

Socially Acceptable? Paul Strome - February 4, 2024

The majority of humanity realizes that climate change is here and that global warming is being caused mainly by those of us who are burning the majority of fossil fuels. There are many associated issues related to this predicament and just as many so-called “solutions”. We relied on meteorologists from around the world to bring our attention to the climate change problem and we need to put our trust in scientists who have studied the solutions.

We know we have to change our primary energy source from fossil fuels and replace it with other ways to generate electricity. How to produce that electricity in the cleanest, most efficient, timely, socially acceptable and cost effective way is the challenge. Hydro, solar, wind, tidal, biomass, nuclear and geothermal are all on the table.

As taxpayers and members of society we have the right to decide what solutions we agree upon and want to put our trust in. In order to do that in an educated way, we need to do our research and due diligence in order to be credible. There are two types on that list that I personally question - biomass and nuclear.

It has been proven over and over again that the current process of burning trees/biomass to produce electricity is so inefficient that it produces even more CO₂ than burning coal. We should be actively dissuading this practice altogether. We need to plant more trees - not as a source of inefficient energy but for their value in capturing carbon and producing oxygen. Trees produce about half the oxygen that all living things need to live. Oceanic plankton produces the other half. Mother Nature came up with a perfectly designed respiratory system long before mankind arrived on the planet. We need to restore that balance sooner rather than later.

There are major concerns with nuclear not only because of the exorbitant financial cost but because of a huge list of safety and long term concerns and ramifications. The spent fuel contains highly poisonous chemicals like plutonium and uranium pellets. These extremely toxic materials remain

highly radioactive for tens of thousands of years, posing a threat to agricultural land, fishing waters, freshwater sources, and humans.

Humanity has witnessed three major nuclear disasters (Chernobyl, Three mile Island and Fukushima) which is scary enough, but then there's the issue of more than a quarter million metric tons of highly radioactive waste that sits in storage near nuclear power plants and weapons production facilities worldwide. Canada has four active nuclear power plants with 19 operating nuclear reactors all together. Three plants are located in Ontario and one in New Brunswick. Canada stores it's radioactive material in 28 sites in Manitoba, Ontario and Quebec.

Article 29(2) of the United Nation Declaration on the Rights of Indigenous Peoples, to which Canada is a signatory, says there must be free, prior, and informed consent by First Nations to storage or disposal of radioactive waste on their lands or territories. But then we have the Algonquin peoples who never consented to the Chalk River site being used for over 75 years for nuclear reactors and research, and now is the site for a permanent "Near Surface Disposal Facility" as a radioactive waste dump. "Consultation was far too late and inadequate, and we reject the plan. The Kichi Sibi is sacred to our peoples and at the heart of our un-ceded homeland," said Chief Lance Haymond, of Kebaowek First Nation.

Developing enough safe, financially and socially acceptable nuclear power in time to make a significant difference to our CO2 emissions is extremely unlikely. It's not only the construction cost and time that's an issue but also the cost and time of refurbishing and maintaining these facilities that is at question.