

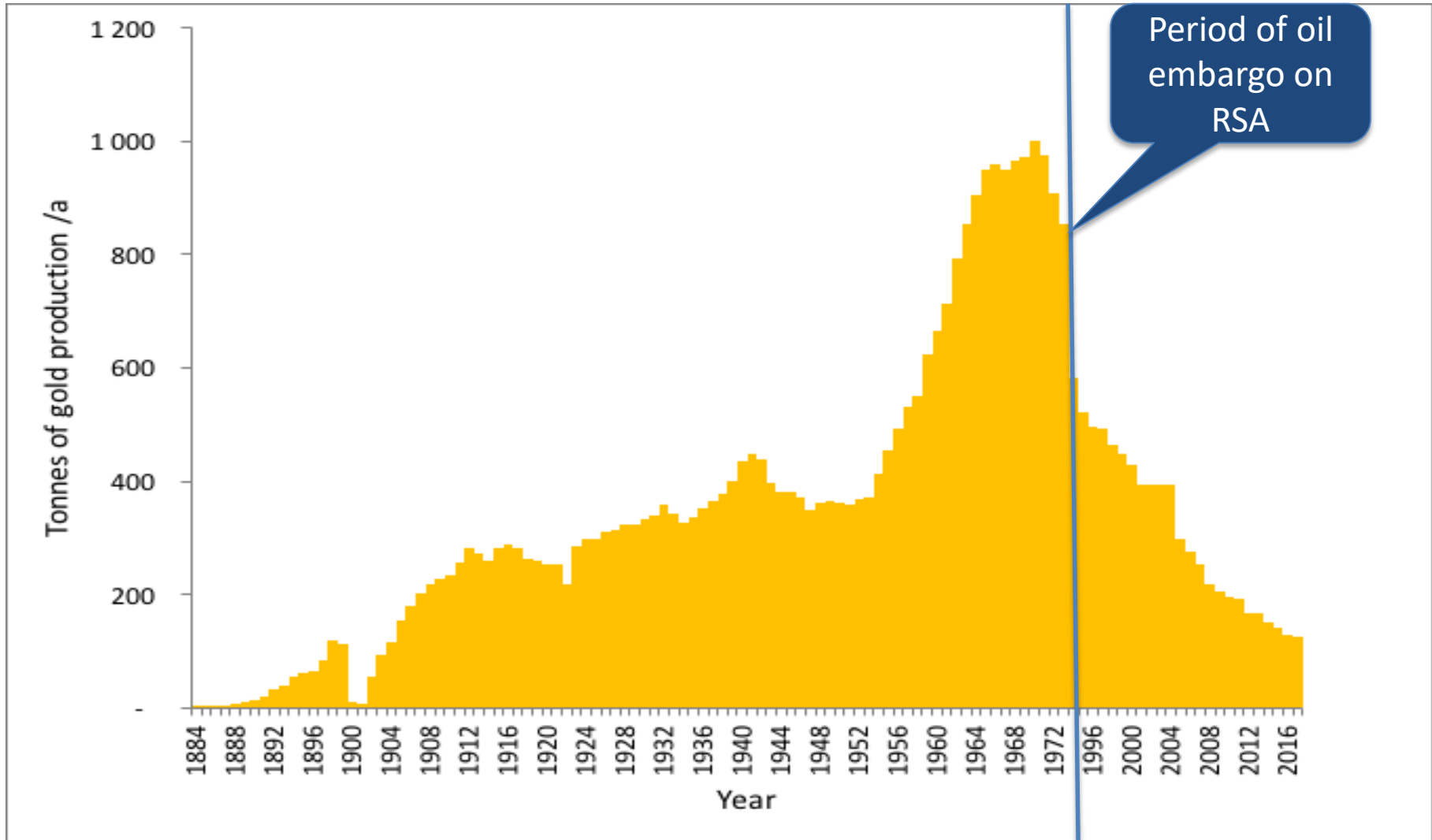
After the gold rush:

Looking back at history to discern root cause

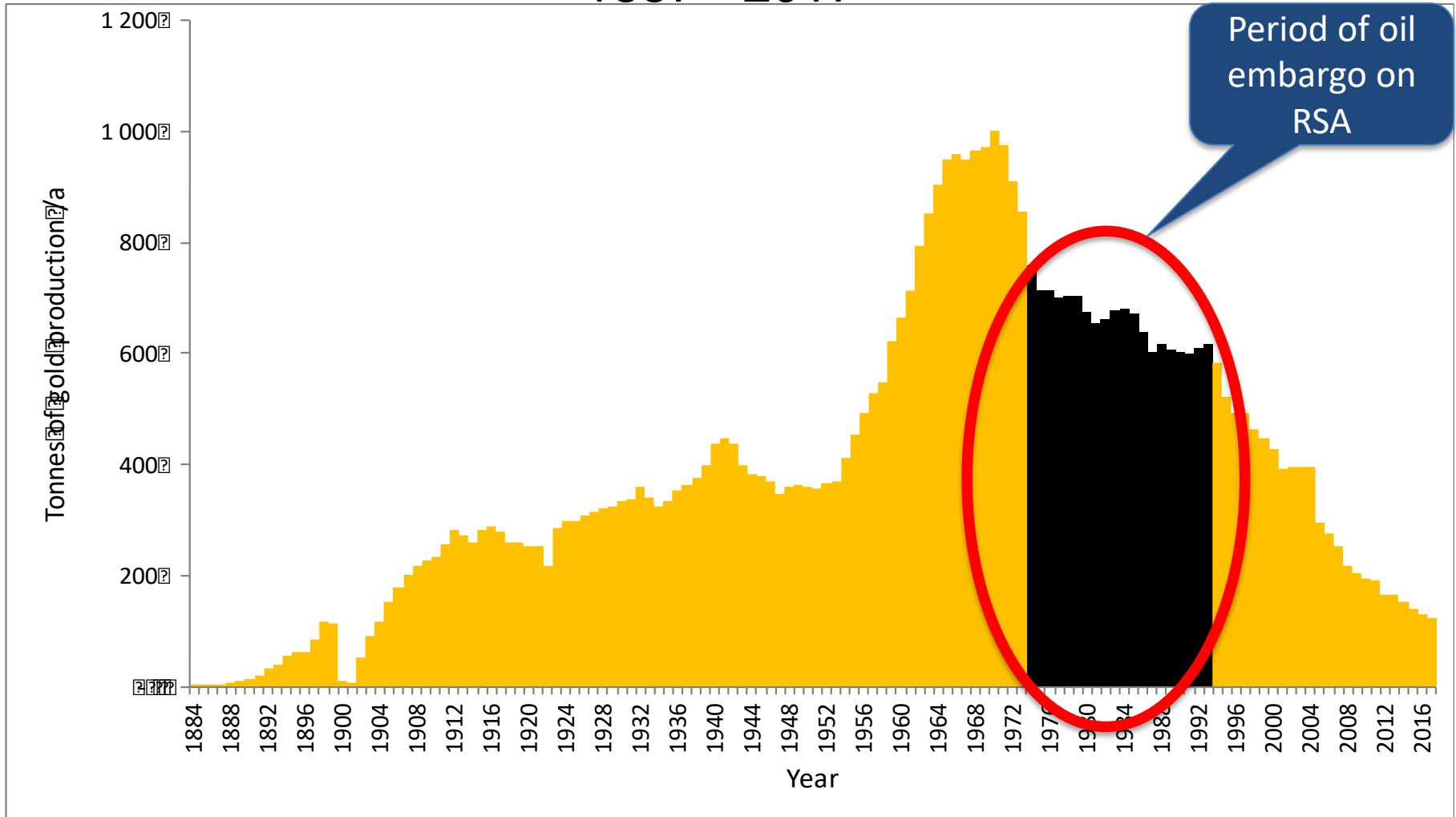
A case in point:

Eskom's 2018 RCA applications

South African Gold Production: 1887 - 1973 : 1994 - 2017



South African Gold Production: 1887 - 2017



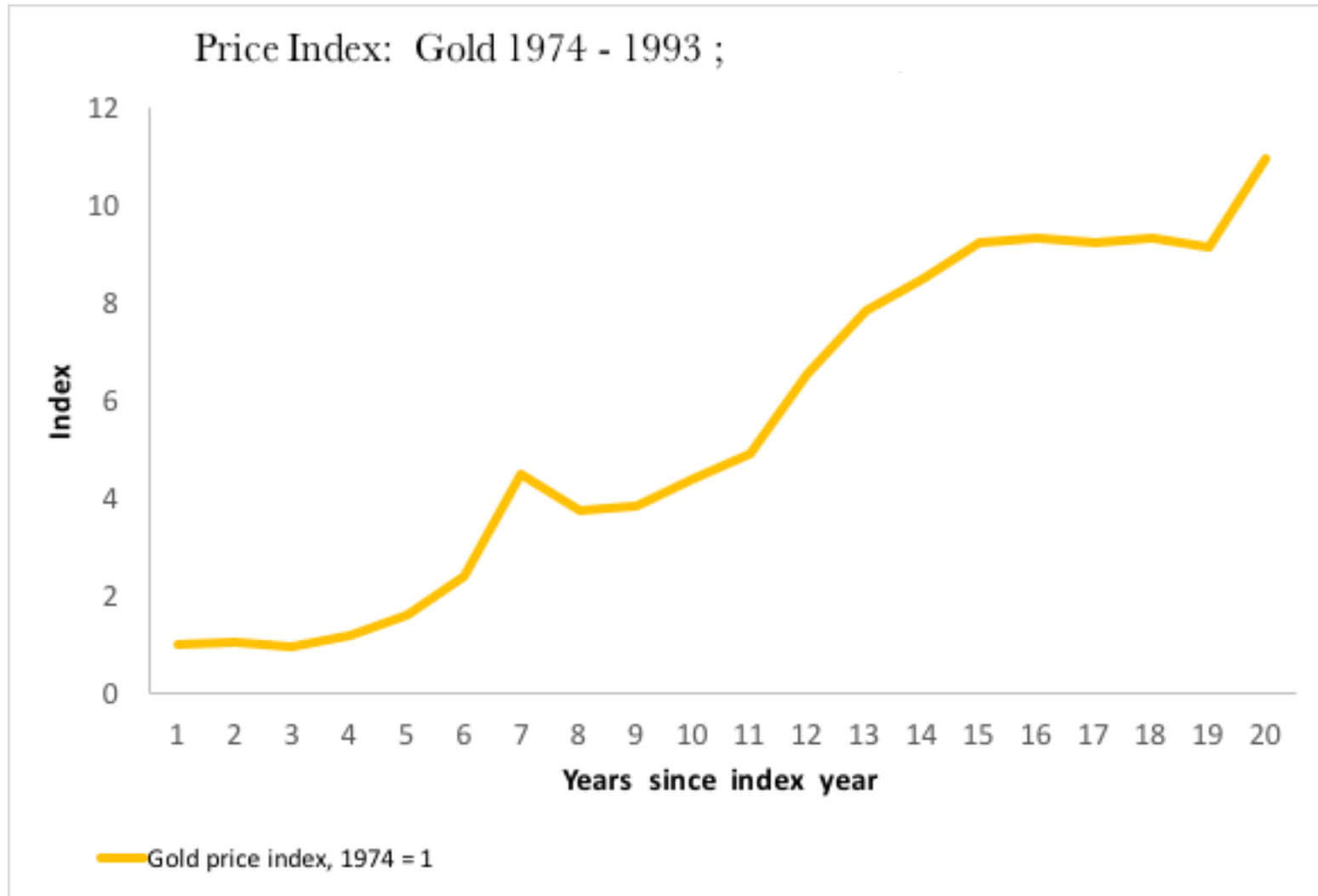
During the oil embargo period ... 1974 -1993

- The “monopoly” government of the day clung to power and resisted change;
- Gold was required as the currency to exchange for oil in embargo-breaking deals;
- Gold mining companies were encouraged to develop new shafts that were not economic in an attempt to sustain gold output;
- Tax from gold mines declined from 15% of total government tax revenue to 1%;
- GST/VAT went from zero and increased steadily to 14%;
- Employment on gold mines increased from 320 000 in 1974 to peak at 480 000 in the late 1980's although gold output continued to decline;
- The gold price in rand terms increased 11-fold;
- The rand weakened 5.4 x against the USD, from 0.68 to 3.67; and
- In the early 1990's, there was a marked increase in the oil price, with an unusual decoupled decrease in the USD gold price, the government had no more cards to play. It was economically and politically bankrupt. Negotiations for a new democracy unfolded as it relinquished its monopoly....

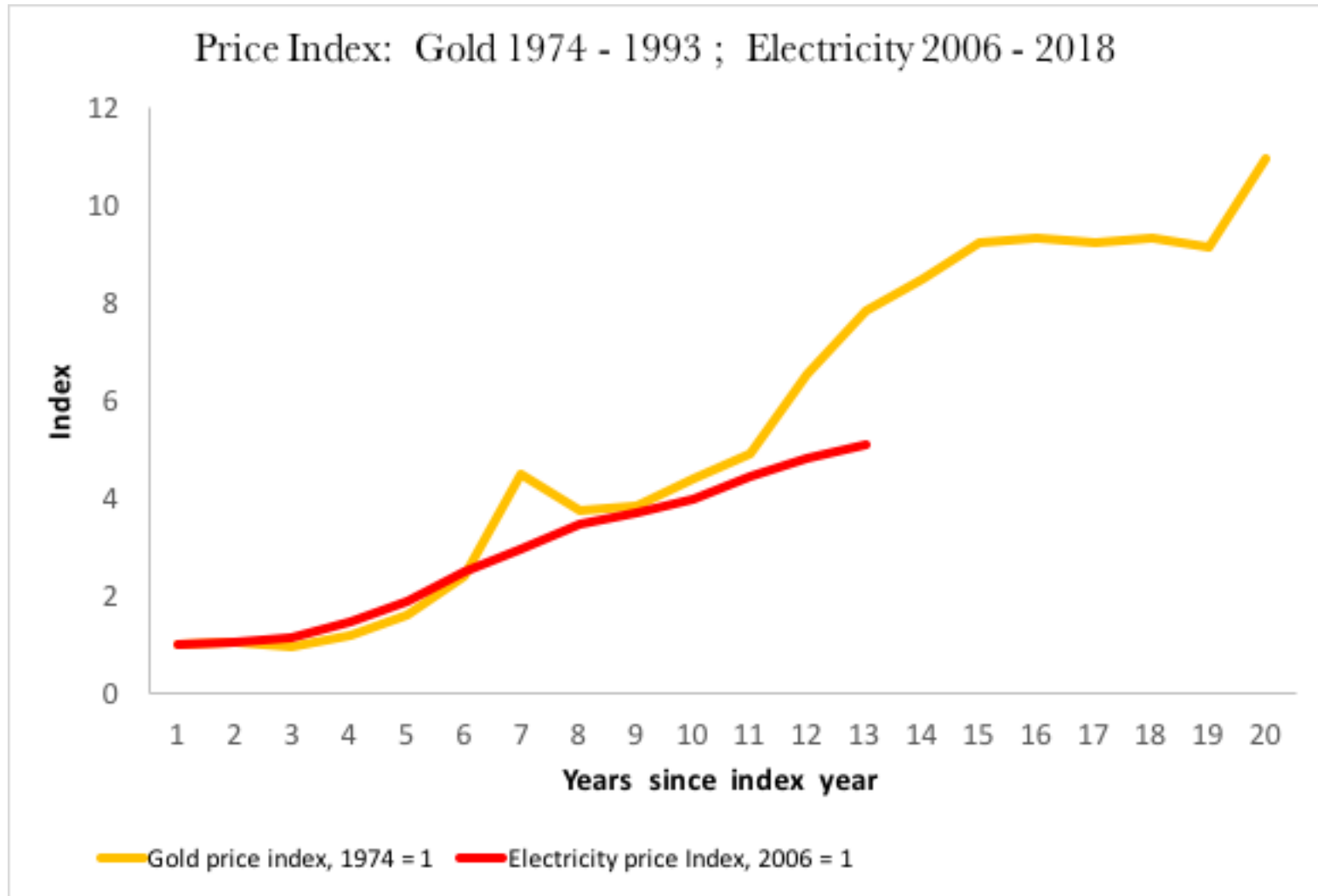
Looking back at history, and predicting the future... Eskom: 2006 - 2025

- The monopoly electricity utility clings to power and resists change;
- Based on the gold analogy, I estimate that we are 12 years into a strikingly similar 20 year period, only this time with electricity production as opposed to oil-trading;
- The utility was encouraged or rather instructed to keep the lights on at all costs, in an attempt to sustain electricity output;
- The utility embarked on 3 ruinously expensive capital projects, and has run up debt of the order of R400 billion;
- GST/VAT has been increased for the first time in the new democracy;
- Employment at Eskom has thus far increased from 32 000 in 2006 to 48 000 at the present time, although electricity output has declined;
- The electricity price has increased 5-fold in 12 years, and this would have been 7-fold if Eskom's tariff requests had been granted. We are on track for at least an 11-fold price increase from 2006 to 2025 if no structural change takes place;
- So far, over the 12 years, the rand has weakened 2 x against the USD;
- Unless there is a comprehensive restructuring of the electricity sector, and a relinquishing of the current monopoly, the risk of utility and indeed RSA Inc. bankruptcy looms large; so
- **Let's not wait out the full 20 years before liberating the sector**

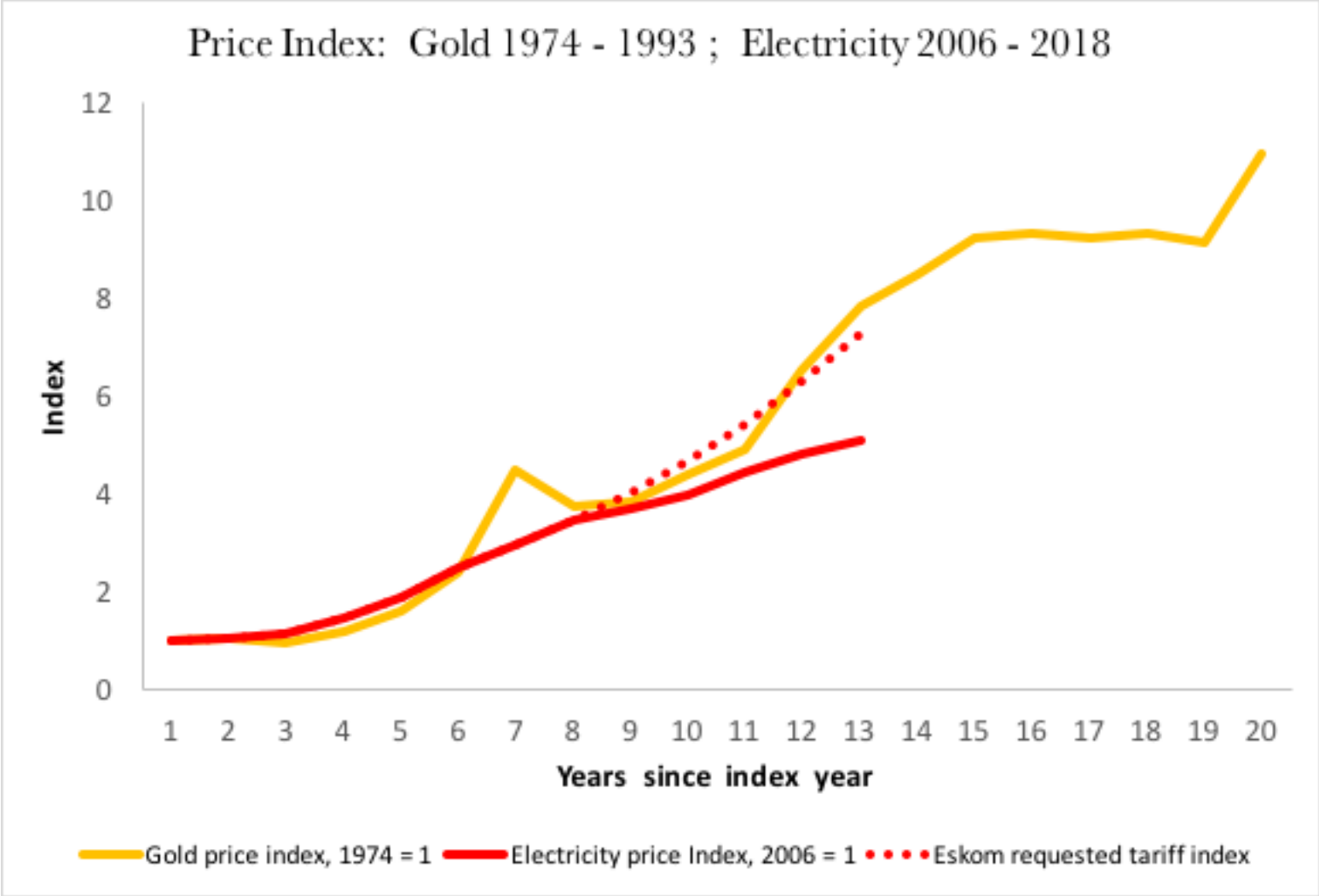
South African Gold and Electricity Price Increases



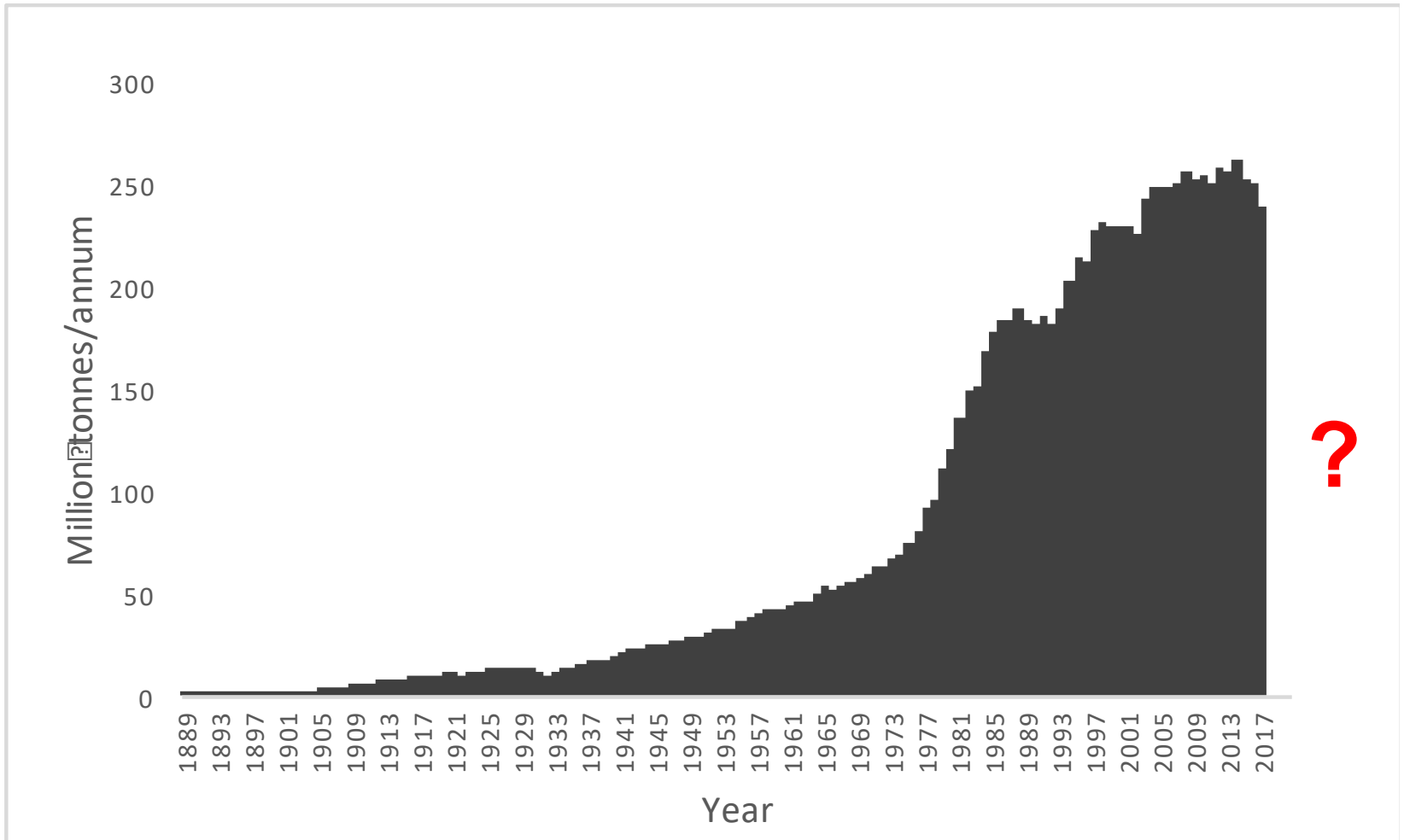
South African Gold and Electricity Price Increases



South African Gold and Electricity Price Increases



South African Coal Production 1889 - 2017



Recommendations

- NERSA to play a pivotal and more pro-active role in coordinating the regulatory environment necessary for sweeping structural changes to the sector;
- We have to stop thinking that we can fix the situation simply by pouring more money into a leaking bucket;
- We have to address the mending of the holes in the bucket, as well as replacing the bucket; and
- We have to make best use of current fleet, paid-off assets, and remaining economic coal reserves to effect a smooth and just transition to a broadly democratised future energy landscape.

From a fossil-fuel dominated centralised
system



to a distributed renewable future