Introduction

I. Attention Getter: There is no end all, save all solution right now for clean energy creation and most likely there wont be for along time.

II. Use one technique for developing effective introductions. (refer to text)

a. Introduce Topic: This fact has stopped people from viewing current solutions as solutions entirely but I find this to be the wrong way of thinking. Although current renewable energy sources are far from perfect it seems highly risky to abandon them all together.

b. How topic relates to audience. (So what?): This being the problem with the current political and person climate. People are used to solutions coming out of thin air and solving everything at the last minute. The idea that we should solve a problem gradually and continue to find better solutions seems to have been put out of our mind.

III. Establish credibility

IV. Preview: The preview of your main points goes here.: Current renewable energy is at a 26% share in global energy creation. And although this is a great improvement and seems to be tracking steadily there are huge gaps in ideas and knowledge that prevent further improvements.

The transition: I will be demonstrating these gaps along with other gaps of knowledge in the world and US energy creation.

Body

I. Background on energy creation problems. (power grid information)

A. Most folks haven’t a clue how the power grid actually operates. It’s not their fault, it’s just not generally taught and there is a lot of misinformation on the net. for a very basic understanding as to how it works, it is best to visualize the power grid as a large lake. All of the power producers pump into the lake and all of the consumers pump out. However, this lake has a very unusual characteristic, it’s only one molecule deep and has to be maintained that way or all of the bad things mentioned above start to happen. So, if you flip on a switch the producers must pump more, flip off a switch, less. Now one switch doesn’t seem like much but there are millions of switches being flipped on and off at any given moment. Now let’s add in wind and solar pumping into the lake and suddenly the skies cloud up and wind dies off and the lake starts to dry up. The power producers have to instantaneously make up the difference. They can’t just flip a switch to make up the difference, that pump has to be already running at a reduced load to have the necessary “Spinning Reserve” available, and there’s the rub.

B. Renewable energy is energy produced from sources that do not deplete or can be replenished within a human’s life time. The most common examples include wind, solar, geothermal, biomass, and hydropower.

C. Nonrenewable, or “dirty,” energy includes fossil fuels such as oil, gas, and coal. Nonrenewable sources of energy are only available in limited amounts and take a long time to replenish. When we pump gas at the station, we’re using a finite resource refined from crude oil that’s been around since prehistoric times.

D. Nonrenewable energy sources are also typically found in specific parts of the world, making them more plentiful in some nations than others. By contrast, every country has access to sunshine and wind. Prioritizing nonrenewable energy can also improve national security by reducing a country’s reliance on exports from fossil fuel–rich nations. Many nonrenewable energy sources can endanger the environment or human health. For example, oil drilling might require strip-mining Canada’s boreal forest, the technology associated with fracking can cause earthquakes and water pollution, and coal power plants foul the air. To top it off, all these activities contribute to global warming.

The transition from your first main point to your second main point goes here.

It is important to note that the terms ‘renewable energy’, ‘green energy’ and ‘clean energy’ are not interchangeable in all cases; for example, a ‘clean’ coal plant is simply a coal plant with emissions reduction technology. The coal plant itself is still not a ‘renewable energy’ source. ‘Green energy’ is a subset of renewable energy, which boasts low or zero emissions and low environmental impacts to systems such as land and water

II. Background on Solar energy and its pros and cons.

A. One of the biggest myths about solar energy is that you need to live somewhere that’s always sunny for it to work. People automatically assume sunshine-abundant states like Florida and California are better for generating solar energy than states with less-than-perfect weather. But this couldn’t be further from the truth. See, it’s not the sun’s brightness that solar panels capture — it’s their UV rays. UV rays are present whether it’s an Instagram-worthy blue-sky day or rainy and overcast out. That means your weather doesn’t matter as much as the positioning of your solar panels. It’s the strength of the sun’s UV rays on your property and how many hours your solar panels get to capture those UV rays that matter most. As long as your solar panels are soaking up as much energy from the sun as possible, they’ll help you generate power to offset your electricity bill.

B. It’s true that your solar panels don’t work at night or when it’s super cloudy outside. If you live somewhere prone to dark and stormy nights, you may feel a little uneasy about relying on something so tied to the sun for your power. But that’s why most homeowners who go solar still connect to the reliability of the power grid. If solar energy was so unreliable, the U.S. Department of Defense probably wouldn’t be one of the largest consumers of solar energy in the world.

C. The largest problem with solar energy is that people never think outside of the solar farm. Meaning that all the draw backs and problems of the solar far are there. The high space cost, the huge transmission line costs are there. No one has thought about large scale solar on homeowner roof tops.

D. Solar is 3700 per kw coal is rising and is up to 3500 per kw with rising emission restrictions. This does not include the added transmission cost to get energy to other locations.

Transition from your second main point to your third main point goes here.

III. The reason for increasing the amount of solar and not just waiting for a fix all solution.

A. Some of the largest problems with other renewable sources like wind, biomass, and water is that they take up huge amounts of space and have drawbacks because of this. Solar on the other hand negates these problems when thought about differently then the typical solar farm. Mass solar across house roof tops would create its own solar farm network without taking up space. Instead it would take advantage of roof tops that are going unused.

B. Solar is also one of the few sources that would do better spread out among residential areas and cut down on transmission costs unlike wind, biomass, and water which all require there point of energy creation to often be far away from the energy consumption.

C. Solar will reflect UV rays. Sea ice has a bright surface; 80 percent of the sunlight that strikes it is reflected back into space. As sea ice melts in the summer, it exposes the dark ocean surface. Instead of reflecting 80 percent of the sunlight, the ocean absorbs 90 percent of the sunlight. The oceans heat up, and Arctic temperatures rise further. With large scale solar the increased temperatures due to global warming will actually slow as a result of the panels reflecting UV that was previously absorbed by houses/earth.

The transition from your last main point to your conclusion goes here.

Conclusion

I. Review: The review of your main points goes here.

A. The main idea of this presentation is that the current way of thinking is wrong. We all shouldn't just think that one day Elon Musk will solve everything and just hope for that day. Instead there are plenty of ways that we can reduce, not solve, but reduce the effects until that magical Elon Musk day comes.

II. Use one or more techniques for developing effective conclusions. (refer to text)

A.

III. Closing: Your closing statement goes here.

A. Installing solar on a mass scale across rooftops all over the US would not only have a huge impact on temperatures, amount of greenhouse gasses, and the percent of renewable energy creation but it would also reinforce a huge workforce of solar installers and manual labor workers.