

CIM Management & Economics Society and CIM Toronto Branch  
Professional Development Series

5<sup>th</sup> Annual Professional Development Series

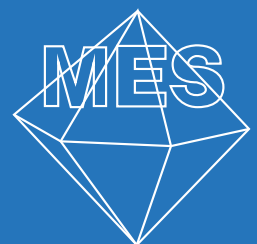
# Rocks & Stocks

THE EMERGING CYCLE:  
RISK MITIGATION &  
OPPORTUNITIES

October 25, 2018



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Rocks & Stocks 2018 Professional Development Series



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Thursday, October 25, 2018

## THE EMERGING CYCLE: RISK MITIGATION & OPPORTUNITIES

### Letter from the Chair

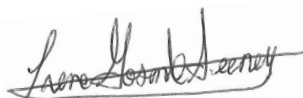
Risk and Opportunity: two sides of the coin when we look at any situation. With risk, we need to identify and take steps to mitigate potential adverse effects or reduce the likelihood of adverse impacts. With opportunity, we must also recognize it and take steps to benefit from it. But one thing we can be certain of is uncertainty. Uncertainty will always be with us and we must be prepared and open-minded when risks and opportunities arise.

We can look at this emerging cycle in the mining industry with only our risk mitigation glasses on, or clear the glasses and look at it as well through the lens of opportunity. Within every risk situation, there is the opportunity side of the coin. Things are evolving on all levels: financing, social, geopolitical, governance, skills and talent, and innovation and the future. Where are the risks? Where are the opportunities? How will we recognize them, mitigate them, and/or embrace them? Only together will we be able to move the mining industry forward, safely and profitably for all stakeholders.

In Rocks & Stocks 2018, our speakers will share their ideas on how to mitigate these risks but how to also take advantage of the opportunities that will maintain competitiveness in this fast-evolving world. But we all have something to add! In the open floor panel discussions, you are invited to engage with the speakers and the audience to ask questions and share your views. Take that risk so that we have the opportunity to hear your thoughts as well.

Special thanks to Ernst & Young LLP as our 2018 Host Sponsor and to our corporate sponsors for their generous support: DRA, Epiroc, PDAC, Champion Iron Limited, Chemtreat, Inc., CIBC, Micon International Limited and Watts, Griffis and McQuat Limited.

On behalf the Executive Committee, I welcome you and thank you for participating in the 5th Annual Rocks & Stocks Professional Development Day.



Irene Gosende Seeney  
Rocks & Stocks Chair

Rocks & Stocks is a joint initiative of the CIM Management & Economics Society and the CIM Toronto Branch.



# ROCKS & STOCKS 2018

## THE EMERGING CYCLE: RISK MITIGATION & OPPORTUNITIES

Thursday, October 25, 2018, 8:30 am to 4:15 pm

EY Tower, 100 Adelaide Street West, 31st Floor, Toronto, Ontario

### Agenda

8:30	Registration & Continental Breakfast (Networking)	
8:45	Opening & Welcome	Irene Gosende Seeney, Rocks & Stocks Chair
	<b>Session 1: Risks and Opportunities</b>	<b>Session Chair: Bereket A. Berhe</b>
9:00	Transforming Risk into Opportunity	Janice Zinck, CIM and Natural Resources Canada
9:30	Trends and Innovation in Mining Finance	David Shaver, CIBC
10:00	Spreading the Risk: JVs, Strategic Partners, Smaller Projects	Mohit Hasija, EY
10:30	Break (Networking)	
	<b>Session 2: Practical Permits</b>	<b>Session Chair: Shilika Mathur</b>
10:40	Social Risk Management - An Opportunity for Mining	Monica Ospina, O Trade
11:10	Path to Project Permitting	Louise Grondin, Agnico Eagle Mines Limited.
11:40	Developing Themes in Geopolitics from 1st to 3rd World	Cashel Meagher, Hudbay Minerals Inc.
12:10	Open Floor Panel Discussions	Moderator: Sabrina Dias, SDC
12:40	Lunch (Networking)	
1:10	<b>Keynote Speaker:</b> Key Trends in Corporate Governance and Implications for the Mining Sector	<b>Introduction: Larry Smith</b> Richard Leblanc, Boardexpert.com and York University
1:50	Break (Networking)	
	<b>Session 3: Disruptors</b>	<b>Session Chair: Warren Flannery</b>
2:00	The Talent Crunch is Here - We Need a New People Equation	Pamela Hackett, Proudfoot.
2:30	Recovering ROI Through Innovation	Douglas Morrison, Centre for Excellence in Mining Innovation
3:00	Why the Future is Ours to Uncover	Ayelet Baron, Chief Purpose Officer, Genius 100 Visions
3:30	Open Floor Panel Discussion	Moderator: Ryan Bergen, CIM Magazine and CIM Journal
4:00	Questions and Closing	Irene Gosende Seeney, Rocks & Stocks Chair



## Janice Zinck

Director

Green Mining Innovation CanmetMINING

Natural Resources Canada

President CIM

### Topic: Transforming Risk into Opportunity

The mining industry is fraught with many and varied risks covering the entire spectrum:

- Business risks, including pressure to increase a cost benefit ratio with declining ore grade;
- Resource replacement in a resource stressed world;
- Environmental and social issues that continue to evolve;
- Capital cost overruns that appear to be inevitable;
- Aging management talent with few experienced personnel to replace them; and
- Access to capital in a risk adverse world.

On top of these traditional concerns are:

- Recent threats surrounding cybersecurity and digitization; and
- Astonishing possibilities from innovation in an industry where the status quo is the norm.

Can we transform how we manage risk and more importantly can we turn these risks into opportunity? For a sector that is frequently labelled as “traditional” and risk-adverse, this transformation will require a strategic paradigm shift to re-examine risk approaches. How can this, ultimately, lead to increased productivity, lower costs, and stronger community confidence? The presentation will explore the potential for transformation and examine opportunities for strategic change.

### Biography

Janice Zinck has over twenty-five years' experience in the leadership of multidisciplinary programs to address mineral resource development related to environmental and processing challenges. She has been involved in many national and international multi-stakeholder initiatives where she has developed strategic priorities, partnerships and collaborations. She was instrumental in the creation of Canada's Green Mining Initiative and more recently the national program on rare earth elements and chromite development in Canada, and the new Mining Value from Waste initiative. Janice is presently President of the Canadian Institute of Mining Metallurgy and Petroleum (CIM) and has served on the board of the Canadian Mineral Processors, the Metallurgical Society and CIM's Environmental and Social Responsibility Society. She is a board director for MIRARCO (Mining Innovation Rehabilitation and Applied Research Corporation). She is a Fellow of CIM and a past CIM Distinguished Lecturer. She was profiled as one of eighteen 'Women of Impact in Canada's Mining, Metallurgical and Materials Industry' and more recently by the Canadian Museum of Science and Technology as a “Superhero of Industry – Lady Chromite”. Janice has undergraduate degrees in geology and chemistry, and a master's degree in metallurgical engineering. She holds two patents, has published extensively and presented widely on aspects relating to mineral / metallurgical processing and environmental management.





## David Shaver

Managing Director

Mining Investment Banking

Canadian Imperial Bank of Commerce – CIBC

### Topic: Trends and Innovation in Mining Finance

David will examine the latest trends and innovations in mining finance relating to equity, debt, convertibles, royalties and streams.

A review of the providers of capital to the mining sector as it has evolved will include retail and institutional investors, royalty and streamers, banks, private equity and alternative capital.

### Biography

David Shaver joined CIBC in 2016 as a Managing Director on the Global Mining Team in Toronto. Before that, he worked for over 20 years with other leading financial institutions on their Mining & Metals Investment Banking teams in Toronto and New York. During his investment banking career, he has advised on numerous significant cross-border and domestic M&A and financing transactions.

David holds a B.A. Honors degree from the University of Western Ontario and an MBA from Queen's University.



## Mohit Hasija

Vice-President

Valuation & Business Modelling Practice in Toronto  
Ernst & Young – EY



### Topic: Spreading the Risk: JVs, Strategic Partners, Smaller Projects

Volatility and an ever-changing macroeconomic environment have made executing deals difficult in the mining sector. The sector's focus remains cautious, although there are signs that companies are beginning to look toward strategic growth. However, an emphasis on capital discipline continues to force mining and metals companies to consider not only the potential returns of projects and acquisitions, but also the complexity of the project with regards to execution, and the transaction currency.

There is a growing appetite to spread the risk through joint ventures and strategic partnerships. Other options include acquiring smaller projects, expanding existing projects and/or taking a phased approach to capital spend.

This presentation includes a review and outlook for mining M&A and capital raising.

### Biography

Mohit Hasija has over 10 years of professional experience which includes business valuations and audit services. This includes extensive provision of valuation services for various large mining, retail and manufacturing clients. He has been involved in and has led a number of assignments for companies in these sectors, including transactions, purchase price allocations, goodwill impairments and valuations for tax purposes.

Mohit works closely with a number of large gold mining companies providing annual valuations of multiple mine sites for financial reporting, including tangible and intangible asset valuations, and legal entity valuations for income tax purposes. He has also performed strategic valuation reviews of internally developed intellectual properties/technologies for mining clients.

He has been involved in various valuation related matters on EY's audit SEC mining public clients ranging from precious and base metal and rare earth metal projects. He has been a key contributor since the inception of EY's Mining Eye, a focused quarterly thought leadership publication that closely tracks the Canadian mining sector mid-tier and junior companies.

Mohit has an MBA with a specialization in Finance and holds a Bachelor of Commerce degree.



## Monica Ospina

Founder & Director

O Trade and Market Access

Head of Corporate Social Responsibility at Aurania



O Trade



AURANIA

### Topic: Social Risk Management: An Opportunity for Mining

In an industry that understands technical risk and long-term investment, working towards mitigating social risk and monitoring social return on investment represents an opportunity not to be missed. In this presentation, Monica Ospina will discuss the connection between Social Risk Management and Corporate Social Responsibility, and how companies can translate social investment into value for the operation. Viewed from this perspective, investors and mining analysts not only observe good practices in social risk management but find operational efficiencies and value.

### Biography

Monica Ospina is a respected authority in socio-economic development specialized in the extractive industry. More than 15 years of work and research make of her a recognized expert in designing and implementing customized solutions in corporate social responsibility (CSR) that mitigate social risk and support operational productivity. Her accolades include:

- United Nations Global Compact Canada award in 2016 for her efforts in promoting Sustainable Development Goals in the Mining Industry.
- World Bank award in 2012 for the Local Community Procurement Program she authored, a program recognized as one of the Top 15 Innovations that year in the World Bank Procurement Innovation Challenge.
- Contributing author to the “Strategic Approach to Early Stakeholder Engagement: Good Practice Handbook” in 2013, later published by the International Finance Corporation.
- Expert contributor in the Working Session on Procurement and Community Development at the United Nations Global Compact’s Rio +20 Conference, where the Sustainable Development Goals (SDGs) were first defined.

Monica holds a Master’s degree in Diplomatic Studies from the University of Westminster, and has completed postgraduate programs in International Business Strategy at the London School of Economics and Sustainable Management at Harvard University.





**AGNICO EAGLE**



### Louise Grondin, P.Eng.

Senior Vice-President Environment,  
Sustainable Development and People  
Agnico Eagle Mines Limited

#### Topic: Path to Project Permitting

A review will be presented of the fundamental steps to successful project permitting and some of the lessons learned by the Agnico Eagle team over the last fifteen years of permitting, in Canada and abroad. Louise Grondin will share her experience as to how a company can understand and adapt to changes in expectations from society, reflected in new regulatory requirements.

#### Biography

Louise Grondin is the Senior Vice-President, Environment, Sustainable Development and People at Agnico Eagle Mines Limited and has held this position since December 2010. Prior to this, she was Vice-President Environment, Regional Environmental Manager for Abitibi and Environmental Manager for the LaRonde Division. Before that, she worked at the Selbaie mine in Quebec and with Ontario Hydro in Toronto.

Louise was recognized by Women in Mining International as one of the 100 most inspiring women in mining in 2013 and by Women in Mining Canada as a trail blazer in 2016. She also received the Rick W. Firlotte Career Recognition award from the Symposium in mining environment in 2015. In addition, she was named fellow of the Canadian Academy of Engineering in June, 2018.

Ms. Grondin holds a B.Sc. in Physics from the University of Ottawa and an M.Sc. in Meteorology from McGill University. She has completed the mechanical engineering curriculum at the University of Toronto and is a member of OIQ in Quebec and PEO in Ontario.



## Cashel Meagher

Senior Vice President and Chief Operating Officer  
Hudbay Minerals Inc.

### Topic: Developing Themes in Geopolitics from 1st to 3rd World

The mining industry's footprint creates constant negative pressure ranging from poor image, populist political ambition, NIMBYism, and environmental and CSR legacies. Every jurisdiction, from the first world to the third world, presents its special challenges and considerations. Cashel Meagher will explore some of the developing themes and issues facing the industry and will suggest ways to mitigate them.

### Biography

Cashel Meagher is Senior Vice President and Chief Operating Officer at Hudbay Minerals. He is charged with Hudbay's international operating teams and responsible for business development, technical services, exploration and corporate social responsibility. He was previously Vice President, South America Business Unit from 2011 to 2015, where he led the successful construction and ramp-up of the Constanca mine. He has an extensive background in precious metal and base metal exploration, resource and reserve estimation, engineering studies and open pit and underground operations. Prior to joining the company in 2008, he held several management positions with Vale Inco.

Cashel holds a Joint Advanced Major in Geology and Chemistry from Saint Francis Xavier University and is a Professional Geoscientist in Ontario.



MODERATOR

Sabrina Dias

President

SDC



### Biography

With over 15 years of experience tackling the industry's sustainability issue, Sabrina Dias works with clients on corporate and site-level sustainable development strategies to manage operational risk and maximize stakeholder support, as well as strategic, sustainability reporting. She is Founder and President of SDC, a team of passionate mining and sustainability experts.

Colleagues have called Sabrina a 'bilingual' project manager, thanks to her engineering and sustainability education and experience - she understands industry needs in order to operate in culturally and politically sensitive contexts. This bilingualism has proven to be an indispensable asset to the many project teams with whom she has worked, particularly her ability to come to a mutually agreed upon solution benefiting both client and stakeholders.

Sabrina's work has taken her to Madagascar, Tanzania, South Africa, Australia, Northern Canada, South America, and the South Pacific islands of Papua New Guinea and New Caledonia. Currently, she is co-authoring a book on how to integrate sustainability into major projects that will be published by Wiley in 2019.

A licensed Professional Engineer with a Master's Degree in Environmental Studies and Graduate Diploma in Business and Environment from the Schulich School of Business, Sabrina continues to collaborate with the best and brightest to bring innovative approaches to mining and sustainability.



## Richard Leblanc

Associate Professor of Law, Governance & Ethics  
York University / Boardexpert.com



### Topic: Key Trends in Corporate Governance for the Mining Sector

Richard Leblanc's presentation will focus on:

- Role of the board and board composition
- Strategic Performance
- Executive Pay, Executive Tenure
- Oversight of the CEO
- Ethical Conduct
- Risk
- Trends in the Mining Sector
- Actions Items for Mining Boards.

### Biography

Dr. Richard Leblanc, CMC, BSc, MBA, LLB, JD, LLM, PhD, is one of Canada's leading experts on corporate governance and accountability. He is an award-winning teacher and researcher, lawyer, public speaker, consultant, and specialist on boards of directors. He has taught at leading universities including Harvard University and is the author of dozens of scholarly and practitioner articles, programs and reports. He is a former recipient of Canada's Top 40 Under 40™ award, received a teaching award as one of the top five university teachers in Ontario, and was named to Canadian Who's Who.

Richard brings to business and professional audiences a depth of information from his extensive research and work with over 150 organizations; and training, assessment and development of over 1,000 directors and managers. He is engaging, dynamic and personable. Because of his work with leading companies and current research, he is always on the cutting edge of emerging global developments.

He has advised the boards of directors of numerous large and iconic companies and has often served as an expert witness.

Richard holds a Bachelor of Science degree, an MBA, Canadian and American law degrees, a Master's in Law, and a PhD focusing on board of director effectiveness.



## Pamela Hackett

Chief Executive Officer  
Proudfoot

### Topic: The Talent Crunch is Here – We Need a New People Equation

There is a perfect storm in the mining industry. A retiring workforce, old management models, slow input of a new workforce who do not want to be managed the old way, changing skill requirements, shiny new technology, price cycle volatility, unforgiving shareholders and, of course, the need to be safe. How do we navigate this storm? We need a new people equation.

### Biography

As Chief Executive Officer, Pamela Hackett is charged with the growth of Proudfoot - a global consulting brand known for its strength in delivering measurable results for over 70 years. She leads the Proudfoot Global Management Team, who ensure client satisfaction across the Proudfoot world.

Pamela joined Proudfoot 30 years ago. Her first assignment was with Mount Isa Mines in outback Queensland, Australia where she rolled up her sleeves, put on her safety boots, and delivered her first set of measurable benefits, through people. Thirty years later, she continues to advocate that real change and transformation comes from powering up your people.

Pamela has held various executive roles, including the global leadership of Proudfoot People Solutions practice, the growth of Proudfoot Asia, President, EMEA Business, and is Executive Sponsor of the Proudfoot Institute – home of the Proudfoot Transformation Masterclass. Pamela is a recognized thought leader in transformative change. She has led client engagements across multiple sectors in more than 35 countries and, like most Proudfoot Leadership, works directly with teams on the ground at every opportunity in order to continue delivering measurable results through people.

Pamela will publish her first book on empowering people for transformative change in early 2019 titled “getGruntled! Triggering Engagement”.





## Douglas Morrison

President & Chief Executive Officer  
Centre for Excellence in Mining Innovation



### Topic: Recovering ROI Through Innovation

Productivity in the mining industry has been declining for over a decade and has eroded the return on investment. Current mining technology platforms are now thirty years old – few other industries have changed so little. Declining ROI reflects this.

Projects at CEMI have demonstrated the value derived from reducing the time to first revenue, reducing up-front capital cost and reducing operating cost:

- Getting to a new underground orebody as fast as possible is one of the most important things we can do – the choice of how to do this comes down to cost and risk.
- Automation and electrification of production systems is essential – but not sufficient.
- Batch ore transfer contacts the ore about 5% of the time; we need to move ore continuously at the highest possible ‘product transfer rate.’
- We need to reduce the energy cost of ventilation, particularly for cooling equipment and people in hot excavations.

The adoption rate of new technology in mining has to be accelerated if the decline in ROI is to be reversed. But if this is to be achieved, investors will have to play a much greater role in making it happen.

### Biography

Douglas Morrison has 14 years of operating experience in the deep nickel mines of the Sudbury Basin, at both Falconbridge (now Glencore) and Inco (now Vale). He then spent 15 years as a consultant at Golder Associates working on mine design, productivity, and safety issues, living and working in Australia and South America. From 2005-2010, he was Golder’s Global Mining Sector Leader based in Toronto. Throughout his career, he maintained advisory roles with several Canadian research and innovation groups. In 2012, he was appointed President and CEO at the Centre for Excellence in Mining Innovation (CEMI).

Doug believes that for the mining industry to meet the economy’s long-term demand for metals and the public’s demand for greater environmental stewardship, the industry must completely transform the technology platforms in mine operations, in mine waste and waste-water management and post-closure land-use alternatives.

Doug holds a B.Sc. from the University of Edinburgh and a M.Sc.(Eng.) in Rock Mechanics and Excavation Engineering from Newcastle University.



## Ayelet Baron

Chief Purpose Officer

Genius 100 Visions. Inspired by Einstein

### Topic: Why the Future is Ours to Uncover

Many people will tell you that the future is about disruption and will provide you with the “keys to success”. Ayelet Baron believes that the future is human and that the biggest change we need in this century is one of mindset. Our world needs more conscious 21st Century leaders to build bridges and navigate a changing world where purpose and value are key to our collective future on the planet.

### Biography

Ayelet Baron is a purposeful designer and strategist, dedicated to the evolution of the next generation of conscious leaders. She envisions a world where people and the planet matter, and business plays a greater role in societal value. Ayelet is the Chief Purpose Officer of Genius 100 Visions, Inspired by Einstein, a purpose driven community uniting 100 global visionaries with likeminded individuals who wish to impact humanity positively by bringing genius and imagination to create hope for humanity.

Previously, she was a Chief Strategy and Innovation Officer for Cisco, co-creating a strategy to take Canada to the second largest revenue country. She has worked in over 100 countries as a global technology executive. Ayelet is the author of “Our Journey to Corporate Sanity: Transformational Stories from the Frontiers of 21st Century Leadership”. Two new co-authored books will be published in 2019 and 2020.

What makes Ayelet’s approach unique is her personal story of seeking the truth. To that extent, she has worked to gain clarity and ground herself in the reality of doing the right thing for herself and her community. She shares her story openly, so others can learn from her lessons and apply them to themselves.



## MODERATOR

Ryan Bergen

Editor-in-chief

CIM Magazine and CIM Journal

### Biography

Ryan Bergen joined CIM Magazine, the flagship publication of the Canadian Institute of Mining, Metallurgy and Petroleum, in 2009. He has a background in the humanities, trained as a journalist and - prior to immersing himself in all things mining - experienced reporting in Canada and the United States, covering topics from self-dealing small-town Kansas mayors to Kingston prison breaks to Montreal's famously crumbling infrastructure.

Ryan has been the Editor-in-chief of the magazine since 2012. During his tenure, CIM Magazine has been recognized many times for the editorial quality of its coverage of the mining industry. He also manages the production of CIM Journal, the quarterly peer-reviewed technical publication of CIM.

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