The SAF Program

A self-evaluation by the Project Steering Committee: a report to the ACOLA Council

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Contents

Executive Summary

Over the past four years the four Australian learned academies, acting together as the Australian Council of Learned Academies (ACOLA), have been funded by the Australian Research Council under the auspices of the Office of the Australian Chief Scientist to undertake a novel approach to deliver science advice and influence policy—the *Securing Australia's Future* (SAF) Program. The distinctive feature of the SAF Program has been to draw upon the collective expertise of all four academies to deliver evidence-based findings to support policy development, the intent being to deliver those findings within a wider understanding of the relevant societal, cultural and political context. Eleven reports on a range of topics of importance to Australia's future have been completed.

This report is a self-evaluation by the Program Steering Committee (PSC) of the SAF program.

The learnings recorded herein should guide any future SAF-style program that ACOLA might run. These learnings include:

- The need to scope projects well before initiation;

- The value of projects having a narrower focus and shorter duration;

- The critical role of the Chair of an Expert Working Group who, in addition to bringing relevant expertise, must have demonstrable project management skills, a commitment to collaboration and the ability to ensure that all relevant skills from across the Academies are valued and engaged;

- The value of PSC taking a more interventionist role in the workings of EWGs in particular to ensure that the different perspectives of the individual Academies are harnessed;

- The need for better engagement with Government departments and agencies to scope projects and maintain interest in the policy implications of the findings;

- The need for a formal and comprehensive plan and program to promote projects and promulgate reports and their findings including the issuing of interim reports. Ideally this should occur during the initial scoping.

1. Introduction—Concept and Objectives of SAF

The *Securing Australia's Future* (SAF) Program was developed to provide evidence-based research to support proactive policy development. SAF was initiated by the then Chief Scientist, Professor Ian Chubb AC, and funded by the Australian Research Council (ARC). It consisted of a $10 million investment in eleven strategic peer-reviewed interdisciplinary research projects, an evaluation and synthesis of the Program (SAF12) and a review of the Australian Research Training System (SAF13) commissioned by the Minister for Education and Training.

The program was managed by the Australian Council of Learned Academies (ACOLA), an organisation established by the four Learned Academies, namely: the Australian Academy of the Humanities (AAH), the Australian Academy of Science (AAS), the Academy of Social Sciences in Australia (ASSA) and the Australian Academy of Technology and Engineering (ATSE). The ACOLA Secretariat Ltd, a separate company, was responsible for delivering project reports to the OCS and for managing and acquitting the program funding in accordance with ARC requirements. While doing so, the ACOLA Secretariat was accountable to the ACOLA Secretariat Board and ACOLA Council as per normal ACOLA operating procedure.

A Program Steering Committee (PSC), consisting of 3 fellows from each of the Academies, was established to oversee the Program with responsibility for the overall quality of the SAF Program including project scoping, establishment of Expert Working Groups (EWGs) and the peer review process. Each EWG was responsible for developing and implementing the project methodology, including conducting research and/or managing research consultants, responding to peer reviewer and PSC feedback, and drafting the final report. On the recommendation of PSC, ACOLA Council approved the final reports for publication and transmission to OCS. Between June 2012 and June 2016 a total of eleven SAF projects were delivered.

Originally, the primary objective of the SAF Program had been to deliver interdisciplinary research reports to the OCS, without further carriage. In mid-2015 following the discontinuation of the Prime Minister's Science, Engineering and Innovation Council (PMSEIC), OCS encouraged ACOLA and its stakeholders to distribute and promote the research reports more actively following their launch, see Sec 5.

At its meeting on 24 October 2014, PSC agreed on the need for a 'meta-analysis' of the SAF Program and subsequently recommended to ACOLA Council, at its meeting on 11 November 2014, that it would be appropriate, as the SAF program moved towards completion, to undertake an evaluation of the program and to synthesise the findings of the reports. The latter will be the focus of a book being written by Simon Torok and Paul Holper under the oversight of a PSC subcommittee chaired by Professor Peter McPhee FAHA, FASSA. The book is scheduled for publication in May 2017.

This report constitutes a self-evaluation by PSC of the program.

2. The Program Steering Committee —Membership and Operations

The inaugural Program Steering Committee (PSC) was appointed in May 2012. Since then 22 fellows from the four Academies have served on PSC, see Table 1. An officer, usually Dr Simon Prasad, from OCS attended most meetings.

Over the duration of the program the role and functions of PSC evolved to meet the needs of the program and in response to various issues that arose. Initially conceived as primarily a management and high level oversight committee it evolved to take a greater direct involvement in the workings of the EWGs particularly to ensure the delivery of timely reports with clear findings that could be actioned by OCS and/or line Government departments.

While the initial suite of six projects had been determined by ACOLA in discussion with OCS before the initiation of the program, the initial work of PSC from approximately August 2012 to early 2013 focused on refining the scope of the projects, recommending Chairs and EWG members to ACOLA Council and supporting the development of policies and procedures to govern the program; these being made available to SAF program participants via ACOLA's secure online information management system, *Confluence*.

From early 2013 the focus of PSC changed to oversight of the EWGs work and quality assurance. As projects came to completion PSC managed their review ultimately recommending the reports to ACOLA Council for approval, publication and transmission to OCS.

SAF projects 7 and 8 were scoped and finalised in the first half of 2014 and in August 2014 PSC took the initiative to organise a think tank, involving PSC members, ACOLA Council and Board members and facilitated by Professor Joseph Lo Bianco FAHA, to scope additional projects to complete the program. Following this workshop and consultation with OCS and ARC, SAF projects 9–11 were finalised and approved by ACOLA Council.

Table 1: Membership for the Program Steering Committee

| Academy	Fellow	2012	2013	2014	2015	2016
Australian Academy of Science (AAS)	Professor Michael Barber FAA FTSE (Chair from Dec 2012)	▓	▓	▓	▓	▓
	Dr Jim Peacock AC FRS FAA FTSE	▓	▓			
	Dr Graham Mitchell AO FTSE FAA	▓	▓			
	Professor Jim Angus AO FAA			▓	▓	▓
	Professor Stephen Powles FAA FTSE			▓	▓	▓
Australian Academy of Technology & Engineering (ATSE)	Dr Alan Finkel AO FTSE (Chair to Dec 2012)	▓				
	Dr Margaret Hartley FTSE	▓				
	Dr Susan Pond AM FTSE	▓	▓	▓	▓	▓
	Dr Leanna Read FTSE		▓	▓		
	Professor Paul Greenfield AO FTSE		▓	▓	▓	▓
	Dr John Burgess FTSE			▓	▓	▓
Academy of the Social Sciences in Australia (ASSA)	Mr Dennis Trewin AO FASSA (Deputy Chair)	▓	▓			
	Professor John Quiggin FASSA	▓	▓			
	Professor Ruth Fincher AM FASSA	▓	▓	▓	▓	▓
	Professor Bruce Chapman AM FASSA				▓	▓
Australian Academy of the Humanities (AAH)	Professor Iain McCalman AO FAHA FASSA	▓	▓			
	Professor Richard Waterhouse FAHA	▓				
	Professor Julianne Schulz AM FAHA	▓	▓			
	Professor Mark Finnane FAHA FASSA		▓	▓		
	Professor Peter McPhee AM FAHA FASSA		▓	▓	▓	▓
	Professor Lesley Head FAHA FASSA				▓	▓
	Professor Graeme Turner FAHA				▓	▓

3. Projects Delivered

Over the four years of the SAF program, 11 major reports have been delivered as detailed in Table 2. All projects were delivered on budget and within specified timelines. Copies of these reports are available on <acola.org.au/index.php/ projects/securing-australia-s-future> with summaries compiled in the '*Securing Australia's Future* Program: Summary Report' (SAF12), and a more comprehensive synthesis volume due in 2017. The ACOLA website also archives the working papers and consultant reports commissioned by the EWGs. These, by themselves, constitute a significant legacy of the program that can assist future research. Indeed, the country studies underpinning SAF02 have already been published in an edited book[1].

In addition, the Review of Australia's Research and Training System (SAF13), commissioned by the then Minister for Education, The Hon Christopher Pyne, and submitted on 24 March 2016, was funded from the SAF grant. That report is available at <acola.org.au/PDF/SAF13/SAF13%20 RTS%20report.pdf>.

A total of 56 Fellows from the four Academies and 19 experts from outside the Academies participated as members of SAF Project Expert Working Groups. Figure 1 shows the representation of the four Learned Academies.[2] Appendix A lists the membership of all EWGs; 75% of who were from universities while 25% had non-university affiliations. While 27% of the 22 fellows who served on PSC were women, only 20% of EWG members were women including 2 chairs. Ensuring a greater diversity of EWG members should remain a high priority for the Academies in any future collaborative program.

Figure 1: Participation[2] of Fellows and non-Fellows on EWGs

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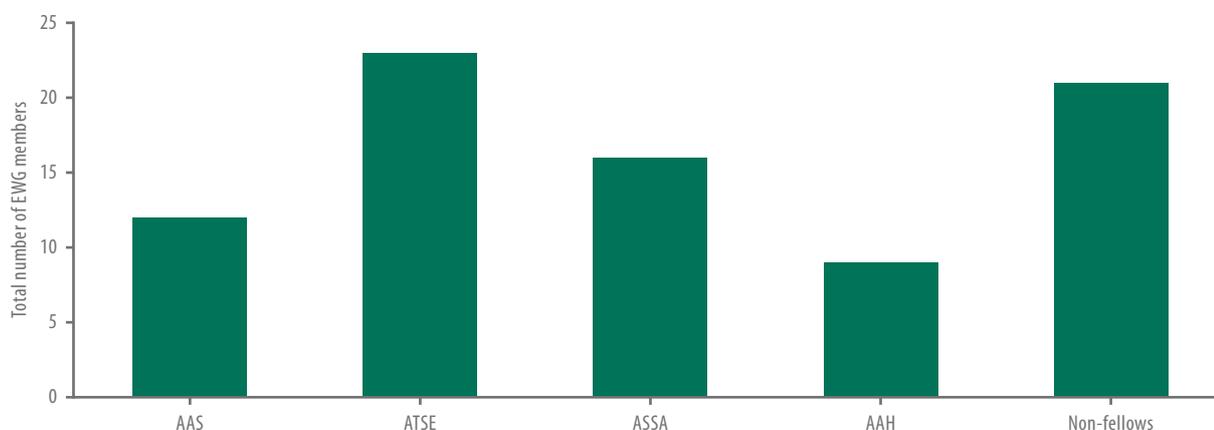
1. *The Age of STEM: Educational Policy and Practice across the World in Science, Technology, Engineering and Mathematics,* B Freeman, S. Marginson and R Tyler (editors*),* Routledge Research in Education, 2015.

2. The deviation from a strict 25% representation by each Academy is a result of a number of members being Fellows of two academies (5 AAS/ATSE and 2 ASSA/AAH) and counting for each. In addition three EWGs (5,6, and 9) had no Fellow from AAH but with experts from relevant disciplines covered by AAH.

Table 2: SAF reports delivered

Project#	Report title	EWG Chair(s)	Project mgt. services provider	Duration (months)	Launch Date	Venue/event	Keynote
SAF01	*Australia's Comparative Advantage*	Prof Glenn Withers AO FASSA	ASSA	27	16/11/15	ASSA Symposium, University House, ANU	Prof John Hewson AM
SAF02	*STEM: Country Comparisons*	Prof Simon Marginson FASSA	ACOLA Secretariat	5.5	05/06/13	Parliament House	Prof Ian Chubb AC FTSE Chief Scientist of Australia
SAF03	*Smart engagement with Asia: Leveraging language, research and culture*	Prof Ien Ang FAHA	AAH	27	05/06/15	Footscray Community Arts Centre	Prof Ian Chubb AC FTSE Chief Scientist of Australia
SAF04	*The role of science, research and technology in lifting Australian productivity*	Dr John Bell FTSE	ATSE	24	03/06/14	National Press Club	Dr John Bell FTSE
SAF05	*Technology and Australia's Future: New technologies and their role in our security, cultural, democratic, social and economic systems*	Prof Rob Evans FAA FTSE & Prof Bob Williamson FAA (Co-Chairs)	AAS	29	23/09/15	The Shine Dome	Prof Ian Chubb AC FTSE Chief Scientist of Australia
SAF06	*Engineering Energy: Unconventional Gas Production*	Prof Peter Cook CBE FTSE	ATSE	5	05/06/13	Parliament House	Prof Ian Chubb AC FTSE Chief Scientist of Australia
SAF07	*Australia's Agricultural Future*	Dr Joanne Daly FTSE	ATSE	12	27/07/15	CSIRO Discovery Centre	Prof Ian Chubb AC FTSE Chief Scientist of Australia
SAF08	*Delivering Sustainable Urban Mobility*	Dr Bruce Godfrey FTSE	ACOLA Secretariat	14	07/10/15	National Portrait Gallery	Hon Jamie Briggs, MP Minister for Cities and the Built Environment
SAF09	*Translating research for economic and social benefit: country comparisons*	Dr John Bell FTSE	ATSE	10.5	27/11/15	Parliament House	Prof Ian Chubb AC FTSE Chief Scientist of Australia
SAF10	*Capabilities for Australian enterprise innovation*	Prof Stuart Cunningham FAHA	AAH	12.5	TBC	TBC	TBC
SAF11	*Business diasporas in Australia: maximising people to people links with Asia*	Prof Kam Louie FAHA & Prof Fazal Rizvi FASSA (Co-Chairs)	AAH	11.5	26/05/16	National Library foyer	Dr Alan Finkel AO FTSE Chief Scientist of Australia

4. The Bissell Assessment

In late 2015 ACOLA Council, on the recommendation of the PSC Chair, commissioned Dr Richard Bissell, Executive Director, Public Policy & Global Affairs, of the US National Academies in Washington, to assess the SAF program and compare its operation with the way that The US National Academies in Washington would have conducted such a program. Dr Bissell spent the week of November 13–20 in Australia meeting various stakeholders.

While making a number of suggestions for any future SAF-style program, Dr Bissell's report is pleasingly positive on the operation of the SAF program. In particular, he commented: "*A fundamental tenet …is the interdisciplinary nature of the enterprise. The ability to mobilize first-rate expertise across the science, engineering, social science and humanities communities is quite extraordinary. Indeed, there is no comparable effort outside Australia that has been able to sustain such an integrated structure beyond a one-off study …In that sense, the work of the SAF is not only a unique asset in Australia; it is also a model that academies abroad should watch closely to see whether it can be institutionalized*". PSC is, not surprisingly, very gratified by this assessment.

5. Publicity and Impact

Under the original concept of the SAF program, reports were intended to go to OCS who would then distribute and promote. In particular OCS, in consultation with relevant Commonwealth line departments, would consider the findings and prepare a report for PMSEIC with specific recommendations and actions for Government. This process was followed for the first two reports—SAF 2 and SAF 6—with the reports being presented at the 27th PMSEIC meeting on 21 June 2013. These reports are archived at <www.chiefscientist.gov.au/wp-content/uploads/shalegas-recommendationsFINAL.pdf> and <www.chiefscientist.gov.au/wp-content/uploads/STEM-recommendations-for-PMSEIC.pdf> respectively.

With the change of Government in October 2013 and the ultimate replacement of PMSEIC by the Commonwealth Science Council (CSC) this process broke down. As of May 2016 none of the SAF reports (other than SAF02 and SAF06) have been formally presented to CSC and no considered Governmental responses to the findings have yet been prepared.

In the light of the new arrangements OCS encouraged ACOLA to more actively promote the reports. Typically this took the form of a well-publicised launch by the Chief Scientist or a key figure in either a stand alone event or in conjunction with some relevant other event. Table 2 summarises the launches of all SAF reports.

Report launches were supported by project-specific communications plans and media engagement and, although more formal follow-up and promulgation was largely *ad hoc* and uncoordinated, SAF projects had some success in supporting public policy development. Examples include:

- SAF02: Substantive input to the development of the Chief Scientist's position paper *Science, Technology, Engineering and Mathematics in the National Interest: A Strategic Approach* (2013) and the *Vision for a Science Nation Consultation Paper* (2015);

- SAF03: Influence on the development of the Department of Foreign Affairs and Trade's *Public Diplomacy Strategy 2014–2016* (2014);

- SAF04: Substantive input to the development of *Boosting the Commercial Returns from Research* (2015) and the *Industry Innovation and Competitiveness Agenda* (2014);

- SAF05: Input to the Productivity Commission's Research Paper, *Digital Disruption: What do government's need to do?* (2016);

- SAF06: Substantive input to the development of shale gas policies at Federal and State/Territory level (2014);

- SAF08: References in the *Australian Infrastructure Plan: Priorities and reforms for our nation's future* (2016);

- SAF09: Findings incorporated in the *National Innovation and Science Agenda* (2015), the *Watt Review of Research Policy and Funding Arrangements* (2015);

- SAF13: Findings incorporated in the *Research Block Grant Consultation Paper* (2016);

In addition, several reports were timely with regard to active policy development and anecdotally they appear to have been regarded favourably and had influence:

- SAF02 with the ongoing focus on a STEM agenda for Australia;

- SAF06 was also the genesis of the 2015 international ATSE Conference and Workshop on Unconventional Gas that brought together international experts who had been involved in similar reviews in their own jurisdictions;

- SAF07 with the release of the Government's Agricultural Competiveness White Paper July 2015.

Unfortunately delays in the timing of the release of SAF01 meant that it was only informally available to participants in the National Productivity Summit in November 2015 notwithstanding its high relevance. However, subsequently the report was a major source document for the report, *Australia's Economic Future: An Agenda for Growth,* by the Committee for Economic Development of Australia (CEDA).

EWG chairs and members also presented at various forums and/or wrote articles and *op eds*. In the absence of any overarching communication strategy most of these activities occurred through the initiative and resourcefulness of the individuals involved. However, in many instances, SAF project engagement activities were undertaken directly in response to requests from influential stakeholders, demonstrating the relevance and broader interest in SAF projects. These included:

- The Knowledge Nation Summit (2016);

- The Financial Review inaugural Innovation Summit (2016);

- The Business Council of Australia (2015);

- The Department of Foreign Affairs and Trade (2015)

- The Victorian Auditor General's Office (2015)

- The Victorian Essential Services Commission (2015)

- *China in the World from the Maritime Perspective: The First International Conference of the Silk Road* Prof Louie convened by the Asia-Pacific Research Cluster for Chinese Entrepreneurial Studies, The University of Queensland (2015), and

- The *Race, Identity and Advocacy* conference convened by the Asian Australian Alliance (2016)

Some other events and forums, at which the reports featured include:

- For SAF01: A number of presentations by EWG Chair including at a Monash Business School public forum in November 2015 on Australia's Future with the Chief Scientist-elect of Australia, Dr Alan Finkel, and at the Global Education Commission conference in Seoul, Korea, June 2016;

- For SAF 03: Panel discussion at the International Convention of Asia Scholars in July 2015; presentations by Prof Kent Anderson (EWG member) at the Asia-Pacific International Education Association (APAIE) in Beijing in December 2014 and Universities Australia annual conference in March 2016;

- For SAF 04: National Press Club address by the EWG Chair in June 2014;

- For SAF 05: Presentations by Prof Bob Williamson (EWG Co-chair) at Data61 Live on 30 March 2016 and SAS Executive Forum in May 2016;

- For SAF 06: Presentation by EWG Chair at the ATSE Conference on Unconventional Gas; numerous presentations by the Chair and other EWG members at various international and domestic universities, policy forums and energy-related events; presentations at CEDA Forums on Unconventional Gas in Melbourne (by EWG Chair) and Adelaide (by PSC Chair);

- For SAF 07: Presentation by Prof Kym Anderson (EWG member) at *Critical Moment*.

- 2016 ABARES Outlook and a speech by the EWG Chair at a meeting with the Chinese Academy of Engineering on Food Safety;

- For SAF 08: Presentation by Prof Brendan Gleeson and Prof Graeme Davidson (EWG members) at the State of Australian Cities (SOAC) 2015 Conference;

- For SAF 09: Presentation by the EWG Chair at the 2015 CRC Association Conference.

We are also aware of two parliamentarians who have at least read a SAF report! Tim Watts (Member for Gellibrand) and Claire O' Neill (Member for Hotham) cite the SAF03 report in their book *Two Futures: Australia at a Critical Moment* (Text Publishing, 2015).

The implementation project-specific launch and communication plans also resulted in extensive exposure in local and national media and, in some instances, local foreign language media and international media. The occurrence of media articles in the print and online press during the period when the majority of SAF reports were launched, from the start of 2015 until mid-June 2016, is shown in Figure 2.

As discussed below a more formal plan for the promotion and promulgation of reports is a key learning for any future SAF-style program.

Figure 2: The number of online and print media articles published about SAF reports from 2015 to June 2016
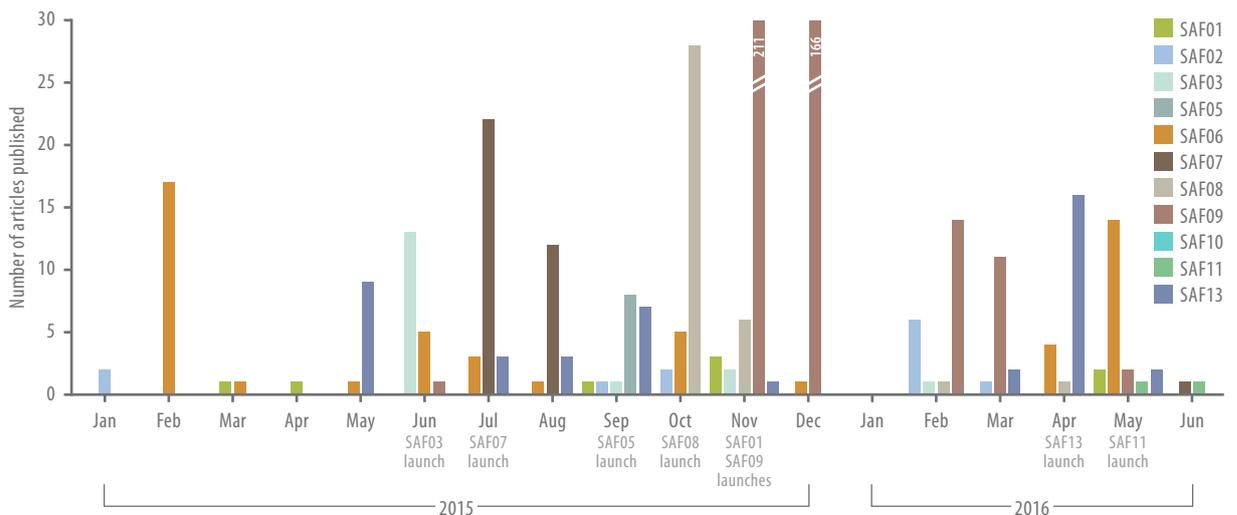
Note: The data presented in this graph represents primarily print and online media. It was sourced from a third party and all attempts have been made to ensure its accuracy, however it may be an under-representation.

6. Reflections on the SAF Program —Lessons Learnt

Scoping and focus

Projects shorter in specified duration and more focused in scope are to be preferred. Shorter projects allow findings to be delivered on a timeline of greater relevance to public policy. A shorter duration reduces the risk that EWG members become disaffected and drift away as did occur with the longer projects. The later SAF projects—SAF 7 onwards—benefited from a robust and formal scoping process *prior* to formal approval. This process not only helped clarify the focus of the proposed project, the key questions to be explored and how their answers might influence public policy but, critically for an 'ACOLA project', maximised the interdisciplinary input available from the four Academies. One of the challenges of such a process is managing the changes in scope without losing key Fellows who rightly or wrongly disagree with the changes but whose expertise is highly desirable, even essential.

Primary research vs secondary research and synthesis

SAF was initially conceived as a program of multi-disciplinary or inter-disciplinary *basic* research that would address medium term issues of potential public policy interest. If that was the remit, with success measured by papers in the academic literature, then it would be debatable how well SAF delivered. Rather where a SAF-style program is in its element is in harnessing the talent in the four Academies to assess existing research, both in the academic literature and in the 'grey literature' outside academia, and synthesise that research into pertinent evidence-based findings that are relevant to public policy. At the margin, and on very focused issues, more primary research may be appropriate but that should be an exception rather than the rule.

EWG chair and membership

The chair of an EWG is critical to its success. The workload on, and expected of, EWG chairs, was underestimated. The Academies can be very thankful for the amazing efforts put in by the chairs in delivering their EWG reports. Selection of chairs (along with realistic communication of the expected time commitment) is thus critical. In addition to bringing relevant expertise a successful chair must have demonstrable project management skills, a commitment to collaboration and particularly the ability to ensure that all relevant skills from across the Academies (and, if necessary, beyond) are valued and engaged. EWG members, in turn, in addition to bringing their own expertise to the EWG must also recognise that other perspectives are equally valuable. Their selection should be based upon a careful consideration of the relevant skills that the particular project needs. A strong initial scoping of projects significantly helps the identification of the skills required and hence the selection of EWG members. Shorter duration projects also facilitate the involvement of members from non-academic backgrounds.

PSC engagement and oversight

The role of PSC evolved over the SAF project. In addition to a periodic formal 'deep dive'—an intensive 45-60 minutes review and discussion— at a PSC meeting, specific PSC members were assigned to each EWG. These PSC liaisons attended EWG meetings and/or communicated with the EWG Chair between PSC meetings. This approach helped communicate emerging 'best practices' from one EWG to another, ensured that the EWG focused on producing a report as influential as it could be and in doing so utilised to the greatest possible extent the full potential

of ACOLA. While this approach was seen at times by some EWGs as unnecessarily intrusive, it was generally agreed to be supportive and beneficial. In hindsight it is possible that a more directive approach from PSC could have been justified. A number of examples exist where EWGs dismissed suggestions from PSC members perhaps too easily. Many of the issues that surfaced at final review (even Council level), particularly concerning the extent that the different perspectives of the individual Academies had been harnessed, should have been picked up earlier.

Project management and support

The approach by which project management was delivered by the individual Academies (in most projects) had pros and cons. Positively it made use of the existing project management and policy relevant skills in the individual Academies. However, those skill levels are variable and each Academy (and this is part of the strength of ACOLA) has its own style and approach so that the risk is that ACOLA projects began to look like those of the individual Academies. This is not necessarily a problem except where, possibly unconsciously, the values and ethos of the administering Academy becomes more dominant than ideally they should. A better approach may have been to have the relevant Academy staff seconded to the ACOLA Secretariat for delivery of the project. Such an approach would have given ACOLA greater administrative control if an EWG did go astray. It would also, together with a clearer and stronger role for PSC in governance, have helped manage the potential—but generally manageable—conflicts of interest that exist. Certainly there seems little reason or advantage for any Academy to out-source management or support to a third party.

Use of consultants

EWGs made extensive use of consultants. Given the scope of projects, short timelines and particularly the need to gain international comparative data, this practice was probably inevitable and generally EWGs handled those contributions well. PSC did express concern when EWG's cited commissioned consultancies as primary source material particularly as evidence for key findings. Since consultants' reports were *not* subject to any independent review this practice seemed problematic to PSC and EWGs generally accepted PSC's advice and looked through the consultants reports to cite more appropriate source materials. Given that the intent had been to access the collective wisdom and knowledge of the Academies, a future SAF program might consider a greater use of Fellows as (paid) consultants and advisers to EWGs. This might be supported by a review of ARC grant rules for projects of this kind to allow access to academic institutions.

Executive summary and extract reports

Given the length of the reports and the complexity and richness covered therein, the Executive Summary became a critical focus. Except for two initial reports—SAF 2 and 6—it became standard practice to combine the Executive Summary and Key Findings (including a sense of the context and the evidence for them) into a stand-alone 'Extract Report'. In addition PSC encouraged EWGs to adopt the practice of including at the beginning of each major section/chapter a short summary of the 'key points' (preferably in dot points and in a highlighted box) that indicated to the reader what the section would cover. On occasion PSC suggested that an appropriate communicator should edit the report to ensure maximum accessibility for policymakers. EWGs were generally receptive of such advice.

Interim reporting

While a shorter duration of a project reduces the need for interim reporting, there is still value (and, as SAF 09 showed, a need) in EWGs releasing 'working papers' and/or having a formal mechanism to release 'interim reports'. Such papers, with an appropriate disclaimer, could serve a number of functions including encouraging comment and input from more widely across the Academies, informing policymakers of emerging thinking and generally raising the profile of ACOLA and its contributions to public policy. The *ad hoc* policy developed for SAF 09 would be a good template.

Governance and clarity of roles

A common 'complaint' concerned the complexity of the governance of the SAF program along with an associated perception of duplication of responsibilities between PSC, ACOLA and the individual administering Academies. Given the novelty of SAF this is perhaps understandable. However a future SAF-style program should aspire to simpler governance and clearer lines of responsibility. ACOLA Council and the Presidents, acting on behalf of their respective Academy, should have an oversight strategic role, with Council having ultimate responsibility for approving reports. The practice that evolved, whereby the PSC Chair attended ACOLA Council meetings, helped communication. However, unless in exceptional and extreme circumstances, it would be best if communication with EWGs was always via PSC. If Council is unhappy with a report its first response should be to refer it back to PSC (with appropriate comment and even direction) rather than attempting itself to resolve the issue. Similarly administering Academies should not take decisions, even if well intentioned, that affect EWGs without reference to PSC.

Engagement with OCS, ARC and Government line departments

The Office of the Chief Scientist (OCS) was very important to the SAF program, not just as the 'client' but generally as a very supportive participant. An officer, usually Dr Simon Prasad attended most PSC meetings. Other OCS officers attended EWG meetings and actively helped shape findings and reports. When issues arose they were generally resolved in amicable and constructive ways. Effective communication and a policy of 'no surprises' is essential. The practice that evolved of regular meetings of the PSC Chair with the Chief Scientist also helped the relationship. Similar, but less frequent meetings, with the CEO of the ARC, Professor Aidan Byrne, played a similar role. In addition, the ACOLA Secretariat met regularly with ARC officers to brief them on administrative matters and merging issues, e.g. new projects. That said, serious miscommunication did arise on some occasions, causing disruption of effective project completion and promotion, so underlying the importance of 'no surprises' policy.

Unfortunately engagement with line departments was less satisfactory. In the original design of the SAF program line departments with an interest in the project and potential responsibility for carrying findings into policy would at least attend EWG meetings. This happened to some extent with the early projects particularly SAF 06 where the Secretary of the then Department of Resources, Energy and Tourism, Dr Drew Clarke showed considerable interest.

Unfortunately engagement and even interest fell way rapidly over the later years. In particular attempts to gain guidance from Departments as input to the strategic planning workshop that shaped the later SAF projects met with little success. As Bissell notes in his report this is an area in which ACOLA could learn from the US National Academies and the way they engage with Government departments and agencies to scope projects.

Promotion and publicity

As described in Section 5, above, in mid-2015 with the demise of PMSEIC, the OCS encouraged ACOLA to take on a greater role in promoting the SAF reports. While somewhat successful, in hindsight, the potential impact of the reports would have benefited from greater clarity of responsibilities (between ACOLA and the individual Academies) for distributing and promoting reports and also from a more thorough and coordinated planning of pre-launch, launch and post-launch communication and engagement activities. PSC members could also have been used more actively to support EWG chairs and give an 'ACOLA perspective' in key briefings. This would have allowed a number of key opportunities to be seized, thereby influencing uptake of the reports and their findings with key departments but also building the ACOLA brand.

PSC also believes that individual Academies could do more to promote the SAF program and projects within their own Academies thereby gaining greater awareness and hopefully buy-in by Fellows.

7. Conclusion

The most significant conclusion from the past four years is that the SAF program has demonstrated that the four Academies, working collectively and collaboratively as ACOLA, have the potential to be an important voice in evidence-based policy advice in Australia. Eleven reports of substance have been produced on topics of importance to Australia's future. The quality and depth of these reports should see their relevance maintained for some time.

With the completion of the program and particularly around the publication of the synthesis volume in May 2017, ACOLA and the individual Academies should give serious thought to how to promote the program and its reports more broadly both outside the Academies and with their collective fellowships.

The SAF program was a novel experiment and had to experiment and learn itself as it progressed. The learnings, summarised in this report, together with the suggestions from Richard Bissell, should hopefully assist any future opportunity that ACOLA has to run a second SAF-style program.

Indeed there is a case that ACOLA Council could usefully establish a standing committee with a remit similar to PSC (possibly modelled on the Program Review Committees of the US National Academies mentioned by Bissell) to oversee all ACOLA research and policy projects with the Chair an *ex officio* member of ACOLA Council. Given the intersection of many research and policy issues with health, membership on this standing committee of the new Australian Academy of Health and Medical Sciences would be warranted. Membership should refresh over time but such a standing committee would assist the profile of ACOLA, retain important corporate memory, engage more Fellows and importantly ensure that 'ACOLA projects' maximised the full power of the Academies.

8. Acknowledgements

Appendix A—Membership of EWGs

SAF01

Professor Glenn Withers AO, FASSA (Chair)

Peter Laver AM, FTSE, HonFIEAust, FAusIMM (Deputy)

Professor Graham Farquhar AO, FAA, FRS

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Mr Kevin Hobgood-Brown

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Program Steering Committee

The Program Steering Committee responsible for the overall quality of the program, including selection of the Expert Working Groups and the peer review process, is comprised of three Fellows from each of the four Learned Academies.

At the completion of the SAF Program on 30 June 2016, the PSC members were:

   Professor Michael Barber FAA FTSE (Chair)

   Mr Dennis Trewin AO FASSA (Deputy Chair—Research)

   Professor James Angus AO FAA

   Dr John Burgess FTSE

   Professor Bruce Chapman AO FASSA

   Professor Ruth Fincher AM FASSA

   Professor Paul Greenfield AO FTSE

   Professor Lesley Head FAHA

   Professor Peter McPhee AM FAHA FASSA

   Professor Stephen Powles FAA FTSE

   Dr Susan Pond AM FTSE

   Professor Graeme Turner FAHA

Previous members included:

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   Professor Mark Finnane FAHA FASSA

   Dr Margaret Hartley FTSE

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   Professor Julianne Schulz AM FAHA

   Professor Richard Waterhouse FAHA

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Professor Andrew Holmes AM ScD FAA FRS FTSE (Chair)

President, Australian Academy of Science

Professor Andrew Holmes is a Melbourne University Laureate Professor of Chemistry, CSIRO Fellow and Distinguished Research Fellow (Imperial College, London).

Professor John Fitzgerald PhD FAHA

President, Australian Academy of the Humanities

Professor John Fitzgerald FAHA is a leading expert on China, Australia and the geo-politics of the Asia-Pacific region.

Professor Glenn Withers AO BEc PhD FASSA

President, Academy of the Social Sciences in Australia

Glenn Withers is a Professor of the University at ANU. He was previously foundation Chief Executive Officer of Universities Australia and has held various earlier academic and government appointments, including as Professor of Public Policy at ANU, Head of the Economic Planning Advisory Commission under Prime Minister Keating and Co-Chair of the National Population Council under Prime Minister Hawke.

Professor Peter Gray BSc Chem Eng (hons) PhD FTSE FIEAust, FAICD

President, Australian Academy of Technology and Engineering

Professor Peter Gray was appointed in 2003 as the inaugural Director of the Australian Institute of Bioengineering and Nanotechnology (AIBN) at the University of Queensland.

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