Prologue

Professor Ian Chubb AC FTSE

Chief Scientist for Australia (2011-15)

In 2011, when I started as Chief Scientist for Australia, there was a view around that we (or I) could spend a lot of time developing great reports with their climax so far in the future that the government of the moment would have little capacity (or interest) in taking them anywhere. So I had a problem: how would we seek to influence the here and now, and identify the matters that Ministers needed to know about along with the actions that they could take, without losing sight of the need to think ahead of the game?

The downside risk was obvious: a focus on the now means that the matters further ahead in time could drift even further into the future. A cursory knowledge of our history shows us that the exigencies of the moment nearly always trump discussion of the actions which should be taken to improve the mid- to long-term view.

To me it was clear: we would have to make a particular effort to shift and sustain the conversation or lose sight of the horizon because of a myopic view of the world.

So the Office of the Chief Scientist with help from the Australian Research Council sought out the Australian Council of Learned Academies (ACOLA) – the group established by the four Australian academies to enable intelligent people to work together away from the exigencies of their disciplines, territory, narrow interests or academic envy.

We effectively set up a novel experiment in Australian public policy: draw all the academic disciplines in to produce evidence that would put the interests of the future securely on the national radar. It reflected a belief that the future can and should be discussed in informed – dare we say 'learned' and cross-disciplinary – terms.

HG Wells once observed that there were many professors of history, but few or no professors of the future. That probably remains the case in much of the academic world. In the media, on the other hand, the ratio seems to be reversed: any number of pundits will speculate about what the future might hold, or promise the renaissance of some neverdefined Golden Age – too often mouths masquerading as brains.

That is not a surprise. It is much easier to make things up than to look them up. It is also fairly safe because the conversation moves on, and we forget.

So when we started we knew that Australia, too, has no shortage of pontificators-atlarge. What we sought to develop through this project was different: a deep tradition of scholarly future-thinking, combining the merits of expert peer review and rigorous analysis with a mission to shape change.

This meant the challenge was twofold. One, to encourage researchers to venture boldly into the difficult business of combining their expertise to tease out the implications for the future. And two, to find a way to give national decision makers access to genuine expertise in a helpful and timely form. Front of mind was the example of the National Research Council of the United States. As the research arm of three of the US academies, the Council has the mission:

To improve government decision making and public policy, increase public understanding, and promote the acquisition and dissemination of knowledge in matters involving science, engineering, technology, and health. Our independent, expert reports and other scientific activities inform policies and actions that have the power to improve the lives of people in the USA and around the world.

- The National Academies of Sciences, Engineering, and Medicine website

Good enough for them ... and surely (with a broader focus, and the appropriate geographical tweak) good enough for us. To *improve government decision making*, *public understanding*, *acquisition and dissemination of knowledge*, and so forth, is the stuff that dreams are made of.

We have the passion, talent and ability in Australia. But it has rarely (or never?) been harnessed to focus the disciplines so squarely on particular topics especially important to future national wellbeing. What will Australia be like? What do we want it to be? What do we have to do to prepare the foundations for that future – to take the long run, to be ready? How do we eschew the 'techo-talk' that turns too many in the community off, even though they pay for most of the expertise that generates it? And all this in the context that this generation has, surely, a moral obligation to prepare comprehensively and as best it can the ground for the next.

I would not be the first to see in Australia's political institutions a tendency to drift. It is captured by our national motto 'she'll be right', or its sibling 'no worries'. Perhaps our history has led us to believe that something will always crop up to replace the last bit of good luck we've exhausted, without our taking the trouble to build something with enduring strength in its place.

In any event, the rewards for building those assets are difficult to fit within the three years that governments have (at least nominally) to leave their mark. And marks are important to our professional polity.

But to be better than that, we have to work at it. And it can be complicated.

Since the Securing Australia's Future (SAF) program commenced, we have had four Prime Ministers and seven Ministers responsible for science. All have had instincts, interests, impulses and imaginations – overlapping maybe, but different.

That is the context in which 11 reports and one SAF review report were born.

The point of the exercise was to create a mechanism that would endure, no matter the personalities or politics involved. That is the test we had to meet.

Did we succeed?

As always, the answer depends on where the expectation is set. Every report put forward evidence and useful and useable insights. These were orchestrated into recommendations to government by the Office of the Chief Scientist and the experts. Their quality is testament to the calibre of the teams involved.

On the other hand, not every report received the coverage or policy impact it deserves. So perhaps the better question to ask is under what circumstances the individual projects fared best. I think, for example, of SAF02 *STEM: Country Comparisons*, a report routinely cited in the many think-tank papers and policy submissions that followed in its wake.

That study made it abundantly clear that science, technology, engineering, mathematics (STEM) education is, in the authors' words, the 'overwhelming preoccupation' of national governments nearly everywhere (but not here at that time). It set out models for our own education system to follow, as well as an imperative to raise the bar.

SAF02 was well targeted, well timed and well supported long after the initial report launch. We kept talking about it – and so it kept being talked about in the places where its insights were required.

Of course, SAF02 is not alone in presenting ideas or changing readers' perspectives. The challenge that remains is to capitalise on the insights to be drawn from all 11 reports.

My three word mantra is passion, persistence and patience. It is not enough to be authors of reports, even good ones. We have to be passionate ambassadors for their findings long after the ink has dried. Patient and persistent. Relentless.

The future is a long game, after all, but its base must be built now. What we will need is not simply waiting on a shelf in some cupboard somewhere for a future Prime Minister to take it down, dust it off and use it. It is a national vision handed on through time; with every new Prime Minister picking up its threads, because Australians understand its importance and insist that they do.

In concluding, let me acknowledge the many people who have contributed to the SAF series over the years and pushed the project in new directions. The million words we have on the page mark the diversity, as well as the dedication, of the individuals and organisations involved.

The SAF project was a good beginning which has left us with an understanding of how best to choose our means. The end remains: securing a better Australia. We will always go further, and faster, with the guidance that evidence provides, combined with respect for expertise.