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Recommended Citation

Vyugov, Nikita, "American Solar and the U.S. Government: The History of a Love-Hate Relationship" (2018).
Undergraduate Library Research Awards. 3.
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AMERICAN SOLAR AND THE U.S. GOVERNMENT:
THE HISTORY OF A LOVE-HATE RELATIONSHIP

HIST 3452: U.S. Environmental History

Dr. Nicolas G. Rosenthal

December 11, 2017

AMERICAN SOLAR AND THE U.S. GOVERNMENT: THE HISTORY OF A LOVE-HATE RELATIONSHIP

America's most celebrated inventor and the founder of the lightbulb, Thomas Edison, not long before his death in 1931, said: "I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that."¹ Today, with immense progress in solar technology, the famous inventor's dream is closer to becoming a reality than it has ever been before. Technological constraints are no longer a preventive factor in the utilization of solar energy, while the environmental need for clean energy sources is becoming increasingly more pronounced due to global warming. At the dawn of the 21st century, however, after several years of moving forward, the American solar industry is facing new measures from the federal government that discourage solar energy in favor of traditional fossil fuel sources.² The most prominent example of the current administration's anti-environmental philosophy is the recent proposition to impose tariffs on imported solar panels.³ Such tariffs are meant to promote the use of traditional coal-fired plants, simultaneously disrupting the eco-friendly solar industry. If implemented, the legislation will create a spike in the U.S. prices of solar panels and the required technological components, reducing the capability of numerous solar energy firms to stay in business. Moreover, the tariffs are destined to cripple the demand for solar energy that is directly correlated to the product's competitive pricing, "which in turn depends on access to low-price panels."⁴ While technological innovations

¹ Heather Rogers, "Current Thinking," *New York Times*, Jun. 3, 2007.

<http://www.nytimes.com/2007/06/03/magazine/03wwln-essay-t.html>

² Keith Schneider, "Energy Battle Fires Up in West," *Los Angeles Times*, Oct. 30, 2017.

<http://electra.lmu.edu:2048/login?url=https://search.proquest.com/docview/1957067768?accountid=7418>.

³ *Ibid.*

⁴ "How to Kill American Solar," *Wall Street Journal*, Oct. 30, 2017.

<http://electra.lmu.edu:2048/login?url=https://search.proquest.com/docview/1957073128?accountid=7418>.

in the field of solar energy have made it possible to transition away from the pollution associated with traditional ways of generating electricity, such trends are unlikely to continue without the robust support of the federal government. Throughout American history, the renewable energy sector has seen periods of both stagnation and progression. Although impacted by various socio-economic factors, broad-scale social movements, and general growth in environmental consciousness, the success of solar energy initiatives has always been determined by the support and actions of the federal government.

Before the solar industry emerged to combat the environmental dangers of polluting and non-renewable energy sources, America became dependent on fossil fuels. The beginning of this fossil fuel addiction is rooted in the post-World War II era of the late 1940s, which saw an unceasing growth in the gross domestic product and automobile use in the United States.⁵ Higher standards of living, as well as the beginning of the Cold War with the Soviet Union, “raised the national thirst for fossil fuels to ever greater levels.”⁶ Soldiers returned home with an intention to start families and find lucrative careers, both of which contributed to America’s rising population and GDP.⁷ To accommodate the population boom and the subsequent increase in traffic, President Dwight Eisenhower launched the 40,000-mile interstate highway system with the passage of the Federal Highway Act of 1956, which “encouraged the expansion of commercial trucking, family vacations, and daily commutes,” thereby raising national consumption of diesel and gasoline fuels.⁸

⁵ Gerald McNeerney and Martin Cheek, *Clean Energy Nation: Freeing America From the Tyranny of Fossil Fuels*. (New York: AMACOM, 2012. PDF e-book), 43.

⁶ Ibid.

⁷ Ibid.

⁸ Jay E. Hakes, *A Declaration of Energy Independence: How Freedom From Foreign Oil Can Improve National Security, Our Economy, and the Environment*. (Hoboken, N.J: Wiley, 2008. PDF e-book), 14.

Following the scarcity of the Great Depression and World War Two, the American population and government officials favored high production rates and showed little concern about the environmental impacts of increasing energy consumption. Therefore, America's central debates about the purchase and use of fossil fuels at the time revolved around socio-economic and political factors, such as the impact of foreign oil on the national state of the economy. Already by the 1950s, however, a few scientists were speculating about the future scarcity of fossil fuels and offered possible solutions to the potential energy problem. Often recognized as the pioneer of the solar energy movement, Farrington Daniels was a unicum among scientists and a devoted solar advocate.⁹ Daniels offered a unique philosophy by the standards of the time, about the utilization of energy resources that helped inspire the birth of the solar initiative. He argued, "that energy resources should not be seen as standard economic goods whose rate of use might safely be determined by price signals, but as a legacy or heritage that we have an obligation to preserve for future generations. He presented solar energy as a means to achieve this end, not just as another interchangeable technology to compete with fossil fuels."¹⁰ Purely conceptual, his ambitious speeches circulated through scientific organizations like the National Academy of Sciences and the American Chemical Society.¹¹ Mainly because of Daniels the interest in the solar energy gained noticeable traction in the early 1950s, stimulating scientific inquiry and research. Yet no remarkable advances were made to further the practical development of the seemingly-exotic technology, in part due to disinterest within the federal government and among policymakers.

⁹ Frank N. Laird, "Constructing the Future: Advocating Energy Technologies in the Cold War," *Technology and Culture* 44, no. 1 (2003): 33.

<http://electra.lmu.edu:2048/login?url=https://search.proquest.com/docview/198463294?accountid=7418>.

¹⁰ Ibid, 35.

¹¹ Ibid, 33.

In fact, President Eisenhower expressed little interest in the prospects of renewable energy. His administration was preoccupied with establishing a careful balance between the domestic and imported oil to safeguard the stability of the economic growth. In 1959, Eisenhower implemented restrictive quotas on foreign petroleum that limited the imported oil to 12.2 percent of the domestic oil quantity.¹² Eisenhower's oil plan rescued the United States economy a decade later, during the 1967 Six Day War between Israel and its Arab neighbors, when an oil embargo from the Persian Gulf threatened the country's financial welfare.¹³ Following from Eisenhower's policies, domestic production of oil reached new heights to compensate for the declining imports, consequently raising public concern about pollution and resource depletion.¹⁴

The 1970s ushered in a new and unprecedented age of environmental consciousness and federal environmentalist legislation in the United States.¹⁵ The prominent issue that worried modern environmental activists was air pollution.¹⁶ By symbolically wearing gas masks and carrying cartoonish images of the earth suffocating, people drew attention to the harmful consequences of the increase in fossil fuel use.¹⁷ The movement targeted two primary agents as the forces of destruction that contributed to the pollution of the atmosphere: consumers and fossil fuel companies. The activists focused on the latter with much more severe and condemning arguments. By the end of 1970, Richard Nixon took actions against the coal industry by affirming the Clean Air Act, which "forced a switch from coal to other fuels until new

¹² Hakes, "A Declaration of Energy Independence," 15.

¹³ Ibid, 16.

¹⁴ Ibid.

¹⁵ *Earth Days*, directed by Robert Stone (2009; Alexandria, VA: PBS Distribution, 2010), DVD.

¹⁶ Ibid.

¹⁷ Ibid.

technologies to clean up coal emissions could be developed.”¹⁸ The Clean Air Act was also designed to prescribe standards for the automotive industry and limit consumer choices to the eco-friendlier alternatives. Moreover, the Administration of each state was now required to set goals on attaining the air quality standards established by the act. These “national primary ambient air quality standards,” as referred to in the Clean Air Act, were the leading legislative component that promulgated sustainability objectives under the Nixon administration.¹⁹ By limiting the detrimental effects of unregulated fossil fuel consumption, Nixon geared the federal policy to promote public health and transition to the renewable energy. The Clean Air Act itself stated that all the standards imposed on fossil fuel energy sector and associated industries were “requisite to protect the public health.”²⁰ While the environmental movement was the catalyst of change in the energy sector during the 1970s, it was the federal administration that ultimately executed the transformation.

The stimuli for the transition to renewable energy sources were not always internal, but the federal actions taken in response came to promote solar energy. The oil embargo in 1973 caught U.S. citizens and policymakers by surprise.²¹ In retaliation against Nixon administration for supporting Israel in the Arab-Israeli War, Saudi Arabia placed a ban on all the oil exports to the United States of America. Chaos started to spread throughout the country when gas stations began to run out of gasoline, causing Americans to further consider the dangers of their longstanding fossil fuel addiction.²² In the light of the 1973 energy crisis revelations, the public

¹⁸ Hakes, *A Declaration of Energy Independence*, 17.

¹⁹ “Clean Air Act Amendments (1970),” In *The Environmental Debate: A Documentary History* (Amenia, NY: Grey House Publishing, 2011), https://search.credoreference.com/content/entry/ghed/clean_air_act_amendments_1970/0

²⁰ Ibid

²¹ Hakes, *A Declaration of Energy Independence*, 79.

²² McNerney and Cheek, *Clean Energy Nation*, 14.

began expressing an unprecedented desire for alternative energy sources that would prevent the destructive reliance upon economically volatile and environmentally toxic fossil fuels. In addition to the news of the embargo, “pleas from the government to conserve helped further alter American views about energy.”²³ According to a Gallup poll taken in the late November of 1974,

62 percent of people said they were using less electricity. To save gasoline, 62 percent reported driving slower, 41 percent using the car less, and 8 percent joining a carpool. Americans were adopting the conservation ethic.²⁴

Coupled with his promotion of conservation values, Nixon wanted to find viable alternatives to the slashed oil imports. Unlike his predecessor, Eisenhower a decade earlier, Nixon did not consider raising domestic production of oil as a solution to the crisis. Instead, he decided to focus his attention on stimulating research and development of renewable energy. Subsequently, “with new funds pouring into energy research, the reorganization was far from a trivial matter. The budget rose from \$1.25 billion in 1973 to \$2.5 billion in 1975.”²⁵ The inflow of federal funding significantly accelerated the industry's growth and became one of the driving forces of the movement to solar.

Newly generated national interest in alternative energy portrayed solar technology as a prospectively lucrative investment, attracting the attention of large and small businesses alike. Paradoxically, the majority of investors in the solar power at the dawn of the 1970s were large oil companies that put forth massive capital in anticipation of an immediate return on investment.²⁶ Most of these oil companies did not see the anticipated return after entering the

²³ Hakes, *A Declaration of Energy Independence*, 22.

²⁴ *Ibid*, 22.

²⁵ *Ibid*, 37.

²⁶ Hartmut Berghoff and Adam Rome, *Green Capitalism?: Business and the Environment in the Twentieth Century*. (Philadelphia: University of Pennsylvania Press, 2017. PDF e-book.), 26.

industry and subsequently abandoned their green initiatives by 1980.²⁷ Conversely, more small-fish entrepreneurs entered the emerging market of renewable energy with an intention to stay.²⁸ The period of the 1970s is the example of the most rapid growth that the solar industry had ever undergone, as seen from the federal policy and business accounts of the time. However, contrary to what one may assume, public and business interest in solar were not the key factors that permitted the industry's success, but federal policy played the primary role.

During the period of the 1970s, the federal government's philosophy on energy prompted multiple legislative policies and administrative actions that allowed for the solar industry to become competitive and facilitated the demand for solar technology. Since becoming a Presidential Candidate, Jimmy Carter promulgated the idea of an energy policy that would emphasize conservation and encourage alternative energy.²⁹ Carter was highly synchronized with the spirit of the time, having learned from the energy crisis and the modern environmental movement. Optimistically, Carter "called for a bold goal of generating 20 percent of nation's energy from renewable energy...by the end of the century."³⁰ To achieve his ambitious goal, Carter established a set of federal acts that allowed solar companies to become competitive, thereby stimulating an epoch-making growth of the industry. Through the Public Utility Regulatory Policies Act of 1978, Carter instilled a requirement for the U.S. utility companies to purchase electricity from renewable power plants.³¹ At the same time, his policies made transitioning to the renewable energy more beneficial for American citizens and businesses, galvanizing the demand for the environment-friendly solar energy. The 1978 Energy Tax Act,

²⁷ Ibid.

²⁸ Ibid, 220.

²⁹ Hakes, *A Declaration of Energy Independence*, 47.

³⁰ Ibid, 61.

³¹ Berghoff and Rome, *Green Capitalism?*, 218.

conceived and implemented under Carter administration, “offered a 30 percent investment tax credit for residential consumers...and a 10 percent investment tax credit for business consumers” for installation of solar panels and other renewable energy technologies.³² In 1979, Carter himself installed “thirty-two thermal collectors” on the rooftop of the White House to symbolize the mark of progressive development which he left on the United States of America.³³ Carter’s last gift, as a president, to the people of America and the environment, was the Windfall Profits Tax reform of 1980, which imposed a cumulative \$227 billion tax on the oil industry, and extended \$3.1 billion of aid “to poor families affected by higher energy prices.”³⁴ During Jimmy Carter’s presidency, the federal government successfully established the first public energy plan in the United States history. The program efficiently regulated conservational norms in favor of the solar energy, which momentarily allowed America to move forward from the history of atrocious dependence on fossil fuel.

The end of Carter’s presidency corresponded with the end of federal support for the energy conservation and the renewable energy sector. The post-1970s United States once again fell into the trap of oil dependence under Ronald Reagan, who "announced immediate decontrol of crude oil and gasoline" in his first ten days in the office.³⁵ For Reagan, restrictive controls on domestic oil limited the country's production, and thereby, its highest economic potential. His primary objective in the office was not to solve environmental issues but to "make America great again." With the government administration that radically supported an increase in the utilization of the conventional fuels, solar industry was threatened by potential cuts in research and

³² Ibid, 219.

³³ Hakes, *A Declaration of Energy Independence*, 61.

³⁴ Ibid, 64.

³⁵ Ibid, 67.

development. As argued by Richard Worthington in his *Policy Studies Journal* article, "Renewable Energy Policy and Politics," government R&D policies can have a dramatic effect on the alternative energy options available to the private sector.³⁶ In the stage of progressive development, any budget cuts could prove to be lethal to the success of the solar initiative. As it was dreaded by many solar entrepreneurs, advocates, and lobbyists, "Reagan administration won majority share of its battles to cut financing for solar and other forms of alternative energy."³⁷ Reagan singlehandedly annulled the legislative stimulation for the growth of the solar industry, which gained significant momentum during Carter's presidency. Reagan had no intention to accommodate the principles of the environmental movement that the previous decade of citizens, businesses, and government officials worked strenuously to establish, due to incongruence of such tenets with his political philosophy. As a result, in the very beginning of the 1980s, solar firms and the renewable energy industry went into a period of stagnation.

Reagan's actions and policies were meant to reconfigure the energy sector not only by influencing the companies directly but also by affecting consumer choices. Carter's Energy Tax initiative to reward residential and business consumers for switching to the renewable energy sources abruptly ended under the Reagan administration.³⁸ By taking away the financial incentive of adapting domestic renewable energy systems, Reagan effectively extinguished the popular demand for clean energy, thereby sealing the fate of the solar industry for the foreseeable future. Even the most devoted environmentalists were reluctant to individually embrace clean energy to their financial detriment. As a 2002 study on the public participation in environmental

³⁶ Richard K. Worthington, "Renewable Energy Policy and Politics: The Case of The Windfall Profits Tax," *Policy Studies Journal* 13, no. 2 (1984): 366, doi: 10.1111/1541-0072.ep11828898.

³⁷ Hakes, *A Declaration of Energy Independence*, 73.

³⁸ *Ibid.*

policies later showed, people's willingness to take action "appears to decrease with the difficulty or cost of proposed actions."³⁹ Therefore, without legislative support, neither the environmentalists nor the renewable energy advocates were able to sustain an extensive transition to solar energy. While in the period of 1970s, presidents "emphasized a balance between new production and environmental protection," in the 1980s, coupled with the Interior Secretary James Watt, President Reagan "wanted to move the fulcrum of that balance."⁴⁰ As an act of symbolism, the solar panels installed at the White House during Carter's presidency were removed under Ronald Reagan.⁴¹ While Reagan's energy policies were solely based on his economic philosophy, the contemporary environmentalists and solar advocates were desperately trying to attract attention to a substantially more critical issue.

Nonetheless, towards the end of the Reagan era, in 1988, the U.S. Committee on Energy and Natural Resources became alarmed by the growing issue of climate change, which sparked a renewed interest in federal policies to support solar energy. Simultaneous concern and fascination with the topic prompted the committee to conduct hearings with the country's most prominent scientists to further explore the nature of this peculiar phenomenon. One of the undertaken hearings was with James Hansen, the director of NASA Goddard Institute of Space Studies. Hansen's thesis was that global warming had an indisputable "cause and effect relationship to the greenhouse effect," which is precipitated by the buildup of carbon dioxide in

³⁹ R.E. O' Connor et al. "Who Wants to Reduce Greenhouse Gas Emissions?" *Social Science Quarterly* 83 (2002): 1-17, cited in Thomas Dietz et al. "Support for Climate Change Policy: Social Psychology and Social Structural Influences," *Rural Sociology* 72, no. 2 (2007): 186.
<http://electra.lmu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ahl&AN=25527981&site=ehost-live&scope=site>

⁴⁰ Hakes, *A Declaration of Energy Independence*, 74.

⁴¹ *Ibid*, 73.

our atmosphere.⁴² In his address to the U.S. Committee on Energy and Natural Resources, Hansen said,

The observed warming during the past 30 years, which is the period when we have accurate measurements of atmospheric composition...is almost 0.4 degrees Centigrade by 1987 relative to climatology, which is defined as the 30-year mean, 1950 to 1980 and, in fact, the warming is more than 0.4 degrees in 1988. The probability of a chance warming of that magnitude is about 1 percent. So, with 99 percent confidence we can state that the warming during this time period is a real warming trend.⁴³

Having established that the temperature increase trends were not a coincidence, Hansen contrasted these trends with an increase in the greenhouse gas emissions. To the fascination of the committee, Hansen concluded that “the agreement with the expected greenhouse effect is of considerable significance.”⁴⁴ Hansen's findings were at dissonance with the environmental philosophy of the current administration, and therefore, sparked further debate in the legislature.

By the end of the 20th century, however, the issue of global warming received sufficient scientific research and publicity to be regarded as a factual consequence of human impact on the planet. Moreover, by the beginning of the 21st century, scientific research made it practically unreasonable to deny that “investing in more fossil fuel extraction and burning...is the main cause of global warming.”⁴⁵ The issue was taken seriously by select public groups, consisting of environmentalists and proponents of alternative energy, as well as a few government officials like Vice President Al Gore. Even before his entrance to the White House as vice president, Al

⁴² "James Hansen Makes the Case for Climate Change (1988)." In *The Environmental Debate: A Documentary History* (Amenia, NY: Grey House Publishing, 2011), https://search.credoreference.com/content/entry/ghed/james_hansen_makes_the_case_for_climate_change_1988/0

⁴³ Ibid

⁴⁴ Ibid

⁴⁵ Larry Lohmann, "Climate as Investment," *Development and Change* 40, no. 6 (2009): 1065, doi: 10.1111/j.1467-7660.2009.01612.x.

Gore became a leader in drawing attention to the issue of climate change by writing *Earth in the Balance*, which called for the immediate popularization of clean energy.⁴⁶ Furthermore, in his address to the Congress in 1981, Gore successfully argued against Reagan's Department of Energy appointee, Douglas Pewitt, who proposed to cut funding for a federal program to fight greenhouse effect.⁴⁷ Therefore, when Al Gore ran for president in the year 2000, there was a public consensus that the next president would support actions to combat global warming, giving hope to solar entrepreneurs and environmentally-conscious Americans. In his campaign, Gore vigorously promoted the idea that the U.S. needs to "take an assertive clean-energy stand in combating climate change."⁴⁸ Although Al Gore won the election by popular vote, which to some degree could be attributed to his stance on environmental issues like global warming and support for the alternative energy sectors, his opponent, George W. Bush won the electoral college and assumed the presidency.

Bush's philosophy on global warming during his campaigning period also mildly reflected the public concern about climate change. However, his actions and policies throughout his presidential term did not reflect that philosophy. As a Presidential Candidate, Bush agreed to implement quotas for the use of renewable energy and to cap emissions of carbon dioxide, yet after being elected, he quickly reversed his standing on the issue.⁴⁹ By measuring the greenhouse gas emissions as a percentage of GDP, Bush allowed the actual total emissions to rise "as long as the economy continued to grow."⁵⁰ This unsustainable model of managing carbon footprint did the opposite of combating the climate change, thereby further increasing the impact of the United

⁴⁶ Hakes, *A Declaration of Energy Independence*, 110.

⁴⁷ "Testimony Before The House Committee on Science and Technology, July 31, 1981." In *Making Climate Change History: Documents from Global Warming's Past* (Seattle, University of Washington Press, 2017. PDF e-book), 137.

⁴⁸ McNerney and Cheek, *Clean Energy Nation*, 247.

⁴⁹ Hakes, *A Declaration of Energy Independence*, 110.

⁵⁰ *Ibid.*

States on the rising temperatures. Being heavily influenced and funded by fossil fuel companies, Bush refused to sign the Kyoto protocol in 2005, which would require the U.S. to limit their coal and oil consumption and result in lower profits for the fossil fuel industry.⁵¹ Consequently, Bush's support for the fossil fuel companies resulted in a nineteen percent growth in the country's emissions.⁵² Not only did Bush's favoritism of the non-renewable energy sector contribute to the issue of climate change, but it also reduced the viability of solar energy as a substitute for fossil fuels. In his symposium on future energy transitions, Gregory Daneke offered an insightful account of favorable conditions for a successful transition from one energy source to another:

Oil independence usually entailed a mix of alternative resources and technologies which could achieve rather rapid substitution under conditions of oil supply shortfall... The transitions from wood to coal and coal to oil took nearly 100 years and these transitions were driven by lower prices and institutional support.⁵³

Therefore, to accommodate an effective transition to clean energy sources, the fossil fuel supply and consumption had to be preliminarily brought down. Per capita, the United States saw a boost in the nationwide utilization of fossil fuels under George W. Bush administration, which in turn significantly decreased the demand for solar energy. At the same time, without any legislature supporting lower clean energy prices, the solar industry could not gain a competitive edge to rival the bloating fossil fuel market.

Only a decade later, under the Obama administration, generous federal funding and corroborate legislation rejuvenated the solar field and allowed it to become unprecedentedly

⁵¹ McNerney and Cheek, *Clean Energy Nation*, 79.

⁵² Hakes, *A Declaration of Energy Independence*, 111.

⁵³ Gregory A. Daneke, "The Perplexing Political Economy of Energy: An Introduction, Overview and Opinion," *Policy Studies Review* 5, no. 1 (1985): 70, doi: 10.1111/j.1541-1338.1985.tb00009.x.

competitive. The environmentalist philosophy of President Obama had a galvanizing effect on all the renewable sectors and promoted sustainability thinking throughout all layers of society. All the way through his Presidency, Obama expressed a profound concern about the state of the environment. After an oil spill in the Gulf of Mexico, President Obama “visited the region several times to check on the BP’s clean-up efforts and actions done to stop the spill.”⁵⁴ Yet his contribution to resolving this environmental hazard did not stop with close supervision of the clean-up. In 2010, Barack Obama created a National Policy for Stewardship of the Ocean, our Coasts, and the Great Lakes. The policy outlined multiple methods to “bolster the conservation and sustainable uses of land in ways that will improve the health of ocean, coastal, and Great Lakes ecosystems.”⁵⁵ One of such methods was to promote renewable energy as a substitute for fossil fuels. By 2016, Obama released his Clean Power Plan, which assisted low-income families and non-profit organizations in getting access to solar energy.⁵⁶ The plan developed affordable clean energy for all Americans with an intention to keep the U.S. in the leadership position in the global efforts of combatting climate change. This initiative successfully stimulated innovation and development in the renewable energy sector and attracted significant private investment to supplement the federal funding. By that design, solar plants became “the fastest-growing source of renewable energy in the United States” under the Obama Administration.⁵⁷ According to Rhone Resch, the President and CEO of the Solar Energy Industries Association, “Without

⁵⁴ McNerney and Cheek, *Clean Energy Nation*, 106.

⁵⁵ "Barack Obama Recommends a National Policy for Stewardship of the Ocean, our Coasts, and the Great Lakes (2010)." In *The Environmental Debate: A Documentary History* (Amenia, NY: Grey House Publishing, 2011), https://search.credoreference.com/content/entry/ghed/barack_obama_recommends_a_national_policy_for_stewardship_of_the_ocean_our_coasts_and_the_great_lakes_2010/0

⁵⁶ “President Obama’s Clean Power Plan.” *Congressional Digest* 95, no. 2, (2016): 4.

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⁵⁷ Juliet Eilperin and Katie Zezima, “Obama touts solar power,” *The Washington Post*, Apr. 17, 2014.

<http://electra.lmu.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsggo&AN=edsgocl.365209725&site=eds-live&scope=site>

question, the Obama administration has been the most solar-friendly ever."⁵⁸ President Barack Obama's environmentalist philosophy, conjoined with his determinate actions in the pursuit of sustainable development of the energy sector had a proliferating effect on the solar industry. Indeed, without Obama's extensive financial and legislative assistance to the field of renewable energy, the solar technology would have slim chances of attaining the same level of implementation in the United States power grid.

The contemporary political history of the United States exhibits an indisputable connection between the development of the solar energy sector and the philosophies, actions, and policies of the government administration. Evidently, the present-day United States continues to follow that correlation rule, even though the environmental stakes are higher today than ever before. By imposing tariffs on foreign solar panels, the current administration is intending to "severely damage American solar power," one of the most advanced and prospective technologies in the renewable energy sector.⁵⁹ Nowadays, the age of unprecedented technological innovation has given rise to the lithium-ion batteries that can provide "70 megawatts of electricity, enough to power about 50,000 homes."⁶⁰ The future that Thomas Edison once speculated about, where people can harvest the infinite power of the sun, is here and now. More importantly, global warming has augmented the need to transition away from the polluting energy sources as an imperative to humanity's long-term sustainable development. Nevertheless, the anti-environmental philosophy of the current administration has recently led President Donald Trump to announce that the U.S. will withdraw from the Paris Climate

⁵⁸ Eilperin and Zezima, "Obama touts solar power."

⁵⁹ "How to Kill American Solar."

⁶⁰ Jacques Leslie, "No, renewable power won't kill the grid," *Los Angeles Times*, Jun. 11, 2017. <http://electra.lmu.edu:2048/login?url=https://search.proquest.com/docview/1908007005?accountid=7418>.

Agreement.⁶¹ The agreement was formed to reduce harmful emissions and limit the global temperature increase by promoting clean energy practices.⁶² As the second largest polluter in the world, United States owes a moral obligation to the rest of the world to follow the accords of the Paris Climate Agreement. To the detriment of the entire planet, Trump's environmentally inconsiderate actions are stagnating the growth of the American solar industry. While the progress in the solar energy field has always been dependent upon the governmental support, our planet's future may be too great of a deal to put at risk through a presidential election.

⁶¹ Michael D. Shear, "Trump Will Withdraw U.S. From Paris Climate Agreement," *New York Times*, Jun. 1, 2017. <https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html>

⁶² Coral Davenport, et. al, "Inside the Paris Climate Deal," *New York Times*, Dec. 12, 2015. <https://www.nytimes.com/interactive/2015/12/12/world/paris-climate-change-deal-explainer.html>

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