# BRITISH COLUMBIA MINING PLAN



**COVER PHOTOS:** 

Pursuing a career in mine planning and development, this University of British Columbia doctoral student has worked in the mining industry and is interested in sustainability and mining

Bighorn sheep utilizing the habitat provided by mine reclamation at Line Creek coal mine

Trucks hauling ore at Kemess Mine in northern British Columbia

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# **Message from the Premier**

British Columbia was built on its wealth of natural resources – including a strong mining industry that has been a part of our economy for more than a century. The Province's mineral exploration and mining industries provide thousands of long-term, family-supporting jobs, revenue to support provincial and local government services, and are important parts of regional economies throughout British Columbia.

British Columbians have the experience, energy and enthusiasm to build a prosperous future for our communities and the mining industry. Importantly, this prosperity includes BC First Nations, who are participating in our mining industry as never before.

Mining is playing a major role in government's work to revitalize the economy across our province. Critical to these efforts is the BC Mining Plan, which will contribute to the enormous potential for job and wealth creation resulting from mining. The Mining Plan builds on the initial consultation undertaken by the MLA Mining Task Force. I appreciate the work of the committee and wish to thank all MLAs who contributed to that valuable endeavor. I also want to thank all those who shared their ideas and vision with the Task Force.

Working together, I know we can build a strong, vibrant mining sector that provides new jobs for communities throughout British Columbia for generations to come.



Honourable Gordon Campbell

# Message from the Minister of Energy and Mines



The Government of British Columbia is committed to revitalizing the mining industry in this province, and we are doing just that.

Important government initiatives have spurred British Columbia's mining industry to new growth. These initiatives include revisions to the tax regime, the streamlining of regulatory and approval processes, extension of flow-through tax credits which are among the best in Canada, and development of land management plans that provide security for the land base.

The BC Mining Plan will build on this success by enhancing partnerships with communities, First Nations and industry to further stimulate exploration investment, eliminate duplicate regulations and rationalize other provincial and federal regulations that pertain to resource extraction. Mining is returning to its deserved role as an exciting, vital player in British Columbia's economy.

Honourable Richard Neufeld

# Message from the Minister of State for Mining



Honourable Pat Bell

The Government of British Columbia has worked actively with the mining industry to once again make the Province of British Columbia a globally competitive jurisdiction. A vibrant mining industry is built on exploration, and exploration is built on investor confidence. As a result, mining exploration activity in British Columbia has more than tripled since 2001. New mines are once again opening in the province and old ones are finding new life.

By lowering taxes, reducing regulations and continuing to be on the leading edge of technological and service delivery innovation, we are setting the stage to more fully develop the tremendous mineral wealth of our province. This plan will continue to build on the recent measures government has already undertaken to ensure that BC remains globally competitive and that we continue to generate new opportunities for young British Columbians.

I would like to thank all of the individuals and organizations that contributed to the BC Mining Plan. The Mining Plan will help focus our resources to ensure we remain globally competitive and further increase the benefits to British Columbia of this vital economic sector.

# EXECUTIVE SUMMARY

BC is one of the world's most important mining regions, and mining is one of the province's most important industries. It generates thousands of jobs and billions of dollars in annual sales while providing raw materials for many of the products we rely on every day – from light bulbs to airplanes, all the way down to the very foundations of our homes, schools, hospitals and businesses.

Mining has fuelled economic development in BC communities for over 150 years, and it has incredible potential for the future. World demand for coal, metals and minerals is rising, led by industrial growth in places like China and India. Demand is also growing for aggregate materials, such as sand and gravel, to support the booming BC economy and exports to the US.

BC is ideally positioned to meet these demands.

Our mineral potential is among the best anywhere; we have vast, untapped reserves of metals and other resources; our taxes are competitive; our regulatory requirements have been streamlined; our electricity rates are among the lowest in North America; our workforce is highly skilled; and our infrastructure is well developed.

We also have tremendous strength in our communities, where First Nations and local governments are partnering with mining firms, environmental organizations and other groups to help ensure that the industry is not only profitable but socially and environmentally responsible and, ultimately, sustainable for the long-term future. The government is committed to building on these strengths to realize the industry's full potential, province-wide.

The BC Mining Plan is built on the following four Cornerstones as guiding principles for a strong, healthy industry:

- Focus on Communities and First Nations
- Protecting Workers, Protecting the Environment
- Global Competitiveness
- Access to Land

The Plan, which will guide mining policy in BC for the next decade, is based on the above Cornerstones and supports British Columbia's vision for exploration and mining:

Thriving, globally competitive, safe and environmentally responsible exploration and mining sectors, significantly benefiting all British Columbians





Crops are raised and cattle graze on a portion of the Afton copper-gold mine, currently being reclaimed

# **MINING TODAY**

Products made from minerals are vital to our way of life, and British Columbia has a rich endowment of minerals. Mining these minerals creates jobs and economic growth, and produces billions of dollars in sales every year, contributing to key services such as education and health care.

The Province of British Columbia is dedicated to fostering environmentally responsible mining that supports and sustains our communities, thrives in a globally competitive investment climate and benefits all British Columbians for years to come.

We have the resources. We have the potential. This is our plan for the future.

The Dennys, three generations of Kootenay miners

#### **Asian Growth Driving Demand**

- Chinese housing starts rose more than 25% and car sales surged by 76% in 2003.
- Copper prices gained almost 50% in 2003 and 2004 as China increased demand for copper cables and electrical wiring in cars and appliances.
- Spot coal prices rose to a record high in 2004 as China limited exports to ensure supply for its own steelmakers and power companies.

#### **B.C.'s Mineral Wealth Includes:**

- metallurgical coal, critical to steel production
- thermal coal, a major source for world electricity generation
- copper, used in almost every appliance and car; medical equipment
- gold, used in jewelry, coins, electrical contacts
- silver, used in photography, mirrors, dental work
- □ lead, used in batteries, solder, paint
- zinc, used in galvanizing steel, TV screens, plastics
- molybdenum, used mainly in steel production, medical implants, tools
- industrial minerals such as magnesite, zeolites, medical clays, sulphur, silica and garnet
- construction aggregates, such as limestone, sand, gravel and stone
- jade, used in tiles, jewelry and sculptures
- graphite, used in fuel cell production

# INTRODUCTION

# Society needs minerals

Cell phones. Hip implants. Computers. Cement. Cars. Jet turbines. Anti-bacterial silver. Refrigerators. These are just a few of the countless products we rely on every day that are made from minerals.

Worldwide demand for these types of products has increased dramatically in recent years, and is expected to rise even more in coming decades, led by industrial growth in places like China and India as well as continuing global population growth.

BC is extremely well-positioned to meet this growing demand. Our mineral potential is among the best anywhere, including:

- vast reserves of coal
- metals such as gold and copper
- industrial minerals like sulphur and silica, and
- construction aggregates such as sand, gravel, limestone and clay

We also have tremendous strength in our communities, where First Nations and local governments are partnering with mining firms, environmental organizations and other groups to help ensure a healthy mining industry. The BC Mining Plan supports and builds on those efforts – setting out the actions the Province will take to ensure the industry is not only profitable but socially and environmentally responsible and, ultimately, sustainable for the long-term future.



First Nations artisans hammered copper into ceremonial items like this Haida shield. Today, copper is in high demand for products such as cables, electronics and electrical wiring. From the steel in the roof and train rails to the concrete in the platform and railbeds, BC's mining industry is critical to the provincial transportation network



Platinum, silica, silver and steel are critical in the manufacture of life-saving heart pacemakers

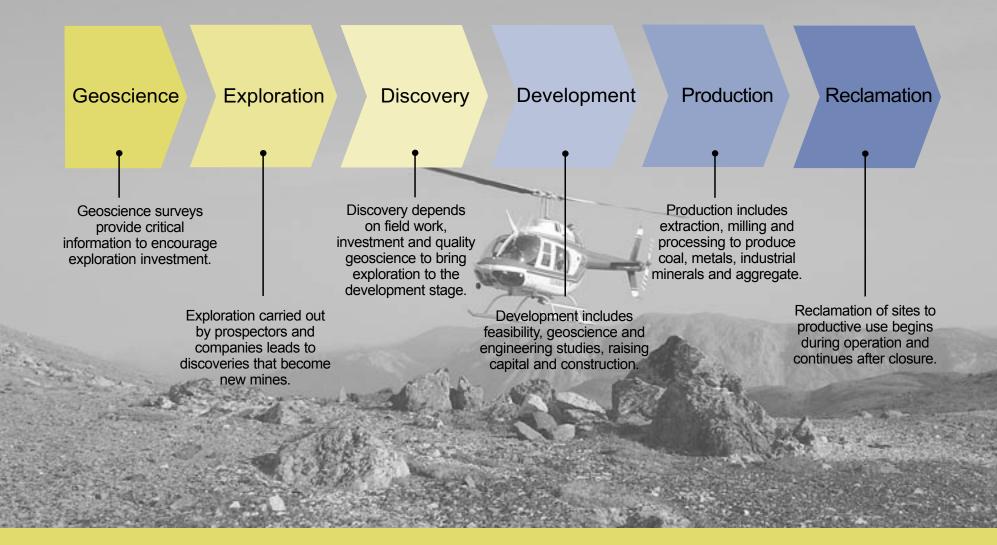


Steel, aluminum and copper provide raw materials for the production of many recreational vehicles

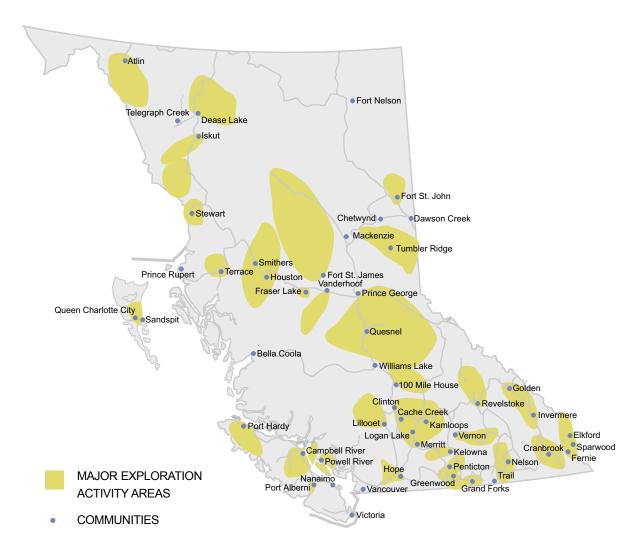


Graphite is an important component of fuel cell engine technology for clean energy vehicles

# **6 ESSENTIAL PHASES OF MINING**



# The Exploration Phase: Communities benefiting from major mineral exploration investments

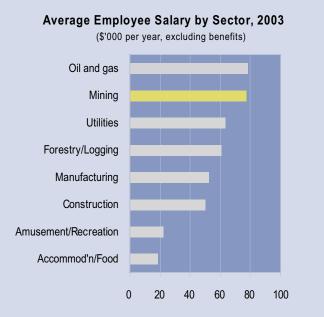


#### **Exploration and Communities**

- Over 35 communities across the province benefit from exploration activity
- Exploration spending is forecast to be more than \$100 million in 2004
- Communities benefit from the purchase of goods and services such as:
  - Food and accommodation
  - Helicopter rental
  - Equipment/vehicle rental and fuel
  - Drilling contracting
  - Laboratory sample analysis
  - Financial services
  - Head office support
  - Transportation and freight services
- Exploration activity creates more than 800 seasonal field jobs and over 400 full-time jobs across British Columbia

"Improved prices and a stable economy have mines at Barrick's Eskay Creek and Northgate's Kemess South providing employment and a positive impact on this region. Mineral exploration for 2004 has seen the most activity in years, and many companies have plans for continued exploration and development in 2005."

> Mayor Jim Davidson Smithers



# INTRODUCTION

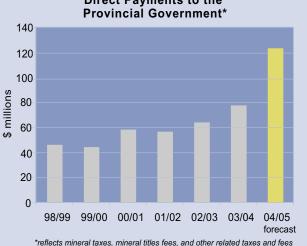
# Mining supports provincial and local economies

Exploration and mining generate highwage, family-supporting jobs throughout British Columbia.

- Approximately 9,300 people are directly employed in the BC mining sector
- Workers in the industry, on average, • earn \$94,500 per year including benefits
- Building on successful partnerships to • date, exploration and mining have great potential to support economic growth for First Nations

Provincial and local revenues from mining activity help support schools, hospitals and local community infrastructure:

Companies contribute more than \$79 million in direct payments to the provincial government (see table on this page)





Opportunities are growing in the mining sector.

# **Direct Payments to the**

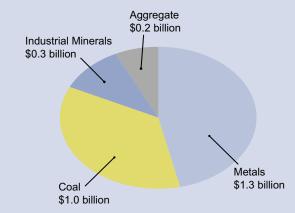
# Mines are located throughout British Columbia



#### **Mining Today**

- Metal, coal and industrial mineral operations are widely distributed throughout the province
- Hundreds of aggregate operations and seasonal placer mines are operating in BC
- The Dillon project, located 40 km south of Chetwynd, has been approved and shipped its first coal in December 2004
- The Wolverine mine, located 23 km northwest of Tumbler Ridge, is expected to produce at a rate of 1.6 million tonnes of coal per year
- Thirteen new mine proposals are in the provincial *Environmental Assessment Act* review process, including Galore Creek gold and copper, Kemess North copper and gold, Mount Klappan coal, Orca sand and gravel, and Red Chris copper and gold

#### Average Annual Mineral Sales (2003)

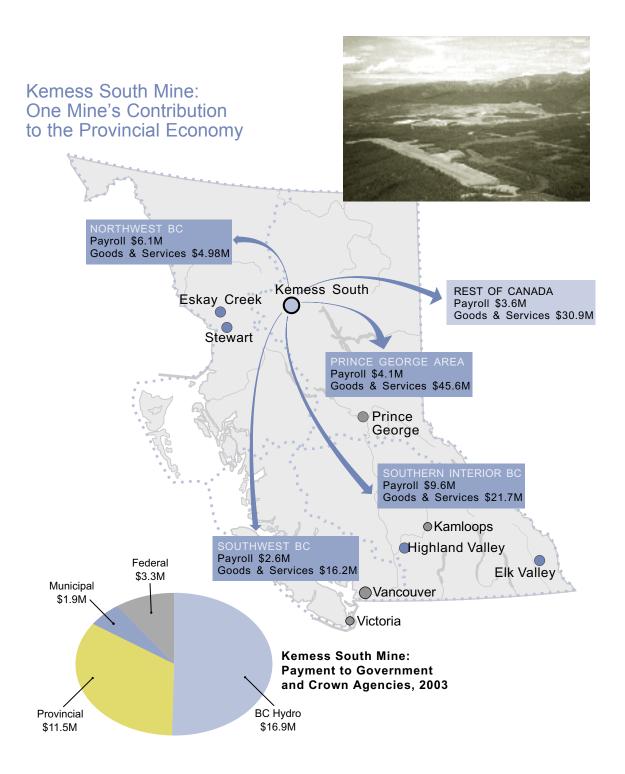


### **Economic Benefits of BC Mines (2003)**

- Kemess South Copper-Gold Mine
- \$194 million in copper, gold and silver revenues
- 351 employees
- \$26 million in payroll
- \$24 million in capital expenditures
- \$88 million spent on goods and services
- \$14 million in direct payments to local and provincial governments
- \$17 million for electricity purchased from BC Hydro
- Highland Valley Copper Mine
- \$378 million in copper, molybdenum, gold and silver revenues
- 900 employees
- \$85 million in payroll
- \$12 million in capital expenditures
- \$215 million spent on goods and services
- \$15 million in direct payments to local and provincial governments
- Largest base metal mine in Canada

#### Eskay Creek Gold-Silver Mine

- \$130 million in gold and silver revenues
- 258 employees
- \$20.8 million in payroll
- \$2 million in capital expenditures
- \$60 million spent on goods and services
- \$8.2 million in direct payments to local and provincial governments
- Amongst the world's richest grade gold-silver mines
- Elk Valley Coal Corporation
- \$1 billion in metallurgical and thermal coal revenues
- 2,360 employees
- \$220 million in payroll
- \$50 million in capital expenditures
- \$430 million spent on goods and services
- \$35 million in direct payments to local and provincial governments
- A world leader in the production of high-quality hard coking coal



# Our commitment to mining

British Columbia is one of the most attractive jurisdictions in the world for exploration and mining.

- Taxes have been reduced
- Mining regulations have been reduced by one-third to eliminate unnecessary provisions
- An MLA Mining Task Force consulted with local governments, First Nations, industry and other interested parties on revitalizing the mining sector
- Increased marketing is encouraging investment in BC

Many First Nations and local communities are supporting industry and government in encouraging responsible exploration and mining in BC.

# BC Mining Plan and Cornerstones

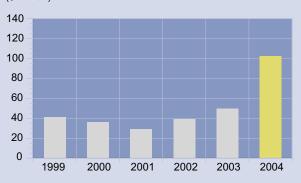
The BC Mining Plan builds on our achievements with a series of targeted strategies and actions under four Cornerstones as guiding principles:

- Focus on Communities and First Nations
- Protecting Workers, Protecting the Environment
- Global Competitiveness
- Access to Land

Together, these strategies and actions will allow BC to realize its vision of thriving, globally competitive, safe and environmentally responsible exploration and mining sectors, significantly benefiting all British Columbians.



BC Mineral Exploration Expenditures (\$ million)



Exploration investment could double in 2004 with total expenditures projected to be more than \$100 million

#### **Positive Signs For BC Mining**

- Exploration spending is forecast at over \$100 million in 2004
- Claim staking in 2004 is over 80% ahead of 2001
- Our share of Canadian exploration investment has increased to 9.1% in 2003 from 5.7% in 2001
- Several new mine projects are advancing to production, like Wolverine Coal
- Some closed mines, such as Gibraltar and Mt. Polley, are being reactivated
- Coal mining has returned to northeastern BC with the opening of the Pine Valley and Dillon mines, and the anticipated opening of several others in the next few years
- The number of major exploration projects with budgets in excess of \$100,000 is estimated at 220 in 2004, compared to 92 in 2003
- Drilling projects are estimated to be 206 in 2004, up from 87 in 2003
- The total number of exploration projects in 2004 is estimated at 450, up about 50% from 2003

# THE FOUR CORNERSTONES OF THE MINING PLAN

Focus on Communities and First Nations Communities, First Nations and industry working together ensure mining provides long-term benefits

Access to Land Certainty concerning access to land supports investment in exploration and mining BC'S MINING VISION Thriving, globally competitive, safe and environmentally responsible exploration and mining sectors, significantly benefiting all British Columbians

Global Competitiveness A stable policy climate, competitive taxes and regulations, a skilled workforce, strong infrastructure and excellent geoscience data attract investment in exploration and mining Protecting Workers Protecting the Environment Efficient, science-based standards protect the safety of mine workers and the natural environment

Exploration drilling on Williams Gold property in northern BC

# FOCUS ON COMMUNITIES AND FIRST NATIONS

Exploration and mining create jobs and economic opportunity in communities throughout British Columbia. Communities, First Nations and industry work together to ensure a thriving mining sector that provides substantial economic and social benefits, while protecting worker safety and the environment.

This Plan will support:

- Strong, enduring relationships between the mining industry, communities and First Nations
- The development and implementation of a made-in-British Columbia approach to sustainable exploration, mining and communities

cornerstone

Miners have always been part of the Smithers community



"We are ecstatic to see the Gibraltar mine re-opened and Mt. Polley on the way to production next year. These operations contribute directly to the economy of our community, and they contribute indirectly by boosting investor confidence in the city, the Cariboo and BC."

> Mayor Rick Gibson Williams Lake

"Coal Mining has always played a significant role in the economy of Sparwood and the surrounding Elk Valley and with the new direction taken by the Province, everything points toward a strong and stable future. Along with the strengthening of the coal industry, our community looks forward to the growth that will come from new and expanded secondary industries that supply our mines."

> Mayor Cal McDougall Sparwood

# FOCUS ON COMMUNITIES AND FIRST NATIONS

# Exploration and mining are community engines

Mining has supported BC communities for well over a century, dating back to the Gold Rush period which spurred the development of railways, roads and other industries, such as agriculture. Today, communities continue to benefit from exploration and mining through:

- Job creation: mining employs about 9,300 people directly and about 8,000 in related sectors
- Economic growth through annual sales, and through payroll: the average annual wage is \$94,500 including benefits

- Business opportunities for local suppliers and service industries
- Economic diversification
- Infrastructure development, and
- Growing opportunities for people to develop and enhance their skills as the industry becomes increasingly sophisticated

MINING FACT: Elk Valley coal mines contribute 2,360 jobs and \$220 million in salaries to the region's economy



Mining supports the construction of community facilities like this recreation centre in Logan Lake.

# Communities and mining working together

The Province has a policy for consultation with First Nations throughout British Columbia. In addition, communities, First Nations and industry around the province have developed solid, constructive relationships and through resource development, provide opportunities for a range of economic, social and environmental benefits – before, during and after mining.

For example:

 In northwestern BC, NovaGold is working with the Tahltan First Nation to responsibly develop the Galore Creek gold-silver-copper project. The company and the First Nation are also working with local, provincial and federal governments to ensure the project will create economic and other opportunities that benefit local communities.

- In Port Alberni, Hupacasath and Ucluelet First Nations and municipal officials jointly venture with Polaris Minerals to develop the Eagle Rock Quarry.
- In Kimberley, Teck Cominco worked closely with the city to help diversify the local economy after mine closure.

MINING FACT: Butchart Gardens, a reclaimed limestone quarry on Vancouver Island, attracts a million visitors every year "We wanted to send a signal that the Tahltan people are supportive of mining on their



land... We want to make sure that any mining that happens on our traditional lands is a win-win for all parties – the Tahltan people, the mining industry and the government."

Chief Jerry Asp Tahltan First Nation

"We are excited that the Northeast coalfields will contribute once again to our local prosperity in the form of employment and tax dollars. Benefits have already been experienced by our community and the optimistic forecast has spurred a flurry of investment inquiries."

> Mayor Clay Iles District of Tumbler Ridge



# ACHIEVEMENTS

- Mining Task Force consultation process with communities and industry to identify challenges and opportunities in mining
- Conferences ongoing support for community and industry conferences
- Newsletter monthly publication of BC's Mining Update, highlighting for potential investors provincial initiatives that improve BC's global competitiveness
- Mining Projects communities, industry and the Province working together on the review of mining projects
- ✓ Negotiated agreements resulting in the resumption of operations at the Gibraltar Mine in the Cariboo, and a new commercial industrial development by the Quatsino First Nation on the site of the Island Copper Mine

#### **Mining and Community Forums**

Annual community forums will be held to enable an ongoing discussion about exploration, mining and communities in British Columbia.

The forums will bring together representatives from communities, the mining industry and elected officials to identify challenges and solutions in working towards sustainable resource development.

# FOCUS ON COMMUNITIES AND FIRST NATIONS

# Strategy 1 Enhance relationships with communities

- Action 1 Host four regional mining and community forums each year beginning in 2005
- □ Action 2

Host an annual meeting with the mining industry and the Union of British Columbia Municipalities beginning in 2005 □ Action 3

Actively support the Mineral Resource Education Program, a partnership among schools, industry and government that gives students access to hands-on resources that demonstrate the role of mining in society

□ Action 4

Create a mining and minerals video for use in communities, and to promote the industry outside BC



Local conferences and meetings, like Minerals North held in Smithers in 2004, help establish community and First Nations partnerships with industry to encourage sustainable resource development.

# Strategy 2 Enhance relationships with First Nations

### □ Action 5

Host annual workshops, beginning in 2005, to share information with First Nations on exploration and mining development opportunities

□ Action 6

Develop partnerships between industry and government to fund mining-related skill, employment and business development opportunities for First Nations

### □ Action 7

Appoint a provincial coal coordinator to work with First Nations and industry to facilitate the development of new coal projects

# ACHIEVEMENTS

#### **Developing Skills And Creating Jobs**

- ✓ Yekooche First Nation partnership with the Province supporting training to gain skills to explore mineral potential and pursue joint ventures
- ✓ Tahltan First Nation working relationship with exploration and mining companies for over four decades, resulting in training and jobs for Tahltan members
- ✓ Hupacasath and Ucluelet First Nations partnership with Polaris Minerals in a 710 million tonne aggregate project near Port Alberni, expected to create new jobs for the next 100 years

### **Building Now for the Future**

- ✓ Quatsino First Nation, Electra Gold mining participation and royalty agreement concerning mineral development near Port Hardy
- ✓ BC & Yukon Chamber of Mines development of an aboriginal community engagement guidebook for First Nations and industry
- ✓ Upper Similkameen Indian Band partnership with the Province supporting development of tourism and an industrial park at historic Nickle Plate Mine site in Hedley
- ✓ Yekooche nomination for the Northern BC Prospector of the Year award, recognizing persistence, innovation and initiative
- ✓ A venture by the Quatsino First Nation to purchase the former Island Copper mine site buildings and port to provide employment and revenue generation opportunities for their members

The 2004 Prospecting Field School, sponsored by the BC & Yukon Chamber of Mines and the BC Institute of Technology, included three First Nations participants. These students are following in the footsteps of many aboriginal prospectors, both precontact and modern.



# ACHIEVEMENTS

- Supported Tahltan First Nation mining sustainability workshop
- ✓ Supported "Out of Respect," Tahltan First Nation report on sustainable mining
- ✓ Supported Mining Association of BC's Sustainable Mining initiative

#### **Sullivan Mine and Kimberley:**

# One Mine's Lasting Contribution to a Community

- ✓ In operation for 92 years, employing four generations of Kimberley residents
- ✓ Mine operations have supported the construction of:
  - roads
  - schools
  - recreational facilities
  - other community facilities
- Supported diversification of Kimberley's economy, including a focus on recreation and tourism
- ✓ Sullivan Mine won the provincial Mine Reclamation Award in 1996 for its comprehensive reclamation program

#### **Sustainable Mining**

Sustainable mining has been defined as mining that meets our needs today, without compromising future generations' ability to meet their needs.

A made-in-BC approach will maximize mining's contribution to sustainability for long-term, ongoing economic and social benefits, while protecting worker safety and the natural environment.

# Strategy 3 Develop a made-in-BC approach to sustainable mining

□ Action 8

Develop and implement guidelines to maximize mining's contribution to sustainability with communities, First Nations, labour, industry and environmental groups, beginning in 2005

□ Action 9

Create an annual Sustainable Mining Award in 2006 to recognize the achievements of communities, industry and organizations



The Tahltan First Nation organized a Mining Symposium with industry and government (participants in photograph) to address sustainability issues in 2003.

# PROTECTING WORKERS PROTECTING THE ENVIRONMENT

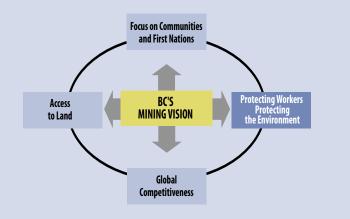
British Columbia is a leader in protecting the health and safety of mine workers, the public and the environment. Our commitment is to uphold and build on our already strong environmental and safety standards.

The Mining Plan will ensure:

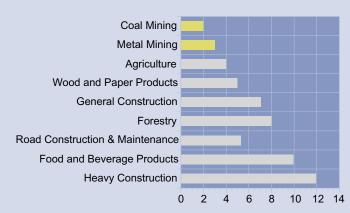
cornerstone

- The continuous improvement of science-based standards for environmental, health and safety protection in exploration and mining
- Collaboration with industry, First Nations, communities, interested parties and other levels of government to reinforce BC's leadership in environmental stewardship and sustainable mining

# Butchart Gardens, a National Historic site near Victoria, is a reclaimed limestone quarry



#### Industry Injury Rate, Average 1999–2003



# PROTECTING WORKERS PROTECTING THE ENVIRONMENT

# Keeping our workers safe

Mining is one of British Columbia's safest heavy industries.

Exploration and mine managers, workers and the Ministry of Energy and Mines are all dedicated to maintaining and improving safe exploration and mining practices.

Worker health and safety are protected through a multi-faceted approach that combines:

 Expert review of exploration and mining operations

- Mine site joint safety committees
- Inspections and audits
- Mine rescue and first-aid competitions
- Annual exploration and mine safety awards



Quinsam Coal near Campbell River received the 2003 John T. Ryan Safety Award for being Canada's safest coal mine, with zero time lost to accidents over a three-year period.

# Protecting the environment

British Columbia's natural beauty is one of its greatest resources, and the Province is committed to protecting the environment as a key part of its broader plan for sustained economic growth.

All mining and mine-related activities are carried out in ways that minimize their impact on their surroundings, and BC's standards for environmental protection are among the highest anywhere. A range of provincial ministries and agencies work with industry and communities to help ensure these standards are not only met but continuously improved. For example, all significant mining projects are reviewed under BC's *Environmental Assessment Act* under a harmonized process with the *Canadian Environmental Assessment Act*.

Standards for clean air, clean water and healthy communities also apply at every stage of a mine's life, from exploration to reclamation.

#### **Environmental Protection**

- World-class environmental protection standards
- One of the first provinces to enact reclamation legislation
- Integrated land use plans throughout most of the province
- Innovative guidelines for waste rock disposal at mines
- Security bond policies to ensure modern mine sites are reclaimed

#### **World Class Code For Mines in BC**

The Health, Safety and Reclamation Code was developed and written by a tripartite committee comprised of labour, industry and government. It contains specific requirements to protect workers and the environment.

In keeping with the government's commitment to balance environmental protection with sustainable development, the Code specifies outcomes that must be achieved. It also requires regular site inspections to ensure compliance.

#### **Focusing Inspections and Audits**

The Ministry of Energy and Mines is developing procedures to focus exploration and mine site inspections and audits where they are most needed.

A baseline number of inspections/audits will be established in relation to risk factors such as the age and type of mine and frequency of accidents. Mines that have higher or lower risk profiles than the baseline will have their inspections adjusted accordingly.

The province's total mining footprint is very small. For example, the Eskay Creek gold and silver mine (right), occupies about the same area as a shopping centre and produces over \$130 million in annual revenues.



# ACHIEVEMENTS

- ✓ Best safety record among British Columbia's heavy industries for 8 of the last 10 years
- ✓ Health, Safety and Reclamation Code clarified and simplified, while keeping the same high safety and environmental standards
- Annual mine rescue competitions and awards
- ✓ Highly trained and experienced professionals in the field
- ✓ Clear, science-based standards
- ✓ Ministry of Energy and Mines works with labour and industry to ensure safety standards are met
- ✓ Standards and regulations reviewed on an ongoing basis to continuously improve the province's health, safety and environmental protection record
- ✓ Annual industry health and safety recognition awards

# PROTECTING WORKERS PROTECTING THE ENVIRONMENT

Strategy 4 Lead in health and safety standards and practices

□ Action 10

Establish a Minister's worker safety advisory council with representatives from labour and industry by the end of 2005

□ Action 11

Improve compliance of worker safety requirements through a newlydeveloped mine site inspection and audit program

### MINING FACT: Mining is one of the safest heavy industries in British Columbia



Mines are required to have personnel trained in emergency response and mine rescue. An annual provincial competition is held to hone the skills and knowledge of provincial mine rescue teams.

# Strategy 5 Lead in environmental standards and practices

#### □ Action 12

Build on world-class environmental and reclamation guidelines through meetings with industry, government and environmental groups at regional workshops beginning in 2005

□ Action 13

Improve compliance with environmental standards and practices through a new program of focused inspections and audits at exploration and mine sites □ Action 14

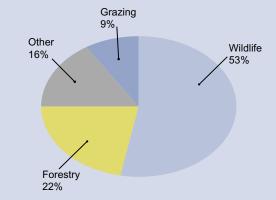
Recognize and continue to support exemplary environmental performance in mining activities through the annual Mine Reclamation Awards Program

MINING FACT: Total mining in the province disturbs less than threehundredths of one percent of the land base

# ACHIEVEMENTS

- ✓ Streamlined science-based provincial Environmental Assessment Act review process
- ✓ Developed leading-edge guidelines and monitoring processes for waste rock
- ✓ Introduced best management practices for the aggregate sector
- ✓ Adopted emission standards for coal-fired power plants
- ✓ Supported the completion of successful, award-winning reclamation projects across the province
- Continued support for world-class reclamation specialists in environments ranging from rainforest to high alpine
- Continued protection of the environment adjacent to mine sites through application of proven standards and guidelines developed by the Ministry of Water, Land and Air Protection

#### Uses of Reclaimed Mining Land



Over half of mine reclamation in British Columbia is designed to create wildlife habitat.



Deer grazing on reclaimed coal mining land in the Elk Valley.

# ACHIEVEMENTS

- ✓ Participation in National Orphaned/Abandoned Mines Initiative
- ✓ Partnership between industry and government to complete clean-up and remediation of Britannia Mine site including construction of a new treatment plant, in partnership with the private sector, to remediate contaminated water
- ✓ Historic Mine Sites in BC publication release in 2003
- ✓ Biological process developed by BC's BioteQ now in use around the world to treat acid rock drainage and recover saleable metals
- ✓ Computer and appliance parts being recycled by Teck Cominco at its Trail smelter

### **Orphaned/Abandoned Mine Sites**

Environmental problems occur across Canada at historical mine sites that operated under old standards.

The National Orphaned/Abandoned Mines Initiative is documenting these sites across Canada and assessing their environmental and health liabilities.

### **Best Management Practices**

The Prospectors and Developers Association of Canada's Environmental Excellence in Exploration (E3) initiative provides free online access to field-tested best management practices for the global industry.

In British Columbia, government and the mining industry have been participating in regional "Joint Solutions" workshops to address challenges to exploration and enable permitting.

Building on these efforts, the Province will work with industry and stakeholders to develop made-in-BC best management practices for mineral exploration.

# PROTECTING WORKERS PROTECTING THE ENVIRONMENT

Strategy 6 Collaborate on environmental challenges

### □ Action 15

Work with provincial universities and colleges on mining reclamation and biotechnology tools as part of British Columbia's Life Sciences Strategy

□ Action 16

Inventory and assess historic mine sites for potential environmental challenges through continuing participation in the National Orphaned/Abandoned Mines Initiative

□ Action 17

Building on world-class environmental standards and best management practices, develop "user friendly" best management guides for mining exploration in 2006 □ Action 18

Work towards harmonizing Fisheries and Oceans Canada and provincial fish and fish habitat management activities to reduce duplication and overlap

□ Action 19

Identify, in partnership with industry, new opportunities for recycling metals and minerals

□ Action 20

Support the Britannia Project in transforming an abandoned mine site into a world-class interpretive centre communicating the opportunities and challenges presented by mineral resource development activities



The Britannia Beach community and Britannia Mine site, is home to the BC Museum of Mining. The Province is working with the federal government and industry to clean up environmental problems related to this historical mine which operated prior to adoption of environmental guidelines.

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# **GLOBAL COMPETITIVENESS**

British Columbia has tremendous mineral potential, an excellent geoscience database and other important infrastructure for exploration and mining. We compete globally for new investments to generate jobs and financial stability in our communities.

This Plan will attract industry investment by:

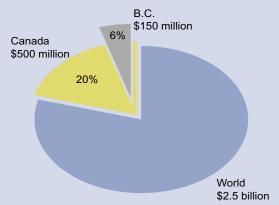
cornerstone

- Supporting sound infrastructure and a skilled workforce
- Improving and enhancing access to geoscience surveys and reports
- Maintaining globally competitive taxes, fees and regulations
- Marketing BC exploration and mining opportunities

Coal miner standing in huge shovel in the Elk Valley



#### **Global Exploration Capital Raised, 2003**



British Columbia accounts for a significant share of exploration capital raised worldwide.

# **GLOBAL COMPETITIVENESS**

# A global, high-tech business

In this global age, investment dollars flow quickly around the world in response to new mineral finds, changes in government policy and other factors.

To maintain its international competitiveness, the province's mining sector has continued to improve productivity and invest in new technologies. BC is recognized for its highly skilled engineers, geologists, prospectors and specialized sector workers.

Modern exploration and mining make extensive use of advanced technology. British Columbia is a leader in innovation and high technology research and education.

# Vancouver is a centre of mining excellence

Vancouver is a major head office location for exploration and mining companies, and a source of investment financing for the global mining industry.

BC and the rest of the world draw on the city's growing cluster of technology, geoscience, engineering, financial, legal and other service providers to inform and support exploration and mining activities.



Vancouver (left) More than 60% of Canadian exploration and mining companies are based in British Columbia.

# Our investment attractiveness

A number of policy changes have dramatically improved British Columbia's attractiveness for exploration and mining investment.

The results include:

- Competitive corporate and personal income taxes
- Exploration incentives among the most attractive in Canada
- Streamlined mining regulations
- High quality, readily accessible geoscience data on the Province's web site

# Strategy 7 Ensure competitive taxation

#### □ Action 21

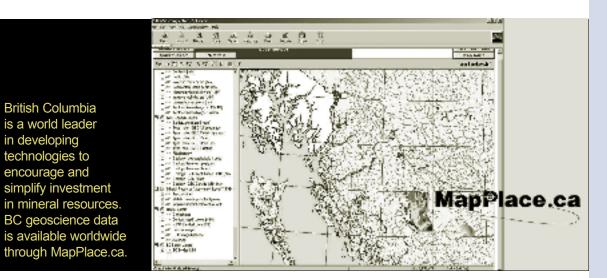
Support the further extension of the federal Super Flow Through Share Tax Credit program

□ Action 22

Review with other levels of government (municipal and federal) taxation and fee issues related to mines and quarries to ensure an equitable tax structure

□ Action 23

Monitor and report annually on the global competitiveness of BC mining-related taxes, fees and regulations



# ACHIEVEMENTS

## Tax Relief

- ✓ 20% Mining Flow Through Share Tax Credit program introduced and extended
- ✓ 20% Mining Exploration Tax Credit extended
- ✓ Personal provincial income tax reduced by about 25%; corporate income taxes reduced from 16.5% to 13.5%
- Corporate capital tax and PST on production machinery and equipment eliminated
- ✓ *International Financial Activity Act* enacted to foster foreign investment

### **Flow Through Shares**

Flow through shares allow mining companies to transfer the tax deductions from exploration to private investors.

Provincial flow through share provisions introduced in 2001, harmonized with the 2000 federal flow through share tax credit program, are referred to as super flow through shares.

These combined tax credits can reduce the after-tax cost of a BC resident's \$1,000 flow through share investment in BC grassroots exploration to as little as \$383.

Super flow through shares have contributed substantially to the recent increase in exploration activity in British Columbia.

# ACHIEVEMENTS

## **Cutting Red Tape**

- Mining-related regulations reduced by 30% in 2004 and by an additional 10% in early 2005
- ✓ Health, Safety and Reclamation Code substantially streamlined
- Fast-Track process introduced to streamline major project approvals for qualified proponents
- 2004 award from the Prospectors and Developers Association of Canada for Mineral Titles Online – a new electronic, web-based system implemented for mineral claim staking

# **GLOBAL COMPETITIVENESS**

# Strategy 8 Streamline regulation

□ Action 24

Develop and implement a faster and simplified approach to multi-agency exploration and mining approvals, with the Ministry of Energy and Mines as the single coordinating agency, beginning in 2005

□ Action 25

Develop and implement an online mine permitting process, harmonized with the new approach to multiagency approvals □ Action 26

Continue to examine regulatory requirements to find additional opportunities for appropriate reductions while ensuring the integrity of environmental, health and safety standards, reviewed biannually starting in 2006



The new Mineral Titles Online initiative is another example of the Province's innovative and leadingedge approach to technology. It allows acquisition of mineral tenure through your computer over the Internet.



The BC Geological Survey carries out geoscience surveys to help the province compete globally for the mineral exploration investment necessary to find new mines.

# Strategy 9 Invest in geoscience

## □ Action 27

Invest in frontier geoscience surveys in BC to increase mineral exploration

□ Action 28

Invest in partnerships with industry, universities and the federal government to maximize frontier geoscience in BC

□ Action 29

Enhance global investors' access to the digital geoscience database on MapPlace.ca by publishing more data layers and providing cuttingedge tools, including a new digital geology map of BC

□ Action 30

Acquire additional existing geoscience information to increase mineral exploration

# ACHIEVEMENTS

### Geoscience

- ✓ World leader in digital access to geoscience data via MapPlace.ca
- ✓ \$2.1 million Rocks to Riches program to survey under-explored areas
- ✓ 2003 award from the Prospectors and Developers Association of Canada for the Rocks to Riches program
- ✓ Geophysical surveys in areas near Quesnel and northwest of Mackenzie
- ✓ Geological mapping of the Toodoggone, Eskay and Atlin mining districts
- ✓ Free access to multi-element geochemical data for over 55,000 samples collected across the province
- ✓ World leader in developing and maintaining mineral occurrence data bases
- ✓ Provincial library of more than 28,000 industry exploration reports that assist prospectors and companies make new discoveries

"I have been involved in the mining industry for many years (more than I care to remember) in areas all over the world. It is truly a pleasure to be able to work in my own backyard for a change."

> Carl F. Zuber, CEO Chairman of the Board bcMetals Corporation Vancouver BC

# ACHIEVEMENTS

#### **Investment Promotion**

- ✓ Government/industry trade delegation to London in 2003 led to Vancouver's selection for the International Mines and Money Conference in 2004
- BC nominated by 2004 International Mines and Money Conference for showing the most improved policies for exploration
- Mining newsletter informing investors of changes that improve BC's global competitiveness
- ✓ 2004 Claim Tag Award to BC's Mineral Titles Online initiative from Prospectors and Developers Association of Canada

### **E-Service to Promote Investment in BC**

- MapPlace.ca is an innovative web site providing easy, interactive access to BC's geoscience maps and data
- Mineral Titles Online allows the acquisition of mineral rights by selecting a claim on an electronic map via the Internet, rather than staking a claim on the ground
- "Mineral Properties Available in BC," a detailed map showing exploration properties for sale or option in BC, was developed by the Province and the BC & Yukon Chamber of Mines – available at www.chamberofmines.ca

# **GLOBAL COMPETITIVENESS**

# Strategy 10 Attract investment

□ Action 31

Develop and implement a focused marketing and investment program with industry in 2005

□ Action 32

Showcase BC as a mining centre of excellence by establishing a web portal in 2006 in cooperation with industry associations □ Action 33

Continue producing a monthly mining newsletter, highlighting provincial initiatives that improve BC's global competitiveness

□ Action 34

Provide an annual marketing contribution to the BC & Yukon Chamber of Mines to promote increased investment

MINING FACT: More than 60 percent of Canadian exploration and mining companies are based in BC



#### Strategy 11 Enhance excellent infrastructure

#### □ Action 35

Pursue strategic investment opportunities in unserviced areas to secure long-term delivery of energy supply and transportation infrastructure

#### □ Action 36

Develop an inter-agency model in 2005 to preserve key routes as resource roads for mining and other land uses

#### □ Action 37

Facilitate affordable industry access to ports and railways through collaboration with the federal government, and railway and port authorities, to ensure BC remains the Pacific gateway for mineral exports

#### ACHIEVEMENTS

#### Infrastructure

- ✓ \$32 million invested in a new container port and rail facilities at Prince Rupert
- ✓ Rail access to northeast coal preserved
- Low power rates ensured in BC Energy Plan – third lowest rate in North America
- ✓ \$44 million invested in Highway 37 projects supporting northwest BC exploration
- ✓ Under BC-CN partnership, new Chicago Express Line benefits shippers and communities with shorter and faster route from Prince George to Chicago

Rail transport moves many of the products of BC's mining industry to smelters and processing plants, and then to markets in Canada and around the globe.



#### ACHIEVEMENTS

#### **Skilled Workforce**

- Vancouver is recognized as a global centre of mining expertise and technology
- BC is the only jurisdiction in the world with a certification program for geochemical assayers
- Prospector training is provided in partnership with industry
- The Province provides professional work experience and training for summer and co-op students in areas such as mapping and mineral deposit studies

#### **BC Mining Education Network**

A BC Mining Education Network will be established to coordinate education, training and research across a number of institutions throughout the province.

The BC Mining Education Network will focus on training to meet identified skill shortages in exploration and mining in British Columbia and globally.

## **GLOBAL COMPETITIVENESS**

Strategy 12 Invest in people and new technology

□ Action 38

Work with industry, the federal government and provincial agency partners in 2005 to further establish British Columbia as an innovation and high technology research and education cluster

#### MINING FACT:

Annual salary and benefits for BC miners average over \$94,000

□ Action 39

Establish a BC Mining Education Network in 2005 to identify and meet existing and future skill requirements for exploration and mining



The mineral industry provides a range of job opportunities that can lead to rewarding careers.

## ACCESS TO LAND

Mining affects only a tiny proportion of our land base but, even with the guidance of geoscience surveys, prospectors and mining firms need to explore large tracts of land to find commercial ore bodies. They also need to know where they can explore, and under what conditions, before they make investments that lead to mine development.

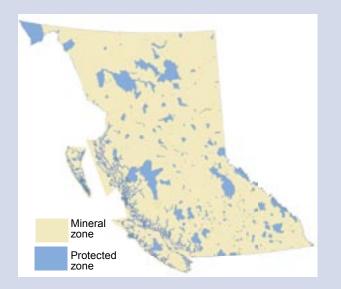
This Plan advocates:

• The consistent application of integrated land use models that appropriately accommodate exploration and mining in British Columbia

ersio

Exploration site in the Coast Mountains south of Stewart





British Columbia's land use plans establish the land base available to exploration.

### ACCESS TO LAND

Modern technology has simplified the process, but mineral exploration is still very much like looking for the proverbial needle in a haystack.

Companies and prospectors need access to land to find the valuable deposits that can become commercially viable mines. They also need certainty about where they can and cannot search for and develop mineral resources. British Columbia is working to ensure they have that certainty.

The Province has legislated a land use system that opens the way for exploration throughout much of the land base. Under this two-zone land-use system, land is clearly defined as either open or closed to exploration:

- Parks, ecological reserves and other sensitive areas are protected. Mining is prohibited in these areas.
- The rest of the land base is designated as "mineral zone." Over 85 percent of the province is open to exploration as part of an integrated land use approach.

#### **MINING FACT:**

BC is the first jurisdiction in Canada to have a mining and tourism Memorandum of Understanding to support growth in both sectors



Exploration surveys for sub-surface mineral resources, such as this geochemical sampling in northwest BC, take place over vast areas but with little longterm disturbance of the land base.

#### Strategy 13 Define land available for exploration and mining

#### □ Action 40

Ensure all new and updated land use plans clearly define areas open to mineral exploration and mining

#### □ Action 41

Simplify access to land use data to improve exploration effectiveness and balance land use interests

 $\Box$  Action 42

Ensure the provincial Integrated Land and Resource Registry accommodates key databases required by the mineral industry by 2007

**MINING FACT:** Over 85 percent of the province is open to mineral exploration

Industry and government representatives met in five communities in 2004 to work towards joint solutions to protect the environment and community interests, while encouraging responsible economic development.



#### ACHIEVEMENTS

#### Land Use Planning and Mining

- ✓ A two-zone land use system, confirmed in legislation, clearly defines land as either open or closed to exploration - more than 85% of BC is available for mineral exploration
- Completed regional land use plans provide  $\checkmark$ greater certainty for all land users in the province
- ✓ New land use plans recognize the compatibility of exploration and future mining activities with sensitive ecosystems, tourism and recreation values
- ✓ The newly established Integrated Land and Resource Registry will centralize the registration of all tenures and other legal encumbrances on Crown land and resources
- $\checkmark$ Significant land use decisions are made by elected officials, accountable to the people of British Columbia

#### ACHIEVEMENTS

#### **Integrated Land Use Management**

- ✓ Significant progress towards completion of land use plans across British Columbia
- ✓ Government/industry regional workshops to ease mineral exploration permitting while maintaining environmental standards
- ✓ Formal agreement among the BC & Yukon Chamber of Mines, the Mining Association of British Columbia and the Council of Tourism Associations of British Columbia to advance sustainable growth opportunities and improved access to land and land use certainty for both mining and tourism
- ✓ Mineral potential mapping completed for the entire province
- MLA Task Force created to enable more effective completion and implementation of land use plans

## ACCESS TO LAND

#### Strategy 14 Work with other land users

□ Action 43

Develop and implement user-friendly guidelines for integrating mineral exploration and development with other land uses

□ Action 44

Support increased partnerships between the mineral industry and other land users, like the Memorandum of Understanding between the mining and tourism industries, to further sustainable growth opportunities □ Action 45

Support regional workshops to continually improve the integration of mineral exploration and development with other land uses

□ Action 46

Ensure that land use planning and plan implementation continue to be informed by relevant and peer-reviewed science



Mineral exploration and mine development characteristically share land and infrastructure with other land-based users such as forestry, guide outfitters and recreational users.

## THE MINING SECTORS

The BC Mining Plan supports the growth and development of the mining industry province-wide. It also targets specific actions to each of the vital sectors that make up the industry:

- Aggregate
- Coal
- Industrial Minerals
- Metals
- Placer

Geologists inspecting drill core for molybdenum

#### 36 BC MINING PLAN

## AGGREGATE

#### **Economic Benefits**

- More than \$2 million annually in Crown royalties
- Employs more than 2,000 people directly
- \$238 million worth of sales by producers
- 38 million tonnes produced annually
- 5% or 1.9 million tonnes exported

#### ACTION

#### Action 47

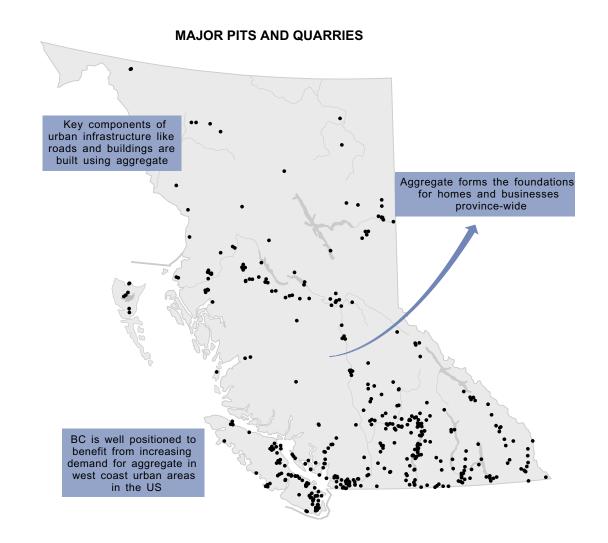
Develop and test a model for ensuring a long-term, affordable supply of provincial aggregate by completing an Aggregate Pilot Project

Action 48

Expand a successful Aggregate Pilot Project model and implementation guidelines province-wide

- Action 49 Continue to promote export markets for coastal aggregate resources
- Action 50 Investigate options to increase benefits to local governments from local aggregate operations

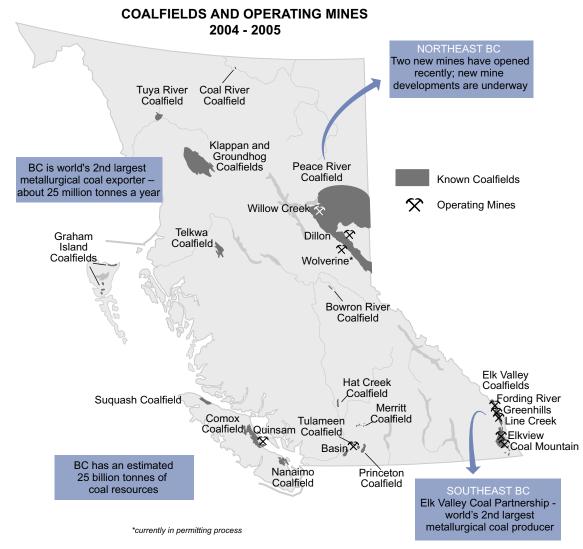




#### BC MINING PLAN = 37

## COAL





#### **Economic Benefits**

- Provides secure, long term, well-paying jobs in rural communities
- Makes a significant contribution to the economy through transportation and port handling, and through the acquisition of goods and services in local areas
- Coal production accounts for approximately 35% of BC's total mineral production value
- The industry provides over 2,400 direct jobs

#### ACTION

- Action 51
   Continue to work with proponents to facilitate new coal projects entering the provincial *Environmental Assessment Act* review process
- Action 52

Promote the continued use of Ridley Terminal as a coal handling facility

□ Action 53

Work with the federal government to open up the Dominion coal block in the Elk Valley to exploration

□ Action 7\*

Appoint a provincial coal coordinator to work with First Nations and industry to facilitate the development of new coal projects

Action 37\*

Facilitate affordable industry access to ports and railways through collaboration with the federal government, and railway and port authorities to ensure BC remains the Pacific Gateway for mineral exports

\* denotes actions repeated from earlier in the Plan

#### **Economic Benefits**

- In recent years British Columbia's annual mineral production has been valued at about \$3 billion, with industrial minerals and structural materials such as aggregate contributing about 20% of this total
- Industrial mineral mines, processing plants and value added manufacturing employ 2,400 people directly
- There are about 40 processing plants located in numerous communities across the province

MINERALS (examples)	TYPICAL USES
clays & shales	pottery, medical clays, aggregate, refractory bricks, castable products
dimension stone	kitchen counters, facing stone on buildings, floor tiles, flagstone, landscaping, monuments
garnet	abrasives, roofing tiles
gypsum	wallboard, plaster of paris, flux in pottery, fertilizer
limestone	landscaping, cement, chemicals, agriculture, aggregate
pumice, tephra, & lava rock	landscaping, sporting facilities, growing and filtration media, lightweight aggregate, cement
sulphur	acid, rubber, dyes, explosives, insecticides, fungicides, matches
talc	baby powder, climbing, gymnastics

#### ACTION

#### □ Action 54

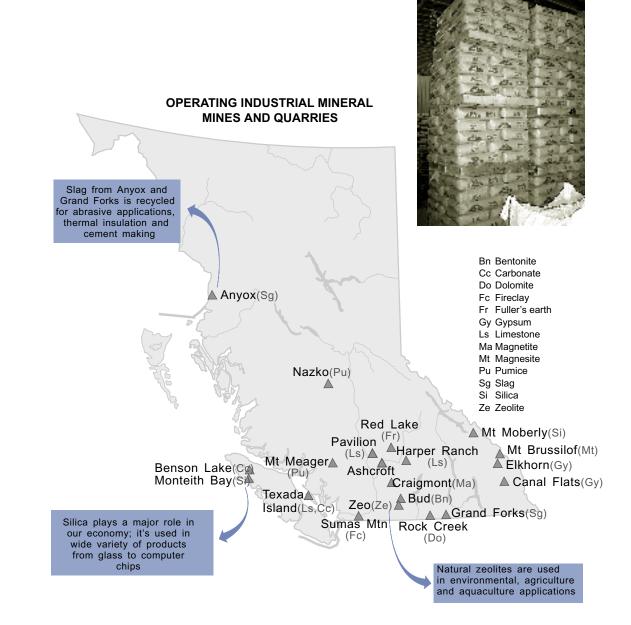
Encourage industry participation in sector associations to help build the industrial minerals production and processing industry

Action 22\*

Review with other levels of government (municipal and federal) taxation and fee issues related to mines and quarries to ensure an equitable tax structure

Establish a BC Mining Education Network in 2005 to meet the industry's skill requirements

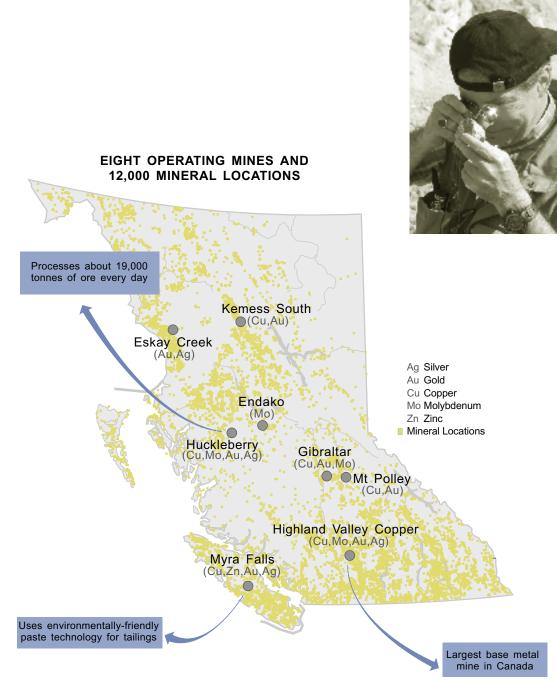




<sup>□</sup> Action 39\*

<sup>\*</sup> denotes actions repeated from earlier in the Plan

## **METALS**



#### **Economic Benefits**

- The metal mining sector currently provides approximately 2,500 direct jobs and pays among the highest average industrial wages in the province – the sector also supports numerous indirect jobs and industries throughout British Columbia
- Over the past 20 years British Columbia's mining industry has produced annually about \$1.4 billion worth of copper, gold, molybdenum, lead, zinc and other metals
- The mineral exploration and mining industries provide important economic and geographic diversification by supporting regional economies, small communities and infrastructure within British Columbia
- In the last five years the metals sector contributed in the range of \$25–\$50 million in direct taxes to the provincial government and approximately \$30 million to municipal governments annually

### ACTION

- Action 21\* Support the further extension of the federal Super Flow Through Share Tax Credit program
- □ Action 24\*

Develop and implement a faster and simplified approach to multi-agency exploration and mining approvals with the Ministry of Energy and Mines as the single coordinating agency, beginning in 2005

- Action 27\* Invest in frontier geoscience surveys in BC to increase mineral exploration
- Action 29\*

Enhance global investors' access to the digital geoscience database on MapPlace.ca by publishing more data layers and providing cutting-edge tools, including a new digital geology map of BC

#### 40 BC MINING PLAN

## PLACER

#### **Economic Benefits**

- Mineral titles revenue, mineral tax and water rentals: \$0.6 M
- Estimated gross revenues range from \$3.9 M to \$12.3 M in 1999 to 2002
- Placer miners support local economies with their purchase of services and supplies, and contribute in the order of \$0.4 to \$1.2 million to provincial revenue annually through the payment of taxes on consumables and income tax

#### ACTION

□ Action 55

Review permitting and bonding requirements for small volume, mechanized placer activities with a goal of identifying means to reduce bonding levels and permitting complexity

□ Action 56

Reduce substantially the timelines for conversion of a placer claim to a lease by 2006

□ Action 57

In conjunction with the BC Placer Miners Association, review all legislation pertaining to placer leases to ensure security of tenure, beginning no later than summer 2005

## DESIGNATED AREAS FOR PLACER ACTIVITY Turnagain Nugget weighing 1,641 grams (52 ounces), discovered in northwest BC in 1937. Placer mining provides economic support to small rural communities Placer gold is a historic reason for development of many BC communities Placer minerals have long helped indicate the presence of undiscovered bedrock minerals

## **CONCLUSION: THE WAY FORWARD**

British Columbia has excellent geology, an abundance of lowcost power, excellent transportation systems, and modern ports with a strategic location to Asian markets. The BC Mining Plan is a comprehensive strategy to help our province recognize the potential of one of its most important industries. The Plan addresses a range of factors which sets the stage for a healthy mining industry that delivers community benefits and is sustainable for years to come.

The Plan commits the government to:

- continue working closely with communities and First Nations to ensure mineral exploration and mining provide long-term, sustainable benefits
- continuously improve our world-class standards and practices to protect worker safety and the natural environment
- maintain and build on our highly competitive regulatory and tax regime to ensure global competitiveness, and
- continue working province-wide to bring real certainty to land use planning for all British Columbians.

Some of the actions in this Plan will be implemented immediately. Others will continue to guide mining policy for the next 10 years and beyond.

The actions in the Plan reflect the ideas and comments of people in our province, including First Nations, municipal leaders, individuals, industry, environmental organizations and countless other groups who took the time to share their views with government over the last few years. Their participation has been very much appreciated. As we work together to implement the Plan, we will report on our progress year by year and, over time, achieve our vision of:

Thriving, globally competitive, safe and environmentally responsible exploration and mining sectors, significantly benefiting all British Columbians.

## **APPENDICES**

- 44 Summary of Achievements
- 49 Summary of Actions
- 56 Contacts
- 56 Photo Credits

## SUMMARY OF ACHIEVEMENTS

Mining in British Columbia has been going through a transformation since 2001. A number of initiatives were implemented to improve global competitiveness and attract investment to the Province. In 2003 a provincial Task Force on Mining (Task Force) met with industry, communities and First Nations with a mandate to develop ideas for revitalizing the mining industry.

Many of these ideas have been implemented or initiated by the provincial government and others have provided the basis for the development of the BC Mining Plan.

A list of achievements and ongoing government initiatives is listed below.

FOCUS ON COMMUNITIES AND FIRST NATIONS	YEAR
Strategy 1: Enhance relationships with communities	
✓ Mining Task Force – consultation process with communities and industry to identify challenges and opportunities in mining	2003
✓ Conferences – ongoing support for community and industry conferences	2004
<ul> <li>Newsletter – monthly publication of BC's Mining Update, highlighting for potential investors provincial initiatives that improve BC's global competitiveness</li> </ul>	2004
✓ Mining Projects – communities, industry and the Province working together on the review of mining projects	2004
<ul> <li>Negotiated agreements resulting in the resumption of operations at the Gibraltar Mine in the Cariboo, and a new commercial industrial development by the Quatsino First Nation on the site of the Island Copper Mine</li> </ul>	2004
Strategy 2 Enhance Relationships with First Nations - Developing Skills And Creating Jobs	
✓ Yekooche First Nation partnership with the Province supporting training to gain skills to explore mineral potential and pursue joint ventures	2004
<ul> <li>Tahltan First Nation working relationship with exploration and mining companies for over four decades, resulting in training and jobs for Tahltan members</li> </ul>	Ongoing
<ul> <li>Hupacasath and Ucluelet First Nations partnership with Polaris Minerals in a 710-million tonne aggregate project near Port Alberni, expected to create new jobs for the next 100 years</li> </ul>	Ongoing
Enhance Relationships with First Nations - Building Now for the Future	
✓ Quatsino First Nation and Electra Gold mining participation and royalty agreement concerning mineral development near Port Hardy	2003
✓ BC & Yukon Chamber of Mines development of an aboriginal community engagement guidebook for First Nations and industry	2004
<ul> <li>Upper Similkameen Indian Band partnership with the Province supporting development of tourism and industrial park at historic Nickle Mine site in Hedley</li> </ul>	2003-04
✓ Yekooche nomination for the Northern BC Prospector of the Year award, recognizing persistence, innovation and initiative	2004
<ul> <li>A venture by the Quatsino First Nation to purchase the former Island Copper mine site buildings and port to provide employment and revenue generation opportunities for their members</li> </ul>	2004

FOCUS ON COMMUNITIES AND FIRST NATIONS	YEAR
Strategy 3:         Develop a Made-in-BC Approach to Sustainable mining         ✓       Supported Tahltan First Nation mining sustainability workshop         ✓       Supported "Out of Respect," Tahltan First Nation report on sustainable mining         ✓       Supported Mining Association of BC's Sustainable Mining initiative	2003 2004 2004
PROTECTING WORKERS, PROTECTING THE ENVIRONMENT	
<ul> <li>Strategy 4</li> <li>Lead in Health and Safety Standards and Practices</li> <li>Best safety record among British Columbia's heavy industries for 8 of the last 10 years</li> <li>Health, Safety and Reclamation Code clarified and simplified, while keeping the same high safety and environmental standards</li> <li>Annual mine rescue competitions and awards</li> <li>Highly trained and experienced professionals in the field</li> <li>Clear, science-based standards</li> <li>Ministry of Energy and Mines works with labour and industry to ensure safety standards are met</li> <li>Standards and regulations reviewed on an ongoing basis to continuously improve the province's health, safety and environmental protection record</li> <li>Annual industry health and safety recognition awards</li> </ul>	2003 2002-03 Ongoing Ongoing Ongoing Ongoing 2004 Ongoing
<ul> <li>Strategy 5</li> <li>Lead in Environmental Standards and Practices</li> <li>Streamlined science-based provincial Environmental Assessment Act review process</li> <li>Developed leading-edge guidelines and monitoring processes for waste rock</li> <li>Introduced best management practices for the aggregate sector</li> <li>Adopted emission standards for coal-fired power plants</li> <li>Supported the completion of successful, award winning reclamation projects across the province</li> <li>Continued support for world-class reclamation specialists in environments ranging from rainforest to high alpine</li> <li>Continued protection of the environment adjacent to mine sites through application of proven standards and guidelines developed by the Ministry of Water, Land and Air Protection</li> </ul>	2002-03 1991 2002 2003 Ongoing Ongoing Ongoing
<ul> <li>Strategy 6</li> <li>Collaborate on environmental challenges</li> <li>✓ Participation in National Orphaned/Abandoned Mines Initiative</li> <li>✓ Partnership between industry and government to complete clean-up and remediation of Britannia Mine site, including construction of a new treatment plant, in partnership with the private sector, to remediate contaminated water</li> <li>✓ Historic Mine Sites in BC publication release</li> </ul>	Ongoing 2004 2003

GLOBAL COMPETITIVENESS	YEAR
<ul> <li>Biological process developed by BC's BioteQ now in use around the world to treat acid rock drainage and recover saleable metals</li> <li>Computer and appliance parts being recycled by Teck Cominco at its Trail smelter</li> </ul>	Ongoing 2004
Strategy 7:         Ensure Competitive Taxation <ul> <li>20% Mining Flow Through Share Tax Credit program introduced and extended</li> <li>20% Mining Exploration Tax Credit extended</li> <li>20% Mining Exploration Tax Credit extended</li> <li>Personal provincial income tax reduced by about 25%; corporate income taxes reduced from 16.5% to 13.5%</li> <li>Corporate capital tax and PST on production machinery and equipment eliminated</li> <li>International Financial Activity Act enacted to foster foreign investment</li> </ul> <li>Strategy 8         <ul> <li>Strategy 8             </li> <li>Strategy 10% in 2004 and by an additional 10% in early 2005</li> </ul> </li>	2001/04 2004 2001 2001/02 2004 Ongoing
<ul> <li>Health, Safety and Reclamation Code substantially streamlined</li> <li>Fast-Track process introduced to streamline major project approvals for qualified proponents</li> <li>Award from the Prospectors and Developers Association of Canada for Mineral Titles Online - a new electronic, web-based system implemented for mineral claim staking</li> </ul>	2002 2003 2004
<ul> <li>Strategy 9</li> <li>Invest in Geoscience</li> <li>World leader in digital access to geoscience data via MapPlace.ca</li> <li>\$2.1 million Rocks to Riches program to survey under-explored areas</li> <li>Award from the Prospectors and Developers Association of Canada for the Rocks to Riches program</li> <li>Geophysical surveys in areas near Quesnel and northwest of Mackenzie</li> <li>Geological mapping of the Toodoggone, Eskay and Atlin mining districts</li> <li>Free access to multi-element geochemical data for over 55,000 samples collected across the province</li> <li>World leader in developing and maintaining mineral occurrence databases</li> <li>Provincial library of more than 28,000 industry exploration reports that assist prospectors and companies make new discoveries</li> </ul>	Ongoing 2003-04 2003 2004 2004 Ongoing Ongoing Ongoing
<ul> <li>Strategy 10</li> <li>Attract Investment - Investment Promotion</li> <li>Government/industry trade delegation to London in 2003 led to Vancouver's selection for the International Mines and Money Conference</li> <li>BC nominated by International Mines and Money Conference for showing the most improved policies for exploration</li> <li>Mining newsletter informing investors of changes that improve BC's global competitiveness</li> <li>Claim Tag Award to BC's Mineral Titles Online initiative from Prospectors and Developers Association of Canada</li> </ul>	2004 2004 2004 2004 2004

#### BC MINING PLAN = 47

GLOBAL COMPETITIVENESS	YEAR
<ul> <li>Attract Investment - E-Service to Promote Investment</li> <li>MapPlace.ca is an innovative website providing easy, interactive access to BC's geoscience maps and data</li> <li>Mineral Titles Online allows the acquisition of mineral rights by selecting a claim on an electronic map via the Internet, rather than staking a claim on the ground</li> <li>"Mineral Properties Available in BC," a detailed map showing exploration properties for sale or option in BC, was developed by the Province and the BC &amp; Yukon Chamber of Mines – available at www.chamberofmines.ca</li> </ul>	2004 2005 Ongoing
<ul> <li>Strategy 11 Enhance Excellent Infrastructure</li> <li>\$32 million invested in a new container port and rail facilities at Prince Rupert</li> <li>Rail access to northeast coal preserved</li> <li>Low power rates ensured in BC Energy Plan – third lowest rate in North America</li> <li>\$44 million invested in Highway 37 projects supporting northwest BC exploration</li> <li>Under BC – CN partnership, new Chicago Express Line benefits shippers and communities with shorter and faster route from Prince George to Chicago</li> </ul>	2004-06 2003 Ongoing 2003-04 2004
<ul> <li>Strategy 12 Invest in People and New Technology</li> <li>Vancouver is recognized as a global centre of mining expertise and technology</li> <li>BC is the only jurisdiction in the world with a certification program for geochemical assayers</li> <li>Prospector training is provided in partnership with industry</li> <li>The Province provides professional work experience and training for summer and co-op students in areas such as mapping and mineral deposit studies</li> </ul>	Ongoing Ongoing Ongoing Ongoing
ACCESS TO LAND	
<ul> <li>Strategy 13</li> <li>Define Land Available for Exploration and Mining</li> <li>A two-zone land use system, confirmed in legislation, clearly defines land as either open or closed to exploration - more than 85% of BC is available for mineral exploration</li> <li>Completed regional land use plans provide greater certainty for all land users in the province</li> <li>New land use plans recognize the compatibility of exploration and future mining activities with sensitive ecosystems, tourism and recreation values</li> <li>The newly established Integrated Land and Resource Registry will centralize the registration of all tenures and other legal encumbrances on Crown land and resources</li> <li>Significant land use decisions are made by elected officials, accountable to the people of British Columbia</li> </ul>	2002 2004 Ongoing 2003-04 Ongoing

ACCESS TO LAND	YEAR
Strategy 14 Work with Other Land Users	
✓ Significant progress towards completion of land use plans across British Columbia	2004
✓ Government/industry regional workshops to ease mineral exploration permitting while maintaining environmental standards	2004
<ul> <li>Formal agreement among the BC &amp; Yukon Chamber of Mines, the Mining Association of British Columbia and the Council of Tourism Associations of British Columbia to advance sustainable growth opportunities and improve access to land and land use certainty for both mining and tourism</li> </ul>	2004
✓ Mineral potential mapping completed for the entire province	Ongoing
✓ MLA Task Force created to enable more effective completion and implementation of land use plans	2003

### SUMMARY OF ACTIONS

The BC Mining Plan identifies 57 separate action items to be completed. These action items often involve several provincial agencies. The Ministry of Energy and Mines has taken the lead in implementing the Plan; however, other agencies are involved in many action items. The following table identifies the agencies involved with the various action items and the expected implementation date.

BC Hydro

- MAE Ministry of Advanced Education
- AGF Ministry of Agriculture, Fisheries and Food
- CAWS Ministry of Community, Aboriginal and Women's Services
- MEM Ministry of Energy and Mines
- FIN Ministry of Finance

- MoF Ministry of Forests
- SBED Ministry of Small Business and Economic Development
- MSRM Ministry of Sustainable Resource Management
- TNO Treaty Negotiations Office
- MoT Ministry of Transportation
- WLAP Ministry of Water, Land and Air Protection

CORNERSTONE 1 FOCUS ON COMMUNITIES AND FIRST NATIONS	Provincial Agencies Involved	Target Date
STRATEGY 1: Enhance Relationships with Communities		
Action 1 Host four regional mining and community forums each year	MEM	Annually Dec 31/05
Action 2 Host an annual meeting with the mining industry and the Union of British Columbia Municipalities	MEM	Annually Dec 31/05
Action 3 Actively support the Mineral Resource Education Program, a partnership among schools, industry and government that gives students access to hands-on resources that demonstrate the role of mining in society Action 4	MEM, MAE	Mar 31/05
Create a mining and minerals video for use in communities, and to promote the industry outside BC	MEM	Feb 01/05
STRATEGY 2: Enhance Relationships with First Nations Action 5 Host annual workshops to share information with First Nations on exploration and mining development opportunities	MEM, MSRM	Annually Oct 31/05

CORNERSTONE 1 FOCUS ON COMMUNITIES AND FIRST NATIONS	Provincial Agencies Involved	Target Date
Action 6 Develop partnerships between industry and government to fund mining-related skill, employment and business development opportunities for First Nations	MEM, SBED, TNO	Dec 31/05
Action 7 Appoint a provincial coal coordinator to work with First Nations and industry to facilitate the development of new coal projects	MEM, TNO	June 30/05
STRATEGY 3: Develop a Made-in-BC Approach to Sustainable Mining		
Action 8 Develop and implement guidelines to maximize mining's contribution to sustainability with communities, First Nations, labour, industry and environmental groups	MEM, MSRM	Apr 1/06
Action 9 Create an annual Sustainable Mining Award to recognize the achievements of communities, industry and organizations	MEM, MSRM	Dec 31/06
CORNERSTONE 2 PROTECTING WORKERS, PROTECTING THE ENVIRONMENT		
STRATEGY 4: Lead in Health and Safety Standards and Practices		
Action 10 Establish a Minister's worker safety advisory council with representatives from labour and industry	MEM	Dec 31/05
Action 11 Improve compliance of worker safety requirements through a newly developed mine site inspection and audit program	MEM	Dec 31/05
STRATEGY 5: Lead in Environmental Standards and Practices		
Action 12 Build on world-class environmental and reclamation guidelines through meetings with industry, government and environmental groups at regional workshops	MEM, WLAP	Dec 31/05
Action 13 Improve compliance with environmental standards and practices through a new program of focused inspections and audits at exploration and mine sites	MEM, WLAP	Apr 1/06
Action 14 Recognize and continue to support exemplary environmental performance in mining activities through the annual Mine Reclamation Awards Program	MEM	Annually/05

CORNERSTONE 2 PROTECTING WORKERS, PROTECTING THE ENVIRONMENT	Provincial Agencies Involved	Target Date
STRATEGY 6: Collaborate on Environmental Challenges		
Action 15		
Work with provincial universities and colleges on mining reclamation and biotechnology tools as part of British Columbia's Life Sciences Strategy	MEM, MAE	Apr 1/06
Action 16 Inventory and assess historic mine sites for potential environmental challenges through continuing participation in the National Orphaned/Abandoned Mines Initiative	MEM, MSRM	Dec 31/06
Action 17 Building on world-class environmental standards and best management practices, develop best management guides for mining exploration	MEM	Dec 31/06
Action 18 Work towards harmonizing Fisheries and Oceans Canada and provincial fish and fish habitat management activities to reduce duplication and overlap	MEM, WLAP, MSRM, AGF	Ongoing
Action 19 Identify, in partnership with industry, new opportunities for recycling metals and minerals	МЕМ	Ongoing
Action 20 Support the Britannia Project in transforming an abandoned mine site into a world-class interpretive centre communicating the opportunities and challenges presented by mineral resource development activities	MSRM, MEM WLAP	Dec 31/05
CORNERSTONE 3 GLOBAL COMPETITIVENESS		
STRATEGY 7: Ensure Competitive Taxation		
Action 21 Support the further extension of the federal Super Flow Through Share Tax Credit program	FIN, MEM	Dec 31/05
Action 22 Review with other levels of government (municipal and federal) taxation and fee issues related to mines and quarries to ensure an equitable tax structure	MEM, FIN CAWS	Oct 31/06
Action 23 Monitor and report annually on the global competitiveness of BC mining-related taxes, fees and regulations	MEM, FIN SBED	Annually Ongoing

CORNERSTONE 3 GLOBAL COMPETITIVENESS	Provincial Agencies Involved	Target Date
STRATEGY 8: Streamline Regulation		
Action 24 Develop and implement a faster and simplified approach to multi-agency exploration and mining approvals with the Ministry of Energy and Mines as the single coordinating agency	MEM, MSRM, MoF, WLAP	Dec 31/05
Action 25 Develop and implement an online mine permitting process, harmonized with the new approach to multi-agency approvals	MEM, MSRM, MoF, WLAP SBED	Apr 1/06
Action 26 Continue to examine regulatory requirements to find additional opportunities for appropriate reductions while ensuring the integrity of environmental, health and safety standards	MEM	Bi-annual Dec 31/06
STRATEGY 9: Invest in Geoscience		
Action 27 Invest in frontier geoscience surveys in BC to increase mineral exploration	MEM	Dec 31/05
Action 28 Invest in partnerships with industry, universities and the federal government to maximize frontier geoscience in BC	MEM	Dec 31/05
Action 29 Enhance global investors' access to the digital geoscience database on MapPlace.ca by publishing more data layers and providing cutting-edge tools, including a new digital geology map of BC	MEM	Dec 31/05
Action 30 Acquire additional existing geoscience information to increase mineral exploration	MEM	Dec 31/05
STRATEGY 10: Attract Investment		
Action 31 Develop and implement a focused marketing and investment program with industry	MEM, SBED	Dec 31/05
Action 32 Showcase BC as a mining centre of excellence by establishing a web portal in cooperation with industry associations	MEM	Apr 01/06
Action 33 Continue producing a monthly mining newsletter, highlighting provincial initiatives that improve BC's global competitiveness	MEM	Monthly/05
Action 34 Provide an annual marketing contribution to the BC & Yukon Chamber of Mines to promote increased investment	MEM	Annually/05

CORNERSTONE 3 GLOBAL COMPETITIVENESS	Provincial Agencies Involved	Target Date
STRATEGY 11: Enhance Excellent Infrastructure		
Action 35 Pursue strategic investment opportunities in unserviced areas to secure long-term delivery of energy supply and transportation Infrastructure	MEM BC Hydro	Ongoing
Action 36 Develop an inter-agency model to preserve key routes as resource roads for mining and other land uses	MEM, MoT MoF	Dec 31/05
Action 37 Facilitate affordable industry access to ports and railways through collaboration with the federal government, and railway and port authorities to ensure BC remains the Pacific gateway for mineral exports	MEM, MoT	Ongoing/05
STRATEGY 12: Invest in People and New Technology		
Action 38 Work with industry, the federal government and provincial agency partners to further establish British Columbia as an innovation and high technology research and education cluster	MEM, MAE	Dec 31/05
Action 39 Establish a BC Mining Education Network to identify and meet existing and future skill requirements for exploration and mining	MEM, MAE	Sept 30/06
CORNERSTONE 4 ACCESS TO LAND		
STRATEGY 13: Define Land Available for Exploration and Mining		
Action 40 Ensure all new and updated land use plans clearly define areas open to mineral exploration and mining	MSRM, MEM	Ongoing
Action 41 Simplify access to land use data to improve exploration effectiveness and balance land use interests	MSRM, MEM	Dec 31/07
Action 42 Ensure the provincial Integrated Land and Resource Registry accommodates key databases required by the mineral industry	MSRM, MEM	Dec 31/07

CORNERSTONE 4 ACCESS TO LAND	Provincial Agencies Involved	Target Date
STRATEGY 14: Work with Other Land Users		
Action 43 Develop and implement user-friendly guidelines for integrating mineral exploration and development with other land uses	MSRM, MEM	Apr 1/06
Action 44 Support increased partnerships between the mineral industry and other land users, like the Memorandum of Understanding between the mining and tourism industries, to further sustainable growth opportunities	MSRM, MEM SBED	Annually Dec 31/05
Action 45 Support regional workshops to continually improve the integration of mineral exploration and development with other land uses	MEM, MSRM SBED	Dec 31/05
Action 46 Ensure that land use planning and plan implementation continue to be informed by relevant and peer-reviewed science	MSRM, MEM	Mar 31/06
THE MINING SECTORS		
AGGREGATE		
Action 47 Develop and test a model for ensuring a long-term, affordable supply of provincial aggregate by completing an Aggregate Pilot Project	MEM, MoT, MSRM, LWBC, CAWS	Dec 31/05
Action 48 Expand a successful Aggregate Pilot Project model and implementation guidelines province-wide	MEM, MoT, MSRM, LWBC, CAWS	Dec 31/ 06-08
Action 49 Continue to promote export markets for coastal aggregate resources	MEM, MSRM, LWBC	Ongoing
Action 50 Investigate options to increase benefits to local governments from local aggregate operations	MEM, FIN CAWS	Ongoing
COAL		
Action 51 Continue to work with proponents to facilitate new coal projects entering the provincial <i>Environmental Assessment Act</i> review process	MSRM, MEM	Ongoing/05
Action 52 Promote the continued use of Ridley Terminal as a coal handling facility	MEM, SBED MoT	Dec 31/05

#### BC MINING PLAN **55**

THE MINING SECTORS	Provincial Agencies Involved	Target Date
Action 53 Work with the federal government to open up the Dominion coal block in the Elk Valley to exploration	MEM	Ongoing
Action 7* Appoint a provincial coal coordinator to work with First Nations and industry to facilitate the development of new coal projects	MEM, TNO	June 30/05
Action 37* Facilitate affordable industry access to ports and railways through collaboration with the federal government, and railway and port authorities to ensure BC remains the Pacific gateway for mineral exports	MEM, MoT	
INDUSTRIAL MINERALS		
Action 54 Encourage industry participation in sector associations to help build the industrial minerals production and processing industry Action 22*	MEM	Dec 31/07
Review with other levels of government (municipal and federal) taxation and fee issues related to mines and quarries to ensure an equitable tax structure	MEM, FIN	Oct 31/06
Action 39* Establish a BC Mining Education Network to meet the industry's skill requirements	MEM, MAE	Sept 30/06
METALS Action 21*		
Support the further extension of the federal Super Flow Through Share Tax Credit program Action 24*	FIN, MEM	Dec 31/05
Develop and implement a faster and simplified approach to multi-agency exploration and mining approvals with the Ministry of Energy and Mines as the single coordinating agency	MEM, MSRM MoF, WLAP SBED	Dec 31/05
Action 27* Invest in frontier geoscience surveys in BC to increase mineral exploration	MEM	Dec 31/05
Action 29* Enhance global investors' access to the digital geoscience database on MapPlace.ca by publishing more data layers and providing cutting-edge tools, including a new digital geology map of BC	MEM	Dec 31/05
PLACER		
Action 55 Review permitting and bonding requirments for small volume, mechanized placer activities with a goal of identifying means to reduce bonding levels and permitting complexity	MEM, MSRM WLAP, MoF, LWBC	Dec 31/06
Action 56 Reduce substantially the timelines for conversion of a placer claim to a lease	MEM, MSRM	Dec 31/06
Action 57 In conjunction with the BC Placer Miners Association, review all legislation pertaining to placer leases to ensure security of tenure	MEM	Apr 1/07

\*denotes actions repeated from earlier in the plan

## CONTACTS

The BC Mining Plan is a government-wide initiative, led by the Ministry of Energy and Mines, to support a healthy, sustainable exploration and mining industry.

Following is an alphabetical list of BC government organizations that have responsibilities related to exploration and mining activities. For more information on their roles and responsibilities, follow the links to their web sites from the BC government home page www.gov.bc.ca

- Ministry of Advanced Education
- Ministry of Agriculture, Food and Fisheries
- BC Rail
- BC Hydro
- Ministry of Community, Aboriginal and Women's Services
- Deregulation Office
- Ministry of Education
- Ministry of Energy and Mines
- Environmental Assessment Office
- Ministry of Finance
- Ministry of Forests
- Land and Water British Columbia Inc.
- Ministry of Provincial Revenue
- Ministry of Skills Development and Labour
- Ministry of Small Business and Economic Development
- Ministry of Sustainable Resource Management
- Ministry of Transportation
- Treaty Negotiations Office
- Ministry of Water, Land and Air Protection

## **PHOTO CREDITS**

Photos were selected from those provided by numerous organizations and individuals in the mining industry, government agencies and others with an interest in resource and community development.

The Ministry of Energy and Mines extends their appreciation to those who generously provided images for the BC Mining Plan.

## FOR MORE INFORMATION:

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# BRITISH COLUMBIA MINING PLAN

