The Prospectors & Developers Association of Canada (PDAC) is the national voice of Canada's mineral exploration and development industry and represents over 10,000 members, including junior and senior mining companies, prospectors, geoscientists, students and service providers. The PDAC encourages leading practices in technical, environmental, safety and social performance in Canada and internationally and is known worldwide for its annual convention, regarded as the leading event in the global minerals industry.

Mineral Exploration in Canada

Mineral exploration is the first and vital stage of the mineral development cycle. The purpose of this stage is to locate mineral deposits that could be economically developed into a mine. Mineral exploration involves a high degree of uncertainty and risk; the probability that an exploration project will result in a mine is roughly 1 in 1,000.

Canada is a world leader in mineral exploration, with an estimated 800 Canadian junior exploration companies active in more than 100 countries. Canadian innovations such as flow-through share financing and the federal Mineral Exploration Tax Credit, provincial exploration incentives and public geoscience research help to create the conditions that make Canada a premier destination for mineral exploration investment.

Economic and Social Contributions of the Minerals Industry

A robust mineral exploration sector is vital to the health of Canada's mineral industry as a whole, which makes significant contributions to the Canadian economy. The mineral industry accounts for 3.4% of Canada's GDP (2012) and employs 418,000 workers across the country, from remote communities to large cities. In 2012, the mining industry paid $6.6 billion in taxes and royalties to federal and provincial governments, contributing to the delivery of public services such as health care and infrastructure. Exploration activity takes place across the country, generating employment and business activity in the most remote parts of the country. Canada is also a global centre for exploration financing, generating related economic opportunities in every major city.

Key Challenges Threaten Canada's Competitive Advantage

Mines do not last forever. Sustaining the economic benefits generated by the industry requires two critical ingredients: new discoveries, and new producing mines drawn from that pipeline of new discoveries. There are warning signs that Canada may be facing challenges with respect to both halves of that equation: base metal reserves are declining, which means that new discoveries are not keeping up with production levels, and the unit cost of making discoveries in Canada has been going up steadily, as companies look for deeper deposits and explore in more costly parts of the country (remote and northern regions). The time it takes to move discoveries into production is also increasing; on average it now takes more than 11 years to bring a discovery into production in Canada. At the same time, the average mine life in Canada is also shortening, meaning that new mines may not open in time to compensate for the closure of existing mines. This can be hard for communities in remote areas that depend upon the mineral industry for jobs, business revenues and local investment. These challenges are being compounded by the capital crisis in exploration financing, which is limiting the exploration budgets of both juniors and majors.

Canada's rich natural resource endowment remains a pillar of the country's economic engine and maintaining the vibrancy of the mineral exploration and development industry will help ensure economic growth, jobs and fiscal sustainability for Canada. The PDAC looks forward to working together with the Government of Canada on the following recommendations to create the conditions necessary to ensure the viability of Canada's unique mineral exploration sector.

Key Recommendations

1. **Enhancing Canada's competitiveness by investing in public geoscience, to improve the efficiency of domestic exploration and close the 'discovery gap'**

Base metal reserves in Canada are on the decline. Most of the easy-to-find deposits in established mining camps have been exploited, and new discoveries are hard to come by. Closing the discovery gap and replenishing existing reserves will require mineral explorers to search for mineral deposits in more challenging environments, including in more remote/northern parts of Canada as well as at depth and under covered terrain. These new challenges will further increase the uncertainty and risk associated with locating and delineating exploration targets, as well as the costs. Public investments in geoscience are required to increase the probability of exploration success in Canada.

The PDAC applauds the federal government's renewal of the Geo-mapping for Energy and Minerals (GEM) program, which will ***stimulate exploration*** in data-poor northern regions of Canada by establishing the modern and foundational geoscience knowledge base required to inform exploration decisions. The renewal of GEM creates opportunities for new economic development through the location and development of significant near-surface deposits in the North. However, a comprehensive public geoscience strategy also requires programs that ***innovate exploration*** in active mineral regions where near-surface deposits have likely been developed.

The Targeted Geoscience Initiative (TGI) has served to enhance the capacity of industry to detect buried ore deposits. The program has improved exploration models for a number of areas including the Canadian Malartic region near Val d'Or (Quebec), the James Bay lowlands (Ontario) and the Athabasca Basin. New exploration strategies developed as a result of the program will support mine expansion and increased mine-life while lowering discovery costs. Given that the focus of the program is thematic, rather than geographic, the outputs of the program will have application for northern exploration projects once the GEM program is completed.

Renew the Government of Canada's Targeted Geoscience Initiative

Given the increasing depths at which discoveries in Canada are now being found, TGI plays a critical role in maintaining Canada's competitiveness as a destination for exploration improving the odds of exploration success in a cost-effective manner, thereby addressing the twin challenges of declining mineral reserves and increasing unit discovery costs. Accordingly, the PDAC recommends that the federal government renew the TGI for an additional 5 years, at $5 million per year. The Association also recommends that, if renewed, TGI-5 include greater industry participation, particularly at the planning and design stages, which will help to increase the uptake and application of the products generated by this important initiative.

2. Unlocking the Mineral Potential of Northern Canada

Mining is the North's economic advantage, and is one of the key private sector drivers of employment, business development and revenues (federal taxation and royalty revenues from mineral development in NWT and Nunavut totaled $57.4 million in 2013 and $132 million the year prior). Mining is one of the few industries that can help the federal government achieve key policy objectives in its Northern Strategy, including socio-economic development and territorial self-sufficiency.

The ability of the industry to sustain and augment these contributions is hampered by substantial transportation infrastructure deficiencies. At the exploration stage, infrastructure gaps make accessing potentially prospective lands extremely costly. Exploration projects that are more than 500km from a transportation route or supply centre face costs that can be 600% higher than projects that are less remote, according to a recent study done by PDAC and other associations. Even when a discovery has been made, however, in remote and northern parts of Canada the infrastructure deficit creates a need for very large initial capital investments which makes otherwise economic deposits unviable.

The federal government has consistently pointed to the Building Canada Fund and the P3 Canada Fund as appropriate vehicles for addressing the mining infrastructure challenges facing companies operating in northern Canada. In both cases, a key requirement is that proposed infrastructure projects have a 'public use' component, not just a 'public benefit' component. Although mining-specific infrastructure development in the North generates numerous public benefits (GDP contribution, employment, business development, tax and royalty revenues), it rarely meets the 'public use' test of existing federal programs.

The sustainability of the northern mineral industry and the northern economy requires innovative financing options to support the development of public benefit infrastructure, aimed at unlocking the mineral potential of northern Canada. In the absence of creative financing solutions, key infrastructure gaps will not be addressed.

Infrastructure is the linchpin for:

- Enhancing the competitiveness of the territories as a destination for mineral investment
- Spurring economic growth and reducing socio-economic disparities between northern and southern Canadians
- Improving the revenue generation capabilities of the territorial governments, raising territorial self-sufficiency and reducing their reliance on substantial federal transfer payments
- Maximizing the effectiveness of other substantial government investments in northern resource development, including the renewal of the GEM program, the Northern Regulatory Improvement Initiative, the Northern Projects Management Office and the work of the Canadian Northern Economic Development Agency

Establish a Northern Infrastructure Financing Authority

The PDAC recommends that the current financing gap be addressed through the establishment of a federal Crown corporation, similar to the Alaska Industrial Development and Export Authority, aimed at providing long-term financing (loans, bonds, equity investment) to northern infrastructure projects that generate public benefits but do not meet the 'public use' criterion of existing federal programs. This model is consistent with existing federal institutions (Business Development Bank of Canada and Export Development Canada) aimed at providing financing support to private sector entities to promote economic growth.

Create incentives for investors to finance mineral exploration in northern Canada

The cost differential faced by exploration companies operating in the North is substantial, and can make projects less attractive to investors. PDAC recommends enhancing the federal Mineral Exploration Tax Credit by 10% (to 25%) for projects in the three territories, to help flow capital to projects in these geologically promising jurisdictions. Finding ways to attract exploration investment to the territories will be a key component to unlocking the resource potential of the North, and sustaining social and economic benefits for northern residents for another generation.

3. Address the Ongoing Downturn in Exploration Financing

Unlike major companies, who finance their exploration activities from internal revenues, juniors raise the bulk of their budgets from investors primarily by issuing shares. In response to ongoing global economic uncertainty, however, the risk of tolerance of investors has dropped, drying up the sources of capital upon which junior mineral exploration companies depend. According to PricewaterhouseCoopers, the total cash generated from junior financing activities fell by 34% in 2013, after a 52% drop in 2012.

As financing has declined, so to has exploration activity; exploration expenditures in Canada dropped 30% in 2013, with grassroots exploration (the high-risk search for new discoveries, most often undertaken by juniors) dropping 50%. This does not bode well for reversing the decline in base metal reserves; in Canada, 80% of significant discoveries over the last five years have been made by junior explorers (Schodde, 2013). Sustaining the flow of capital to the junior industry must be part of any solution to reverse the decline in base metal-reserves and sustain the economic benefits generated by the mineral industry.

The federal Mineral Exploration Tax Credit (METC) supports exploration financing by providing individuals who invest in companies that are exploring for minerals in Canada with a 15% tax credit linked to eligible expenditures. Originally introduced in 2000 for a five year period, the METC has been a key feature of Canada's tax regime that has helped it remain the number one destination for mineral exploration investment.

While the METC was once unique to Canada, in May of 2014 Australia announced a $100 million Exploration Development Incentive, which would provide investors in junior exploration companies that explore in Australia with a refundable tax offset for greenfield exploration costs. In the highly competitive market for capital, Australia's introduction of this incentive could threaten Canada's position as the top destination for mineral exploration expenditures.

Renew the Mineral Exploration Tax Credit for a period of three years

The PDAC recommends renewal of the METC for three years to provide longer-term stability to junior companies, enabling them to plan the financing of multi-year exploration programs. This three-year extension provides a better sense of predictability for investors, boosting investor confidence in Canadian projects. It also provides a sense of stability in the overall marketplace for ancillary companies, suppliers, and service providers, as well as peace of mind for the rural and northern communities across Canada that depend on exploration and mining for growth, employment opportunities and local trade.