



*TASMANIA'S ANTARCTIC & SOUTHERN OCEAN SECTOR
CSIRO JOB CUTS POTENTIALLY UNDERMINE TASAMANIA' S COMMUNITY &
ECONOMY*

Submission For

THE SENATE

*SELECT COMMITTEE INTO SCRUTINY OF GOVERNMENT BUDGET MEASURES
8nd March 2016*

Tasmanian Polar Network

The Tasmanian Polar Network (TPN) is the peak Antarctic and Southern Ocean sector industry body. The TPN promotes the expansion of the sector and the economic benefits to Tasmania, and the enhancement of Australia's international reputation in the field of Antarctic and Southern Ocean science (including marine and atmospheric science).

Summary

The TPN is deeply concerned for the future of the sector if more job losses are to occur at CSIRO, Hobart, or and any other branch that may contribute to oceans and atmospheric science which supports the sector.

It appears evident that decisions are being made at a level where there is little or no grounded understanding about the inter-connectedness of CSIRO to the Antarctic and Southern Ocean sector and the importance of its role to the Tasmanian economy and its community.

State Growth figures indicate that the Antarctic and Southern Ocean organisations contributed:

- \$45 million to Tasmania's GSP Tasmanian businesses; and
- Supplied \$110 million in goods and services to Antarctic and Southern Ocean organisations based in Hobart.

It is probable that further job cuts in the CSIRO will negatively impact on Tasmanian enterprises and GSP:

- Past Federal budget cuts in 2014 cost the CSIRO in Hobart 67 science-related jobs with at least 18 being from the Oceans and Atmosphere Branch. Based on the best available information, the estimated total direct economic loss was of the order of \$11.5 million per annum.

Tasmania has developed a unique cluster of interconnected Antarctic, marine, atmospheric science and research expertise with supporting commercial suppliers. This unique mix and concentration cannot be found anywhere else in the world.

It is likely that job cuts will:

- Damage the credibility of the Antarctic and Southern Ocean sector;
- Put at risk the basic economic drivers for the sector;
- Undermine Australia's international science credibility;
- Disrupt the other organisations and their programs that rely upon the partnerships and interconnectedness;
- Reduce our capacity to mitigate and plan for disaster relief (e.g. fire/drought/floods);
- Reduce capacity to inform Tasmanian industry (e.g. tourism, agriculture and aquaculture) of risks associated with climate change;
- Result in the loss of intelligent, high income earning citizens from the Tasmanian economy; and
- Cause a brain drain from Tasmania and possibly loss of world leading scientists from Australia.

The TPN strongly opposes any job cuts. The investment of the last 30 years must be protected and by rights further investment should be made to make more of this opportunity to work in parallel with mitigation and adaptation measures.

Industry Background

Over 30 years ago the Commonwealth decentralised the Australian Antarctic Division (AAD) and CSIRO to Tasmania. This required significant human resources and infrastructure allocation. What we have witnessed over that period is the emergence of a whole new economy that is low impact, intelligent and has outputs that have global outreach. The CSIRO, and in particular marine and atmosphere science, has played a crucial role in supporting the growth of the sector and it is required for its future success.

The key driver for the new economy is science and research, particularly climate change science. Science is actually the currency for success. If we divest in science, we undermine our whole sector and put at risk the opportunities that lay ahead for future generations.

Table 1 outlines how the CSIRO is connected at present and involved with strategic working relationships in Tasmania and the risks involved should job cuts occur:

Table I CSIRO Influence in inter-connected programs and risks

PROGRAM	RELATIONSHIP	RISK (if jobs lost)
The Australian Research Council's Special Research Initiative Antarctic Gateway Partnership (ARC AGP)	CSIRO, AAD and UTAS total funding of \$24 million 16 post-doctoral researchers and 15 Ph.D. in last 12 months	Credibility risk diminishing international standing of institutions and undermining the sector. Functional risk to partnership.
Antarctic Ecosystem – CRC (ACECRC)	ACECRC relies on the partnerships it has with UTAS, the AAD, the BOM and CSIRO. CSIRO's partnership with the ACECRC provides the equivalent of 20 FTE in in-kind contributions over the 2014-2019 funding. Attracted collaboration with Germany, N.Z. and Japan.	Credibility risk with undermining the sector with international linkages. Functional risk to partnership. Financial risk less spending by visiting scientists.
Integrated Marine Observing System (IMOS) role of climate change and climate variability	IMOS, UTAS, Tas Gvt and CSIRO.	Credibility risk - Cut to CSIRO staff will impact significantly and have flow on effects to the information it provides to the international Southern Ocean Observing System (SOOS) - headquarters Hobart then to other international programs.
The National Environmental Scientific Program (NESP) Marine Biodiversity Hub and the NESP Climate System Science Hub	UTAS and CSIRO - total of \$47 million over 6 years, reliant on input from climate science from CSIRO	Credibility and functional risk.
PhD Program in Quantitative Marine Science (QMS)	UTAS and CSIRO - \$250K/year for 5 years topics across five areas one being climate projects requiring Oceans and Atmospheric supervisors.	Credibility and functional risk.

The benefits to the state from CSIRO involvement in the sector are both social and economic. The highly educated/trained individuals who have significant incomes churn this money back into the local economy and their work creates commercial opportunities for local businesses.

Some pertinent economic points about the sector are:

- The Antarctic and Southern Ocean sector is a sound investment delivering \$5.50 of total economic return for every dollar invested in the sector.
- In Tasmania the Antarctic and Southern Ocean sector directly employs more than 1100 people. In 2011/12 it directly contributed \$187 million (or 0.7%) to the Tasmanian GSP. Average wages in the sector are significantly higher than the Tasmanian average, standing at \$118,400 per full-time employee in 2011/12 compared to a state average of \$63,590. This provides a significant flow-on effect to the Tasmanian economy, where spending by sector employees generated a further 1606 jobs and an additional contribution of \$256.9 million to the Tasmanian GSP, for a total contribution of 2791 jobs and \$444.2 million.
- Working with Federal, State and Local governments, the Tasmanian Polar Network envisages a future where the sector will continue to grow and stimulate economic and social benefits for Tasmania through Tasmania's status as an internationally acclaimed Antarctic Gateway.

The Solution

- A guarantee should be given that any proposed job cuts at the CSIRO will not pose a reputational, functional or financial loss to the current and future success of the Antarctic and Southern Ocean sector/Tasmanian economy and community.
- Decisions concerning any job/infrastructure cut made by federal government departments that have representation in Tasmania (e.g. CSIRO, AAD) should be made in consultation with the State government to ensure that they do not contradict and/or negatively impact on the community, economy or environment.
- A process should be developed and adopted to assess conflicts that may arise between decentralised federal government departments/entities and any potential changes to jobs/infrastructure/budgets and the impacts on strategies of industry and State government.

John Brennan
Chair
8nd March 2016