America's century, our energy consumption has focused



America's energy historyThe United States currently utilizes a wide variety of energy sources to power itself. The U. S. Energy Information Administration (EIA) reports that 2016 energy consumption looked like this: Natural gas – 33%Petroleum – 28%Coal – 17%Renewable energy – 12%Nuclear electric power – 10%For the last century, our energy consumption has focused primarily on the major three major fossil fuels: petroleum, natural gas, and coal. Fossil fuels have allowed tremendous growth; : it is not an exaggeration to say that the 20th century was built on them.

Never before in human history has there been such a sharp acceleration in technology, science, and medicine thanks to seemingly limitless power of petroleum. But this rapid and unprecedented growth has come at a steep price. Carbon emissions from burning fossil fuels have a disastrous impact on our atmosphere and environment. Over just the last twenty years, nearly 75% of human emissions came from burning fossil fuels – the majority of which were used for transportation. If we are to curb greenhouse gas emissions, America needs to develop a large-scale, practical remedy to its dependence on fossil fuels. And that remedy is renewable energy. The potential of renewable energy derived from naturally replenishing sources including solar, wind, rivers, hot springs, tides and biomass. Its health and environmental implications are compelling: reduced greenhouse emissions, cleaner air, natural preservation, and the potential to halt the advance of climate change.

But despite all of its myriad of benefits, renewable energy has proven expensive to produce and an inefficient and unattractive alternative to https://assignbuster.com/americas-century-our-energy-consumption-has-focused/

natural gas. Until now. In the last year, the renewable energy sector broke major records in almost every category, citing the technology's increased cost-effectiveness and efficiency. In a very short time, renewable energy has become a major competitor to replace fossil fuels in the coming decades. A recent study by the Department of Energy's National Renewable Energy Laboratory (NREL) gives us a fairly optimistic picture.

By their calculations, the U. S. can generate most of its electricity – nearly 80% – from renewable energy by 2050. The majority of this energy comes from wind turbines and solar (photovoltaic) sources. And that's using existing technology – saying nothing of the innovations that will undoubtedly arrive in the coming years. But many American cities aren't waiting around to transform into their energy consumption from fossil fuels to green alternative. Major metros including San Diego, San Francisco, and Rochester, Minnesota are already on track to achieve a 100% renewable energy status by 2030.

This shouldn't come as a surprise. Tackling urgent, seemingly impossible challenges with ingenuity and grit is inherent to the American character. Purely from an economic standpoint, the renewable energy sector also offers tremendous potential for job creation. Employment in the solar industry alone grew nearly 25 percent in 2016 compared to a year earlier, reaching a total labor force of 374, 000 people, according to an Energy Department report. Seeing this potential, American businesses are finally following suit. In Fall 2017, a joint survey by the GreenBiz Group and Apex Clean Energy revealed exciting trends in corporate America towards clean energy. The survey of more than 150 public and private companies found that 84% were https://assignbuster.com/americas-century-our-energy-consumption-has-focused/

" actively pursuing or considering purchasing renewable energy over the next 5-10 years." Now that the majority of U.

S. businesses are on board with renewable energy, the possibilities for major innovation and economic growth in the sector are promising. Trump's energy plansA year into the Trump Presidency, America is now well familiar with his disregard for the environment at large, and particularly renewables energy as a viable – and essential – piece of our energy portfolio.

Despite Trump's bombastic proclamation that he was pulling the U. S. from the Paris Climate Accords (though no such action could take effect until 2020). In protest, America responded with the We Are Still In movement, a coalition of thousands of governors, mayors, CEOs and organizations who insist that America's involvement and responsibility to reduce carbon emissions is irrevocable. However, his administration still poses the most critical threat to America's alternative energy future – primarily through legislation.

The threat is a double edged sword – characterized by an obsessive support for the coal industry coupled with a concerted effort to punish clean energy businesses with costly tariffs. It is true that proposed tariffs on foreign-made solar panels would certainly serve in protecting U. S.

manufacturers. However, cheap foreign panels are essential to the U. S. solar industry, and aided in the six fold increase in photovoltaic power generation over the last six years. Only two weeks ago, the clean energy sector breathed a (brief) sigh of relief when a recent Republican tax bill preserved key tax credits and incentives for renewable energy companies that if https://assignbuster.com/americas-century-our-energy-consumption-has-

focused/

removed could have seriously damaged its rapid growth. The futureRenewable energy is a massive, critical component in the larger shift to a sustainable society. The mathematics of capitalism's growth are startling in their simplicity.

When the exponential growth model meets the reality of a closed system and finite resources, the whole machine will break down. America needs an administration who understands and respects this fundamental truth and creates policies that supports at once the interests of the American people, the environment and our great responsibility in leading the world to a cleaner, more conscientious energy model.