

June 2020 – CSUR’s Non-Technical Webinar

ENERGY TRANSITIONS – HOW DO WE POWER HUMANITY IN THE FUTURE?

For CSUR’s June 2020 Non-Technical Webinar, the spotlight was on Dr. Brad Hayes, President of Petrel Robertson Consulting & CSUR Director. The topic for Brad’s presentation was based on the concept of Energy Transitions and what the future holds as far as the global energy mix is concerned.

As Brad so eloquently indicated, the concept of how humanity will be powered in the decades to come is rather dynamic and at the same time complex! Just as no one could have predicted the prevailing situation with Covid 19, we can only speculate what our future energy supply equation will look like. In order to mitigate or minimize the effects of disruptions, most households and organizations are encouraged to have contingencies in place in case of emergencies. Similarly, a strategy needs to be developed and in place to ensure that there is a continuous supply of energy even during devastating events such as this pandemic.

The gist of Dr. Hayes’ talk revolved around creating pathways and logical solutions such that we will continue to have reliable, cost effective and sustainable energy supply not just locally, but indeed globally, regardless of the sources! At the same time and parallel to these conversations, challenges with respect to climate change, development issues and setting attainable & realistic expectations need to be addressed collectively.

The speaker also acknowledged that although the renewable component (wind, solar, biomass, geothermal, etc.) continues to grow every year, studies show that energy based on fossil fuels (oil, gas, coal) will continue to be a major component within the overall energy equation for some time. Technology continues to advance the efficiency for all sources of energy. However, global energy demand also continues to grow, with developing nations being the key drivers of the energy demand growth. Therefore, it would be considered wishful thinking if we were to abruptly cut off any of the energy sources and expect to maintain a similar lifestyle, especially in the developed world!

ABSTRACT: Modern humanity needs energy to survive. Energy networks that support us today are complex, having been built up over decades.



CSUR
Canadian
Society for
Unconventional
Resources

Non-Technical Webinar Series

"ENERGY TRANSITIONS –
HOW DO WE POWER
HUMANITY IN THE FUTURE?"

BY BRAD HAYES, PHD,
P.GEOL - PETREL
ROBERTSON CONSULTING
LTD. PRESIDENT AND CSUR
OUTREACH DIRECTOR.

Forecasting energy supply and demand in the coming decades is equally complex, relying on many assumptions about energy sources and human behaviour around the world. The issue of climate change and greenhouse gas emissions that is regarded as critical to many in North America and Europe is a lesser concern in other regions of the world, where people and governments are more focused on securing reliable energy supplies to support modern industry, education, health and lifestyles.

We will look at different scenarios visualizing future energy demand and supply, all of which include a significant role for fossil fuels, especially natural gas, in the decades to come. We will also look at the challenges around transitioning from today's energy picture toward energy supply and demand in 2040 and beyond.

PRESENTER: Brad Hayes, PhD, P.Geol - Petrel Robertson Consulting Ltd. President and CSUR Outreach Director.

Brad Hayes is President of Petrel Robertson Consulting Ltd., a geoscience consulting firm applying subsurface skills to energy technologies in conventional and unconventional oil and gas, non-petroleum resource exploration, energy storage and geothermal applications.

Brad earned a PhD in geology from the University of Alberta, and a BSc from the University of Toronto. He joined PRCL in 1996 after 15 years of exploration experience in the petroleum industry. Brad is a Director for the Canadian Society for Unconventional Resources (CSUR), and an active member and Past-President of the Canadian Society of Petroleum Geologists (CSPG). He recently completed a six-year term as Councillor for the Association of Professional Engineers and Geoscientists of Alberta (APEGA), and is also registered as a Professional Geoscientist in BC and Nova Scotia.

Brad is an active Adjunct Professor in the University of Alberta Department of Earth and Atmospheric Sciences, and a sessional lecturer at Mount Royal University. With CSUR, Brad manages the Outreach Program, sharing accurate, unbiased scientific information related to unconventional oil and gas development.



Thursday, June 25, 2020
From 10:00 to 10:40am

CSUR PRESENTS A NON-TECHNICAL WEBINAR SERIES:

ENERGY TRANSITIONS -
**HOW DO WE
POWER HUMANITY
IN THE FUTURE?**

By Brad Hayes, PhD, P.Geol -
Petrel Robertson Consulting Ltd. President and
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For more Information and Registration:
www.csur.com/events