



Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Ozone Science Strategy

- September 2012 –



Ozonesonde release on Macquarie Island, 2011 (image courtesy of the Bureau of Meteorology)

Goal

- to support ozone research in Australia that is both coordinated nationally and contributes to better understanding globally of ozone protection activities and accomplishments.

Situation

Articles 3 and 4 of the Vienna Convention for the Protection of the Ozone Layer sets out obligations to encourage and ensure ozone science research at the national level. The Conference of the Parties of the Vienna Convention keeps ozone science under regular review and considers the outcomes of key ozone research meetings including those of Ozone Research Managers and the quadrennial ozone assessments undertaken by the Scientific Assessment Panel.

Stratospheric ozone research and data collection in Australia is carried out by a number of different institutions, including the Bureau of Meteorology (BoM), the Australian Antarctic Division (AAD) (both DSEWPAC portfolio agencies), CSIRO, ARPANSA and various universities. Significant efforts to coordinate and make use of existing data collections and expertise and to publish data and findings are required. Southern hemisphere observation points are sparse and Australian observations are essential for global emission and trend analysis, and as inputs to global assessments. The overall level of funding for ozone science in Australia is low, which requires a strategic approach to ensure research undertaken is as relevant and effective as possible. Linkages between climate change and ozone protection, and stratospheric and tropospheric processes are current areas of international focus.

Department role

The Department (currently the Department of Sustainability, Environment, Water, Population and Communities) has responsibility for national implementation of the Vienna Convention and its Montreal Protocol. Its primary means of so doing is through the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*. The Act does not make any specific reference to legislating ozone science research in Australia, but one of the purposes of the Ozone Protection and SGG Account (Section 65D) includes “paying or reimbursing the Commonwealth’s costs associated with research relating to (i) substances that deplete ozone in the atmosphere; or (ii) synthetic greenhouse gases”.

In light of the situation and the requirements of the Act, the Department will:

- encourage stratospheric ozone research in Australia;
- facilitate cooperation between ozone research and related organisations in Australia; and
- target Australian ozone related research to meeting international needs.

To do this, the Department will undertake the following activities:

- provide guidance to Australian science organisations and Government on national and international priorities for ozone research, linkages to climate research activities, and encourage those organisations to align their ozone research priorities with international requirements and seek synergies with other research priorities where relevant;
- advocate for the retention, commencement or expansion of Australian stratospheric research consistent with existing Australian strengths and international requirements;
- encourage new scientists to focus on stratospheric ozone science by working with university staff and existing ozone scientists to promote ozone science at the undergraduate and post graduate level, and through the provision of annual top-up scholarships to Ph.D. students undertaking stratospheric ozone research;
- continue to facilitate the regular meeting of Australian ozone research interests and encourage cooperative activities and actions in so far as resources permit;

- support Australian ozone scientists contributing expertise to quadrennial Scientific Assessment Panel reports, including the possible provision of funding to facilitate participation for key experts; and
- consider provision of funding or in-kind support on a case by case basis to support institutions and organisations undertaking research relevant to improving our understanding of stratospheric ozone and interactions with changing meteorology and climate, and of research on ozone depleting substances.

Consultation - In undertaking these activities, the Department will consult closely with independent ozone research interests in Australia, New Zealand and internationally, with other portfolio agencies such as the Australian Antarctic Division and the Bureau of Meteorology, with other Government agencies, such as CSIRO, the Department of Climate Change and Energy Efficiency and the Australian Radiation Protection and Nuclear Safety Authority and with other stakeholders (such as industry) as required.

Funding - Administration and implementation of this policy will be undertaken by the Ozone and Synthetic Greenhouse Gas Policy Section of the Department. It is envisaged that 0.2 FTE will be sufficient for the administration and implementation of this policy. Funding for implementation of the policy is expected to be around \$15,000 per annum for most years, including funding for the top-up scholarship, travel, communication activities etc. In the year when the quadrennial Scientific Assessment Panel report is being prepared, funding may increase to \$40,000 per annum. Funding will be sourced from the Ozone Protection and SGG Account.

Separately, the Department and CSIRO are cooperating on research on emissions of ozone depleting substances from Australia and atmospheric concentrations of these substances. This research is reviewed annually and is put into the public domain for scientific and public use.

Indicators of success - It is difficult to determine indicators of success that can be solely attributed to implementation of the Ozone Science Strategy. However, some indication of success could be: the number of joint activities undertaken by Australian scientists, participation and interest in ozone science group meetings, joint papers published by Australian ozone scientists, Australian science contributions to reports of the Scientific Assessment Panel and new scientists studying ozone science. Qualitative measures of success (eg ozone scientist satisfaction with implementation of the strategy) will provide some indication of success.

Communication - This strategy, its accomplishments, and those of Australian scientists working on stratospheric ozone science will be communicated to interested stakeholders and the public by the Department via its departmental website, at a minimum. The Department will also look for opportunities to promote the outcomes of the strategy both nationally and internationally as circumstances permit and will work to ensure better recognition of the Strategy as an activity supporting broader portfolio goals.

Review - The Strategy will next be reviewed in 2016 to provide accountability to stakeholders and the Australian public and to ensure continuing relevance of its activities.