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3RD Period

The United Stated Federal Government should fund and develop Solar Powered Satellites for an alternate energy source.

For over 40 years we as the United States have been overly dependent on other countries for oil. So much, that the 2008 economic crisis was caused partially by the skyrocketing oil prices from the Middle East. And, what will happen when the natural oil supply is lost? What will fuel our cars, run factories, and help generate electricity? And will there be an Earth 40 years from now? Or will we have damaged the Earth so badly that there is no turning back?

For 30 years NASA has worked on an alternative energy source which could solve all our energy problems. But, back then the technology wasn't as advanced as it is now, and the technology to implement this huge source of energy has finally been completed (Matai). And that's why the United States Federal Government should fully fund and launch Solar Powered Satellites into space to halt global warming and rescue the aerospace sector of the government.

SPS has been considered as a potential energy source, but never more than that. No one in Congress in willing to take the risk of funding a huge liberal project and maybe failing. But, that shouldn't be a problem anymore because SPS is now incredibly feasible and if the U.S. government commits to it as a matter of public policy, a new SPS

industry will emerge, repaying the public investment many times over (Matai). SPS fully supported by NASA and scientists across the US, too. SPS is the best alternative energy source because of many reasons, but chief among them is the massive amount of energy provided by it. SPS collects energy from the sun on solar panels and transmits the energy down to Earth. The Sun provides an unparalleled source of power because of the tremendous light and energy is gives (Feng). And, because the sun won't stop burning for the next couple billion years, it is also the most reliable and long lasting energy source. Fossil fuels are sure to run out in the next couple hundred years, if not in this century which means they provide a great cost and energy tradeoff. Another incentive of NASA's and the United States government to fund SPS now is that if the U.S. does not do so, Japan, China, India or Russia will take the lead in space solar power development and the U.S. will continue to send billions of dollars a year abroad to insure that our energy needs are met.

Saying that you're a professional tennis player is easy. But actually doing well in professional tennis tournaments is very different. Start off playing Challengers. These will build up your ATP/WTA ranking enough so you can get your shot into one Tier 1 event or maybe you could pull some strings to get wild carded into a Masters Series event. Simply winning one match at one of these events or maybe even upsetting a seed would catapult you into the limelight. Slowly, your ranking would increase and you would start getting into lots and lots of high level events, the best being the Grand Slams. Winning a grand slam is the biggest goal of a professional tennis player. There are

4 Grand slams a year- Australian Open, Roland Garros (French Open), Wimbledon, and finally, the US Open.

Each of these 4 grand slams is worth 2000 ranking points. To win any one of these tournaments you must win 7 matches in a row against the best competitors and the most talented tennis players in the world. The fame and glory and happiness of winning a grand slam are unparalleled.

Although I knew majority of this because I would like to turn professional in tennis, I still learned that playing Challengers would increase your ranking so you could get into bigger, better tournaments. I absolutely love tennis and that's basically the reason I would like to turn professional-to go to train is the favorite part of my day. I'm probably more interested in becoming a professional tennis player after this research project because it's put in perspective now, and I'm looking at it realistically.

Burning fossil fuels produces tons of carbon dioxide emissions everyday, which cause the climate to increase because they gases get trapped in the atmosphere. The world's climate from increasing temperatures would be devastating. Floods, droughts, heat waves and plagues would be on the rise. The eleven warmest years in history have occurred since 1980. Increasing temperatures will cause much more precipitation in certain parts of the world, leading to many deadly floods (Feng). Conversely, other parts of the globe will see a reduction in rainfall and deserts will relentlessly overtake thousands of square miles of habitable land (Feng). Changing climates can allow tropical diseases to move into higher latitudes and affect people and animals that have no immunity to the new viruses. Already deadly rodent viruses are showing up in areas of Africa and the American Southwest that were previously unknown to affect humans

(Feng). In addition to that, sea levels would rise and kill key producers on land, causing a domino effect to every other predator on Earth, including humans. Ignorant people would argue that global warming is inevitable and not human induced. Somerville talks about how warming is real and human induced and that drastic emissions reductions are key to avoid dangerous climate disruptions. "Observational data underscore the concerns about global climate change. Previous projections, as summarized by IPCC, have not exaggerated but may in some respects even have underestimated the change. Now, in 2011, more recent research and newer observations have demonstrated that climate change continues to occur, and in several aspects the magnitude and rapidity of observed changes frequently exceed the estimates of earlier projection."

The only way to stop all these horrible impacts of global warming is to reform now and invest in an energy source which doesn't put harmful greenhouse gases into the atmosphere. Hsu, an incredibly qualified professor at UCLA who studied SPS for a long time, argues that because SPS uses solar power and the launches use liquid oxygen instead of fossil fuels, SPS would be a giant leap towards stopping global warming. But, funding must happen now because Somerville emphasizes that "In order to have a reasonable likelihood of avoiding the risk of dangerous climate disruption, global emissions of greenhouse gases must decline rapidly within the next five to ten years because carbon emissions have catalyzed the effects of warming.

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