Green Homesteading

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Climate change is an undeniable threat to our species' existence on this planet. In order to combat the threat of climate change, we need to reinvent the ways in which we produce and consume energy. As an American, I am ashamed of my country's inability to lead. Where we should be contributing to — or, as the most patriotic among us would have it, leading — a global energy revolution, we do nothing. The engines of American excitement are quiet.

For many people, the idea of a renewable energy revolution is a bogeyman.

It is a constant reminder of our failure to innovate as a country, it is an omen that a profitable industry — and a way of life — is now dying, and it is a symbol for one political doctrine over another. Rather than bring the country together under a banner of innovation and opportunity, climate change and renewable energy solutions have become issues that divide us.

Although early environmental legislation in the United States was bipartisan, now merely recognizing the scientific fact of climate change has become a political shibboleth. Renewable energy is so tainted by political drama (and the pangs of abandoning an old industry) that it is associated more with government overreach and job elimination than it is with our ability to innovate for the future.

As the world's largest economy (and second largest producer of carbon emissions) the United States has both a extraordinary opportunity and responsibility to lead the world in a collective effort to stop poisoning our planet. However, because of the country's cultural divide, we have failed to rapidly develop green energy solutions.

In order to solve this problem globally, and especially in the United States, we need to completely reframe our relationship to renewable energy.

I propose a radical new program that calls upon the great entrepreneurial spirit of the country: The "Green Homestead" Program. The goal of "Green Homesteading" is twofold: institute a program that will allow individual entrepreneurs to begin renewable energy farms, and associate renewable energy with the idea of American frontiersmanship. Additionally, it could provide a basis for later work to address land inequity in historically marginalized groups.

The land grants of the 19th and early 20th centuries captured America's imagination. They were a way for a country which sought to forge its own destiny to empower her people to do the same. They inspired dreams of wealth and independence — a more thrilling and rugged American dream than the white picket fences of 20th Century. Green Homesteading is a version of this for the present day, and our urgent needs.

Each year the United States spends billions of dollars on agricultural subsidies, most of which goes towards large corporate farms. Green Homesteading will repurpose this land, and this money, to create a new market for renewable energy with a low enough barrier of entry that individual entrepreneurs will be empowered to participate.

We should institute a buyback program for unprofitable farmland. This land can then parceled and offered to any qualifying individual for a provisional 10-year period. If, at the end of that period, the owner of the land is selling renewably-produced electricity back to the power grid past a certain threshold, the individual is granted the land. If the cost of buying back land is too high for the government to bear, the program can instead make use of a mortgaging system where investments in renewable energy are credited towards payments for the first 10 years, and once the land has become profitable the claimant can begin payments.

Priority for land claims should go to the original holder of that land, to allow families with a historical connection to land to maintain it while transitioning their land to an energy farm. Individual legal entities should initially have a cap on how many land parcels they can claim, to allow access to the program for as many interested people as possible. Ultimately, this cap can be removed to encourage the efficiency of opening the Green Homestead program to larger firms.

Of particular interest is the government-set threshold for sufficient energy production. This threshold will effectively set a target for the cost efficiency of solar technology, as the effective price to “buy” a parcel of land will be a function of the cost to set up renewable energy production past the threshold. Additionally, elimination of the land cost barrier to entry will drive the price of renewably-produced electricity lower, forcing existing firms in the fossil fuel industry to adapt and compete.

The United States is currently responsible for an estimated 13-14% of fossil fuel emissions. While this plan would significantly reduce emissions, it will also have the effect of benefiting the global effort on climate change.

First, the plan will have a positive impact on the climate change dialogue within the United States. Rather than force renewables on the country, if climate change is reframed as an opportunity for American entrepreneurship and ingenuity, the country will be more likely to commit to a leading role in worldwide climate change efforts.

Second, the program will encourage the development of increasingly cost efficient renewable energy solutions. Land area is not one of the problematic factors for large-scale renewable energy production; the United States could produce enough electricity for all its needs with approximately 10,000 square miles (26,000 square kilometers) of solar arrays. This is less than .5% of the total land area — or 3 times the area taken up by golf courses. The true challenge of renewable energy is lowering installation cost of solar cells and finding ways to maintain a constant energy supply throughout the day. By creating a massive market for renewable energy solutions there will be significant

financial incentives to improve the technology. This will benefit climate change efforts on a global scale.

No single solution is enough to solve global climate change. But the Green Homestead program is one way to not only invigorate a market for renewable energy solutions but also capture the imagination of an otherwise reticent superpower.