

Policy Paper: Response to ALP ‘Advance Queensland’ Issues paper

Dr Chris Salisbury
TJRyan Research Associate

To begin, it is welcome to hear the ALP’s commitment as stated in its ‘Advance Queensland’ issues paper to continue supporting the science, research and innovative industry sectors, and its recognition that government involvement is vital in encouraging the growth of high-skill, high-technology industries and the attraction of leading researchers and entrepreneurs, factors that underpin the further development of Queensland’s knowledge-based economy.

The ‘Smart State’

The Beattie government’s Smart State program invested substantial funds into the state’s universities and technological hubs to create world-class research institutes and support ground-breaking research endeavours – leading to a number of scientific and medical innovations and product developments, such as the Gardasil vaccine and Relenza medicine. It also invigorated collaborative funding schemes to new and existing research fields; for its share, the state government pumped \$100 million into biotechnology and life sciences research at the University of Queensland alone, and a special research project fund was established to support proposals from the research community for new ventures. The Smart State Research Facilities Fund, replenished annually between 2001 and 2005, also dispersed considerable funding to higher education and research institutions across the state, with UQ attracting the biggest slice of these investments (not counting the more than \$175 million donated to UQ from Chuck Feeney’s Atlantic Philanthropies in roughly the same period). This expenditure on research infrastructure created a highly visible element of the government’s agenda, proving to be critical in attracting and retaining a growing research community. Significantly, no other state government made such extensive and targeted investments in research capacity and infrastructure as Peter Beattie’s did through the Smart State strategy.

Beattie’s government, followed by Anna Bligh’s, ultimately spent more per capita and almost more in absolute terms on education reforms and research and development initiatives – mainly through university-based research institutes – than any state or territory government in Australia. Such targeted funding supposedly laid foundations for the development of a future-focused, knowledge-based economy in Queensland, where marketable research activity and ‘learning till earning’ helped underpin the government’s economic strategy. In this novel policy framework, knowledge-

intensive industries and a highly skilled workforce were considered key components of economic growth and productivity. Unprecedented capital expenditure – paired with funding from the federal government, the state’s universities and one or two philanthropic benefactors – built new institutes of research excellence and innovation, or updated existing ones, and furnished them with the resources and expertise to create flourishing research environments. The concentration of biotech institutes at the University of Queensland and its attendant cluster of commercial spin-off ventures is a prime and still impressive example.

The Smart State investments in education and research also aimed to reverse the often bemoaned ‘brain drain’, where the state’s best and brightest traditionally looked further afield for better opportunities of career advancement and more varied, rewarding lifestyles, despite the changes enjoyed in Brisbane after Expo ‘88. This pattern of outward economic migration was long seen as undermining the state’s longer-term development and the economy’s capacity to generate higher wages and better living conditions. As others had in recent times, Beattie’s government committed itself to ‘value-adding’ to the worth and viability of the state’s new and established industries and to the productivity of its growing workforce. Looking to reverse the brain drain into a ‘brain gain’, the government’s education agenda focused on the earliest stages of schooling, introducing a new Preparatory (or Prep) Year – a hugely expensive initiative that had remained an untouched policy proposal under previous administrations. This and similar reforms and investments intended to propel students – via a reinvigorated and better funded state school system, more than to the increasingly popular private and independent systems – into becoming better educated, better-equipped members of the state’s future workforce, able to command higher incomes and generate greater economic prosperity across Queensland’s varied industry sectors.

Smart State as a government agenda appealed to voters (eventually) as reasonable, sensible and, perhaps most of all, economically desirable. Politically speaking, it unbalanced the Opposition as it was a difficult policy program to counter. Also, since the agenda was in fact pro-business and pro-development it stole the Coalition’s traditional territory, offering considerable funds in the form of industry incentives to enterprising businesses and thus proving an effective way to grow the economy, create jobs and win over more voters. Under Beattie’s government, almost \$200 million was given in industry assistance, leading to over \$750 million worth of business investment and 30,000 jobs being created or retained in Queensland. Smart State represented a revision of past approaches, a newly-framed and relentlessly promoted policy direction on the part of Beattie’s government (and continued by Bligh’s) aimed at expanding the state’s economic base. And while it was born out of a quite standard political agenda to create jobs and reduce unemployment – remember Beattie’s “jobs, jobs, jobs” mantra at the 1998 state election – through strategic leadership from a policy-invigorated Premier’s Department it soon morphed into a program aiming to create ‘smarter’, higher-skilled and better-paying jobs in new and innovative industries. In this

very forward-looking strategic vision, higher education, biotechnology and other research-intensive sectors were positioned as foundations of a progressive knowledge-based economy in Queensland. The government's increased focus on technologically-intensive industries and the research and education sectors can be seen to have subtly redirected the state's future economic development, and in ways that primary production and mining – the erstwhile lynchpins of the state's economy – could not hope to alone. These previously less valued sectors were positioned alongside the traditional primary industries as cornerstones and driving forces of a modernised and diversified economic base, linked increasingly to economic development, higher living standards and broader prosperity.

'Dumbing down': the impact of the LNP Newman government on the Smart State

With any change in government, of course, comes a change in political priorities and in political posturing. Inevitably, what was considered critical to one administration, or even just to one Premier, can be seen as dispensable to that following it. After the LNP's landslide victory at the March 2012 state election, new Premier Campbell Newman began erasing the Smart State slogan and the Beattie/Bligh-era symbolism – if not entirely its substance – from the public face of government. In moves seen by some as 'winding back the clock', the first conservative administration in Queensland in fourteen years reverted to having the state's colonial-era crest featured as the government's logo on documentation and consigned the Smart State brand to the dustbin of history. Besides marking this government as steeped in the traditions of Queensland conservatism (or wanting to be seen as such), it underlined the considerable political power wielded by an LNP government sitting comfortably on its huge parliamentary majority. Furthermore, these moves along with the campaign message of building a 'four-pillar economy' sent a strong signal to Queenslanders and 'southerners' alike that the state was getting back to doing what it purportedly had always done best – digging mines, growing crops and promoting itself as one long, sunny beach; hardly the stuff, though, of a state given recently to 'showing off its smarts'.

As an example of the 'erasing' of Smart State, the former Labor government had established a website devoted to Smart State policies and programs, on which were links to advisory reports compiled by the so-called 'Smart State Council' of experts (which included the Chief Scientist among other eminent minds). When the Newman government assumed office the site was pulled down and the links to these reports – commissioned by the ALP executive but independent and reportedly very well received – have now all but disappeared from the government's web presence (a development that, incidentally, has not gone unnoticed by the former Chief Scientist). Newman's government waited until six months into office before delivering its 2012-13 budget, after taking time to reconfigure the former government's settings and jettisoning any mention of Smart State or Bligh's 'Q2' agenda. Although framed as a so-called 'austerity' budget, there had

been room for some largesse towards traditional supporters and favoured sectors (e.g., the small business sector, property developers and the racing industry). With such a huge parliamentary majority and almost fifty percent of the primary vote at the 2012 election, there were many electorates and new MPs to keep onside – but it seemed that the previously favoured sectors of life science research and high-tech industries were not to be prioritised, and some would be abandoned.

Owing to the hotly debated condition of the state's economy, and the fiscal constraints this supposedly places on the LNP government for the foreseeable future, it would appear that Newman's administration is not well disposed towards continuing any further 'smart' investments initiated by the previous Beattie and Bligh governments (although some welcome funding extensions to research institutes have been announced quietly). In the months following the March 2012 poll, these indications became more and more obvious, if not stated outright. References to Smart State funding opportunities were removed (or links to that information made inactive) from the websites of the Premier's Department, the Health Department's Office of Health and Medical Research and the Office of the Chief Scientist. Similarly, mention of the Smart Futures Fund for grants to collaborative industry-research partnership projects was untraceable at the website of the former Department of Employment, Economic Development & Innovation – unsurprising, as the Department was quickly dismantled – although out-dated references to these annual funding rounds still persisted on the new Department of Business & Industry website. On the 'official' record, the Government's budget documents released in September 2012, after the implications of the Peter Costello-led commission of audit had been absorbed (and repeated ad infinitum via the local media), demonstrated clearly the administration's determination to position itself well and truly in the 'post-Labor' era. The new Department of Science, Information Technology, Innovation & the Arts, responsible for policy areas formerly under the umbrella of Smart State programs, advised in its portfolio budget papers that funding for new research infrastructure through the Smart State Research Facilities Fund would be wound up. In a further budgetary measure obviously marking the demise of priority status for Smart State initiatives, the Chief Scientist's website advised that the Smart State Council was to be disbanded. Such is the fate of former government slogans and branded agencies that have outlived their usefulness.

Perhaps predictably, the Newman government's third budget, delivered just recently and within touching distance of the next state election, has offered (among further debatable 'austerity' measures) some 'sweeteners' to the electorate. These include an 'entrepreneurial and innovation' fund that will – depending upon the government's re-election and its selling of state-owned assets – provide financial support for the research sector, or to those parts of it that have retained enough expertise and research capacity through recent leaner times to mount applications deemed worthy. But the promise of government funds (and only, in the immediate term, to the tune of \$500 million)

that are contingent on the government's political fortunes and future plans will do little to reduce the uncertainty and anxiety facing much of the state's research community, especially in light of reduced funding from the Commonwealth to the higher education sector and to research bodies generally, as made clear in the recent federal budget ('blue sky' medical research funds notwithstanding).

'Advance Queensland' issues paper

As an initial impression, the ALP's 'Advance Queensland' issues paper notably argues that government investment in R&D, science and innovation should be "cognisant of the need to achieve improved productivity" – this seems to indicate a wariness that voters won't readily accept increased research expenditure (relative to the current government's outlays) without an obvious 'bang for their buck', much as they saw in the shape of new research institutes in the earlier Smart State period. This position emphasises the need to move beyond the 'construction phase' (to borrow a resources sector metaphor) of investing in new research infrastructure to a 'production phase' where inputs are matched to outputs in the form of recognisable and measurable outcomes, such as commercialised products and improved technical/medical services. While realistic, this approach is harder to 'sell' to the public and also harder to highlight 'returns' on government investment than repeated openings and photo opportunities in front of new research institutes. Some sections of the document, however, read like a collection of fairly tame 'motherhood' statements, rather than statements of real intent and purposeful policy. There is a slight impression at times that, in place of an actual plan or strategy going forward, the document simply harks back to the Beattie government period of visionary infrastructure building. But the next phase of activity in the promotion and support of a knowledge economy needs to move beyond these recent achievements and build upon them (or what remains of them). For instance, after such a sustained effort under previous Labor governments in Queensland to kick-start new industries to the point of self-sufficiency, it is a little surprising that the terms 'entrepreneurship' and 'small business' hardly feature in the document. If we are to aim for innovation, higher-skilled jobs and increased productivity in Queensland, it might be expected that Labor focuses equally on the 'bread and butter' within our industry structures and connects with the wider business sector to help drive innovation.

Yet it seems sometimes that both sides of politics struggle to grasp the dynamics of the so-called 'innovation system', preferring to use blunt policy levers of investment in large public infrastructure and scientific institutions rather than precise policy tools that encourage research clusters and business/industry to more readily collaborate and support each other's work. Perhaps a finer-grained policy response is required and the idea within the document of 'innovation vouchers' is certainly one step in the right direction. There is, of course, the possibility of this and other elements being snapped up as policy ideas by the current government, so too many details in such

a document at this time could be seen as counter-productive, and their absence not necessarily indicative of any lack of policy imagination.

But there has to be a way of unravelling, conceptualising and problematising the dynamics of how these innovation systems work. Of the many discussion questions in the document, what are the mechanisms by which key people located in firms (small and large) can be connected with the research infrastructure and specialists around them? Granted, there are still significant institutional barriers to collaboration within and across these systems ... more consultation and case studies are probably required to tease out best practices, norms for productive collaboration, and actual types of training and skills required to help translate and commercialise the production of knowledge. In the absence of opportune financial settings (such as existed in the Beattie era), universities and institutes need to get better at commercialising – and self-funding through increased teaching income – their research and break through those institutional barriers so they can more readily collaborate with industry.

Response to some of the ‘points to consider’ in the ‘Advance Queensland’ paper:

[p16] Queensland’s research infrastructure is now considered world-class and serves the medical/biotech community well (although it’s likely there are cases to be made for updated or expanded facilities or more facilities in other parts of the state than the southeast corner). What government can do in terms of extra capital investment, to counter what was seen as a shortcoming of earlier programs, is to provide additional seed funding to these established research hubs for leveraging joint investments, and ongoing funding streams (rather than one-off grants or loans, or hit-and-miss federal grant schemes) to support research activity. Anecdotally, there is now a reversal of the movement of researchers over the last fifteen years to Queensland, as staff and facility funds dry up and are not being replenished by the current state or federal governments (save for the ‘carrot and stick’ approach of research funds being contingent on the implementation of budget measures, including asset sales).

[p19] Investment in ‘brains’ is critical, and was an important follow-up stage undertaken by the Bligh government to the earlier ‘bricks’ stage of infrastructure investment. To a limited extent this is being carried on by the current government, although in very specific fields and with more restrictive remits than was the case previously; the argument has been made that current funding initiatives to attract and retain top researchers are not nearly as conducive to collaboration or (especially international) cross-institutional exchange – the now-defunct Smithsonian Fellowships is an important case in point, the loss of which has been decried both internally and externally. Researchers, by their own admission, will respond positively to an appealing environment that supports and, importantly, rewards them professionally; investment in fellowships and scholarship

opportunities (particularly in areas of special need or under-representation) is important, but so is continued investment in the liveability and, critically, 'connectedness' of our major cities and research/innovation hubs.

[p22] The question of encouraging collaboration between researchers and industry is the big bug-bear at the moment, especially for researchers who can feel that their endeavours are dismissed by a business sector that continues to under-invest in research in comparison with international averages. In current financial settings at both state and federal levels, this is a critical point for universities and research institutes to consider and hopefully find an answer to – the idea of 'innovation vouchers' to promote researcher placements within industry and business is a very good initiative but more avenues need to be found outside of government. That said, government can still play an important role in encouraging the growth of research-friendly businesses through collaborative funds and industry incentive schemes, and also by promoting research activity across a variety of sectoral areas and 'marketing' it to desirable collaborative and partnership locations (e.g., leading Asian economies and R&D institutions).

[p23] Program governance and performance measurement are important considerations, from both a public administration and a political viewpoint – Smart State, for instance, had some relatively loose governance arrangements (though still innovative and effective, such as appointment of the state's first Chief Scientist) that saw it perceived by some as simply Premier Beattie's 'hobby-horse'; 'outsourcing' governance structures to external or statutory bodies should be approached with a degree of caution, though, as it can be equally valuable that oversight rest with a government office that can be answerable to both the executive (from a strategic leadership perspective) and the parliament (from a fiscal accountability perspective). Also, while Smart State established performance measures and clear policy goals these weren't always openly reported or were framed in sometimes vague terms, which left the public (and a hyper-critical media) questioning at times the strategy's worth and its administration – cost-benefit analyses and metrics-based research evaluation should as a matter of course be used to justify expenditure and the profitability of proposals, but applied in ways that acknowledge the 'long-term view' of such government initiatives.