An Interview With Dr. Brad Hayes, Chair Of CSUR's Outreach Program

Daily Oil Bulletin, NOV. 22, 2017 - VIEW ISSUE



Well-informed people in a modern society need to seek out expert knowledge, ask questions, think critically, and apply common sense in understanding complex issues. Our goal is to provide accurate scientific information around unconventional oil and gas development, so that everyone can reach reasonable, informed, and balanced opinions.

Mr. Hayes, what prompted CSUR to undertake such an initiative?

 One of CSUR's primary missions is to provide accurate scientific information around unconventional oil and gas — both to our membership and to the general public. In light of the many public debates over hydraulic fracturing and associated environmental issues such as water resources and induced seismicity, we saw a need to provide unbiased and accurate information on industry operations, environmental concerns and mitigation, and Canadian regulatory standards. Our goal is to be seen as a reliable source of accurate, unbiased information around all unconventional oil and gas issues.

Our initial outreach has been to universities, but we are expanding our reach to colleges and technical schools as well. We want to reach the decision-makers of tomorrow through this program.

What feedback are you getting from the universities on this initiative?

Faculty and graduate student organizers at the department level are very keen to see us, as they
want students to gain resource industry perspectives. So far, we're talking primarily to
geoscience and engineering groups, with some students and faculty from related groups such as
environment and ocean studies. It's taking longer to get in front of more diverse groups that we
want to target — like political science, policy, legal and environmental students and faculty —
but we're making progress as word gets around and we access broader networks.

We recently spoke to a fourth-year political science class at University of Calgary and found them very interested in better understanding water resource issues, environmental safeguards, and regulations.

How engaged and informed are the students?

• Students have shown great interest in gaining understanding on the key topics — what are unconventional resources? Why are they so important? What are the environmental implications? It takes some encouragement to get them to interact and start asking questions, but once they get going, the questions come fast and furious!

What questions are they asking?

• There are some questions around the processes and logistics of unconventional oil and gas development, but the main interest is in exploring environmental issues in more detail. At University of Victoria, we spent time talking about methane emissions, in part because of the Geoscience-BC sponsored research there on the Natural Gas Atlas and Methane Emissions Mapping (GHG Map) projects. We also spent considerable time in talking about water resources, particularly around deep saline aquifers and groundwater protection. A special thanks here to Canbriam Energy for information on their water resource hub.

What were the toughest questions to answer?

Not surprisingly, we were asked why unconventional oil and gas would be needed in the future
in light of the international agreements made at the climate summit in Paris to move off fossil
fuel use. Consistent with our overall approach, our answer was to look to the best available
scientific data — we showed that all credible energy forecasters (such as the National Energy
Board and the Energy Information Administration) see worldwide oil and natural gas demand
growth through at least 2040.

How effective do you believe the program is? Is there a demand for this type of initiative?

We see great interest and engagement with the people we're addressing — so we believe the
program is very effective in providing them with key information they can't find elsewhere. We
are getting enthusiastic responses when we reach out, particularly from student groups. The
biggest challenge is getting people to understand that we are providing unbiased and accurate
information, not advocating for industry activity.

Does CSUR plan to continue this program in 2018?

CSUR's Board will review feedback from the 2017 program to support planning for 2018. We are
proposing a very active 2018 program, and are looking for active support from our members.
We will continue to leverage our relationships with other technical societies such as CSPG and
AAPG in order to get the best value for the efforts and dollars invested. In addition, we are also
collaborating with other industry associations in order to ensure we have broad and relevant
content in our presentations.