

Example by StudyDriver

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Global Warming a Fix for the Future Example

Everyone has heard the infamous words “global warming”, but not many understand the disaster that’s happening. Terms are thrown out such as carbon emissions and greenhouse gases the list goes on, and those not scientifically savvy tend to brush off what may become the downfall of humanity. According to Nasa’s official website, “The planet’s average surface temperature has risen about 1.62 degrees Fahrenheit since the late 19th century, a change driven largely by increased carbon dioxide and other human-made emissions into the atmosphere.⁴ Most of the warming occurred in the past 35 years, with the five warmest years on record taking place since 2010”. This phenomenon has started to show itself as recently as this past year, making record breaking highs in temperature.

The effects of global warming include warming of the ocean’s water, which can lead to catastrophic weather. Also, melting of ice caps will cause the sea level to rise, this will eliminate our coastline as we know it. Sea level is already rising at an alarming rate. “Globally the sea level has risen about 20 centimeters since the beginning of the 20th century and more than 5 centimeters in the last twenty years”. Since the industrial revolution, around the mid 1800’s, carbon emission has been on the rise.

The average carbon emission before the 19th century was around 280 ppm. However, now Carbon dioxide levels in the atmosphere are reaching 400 ppm. Since carbon dioxide in the atmosphere has a direct effect with warming of the globe this is bad news. Many scientists are warning politicians about cutting back on CO2 emission, but many are refusing to look at the science and refusing to make the changes needed. The idealistic fix is to cut carbon-based fuel systems totally and integrate a source of cleaner energy. The energy source most abundant is solar energy, replacing carbon-based fuel with solar energy is the future. Solar energy is limitless, clean, and easily available. With further technological advancements there's no reason solar energy can't be used to power every residential house, commercial building, or every vehicle on the road.

Transferring to solar energy in those three areas could be the life or death difference for generations to come. Realistically, solar energy could replace nearly all sources of energy, including land vehicles and building power. There's no excuse not to convert to total solar power, other than the humanistic thought of muscle cars ruling and electric cars stinking. The only time solar energy wouldn't be a feasible option is in a case where a large amount of energy is needed at one time, such as a rocket launch. Fossil fuel use could still be a relevant source of energy, it just needs to be limited for certain situations.

There are countless advantages to converting to solar energy. This isn't a matter of making money, this is a matter of saving the environment as we know it. It has been shown carbon emissions are nearing 400ppm. According to Hugh Steadman's research carbon levels between 4-450ppm will cause catastrophic climate destabilization, 425-600ppm will cause irreversible climate destabilization, and levels above 600ppm will cause human ext. Carbon emissions need to drop by nearly half to get this under control. These advantages include having an endless supply of energy, pollution being bare minimum, and reducing the use of fossil fuels.

Since solar energy is a renewable energy source from the sun energy is limitless. Solar energy can even be picked up on cloudy days, in lower amount. If energy isn't being gathered due to weather battery storage can be used instead to generate the power needed. Solar energy will be the most economically friendly solution to this carbon emission problem. Initial costs to set up solar panels will be quite expensive, but the ROI of solar panels will be

massive. A study done in Poland, by Mixtaj, L., Naš?áková, J., Weiss, E., Weiss, R., & Zawada, M., showed an annual saving of 284 euros for electrical energy and a return period of twelve years.

While other energy sources such as natural gas, the return period would be nearly double the time, twenty-two years, to get the money back from initial costs. Doing this will drastically decrease electricity bills per month making the investment instantly worthwhile. Greenhouse gases are the main culprit in global warming, solar energy drastically reduces the amount of greenhouse gas emittance. Solar energy has been known to produce small amounts of greenhouse gas, but nothing compared to traditional energy sources. This is the main reason solar is the best replacement for energy.

The whole objective is to cut down on air pollution and nothing compares to solar when it comes to cleanliness. Another advantage of solar is the reduced need for fossil fuel use, with an abundance of solar energy there will be no need to waste precious fossil fuels on tasks easily achieved by renewable energy. Fossil fuels should be used only when necessary and at this rate they will be totally gone, soon. Fossil fuels have been in use for a few hundred years and are a great source of energy. However, the use of fossil fuels releases carbon into the atmosphere at a rate many times more than alternative sources. Research showed in 2014, fossil fuels were responsible for 81% of the planet's energy source. Ultimately, fossil fuels will become much more expensive as scarcity becomes more relevant, then pushing an alternative source of energy to the forefront. Benefits will be extravagant once these energy systems are put into place. Once governments agree to incorporate these systems electricity will be dirt cheap. The nation will be powered totally on sunlight with storage reserves always ready to kick on.

Maintenance for these systems will also be minimal, the benefits are endless.

This problem cannot be left alone any longer, the science is showing trends that are irrefutable. "Mankind has pumped some 150 billion tons of carbon dioxide into the atmosphere. Almost half that amount has been emitted since 2000". The disadvantages of solar energy must be sacrificed to ensure a safe future for the planet. Some of these disadvantages include job loss, high initial cost, large area consumption, and animal habitat destruction.

Loss of jobs is a difficult subject to tackle, one cannot be persuaded their job needs to be eliminated. For example, coal miners have already had a reduction in job opportunities and will only decrease in solar energy becomes a real possibility to power the planet. However, with a decrease in coal careers comes an opportunity in the solar energy field. It's a tradeoff, many times in history these shifts have come about.

High initial cost to install and integrate solar panels and batteries large enough to store the abundance of energy being brought in is another disadvantage and probably the main issue keeping progression low. After funding, finding an area to put these solar structures becomes an obstacle, a fear is the destruction of animal habitats. Some research on this topic showed that other than land clearing the environmental change had little effect on the wildlife within the area of research. Assuming these studies hold true over time, solar energy looks very promising. The area needed for a mass solar energy plant is extremely large and presents its own problems in large cities. A fix for that problem would be to tie the energy into a grid and pump the energy in from a more rural area, easier said than done.

The conversion to solar energy has its own set of advantages and disadvantages, but no disadvantage is greater than the future of the planet if carbon emissions continue to rise at this pace.

The environmental catastrophes will continue to get worse. Hurricanes will become larger and more powerful than ever before. Ice caps will continue to melt causing flooding in coastal areas. Crops will begin to die due to increased heat. The negatives of global warming are real and are in effect now, at a smaller degree. The negatives of solar energy being job loss, high initial costs, large area consumption, and animal habitat destruction. All these negatives can be mitigated to a certain degree. Job loss will level out and be replaced with more current jobs. The high initial costs will only hurt for a moment, they will pay for themselves in the long run. Animal habitats have been shown to do well with solar plants nearby. The positives are endless including limitless energy, low pollution output, and fossil fuel reduction. The data shows solar energy is the future. It's a matter of time until fossil fuels become scarce and prices of all will skyrocket, causing an economical crash. Hugh Steadman predicts a nuclear war over resources as they become scarce.

If solar energy plants are put in place today this fear can be put to bed. Results will show a decrease in global warming and all negative factors that come along. The world will have to work together and face this issue head on. One country cannot accomplish this goal alone. They all must work in unison. Cutting fossil fuel usage and putting forward a plan for the future. The most sensible plan is solar energy. The positives far outweigh the negatives. This is a plan that may hurt now, considering job loss, but will be far worth it in the future. It's the only thing that can happen, because what's going on in the environment cannot last much longer. It's comparative to a lifelong smoker, they need to quit but the satisfaction for the moment blinds them from seeing the future. That future is not one, exactly like ours if these changes are not made.

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