



CANADIAN PERMAFROST ASSOCIATION
ASSOCIATION CANADIENNE DU PERGÉLISOL



STRATEGIC PLAN (2021-2025)

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EXECUTIVE SUMMARY

This is the first-ever Strategic Plan for the Canadian Permafrost Association (CPA), which was incorporated in March 2018. Based upon the mission of the CPA, the plan comprises five interwoven themes: (1) **MEMBERSHIP**, (2) **FINANCES**, (3) **DISSEMINATION OF PERMAFROST KNOWLEDGE**, (4) **LINKAGES**, and (5) **PROMINENCE**.

Each theme includes a **Vision**, a **Context** which provides information on current conditions within and outside the CPA, **Objectives** proposed, **Actions** required to fulfill the objectives, and **Metrics** for tracking the Association's progress and success over the next five years (2021-2025).

This ambitious plan presents a significant growth in CPA activities, concomitant with its maturation as an organization. Major goals include:

- Improving the tangible and intangible benefits for all members.
- Enlarging and diversifying the membership, especially by attracting northern Indigenous organizations and northern communities, and facilitating their participation in activities and initiatives.
- Increasing the capacity of the CPA to generate and communicate information about permafrost with a variety of audiences.
- Building strong connections between the CPA and other organizations, associations, and northern communities.
- Ensuring the CPA has the financial means to carry out its mission over the long term.
- Raising the national and international prominence of the CPA so that it becomes the primary contact with respect to permafrost issues, interests, and activities in Canada.

Key activities during the 5-year planning window include:

- Improving permafrost knowledge in Canada through active outreach, training, and education initiatives.
- Achieving a more equitable, diverse, and inclusive membership with increased Northern representation.
- Developing a charitable arm to support educational initiatives that require funding (e.g., student bursaries, awards, public lectures).
- Creating more joint memberships with affiliate organizations.
- Hosting the 2024 International Conference on Permafrost in Whitehorse, YT.

Structural changes will be needed to support the plan, including the creation and operation of five Standing Committees largely composed of CPA members outside the Board. This volunteer support will further emphasize the Canadian permafrost community's ownership and commitment to its Association.

Achieving the objectives described in this plan will lead to a larger, more diverse, and vibrant Association. The many steps to be taken over the next five years will result in the CPA actively fulfilling its mission to advance knowledge by bringing together all individuals and groups interested in permafrost in Canada.



CANADIAN PERMAFROST ASSOCIATION

The Canadian Permafrost Association (CPA) was incorporated under the Canadian Not-For-Profit Corporations Act S.C. 2009, c. 23 in March 2018 to help understand and address challenges relating to permafrost, such as:

- Rising costs of infrastructure construction and maintenance.
- Impacts on ecosystems and food security.
- Development of landslides and other geohazards.
- Release of greenhouse gases.
- Stability of buildings.
- Changes in water quantity and quality.
- Sustainable resource development.

The CPA's activities are managed by officers and a Board of Directors operating under the rules prescribed in the  [Constitution and Bylaws](#), and whose decisions are subject to review by members voting at the Annual Meeting. At the time this document was being prepared, members included more than 100 individuals, groups, institutions, corporations and communities interested in permafrost in Canada.



MISSION STATEMENT & OBJECTIVES

The Canadian Permafrost Association's mission is:

“ To bring communities, researchers and practitioners together to advance understanding of permafrost environments. ”

The Mission Statement was developed by the Steering Committee that formed the CPA in 2017-2018. It is a critical part of the CPA's Constitution and By-Laws and the foundation of this Strategic Plan. It emphasizes that the Association's success depends on attracting a diverse membership, including individual members at all career stages within academia, government and industry, and group members that represent institutions, communities, corporations and Indigenous organizations. An essential element is that a significant proportion of these members live and/or operate in Canada's North.

The CPA's objectives appear in Article 3 of its Constitution and By-Laws as follows:

- To support national and international permafrost research within Canada.
- To support the development and dissemination of key synthesis products, such as maps, databases, and guidelines concerning permafrost in Canada.
- To organize each year a technical meeting on permafrost environments, co-located with the Annual Meeting of Members of the Association, and to normally hold both every second year in a location where permafrost-related problems are of particular relevance.
- To organize Canadian Permafrost Conferences, host International and Regional conferences on permafrost at appropriate intervals, and promote permafrost-related sessions at geoscience, engineering, and northern conferences.
- To promote excellence in permafrost science and engineering in Canada through awards and scholarships for exceptional contributions and support for early career researchers and practitioners.
- To promote permafrost education through supporting specialized training seminars, developing outreach products and events, and coordinating media inquiries with informed expertise.
- To advise the International Permafrost Association on issues relating to permafrost in Canada and to collaborate with other associations concerned with permafrost science and engineering.

An additional objective is proposed within this plan:

- To support northern Canadian communities affected by changes in permafrost environments.



CPA STRUCTURE

The CPA's current organizational structure is simple, reflecting the recent creation of the Association and its initial size. It consists of the membership and a volunteer Board of up to nine persons.

The strategy for the CPA outlined in this plan will require a significant increase in the implication of the membership within the Association and a concomitant evolution in the structure of the organization to support it (Figure 1). This can only be accomplished by engaging a significant number of CPA members to sit on the five new Standing Committees. The mandates of each of these committees and which Board member they report to is specified in later sections of this document.

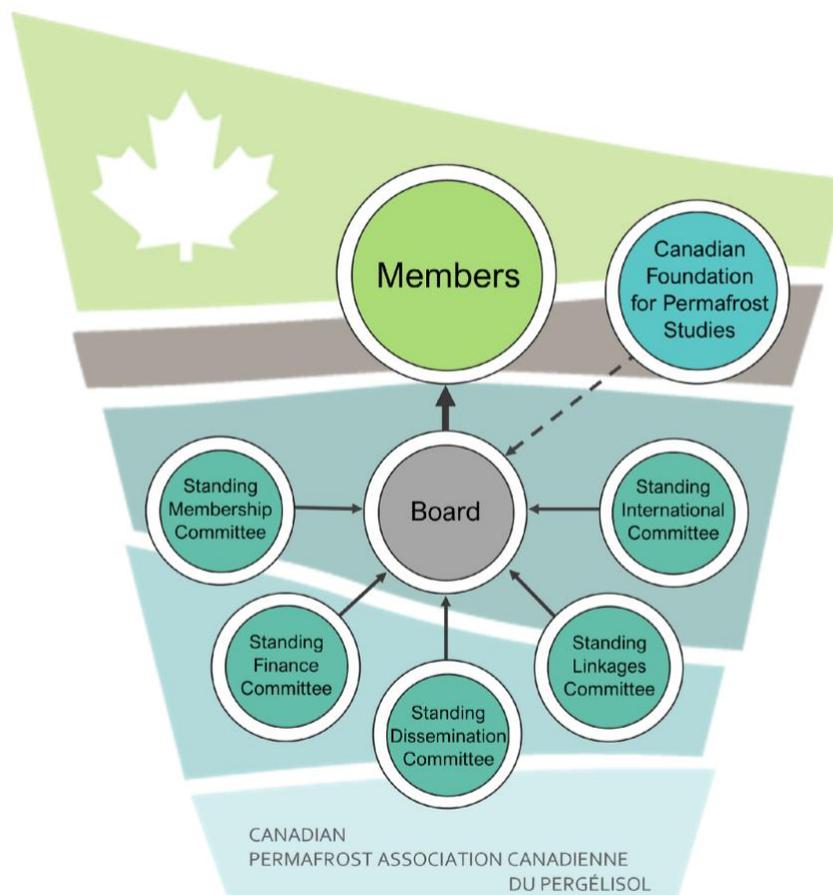


Figure 1. Future organizational structure of the CPA



PROCESS TO DEVELOP THIS PLAN

The CPA Board informed members at the Annual Meeting in Québec City in August 2019 that it would develop a Strategic Plan for the Association that would be presented for approval at the Annual Meeting in 2020.

A call for volunteers to sit on the Strategic Planning Committee (SPC) and for topics to be included in the plan went out to the membership in the February 2020 newsletter. Subsequently, the CPA Board approved the following as members of the SPC in April 2020:



Antoni Lewkowicz (co-chair and CPA Past-President)
 Pooneh Maghoul (co-chair and CPA member)
 Peter Morse (CPA Secretary)
 Brendan O'Neill (CPA member)
 Jason Smith (CPA Board Member-at-Large)
 Eva Stephani (CPA member)

The SPC met six times by videoconference from April to June 2020 and produced an initial draft on June 30, 2020. The actions proposed are designed to enhance knowledge exchange over the next five years among all Canadians interested in permafrost in order to make progress in understanding permafrost environments.

The draft plan was reviewed and approved by the CPA Board at its meeting on July 10, 2020 subject to a number of minor changes. The current “for member review” version (v1.1) includes those modifications. The plan document was then translated into French and posted on the CPA's web-site on August 15, 2020 for comment. Members are requested to provide their feedback on the plan by September 15, 2020 (see links through the document).

Further revisions are expected following this round of consultation and the final version of the plan, as approved by the Board, is expected to be published on October 15, 2020. Approval by a vote of the membership will be sought at the Annual Meeting of members in November 2020.



THEMES

The activities of the Canadian Permafrost Association are grouped into **five** interwoven themes within this Strategic Plan (Figure 2):

1. **Membership**, including services to CPA members.
2. **Finances**, including the development of a charitable arm of the CPA.
3. **Dissemination of Permafrost Knowledge**, including Outreach & Education, Technical Training, Online Resources, Conferences, and Targeted Activities.
4. **Linkages**, including with northern communities and other associations.
5. **Prominence**, including within Canada and on an international stage.

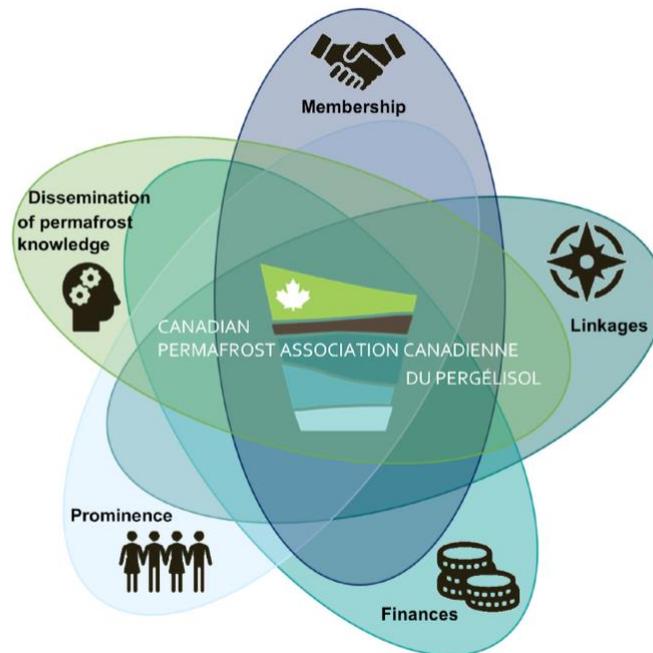


Figure 2. CPA activity themes

Each theme is structured as follows:

- **Vision:** the rationale for the theme being a significant part of the strategy for the CPA.
- **Context:** information on current state of the theme within the CPA and/or external conditions relating to the theme.
- **Objectives:** the specific goals to be achieved by 2025.
- **Actions:** the actions to be taken in order to achieve the objectives.
- **Metrics:** the measures to be used to track progress towards achieving the objectives.





Membership

Vision

The CPA wishes to attract individuals and groups interested in permafrost in Canada as members who actively participate and support the Association. This interest may be because permafrost is a central focus of a member's research or education (e.g. academic and government scientists and engineers, graduate students), a critical element to be dealt with as part of employment or corporate activities (e.g. northern infrastructure managers, transportation engineers, consulting companies), or a factor that affects rights and livelihoods (e.g. northern communities, First Nations, Inuit and other Indigenous groups).

The **MEMBERSHIP** theme aims to bring diverse individuals and groups together to build capacity and knowledge with respect to permafrost environments and related issues. An important element is to provide exclusive member benefits so that existing members renew annually or switch to become lifetime members, and new individuals and groups decide to join the Association.

Context

The importance of permafrost and the breadth of the domain in Canada will continue to grow over the next 5 years. The CPA is a young organization and should expect to increase in size in its first few years as it becomes better known and respected (see the **PROMINENCE** theme).

The total number of members effectively remained constant between May 2019 (114) and May 2020 (115). The CPA has not tracked its members in terms of sub-field, nor in relation to equity and diversity. Membership in the community category, in particular, is not high enough at present for the CPA to fulfil its mission to bring together all those interested in permafrost.

Although membership renewal rates have been high, the benefits of joining the CPA have not been fully articulated and communicated.

Objectives

- **TARGETS:** Membership targets for 2025 should be higher than present levels in all categories, but especially for northern communities.
- **DIVERSITY:**
 - Member diversity should be maintained or increased to ensure the vibrancy of the CPA. This objective will also be supported by actions within the **LINKAGES** theme.
 - An interdisciplinary mix of scientists (including geocryologists, geoscientists, hydrologists, ecologists and remote sensing experts), engineers, and information



users must be maintained, including individuals at all career stages. None of the groups should exceed two-thirds of the CPA's members.

- Good sectoral representation, including government, industry, academia and communities must be maintained.
- **NORTHERN REPRESENTATION:** Good geographical representation should be maintained with northern community members and Indigenous groups in all three Territories and relevant Provinces.
- **MEMBER BENEFITS:** Members should be provided with a range of exclusive benefits and services that encourage existing members to renew their affiliation annually or to become lifetime members, and that incite non-members to join the CPA.

Actions

- **STANDING MEMBERSHIP COMMITTEE:** Establish a Standing Membership Committee (SMC) that is composed of a Chair and between two and four members, and which reports to the CPA Secretary. The mandate of the SMC is to solicit new members, retain existing members, increase engagement of CPA members in activities, propose innovative member services to the Board, and to implement these services once they are approved. The SMC also monitors progress toward membership targets.
- **MEMBERSHIP CATEGORY:** Develop a new membership category or redefine the Community Membership category to better represent First Nations and Inuit, to ensure greater representation of Indigenous peoples in the CPA.
- **MEMBER CENSUS:** Request CPA members to voluntarily self-identify during the membership renewal process, in terms of domain (science, engineering, policy, other), gender, racialized group, and Indigenous heritage, to enable the CPA to track its progress in equity, diversity, and inclusion.
- **MEMBER BENEFITS:** Develop and clearly communicate the following benefits:
 - **Reduced registration costs:** Provide members with a reduced registration fee for Canadian permafrost conferences and other CPA activities (e.g., training, workshops).
 - **Travel bursaries for early career members:** Students and other early career members have access to travel support (potentially on a competitive basis) to attend CPA meetings and other permafrost conferences.
 - **CPA Awards:** The awards currently open to CPA members are:
 - ✓ Hugh M. French Award for outstanding contributions to permafrost science and/or periglacial geomorphology over a career (awarded every second year)
 - ✓ Mackay Lecture, for research excellence in permafrost studies, given at each Canadian Permafrost Conference and jointly awarded with CNC-IPA.

Additional awards should be developed over the next five years, including for early career researchers, northern partners, and for service to the Association.



- **Newsletter:** Distribute a quarterly newsletter describing CPA developments, information on conferences and meetings, a letter from the president, and other relevant information.
- **Article series:** Develop a short, peer-reviewed article series on topics of interest to the Canadian or international permafrost community.
- **Online resources:** Produce or host online resources with login required for access, such as:
 - ✓ Proceedings of Canadian Permafrost Conferences.
 - ✓ A guide on research licensing requirements by provinces/territory.
 - ✓ A searchable directory of members with information on specializations (by keywords). Members may also opt to have their information displayed on a public-facing directory.
 - ✓ An employment opportunities web page.
 - ✓ A student opportunities web page.
- **Member satisfaction:** Measure satisfaction with member services by an annual survey distributed during the renewal process.

Metrics

- By 2025, the CPA's membership should increase by 50% (+58) relative to the 115 members at present (May 31, 2020) for a total of 173 members. Increases in the various categories are envisaged as follows:
 - Regular: 78 (+16)
 - Early Career: 50 (+16)
 - Lifetime: 15 (+5)
 - Corporate 8 (+2)
 - Institutional: 6 (+2)
 - Community: 16 (+15) Note: category title may change (see above).
- Within the enlarged CPA, diversity targets for all membership categories (individual and group) are:
 - At least 30% of all members reside or are based in permafrost regions (currently 25% of individual members live in the three Territories).
- Within the enlarged CPA, diversity targets for individual members are:
 - Individual members from academia, all levels of government (Federal, Provincial, all three Territories and Local), consulting and other industries, and nonprofits.
 - At least 33% of members from science and 33% from engineering.
 - At least 35% of individual members to be female (current estimate from the list of member names is 32%).
 - At least 35% Early Career (currently 32%).



- Annual increases in the number of members identifying as Indigenous or racialized (no data at present).
- Member services to be evaluated from:
 - Membership renewal rate greater than 90%.
 - More than 90% of members satisfied or very satisfied with member services.
 - Exit interviews with members not renewing.
 - Number and percentage of discounts and travel bursaries provided to members for conferences and other activities.
 - Four newsletters distributed to members annually.
 - Article series:
 - ✓ 2021: establish editorial board, register for DOI, publish introductory article.
 - ✓ 2022-2025: publish 6-10 articles annually.
 - Regular attribution of existing CPA awards and at least two new awards to be developed by 2023. Funding (where required) to support the awards to come from the Canadian Foundation for Permafrost Studies.

Click [here](#) to submit feedback on the MEMBERSHIP theme before September 15, 2020. Comments will be recorded anonymously unless you choose to add your name.





Finances

Vision

Strong **FINANCES** will ensure that the CPA has the resources available to carry out its mission over the long term, and to develop reserves sufficient to function for 12 months if revenues unexpectedly drop. The **FINANCES** theme is the responsibility of the CPA Board with handling of funds and annual budget development in the hands of the CPA Treasurer. A portion of the **FINANCES** theme relates to the incorporation and successful operation of the Canadian Foundation for Permafrost Studies as a charitable arm of the CPA.

Context

Annual revenue and expenses are currently budgeted at \$18.5K, with 84% of revenue from memberships and 16% from the annual meeting. Expenses relate to operational costs, such as web-hosting and insurance, and bursaries for students to participate in selected permafrost conferences. The CPA has achieved a healthy bank balance (approximately \$31K as of May 15, 2020) thanks to an initial take-up of CPA membership by lifetime members, a contract that was awarded to the CPA by GNWT to produce a literature review on transportation infrastructure and permafrost, a high rate of membership renewal, and financially successful conferences in 2018 and 2019. At the same time, expenses have been kept to a minimum.

The CPA is a not-for-profit corporation and not a charitable organization. This limits the Association's attractiveness to raise funds for educational purposes as charitable receipts cannot be issued. The Board has proposed and the membership has agreed that an important step forward is to establish the Canadian Foundation for Permafrost Studies (CFPS - name to be confirmed) as a separate charitable arm of the Association whose specific role would be to raise funds to (1) support student bursaries (2) fund CPA awards of excellence, (3) give public lectures in the North, (4) fund a lecture series, and (5) provide seed funding for research. This would allow the Association's budget to be used for other relevant but non-charitable purposes.

Objectives

- **BUDGET:** Double the annual budget by 2025 to permit the CPA to increase funding for existing activities and fund new ones.
- **REVENUE:** Develop new sources of revenue so that the organization is less dependent on membership dues.
- **RESERVE:** By 2025, build up and set aside a reserve equal to the annual budget for that year.
- **CHARITABLE STATUS:** Legally incorporate the CFPS and work with its Board to support the CPA's educational objectives.



Actions

- **STANDING FINANCE COMMITTEE:** Establish a Standing Finance Committee (SFC) that is composed of a Chair and between two and four members, and which reports to the CPA Treasurer. The mandate of the SFC is to develop and implement ideas to increase revenues, including attracting donations from foundations, industry and individuals.
- **REVENUE:** Achieving the targets for membership (see **MEMBERSHIP** theme) will raise approximately \$5K per year by 2025. This means that the Standing Finance Committee must implement actions to raise a further \$13.5K per year.
- **CHARITABLE STATUS:** Complete legal incorporation of the Canadian Foundation for Permafrost Studies by December 2020.

Metrics

- Total budget to reach \$37K by 2025.
- Financial reserve to reach \$37K by 2025.
- Membership dues to constitute less than 60% of the Annual Budget by 2025.
- Canadian Foundation for Permafrost Studies to fund \$50K of travel bursaries for ICOP2024 in Whitehorse and fund \$20K of awards and bursaries annually by 2025.

Click [here](#) to submit feedback on the FINANCES theme before September 15, 2020. Comments will be recorded anonymously unless you choose to add your name.





Dissemination of Permafrost Knowledge

Vision

DISSEMINATION OF PERMAFROST KNOWLEDGE increases the sharing of information about permafrost to a variety of audiences, including northern community members, practitioners, government officials, and academics in numerous disciplines. Knowledge creation through discussions and exchanges among CPA members with differing backgrounds is an essential element of this dissemination.

Context

The mission of the CPA is to bring communities, researchers and practitioners together to advance understanding of permafrost environments.

In its first 28 months, the CPA has supported this mission by: (1) developing a website and social media accounts, and producing regular newsletters; (2) organizing two technical meetings; (3) being represented at several other conferences; (4) writing a literature review on cold regions transportation engineering; (5) providing conference bursaries for early career members; (6) providing funding for the Eighth Canadian Permafrost Conference; (7) bestowing the CPA Hugh French Award for the first time; and (8) submitting a winning proposal to host the 2024 International Conference on Permafrost in Whitehorse, Yukon (ICOP2024).

Numerous opportunities for knowledge dissemination exist, but the Association has not been able to take advantage of all of these because of limited capacity within the Board which until now, has been the sole vehicle for action within the Association.

Strengthening the **DISSEMINATION OF PERMAFROST KNOWLEDGE** is essential for the CPA to achieve its constitutional objectives.

Objectives

- **OUTREACH & EDUCATION:** Establish a Standing Dissemination Committee (SDC) that is composed of a Chair and between three and five members, and which reports to the CPA Communications Director. The mandate of the SDC is to facilitate the activities of the CPA to raise public awareness of permafrost issues, make contributions to permafrost education, and highlight both CPA synthesis products and permafrost research carried out by CPA members.
- **TARGETED ACTIVITIES:** Support targeted activities proposed by CPA members to the Board or initiated by the Board itself. Once approved, these activities are carried out by groups of members established for a limited time in order to address a specific issue.
- **TECHNICAL TRAINING:** Provide training opportunities through **TARGETED ACTIVITIES** that (1) promote interdisciplinary approaches to permafrost, especially between permafrost science and engineering, (2) promote engineering practices adapted to



permafrost terrain, and (3) support capacity-building in northern communities for sustainable development.

- **ONLINE RESOURCES:** Provide the public and members with web content that accurately disseminates information about permafrost.
- **CONFERENCES AND ANNUAL MEETING:** Organize annual technical meetings as specified in the By-Laws, initiate Canadian Permafrost Conferences at intervals, and every 15-20 years propose the hosting within Canada of an IPA Regional or International Conference on Permafrost. Sponsor permafrost-focused sessions at appropriate conferences organized by other organizations to promote information exchange between CPA members and individuals and groups outside the Association.

Actions

- **OUTREACH & EDUCATION:**

- **Establishment of a Standing Dissemination Committee**

- ✓ Proposes strategies to the CPA Board to engage with new and/or external audiences (e.g., permafrost introduction course, workshops, science slams, public lectures, discussion groups, "vendor booth") and implements those approved.
- ✓ Encourages members to propose **TARGETED ACTIVITIES** that result in the creation of synthesis products (e.g., reports, whitepapers, maps, and databases).
- ✓ Disseminates newly-released Canadian permafrost research.
- ✓ Supports the development and dissemination of resources for K-12 education, especially to northern communities.
- ✓ Provides content to the Communications Director and website manager.
- ✓ Coordinates with the Standing Linkages Committee to link with external audiences.
- ✓ SDC membership takes equity, diversity and inclusion into account, in order to incorporate many possible perspectives.

- **TARGETED ACTIVITIES:**

- **Action Groups**

- ✓ Established through a proposal to the Board for funding of targeted work towards the production of well-defined products such as courses, maps, science plans, books, reports, whitepapers, or databases, that can be supported through the organization of workshops, management support, technical support, etc.
- ✓ Funded on a competitive basis at up to \$1500 per year for two years (renewable for an additional two years). Target of \$3000 per year of the CPA budget to be devoted to Action Groups.
- ✓ Reports on activities and finances to the Board each year.



- **Interest Groups**

- ✓ Established through a proposal to the Board for approval.
- ✓ Address scientific and engineering issues in a problem-solving context, often focusing on communication and collaboration surrounding a specific topic (e.g., Permafrost Carbon; Geothermal; Geomechanics; Northern Infrastructure; bridging the gap between permafrost science and engineering).
- ✓ Creates and sustains formalized pathways for CPA members to give feedback on the focus on the Interest Group.
- ✓ Reports on activities to the Board each year.

- **TECHNICAL TRAINING:**

- **Course on Permafrost and Sustainable Development**

- ✓ Develop a standardized permafrost course that integrates methods and techniques from science and engineering and covers critical knowledge required for professionals (e.g., geoscientists, geologists, and engineers) practicing in permafrost regions.
- ✓ Lobby provincial and territorial professional associations to consider the course essential for professional licensing and/or develop a stand-alone CPA certification program.

- **Short Courses on Permafrost**

- ✓ Develop new short courses as **TARGETED ACTIVITIES** to support diffusion of permafrost knowledge in Canada and help identify needs for future training.
- ✓ Promote existing short courses that are given by CPA members at various institutions.

- **ONLINE RESOURCES:**

- Host web pages on pertinent themes (e.g., engineering, available data, mapping) with links and references to useful resources (textbooks, government Open Files, portals).
- Satisfaction with online resources to be polled annually during renewal (same poll as for member services).

- **CONFERENCES and ANNUAL TECHNICAL MEETING:**

- Host CPA stand-alone annual technical meeting when there is no appropriate larger meeting with which to partner.
- Host the 13th International Conference on Permafrost in Whitehorse (ICOP2024):
 - ✓ Support the National Organizing Committee and the other committees charged with organizing ICOP2024 over the next 3-4 years to ensure a highly successful conference.
 - ✓ Present ICOP2024 planning activities in sessions within other conferences.



- Disseminate information regarding CPA activities at the Annual Technical Meeting, at the conferences of affiliated associations, and at IPA-linked permafrost conferences (Boulder, USA (2021), Lanzhou, China (2022), and Puicerdà, Spain (2023)).

Metrics

- **OUTREACH & EDUCATION:**

- ***Standing Dissemination Committee***

- 3 strategies implemented each year.
- 2 resources developed or disseminated to support K-12 education (including in northern communities) each year.
- 1 synthesis product developed each year.
- Public lecture series established in 2021.
- Short (0.5 to 1 day), interactive permafrost introduction course developed by 2022 to increase awareness of permafrost sensitivity and needs for sustainable development.
- Short course presented at least twice a year.
- Short course offered at every Annual Meeting held in the North.
- Vendor booth set up at conferences/forums to promote CPA at least once each year.
- Content provided in a timely manner to the Communications Director and website manager.
- SDC demonstrates coordination with the Standing Linkages Committee.
- SDC membership demonstrates equity, diversity and inclusion.

- **TARGETED ACTIVITIES:**

- ***Action Groups***

- ✓ Outputs delivered according to proposal.
- ✓ Demonstration that annual funding was spent.
- ✓ At least one active Action Group each year.
- ✓ Report on activities and finances delivered to the Board each year.

- ***Interest Groups***

- ✓ Interest groups formed according to proposal.
- ✓ Demonstration that annual funding (if awarded) was spent.
- ✓ At least two active Interest Groups each year.
- ✓ Report on activities delivered to Board each year.



- **TECHNICAL TRAINING:**

- ***Course on Permafrost and Sustainable Development***

- ✓ Develop the course content in 2021-2023.
- ✓ Course taught at an institution in 2023.
- ✓ Lobby provincial and territorial professional licensing bodies in 2023-2025.
- ✓ Course adopted for professional licensing in Canada in 2025 or incorporated into a stand-alone CPA Certification Program.

- ***Short Courses in Permafrost***

- ✓ Develop two short courses by 2023.
- ✓ Deliver annually in 2024-2025.

- **ONLINE RESOURCES:**

- Increase web traffic to online resources by at least 10% per year.
- Satisfaction from member poll maintained >80%.

- **CONFERENCES and ANNUAL TECHNICAL MEETINGS:**

- Run a successful annual technical meeting in the North in 2022, and hold the Annual Meeting of members as part of ICOP2024 in Whitehorse.
- Organize annual technical meetings in southern Canada in 2021, 2023 and 2025, as stand-alone events or in collaboration with affiliated associations.
-

Click [here](#) to submit feedback on the **DISSEMINATION OF PERMAFROST KNOWLEDGE** theme before **September 15, 2020**. Comments will be recorded **anonymously unless you choose to add your name**.





Linkages

Vision

LINKAGES enable the CPA to develop connections and strategic partnerships with other organizations, associations, and northern communities interested in permafrost. Increasing the number and strength of linkages will serve to augment dissemination of permafrost knowledge and the prominence of the CPA.

Context

Currently, the linkages between the CPA and other regional and national organizations are mainly based on individual members who are actively involved in both (or more) organizations. One partnership has been established with the Canadian Geotechnical Society, in which a joint membership has been negotiated with reduced dues. However, there are many northern communities, professional associations, organizations, Indigenous groups and other bodies with interests and mandates that are related to permafrost.

Objectives

- **INTER-ASSOCIATION LINKAGES:**
 - Promote communication across associations, disciplines, and countries.
 - Facilitate inter-association collaborations.
 - Limit duplication of efforts.
- **NORTHERN LINKAGES:**
 - Support capacity-building in the North in relation to permafrost knowledge.
 - Promote sustainable development in relation to permafrost.
 - Improve communication between communities, practitioners, and academics as economic development and research activities intensify in the permafrost regions of Canada.

Actions

- **CREATION OF A STANDING LINKAGES COMMITTEE:** Establish a Standing Linkages Committee (SLC) composed of a Chair and between two and four members with interdisciplinary backgrounds, which reports to the CPA President-Elect or Past President. The mandate of the SLC is to network with Canadian associations and national associations in other countries, and with northern communities.
- **INTER-ASSOCIATION LINKAGES:**
 - Offer joint memberships for associations at reduced rates. Discounted rates will be negotiated between the CPA and other associations. Since some joint memberships already exist between potential partner associations, the CPA



should seek the development of new, multi-association combination memberships.

- Further the formation of interdisciplinary committees and working groups within the CPA and between the CPA and its partner associations to promote and foster the strength of combined efforts at a national level.
- Offer special sessions and short courses at conferences organized by partner associations.
- Invite special sessions and keynote presentations from our partner associations at the CPA Annual Technical Meeting and other CPA events.
- Co-sponsor and co-organize conferences, thematic workshops, webinars or lecture series, and offer discounted registration fees.
- Create awards and scholarships with partner associations to highlight permafrost aspects in their respected fields.
- Write short articles and provide information for magazines, web pages or social media outlets run by our partner associations and offer to highlight their news and activities on the CPA website.
- Promote social media postings from our partner associations through the CPA social media network.
- Promote the publication of scientific articles in journals managed and edited by partner associations.
- Support policy-making relative to permafrost in the field of our partner associations.

- **NORTHERN COMMUNITY LINKAGES:**

- SLC reaches out to northern communities for input on how the CPA can support their sustainable development on permafrost terrain and follows up on progress.
- SLC and Standing Dissemination Committee (SDC) coordinate outreach and training activities in northern communities by researchers, ensuring optimized outreach across associations and disciplines and limiting duplication.
- SLC and SDC develop a list of willing contacts and suitable materials for communicating permafrost information to members of northern communities.
- CPA advertises training and job opportunities for northern community members on its web-site.
- The following objective is added to the CPA Constitution and By-Laws: "To support northern Canadian communities affected by changes in permafrost environments."

Metrics

- **STANDING LINKAGES COMMITTEE:**

- SLC established by January 2021.



- **INTER-ASSOCIATION LINKAGES:**

- Co-sponsor at least one session per year at the conference of an affiliated organization.
- By 2022, develop a MOU between the CPA and the USPA on how to support each other's interests and plans for joint working groups.
- By 2025, joint memberships established with at least five affiliated organizations.
- By 2025, sponsor a minimum of three early career researchers per year to present permafrost-related research at conferences organized by affiliated organizations.
- By 2025, invite established researchers or professionals from two affiliated organizations for a keynote presentation at the CPA annual Technical meeting.

- **NORTHERN COMMUNITY LINKAGES:**

- By 2022, establish partnerships with at least two northern communities or Indigenous organizations. Each partnership will be tailored to the specific geography, needs and interests of the partner in relation to permafrost.
- By 2025, establish at least five more partnerships with northern communities or Indigenous organizations.

Click [here](#) to submit feedback on the LINKAGES theme before September 15, 2020. Comments will be recorded anonymously unless you choose to add your name.





Prominence

Vision

The CPA should become a primary point of contact for all national and international organizations interested in permafrost in Canada. Achieving this **PROMINENCE** is partly an outcome of the other four themes, especially the dissemination of accurate, useful information about permafrost, as well as success in the specific actions and objectives described below. The CPA's profile should be promoted by joining broader associations, while the success of individual members in obtaining prizes and awards will raise the visibility and reputation of the field and help attract the next generation of researchers.

Context

The CPA is well-positioned to represent all those interested in permafrost in Canada and to be the face of Canadian permafrost science, engineering and policy studies internationally. There is no competing organization in Canada that covers permafrost holistically.

At the international level, the body currently representing Canada at the International Permafrost Association is the Canadian National Committee for the IPA (CNC-IPA) whose members are appointed by Natural Resources Canada (NRCan). NRCan hosts the Secretariat while the National Research Council (NRC) pays the dues to the IPA. This arrangement exists because, for the 35 years prior to 2018 when the CPA was formed, CNC-IPA was the sole actor representing permafrost in Canada. The CPA By-Laws state that the Board must maintain close links with the CNC-IPA. However, this is challenging because the two are formed and function independently. More direct links between the CPA and the IPA are desirable which requires a reorganization of the relationship between the CPA, CNC-IPA and the IPA.

At present, the CPA is not a member of any broader organization.

Objectives

- **IPA:**
 - Create direct links with the IPA by changing the relationship between the CPA and the CNC-IPA so that the latter is constituted on the advice of the CPA and operates within the Association.
 - Nominate CPA members as credible candidates for the IPA's Executive Committee so that to the extent possible, it continuously includes a Canadian.
- **EXTERNAL AWARDS:**
 - Raise the profile of Canadian permafrost research by regularly proposing Canadians for national and international awards for excellence in permafrost geoscience and engineering.



- **HIGH-LEVEL ORGANIZATIONS:**

- Apply for membership in higher level scientific and engineering organizations in Canada (e.g. PAGSE, Canadian Federation of Earth Sciences).

Actions

- **CREATION OF A STANDING INTERNATIONAL COMMITTEE:**

- Establish a Standing International Committee (SIC) that is composed of the members of CNC-IPA and which reports to the CPA President. The mandate of the SIC is to act as the interlocutor between the CPA and the IPA on matters relating to the international permafrost community, including at the IPA Council.
- The current arrangement in which NRCan houses the CNC-IPA Secretariat and NRC pays Canada's annual dues to the IPA should be maintained for the next 5 years.
- SIC members serve for the same term as their CNC-IPA appointments (normally the four years between ICOPs). When CNC-IPA members are approaching the end of their terms, the CPA Board makes recommendations to NRCan regarding the composition of the next CNC-IPA and SIC.

- **NOMINATIONS FOR IPA EXECUTIVE COMMITTEE:**

- Propose strong candidacies for the IPA Executive Committee and for other organizations (e.g. IASC) by mentoring CPA members interested in serving their Association and increasing responsibilities as they rotate through CPA standing committees, action groups and the Board.

- **NOMINATIONS FOR EXTERNAL AWARDS:**

- Constitute the two CPA Board members-at-large as a committee responsible for developing nominations of CPA members, including early career researchers, for external national and international prizes and awards, such as those for engineering and geoscience.
- This committee will also generate nominations for CPA's own awards where this is required by the terms linked to each award.

- **HIGHER-LEVEL ORGANIZATIONS:**

- CPA Board to evaluate the benefits and costs of potential memberships in higher-level societies and groups, and decide on which to join.

Metrics

- Standing International Committee established by January 2021.
- Continual presence of a CPA member on the IPA Executive Committee.
- Number of successful nominations of its members by the CPA for national and international awards.



- Number and pertinence of higher-level associations joined.

Click [here](#) to submit feedback on the PROMINENCE theme before September 15, 2020. Comments will be recorded anonymously unless you choose to add your name.



PLAN SUMMARY

This five-year (2021-2025) Strategic Plan, based upon the mission of the CPA, presents five ambitious themes: (1) **MEMBERSHIP**, (2) **FINANCES**, (3) **DISSEMINATION of PERMAFROST KNOWLEDGE**, (4) **LINKAGES** and (5) **PROMINENCE**, each with its own vision, objectives, actions to meet the objectives, and clear metrics with which to evaluate the Association's progress and success.

The Strategic Plan requires CPA members outside the Board to take on leading roles in the CPA's operations within five new Standing Committees (Table 1).

Table 1. Proposed CPA Standing Committees

TITLE	MEMBERSHIP ¹	MANDATE	REPORTS TO
Standing Membership Committee	Chair plus 2-4 members	Retain existing members and attract new ones: increase member engagement and activities: propose and implement new member services; monitor progress toward membership targets.	CPA Secretary
Standing Finances Committee	Chair plus 2-4 members	Develop and implement ideas to increase revenue, including attracting funding from foundations, industry and individuals.	CPA Treasurer
Standing Dissemination Committee	Chair plus 3-5 members	Propose and implement strategies to engage with external audiences; develop targeted activities, technical training, workshops and conferences.	CPA Communications Director
Standing Linkages Committee	Chair plus 2-4 members	Network with national associations in Canada and elsewhere, and northern communities, to enhance linkages, respond to needs and support capacity development relating to permafrost.	CPA President-Elect or Past-President
Standing International Committee	Chair plus 4 members appointed as CNC-IPA by NRCan	Act as the interlocutor between the CPA and IPA, and represent Canada on the IPA Council.	CPA President

¹ Note: At least one member of each Standing Committee will be an Early Career Member.



The Strategic Plan, summarized in Table 2, establishes major goals that include enlarging the membership and improving their tangible benefits, ensuring the CPA's long-term financial stability, strengthening the linkages between the CPA and relevant organizations, associations, and northern communities, and raising the prominence of the CPA, nationally and internationally, so that it becomes known as the primary contact with respect to permafrost issues, interests, and activities in Canada.

Taking the steps envisaged in this plan will result in the CPA actively fulfilling its mission to advance knowledge by bringing together all those interested in permafrost in Canada, and will lead to a larger, more diverse, and vibrant Association of international renown.

Table 2. Summary of the main CPA Strategic Plan Objectives (2021-2025)

THEMES	COMPONENTS	OBJECTIVES
MEMBERSHIP	<i>Targets</i>	Membership targets for 2025 should be higher than present levels in all categories, but especially for northern communities.
	<i>Diversity</i>	Member diversity should be maintained or increased to ensure the vibrancy of the CPA. This objective will also be served by actions within the LINKAGES theme.
	<i>Northern Representation</i>	Good geographical representation should be maintained, with northern community members and Indigenous group members from all three Territories and relevant Provinces.
	<i>Benefits</i>	Members should be provided with a range of exclusive benefits and services that will encourage existing members to renew annually (or acquire lifetime membership) and non-members to join the CPA.
FINANCES	<i>Budget</i>	Double the annual budget by 2025 to permit the CPA to increase funding for existing activities and fund new ones.
	<i>Revenue</i>	Develop new sources of revenue so that the organization is less dependent on membership dues.
	<i>Reserve</i>	By 2025, build up and set aside a reserve equal to the annual budget for that year.
	<i>Charitable Status</i>	Incorporate the CFPS and work with its Board to support the CPA's educational objectives.
DISSEMINATION OF PERMAFROST KNOWLEDGE	<i>Outreach & Education</i>	Raise public awareness of permafrost issues, make contributions to permafrost education, and highlight both CPA synthesis products and permafrost research carried out by CPA members.
	<i>Targeted Activities</i>	Support targeted activities proposed by CPA members to the Board or initiated by the Board itself; once approved, these activities are carried out by groups of members established for a limited time in order to address a specific issue.

...Continued on page 28



Table 2. Continued.

THEMES	COMPONENTS	OBJECTIVES
DISSEMINATION OF PERMAFROST KNOWLEDGE (continued)	<i>Technical Training</i>	Provide training opportunities through targeted activities that (1) promote interdisciplinary approaches to permafrost, especially between permafrost science and engineering, (2) promote engineering practices adapted to permafrost terrain, and (3) support capacity building in northern communities for sustainable development on permafrost.
	<i>Online Resources</i>	Provide the public and members with accurate and appropriate web content in relation to permafrost issues.
	<i>Conferences and Annual Technical Meeting</i>	Run annual technical meetings as specified in the By-Laws, initiate Canadian Permafrost Conferences at intervals, and propose Regional or International Conferences on Permafrost (ICOP) to the International Permafrost Association every 15-20 years. Sponsor permafrost-focused sessions at conferences organized by other organizations to promote information exchange between CPA members and individuals and groups outside the Association. Run a successful ICOP in Whitehorse in 2024.
LINKAGES	<i>Inter-Association Linkages</i>	(1) Promote communication across associations, disciplines, and countries, (2) facilitate inter-association collaborations, and (3) limit duplication of efforts.
	<i>Northern Linkages</i>	Develop partnerships that support sustainable development and capacity building in northern communities and Indigenous groups, and improve communication between communities, practitioners, and academics.
PROMINENCE	<i>IPA</i>	Create direct links with the IPA by changing the relationship between the CPA and the CNC-IPA so that the latter is constituted as a Standing International Committee on the advice of the CPA and operates within the Association. Nominate credible candidates so that the IPA's Executive Committee continually includes a CPA member.
	<i>Excellence Awards</i>	Raise the profile of Canadian permafrost research by regularly proposing CPA members for national and international awards for excellence in permafrost geoscience and engineering.
	<i>High-Level Organizations</i>	Apply for membership in higher level scientific and engineering organizations in Canada (e.g. PAGSE, CFES).

Click [here](#) to submit feedback on the PLAN AS A WHOLE before September 15, 2020. Comments will be recorded anonymously unless you choose to add your name.



LIST OF ACRONYMS

CFES	Canadian Federation of Earth Sciences
CFPS	Canadian Foundation for Permafrost Studies
CNC-IPA	Canadian National Committee for the International Permafrost Association
CPA	Canadian Permafrost Association
GNWT	Government of the Northwest Territories
IASC	International Arctic Science Committee
ICOP	International Conference on Permafrost
ICOP2024	13 th International Conference on Permafrost, Whitehorse, June 2024
IPA	International Permafrost Association
NRC	National Research Council of Canada
NRCan	Natural Resources Canada
PAGSE	Partnership Group for Science and Engineering
SDC	Standing Dissemination Committee (of the CPA)
SFC	Standing Finance Committee (of the CPA)
SIC	Standing International Committee (of the CPA)
SLC	Standing Linkages Committee (of the CPA)
SMC	Standing Membership Committee (of the CPA)
SPC	Strategic Planning Committee (of the CPA)
USPA	United States Permafrost Association

