

Energy for the 21st Century | *Written by Illya Lapko*

Imagine what life would be like without TV, your computer, a washing machine, not even a water heater with which to take a bath. No, I'm not talking about people living in the Stone Age; this might be your life 20 or 30 years from now. The thing is, we are rapidly running out of power and if we don't change over to newer sources of energy soon we will definitely run into major global problems in only a couple of decades. So why should we switch to newer sources of energy? As I've said we are quickly running out of fossil fuels. Once they are completely gone we will be stranded without energy, and many people will die since we as humans have and will surely continue to have a strong need for energy. But that's not the only reason. Current energy sources pollute the air that we breathe. In fact, some cities are so polluted that walking on the streets is like smoking 10 cigarettes a day, for example Mumbai in India. And to add to that point, air pollution creates dirty air, an unhealthy environment for both humans and the world around them, illness and in extreme cases even death. Solar, wind, nuclear, hydroelectric power etc. are cleaner, better, more powerful and they are renewable unlike coal, oil etc. Traditional sources of energy just aren't enough anymore; they pollute our air and we're running out of them at an incredible speed. In order to sustain our power-hungry world we will have to find and use newer, more advanced and cleaner sources of energy.

There are many problems associated with our current sources of energy. The biggest two that we are currently faced with are the diminishing supply of oil and the vast amount of pollution created by our current sources of energy. There have been proposed solutions before and there are many now. A lot of these have been campaigns to cut down on emissions. A lot of these have failed because we humans have an extreme need for energy in our daily lives. Another solution would be to install filters in power plants which would only help the problem a little bit and not even solve it or help enough to make any difference. In my opinion, the best solution to the problem of our diminishing energy supply is changing to newer sources of energy. Oil, currently our most used source will be completely obliterated in a few decades and what do we do then, if we have no other sources of energy that we can turn to? This is why we need start research on new energy sources now, before it's too late and the world goes into complete turmoil.

Examples of such new sources of energy are wind, hydroelectric, nuclear and solar power. Wind power is clean and just uses the energy created from wind to give out energy. The problem with wind power is that you would need thousands of turbines in a turbine farm just to power a small city. Hydroelectric power is another option but as of now very little research has been put into it. A power source that is becoming more and more common in the developed world is nuclear power. This source is rather clean but poses a great threat to the lives of people because as we all know nuclear power is extremely powerful and if a nuclear reactor was to blow up the effects on humans and nature would be catastrophic as clearly seen in the Chernobyl disaster in Ukraine just over a decade ago.

The problem with almost all of the energy sources listed above is that very little research has been put into them; they are not very friendly to the environment and require lots of space as seen in the case of wind power. There's a source of energy that I favor a lot over the others and that's solar power. Solar power takes energy from the sun's rays and creates relatively little or no pollution. Though solar power has not been researched much, I think this is a great source of energy. If a government would invest lots of money into this type of energy and introduce a nationwide campaign to promote solar power I think that within a decade a first-world nation could easily make the switch to solar power. New houses or apartment buildings could be fitted with solar panels to power everyday household needs and existing houses could easily be fitted with these solar panels. Office and industrial buildings could also switch to this source of energy. If the government made it compulsory for people to switch to solar and convinced their citizens that it's the best way forward, I'm sure solar power would be a great success.

Then of course, there are the counterclaims that people have. Some may say that the government *and* the people would have to spend billions of tax dollars to research and switch an entire nation to solar power without the assurance of the whole plan turning out okay. Let me clarify how this one-time cost is beneficial in the long run. What these people have to understand is that they would be helping themselves. If they want to enjoy life and create a good life for their children and grandchildren down the road, current sources of energy just don't cut it. Drastic measures have to be taken to create a drastically serious problem.

Another often heard counterclaim is the fact that many people may say it's expensive to install such solar panels in housing estates, even more so in office buildings. In argument: as the technology improves and becomes more mass-produced the cost of solar power will drop significantly. The only reason it is so expensive now is because it is very rare. Installation of the solar panels themselves is the main cost for the consumer. We don't owe any money to the sun unlike the billions of dollars we owe to the oil companies that mine for oil. There will be no such thing as monthly bills that we have to pay to the big energy company because we're just taking the energy from the sun. Since maintenance is expected to be cheap and not needed much the total cost in the long-run is much lower than our cost for current energy.

One of the most commonly heard objections to solar power is that these solar panels are big and would take up lots of space. Well, right now they are. With the advancements in miniaturization, solar panels can become smaller and smaller as time goes by. Just look at the radio, when it was first introduced it was huge and had minimal features. Look at it now, it's tiny and has many features. It's even added to other products just for kicks. And you don't need any main power stations for solar unlike current sources. *Those* take up lots of space.

As I've stated in the beginning of my essay, traditional sources of energy just aren't enough anymore; they pollute our air and we're running out of them at an incredible speed. In order to sustain our power-hungry world we will have to find and use newer, more advanced and cleaner sources of energy. When we run out of oil there will be chaos. We've been relying on it for a hundred years but it's a nonrenewable energy source meaning we cannot use it and then just reuse it infinitely, unfortunately. But you see the sun is different. It's full of energy; millions times more energy than all of our power plants could ever produce. Solar power does not pollute our air, our water or our lungs. We have to do something and we have to do it soon. Our governments need to face up to the situation and fund research to sustain our current way of life that is our hunger for energy. The thing is, with research we might even find a newer, more superior energy source than we had ever known before. If we do realize the major problem before us and start doing something about it now, we can keep on enjoying life the way we do and not have to worry whether or not we can heat our food in a microwave rather than on an open fire.