KAREN CHOVAN

Sustainability Change Agent
Enviro Integration Strategies

QUICK FACTS

Karen is a Professional Engineer registered with APEGS, and the Founder and Principal of Enviro Integration Strategies. Karen holds a Bachelor of Applied Science in Geological Engineering and Master of Applied Science in Mine Engineering and Mine Waste Management from the University of British Columbia. As a Project Management Professional (PMP), and Sustainability Integrator, she brings practical experience to the planning phase of many mining industry activities. The *Girls In The Classroom* project was fortunate to have Karen share her zest for mining and sustainability at the following events:

Event: Mining Debate
Mine Cycle Stage: Plan
Dates: In-class Speaker Series: May 16, 2018
Debate Event: June 11, 2018

School: Greystone Heights School (SAGE Program)
Grade Level: 7
Curriculum Connection: Debate, Career Pathing
Lesson Plan: www.girlsintheclassroom.org

Q&A WITH KAREN

Why did you want to be a part of the "Girls in the Classroom – Unearthing Career Opportunities in Mining" project?

I've always been interested in helping to educate our next generation of leaders about the particulars of what can be done, and is being done, responsibly and sustainably within mining. I'm the Vice Chair of the Environmental and Social Responsibility Society of our national mining association, CIM, so I promote all of this regularly. To help engage our next generation more, I speak at a university level whenever I can, but I've only had the opportunity to speak with younger kids a couple of times.

After 20 years of experience helping internally with gradual change on the sustainability front, I know a lot has improved in mining and I want kids to know about it - the realities of what is needed to actually permit and develop a mine and what we're now doing as part of business. But I also know there is plenty more opportunity to do a lot more, and it is this generation that will be helping us to do that - we need their support and their ideas, and we need them to have a passion for coming to industry to solve big challenges.

This year and project were of particular interest to me for 2 reasons:
First, my daughter was in the targeted class - I know all of these students and just how many bright ideas they all have, as well as the strengths of their opinions! They can do much in the future to

encourage or dissuade support of our industry, and this project was aimed at helping them to see both sides of the possible stories they might otherwise hear. With this, they can make their own, informed decisions.

Second, I am a board member with Women in Mining Women in Nuclear Saskatchewan, one of the partners of this project, and was in support of it from the start. I wanted to help make sure it got off to a great start!

From your perspective, what was the most meaningful information that you shared with the class?
I think there were a few things I conveyed that were important, but perhaps these were the most meaningful because it made them think a bit differently.

First, I helped them understand that "you don't just get to dig up a resource" once you've found it. There are many requirements, you have to prove that it will be done safely and responsibly, you have to have engaged and gained acceptance from local stakeholders, and there are many regulatory processes and stages that must be followed in order to get a permit, to develop and operate the mine, AND for closing a site too. Proper design and planning, operating and monitoring programs, and lots of accountability through checks and audits by regulatory bodies and local stakeholders alike are all part of business.

Second, I helped them understand that there are alternatives to just returning the land to its natural state, or as close to as possible - many local stakeholders may want to use the land for another development, such as a tourism destination, agricultural or solar development, or storage site, and wastes might be useable for another purpose. It is up to the stakeholders to help determine what this future use might be, and then the project team to help make sure that the returned land/infrastructure will be supportive to make that happen.

How does the project benefit the various stakeholders (teachers, student, industry reps/company and industry as a whole)?
First, I think it provides teachers with a much more rounded and in-depth source of educational materials for the students - without them having to attempt learning these details themselves. Having experts who can come in and educate, then answer questions for students, is a great way to add value to your curriculum.

For students, they get some perspectives about mining that are not influenced by the teachers' own preferences or beliefs. They get information from various perspectives of diverse experts too - for we all also have differing opinions and things that we each care about and focus on too. And aside from the technical learning details, the students got to see that, yes, women can and are a successful part of not just the mining industry, but also engineering and geology, project management, leadership and more.

For industry, we are making inroads to increase the visibility of possibilities of careers in mining, the safe and responsible way in which we are doing things, as well as the positive benefits of mining. Less hear-say for this next generation, more reality. Hopefully programs like this can grow and make a bigger impact for the future of mining.