



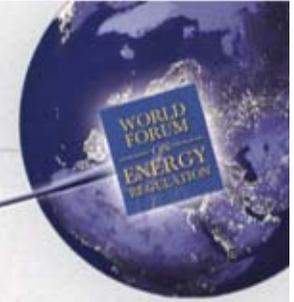
**TRACK C - SESSION 14:
Regulatory issues
affecting energy intensive
customers**

Dr Rod Crompton, regulator member
National Energy Regulator of South Africa

**Security of supply for large
electricity users in South Africa**

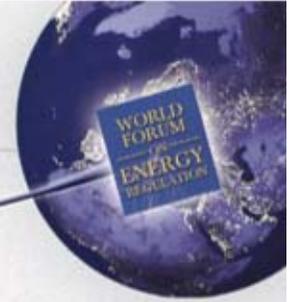
World Forum on Energy Regulation IV
Athens, Greece
October 18 - 21, 2009

National Electricity Utility (Eskom)



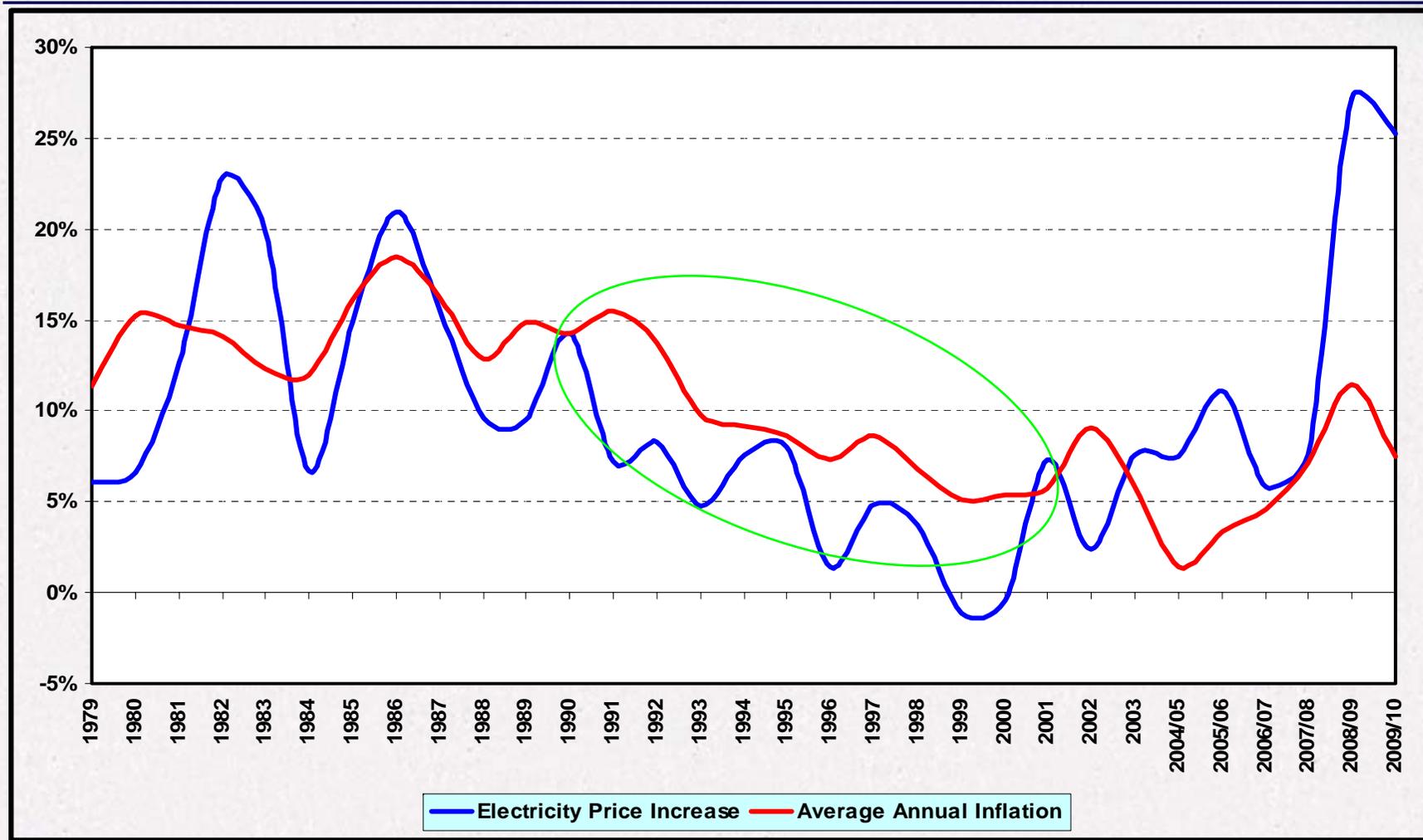
- State owned
- 95% of South African market
- approximately 45% of the electricity used in Africa.
- net maximum capacity is 40 503 MW
- 10th largest generator in world

Surplus Capacity Late 1980s

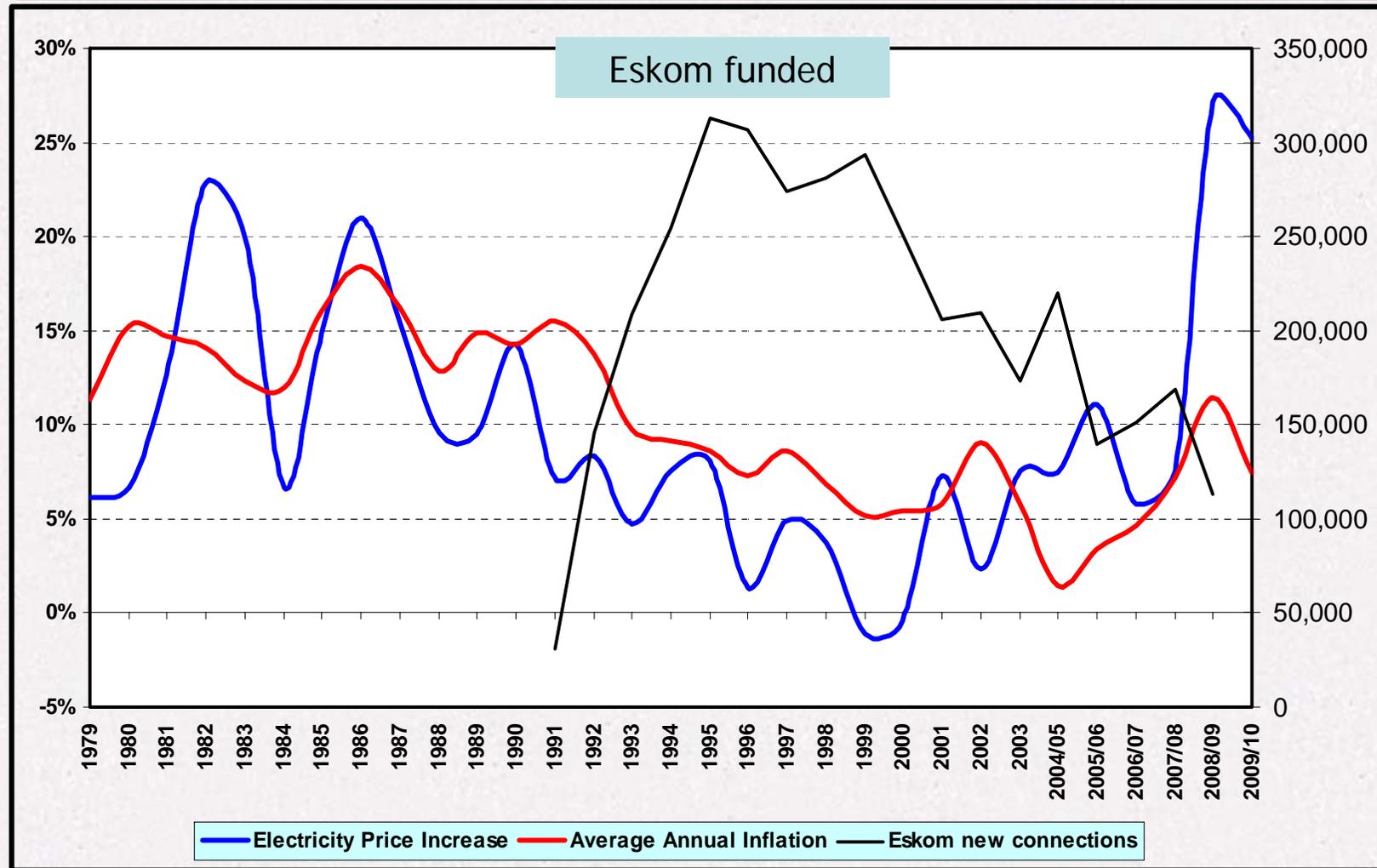


- Attracted energy intensive users,
- Commodity linked tariffs
- 1990 mothballed 3 800 MW
- Commenced domestic electrification programme 1991

Price Increases



Electrification

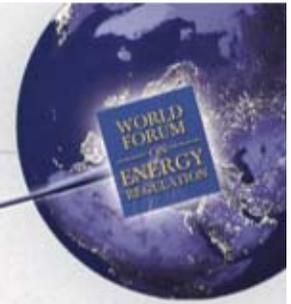


Current position



- January 2008 rolling black outs
 - Hardest hit – large customers e.g. smelters, mines (15% of demand,)
 - Intensive users: 10% reduction for 3 months
- Reserve margin: now 11.5%
- Aging plant - maintenance
- Operational expenditure “out of control” (Energy Intensive User Group) mainly coal
- Economic downturn “saved” more rolling blackouts

Energy Intensive Users



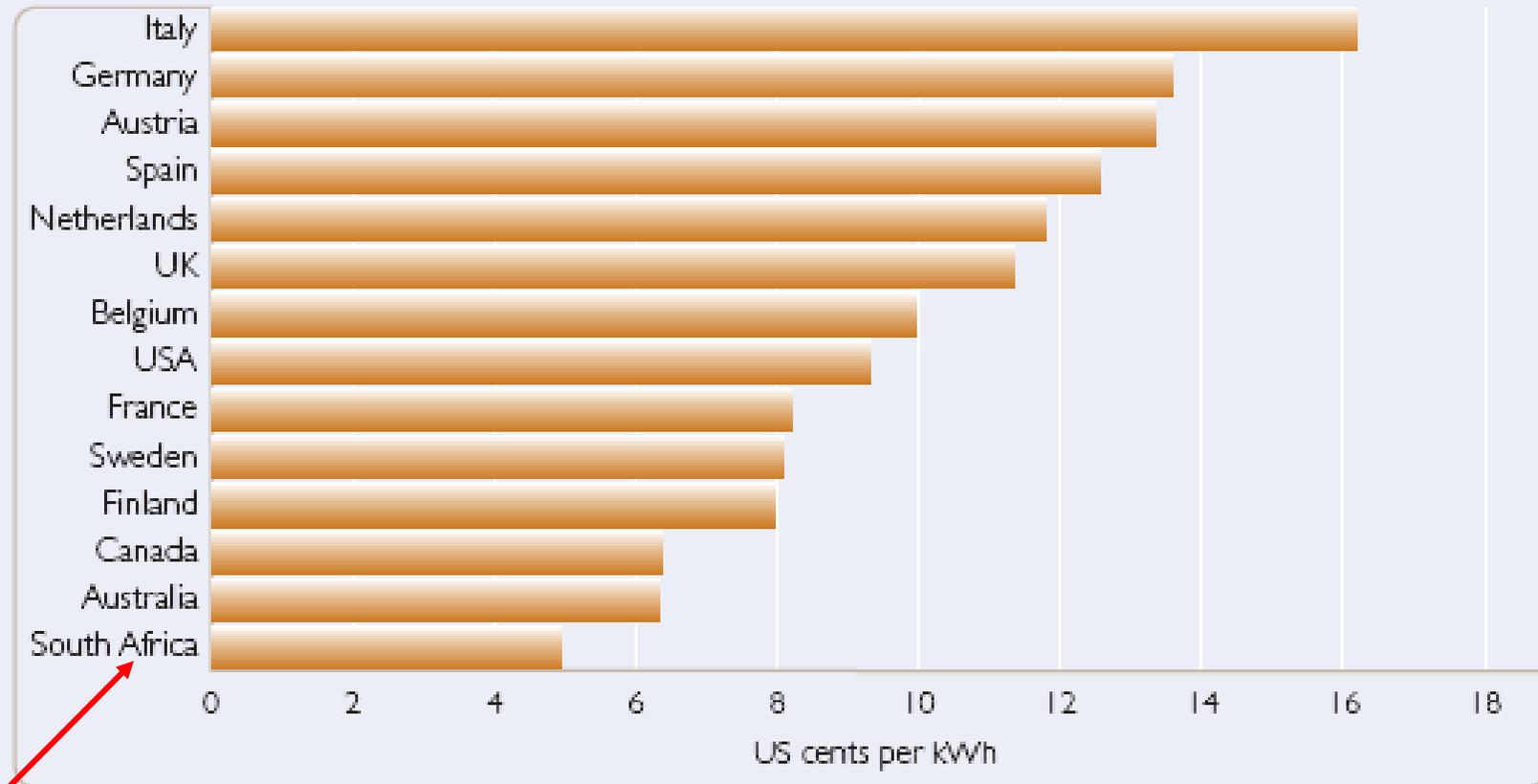
- 35 of the largest energy consumers use >45% of electricity sales
- A number of energy intensive users have not been operational for most of the year to date - lower commodity prices - global economic downturn
- SA recovery partly dependent on energy intensive users (commodities)
- Energy intensive users influencing own security of supply

Cost Comparison



2009 International electricity cost comparison

Cost per kWh



Source: Eskom

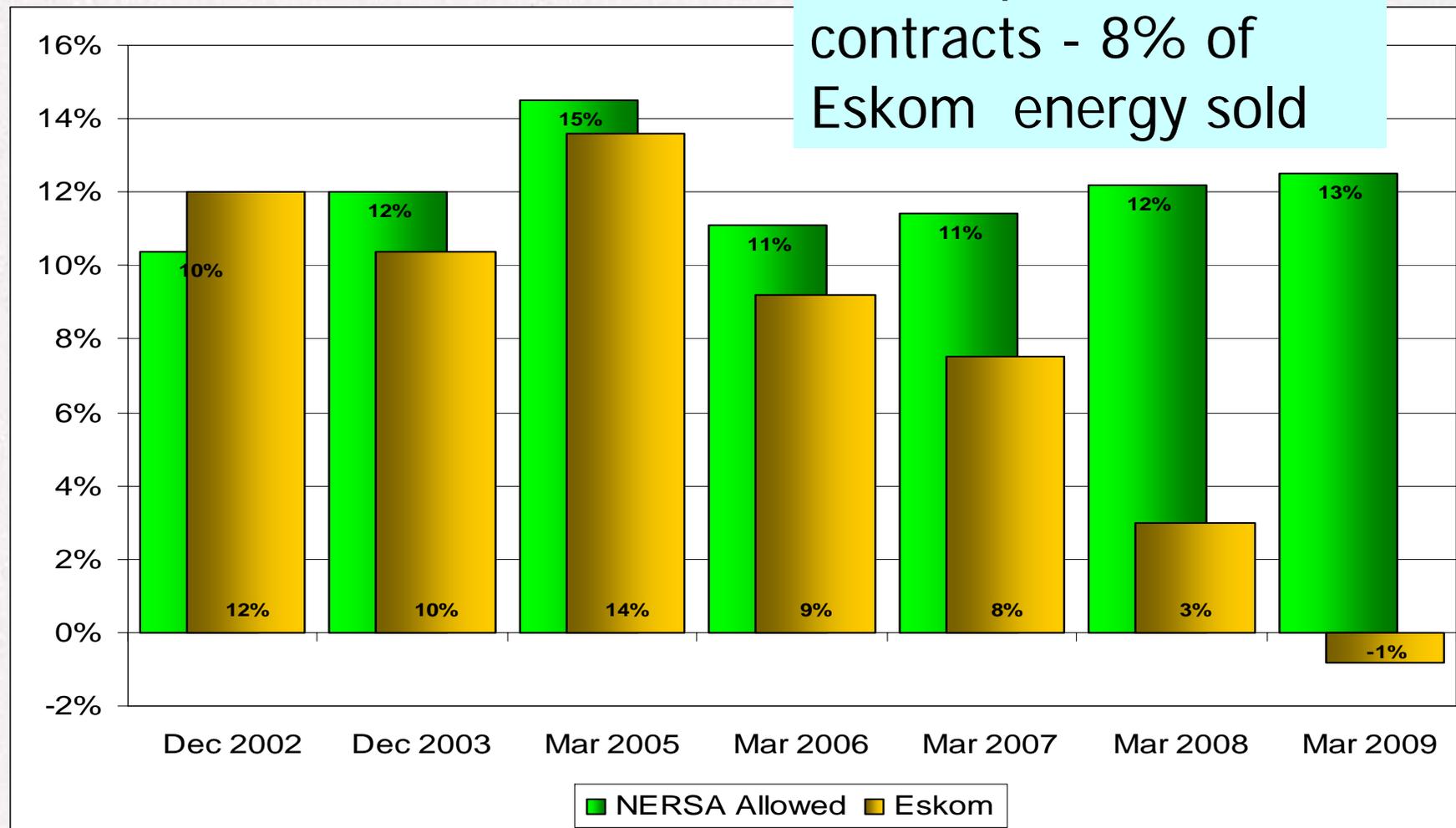
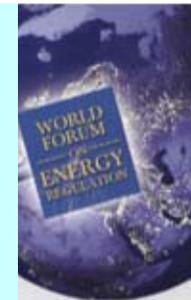
New Build



- Build programme of US\$48 billion (in nominal terms) over the five years to March 2013
- Capacity expansion:
 - Last 4 years 4 454MW
 - Next 5 years 6 184 MW
- No clarity on funding model

Return on assets

R9,7-billion paper loss for the year ended March 2009
metals-price-linked contracts - 8% of Eskom energy sold

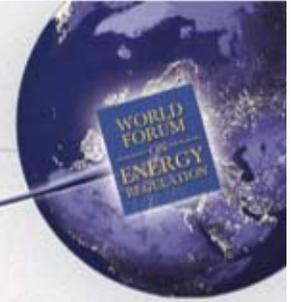


Funding challenge



- Forecast shortfall next 3 years: US\$10 billion (Assuming 31% tariff increase for the next two years)
- After Government's:
 - US\$7.5 billion subordinated loan
 - further US\$ 22 billion in guarantees.
- “everything relies on finding a sustainable funding model” Eskom Chairman
- Tariffs need to rise 90% for Eskom to meet funding requirements if no further intervention

Funding challenge solutions



- Tariffs?
 - Large increases?
 - Review of commodity linked tariffs for energy intensive users?
- Equity? Can Government afford it?
- Allow private equity into some new build?
 - Government policy is 30% of new capacity
 - Energy intensive users were willing to invest in power generation
- Change the model?

Which model?



- Commercial Enterprise Model protect bottom line at the expense of security of supply to the country.
- Public Benefit Enterprise Model availability of electricity is a far more strategic benefit for the country than the monetary return to the company.
- Strategic priority – keeping the lights on.



Thank you

www.nersa.org.za