

Nuclear Waste, Nuclear Accidents and Climate Change

Today, all the jurisdictions in the world that are succeeding in the fight to reduce carbon emissions, rely on two technologies: hydro dams and nuclear power stations. Those two technologies supply reliable power around the clock and are the main generators in Ontario, Quebec, British Columbia, France, Costa Rica, Sweden, Switzerland and elsewhere. Both technologies are decades old and well-understood.

So, is the answer easy, and there are no barriers to solving climate change?

Instead, many societies are resistant to a widespread roll-out of hydro and are particularly against further deployment of nuclear power. The past generation of nuclear power comes with a legacy that includes nuclear weapons, nuclear waste, and nuclear accidents - enough to give anyone pause for thought.

Alastair McIvor will explore the technical details behind those legacy issues, examine some new nuclear technologies being promoted by today's young entrepreneurs, then suggest where nuclear power may be able to contribute in the fight against climate change, a challenge that will define humanity in the 21st century.

Speaker's Short Bio:

Alastair McIvor is a 30-year veteran of the nuclear industry in the UK and Canada. As a young engineer, his original technical field was safety analysis which he applied to a variety of nuclear reactors, nuclear processing facilities and outside the nuclear industry in the safety-critical field of air traffic control. He moved to Canada in the 1990s to work on a new design of research reactor at Chalk River Laboratories. During more than 20 years at Chalk River he held a variety of roles in safety analysis, strategic communications, regulatory affairs, and corporate planning. He then worked for the CEO and Board of Directors during the profound restructuring of Chalk River between 2010 and 2014, starting a new chapter for Canada's national nuclear laboratory. Alastair's final role at Chalk River was leading the 180 people in the Operations and Radiation Protection teams at NRU, one of the world's largest and oldest research reactors. The mission was four years of operation, followed by permanent shutdown in 2018 March. Nurturing the team and securing ongoing employment for all who needed it, while maintaining a focus on safe reactor operation, is an accomplishment of which he is very proud. Alastair now works as an independent consultant.

