



Towards a Human Future: Solving Energy and Money Barriers

by Chris Aikman

Recently, the World Economic Forum has raised some overarching questions as to how we can work together to grow the economy, protect the planet, optimize the use of technology for fairer outcomes and a better life for all global citizens. Yes, those a very big questions. What I'd like to suggest is that their solutions are not that far out of reach; in fact we can be on the verge of resolving them all.

When we look at the myriad of challenges and threats facing our world today, they really cluster around two main themes: money and energy.

The energy challenge arises because we now rely so heavily on proprietary chemical energy, and for reasons of basic chemistry, that means carbon-based energy. We remove hydrocarbons from the Earth's crust, and combust them, raising the greenhouse gas content of the atmosphere to dangerous levels.

The money challenge centers around the fact that so much of the world's land and resources are owned by so few. The picture isn't all bad of course: more people have been lifted out of extreme poverty in recent decades than at any other time in history. But we should acknowledge though that if competition for the Earth's resources lies solely in the hands of a few ultra-wealthy individuals, corporations or governments, this will invite serious conflict. We need only to reflect on the concentration of wealth that preceded World War I to remind us just how dangerous such a situation can become.

Since energy creates wealth, and wealth distribution is defined by how we use energy, these two issues meld together. If we solve one, the other will be largely solved. Furthermore, almost all our environmental challenges (such as agricultural and manufacturing processes) are governed by the cost of energy. If we merely apply Adam Smith-type free market principles (as opposed to government or corporate monopolies) to sustainable energy, these issues will resolve themselves. Yes, there will still be standards. But there will not be monopolies.

Our home planet is a closed system: very little enters our from beyond, and very little leaves its gravitational domain. That means every material thing on Earth is eventually recycled and reclaimable: we never run out of anything. It requires only energy to let this recycling happen by human will, or by nature's own processes. The Sun supplies us with enough solar energy to allow recycling of everything we need: energy that is no longer capital-intensive, it's non-proprietary, it's available to all, all over the globe, on a daily basis. In other words, we have all the material and energy resources needed to provide a high standard of living for every single person on Earth. Moving forward, individual initiative is a vital ingredient.

We all know that the Earth receives about 10,000 times more energy from the Sun that we use in all human activities. Much of the sun's energy goes into moving air and water around. We cannot as individuals build hydro stations, nor efficient wind towers. These will remain as vital collective enterprises. But individuals can harvest solar energy as electricity from their rooftops or back yards: it's the most affordable, most scalable form of new energy. Why are we not eagerly doing this? Wouldn't we all prefer to heat our homes and power our automobiles with the energy that shines down all around us? We can rapidly cut our carbon emissions by 70% by doing this.

We haven't done this because powerful fossil fuel interests have strong-armed our governments to erect trade and regulatory barriers against solarPV electricity:

<https://www.cbsa-asfc.gc.ca/sima-lmsi/mif-mev/sml-eng.html>

If we all could afford to develop the solarPV energy at our homes, farms, factories and communities, almost all our environmental problems would become solvable. Simultaneously, economic inequalities would return to natural levels, as opposed to the present astronomical disparities.

Even in this time of economic chaos and Covid-19 pandemic, governments in Canada and the United States are actively suppressing the adoption of sustainable energy, by pouring billions of public dollars into corporate subsidies. They are pouring billions into building oil and gas pipelines. They are pouring billions into shipping ports for fossil energy.

So, we must demand answers from our governments:

- **Remove all tariffs on the importation of solar panels!**
- **Remove restrictions on the private sale of electricity.**
- **Lower regulatory costs and barriers for the installation of photovoltaic systems.**

Our best way forward is to remove tariff and regulatory barriers to solar photovoltaic electricity. We can and must make solarPV energy affordable and accessible to all (as European nations have largely done). We need to demand this from all levels governments, and from within all our international trade agreements.