
- ❑ Reservoir depth 4400m
- ❑ 170km from shore

➤ Deterministic GIIP estimates (tscf):

	EA	GCA
➤ Proved	1.38	1.45
➤ Probable	3.28	2.72
➤ Possible	9.92	7.12

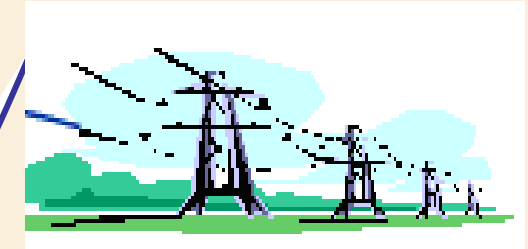


KUDU PROJECT SCHEME

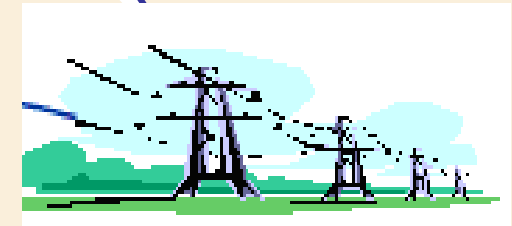
Gas
Sales/Supply
Agreement

Power Purchase
Agreements

Domestic supply



Power Export
Agreements



Upstream

Namcor (54%)
Tullow Oil (31%)
ITOCHU (15%)

Downstream

800 MW CCGT Power
Station

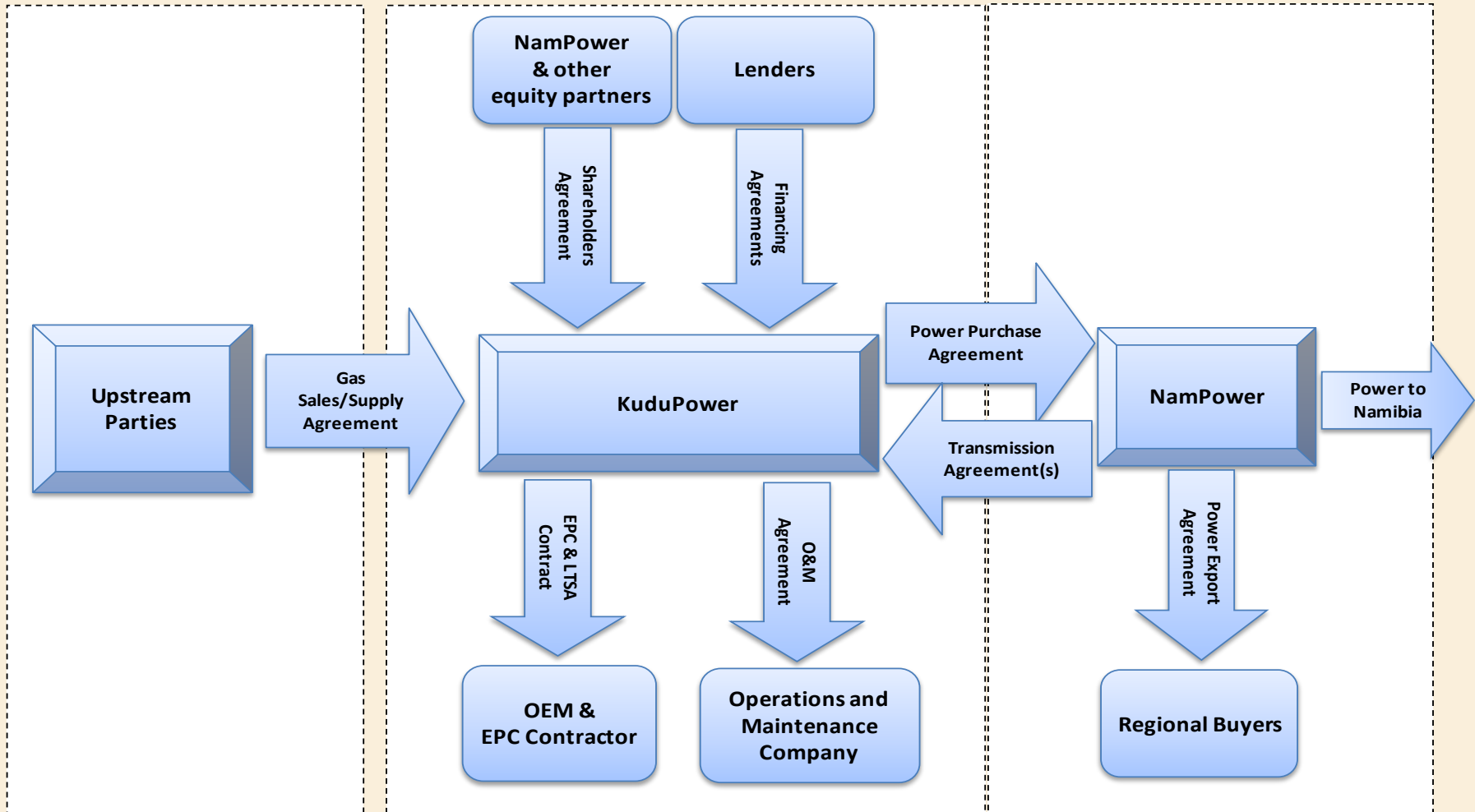
KuduPower (Pty) Ltd
(NamPower + Partners)

Kudu commercial structure:

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Kudu Project Commercial Arrangements



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KUDU'S COMPETITIVENESS IN THE REGION

Kudu's regional competitiveness:

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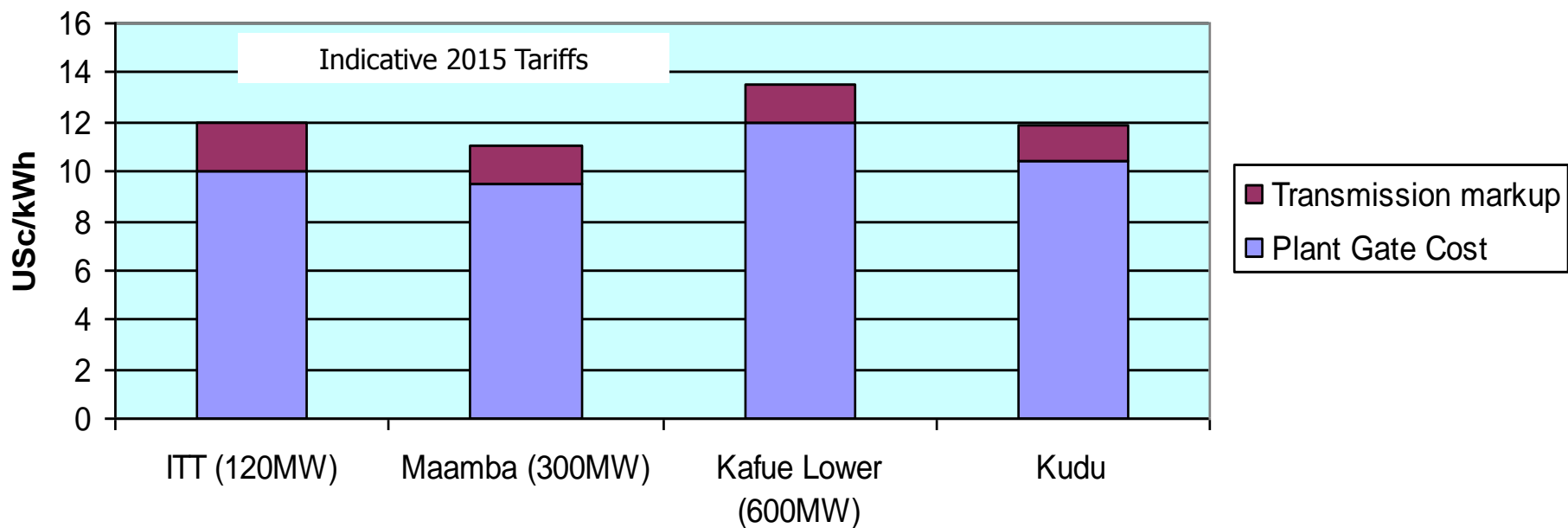


- Regional project comparison that was carried out indicates that:
 - ❖ Kudu is forecast to cost approximately US\$10 - 11c/kWh which is competitive with any regional new build coming on-stream by 2017/18,
 - ❖ Kudu's technology is **environmentally clean** compared to several regional coal projects planned,
 - ❖ it will be the first CCGT power station in the SADC region, and the first CCGT of this size in Africa.

Basic Cost Comparison (Zambian Projects vs. Kudu)



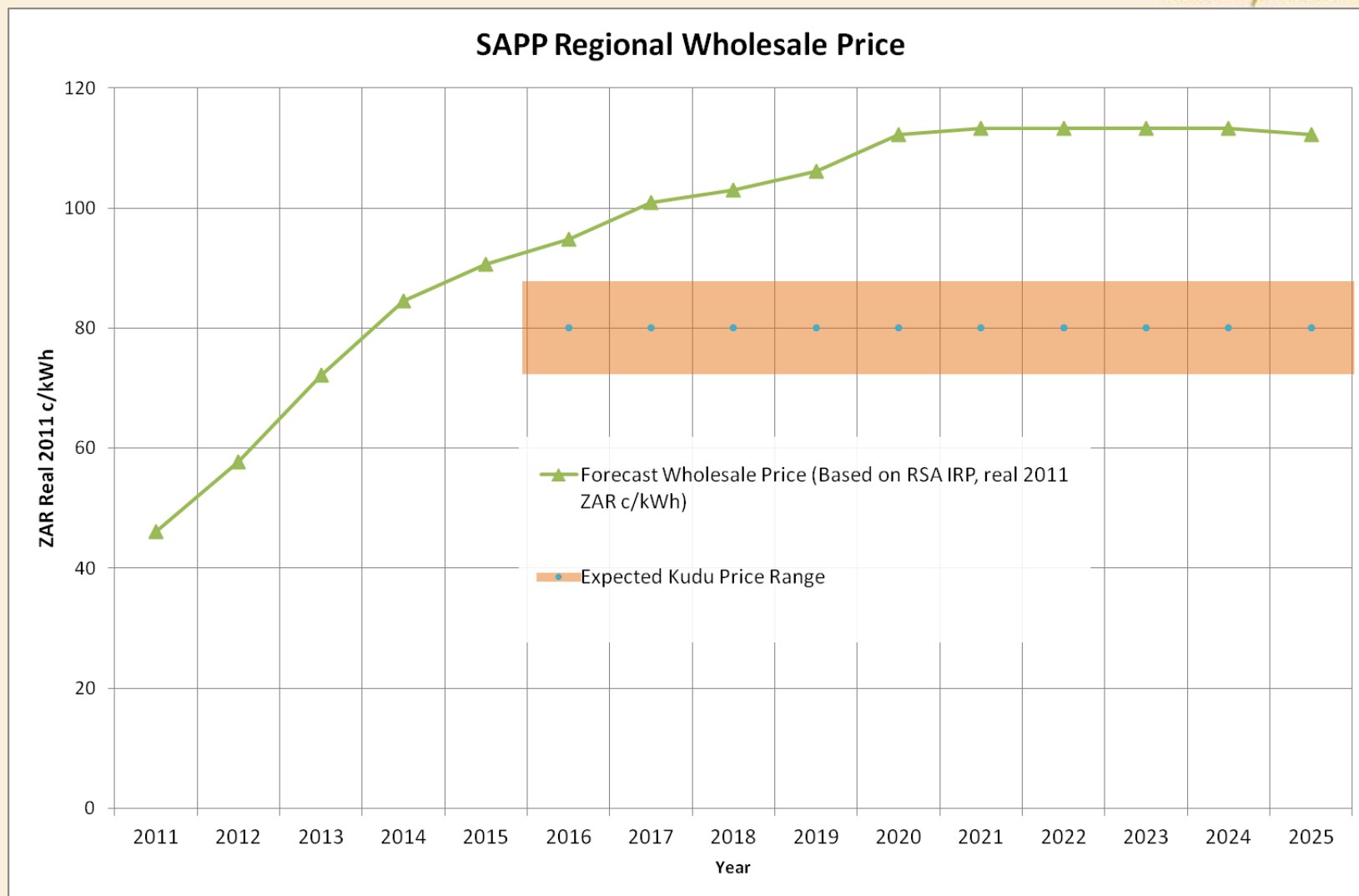
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Source Copperbelt Energy Corporation: 2011

Regional Pricing Forecast (Border Price)

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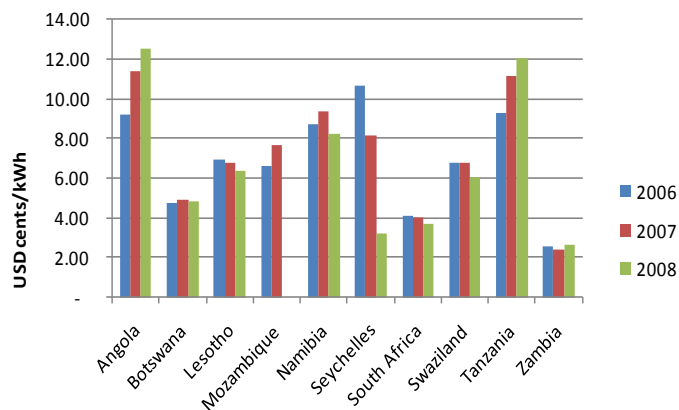
Regional Perspective of Pricing Trends

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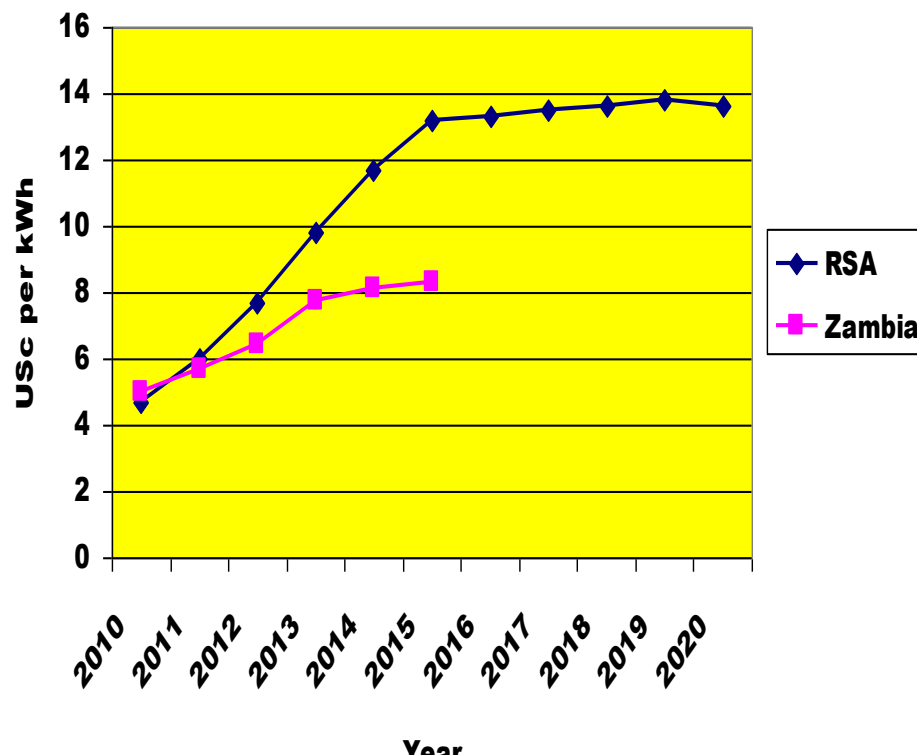
- Low Tariffs but **rising** to cost reflectivity
- Annual increases of **20-30%**
- Driven by new investments needed to meet growing demand

Average Electricity Price



Source Copperbelt Energy Corporation: 2011

Forecast of Industrial Tariffs (2010 - 2020)



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LATEST PROJECT UPDATE

- **Engagement with Government on-going on:**

- Shareholder (parent) guarantees,
- Policy & regulatory support for guaranteed tariff & protection from impacts of future change of law.
- Government has engaged the World Bank and Africa Development Bank (AfDB) to provide advisory services on the structuring of the guarantees required for the project.

- **The Project Development Agreement (PDA):**

- The PDA negotiations between NamPower and the Kudu Gas Field developers were concluded and signed-off in March 2013.
- PDA Steering Committee established, it is the highest decision making body as regards coordinating project timelines and project activities.

○ EPC Tender:

- NamPower issued an EPC pre-qual tender in April 2013, and out of 45 companies that submitted bids, 15 were shortlisted.
- The main EPC tender document has been issued to all 15 pre-qualified companies/consortia, and the tender is expected to close on 18 Oct 2013. 13 companies are still in the running.
- Evaluation of the received tender bids expected to be completed before the end of 2013, with award at FID by mid 2014.

○ **Procurement of Strategic Partner(s):**

- Expression of Interest received from CEC (Offtake Investor) to take upto 30% equity in the project. Joint Development Agreement (JDA) negotiations between NamPower and CEC were concluded in August 2013 and awaits formal approval by the Board, with signature subsequently thereafter.
- The Strategic Equity Investor pre-qualification tender for the procurement of a Power Developer for the remaining 19% was issued to the market on 19 July 2013, and closed on 9 August 2013.
- The shortlisting has been concluded.

- **Power Export Agreements (PXA) negotiations:**

- PXA Termsheet negotiations with CEC of Zambia started in 2011 and are expected to be concluded in early September 2013,
- PXA Termsheet negotiations with Eskom also commenced in 2011 and still on-going,
- Full PXA negotiations expected to commence before the end of 2013.

Tenders that have been issued so far:

- EPC pre-qualification tender - **done**
- EPC main tender - closing 18 Oct 2013
- Investor pre-qual tender - shortlisting finalized
- O&M pre-qual tender - shortlisting finalized
- Financing pre-qual tender - closing 18 Oct 2013

Strategic importance of Kudu to Namibia:

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- Kudu is a strategic project as it will be the only large power station in the country,
- Kudu platform for the development of energy-intensive, export-oriented industries vital to the next phase of Namibia's economic development".
- Kudu will have a substantial impact on Namibia's balance of payment through increased export earnings.
- It would allow for the diversification of energy sources used for power conversion in both Namibia, South Africa and the region;

Direct/Indirect Impact on the Karas Region

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- **Direct impact on Oranjemund:**

- Increased revenue for local authority,
- Housing expansion,
- Infrastructure expansion/upgrade

- **Benefits & impact on the Karas region:**

- Sub-contracting during construction,
- Employment opportunities,
- Increased trading opportunities,
- Local economy will be boosted,
- Increased utilisation of Luderitz harbour,
- Stimulation of secondary industry in region,
- Increase in tourism potential of the region.

Indicative project timelines (2013 – 2017):

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- **Signature of PDA:**
 - 1 March 2013

- **Final Investment Decision/Financial Close:**
 - 2nd quarter 2014

- **Commencement of construction:**
 - 4th quarter of 2014

- **Commercial Operations Date (COD):**
 - COD target date: end 2017
 - (36 months construction period)

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