



Sparta's Latest Update

Over the last few months, news headlines have been dominated by two subjects: The Federal Election in Canada and a determined 16-year-old Swedish girl. Who would have imagined that Canada's experienced political leaders and a teen living overseas would have anything in common?

In a summer Forum Research poll, close to 30 percent of Canadians said the environment was their top concern. During the recent federal election race, all three major parties publicly acknowledged that climate change and the environment demand our attention. At the same time, 16-year-old Swedish activist, Greta Thunberg was encouraging millions of people around the world to join climate marches; a way to demand action to protect the environment for future generations.

In some of our blog posts we have discussed a strong link between our environment and the economy, but it wasn't until this recent election race that our Canadian political representatives openly admitted that our economic and environmental health are undeniably associated. Our recently re-elected Prime Minister has said that our economy "must be tied to a plan to fight climate change".

And in the USA, California Governor, Gavin Newsom, explained in a recent interview that "in the past many thought we needed to make a choice between Environment or Economy. But today, California has been able to prove that the Economy is flourishing *because of* the Environment".

We are entering a paradigm shift in history whereby energy, transportation, and conservation will be a top priority in all sectors of business and this presents massive world-wide opportunity. From a moral perspective, we know that getting serious about protecting the environment is way overdue. And from a business point-of-view, we can tell you that Sparta is very well positioned as we are developing channels and processes to upcycle both physical waste streams and waste energy sources; providing a positive environmental impact while proving to be economically viable.

Here's what we have been doing:

- **Reducing plastic waste** – as you may have seen in a recently published CBC article, we have taken aggressive steps to synergistically combine technologies in order to upcycle useless waste plastics into clean heavy-duty transportation; delivering comparable work while emitting less GHG and harmful emissions than from

traditional fuel sources; and less costly to boot. We are also doing something similar in the industrial arena and will keep you updated on our progress. These are important next steps to putting carbon back in the ground where it belongs, but the ultimate goal is to convert waste plastic into new forms of plastic – driving closer to a circular economy.

- **Reducing paper waste** – while the disposal of fibrous industrial waste has had little to no environmental impact in past years, by processing it into large animal bedding prior to converting it into organic fertilizers, gives this waste stream one more life and one more source of revenue while enhancing its environmental value.
- **Reducing energy consumption** – while media often portray the transportation sector as the great emitter of Green House Gases (GHG), the inadvertent energy waste generated by our homes, office buildings and factories can be staggering. In fact, according to the US EPA [Canada is similar], the energy required to power these sectors, combined with the actual emissions they inherently produce is more than double the transportation sector. Savings of 10% - 30% for these sectors are still quite possible; thus, helping the planet's future while adding to clients' bottom lines. At Sparta, we have taken aggressive steps in this arena, finding ways to expand the product offering to both accurately analyze client waste and to offer solutions to upcycle the losses into useful technologies that will compound the environmental effects; saving even more in future.
- **Reducing environmental damage** – over the years, we have upcycled many tons of electronic waste and we continue to do so. But in recent months we started analyzing our processes for items that are difficult to upcycle. For instance, in the past, gold was used for its permanent luster and beauty, such as in jewelry and pottery. In electronics it is used for its ability to resist oxidization; thus, maintaining electron flow. Humankind spend a lot of time, money and effort, let alone the effect we have on the atmosphere with GHG emissions, to extract and refine this precious resource from the Earth's core, just to see it crushed up and returned back to Mother Earth. We understand how future generations might criticize us for such lunacy, so we are taking steps to further upcycle these components, reducing GHG emissions while benefiting from the by-product of pure gold.

If left to its own devices [without any intervention from humankind] life on our planet always seems to upcycle. However, in our quest to build a better world, we have inadvertently found ways to invent materials that appear to be beneficial for everyday life, but the substances are often foreign to mother nature and thus difficult, if not impossible for her to upcycle.

At Sparta, we are simply looking for ways to help mother nature complete the natural cycle while benefiting financially in the process; i.e. good for the planet and good for the pocket book.

Sincerely,

John O'Bireck

President & CTO, Sparta Group