

OFFICE OF THE PRIME MINISTER'S SCIENCE ADVISORY COMMITTEE

Professor Sir Peter Gluckman, KNZM FRSNZ FMedSci FRS Chief Science Advisor

ANNUAL REPORT 2011-2012

PREAMBLE

The office of the Chief Science Advisor (CSA)¹ has just completed its third year of contribution since its inception on July 1 2009. Over this time, both the role of the CSA and its mode of operation have consolidated. I am told and believe that the Office is held in high regard both nationally and internationally. Despite maintaining its small size, it has established a valuable role comprising seven major functions:

- 1. Promoting the public understanding of science
- 2. Providing a point of reference for various stakeholders in the New Zealand science and innovation system
- 3. Providing a sounding board for science and innovation policy
- 4. Promoting the use of evidence in policy formation across government
- 5. Undertaking special across-agency tasks
- 6. Providing reports and advice as requested by the Prime Minister
- 7. Using science to promote New Zealand's diplomatic interests
- 8. Liaising with equivalent offices internationally

The CSA meets regularly with the Prime Minister both to report on and agree to work programmes. The CSA has frequent meetings with ministers and with CEs of relevant departments, including MSI and MFAT. The Office has operated within the budget allocation provided through DPMC.

1. Promoting the public understanding of science

I undertake a broad range of public lectures and media contacts and more recently have established a blog site for informal commentary on the CSA's website (http://www.pmcsa.org.nz/category/blog/) There is an extraordinary number of parties that wish to hear from or interact with the CSA, but the size of the office and its other responsibilities limit what can be done. I therefore focus my media interactions to significant science issues rather than commenting generally. Matters

Telephone: +64 9 923 1788 Facsimile: +64 9 373 7497 Website: www.pmcsa.org.nz Email: csa@pmcsa.org.nz

¹ The office comprises Sir Peter Gluckman, Chief Science Advisor (0.6 FTE seconded from the University of Auckland), Dr Stephen Goldson, Strategic Advisor (0.3 FTE seconded from AgResearch), Dr Alan Beedle, Chief of Staff (0.8 FTE seconded from the University of Auckland) and Ms Megan Jeffries, PA/communications (1.0 FTE). This has provided a durable and successful combination of skills and attitudes. During the course of the year a joint appointment has also been funded by MSI to provide liaison between MSI/MBIE and the CSA's office. Except for the last, the Office is located in the Liggins Institute of the University of Auckland where the CSA is professionally based.

to which I have given particular attention in the pursuit of better public engagement and understanding in the last year have included: the relationship between science and innovation, the setting of science priorities, the relationship between science and policy formation, and the understanding of risk and technology assessment. All significant speeches from the Office have been placed on the website.

A particularly intensive effort was made in assuming leadership of the Transit of Venus Forum which I took over, with the consent of the Prime Minister, at the request of the late Sir Paul Callaghan. This highly constructive forum focused on how science can assist New Zealand in better meeting its goals for economic and social advancement while protecting its environment. I will be releasing a full report on the forum on August 23rd.

2. Providing a point of reference for various stakeholders in the New Zealand science and innovation system

The Office is frequently approached by individuals and firms and, where appropriate, assistance is given via reference into the appropriate part of the science system. The Office is a sounding board for many stakeholders including universities, CRIs, the Royal Society of New Zealand, community groups, local authorities, special interest groups, and industry groups. I restrict my interactions to those which are appropriate for the CSA to handle (as opposed to MSI/MBIE), but this "sounding board" function is continuing to prove invaluable in creating greater synergies and collective approaches to advancing New Zealand.

3. Providing a sounding board for science and innovation policy

This is the primary role of MSI, although some components lie within ministries such as Health, Conservation and Primary Industries. My office has close liaison with MSI/MBIE and provides input from the science community perspective as requested. I hold regular meetings with the Minister of Science and Innovation.

4. Promoting the use of evidence in policy formation across government

I regard this as a critical role that is the unique responsibility of this Office. The work we have done here in developing a conceptual framework has received international attention. We have been engaged in a significant project to map and assess the quality of and issues associated with scientific input into policy across all of government. The data collection phase is now complete and an analysis under way. We have assisted the Ministry of Defence in establishing the post of chief technology advisor, and MPI in establishing the post of departmental science advisor (not yet filled). We have worked with MSD and the SSC to establish the Social Policy Evaluation and Research Unit associated with the Families Commission; this is part of strengthening the use of social science research across government. We have conducted seminars for a number of government departments on how to use evidence better in policy formation and on the appropriate positioning of science as the base knowledge on which other values-intensive components of policy formation are properly overlaid.

Mail: PO Box 108-117, Symonds Street, Auckland 1150, New Zealand Physical: 2-6 Park Avenue, Grafton, Auckland 1023 Telephone: +64 9 923 1788 Facsimile: +64 9 373 7497

Website: www.pmcsa.org.nz Email: csa@pmcsa.org.nz

5. Undertaking special across-agency tasks

I have chaired both the initial international panel and the later internal advisory panel that designed and then evaluated applications for funding of 'grand research challenges' funded by the Crown as part of its support of the Global Research Alliance on Agricultural Greenhouse Gas Emissions. I have been a member of the interagency panels advising on strategy related to the Square Kilometre Array, and took part in relevant strategic and international negotiations which led to the now satisfactory outcome.

6. Providing reports and advice as requested by the Prime Minister

I meet regularly with the Prime Minister and provide advice as requested. Other Ministers from time to time request my assistance through the Prime Minister or seek my advice on specific matters. Currently I am undertaking work on issues related to access to government data and the understanding of risk. In the past year I chaired the expert group assisting the Minister of Social Development in developing the Green Paper on vulnerable children and I have chaired an advisory group to the Prime Minister's officials working group on Youth Mental Health. I have provided specific advice to select committees or consultations on natural health products, folate supplementation, and the effects of digital developments on education. I have also briefed, at their request, science spokespeople from opposition parties.

7. Using science to promote New Zealand's diplomatic interests

There is growing interest in the role of science as a diplomatic tool. My office has worked closely with MFAT to assist where appropriate. As part of that I have had particular engagement with China, USA, Germany, UK, France, Malaysia, Singapore and the EU. I was the guest of both the German and Canadian governments to explore the potential for closer scientific interactions.

8. Liaising with equivalent offices internationally

A number of countries have Chief Science Advisors, although their terms of reference vary depending on the relationship to the management of the science system in each jurisdiction. Other countries often have science and innovation policy councils where the chairs usually have roles analogous to my own. During 2011/12 we have had meetings with the CSAs of Australia, the UK, Ireland, Israel, Malaysia as well as the CSA to the US State Department. Similar meetings have been held with the chairs of the European science and innovation policy councils and there have been more detailed discussions with the CSA equivalents in France, Germany, Denmark, Austria and Singapore. A major goal of many of these meetings has been to encourage greater insight, understanding and definition of the need for greater liaison between small advanced nations which rely increasingly on science and innovation for economic growth. The CSA of Australia and I have agreed to co-host a meeting to explore how to create greater synergies between the Australian and NZ science systems – surprisingly this will be the first such trans-Tasman meeting. Arising from a New Zealand initiative, APEC has agreed to strengthen the role of science in the regional agenda and has agreed to a meeting of APEC CSAs and

Mail: PO Box 108-117, Symonds Street, Auckland 1150, New Zealand Physical: 2-6 Park Avenue, Grafton, Auckland 1023 Telephone: +64 9 923 1788 Facsimile: +64 9 373 7497

Website: www.pmcsa.org.nz Email: csa@pmcsa.org.nz

equivalents in 2013.

LOOKING AHEAD

The role of the CSA is multifactorial and consolidating. In other countries, the role of CSAs is diversifying and is increasingly linked to issues such as technology forecasting and risk assessment both from the policy and the public perspective. It is inevitable in a participatory democracy that a need for more informed discussion is going to increase as the challenges of climate change, food, water and energy security and issues of public health are confronted. Science is increasingly understood to be central to the sort of innovation that allows countries to thrive. From the New Zealand perspective, it is noteworthy that the small advanced nations have been particularly intensive users of science. New Zealand is no exception to this, but is having also to contend with both historical under-investment in knowledge generation and the challenges of geographical isolation. This creates a number of policy and practical difficulties that continue to be grappled with.

Science is increasingly being recognised to be critical to effective and efficient policy formation and the CSA Office has a central role to play in this transformation. To this effect I am proud of how our work to date has been recognised internationally. Science is now central to New Zealand's diplomatic considerations. A challenge for a small country is maintaining its relevance and it is now science that is helping New Zealand to do that. Innovative countries want to work with other innovative countries and science overcomes barriers and gives New Zealand profile in places where before now it has been low.

After three years I believe the Office is now well established as an important part of the framework of New Zealand government. I believe it would be timely to review its structure, arrangements and role in the coming year.

I thank the Prime Minister, senior Ministers, and the CEs of DPMC, MSI, MFAT and other Ministries for their advice and support during the year. I acknowledge the contributions of Dr Alan Beedle and Dr Stephen Goldson with gratitude.

Sir Peter Gluckman KNZM FMedSci FRSNZ FRS

Website: www.pmcsa.org.nz Email: csa@pmcsa.org.nz