



NUCLEAR FUEL CYCLE ROYAL COMMISSION

Tentative findings

February 2016

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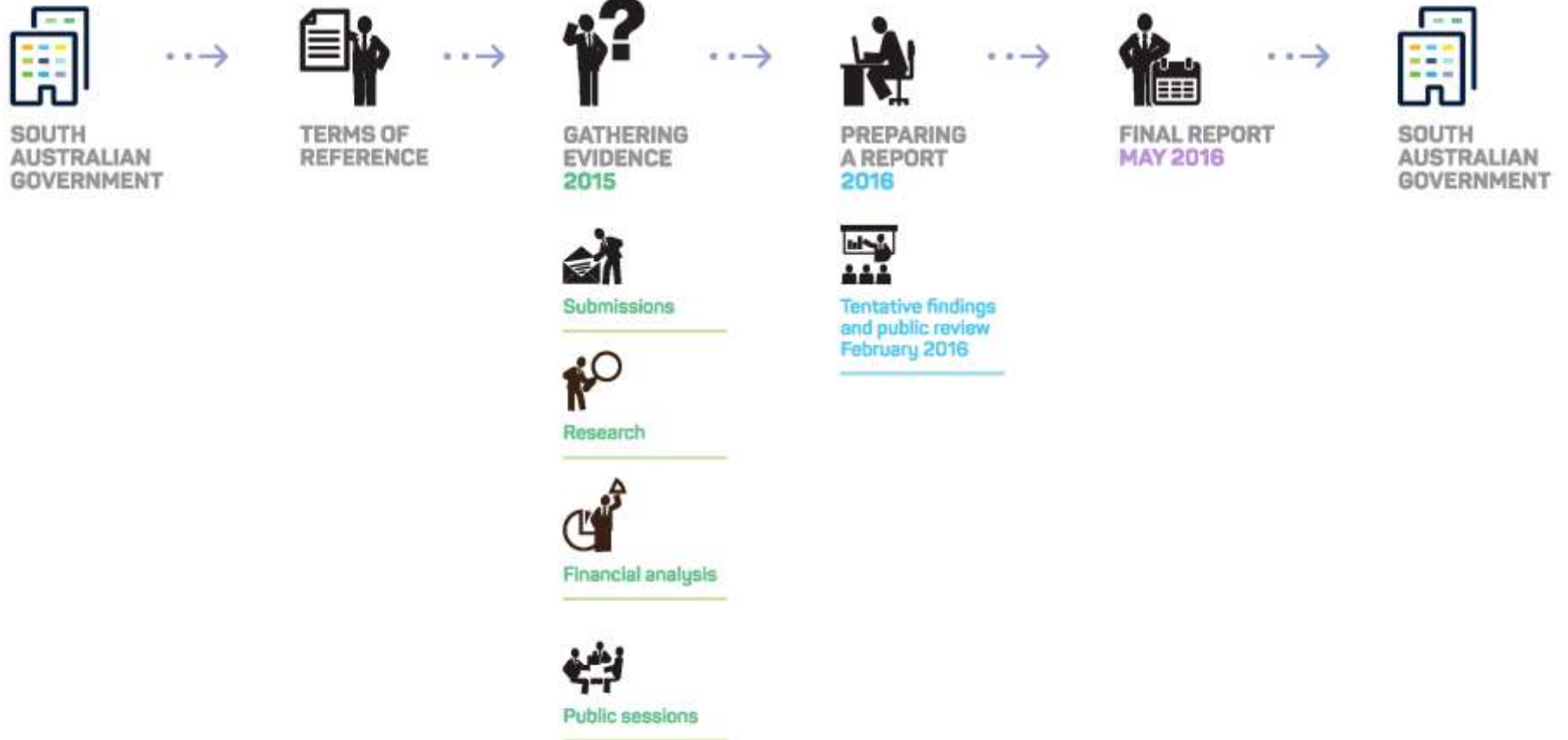


Community engagement

Royal Commission has met with communities all over South Australia



Overview



Nuclear fuel cycle





TENTATIVE FINDINGS

Key observations

South Australia can **safely** increase participation

Some activities viable,
waste management providing **substantial economic benefits**

Social and **community consent** is fundamental

Stable government **policy** essential

Future of nuclear industry affected by **climate action**

Exploration, extraction and milling

Existing regulations sufficient to manage expansion risk

Substantial undiscovered mineral **potential**

Economic **potential** but not the most significant opportunity

Further processing and manufacture

Some risks comparable to those already managed, others require new frameworks

South Australia is technically capable

Significant barriers to entry

Current market oversupplied

Not commercially viable in next decade

Fuel leasing future opportunities

Electricity generation

Improved **reactor safety** although no guarantees

Unique South Australian electricity **market**

Not currently viable in South Australia

Low emission technology

Wise to plan now should nuclear power be required

Management, storage and disposal of waste

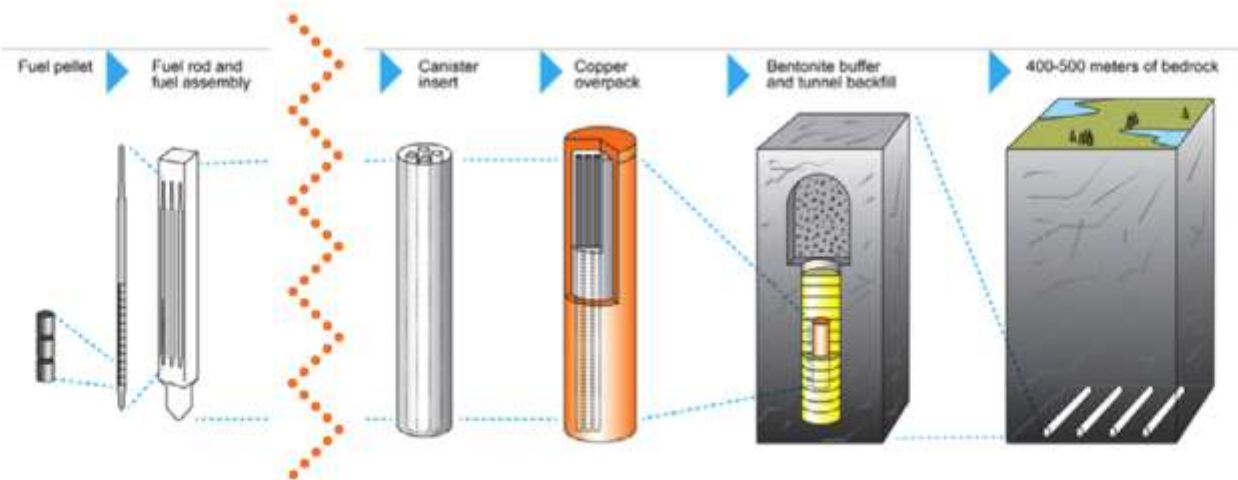
Waste inventory

International approaches

**South Australia's *unique*
combination of *attributes***



Used fuel disposal and storage



Hazard **reducing** over time

Timeframes **significant**

Geological **siting**

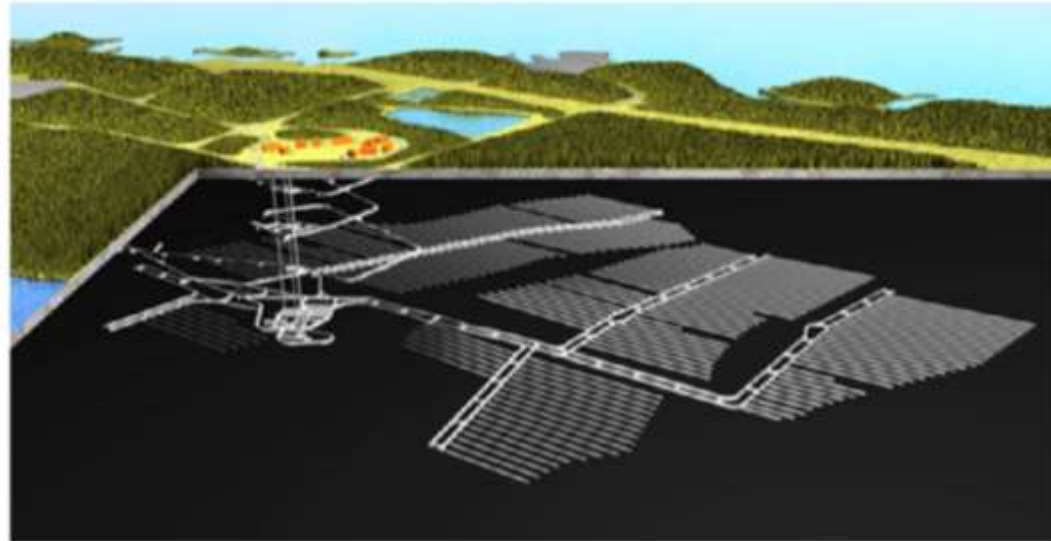
Engineered **barriers**

Management, storage and disposal of waste

Viability assessment - **cost analysis** from consultants

Scenario based
on **two stage
storage and
disposal facility**

Import of **initial
waste inventory**
to finance
geological
disposal



Management, storage and disposal of waste

Viable to operate commercial waste storage and disposal under a range of scenarios

Modelling suggests on baseline scenario benefits could be:

\$257 billion total revenue – with costs of \$145 billion

This includes costs of \$32 billion for closure and ongoing monitoring

State Wealth Fund totalling \$445 billion, growing at more than \$6 billion a year for more than 70 years

Other Findings

Land, heritage, respecting rights

Other risks and challenges:

Radioactivity

Non-proliferation

Transport

Regulation

Security

Responses



OUR WEBSITE

nuclear**rc**.sa.gov.au



POST



TELEPHONE

Next steps



FINAL REPORT
MAY 2016



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Thank you.