

2004 ANZSES PLENARY PAPER

Brief History of ANZSES

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Abstract

Since volunteering to write, coordinate and edit a 50 year history for ISES at the 2001 Solar World Congress ANZSES committee meeting, Garry Baverstock proceeded on a worthwhile journey of discovery and re-discovery of the history of the organization. This journey lasted for 3 years and added to as well as enhanced his perception of events and people involved in solar energy who also had an active role in the Society. Many of the pioneers of solar energy, in Australia, were known personally to the author, as he was involved as an office bearer during the early 1980's. It was an active era when ANZSES became fully incorporated. It was a unique period of innovation and embryonic beginnings of the renewable energy industry.

The paper traces the approach, the methodology, as well presenting a short version that picks out the main highlights of the history. It also recommends what needs to be done to maximize the exposure of the document and how it can be a valuable promotional resource for ANZSES on the internet.

FOREWORD ANZSES HISTORY

Why write the history of ANZSES? With the advent of the 21st century creating a turning point, combined with the realization that a number of our prominent members are now aging, it seemed timely for the first 50 years of ANZSES to be recorded and for the important role it has played internationally to be recognized. The beneficiaries of this effort will hopefully be the coming generation of solar energy scientists, professionals and enthusiasts.

The first half-century of the Society's activities in disseminating information about solar energy research, development, promotion and applications was prolific. The technology developed during this period had the potential to provide sustainable energy solutions for planet Earth for centuries to come, providing an invaluable springboard for a new generation of scientists to solve the many environmental challenges facing the planet in the next 50 years.

Given the magnitude of the importance of this period of development, many ANZSES members considered it was timely for the main events, activities of the many pioneers, and the evolution of ANZSES as an organization, be documented while it was still in living memory and documents were still in existence for reference. This activity was conceived at the Adelaide Solar World Congress (2001) at the Australasian AGM, and was seen by my contemporaries to complement the ISES history project, celebrating the first 50 years of its international incorporation. For many years I was concerned that much of the local history was being lost and so, when the subject was raised, I felt moved to volunteer to coordinate the ANZSES document and assist those responsible for the ISES document, by sharing information and drafts. It expanded into a full-blown writing and editing exercise for both the ANZSES and ISES versions

A debt of gratitude is offered for extensive submissions from long time dedicated ANZSES / ISES members while completing the two tasks. In addition to these submissions, a great deal of this history was written with the assistance of a number of very dedicated ANZSES people who supplied documents, material, photographs and made the time available for interviews. Throughout the process I was impressed with and humbled by their high ethics and integrity. Individual acknowledgements of these contributions are too numerous to list specifically in this document. For this reason, they have been included along with the sections of the comprehensive versions of history that benefited from their input. These versions are to be accessed from ISES in two volumes including histories of each country involved in the evolution of the organization and off the ANZSES website when loaded.

In volunteering for this task, the vision that this history document become a permanent feature of the ANZSES website. As time passes, it could encompass future additions, continually giving credence and respect for those who have achieved scientific milestones or contributed towards the

development of solar energy from 2004 onwards. Perhaps, a review should be introduced each decade to up date the history of the organization?

By highlighting these achievements of the past, it will be easy to demonstrate that ANZSES, as a peak organization, is the appropriate springboard for disseminating credible information about research and development of solar energy in all its forms. Given the slow rate of adoption of solar energy systems and technology, the relevance of the Society surely is destined to continue for decades, if not centuries. If the high level of ethics and integrity of ANZSES pioneers and office holders in the past continues, there is no reason why the organization should not continue as a viable non profit endeavour. With the world environment, and bio-diversity under threat, combined with growing material expectations of an ever-increasing world population, a "golden age" of solar energy, with great certainty, ahead of mankind. For this reason, ANZSES and ISES should have a continuing mandate and an important place in history in this 21st century.

The Process

The work proceeded in a number of stages:

1. Drafting of an initial "Era" analysis of the history that related to global socio-economic events and key technological periods of change from initial material and personal recollections.
2. Canvassing of critiques of the format and draft content produced as well as a request for early submissions from volunteers.
3. Phone interviews
4. Eastern states visit and interviews with key people.
5. Email "intimidation" and follow up for more information.
6. Draft of the ISES version of ANZSES history modified to suit the requested format.
7. Finalization of the ISES version with editorial input from key ANZSES contributors.
8. Draft of the ANZSES version in the original format of "Eras".
9. Accumulation of further submissions from all the states and territories, for the production of local histories for all branches.
10. Approach to membership to collect biographies of key people.
11. Finalization of the content and photographs.
12. Draft presentation of an electronic version of the history.

Summary of the History

Early History

The Australian and New Zealand Solar Energy Society evolved out of the International Solar Energy Society in the mid 20th century. Australians such as Roger Morse of the CSIRO were prominent in the establishment of the Solar Energy Society as early as 1954, known formally as the SES in 1963. This organization originally based in the USA, formally then became known as the International Solar Energy Society and shifted its headquarters to Australia in 1970. At this time Wal Read of the CSIRO and Frank Hogg became well respected, dynamic administrators internationally as well as founders of the ANZ section of ISES. The origins of a separate ANZ organization occurred from 1961 due to the efforts of Norm Sheridan, Roger Morse and others. Wal Read championed the incorporation of ANZSES, as a separate but affiliate organization to ISES and set up a structure of state/territories branches, in the late 1970's. The incorporation was initiated in 1981 and all the formalities were complete by advent of the World Solar Congress in Perth, Western Australia in 1983.

Philosophical and Information Mandate

The Solar Energy Society emanated from a philosophical as well as educated opinion that the future of civilized and inter-generational equity of life on planet earth was dependent on the use of clean forms of energy, such as solar energy. It was seen, by the early leaders of the Society, as part of the environmental management picture for a future world.

After the Second World War many eminent scientists including nuclear physicists, realized that fossil fuel energy was going to diminish as a major energy source eventually and that the long term survival of life on earth as we now know it will rely on the use of solar energy. The US government under the Eisenhower Administration initiated action that lead to scientific and industry leaders to investigate the use of it. Apart from being seen as an important future energy source on logistical grounds there were security and economic strategic planning reasons for the political reasons at the time.

So, ANZSES came out of a research, philosophical base that is still at its core function today. It evolved as a network of researchers and educators

reaching out to the public and industry to adopt new technologies and systems. From the beginning it included related industry groups and individual companies as a forum for the sharing of information and innovative ideas. Companies and academics alike kept abreast of new advances and generated crucial collaborative R&D work.

Because of this solid ethical base many industry groups and associations have, over the years, grown out of the ANZSES organization and the ideals promoted. Organizations such as SEIAA, the Wind Association, ATA and many others often had their roots from the ANZSES philosophy and the lead taken by it in disseminating new technical approaches to generating energy and building a sustainable environment. It is an organization that does not compete with industry and industry groups. It simply supports them and endorses their efforts wherever possible, when the ethics are solid and in the public interest. For the ANZSES fraternity to become seriously involved with any other organizations, it has been a precursor of the evolution of the use of solar energy. This is the main goal and for any collaboration, temporary or permanent this goal must be served. Short term “band-wagon” causes have never enjoyed comprehensive support from the ANZSES membership.

Eternal Credibility

The driver of the unchanging need for an organization like ANZSES is credibility with the public and governments. With membership including the world’s foremost experts in renewable energy, is intellectually robust. Therefore opinions given by the societal hierarchy have been well respected. It is not a government or industry lobby group in itself and does not serve any industrial vested interest. It simply plays a role of providing reliable information and a forum for the exchange of it. However it provides truthful and powerful comment when needed.

This is the single most important reason why ANZSES and ISES has survived as an organization for 50 years.

However, fostering relationships with industrial lobby groups has been one of the healthy, peripheral, credible functions of ANZSES and ISES. Issues are usually supported when it is in the public interest and progresses use of solar energy.

For example, the formation of BCSE in 2004 was supported by ANZSES because it is an extension of the ANZSES charter. The relationship is synergistic in the overall goals of the society but not its main function or its day to day activity. The focus on more specific socio/economic and industry issues is an interesting format and function for the council. Its function by definition is more pragmatic and focused from an industry viewpoint. Unlike ANZSES it is very reliant on industry support to exist. To continue as an organization it must to satisfy industry needs and lobby government when needed.

ANZSES has always supported industry groups when needed but has never become an industry association in its own right, reserving its role as a high ground, ethical supporter of anything that fosters the intelligent use and development of solar and renewable sources of energy. The core support for ANZSES comes from researchers, inventors, innovators, professionals and those who are aligned philosophically.

This has given ANZSES this high ground sense and a reputation of “eternal credibility” on a global as well as local basis.

Key Events and People

The author of the first 50 years of ISES/ANZSES history (Garry Baverstock) has been fortunate to have known most of the early pioneers of the organization personally as well as professionally.

Roger Morse was the champion for Australia in instigating our country’s involvement of forming ISES along with the USA in early days. Wal Read, Frank Hogg and numerous others at the CSIRO, ensured that Australia has always been a prominent player in the development of solar energy. Industrial pioneers such as Ron Brown of “Solar Ray”, Clarry Small of “Small’s Solaheeta”, and John Riley of “Solahart” were industry people who were very active in the early days of ANZSES/ISES. They used the forum to socialize with scientists and gain valuable intellectual support for their work. It enabled them to make contacts that helped them to set up industry groups and standards organizations.

From the mid 1960’s more complex research into industrial solar thermal systems was underway in Australia. Much of this work as with the early work in solar water heaters was carried out in association with the CSIRO.

This activity attracted eminent scientists such as Prof Bill Charters to Australia. Their input into ANZSES help establish this “eternal credibility” for the organization.

In the late 1970’s solar architecture became a new focus for ANZSES, with Dr Steve Szokolay, who was a physicist with a specialist interest in the thermodynamics of buildings, trail blazed the acceptance of architects into the organization in 1975 and then along with John Ballinger (founder of Solarch) of University of NSW, pioneered a period of development of solar housing. In the state branches people like Trevor Lee in the ACT, David Oppenheim in NSW, David Baggs and Gareth Cole in NSW, Richard sale in Qld, Garry Baverstock (the author) and Peter Little in WA, Michael Leach in Tas, and John Held in SA, were mixing with scientists such as Szokolay, Lawrance, Williamson, Barker, Morrison and many others through ANZSES meetings and forums, to perfect their design methods and analysis systems.

Trevor Lee deserves special mention for his office bearing roles in NT, ACT and at the national level. Solar Progress magazine owes a lot to Trevor and still does as he is a frequent writer and contributor. The remarkable Steve Szokolay took Solar Progress magazine to an international standard of presentation, that Trevor continued. In the early 1990’s Dr Bill Parker former Director of the Solar Energy Information Centre in Perth, in the late 1980’s and early 1990’s took over the reigns of continuing the “credibility status” developed by his predecessors.

World recognized scientists such as Dr David Mills from Sydney University, reached great heights in the organization. David became President of ISES in the mid 1990’s. Others such as Prof Martin Green and Prof. Andrew Blakers put Australia on the world map in the field of photovoltaic research. Their ground-breaking research and development was a focus for global attention over the past two decades.. They all enjoyed and took advantage of the ANZSES/ISES forums to present and publish their work, enabling industry to follow in their tracks. Mention any of these people to NASA. They know who they are!

The Challenge for the Future

In recent years ANZSES leaders like Keith Lovegrove and Mahalath Halperin (architect) have been trying to take many scientific and professional concepts to mainstream thinking. We are rapidly reaching a

world of collaboration and networking. Associations with common goals will soon. The organization has always benefited from the community and organizational support of educated enthusiasts who may not have had scientific breakthroughs of their own, but assisted ANZSES in the dissemination of information and helped organize conferences, expos and events. National ANZSES conferences are incredibly informative events. ISES congresses are truly international events that attract the attention of International political leaders.

Barbara Hardy and Monica Oliphant both scientists from South Australia have done more than most in support of the organization as well as acting as important role models for younger women to achieve prominence in the field from hereon.

Stalwarts of ANZSES include Trevor Berrill from Qld, Nigel Isaacs and Andrew Pollard from NZ, Katrina Lyon from WA, Jim Were and Peter Overton from ACT, Muriel Watt from NSW, John Todd from Tas, John and Ann Wellard from NT and many other ongoing contributors. These people all serve as inspiration for all young scientists and professionals who have a philosophical and ethical inclination towards the greater use of solar energy in the 21st century. They pursue and promote the truth.

The 21st century will be the age of solar and renewable energy, sooner or later. What is certain in the minds of the experts in the field is that it is all going to happen much faster and easier with a peak organization such as ANZSES, ISES and Solar Energy Societies in other countries, all collaborating with Industry groups, governments and universities to facilitate the process in a sustainable way!

What Now?

With all this material produced and available for publication, the question is what should we do with it and why? From the start it was envisaged for it to be used for maximum inspiration of the next generation of innovators, scientists and progressive professionals. By understanding what came before them, they may focus their careers taking the efforts made in the establishment of solar and renewable energy and continue to allow it to evolve to be an ever-growing proportion of the way we provide energy on planet earth.

To maximize exposure of the history the following steps are recommended:

1. Produce a visually stimulating electronic presentation to be linked to a brief history document that attracts interest on the Internet.
2. States and territories could be printed as a promotional publication in each state. Available from state energy authorities, and universities, the publication could be a valuable industry promotional document for state and territorial governments (including the national government of New Zealand)
3. Maximum linkage to eminent individuals (ones with approved biographies), support companies and institutions, as well as government could ensure maximum exposure of Internet visitors to the world of solar energy.

The only limit is ones time, resources and imagination engaged in this quest. One thing is known for sure. If we do nothing more than limit the exposure of the history to a location hidden in cyberspace, then no real advantage will result to ANZSES or the development of solar energy, and foremost inspiration of the young will not occur, as they will have limited opportunity to view it. Teamwork and networking is the next challenge.

Perhaps the next generation may want to take leaf out of the book of the early pioneers, who collaborated and worked in this way. This may be our future guiding principal for all those associated with ANZSES and ISES.