

# BUILDING A NUCLEAR FUTURE FOR SA

Productivity through innovation, evidence, engagement, and understanding.

*'South Australia can safely increase its participation in nuclear activities and, by doing so, significantly improve the economic welfare of the South Australian community.*

*Community consent would be essential to the successful development of any nuclear fuel cycle activities.*

*The management of the social, environmental, safety and financial risks of participation in these activities is not beyond South Australians.*

*Long-term political decision-making, with bipartisan support at both state and federal government levels, would be a prerequisite to achieving progress.<sup>1</sup>*

**Consult Australia supports the further investigation, planning and the possible development of a nuclear industry in South Australia that maintains a reliable and stable energy source and contributes to jobs, economic growth and prosperity for South Australians.**

A nuclear fuel cycle spans uranium mining, processing, conversion to fuel, through to decommissioning and waste management. Consideration of what a nuclear industry could look like for South Australia should fully explore opportunities for enrichment, generation, and storage.

We should learn the lessons from where this debate has stalled in the past. Community concerns should be noted and a program of meaningful engagement that fully explores the benefits for the state should be enacted. South Australian business, particularly professional services within the built and natural environment sector is well placed to support and benefit from an expansion of the Nuclear Industry, and is currently searching for diversification of opportunities.

## The Opportunities

Australia currently has no nuclear facilities generating electricity. Australia has 31 per cent of the world's uranium deposits and is the world's third largest producer of uranium.<sup>2</sup> There has been a modern resurgence of interest in nuclear power in response to the need to move to low-carbon methods of power generation in order to reduce the impact of climate change.

South Australia is currently home to four of Australia's five uranium mines, though the possibility of the state developing nuclear power generation, enrichment and waste storage facilities have proven to be contentious issues.

The challenges of South Australia's recent economic contraction, exacerbated by job losses in mining and manufacturing, and combined with an ageing population and increasing demands for health and education services are significant. These challenges point to an urgent need in South Australia to explore new opportunities to generate jobs and productivity.

Opportunities to build productivity through an expanded nuclear industry in South Australia may present themselves gradually, and some may be more suited to short-term planning and investment while other opportunities can only be considered fully in the longer-term.

The success of the Australian Nuclear Science and Technology Organisation (ANSTO) in supporting nuclear science and associated services is a model of how a nuclear industry can be accepted and contribute to the broader economy in Australia. South Australia should explore the opportunities for its

---

<sup>1</sup> Nuclear Fuel Cycle Royal Commission (NFCRC). 2016. *Tentative Findings*. P. 2

<sup>2</sup> *World Nuclear Association* October 2015

# BUILDING A NUCLEAR FUTURE FOR SA

Productivity through innovation, evidence, engagement, and understanding.

nuclear industry, by engaging with business and the community to determine a long-term plan that capitalises on our State's unique assets in skills and geography.

## The Benefits

Ignoring the expansion and further development of the nuclear industry within South Australia is no longer feasible and the costs to our State of deferring action are unacceptable:

South Australia needs jobs and a new industry to replace production, skills and supply chains lost through the closure of automotive manufacturing.

A nuclear industry in South Australia has the potential to:

- Grow Gross State Product.
- Create jobs and build new supply chains.
- Incentivise new industry and innovation clusters.
- Support new areas of academic endeavour with direct industry relevance.
- Provide long term business and cash flows.
- Attract and retain key skills in South Australia and slow the migration of young people domestically and internationally.
- Provide an additional base load generation fuel option to diversify current energy sources and underpin energy security in the National Energy Market and;
- Supply and support a zero emissions energy source as a future replacement of fossil fuels as base load energy source.

## Next Steps

The next steps Australia takes toward the bold initiative of an expanded nuclear industry are critical.

Consult Australia recommends:

- An independent Nuclear South Australia agency established to progress the findings and recommendations delivered by the Nuclear Fuel Cycle Royal Commission.
- Effective community engagement must be the foundation on which South Australia explores the development of a new nuclear industry. This engagement must empower the community, be supported by investment, and account for the particular interests and experience of regional, remote and Aboriginal communities.
- Further development of a nuclear industry for South Australia must identify the most beneficial opportunities and properly account for the costs, benefits, and risks associated with each of enrichment, generation, and storage.
- A staged plan established by Nuclear South Australia to develop these opportunities and the nuclear industry in South Australia must include points of review for further engagement, and evaluation in line with changes in industry, the economy and the broader social and political environment.

April 2016