



CANADA INDIA FOUNDATION MINING AND METALS FORUM

**September 27-29, 2010
Toronto, Canada**

REPORT



FOREWORD

It gives us great pleasure as co-chairs of Canada India Mining and Metals Forum 2010, organized by Canada India Foundation (CIF) during September 27-29, 2010, to present the Conference Report of the event highlighting our recommendations for stronger Canada-India relations in the Mining and Metals sector. The Mining and Metals Forum followed in the footsteps of the Canada India Energy Forum, also organized by CIF, which was the first such event by a non-governmental public policy organization to stimulate discussion on opportunities in key sectors between Canada and India and make policy recommendations. We believe that the success of the two forums have gone a long way in paving the way for what should be a strong, lasting and mutually beneficial trade relationship between the countries.

The rationale for holding the Mining and Metals Forum was self-evident. Canada is the world's largest repository of end-to-end domain knowledge and expertise within the mining and metals sector, covering the full range of resource related activities from prospecting and exploration to mining operations, commodities and market development and world class legal, M&A and financing capabilities. Canadian mining history is rich with examples of explorers starting as prospectors and becoming mining magnates controlling and running global mining companies. The Toronto Stock Exchange (TSX) is the leading market for mining and natural resource stocks with more than 60% of world's public mining companies listed. India is one of the world's strongest economies with a rapidly burgeoning demand for natural resources and commodities, an emerging industrial base and technology driven and knowledge based economy. Canada and India are natural partners within the mining sector. However, the potential for trade between Canada and India still remains to be fully exploited. The objective of Canada India Foundation in holding the Forum was to change this scenario for the better.

Planning for the Forum was greatly helped by the Government of India which sent a large and high-profile delegation of government and industry experts to attend the Forum. The organizers were also fortunate that Canadian federal and provincial governments sent representatives at ministerial as well as civil service levels to speak at the event and dialogue with their Indian counterparts as well as private sector representatives from both countries. The Forum provided a framework to exchange sector specific intelligence and develop strategies for cooperation in the Mining and Metals sector. Thanks are also due to all our sponsors, whose support enabled us to organize the Forum.

We wish to express our sincere thanks to all of our distinguished guests, speakers, attendees, sponsors and members of the media who made the event a success.

Canada India Foundation looks forward to working with the Governments of Canada and India on implementing the recommendations made in the Conference Report. It also looks forward to holding future themed forums exploring similar opportunities in other sectors.

Dr. V.I. Lakshmanan
Vice-Chairman and CEO
Process Research ORTECH Inc.

Manoj Pundit
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Borden Ladner Gervais LLP

Co-Chairs, Canada India Mining and Metals Forum
Founding Members, Canada India Foundation



CANADA INDIA MINING AND METALS FORUM

September 27-29, 2010
Toronto, Ontario, Canada

CONFERENCE REPORT

1. VISION STATEMENT

Canada is a world leader in mining and metals with vast reserves of base metals, coal and uranium. India is one of the world's strongest economies with a rapidly burgeoning demand for natural resources and commodities. Recognizing the tremendous potential that exists for greater partnership between Canada and India in the mining and metals sector, Canada India Foundation (CIF), a non-profit organization, formed in 2007 to promote stronger bilateral relations between the two countries, organized Canada India Mining and Metals Forum 2010 from September 27-29, 2010 in Toronto. The aim of the forum was to engage high-profile government and industry leaders from Canada and India, to exchange sector specific intelligence and to develop strategies for cooperation in the Mining/ Metals sector.

2. OBJECTIVE

The objectives of Canada India Mining and Metals Forum were to:

- Provide a platform for the exchange of Mining and Metals sector specific knowledge and information
- Present current developments in the Mining and Metals sector of Canada and India
- Promote mutual business opportunities for Canadian and Indian Mining and Metals companies

3. BACKGROUND

Canada India Foundation is a national, non-profit, non-partisan, non-governmental organization (NGO) established in 2007 to foster support for stronger bi-lateral relations between Canada and India; to educate Canadians on the changing face of India; and to increase the participation of Indo-Canadians in the public policy process in Canada. CIF's founding members include industrialists, senior Canadian business executives and top tier professionals.



The Mining and Metals Forum, a follow-up to last year's successful Canada India Energy Forum, also organized by CIF, brought together senior representatives from the public and private sector of Canada and India to participate in an open discussion on opportunities for policy development and joint venture activities between Canada and India to collaborate in the mining and metals sector.

The forum had focus sessions on:

- Ferrous (Iron and Steel)
- Non-ferrous and Light Metals
- Coal, including Coking Coal
- Uranium
- Gold and Diamond
- Metals Trading and Recycling
- Capital Markets
- Sustainable Development,
- Governance and Public Policy

The sessions on various aspects of mining and metals concluded with a final panel discussion on the going forward strategies for Canada and India.

4. CONFERENCE SUMMARY

i) Opening session

(a) Welcome address by Dr. V.I. Lakshmanan (Vice Chairman and CEO, Process Research ORTECH Inc., Co-Founder and Member of the Board, Canada India Foundation):

Canada is a country blessed with natural resources. It also provides end-to-end domain knowledge and expertise within the mining and metals sector, covering the full range of resource related activities from prospecting and exploration to mining operations, commodities and market development and world class legal, M&A and financing capabilities. The timing of this Mining and metals Forum could not have been better as it is taking place soon after the signing of a Memorandum of Understanding between Government of Ontario and Republic of India's Ministry of Mines in July 2010 to help promote opportunities for mineral development and investment between the two jurisdictions.



(b) Opening address by Mr. David Anderson (Member of Parliament, Parliamentary Secretary to Minister of Natural Resources, Government of Canada):

Canada India Foundation has become a strong proponent for developing Canada India ties. The trade between Canada and India was over 4 billion last year, which is a >70 % increase over 2004. The relationship between Canada and India goes far beyond trade. We share the same democratic values and we value science, technology and innovation. Canada has expertise in mining, mine financing and geo-mapping technologies. India's mineral geology is similar to that of Canada's. Canada has most stringent laws for mining and has taken the initiative in green mining, economic activity with sustainability. Canada's banking system is the soundest in the world. In summary, there is scope for tremendous growth in the relationship between Canada and India.

(c) Opening address by Mr. S. Vijay Kumar (Secretary, Ministry of Mines, Government of India):

Canada India Mining Forum is taking place at the right time. Canada is very attractive from mining point of view. Ontario's Premier Mr. Dalton McGuinty and Canada's Prime Minister Mr. Stephen Harper visited India in 2009 and India's Minister of Mining Mr. B.K. Handique and India's Prime Minister Dr. Manmohan Singh visited Toronto during summer of 2010. I had come here earlier this year to attend PDAC conference. Canada and India are two democracies working together. India is one of the best performing markets today and there is huge potential for new projects in mining and modernization. Private investment will be encouraged in deeper mining. Geological Survey of India has been restructured and Geological Survey of India portal has been revamped. India is encouraging mining activity in a way that does not pose a threat to the local population and provides employment to local population.

ii) Plenary session

(a) Address by Mr. Gerald Grandey (CEO, Cameco, Canada):

With the signing of Civil Nuclear Treaty between Canada and India in June 2010, real work is before us. The door is opening and it is up to us to walk through it. India is home to over 1 billion people, which is 15% of world population. Energy is in short supply in India and 30 % of India's energy needs is covered by imports. India is planning to triple its energy supply. Canada is blessed with natural resources. Alberta has 2nd largest oil reserve in the world. Canada has one of the largest deposits of U, Ni, Zn and potash. There is a perfect match between India's thirst for resources and Canada's abundant supply of resources. With 1.2 million people from India in Canada, the stage is set to take the relationship to an unprecedented level. While generating energy from coal produces massive amounts of energy, nuclear energy is clean and sustainable. Canada is a leading producer of nuclear fuel. To move forward, our priorities must be clear. India faces challenges and Canada is in a position to help.



(b) Address by Mr. Sundeep Nayak (Joint Secretary, Ministry of Mines, Government of India):

Ministry of Mines, Government of India signed Memorandum of Understanding with Natural Resources, Canada (NRCAN) and Province of Ontario. The Ministry of Mines is trying to ensure access to minerals and commodities. In this regard, Forums like PDAC and CIF Mining and Metals Forum are very helpful. We have interest in clean coal technology. We are looking for outside resources to maintain steady flow of supplies, capacity development in mining sector, upgrading of mining equipment and services and partnerships with institutions of excellence.

(c) Address by Mr. Mark Plamondon (Senior Vice-President-Coal, Sherritt International, Canada):

Sheritt has four major divisions – Metals (Nickel and Cobalt), Coal, Oil and Gas, and Power. Sheritt is a technology leader in nickel laterite operations. Sheritt has over 39 million tonnes of annual production capacity of coal from 9 operating mines in Alberta and Saskatchewan. It has the largest coal resource position in Canada – 12 billion tonnes of coal resources. Sheritt is investing heavily in clean coal technology. Sheritt is producing over 21,000 bpd of petroleum products from assets in Cuba. Sheritt is operating a 356 MW power plant in Cuba, which is being expanded to 506 MW.

Sherritt's core competencies align with India's coal development:

- ❖ Surface mining expertise, low cost production of thermal coal
- ❖ Production of high quality export thermal coal (lower ash and low sulphur)
- ❖ Over 400 million tonnes of reserves and resources at Sherritt's export mines
- ❖ R&D capability – development of lower ash and lower moisture coals in the Clean Coal Technology Center
 - potential blending opportunity with high ash Indian coals.
- ❖ Best in class safety culture
- ❖ Commitment to environmental stewardship

iii) Iron and Steel session

Presentations by Mr. U.P. Singh (Joint Secretary, Ministry of Steel, Government of India), Mr. Subbiah Srinivasan (President and GM, Met-Chem, Canada), Mr. Chanakya Choudhary (Chief Resident Manager, Tata Steel, India), Mr. Rana Som (Chairman/MD, NMDC, India), Mr. Barry Goldberg (Managing Director, Canaccord Genuity, Canada), and Dr. Arun Basu (JNE Consulting, Canada)

- India has the fifth largest steel producing capacity in the world after China, Japan, Russia and the USA.
- It occupied the 3rd rank among the steel consuming nation in the world as in 2009.
- Indian steel industry and the market are both globally integrated. There are no significant trade barriers. Import duty on steel has been brought way below the WTO bound rates (initial 40 %).



- The country has been a net importer since 2007-08. Exports are on the decline. Net imports of steel have risen above 4 million tonnes in 2009-10.
- Met-Chem is an international engineering consulting company and member of U. S. Steel Corporation since 1969.
- Opportunities in India include Mine Planning and Mine Management and Beneficiation of low grade iron ores.
- Tata Steel is a part of Tata Group of companies. Tata Steel group has a capacity of 30 million tones. It is geographically wide spread in 5 continents and has manufacturing units in 26 countries.
- By 2015, Tata Steel would need approximately 23 MT of coking coal for its operations in India, UK and Europe.
- Tata Steel is looking for investment to secure supplies of coking coal and has invested in coal assets in Australia, Mozambique.
- JNE consulting is a full service multi-disciplinary engineering, procurement, and construction management firm with North American base, engaged in global projects.
- JNE's Services for Energy, Mining & Minerals include
 - total solution for energy-efficient mine ventilation systems
 - design, engineering, procurement, fabrication, installation, and commissioning support
 - Mine infrastructure including electricals, controls & instrumentation, surface as well as underground
 - Innovative wastewater recovery and treatment technologies to suit project specific conditions and requirements

iv) Non-Ferrous and Light Metals session

Presentations by Mr. Karunesh Kumar (Chief Manager, Business Development, NALCO, India), Dr. R. Sridhar (President, Process Research ORTECH, Canada), Dr. Prabhas Pande (Deputy Director General, Geological Survey of India), Mr. Andy Roebuck (Manager, Teck Metals Ltd., Canada), Mr. Hari Panday (Director, Avalon Rare Metals, Canada), Mr. Lou Bruno (VP, Materials Handling - Americas, Worley Parsons, Canada), and Mr. Michael Dehn (President and CEO, Argex Mining, Canada)

- National Aluminum Company Limited (NALCO) is the largest integrated aluminum complex in Asia with bauxite reserve of 310 Million Tonnes and bauxite production of 4.8 Million Tonnes per year, alumina production of 1.6 Million Tonnes per year and aluminum metal production of 0.46 Million Tonnes per year.
- NALCO's Areas of interest are:
 - Metals : Copper, Zinc, Gold , Nickel, Platinum, Titanium, Uranium etc
 - Mines : Acquisition of mines (Coal , Bauxite, Copper)
 - Specialty Grade Alumina
 - Special Alloys of Aluminum



- Special Aluminum for railway coaches & wagons

- Canada is an important producer of minerals and metals such as Nickel, Copper, Gold, Cobalt, Lead, Uranium, Zinc, Aluminum, Rare Earths, Silicon and Ferrosilicon.
- Potential areas of technical collaboration are
 - Mineral exploration
 - Mining
 - Process development for new ore bodies
 - Improvement to existing operations
- Argex Mining Inc. has a high grade titanium, iron and vanadium deposit.
- Argex's business strategy for 2010-2011 includes
 - Complete drilling campaign on the La Blache Project
 - Produce a NI43-101 compliant Mineral Resource Estimate for La Blache Project
 - Select the most economic and efficient technology for the processing of the deposit
 - Finalize Scoping Study for La Blache Project that includes an economic analysis of the potential viability of the resource
- Avalon Rare Metals Inc. is developing rare metals production facilities in Canada.
- India's public and private R&D programs, in collaboration with other international parties (such as Avalon) could help accelerate and ensure reliable rare earth-enabled technologies and supply chain availability.
- India's domestic production of copper concentrate accounts for only 4% of the total requirement. Rest is imported.
- Mining Capacity is 3.4 million tonnes of ore/annum, which is equivalent to 34,000 tonnes of metal.
- Refining capacity in India is 949,500 tonnes/annum, of which HCL contributes 49,500 tonnes, HINDALCO 500,000 tonnes and Sterlite Industries (India) 400,000 tonnes.
- India has emerged as a net exporter of copper metal despite an ever growing domestic demand.
- Worley Parsons India has offices in Mumbai and Hyderabad. Worley Parsons India's Strategy is to
 - Build strong long term relationships with both the Public and Private Sectors.
 - Leverage WorleyParsons project delivery systems and superior technical capability from around the world to pursue and executive local opportunities together.
 - Develop as an attractive workshare destination to provide HVPD or HVE services with cost advantage to other WorleyParsons regions.
 - Develop and strengthen local capability to provide sustainable long term growth.



v) Coal session

Presentations by Mr. Sharad Kumar Ghodke (Director, Ministry of Coal, India), Mr. Amar Amarnath (Senior Consultant, Sherritt International, Canada), Mr. Ashu Mathur (Mineral Exploration Corporation Limited, India), Mr. Jean Lafleur (Director, Champion Minerals, Canada), Mr. Richard Pinkerton (Vice President, Labrador Iron Mines Holding, Canada), and Mr. Denis Lehoux (VP- Operations, Coalspur Mines, Canada)

- India's total resources of coal is ~268 bn tonnes: 106bn proved, 124bn indicated and 38bn inferred.
- 88% of production comes from open cast mines; 12% from underground mines.
- Investment/Cooperation Opportunity exists for
 - o Development of underground projects with Longwall/ Mass production technology on Risk/Gain sharing basis.
 - o Application of Longwall/Shortwall technology in extraction of pillars.
 - o Manufacture/lease of spare parts /equipment.
 - o Technology for deep shaft sinking.
 - o Clean Coal Technologies.
- Energy demand is predicted to further increase in the world and coal demand will also increase steadily. However 'business as usual' scenario will not succeed.
- Need counter measures against environmental issues, including global warming resulting from the use of coal
- Future coal supply that will meet its increasing demand, will very strongly depend on the solution to environmental issues
 - o This will be accomplished only through the promotion of clean coal technologies
- Urbanization rates in the developing economies, in particular China and India, are a key driver in the global growth in energy demand.

vi) Uranium session

Presentations by Mr. Andy Oliver (Consultant, former Vice President, Cameco, Canada), Mr. Tuhin Kumar Mukherjee (Executive Director, JSW Energy Limited, India), Mr. Doug Chambers (Partner, SENES Consultants, Canada) and Mr. Rick Swider (President, Rick Swider & Associates, Canada)

- In addition to excellent exploration and mining potential, Canada provides proven capacity to produce uranium concentrates, refined/converted products and finished fuel.
- Most resources are expandable, with potential for investment opportunities to encourage that expansion.
- Technical support and services available to underpin production and growth.
- There are many possibilities of synergies with India due to common interest in CANDU type fuel and reactors.
- India has 4.1 GW of Nuclear Installation, which is 3 % of total installed capacity.
- Nuclear power is projected to grow to 63 GW by 2031.
- Canada can Support India in developing a nuclear fuel cycle by



- Hands-on experience with
 - Mining and Milling
 - Refining and conversion
 - Fuel fabrication
 - Nuclear generation
 - Waste management
- Infrastructure and Regulatory support
- World class Engineers and Environmental scientists

vii) Gold and Diamond session

Presentations by Mr. Jay Fredericks (Director, Minerals Development, Govt. of BC, Canada), Mr. Pradip Sood (Ontario Chambers of Commerce), Mr Praveen Prakash (MD, APMDC, Hyderabad, India), Mr. Ron Gashinski (Director, Diamond Sector Unit, Ministry of Northern Development, Mines and Forestry, Ontario, Canada)

- British Columbia is one of the top three provinces for production of gold, silver, lead and zinc.
- British Columbia leads the country in copper production, is Canada's number one coal exporter and only province to mine molybdenum.
- Andhra Pradesh is India's fourth largest state by area and fifth largest by population. 15% of mineral resources of India is in Andhra Pradesh.
- Andhra Pradesh is rich in respect of a number of Minerals such as Limestone, Coal, Mica, Dolomites, Bauxite, Barytes, Clays, Heavy mineral beach sands, Manganese, Feldspar, Quartz, Silica sand Soapstone, Gold, Diamonds, Uranium, Oil & Natural gas, Iron ore, Semi-precious stones, Granite, Slates, Limestone slabs, Marbles, Dimensional & Building stones.
- Andhra Pradesh has long been the site of gold and Diamond mining, in Particular, Hence it is the endeavor of the state Govt to revive the Gold and Diamond mining in the state
- Aim of the State government is to "attract foreign and national companies with best practices in the industry for grounding of Integrated Gold and Diamond mining and Value addition Project Under PPP
- Foreign equity investment in joint ventures for exploration and mining promoted by Indian companies will be encouraged.
- Global diamond exploration (113 companies) in 2009 stood at US\$449 M.
- Canadian diamond exploration expenditures in 2009 were \$67 M spent primarily in Ontario, Saskatchewan, Nunavut and NWT.
- Ontario diamond exploration expenditures in 2009 were \$16 M
- Ontario also has a vibrant jewellery manufacturing sector.
- 95% of diamonds imported into Canada are imported through Ontario
- 60% of Canada's jewellery import & export trade is through Ontario



viii) Metals Trading and Recycling session

Presentations by Mr. Len Shaw (Exec. Director, Canadian Recycling Industries, Canada), Mr. P. Madhusudhan (Director - Finance, RINL, India) and Dr. Lakshmi Raghupathy (Secretary General, Electronics Recyclers Association, India)

- Environmental & resource availability will drive recycling.
- To maximize the benefits, must eliminate trade barriers and learn to work together.
- Current domestic production of steel in India is 62 million tonnes (2009-10) and expected to grow beyond 100 mt by 2013-14. The National Steel policy envisages steel production in India to go up even beyond this by 2020.
- 37 to 40% of the World steel production is through recycled scrap.
- Scrap recycling saves Iron ore, energy & emissions that would otherwise be consumed to produce from virgin route.
- Recycling of one ton of scrap results in saving of 1400 kg of Iron ore, 400 kg of coal and 55 kg of limestone. Recycling also has enormous impact on reduction of CO₂ emissions.
- ESM - Environmentally Sound Management means taking all practical steps to ensure that any industrial process or activity are managed in a manner which will protect the environment and human health against adverse effects from such activities.
- EST - Environmentally Sound Technologies means technologies used for any industrial process that ensures conservation of resources and energy and generates less waste.

ix) Capital Markets session

Presentations by Mr. Suren Rao (CEO, Tata Steel (Canada), Mr. Sachin Mahajan (Director, Canaccord Genuity, Canada), Mr. Fred Pletcher (Partner, Borden Ladner Gervais, Canada), Ms. Janis Koyanagi (TSE, Canada), and Mr. Mukul Modi (Vice President, SBI Capital Markets, India)

- Globalization has increased the flow of capital and the rate of business that is done among countries.
- Tata Steel Europe is 100% dependent on procuring iron ore in the market.
- Tata Steel has acquired an iron ore resource in Quebec to reduce cost of raw materials and secure captive sources.
- Canaccord Genuity has a long track record of leading or co-leading transactions for international resource companies of all sizes and stages of development.
- M&A is regulated in Canada through Federal Regulations (Competition Act, Investment Canada Act and Canada Business Corporations Act) and Provincial Regulations (Provincial and Territorial Securities Laws, Provincial and Territorial Corporations Laws, and Provincial and Territorial courts)
- SBI Capital Markets Limited, SBICAPS, was incorporated in 1986, is a wholly owned subsidiary of State Bank of India.
- SBICAPS has provided financial advisory and debt syndication services to major steel producers in the country.



**Address by Dr. A.P.J. Abdul Kalam
Former President of India**

“Mining and material realization add to the strength of the nations”

India is one of the world’s strongest economies with a rapidly increasing demand for natural resources and commodities, an emerging industrial base and technology driven and knowledge based economy. India is now concentrating on improving the mineral processing technology to the state of the art level.

Canada and India are natural partners within the mining sector. Canada’s great mining tradition has been developed not just through expertise in exploration but knowledge of legal aspects related to mining and the ability to raise capital for mining companies. The result has been a reputation for mining entrepreneurship that will be a valuable asset in the growth of trade between Canada and India in the mining sector. At the same time, taking into India’s growing reputation as an emerging economic power, Indian entrepreneurs have been making inroads in Canada as well. India-based industry giants have made newsworthy investments in Canada. These investments have revitalized the acquired companies, providing a boost to the local economies.

Mining exploration in a large scale has to take place for locating unique materials, and minerals as vast areas have yet to be explored. Mining of the seas is unexplored sufficiently and it provides lot of opportunities. International partnership in such type of ventures will be valuable.

Canada has large uranium resource with high metal content. India has nuclear power programme to add 20,000 MW power by the year 2020. In view of the India Canada signed a civil nuclear energy cooperation in June 2010. Definitely, uranium mining and processing and related equipment will be very important for India and Canada.

I would suggest that both India and Canada, keeping the objective of a world mining vision 2050, may work on collaborative science and technology research using the core competencies of both the nations. I am sure, this Canada India Mining and Metals Forum 2010 will deliberate on these aspects and come out with an innovative and comprehensive action plan for providing effective solutions and their progressive implementation.



x) Sustainable Development session

Presentations by Mr. Y.S. Malik (Principal Secretary, Industries, Haryana, India), Ms. Valerie Chort (Partner, Deloitte, Canada), Ms. Ginny Flood (Director General, NRCAN, Govt. of Canada), Ms. S. Seshan (COO, Fifth Generation, India), and Ms. Indira Singh (Director, Ministry of Northern Development, Mines and Forestry, Government of Ontario, Canada)

- Global population has grown from 5 billion to 6.7 billion in the last 20 years and is expected to reach 9 billion by 2050.
- Global energy consumption set to grow by 50% by 2050.
- Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own need.
- Sustainable development is maintaining a delicate balance between the human need to improve lifestyles and feelings of well-being on one hand, and preserving the natural resources and ecosystems on which we and future generations depend.
- Indiscriminate exploitation - a strict No. Conservation is the key.
- Restoration and rehabilitation of the area has to be part of the mining plan.
- Integrated mine closure must consider a life-cycle approach to the economic, technical (operational and environmental) as well as social aspects related to a mining operation.
- “Life Cycle Thinking” emphasizes the importance of all the stages of the life cycle so that operations (the money making stage) does not overshadow the importance of the other stages.
- In Canada, the concept of sustainable development has been integrated into federal government policies, programs and legislation.
- Sustainable development principles form the cornerstone of Canada’s environmental assessment legislation, the Canadian Environmental Assessment Act.
- In addition, Government of Canada’s Minerals and Metals Policy: Partnerships for Sustainable Development recognizes need to balance economic, environment and social in the development of mineral and metal resources.

xi) Governance and Public Policy session

Presentations by Chief Glenn Nolan (Vice-President, PDAC, Canada), Mr. Paul Stothart (Vice-President, Economic Affairs, Mining Association of Canada), Mr. Hilary Rebeiro (President, Piruqsaijit Corporation, Canada) and Mr. Anil Arora Assistant Deputy Minister, NRCAN, Government of Canada)

- Governance is the art of steering societies & organizations.
- Good governance is an essential factor to success, especially in mining locations where traditions, cultures, people & relationships affect timely approvals which are critical to major capital over runs.



- The Canadian Mining industry employs over 300,000 Canadians and accounts for ~3% of GDP.
- The Canadian Mining industry was responsible for \$66B in exports in 2009, accounting for 19% of Canada's total merchandise exports.
- It provides a market to over 3200 suppliers of mining goods and services. Mining industry provides 50% of Canada's rail freight revenue.
- Canada attracts \$2-3 billion annually in exploration
- Canadian mining policy objective is "a socially, economically and environmentally sustainable, and prosperous mining industry, underpinned by political and community consensus"
- Canadian governments have tried to achieve this vision by Governance, Fiscal Regime, Regulatory Regime, Socio-Economic Context, and Long-term Sustainability.
- Canadian Mining industry is highly regulated industrial sector with strong legislation:
 - o Environmental Assessment, Environmental Protection and Worker Health and Safety
 - o Timely decision making
 - o Public consultation is widespread (e.g., EA process)
- Community involvement is encouraged, with particular emphasis on Aboriginal participation
- A framework for responsible exploration includes Health and safety, Environmental stewardship and Social responsibility.

xii) The Going Forward session

Presentations by Mr. Anil Arora (Assistant Deputy Minister, NRCAN, Government of Canada), Mr. Sundeep Nayak (Joint Secretary, Ministry of Mines, Government of India) and Mr. Jon Baird, Managing Director, CAMESE, Canada, Past-President, PDAC)

- Current joint activities between Canada and India are low compared to what it should be. There is tremendous opportunity for growth.
- Canada should capitalize on the new mining act of India that's coming up next year.
- The two MOUs (with Ontario and NRCAN) should be used as overarching framework.
- Key areas should be identified and deadlines should be set.
- Use Canada India Foundation (CIF), Prospectors and Developers Association of Canada (PDAC) and Canadian Association of Mining Equipment and Services for Export (CAMESE) as institutions to advance our goals.
- India needs Canadian capital and capabilities to unlock its resources. State of the Art Know-How and private investment, both can come from Canada.



5. STRATEGY FOR WAY FORWARD

The strategy for way forward is to leverage Canada's resources and expertise in Mining and Metals sector to meet India's growing need.

6. ACTION PLAN

- i. Establish a joint task force between Canada and India with independent think tank. The task force would comprise of representatives from Government of Canada and Government of India, representative associations from Indian industries such as FICI or Confederation of Indian Industries (CII) and Canadian Industries such as Prospectors and Developers Association of Canada (PDAC) or Canadian Association of Mining Equipment and Services for Export (CAMESE), and Canada India Foundation (CIF). The task force will have the mandate to come up with a concrete plan within six months.
- ii. Identify important areas for collaboration.
- iii. Look at macroscale: Joint India-Canada sustainable technology development.
- iv. Governments should prepare a level playing field for both countries. Identify and work to address any barriers/challenges.

7. ACKNOWLEDGMENT

The organizers of Canada India Mining and Metals Forum were extremely fortunate in the tremendous support received from both Canadian (federal and provincial) and Indian governments in terms of participation. They would also like to thank all the sponsors of the Forum whose support made such an ambitious program possible.