BRITISH COLUMBIA’S
Mineral Exploration and Mining STRATEGY

Seizing Global Demand
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Message from the Premier

British Columbia was built on the strength of our natural resources. And today, with demand for those resources stronger than ever, the province is poised for a new phase of growth, investment and job creation. With our *BC Jobs Plan*, we’re reaching out across the Pacific and tapping into fast-growing Asian markets – where B.C. coal, copper and other mined commodities are supporting the world’s largest-ever urbanization.

Here at home, that means new opportunities, and major investors are taking notice. In 2011, mineral exploration spending in B.C. was estimated to be over $460 million which is a large increase over 2001, which saw only $29 million in total spending. The 19 major mines provide jobs and opportunities for B.C. communities across the province. New mines are opening, others are expanding, and we’re on track to meet the *BC Jobs Plan* target of eight new mines and nine expansions by 2015.

Delivering on the jobs plan targets will result in over 15,000 jobs in B.C. providing new support for families, communities, First Nations and the province as a whole. We have amazing strengths and strategic advantages and – with this sector strategy – we are moving forward to harness their benefits for all British Columbians.

Message from the Minister

B.C.’s mineral exploration and mining industry is booming, thanks in part to strong demand in Asia. But meeting demand is just one part of fostering a globally competitive sector. Equally important are our policies at home, where strong fiscal management, competitive tax rates, streamlined regulations and good local partnerships are helping to generate billions of dollars worth of revenues each year.

With the *BC Jobs Plan*, we’re focused more than ever on opening markets and building relationships with overseas investors to protect and create jobs in every part of the province. And we are proud to tell our story: B.C.’s mining industry is profitable, revenues to government are strong, and direct employment is increasing.

This mineral exploration and mining strategy outlines the six key steps the Province is taking to keep that momentum going. Building on the progress of the past 10 years, we are moving forward to increase investment, expand job creation, develop new economic opportunities, protect the environment and build a better quality of life for future generations.

As we put this plan into action, we want to hear from you. Join the conversation at [www.bcjobsplan.ca](http://www.bcjobsplan.ca)
Exploration and Mining Industry in British Columbia

British Columbia is a national leader in mining and mineral production. We are Canada’s single largest exporter of coal, the largest producer of copper and the only producer of molybdenum. We also produce significant amounts of gold, silver, lead, zinc and more than 30 industrial minerals.

B.C. is known for its high-quality metallurgical (steelmaking) coal. Most of the coal we produce is exported to Asia for steel production in areas undergoing large-scale urbanization and industrialization, such as China and India.

Copper is used in electrical wiring and electronics like computers and cell phones. Green technology, including hybrid vehicles, also relies on copper parts, while anti-microbial copper alloys are used in hospitals and on public transport to create surfaces with low germ life.

Molybdenum is mainly used to make steel alloys, principally stainless and construction steel. It’s also used to make heat-resistant metals, cast iron, high-speed tools and machine parts.

Driving the Economy and Creating Jobs

Mineral exploration and mining are important economic drivers for British Columbia. In 2011, the mining industry increased its production value by 20 per cent from the year before to approximately $8.6 billion.

Exploration spending rose to more than $460 million, up 35 per cent from 2011. The B.C. mining sector also invested over $2 billion in 2011, an increase of $700 million from the previous year, to upgrade capital equipment, expand existing operations and develop new mines. And more than 29,000 people were employed in mineral exploration, mining and related sectors, mostly in rural British Columbia.

Mine development and mineral exploration has been a cornerstone of our economy for generations. It takes place in every region of the province and ranges from small, one-person operations, to multi-million dollar investment projects.

The goal of exploration is the discovery of new mineable deposits and to build and expand the number of mines in British Columbia. Currently there are 19 mines in operation; nine metal and 10 coal mines.

More than half of Canada’s exploration and mining companies are based in British Columbia, which has the largest concentration of exploration companies and geoscience professionals anywhere in the world.
“The mining sector has led BC’s economic recovery providing a significant contribution to pay for health care, education and other social programs. Many BC communities have benefitted from mining and as the sector continues to grow, there is the potential for prosperity in all regions of the province. Together, communities, government and the mining sector can succeed through shared values and finding common ground to ensure sustainable long term benefits for all.”

– Karina Brino, President and CEO, Mining Association of BC

B.C.’s policies ensure that mining’s benefits are maximized in a sustainable way so communities can prosper for the long term, with economic and social benefits extending from the local to the national level. The industry supports job creation, provides opportunities for business growth and skill transfers, supports enhancements to infrastructure and helps improve the capacity of health, education and other public services through government revenues.

Mineral tax revenues for 2011/12 were valued at more than $400 million, supporting essential infrastructure and social programs that benefit British Columbians.

**Global Demand Rising for BC Commodities**

Worldwide demand for steel-making coal, metals and industrial minerals is rising dramatically in response to expanding urban populations, particularly in China and India. As one of the world’s top mining jurisdictions, British Columbia is uniquely positioned to meet this demand. We have rich mineral, coal and clean energy resources, competitive fiscal policies, extensive infrastructure, comprehensive and publicly available geoscience data, and an enviable location at the crossroads of North American and Asia.

To make the most of these advantages, the Province will move quickly and decisively to leverage today’s high commodity prices and gain a competitive edge over other global mining jurisdictions.

**Seizing the Opportunity**

The Province is ready to capitalize on high commodity prices and global demand for minerals and coal. However, we are not alone in pursuing this opportunity.

B.C. competes with jurisdictions worldwide, and one of our biggest assets is stability – we have a stable political climate, a steady supply of goods and services, vast mineral reserves, and a fiscally responsible government.

B.C. enjoys an AAA credit rating thanks to responsible budgeting and an ongoing commitment to encouraging economic growth through common-sense regulation, competitive taxation and policies supporting new business development and inviting new investment. These advantages are at the heart of our strategy for the mining sector.
Building on the BC Jobs Plan Targets

This B.C. Mineral Exploration and Mining Strategy directly supports the BC Jobs Plan, by expanding targets and commitments to include:

1. **Create eight new mines and expand nine existing ones by 2015.**
   
   Achieving this will:
   
   - increase annual mine-operation revenue by $1.6 billion;
   - create approximately 2,000 construction jobs, 2,000 new direct jobs and 3,000 indirect jobs;
   - sustain 12,500 existing jobs (5,000 direct and 7,500 indirect); and
   - generate over $150 million a year in government revenue.

2. **Increase mineral exploration to ensure future mining activity.**
   
   Mining activities and industry growth increased significantly in 2011, translating to more than $460 million in exploration expenditures. The Province is clearing a backlog of permit applications, such as Notices of Work and committing to an average 60-day turnaround going forward, supporting more investment in mineral exploration.

3. **Ensure mine development improves the social and economic well-being of First Nations and respects cultural values.**
   
   Benefit-sharing agreements and partnerships with industry, First Nations and the Province are key to moving mining forward in B.C. Ten new non-treaty agreements between government and First Nations will be in place by 2015, ensuring they benefit from resource development in their traditional territories.

**Achieving the Vision**

To realize our vision for mineral exploration and mining, this strategy is built around six key components.

1. Enhance Our Competitive Edge
2. Streamline Regulatory Processes
3. Ensure the Health and Safety of Our Workers
4. Protect the Environment
5. Build Partnerships with First Nations
6. Develop a Skilled Workforce
1. Enhance Our Competitive Edge

B.C. is home to the world’s largest concentration of professional geoscientists. And with over 850 mineral exploration and development companies, Vancouver is the centre of a flourishing exploration and mining industry. The city is renowned for its support of mining excellence and hosts conferences – such as the annual Mineral Exploration Roundup – where local and international representatives from industry, education and research institutions, governments, First Nations, and communities gather to share information and shape the global future of mineral exploration and development.

The strength of our industry results from B.C.’s global competitiveness, with our location, wealth of resources and favorable policies making British Columbia a desirable place to invest, explore and develop mineral resources.

Taxation

B.C.’s business tax rates are among North America’s lowest. The combined federal-provincial corporate income tax rate of 25 per cent is among the lowest of the G7 countries.

Since 2001, the B.C. general corporate income tax rate has decreased from 16.5 per cent to 10 per cent while the federal corporate income tax rate has dropped from 28 to 15 per cent. British Columbia now ranks in the top three among Canadian provinces and territories in after-tax profitability for mine operations.¹

The relatively simple structure of the British Columbia Mineral Tax helps keep administrative costs affordable. The Province also has attractive royalty programs and offers several tax incentives:

- the Mining Exploration Tax Credit provides a 20 per cent refundable tax credit for eligible mineral exploration in British Columbia and an enhanced rate of 30 per cent is available for qualified mineral exploration undertaken in prescribed Mountain Pine Beetle affected areas;
- the British Columbia Mining Flow-Through Share Tax Credit provides a non-refundable 20 per cent tax credit; and
- the New Mine Allowance, and other mineral tax provisions allow new mines and major expansions to deduct 133 per cent of their capital costs, until 2016.
Infrastructure, Energy and Services

In addition to abundant raw materials, B.C. offers a number of advantages to mineral exploration and mining companies. These include low-cost electricity and natural gas, an extensive industry service sector and a world-class network of port, road, rail and airport infrastructure, linking the province to markets and investors in the fast-growing Asia Pacific.

B.C.’s Pacific Gateway Alliance, a public-private partnership, is delivering billions of dollars worth of improvements to our transportation infrastructure, making our province the gateway of choice for trade between North America and Asia. B.C.’s ports are even more attractive to Canadian and international investors as the Province recently capped the municipal port property tax rates.

THE NORTHWEST TRANSMISSION LINE

The Northwest Transmission Line (NTL) is a new 322 kilometre, 287 kilovolt power line to be constructed in B.C.’s northwest. The NTL will make electricity available to mine developments and enable clean and renewable energy development in the region. It also has the long-term potential to enable communities now off-grid to shift from diesel generation to clean power. The Province is contributing $94 million to the project through BC Hydro (see map to the left).

Exploring for Future Opportunities

With mineral and coal reserves hidden underground, access to land is essential to their discovery and development. The Province works with communities, First Nations, industry and others to maintain security of tenure and access to land for mineral exploration.

In 2011, exploration spending exceeded $460 million, an increase of 35 per cent from 2010. B.C. now accounts for approximately 15 per cent of all exploration spending in Canada. Exploration activity occurs in virtually all areas of B.C. The highest spending in 2011 was in the northwest region, where companies invested $220 million. The Province will continue to work with its partners to ensure that overall exploration investment continues to increase throughout every region in the years ahead.

THE BRITISH COLUMBIA GEOLOGICAL SURVEY

The British Columbia Geological Survey (BCGS) has supported the mineral exploration and mining industry for more than 100 years. It develops, disseminates and maintains provincial geoscientific maps and knowledge, which are crucial for a successful, sustainable mining industry. The survey’s custodial role is especially important. It ensures the information gathered about B.C.’s geology – representing millions of dollars in industry spending – is retained and publicly available.
B.C.’s geology, geochemistry and mineral deposits are surveyed in co-operation with the Geological Survey of Canada, universities, and industry partners. The results of these applied research programs are released to the public electronically via MapPlace and through various BCGS publications.

**GEOSCIENCE BC**

Geoscience BC is an industry-led organization with a mandate to collect, interpret and deliver geoscience data and expertise to promote investment in mineral exploration and development. Geoscience BC focuses on short-term priority projects that require larger budgets than are typically provided to geological surveys. Since it was launched in 2005, the Province has supported Geoscience BC through a series of grants totaling nearly $50 million.

**Web-based Information and Services**

Online resources maintained by the Province are up-to-date, free and accessible around the world, further opening B.C.’s mineral exploration and mining industry to an ever-expanding market. The British Columbia Geological Survey maintains several databases, including the Assessment Report Indexing System and MINFILE that make important field and analytical information readily available.

The Ministry of Energy and Mines also maintains an extensive mineral statistics website that features production, market, employment and mine development project data. B.C. ranks as one of the top jurisdictions in the world in its commitment to accessible and accurate information.

**MAPPLACE**

An award-winning interactive website created by the BCGS, MapPlace provides easy public access to provincial geological surveys, maps and reports. MapPlace’s interactive data lets users find highly specific information and create personalized maps and reports from that data.

**MINERAL TITLES ONLINE**

B.C. was the first province in Canada to develop an e-commerce online mineral tenure acquisition system, Mineral Titles Online (MTO).

MTO offers continuously updated placer and mineral tenure information; robust query, search and mapping abilities; and integration with related data resources including mineral occurrences, land status and other information clients need to make informed business and investment decisions.

As part of this strategy, the Province will incorporate coal tenure acquisition and management information into the MTO system, extending its benefits to potential coal clients and investors.

"Mining is a key economic driver, creating jobs at every stage from exploration to transportation. A robust mining sector supports a strong economy and strong communities across British Columbia."

— Don Lindsay, President and CEO, Teck
**Stronger Ties with Asia Pacific**

B.C.'s economic ties with the Asia Pacific are strong. In 2011, exports to the Pacific Rim were valued at $14.2 billion, surpassing those to the U.S. for the first time in history. Chinese companies are investing in coal mine developments in B.C.'s northeast, setting the stage for additional economic opportunities and thousands of new direct and indirect jobs.

As Canada's Pacific Gateway, B.C. leads the country in securing a stronger relationship with emerging Asian economies. With *the BC Jobs Plan*, the Province is stepping up its efforts to market British Columbia as the destination of choice for foreign investment—and as a safe, reliable supplier of goods and services in an uncertain global economy. The Premier undertook a Jobs and Trade Mission to Asia in 2011, strengthening existing relationships, opening doors for new relationships, and setting the stage for future opportunities. Additional missions will be undertaken in 2012 and beyond.

### 2. Streamline Regulatory Processes

Unnecessary red tape hinders development and can tie up industry and government resources. As it has committed in *the BC Jobs Plan*, the Province is working to make regulatory processes smarter and more efficient while maintaining high safety and environmental standards. This includes developing a coordinated, transparent permitting and approval process with clear timelines for all industrial projects, including mineral exploration and mine developments. The Province reaffirmed its commitment to reducing red tape in 2012. Progress on regulatory accountability is reported annually.

**Eliminating Duplication in Environmental Assessments**

The B.C. Environmental Assessment Office manages reviews of proposed major projects as required by the *Environmental Assessment Act*. The process is thorough, taking into account the potential environmental, economic, social, health and heritage effects of proposed major mine developments. It also provides for meaningful participation by First Nations; proponents, the public, federal and provincial agencies, and local governments.

Many mine development proposals in B.C. are also subject to federal review, under the *Canadian Environmental Assessment Act*. To attract more opportunities and make B.C. more globally competitive, the Province will work with the federal government to harness federal regulatory reform and develop a single, effective process—maintaining the highest standards while eliminating costly and time-consuming duplication.
Exploration Permit Applications

Mining or exploration work that involves mechanized surface disturbance can only proceed when authorized under the Mines Act. Provincial staff review all Notice of Work (NOW) applications to ensure they adhere to the Mines Act; the Health, Safety and Reclamation Code for Mines in British Columbia; and other associated statutes such as water and environmental regulations. The reviews include First Nations consultation.

Since the launch of the BC Jobs Plan, the Province has made significant progress in reducing the backlog of NOWs. Once this backlog is addressed, the Province will maintain an average turnaround time of 60 days for processing new NOW applications for exploration.

One-Window Model

The one-window model is a streamlined approach to administrative and regulatory functions. It gives clients one-stop access to information and services that help to co-ordinate a range of requirements, including First Nations consultations, into a single, efficient process that expedites decision making.

FRONTCOUNTER BC

FrontCounter BC provides individual prospectors and small-to medium-sized natural resource businesses with a wide range of authorizations and permits on behalf of various client agencies. Services include:

- supporting clients to apply for the authorizations their projects need;
- interpreting land information, maps and management plans;
- helping to initiate the consultation process with First Nations; and
- following up to track the status of applications filed.

Mines Act Amendments

In 2011, the Mines Act was amended to streamline our regulatory process and exempt some low-risk activities from the permitting process. In 2012, the Province will consult with First Nations, industry representatives and the public to develop regulations that define these exemptions.

Low-risk activities could include:

- small scale clearing to expose the rocks under sand, gravel and dirt;
- small volume aggregate extraction; and
- new exploration on an operating mine site.
**Government Cost-recovery Options**

Even with streamlined and simplified processes, reviewing and approving mining and mineral exploration applications is resource intensive.

As levels of activity continue to grow, the Province will work with stakeholders to explore cost-recovery options, helping to ensure that permitting continues to be timely and efficient. Options may include application fees for *Mines Act* permits, construction-approval fees for new mines and major mine expansions, or a levy on mineral and coal production.

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**3. Ensure the Health and Safety of Our Workers**

Mining is one of the safest heavy industries in British Columbia, thanks to a comprehensive regime of workplace health and safety policies. Mines inspectors and other provincial staff protect the well being of workers and the public by:

- reviewing the health and safety aspects of mining and exploration proposals;
- inspecting and monitoring mine sites for compliance with the *Mines Act* and the *Health, Safety and Reclamation Code for Mines in British Columbia*;
- conducting audits to evaluate how well mines have implemented health and safety programs;
- collecting data and maintaining records of accidents, dangerous occurrences, inspection frequencies and audiometric (hearing test) data; and
- participating in research and development projects to enhance procedures, technology, and practices in mine health and safety.

The latest provincial safety statistics show there has not been a mining-related fatality in B.C. since September 2009, the longest period of time without fatalities since 1898. The Province is committed to ensuring that the mining industry remains among the safest heavy industries in the province.

**Recognizing and Encouraging Best Practices**

To promote best practices in health, safety and environmental sustainability, B.C. supports awards and competitions, and works with various stakeholders to develop guidelines for the mining and mineral exploration industry.
Best management practices (BMPs) are derived from years of collected industry and government experience, helping the industry meet and exceed safety and environmental standards. The Province has compiled various BMP handbooks and guides, often tailored to the needs of a specific region or industry activity, to promote continuous improvement in the B.C. industry.

Annual awards include the **Mine Safety Awards**, the **Mine Reclamation Awards** and the **Mining and Sustainability Award**. The Province also supports the annual **Provincial Mine Rescue and First Aid Competition**, which simulates real-life mine rescue situations. Winners of the provincial contest can compete against their counterparts from Manitoba, Saskatchewan, Ontario, Northwest Territories, Nunavut and the Western United States at the biennial **Western Regional Mine Rescue Competition**.

**THE HANDBOOK FOR MINERAL AND COAL EXPLORATION**

The MX Handbook is one example of a widely used BMP guide. Developed by the Ministry of Energy and Mines, the Association for Mineral Exploration British Columbia, the Ministry of Environment and the Mining Association of British Columbia, the handbook helps companies plan and implement exploration, closure and reclamation activities with due regard for worker health and safety and the environment.

**4. Protect the Environment**

B.C. is a recognized leader in environmental protection, successfully balancing resource development with a world-leading commitment to habitat protection and sustainability. The provincial Environmental Assessment Office reviews proposals for major projects, including major mine developments, to ensure they meet the goals of environmental, economic and social sustainability. The process takes into account the concerns of First Nations, the public, other interested stakeholders and government agencies.

The Province is developing a number of initiatives related to environmental protection and sustainability that will affect various B.C. industries, such as mineral exploration and mining. These include continuing work on climate action, water quality, waste discharge and wildlife management.
Climate Action

British Columbia is recognized as a leader in climate action, and the provincial government supports innovation as a key means to address climate change.

Through British Columbia’s Climate Action Plan, the Province collaborates with businesses, including mining companies, on Climate Action Industry Working Groups that develop cost-effective solutions for reducing greenhouse gas emissions and promoting new opportunities in a low-carbon economy.

The B.C. mining industry has taken significant steps to adopt innovative sustainability practices. These include liquefied natural gas and renewable alternatives into power operations; reducing mining operations’ impact on water; and partnering with First Nations to manage land and resources in a sustainable and culturally sensitive manner.

Waste Discharge

All resource extraction activities occurring in B.C. must meet the Province’s strict environmental standards. Mining operations can only discharge effluent, emissions or solid waste under the terms of specific waste discharge permits.

Building on this long-standing level of protection, the Province is working with the mining industry and other agencies to develop the Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators. The document will provide certainty by describing baseline environmental studies in areas including air quality, water quality and quantity, groundwater, hydrology, sediment quality and geological conditions.

Wildlife Management

Much of the mining and mineral exploration in B.C. occurs in rural areas and has the potential to affect wildlife habitat. In particular, Caribou are vulnerable to development and the Province is taking action to recover a number of herds. The work includes developing plans that balance habitat protection and management with the development of industries such as mining, forestry and oil and gas. Actions supporting the plans may be:

- protecting caribou habitat;
- collaborating with industry to fund habitat restoration and research;
- establishing management practices for development activities within certain caribou habitat areas; and
- managing predators and caribou populations.
**TRANSFER TO SAVE MOUNTAIN CARIBOU**

Help is on the way for the mountain caribou. Nineteen of the animals have been transferred from a healthy donor herd near Dease Lake to a threatened herd in the East Kootenay. The newly transferred caribou have GPS radio collars to track their movements and see how well they integrate with the Kootenay herd.

The project was aided in Dease Lake by members of the Tahltan First Nation and in the East Kootenay by the Ktunaxa First Nation. Both nations long relied on caribou for their way of life.

**Water Quality**

Water quality guidelines are one factor considered in determining a project’s environmental impacts. They indicate the concentration at which a substance may be harmful, and are taken into consideration when setting discharge limits under the *Environmental Management Act*.

The Province is updating its water quality guidelines for selenium and sulphate to reflect the latest science.

Selenium and sulphate can sometimes be released as a result of mining activities. The Province is also developing a new *Water Sustainability Act* (WSA), which will build on and replace the current B.C. *Water Act*. Proposed provisions for the WSA include expanded protection of stream health and aquatic environments, new planning tools, provincial water objectives and groundwater licensing.

**Reclamation**

Mining activities cover less than one per cent of B.C. land base. Companies are legally required to reclaim all lands they disturb by mining, or through exploration.

To ensure that reclamation projects respect local and provincial needs, dedicated government staff:

- conduct detailed technical reviews and ensure that reclamation responsibilities are met;
- organize activities and participate in committees supporting technology transfer, reviewing ministry practices and enhancing cooperation among government, industry, First Nations, academia and the public; and
- participate in national and international committees conducting research and technology transfer.
INDUSTRY BEST PRACTICES: THE KEMESS SOUTH MINE
The Kemess South Mine in north central B.C. is one of the largest-scale reclamation projects now being implemented. The mine is in remote, mountainous terrain. Native plant species are not easily purchased and vegetation growth is limited by a severe climate and minimal soil resources.

Despite these challenges, the site has been extensively replanted with native species. Local communities have become involved with annual native-seed collection campaigns. To date, over 750,000 stems of various native species have been planted, and progressive reclamation has been completed on approximately 250 hectares. The reclamation project has earned several awards, including the 2010 Jake McDonald Annual Reclamation Award and the 2010 Mining and Sustainability Award.

5. Build Partnerships with First Nations

Mining has the potential to significantly benefit First Nations in B.C. by providing jobs, infrastructure and economic spin-offs. The Province and industry actively engage First Nations when planning mining developments, ensuring their perspectives and interests are considered.

The Crown has a duty to consult and, where appropriate, accommodate First Nations on decisions that may affect Aboriginal rights or title. This includes decisions on mineral development. Consultation sets the stage for positive relationships that help create certainty and economic sustainability.

The Province is supporting these goals by coordinating its consultations on related permits, establishing timelines and providing clear guidance on roles and responsibilities.

Strategic Agreements

The Province and First Nations have been working together for many years to forge strategic agreements that achieve mutual goals. Through this process, the parties are building enduring government-to-government relationships, funding First Nations consultation capacity, establishing consultation processes for the natural resource sector, and fostering shared decision-making.
Strategic agreements can establish:

- engagement processes with clear and reasonable response times;
- a shared understanding of which types of decisions require no, or different levels of, engagement; and
- structures which ensure First Nations can effectively engage with the Province in resource management.

Strategic agreements may also respond to First Nations’ economic development interests, and can be expanded over time to support objectives such as revenue sharing, carbon offset sharing and socio-cultural initiatives.

**KTUNAXA NATION STRATEGIC ENGAGEMENT AGREEMENT**

The Province and the Ktunaxa Nation Council negotiated a strategic engagement agreement to guide ongoing government-to-government discussions on natural resource decisions.

Under the agreement, $1.65 million is being provided over three years, which commenced in late 2010, to the Ktunaxa Nation to more effectively engage with the Province on land and resource development decisions in Ktunaxa Territory. This is anticipated to result in more co-operative decision-making and lead to increased certainty for resource activities in the area.

**Revenue Sharing**

British Columbia is the first province in Canada to share mineral tax revenues from new or expanded mines with First Nations. Revenue sharing is negotiated on a project-by-project basis, generally through Economic and Community Development Agreements (ECDAs).

As part of this strategy, the Province is committed to negotiate early in the development proposal process, helping to create greater certainty for First Nations, industry and the Province.

B.C. signed its first two ECDAs with First Nations in August 2010 and is working to develop further agreements, emphasizing community development to achieve social and economic goals.
Aboriginal Business and Investment Council

The B.C. Aboriginal Business and Investment Council was established in 2011 as part of the BC Jobs Plan. Its mandate is to work with Aboriginal communities and the private sector to improve Aboriginal peoples’ participation in the economy, identify successful investment models, foster economic development in Aboriginal communities and increase overall investment in the province. The council chair serves on the BC Jobs and Investment Board, ensuring a direct link between the organizations. The board and council both report to government twice a year.

Industry and First Nations

In order to build strong long-term relationships, many companies negotiate directly with local First Nations, often resulting in Impact Benefits Agreements (IBAs). IBAs are comprehensive and can include, jobs for First Nations, other economic benefits, environmental management provisions, cross-cultural training and dispute-resolution mechanisms. For example, an IBA signed in 2010 between Copper Mountain Mining Corporation and the Upper Similkameen Indian Band addresses a number of issues related to the development, operation and reclamation of the Copper Mountain mine project. The Princeton mine began production in June 2011.

6. Develop a Skilled Workforce

Mineral exploration, mining and related sectors provide long-term, family supporting jobs and versatile career options to tens of thousands of British Columbians, and will provide employment for many more in the future. The mining sector, like almost every other sector, faces a series of challenges in making sure it has the right people, with the right skills, in the right places.
As part of this strategy, British Columbia is working to address recruitment and retention issues in a climate marked by aging demographics and strong competition from other sectors for well-skilled employees.

**Skills Development and Recruitment**

Employers in various industries across B.C. are already dealing with skills shortages. Mineral exploration and mining have been hit particularly hard and, without action, the lack of skilled labour could hold back the sector’s growth.

The primary solution lies in education, training and diversifying into non-traditional labour markets. The Province facilitates skills development in mineral exploration and mining in a number of ways, but even with a multitude of programs in place, B.C. may not have enough workers to fill job openings over the next decade. Along with developing the skills of British Columbians, the Province will welcome and integrate skilled workers from other provinces and countries to help keep B.C.’s economy growing.

**OPPORTUNITIES AND CHALLENGES FOR B.C. MINERAL EXPLORATION AND MINING**

B.C.’s growing mineral exploration and mining sector offers tremendous opportunities for workers with the right skills. B.C. miners earn an average annual salary of over $108,000, including benefits.

More than 15,000 job openings are expected in the industry. Companies face significant challenges in both recruitment and retention.

- 50–54 year olds account for the largest share of all age groups in the mining industry at over 20 per cent. Nearly 5,000 retirements are expected for this sector over the next decade.
- More than one in five workers in the B.C. industry have a trades certification. It is estimated that starting in 2016 and through to 2020, the industry will face a significant shortage in over 80 trades.
- Because viable mineral and coal deposits can be found across the province, many exploration and mine development projects are in rural locations.

The skill demands will be diverse and many new employees will need a higher level of training than in the past. Many new jobs will require post-secondary skills training, from advanced degrees in engineering to trades and apprenticeships to certifications for heavy equipment operators and truck drivers.
Skills Development Initiatives

The Province delivers over $500 million each year in labour market programming to help British Columbians get the skills they need. Most of these programs are open to workers in every sector of the economy.

More than $100 million a year is invested in trades training and certification through the Industry Training Authority (ITA). The ITA plays a key role in supplying skilled workers for the mineral exploration and mining sector, such as welders, millwrights, industry electricians and heavy-duty equipment mechanics – responding directly to labour market needs.

Regional Initiatives

As part of the BC Jobs Plan, the Province is establishing Regional Workforce Tables as a new platform for educators, industry, employers, local chambers of commerce, First Nations, labour and others to plan how best to align existing regional training programs to meet local employment opportunities, and to ensure British Columbians have access to training and job opportunities in their communities.

The workforce table approach will be piloted in the northeast and the northwest regions of the province beginning in 2012. For more information, go to www.jti.gov.bc.ca/regionalworkforcetables

Initiatives Specific to Mineral Exploration and Mining

In addition to general skills development programs, the Province invests in several initiatives tailored to the mineral exploration and mining industry.

British Columbia Mineral Exploration and Mining Industry Labour Shortage Task Force

This task force was formed in 2008 by representatives from industry, First Nations, unions, training and education providers, and provincial and federal government agencies. The Province provided over $1 million in start-up funding, supporting efforts to coordinate, develop and implement workforce measures to ensure the industry has the human resources it needs.

In December 2011, the Province announced over $1 million in new funding through the Labour Market Partnerships Program for a three-year project led by the task force. It will identify industry-specific training, education and promotional needs – with a strong focus on youth and under-represented sectors of society such as women, First Nations and new Canadians.

Employment Skills Access

Employment Skills Access provides tuition-free, group-based training at public post-secondary institutions in response to regional priorities. Highlights related to the mining sector include the following:

“The mining sector is an economic driver for both the provincial economy and communities around BC,” said John Winter. “Mining projects are crucial for our province because they create jobs, propel local economies, fund our social programs through revenues they generate, and bring in a great deal of investment.”

— John Winter, President & CEO, British Columbia Chamber of Commerce
• **Underground Mining** (North Island College), a four-month program for participants to address labour shortages and skills gaps in underground mining;

• **Mining Fundamentals** (Northern Lights College), a 12-week program to prepare people from Chetwynd for entry-level positions at a surface mine operation;

• **Mothers to Miners** (Northern Lights College), a 12-week program for women from Tumbler Ridge to prepare them for entry-level positions at a surface mine operation (students are primarily trained in haul truck driving);

• **Introduction to Geographical Information Systems** (University of Northern BC), a three-month certificate program for 14 participants. Designed for workers with little or no experience, this program will provide a broad skill set for employment in the oil and gas and mining sectors; and

• **Northern Skills Training Pilot**, an 18-month essential skills training initiative to upgrade the skills of 840 forestry and mining workers in northern B.C.

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**NORTHWEST COMMUNITY COLLEGE’S SCHOOL OF EXPLORATION AND MINING (SEM)**

Northwest Community College offers unique, hands-on education through its School of Exploration and Mining (SEM), which was founded in 2004. In partnership with Smithers Exploration Group and the Province, SEM develops and delivers courses and programs that equip students with the practical skills and knowledge needed for employment in the mineral exploration and mining industry.
Summary of Actions

In order to meet the BC Jobs Plan goals of eight new mines and nine expansions, here is a list of action items.

1. Enhance Our Competitive Edge

ACTIONS

1. Promote B.C.’s strong fiscal policies (e.g., tax regime, incentive programs) to potential mineral exploration and mining investors.

2. Complete the provincial review of existing mineral and coal land reserves to determine if more land can be made available for exploration.

3. Strengthen relationships with Asia Pacific to market B.C. mineral exploration and mining.

4. Ensure that B.C.’s geoscience information is readily and publicly available to encourage exploration activity.

5. Complete key infrastructure projects to support mine development (e.g., Northwest Transmission Line, Road and Rail Utility Corridor project and port improvement projects in the Pacific Gateway supply chain).

6. Upgrade Mineral Titles Online to create a comprehensive web-based system for mineral, placer and coal tenure acquisition, administration and management.

2. Streamline Regulatory Processes

ACTIONS

1. Reduce the backlog of Notice of Work (NOW) application permits – with a target of an 80 per cent reduction by August 2012.

2. Ensure an average turnaround time of 60 days for processing new NOW applications for exploration.

3. Reduce the backlog of Water and Land Act tenures by 50 per cent by December 2012.

4. Reduce backlog of mining, placer and coal tenure applications by 50 per cent by March 2013.

5. Develop regulations to exempt low-risk exploration and mining activities from requiring Mines Act permits while maintaining health, safety and environmental standards.

6. Work with the federal government to eliminate duplication in environmental assessments.

7. Ensure the review of all mining activities is conducted efficiently and timelines are met.

8. Assess cost-recovery options to improve permitting processes.
3. Ensure the Health and Safety of Our Workers

**ACTIONS**

1. Ensure safety at mine sites with a comprehensive inspection program based on risk assessment.
2. Collaborate with industry, First Nations and stakeholders to develop new and updated best management practices.

4. Protect the Environment

**ACTIONS**

1. Ensure all mines are environmentally sound through technical review, comprehensive permitting, inspections and reclamation.
2. Review and complete *Provincial Water Quality Guidelines* for sulphate and selenium.
3. Develop and implement the Peace Northern Caribou Plan.
5. Support the Mine Reclamation Awards and Mining and Sustainability Award.

5. Build Partnerships with First Nations

**ACTIONS**

1. Negotiate new strategic agreements and build on existing agreements as part of ongoing relationship building.
2. Negotiate provincial government revenue sharing agreements with First Nations early in the development of new mines and major expansions.
3. Work with the Aboriginal Business and Investment Council to facilitate partnerships between the Province, First Nations, and the mineral exploration and mining industry.
4. Ensure First Nations are consulted with and accommodated when authorizing mining activities.
6. Develop a Skilled Workforce

**ACTIONS**

1. Work directly with the British Columbia Mineral Exploration and Mining Industry Labour Shortage Task Force to address the sector’s skills shortages.

2. Support practical, hands-on programs that prepare a wider variety of British Columbians for careers in mineral exploration and mining.

3. Utilize the Regional Workforce Tables by working with stakeholders to ensure that human resources initiatives are aligned with regional needs.
Footnotes

1 PricewaterhouseCoopers 2011 report on Canadian mining taxation.

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