

Rio Tinto Energy

Regulation, Risk Management & the Future of Nuclear Power:
Impending Issues & Implications for the UK

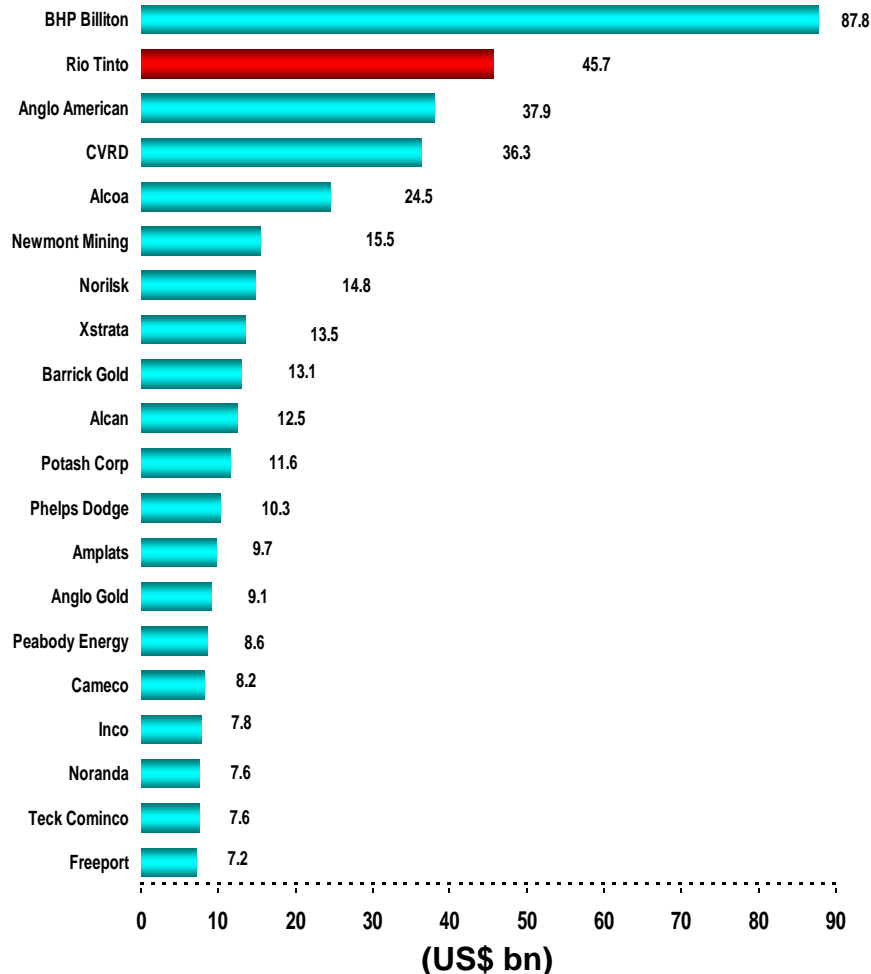
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Rio Tinto Overview



- Second largest mining company in the world
- Second largest coal producer in the world
- Second largest uranium producer in the world
- Second largest exporter of iron ore in the world
- OECD asset base
- Worldwide exploration and growth options

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Rio Tinto Energy Product Group



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Ranger Mine, Australia

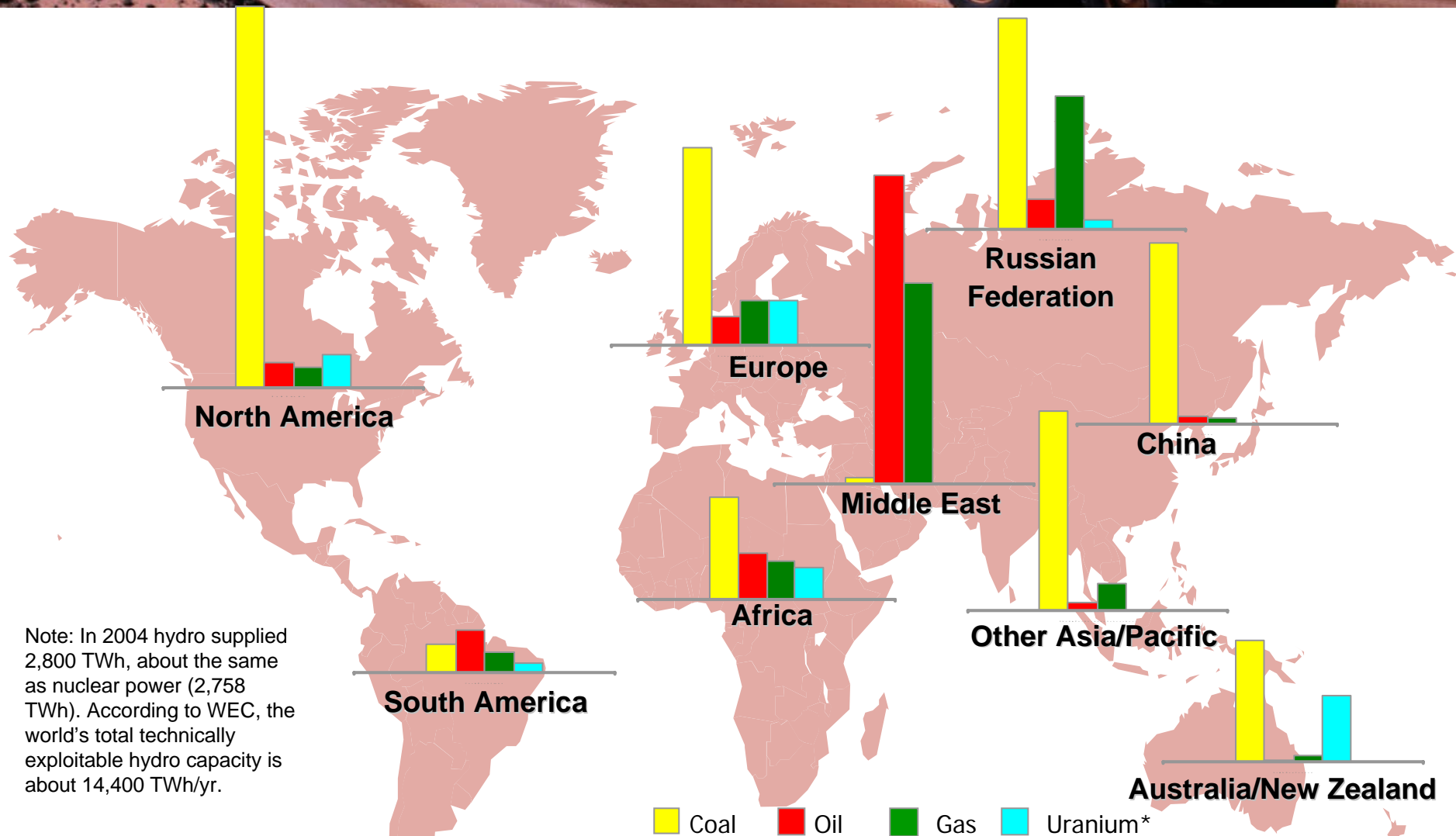


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Rössing Mine, Namibia



World Energy Reserves 2004 (Mtoe)



Note: In 2004 hydro supplied 2,800 TWh, about the same as nuclear power (2,758 TWh). According to WEC, the world's total technically exploitable hydro capacity is about 14,400 TWh/yr.

Sources: BP Statistical Review 2005; WEC Survey of Energy Resources 2001; Reasonably Assured Sources plus inferred resources to US\$80/kg U 1/1/03 from OECD NEA & IAEA Uranium 2003; Resources, Production & Demand updated 2005; *energy equivalence of uranium assumed to be ~20,000 times that of coal

Uranium Market Historic Cycles

- **1950 – 1970**
 - Birth and growth of nuclear weapons industry
 - Birth and growth of nuclear power industry
 - Price peak ~ 1953; >\$72/lb U₃O₈ (constant dollars)
 - Production peak ~ 1959; 130 million lb U₃O₈
- **1970 – 2000**
 - Nuclear weapons limits; secondary supply
 - Nuclear power accidents
 - Price peak 1976; >\$100/lb U₃O₈ (constant dollars)
 - Production peak ~ 1981; 170 million lb U₃O₈

Uranium Markets - Looking Forward

- **Developed country rise in reactor capacity factors**
- **Developing country demand (China, India, S Korea)**
- **Pull-back on HEU supplies**
- **Desire to build inventories (utilities)**
- **Exploration “deficit”**
- **Long lead times for new supplies**
- **Price peak? (current spot price \$37/lb U3O8)**
- **Production peak? (current production ~ 100 million lb U3O8)**

Summary

- Modest growth in demand for nuclear power and uranium
 - Developing economies' need for primary energy
 - Climate change concerns
- Supply side response
 - Extend life of existing resources
 - Significance increase in exploration spend
- Will U market finally come of age?

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