

CMOS Strategic Plan 2021 - 2024

Introduction

The Canadian Meteorological and Oceanographic Society (CMOS) is the national scientific society dedicated to advancing atmospheric and oceanographic sciences and related environmental disciplines in Canada. The Society addresses a broad range of national and international issues related to meteorology and oceanography. These include climate change, weather extremes, ocean warming and acidification, as well as air quality. The interests of the Society's membership include both fundamental and applied science. The Society's work is thus relevant to multiple economic sectors including transportation, forestry, agriculture and fisheries, tourism, and increasingly finance. Membership is open to all who have an interest in these activities and the Society currently comprises around 750 members from academia, government, and the private sector. Over the past decade or so, the active membership of the Society, generally through participation in the annual Congress, has shifted toward the academic sector. Outside of Congress participation, the active portion of the Society membership is statistically skewed toward retired members, and this is a difficult model to sustain for a Society based on volunteer labour.

The world is changing rapidly in many ways that implicate CMOS. Rapid advancements in science and technology such as Big Data Analytics and Artificial Intelligence are changing the way we observe, analyze and predict the world. Technology is also fundamentally changing the way people communicate, for example through the increased use of various social media and web-based conferencing platforms. Meanwhile climate warming and its various expressions continue their upward trajectory (e.g., sea level rise, increasing forest fire size and incidence, migration and immigration due to droughts, etc.). The COVID-19 pandemic has also affected the globe, the daily lives of CMOS members, the way in which the Society functions, and the focus and financial resources of the governments that provide the funds to make the Society viable. This document is thus being prepared in a time of great uncertainty.

CMOS has accomplished much in its 50 plus year history, but has struggled to keep up with the pace of change in the world around it. Particularly worrisome is the aging demographic of its volunteer base, and a mismatch between an increasingly diverse society and a largely homogeneous core of members. As Canada and the world emerge from the COVID-19 pandemic, uncertainties in funding, in the way in which scientists meet and communicate, and pressures on government not related to the areas championed by CMOS will all impact how CMOS functions. Some of this will be through direct impact on funding streams, though at the present time Society finances are stable. A different challenge will be an increase in the scope and interdisciplinarity of climate related research, and a likely public health focus for new government programs. Put simply, once climate change is accepted as a central reality of planning at all levels of government, CMOS becomes only one of many fractured voices that struggle to be heard on the national stage. At the same time, the Government of Canada's increasing focus on climate change impacts and a changing North provides a clear opportunity for CMOS as an organization. This could take the form of novel funding opportunities for CMOS members, a broadening of ties with the public sector, developing ties with NGOs, links with new private sector directions or through meaningful participation in international events like the United Nations Decade of Ocean Science for Sustainable Development (2021-2030).

If CMOS is to remain relevant and at the forefront of atmospheric and oceanographic issues in Canada, it must consider more deliberately the value proposition of its activities to its membership, and how to structure and control the workload for its staff and volunteers. Moreover, CMOS must work to expand the diversity of its membership and volunteer base. This three-year strategic plan, building on the Society's first three-year plan, provides the road map for how CMOS will meet these challenges and implement required changes. It is accompanied by an Implementation Plan to begin putting the Strategic Plan into action. The Implementation Plan will be updated annually.

Definitions

Vision – a description of the organization's aspirations for the future;

Mission – an organization's unchanging purpose; it's who, what, why and how;

Core Values – the guiding principles that govern organizational behaviour;

Strategic Priorities – elements relating to its mission on which CMOS must concentrate attention during the course of the strategic plan to move closer to its vision;

Strategic Objectives – the aims toward which effort and action are directed and coordinated (the "what");

Strategies – the approaches for reaching the strategic objectives (the "how"); and

Implementation plans – activities or projects in line with each strategy, budgeted annually.

BIPOC – Black, Indigenous, and People of Color

ECR – Early Career Researcher, typically including students, postdoctoral fellows and those holding their first permanent appointment.

NGO – Non-governmental organization

Vision

The Canadian Meteorological and Oceanographic Society envisions a sustainable and equitable future supported by scientific progress, its application in governance and communication to the general public.

Mission

CMOS is the national scientific society of individuals dedicated to advancing atmospheric and oceanographic sciences, as well as related environmental disciplines in Canada. The Society's Mission is to promote meteorology and oceanography in Canada within the academic, government and private sectors. CMOS, through its educational and outreach efforts, seeks to enhance public understanding of weather, climate and environmental issues in general.

Core Values

As an organization, CMOS strives for openness and transparency, and the promotion of sound science that is funded at an internationally competitive level and used in decision making. Reflective of the Society's Vision, CMOS strives to conduct its business in a manner that minimizes the Society's carbon footprint, and the Society takes a strong and active stand against discrimination in all its forms.

The core values of the individuals who make up CMOS are reflected in the Membership Code of Conduct, which requires members "to act with respect, responsibility, fairness, honesty and integrity". These values are critical to maintaining the reputation and stature

of CMOS as an active and positive member of the community of Canadian scientific societies.

Strategic Priorities

Three strategic priorities have been identified that will guide CMOS' work to increase its effectiveness for the duration of the plan:

1. **Governance and Membership:** Modernize the Society's governance and business processes to better support members.
2. **Scientific Excellence:** Promote discovery in the CMOS scientific disciplines in order to benefit Canadian society.
3. **Education and Outreach:** Increase the scope of the Society's efforts in Education and Outreach, including the promotion of equity, diversity, and inclusivity.

Strategic Objectives

The following Strategic Objectives have been identified in each of the Strategic Priorities in order to maintain or increase the relevance of CMOS and address its effectiveness in raising the support and funds necessary to achieve its Vision.

Governance and Membership:

- 1) Fostering active, inclusive involvement by the membership, including ECR and BIPOC members, in Society governance and committees.
- 2) Fine tuning Society business practices including By-Laws, the structure of Council/Executive, and Communications to serve the membership effectively. This includes appropriate investment in CMOS staff and IT.
- 3) Increasing the range of options for involvement of government scientists in the Society.
- 4) Ensuring the Society's activities remain both relevant and appropriate for a COVID-19-impacted, and lower-carbon-footprint world. This includes opportunities for tangible collaboration with related Societies and concrete support for the activities of CMOS Centres.
- 5) Ensuring that CMOS delivers both scientific and operational services to its francophone members.

Scientific Excellence

- 1) Ensuring that the CMOS Congress attracts the best and broadest Canadian and international science in the CMOS-supported scientific disciplines, as well as those of related Societies.
- 2) Promoting modern, effective Society publications, supporting local science initiatives from the Centres, and developing broadly effective social media strategies.
- 3) Establishing clear, two-way communication with funding agencies, and the two government departments (ECCC, DFO) that formally support CMOS.
- 4) Honouring outstanding achievement in CMOS-supported scientific disciplines and Society service through financially meaningful scholarships and prizes.

Education and Outreach

- 1) Promoting student involvement from high school through graduate school in Society scientific activities, governance, local Centres, and the annual Congress.
- 2) Providing continued financial and logistical support to Centres for involvement in regional science fairs and the related promotion of scientific disciplines that fall under the CMOS scientific umbrella in K-12 education.

- 3) Providing avenues for active involvement in national and international programs for K-12 teachers to enhance their expertise in scientific disciplines that fall under the CMOS scientific umbrella, especially through joint efforts with related Societies.
- 4) Promoting and enhancing Society outreach to traditionally under-represented groups and developing a climate justice component to CMOS activities.