

Framework for Assessment in the Licensing of Geoscientists in Canada



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The opinions and interpretations in this document are those of the author and do not necessarily reflect those of the Government of Canada.

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Framework for Assessment in the Licensing of Geoscientists in Canada

1. Preamble

Geoscientists Canada is a national consortium of *regulators*¹ who are the independent self-governing bodies whose responsibilities include issuing *licenses* for geoscience practice in Canada's provinces and territories.

Geoscientists Canada supports its members in a variety of ways, including championing, in the public interest, effective regulation and the alignment of regulation of the profession of geoscience Canada-wide. Geoscientists Canada also undertakes to enhance public confidence in the competency and integrity of geoscientists in the practice of their profession, and to provide a voice nationally and internationally for the provincial and territorial geoscience regulators. .

In order to practice *geoscience* in Canada, all persons are required by law to *register* with, and be *licensed* by, the *regulatory body* of the province(s) or territory(ies) in which they intend to practice independent *professional geoscience*. Only those who have been registered/*licensed* may use the title "Professional Geoscientist"; and/or any other regulated geoscience designations or terms.

This framework has been developed to promote consistency and transparency in the processes used by the *regulators* for the *licensing* of those who wish to practise geoscience in Canada. The framework has not been formed with the intention of prescribing the steps to be used by each *regulator*. Instead, it is intended to provide the principles of the assessment processes used by each *regulator* and incorporate the requirements for the *licensure* of all applicants, regardless of their country of education, as outlined in the document 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada'.

2. Glossary

Terms used in this document may have different definitions in some *jurisdictions*. For the purpose of this framework, the term *licensure* will be used to represent *licensure, registration, membership* or all of these terms. Likewise, *license* will be used to represent *license, registration* and/or *membership*. Terms in italics are defined in the Glossary appended.

3. Framework Objectives

The primary goal of this framework on assessment for the *licensing* of geoscientists in Canada is to harmonize the assessment of *qualifications* so that assessments are completed in a consistent and fair manner across the country. This will increase global mobility of the geoscience workforce. This framework has also been designed to ensure that the process used to *license* practitioners meets the evolving requirements of governmental overseers such as Fairness Commissions.

It is not the intention of this framework to supersede the regulations as prescribed by the *regulators*, but rather it is to build upon current similar procedures. Ultimately, it is the responsibility of the *regulator* to determine suitability for *licensure* within its *jurisdiction* to ensure public protection and protection of and respect for the environment.

This framework also provides the foundation for the eventual development of Mutual Recognition Agreements (MRAs) or Memoranda of Understanding (MOUs) with other countries, and promotes the

Engineers and Geoscientists British Columbia, Association of Professional Engineers and Geoscientists of Alberta, Association of Professional Engineers and Geoscientists of Saskatchewan, Engineers Geoscientists Manitoba, Professional Engineers and Geoscientists of Newfoundland and Labrador, Professional Geoscientists Ontario, Engineers and Geoscientists New Brunswick, Geoscientists Nova Scotia, Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists

recognition that Canadian professional geoscientists are required to meet a high common standard. To that end, the processes included in this framework are designed to promote best practices for assessment which can be applied to both Canadian and *internationally trained* applicants.

The processes included in this framework have been developed to *harmonize* admissions methods and policies and to create a more transparent policy for both domestically and *internationally trained* applicants seeking *licensure* in Canada. The framework has been designed with the basic principles of fairness, transparency, timeliness, consistency and reliability² embedded throughout.

The framework promotes clarity of expectations related to *licensure* of geoscientists in Canada while allowing for improved communication of the process requirements for both Canadian and internationally educated and trained applicants. It facilitates mutual understanding and agreed use of consistent terminology. It provides benchmarks for quality control and assurance related to the assessment process and outcomes of *licensing* decisions. It also aims to facilitate the efficiency of the process used by the regulators.

The primary objective of this framework is to ensure consistency and timeliness of outputs, as well as transparency of the *licensing* requirements of *Geoscientists* in Canada, regardless of where the assessment was completed, while ensuring that public safety and the environment are safeguarded.

4. Stakeholders and Users

The stakeholders and users include, but are not limited to, geoscience *regulators* and registrars, Geoscientists Canada, governments, *professional geoscience* licence holders, Canadian and *internationally trained* geoscientists (ITGs), employers, assessors of international *credentials*, immigrant service organizations, the Foreign Credentials Referral Office (FCRO), government fairness or equity overseers, Canadian government offices overseas and potential global mobility partners through Mutual Recognition Agreements (MRAs).

5. Owners

The legal and administrative ownership of this document is Geoscientists Canada on behalf of its constituent associations, the *regulators*. True ownership lies with the *regulators* as a collective.

The owners of this framework are responsible for its development, implementation and its on-going maintenance and improvement. The owners are committed to its quality assurance.

6. Framework Principles

Embedded in this framework are principles included in the “Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications of the Forum of Labour Market Ministers, 2009”³ as well as the “Revised Recommendation on Criteria and Procedures for the Assessment of Foreign Credentials (adopted by the Lisbon Recognition Convention Committee at its fifth meeting, Sevres)”⁴. These principles require that the criteria used in the assessment of applications for *licensure* are objective, reasonable, free of bias, similar in structure and result in consistent outputs from all *regulators*. The methods used in assessment of *qualifications* should be both necessary and sufficient for determining if professional admission standards have been met. By its very nature, this framework applies the established principle that the applications of

² See “A Pan-Canadian Framework for the Assessment and Recognition of Foreign *Qualifications*”, Forum of Labour Market Ministers, 2009, pages 4 & 5.

³ See <http://publications.gc.ca/pub?id=9.672051&sl=0>

⁴ see <http://www.cicic.ca/docs/lisboa/recommendation-foreign-qualifications-2010.en.pdf>

both Canadian and *internationally trained* applicants are treated equally as the requirements for *licensure* are the same, regardless of where education and training took place.

The candidate's education and training will be reviewed and measured by the *regulator* of the *jurisdiction* to which the applicant has sought *licensure* according to each *regulator's* requirements and against the requirements as outlined in the 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada' originally published in 2008 and updated and republished in 2019 by Geoscientists Canada.⁵

Furthermore, the *regulators* accept that it is necessary to provide detailed information to applicants who do not meet the requirements for *licensure* by detailing a clear pathway which outlines how deficiencies may be remedied.

7. Licensing Requirements

The requirements for *licensure* to be applied are outlined in the document 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada'. In 2009, the Constituent Associations⁶ of Geoscientists Canada signed a Memorandum of Understanding that agreed to use the criteria of this document in assessing applicants for *licensure*. These criteria include:

- I. Geoscience knowledge, normally obtained through completion of a bachelor's- level degree or equivalent in geoscience;
- II. Geoscience practice experience;
- III. Good character, reputation and conduct;
- IV. Proficiency in English or French as required by the *regulator*;
- V. Knowledge of professional practice issues, including law and ethics as evidenced through a professional practice examination (PPE).

The results of the assessment processes are mutually recognizable by each jurisdiction's regulator in accordance with CFTA.

8. Principles of Assessment

Part A Licensure Assessment

Assessment processes consist of the three steps which are outlined below: assessment of academic credentials; assessment of the program and course content; and the assessment of the work experience.

I. I. Assessment of Academic Credentials

The process used by all *regulators* to assess academic records will incorporate standards included in the documents "Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications of the Forum of Labour Market Ministers, 2009"⁷, and the "Revised Criteria and Procedures for the Assessment of Foreign *Qualifications*"⁸ under the Lisbon Convention.

Documents relating to academic *credentials* and work experience will be verified for authenticity. Those assessing the *credential* must possess the training and skills required to determine if the documents presented are authentic.

⁵ See <https://geoscientistscanada.ca/resources/publications/>

⁶ See footnote 1.

⁷ <http://publications.gc.ca/site/eng/9.672051/publication.html>

⁸ See <http://www.cicic.ca/docs/lisboa/recommendation-foreign-qualifications-2010.en.pdf>

Regulators may make use of the services of third-party assessment agencies listed on the website of the Canadian Information Centre for International Credentials (<https://www.cicic.ca/>) for the purpose of verifying the authenticity of documents presented and/or determining the level of the credential and recognition status of the institution.

The submission of fraudulent or altered documents will lead to *denial of licensure* unless the applicant is able to provide evidence that the applicant was unaware that the documents were not authentic.

The status and level of a *credential* can only be established through considering the status of the program as well as whether the institution attended is recognized by the appropriate authority of the country in which the institution is located.

In assessing the status of the program and institution, research, including reference to all relevant published materials, will be considered. Where adequate information regarding learning outcomes is available, this documented information will be used to determine whether the geoscience knowledge requirements of the 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada' (GKE) have been satisfied.

II. Assessment of the Academic Content

The assessment of the program content with respect to the knowledge requirements of the GKE should be done by an experienced practitioner in a relevant discipline. The experienced practitioner should be trained in *credential* and credit assessment, and qualified to determine the comparability of content and level of the required learning.

Focus in the assessment of academic *qualifications* is placed on *learning outcomes* as well as the quality of the program. Program duration is only one factor. Recognition of prior learning, credit transfer, different forms of access to higher education, joint degrees and life-long learning may all be considered in the assessment process. Differences in terms of content, profile, workload, quality and *learning outcomes* should be considered in a flexible way.

The criteria for assessment to be used within each *jurisdiction* will strive to promote consistency and transparency. These criteria must ensure that similar cases will be considered in similar ways by all *regulators* although methods of assessment may vary. Each *regulator* agrees to share information regarding their assessment methods with their counterparts in other *jurisdictions*.

The assessment should take into account past practice in similar recognition cases in order to ensure consistency; any substantial change of practice will be justified.

The *regulators* agree that it is desirable to establish a common competency-based assessment method as an option for the purpose of determining eligibility of applicants.

III. Assessment of Geoscience Work Experience

- a) Progressive geoscience practise experience of at least forty-eight months, typically completed within the last ten years, is required. At least twelve months of this must be acquired in a Canadian or equivalent environment. Each *regulator* will determine and clearly state what it deems to be acceptable Canadian experience. This may or may not include work done for Canadian companies outside of Canada or work completed in

countries with similar geoscience practice regulations and workplace environments to Canada.

- b) Work experience is assessed by *licensed* geoscientists with expertise in the area of practice.

IV. Currency of *Qualifications*

Regardless of the date that the academic credentials were granted, current knowledge and work experience requirements must be satisfied.

V. Assessment of Additional Licensing Requirements

- a) Due diligence is taken to ensure that applicants are of good character, reputation and conduct as demonstrated through references and resumes. The application process requires a declaration by the applicant whether the applicant has been convicted of a criminal offence related to either public safety or the protection of the environment.
- b) Language Proficiency
 - i. All applicants for *licensure* are required to demonstrate to the *regulator* that their skills in the required language for practice (i.e. English or French) are sufficient to perform the duties and responsibilities required of a *licensed* practitioner.
 - ii. The methods of assessment are determined by each *regulator*, and criteria for English/French Language Testing exemption is determined by each *regulator*. All applicants, regardless of whether their education was completed in Canada or elsewhere are required to meet the same language proficiency requirements.
- c) Additional Requirements:
 - i. Each applicant is required to submit proof of identity.
 - ii. Each applicant will be required to sign a declaration addressing whether or not any disciplinary action has been taken against them. The application for each *jurisdiction* includes a request for such information, as well as a request for the applicant to outline full details of any disciplinary action taken and steps taken toward rehabilitation. It also requires that the applicant declare any resignation of *membership* or *licensure* from another professional regulatory body, any disciplinary action taken by another professional regulatory body, any conviction for a regulatory criminal offence, or any Settlement of Consent Agreement or similar agreement with a regulatory body.

Part B Required Documents

I. Application form

The application form for each *regulator* is available on-line, or is readily obtained. Each *regulator* is responsible for determining which questions are integral to the processing of the application for inclusion in the form.

II. Educational/Academic

- a) All *transcripts* of academic records must be sent directly from the issuing institution to the *regulator's* office (or an agency receiving *transcripts* on its behalf) in order to be acceptable. Exceptions may be made on an individual basis. Refer to section d) i and ii below.

- b) Course descriptions of studies completed may be required. Acceptable methods of demonstration of course descriptions are defined by the regulators.
- c) Documents not in the working language of the jurisdiction (English or French) require translation. Translations of all documents submitted must be completed by a certified translator or an individual acceptable to the *regulator*. Each *regulator* is responsible for providing information to applicants regarding the process for the translation of documents and acceptable translators.
- d) Unavailable documents:
 - i. If an applicant is unable to have official documents sent by the former institution but has a copy (either original or photocopy) of the documents, these documents should be accepted provided that the candidate has sworn before a notary public in Canada that the documents are unaltered and are an accurate reflection of the applicant's academic record.
 - ii. If no documents are available, the applicant should be required to swear out a full and detailed statutory declaration to a notary public in Canada. The declaration should outline why the original documents are unavailable and should include proof that the applicant has tried to obtain the documents, either from family members or from the institution previously attended. It should include a list of courses successfully completed, learning attained and provide detailed information regarding the applicant's academic and professional background. The applicant should be interviewed by the *regulator* to provide further information regarding the situation. Unless there is strong reason to doubt the validity of the information provided, the *regulator* should accept it at its face value.

III. Other:

- a) Work experience. The required work experience may be demonstrated through a work experience record in a method acceptable to the regulator. Work experience criteria to be demonstrated will be determined and clearly stated by the regulator.
- b) Proof of identity
- c) References

9. Process Outcomes

Communication of the assessment decision will involve a clear explanation of the rationale for the decision.

- I. Successful applicants will be informed that their *qualifications* have been assessed to meet the criteria required to be *licensed* in Canada. If the education and experience presented are deemed to meet the requirements as outlined in 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada', if the references are acceptable, and if the applicant has passed a professional practice examination, the applicant will be issued a *license* to practice.
- II. Applicants may be issued a temporary or limited *licence* where appropriate in order to meet licensing requirements, including lack of Canadian or equivalent work experience.
- III. Applicants will be informed of areas where they lack the academic requirements for *licence* and will be provided with possible remedies (such as additional courses required, challenge examinations, bridging programs).
- IV. If the applicant has insufficient or inappropriate work experience as outlined in the 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada' the *regulator* will provide specific information regarding the deficiencies and how they can be remedied. *Regulators* may accept graduate level education in lieu of some experience.
- V. If the applicant is *refused* or *denied licence*, the applicant will be provided with the reasons for the decision including what, if any, additional requirements must be met before re-seeking *licence*. Appeal and review processes will be outlined to the applicant. This will include applicants whose

backgrounds are inappropriate for *licensure* (e.g. lack university study in appropriate discipline, has criminal record related to practice, etc.).

Results must be communicated to applicants in writing with detailed information regarding next steps.

10. Administrative Considerations

- I. The fees for processing applications are determined by each *regulator* according to the costs associated for application processing. Every effort is made to keep the processing fees as reasonable as possible.
- II. Decisions are made by the appropriate authority within each *jurisdiction*. Such authority may be granted to the registrar, admissions/registration committee or board as determined by the act or regulation of each *jurisdiction*.

11. Timeliness and Communications

- I. The *regulators* will notify applicants when the application has been received and provide details regarding processing, missing documentation or any other helpful information as soon as possible.
- II. The time normally required to process an application once all relevant and required information has been received should be clearly stated by each *regulator*. Should the process be delayed for any reason, the applicant shall be notified of the reasons for the delay. All decisions, including whether the *qualifications* will be recognized, additional information or whether the application is *refused* will be communicated as soon as possible.

12. Reconsideration and Appeal Processes

Each *regulator* must have a defined process for appeals of the *licensing* decision. The availability and processes to be used must be clearly articulated within the application process.

Part A – Reconsideration Requests

- I. Whenever possible, information should be provided to the applicant in writing in an attempt to resolve any outstanding issues prior to the submission of a formal appeal. Candidates who have been denied a *license* may request reconsideration if they are able to provide additional information or documentation in support of their application. Those who are required to complete additional academic or experience requirements may also request reconsideration if they feel the application has not been assessed accurately.

Part B – Appeal Process

Only those applicants who have received a formal decision may request a formal appeal.

- I. Appeals must be requested within the timeframe outlined by each *regulator*.
- II. All appeals will be considered by a committee different from the committee that made the original decision. If necessary, a special committee will be assembled to consider appeals as needed.

13. Ensuring a Transparent Process

- I. All requirements for *licensure* are fully described, written in plain language and are readily available to prospective candidates. These requirements include education, acceptable documentation, references and work experience for applying for *licensure* as a geoscientist as well as the methods for assessment and criteria for recognition of foreign *qualifications*. Geoscience specific examinations, language testing and other evaluation requirements are clearly outlined and exam preparation materials are readily available.

- II. The procedures and criteria used by each *regulator* are clearly articulated, rational and result in reliable outcome decisions.
- III. Prospective candidates for *licensure* are able to make contact with the appropriate *regulator*, prior to their arrival in Canada.
- IV. *Regulators* will ensure that it is clear that it is the applicant's responsibility to ensure that the required documents are submitted.
- V. The *regulators*, in combination with Geoscientists Canada, will work towards the creation of a self-assessment tool.

14. Quality Assurance

Each *regulator* will regularly review its process for reliability of outputs. These outputs should also be compared among *jurisdictions* and take into consideration the efficiencies of the process as well as consistencies of outputs. Reviews should attempt to increase transparency as well as take into account developments in the education field. Reviews should work to eliminate requirements, which lead to undue complications in the process.

A minimum training and qualification standard for the *credential* assessors should be established through consultation with other *regulators* and *credential* assessment agencies.

Feedback by means of focus groups or questionnaires to applicants should be solicited in an endeavour to continuously improve the processes in place, both within the individual *jurisdictions* and within this national framework agreement.

GLOSSARY

The following glossary represents the generally accepted definitions of key terms used in the Framework Agreement for the Licensing of Geoscientists in Canada.

Terms may have different meanings as used by some individual *regulators*. For specific information about geoscience in a *jurisdiction* of Canada, individuals should reference the website of the *regulator* in that *jurisdiction*. Quebec, in particular, uses different terminology.

Term	Description
Competency	A measurable skill or set of skills, level of knowledge, and behavioural practices obtained through formal or informal learning.
Credential	Documented evidence of learning based on a recognized program of study, training, work experience, or prior learning assessment.
(International) <i>credential</i> assessment	Determination of the equivalent <i>qualification</i> or level of education completed compared to the <i>jurisdictional</i> Acts & Regulations, and in accordance with the accepted national 'Geoscience Knowledge and Experience Requirements for Professional Registration in Canada'.
Denied	When the applicant is not qualified for <i>licensure</i> based on the assessment of evidence presented during the application process. Some <i>regulators</i> use 'outright refusal', <i>rejected</i> or ' <i>refused</i> '.
Harmonization	<i>Harmonization</i> is an attempt to improve consistency, compatibility and comparability between <i>jurisdictional</i> requirements while allowing flexibility in methods.
Internationally trained	An "internationally trained" individual is an individual who has been educated and/or trained in a country other than Canada and who has applied for, or who intends to apply for geoscience <i>licensure</i> in a Canadian <i>jurisdiction</i> .
Jurisdiction	Province or territory of Canada. Note that geoscience is not regulated in all provinces and territories.
Learning Outcome	A statement of what a person knows and can do as a result of learning.
Level (of credential)	Increasingly advanced hierarchy of learning difficulty as identified, compared and agreed to on a global basis within the educational and professional context. (e.g. how it compares to a university undergraduate degree)
License	A permit to practice in a <i>jurisdiction</i> in a <i>regulated</i> profession. In this document, the term license includes <i>membership</i> and <i>registration</i> .
Licensure	The awarding of a permit (license) to practise in that <i>jurisdiction</i> to an individual registered with a self-regulating <i>jurisdictional</i> professional association. Licensure signifies that the license-holder meets <i>competency</i> and

	other requirements to be entitled to practise the profession in that <i>jurisdiction</i> .
Membership	<p><i>Membership</i> in the organization which controls and grants licences and registers proven professionals in the field. There are different categories of <i>membership</i> in various <i>jurisdictions</i>.</p> <p>In some <i>jurisdictions</i>, <i>licensing</i> and <i>membership</i> are the same; in others, <i>licensing</i> does not include <i>membership</i>.</p>
Professional Geoscience	<p>Definitions of the practice of professional geoscience are laid out in the legislation that governs the profession of geoscience in each of the <i>jurisdictions</i> in Canada in which <i>licensure</i> is required. Refer to the particular <i>jurisdiction</i> for specific information.</p> <p>The definition adopted by Geoscientists Canada is as follows: "The "practice of professional geoscience" means the performing of any activity that requires application of the principles of the geological sciences, and that concerns the safeguarding of public welfare, life, health, property, or economic interests, including, but not limited to: investigations, interpretations, evaluations, consultations or management aimed at discovery or development of metallic or non-metallic minerals, rocks, nuclear or fossil fuels, precious stones and water resources; and investigations, interpretations, evaluations, consultations or management relating to geoscientific properties, conditions or processes that may affect the well being of the general public, including those pertaining to preservation of the natural environment".</p>
Qualifications	Documented evidence of competence based on completion of a recognized program of study, training, work experience or prior learning assessment.
Refused	See ' <i>Denied</i> '
Registration	Formal recognition of an individual to practice geoscience in a particular <i>jurisdiction</i> by the placement of that person's name on the register and issuance of a <i>license</i> to practice or specified <i>membership</i> .
Registration or licensing decision	Results of an individual's application to be given the right to practice <i>geoscience</i> . A decision, (a) to grant <i>registration</i> to an applicant, (b) to not grant <i>registration</i> to an applicant, or (c) to grant <i>registration</i> to an applicant subject to conditions, or (d) to defer <i>registration</i> pending further action/information.
Regulator	A self-regulating professional association set up under a legislative act or statutes for the purpose of governing the practice of <i>geoscience</i> in that <i>jurisdiction</i> .
Rejected	See ' <i>Denied</i> '
Self-regulated profession	A profession regulated by a self-governing professional organization

	established under provincial laws to protect the public by setting standards of practice and competence.
Transcript	A complete listing of the studies completed at an educational institution which should include, if possible, the hours for each course, grades achieved and graduation status. For degrees completed in Europe since the signing of the Bologna Accord, transcripts must also include the Diploma Supplement. In order to be acceptable, the transcript must normally have been sent by the issuing institution to the receiving <i>regulator</i> or an agency receiving documents on the regulator's behalf.

Geoscientists Canada Constituent Associations

Engineers and Geoscientists British Columbia
www.egbc.ca

Association of Professional Engineers and Geoscientists of Alberta
www.apega.ca

Engineers and Geoscientists New Brunswick
www.apegnb.com

Engineers Geoscientists Manitoba
www.enggeomb.ca

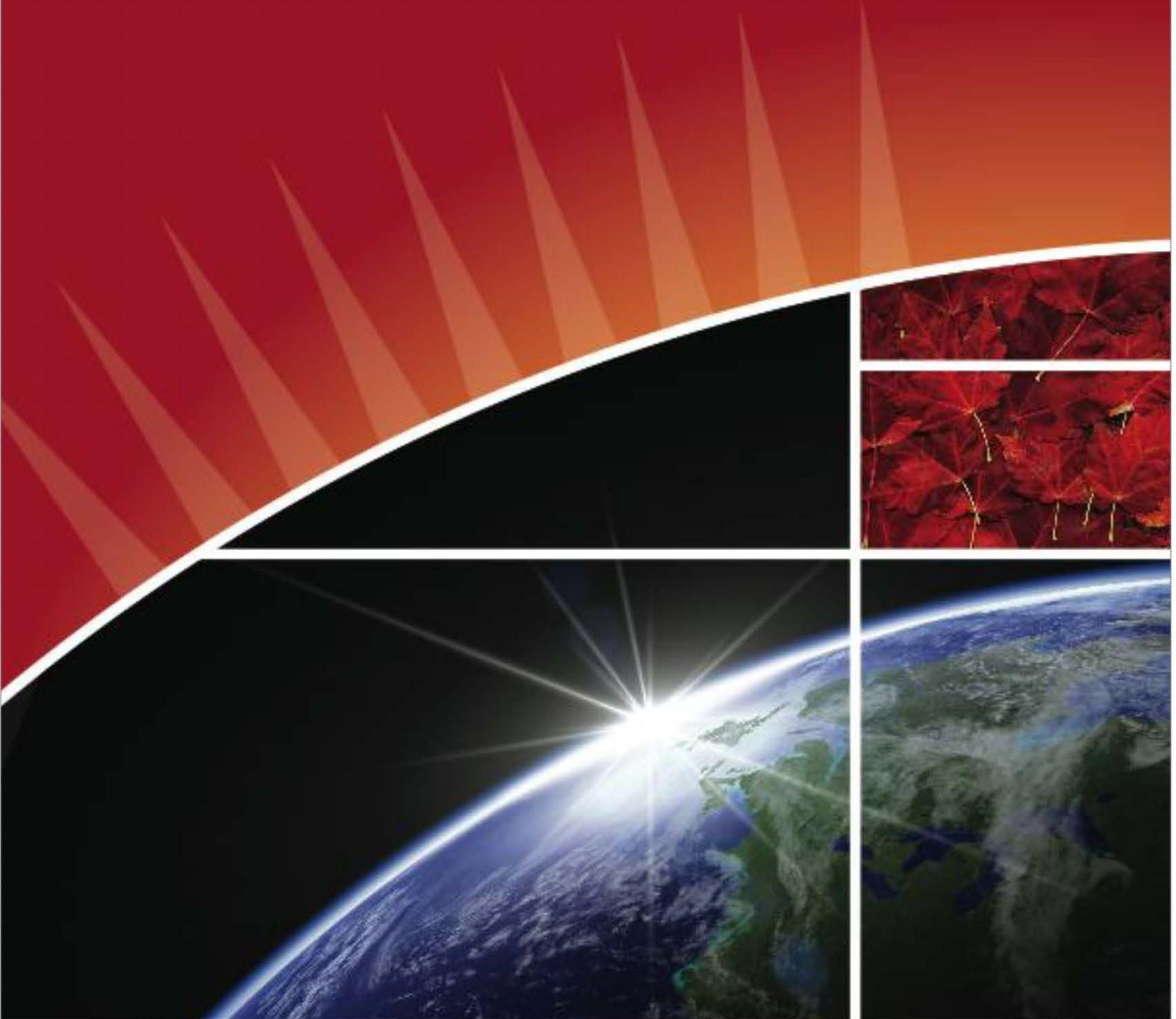
Association of Professional Engineers and Geoscientists of Saskatchewan
www.apegs.ca

Professional Geoscientists Ontario
www.pgo.ca

Geoscientists Nova Scotia
www.geoscientistsns.ca

Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists
www.napeg.nt.ca

Professional Engineers and Geoscientists of Newfoundland and Labrador
www.pegnl.ca



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