The leads proponents of energy reform to shift



The term "carbon footprint" is widely used today as an indicator of how much of an impact an individual or a group of people is making on the environment. It is what accounts for the rapidly changing world climate—which impacts food sources, animals, populations, and the planet overall.

Because of the amount of carbon dioxide that is being put into the atmosphere by cars, it is important to understand exactly how much of impact cars can make concerning their carbon footprint. A recent estimate of the impact of cars In the United States shows that 31% of all carbon emissions each year from the United States is caused by car usage.

But in an economy dependent on getting people to and from work, how is the United States to ease up their carbon footprint? Kickstarting National Alternative Energy Despite the stronghold of oil companies, many auto manufacturers and oil-based industries are trying to find an alternative to relying solely on petroleum to run their products. Electric cars are becoming more popular, with even popular cars like Honda making a commitment to launch more electric car models in the future. Most people who are proponents of environmental change have praised the recent efforts of cars companies to convert to electricity. However, with more cars plugging in, the question lies in whether the electricity being used to power these cars is coming from a green resource, which leads proponents of energy reform to shift their efforts into creating an energy infrastructure that is entirely green.

Enter solar power – a way of generating electricity that requires only one of the most abundant sources of energy available. It makes sense that a resource so abundant would be the first choice for mechanical operation. However, there are obstacles to overcome when it comes to solar powered cars. Before diving into the dilemmas, it is important to understand just how solar energy works. The most efficient way to harness solar energy has been found to be through using solar panels, in which photovoltaic cells convert the sun's energy into the energy used to power things. These are what harnesses the energy, and when it is harnessed it is stored in a separate battery.

The Problems with Solar Power and CarsWhen solar power is used for powering buildings or other large structures, excess energy must be stored in batteries. With cars, because they are hooked up to batteries the energy from the solar panels is sent directly to the car battery. In theory, if a car received continuous access to the sun and all the parts of the energy conversion worked then there would be no problem making it a renewable resource.

But there are issues in the construction that are, for now, part of the reason why solar energy isn't being harnessed actively for cars. One of the biggest issues that engineers designing solar powered-cars are running into is how to harness the energy so that it fits with all the constraints that come with a car. For instance, a car's battery would not hold enough of the energy to allow it to run without being in constant sunlight, so if a car were to go through a tunnel or were to operate in a place with little sunlight, the car would not work. Additionally, more or larger batteries would significantly slow the car down – a problem that is amplified by the lack of horsepower available with solar power.

Solar Powered Cars and PovertyAn additional problem that often is at the root of the carbon footprint and solar-powered car issue is cost. While electric cars are becoming more and more affordable for the average American, because of the high cost of manufacturing solar-powered cars are currently out of the price range for most Americans. The federal minimum wage is \$7. 25 – a wage that has not gone up since 2009. In the United States, the cheapest state to live in is Arkansas. Even bearing these statistics in mind, the amount that a person needs to make hourly to meet that standard of living and avoid working more than 40 hours a week is 13. 72, which is a full \$5. 22 more per hour than the state minimum wage.

Because many of the people who are contributing to the United States' carbon footprint are also making minimum wage, this solution currently does include a large part of the population. How can a person struggling to afford to live on minimum wage afford a car that runs efficiently on solar energy? With no fully-solar powered cars available on the market yet, it is hard to determine exactly how much one would cost for the average car buyer. The most affordable electric car, the Smart Electric Drive, only has two seats and costs an average of \$ 25, 825. Even if a family working on minimum wage could afford monthly payments on this car, it would not be able to transport more than one person and would be useless for families with children. As has been with many other environmental issues, including the release of detergents into water sources and the purchase of sustainably-sourced and manufactured food, environmental progress is directly related to income and therefore a multi-faceted issue. The Benefits Will Outweigh the Cost.

EventuallyThere are many road bumps standing in the way of a successful implementation of solar-powered vehicles.

However, it is imperative that the United States and sustainable energy manufacturers make solar-powered vehicles a top priority. It is a clean energy, meaning that if the successful storage of the sun's energy is implemented, there will be almost no output of carbon. In combination with factories dedicated to the utilization of clean energy, this will mean a drastic reduction in carbon input. Use of solar-powered vehicles will effectively put an end to the need for petroleum, also cutting out the environmental hazards that come with it. Additionally, it will address issues of poverty.

If solar power becomes the fuel of the future, you guarantee a free resource (once the up-front costs have been paid for). While expensive electric cars seem out of the reach for most low-income families now, the surge in popularity will allow these products to become more accessible, eventually relinquishing the need for gas – an expense that only adds to the heavy economic blows that working-class families are dealt every day. In the meantime, promoting sustainable charging of electric cars and helping families across America get affordable, sustainable energy from solar-powered houses will begin the carbon-reduction process. To successfully implement solar energy to be used in cars, there is a myriad of elements that must be changed in our governmental system. Solar power needs to develop and become more affordable and widely accessible. Until then, sustainable alternatives like affordable electric cars powered by solar energy, need to be made readily available to the public.

Lastly, poverty and wage inequality need to be addressed to target one of the largest populations in the United States. Once these issues are addressed, the future of solar-powered machinery, as well as the future of our environment, will look a little brighter.