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POLICY BRIEF



Summary

- The Green New Deal is a dangerous combination of environmental extremism and socialism.
- The Green New Deal's dependence on renewable energy sources such as wind and solar would cause tremendous and far-reaching environmental harms.
- Even if America were to completely eliminate its CO₂ emissions, EPA models estimate this would avert less than 0.2 degrees Celsius of global temperature rise by the end of the century, too little to accurately measure.
- The Green New Deal could cost nearly \$100 trillion in its first 10 years alone.

The Green New Deal: A Grave Threat to the American Economy, Environment, and Freedom

By James Taylor

Executive Summary

The “Green New Deal” (GND) resolution proposed by Rep. Alexandria Ocasio-Cortez (D-NY) and Sen. Edward Markey (D-MA) purports to be a radical plan required to avert a future climate change catastrophe. Its proponents also claim it would improve the environment and bolster the economy.¹ However, the truth is the GND is a dangerous combination of environmental extremism and socialism. The tremendously expensive proposal would devastate the U.S. economy and cause more environmental destruction than protection.

Despite extensive coverage, the left-leaning media has refused to conduct a rigorous examination of the Green New Deal's planks, and it has largely chosen to ignore many of the GND's unrealistic provisions and promises. Even a cursory look at the proposal shows it would be impossible to fully carry out in 10 years and that it would be economically, socially, and politically detrimental, almost beyond imagination.

Ocasio-Cortez, an avowed socialist, has made it clear the Green New Deal is part of her strategy to replace the free market with the failed policies of the Soviet Union and other socialist nations, including Venezuela, whose economy remains in the midst of a socialism-induced death spiral.²

¹ House Resolution 109, 116th Congress, February 7, 2019, <https://www.congress.gov/bill/116th-congress/house-resolution/109/text>

² See FAQ for the Green New Deal, Office of U.S. Rep. Alexandria Ocasio-Cortez, February 7, 2019, https://www.heartland.org/_template-assets/documents/Green-New-Deal-FAQ-Fact-Sheet-Feb-7-2019.pdf

When put to a test vote in the Senate, no member, not even the plan’s co-sponsors, supported Ocasio-Cortez and Markey’s GND nonbinding resolution. Nevertheless, Democrats in Congress still praise it. Undoubtedly, many will try to resurrect it. Some Republicans already appear willing to do the heavy lifting for them, proposing watered-down Green New Deal plans under the guise of a “Green Real Deal” or a “Manhattan Project” for renewable energy.

Whether presented as a congressional bill, resolution, or as a mere “aspiration,” the provisions of the Green New Deal pose a dangerous threat to the American values of individual freedom and limited government. It should be opposed at all costs, and in its place, lawmakers should embrace proven pro-energy policies that increase the quality of life for all people.

This *Policy Brief* will make the following arguments:

1. The Green New Deal Would Harm the Environment, Not Help It

The Green New Deal would not substantial-

ly improve America’s current environmental protections, which are already among the most stringent in the world. For example, U.S. air quality is the cleanest among comparable industrialized countries, and it is getting significantly cleaner every year. The Green New Deal’s dependence on renewable energy sources

such as wind and solar would cause tremendous and far-reaching environmental harms. For example, wind turbines already likely kill more than 10 million birds and bats each year, including numerous endangered and protected species.³ Additionally, one study found solar panels create 300 times more toxic

waste per unit of energy produced than nuclear power plants.⁴

2. The Green New Deal Would Have Minimal Impact on Global Temperature

The assumption made by Green New Deal supporters is that carbon dioxide (CO₂) emissions from fossil fuels are causing runaway global warming. However, although global emissions have risen 56 percent since 2000, U.S. emissions have declined by 14 percent during that period.⁵ Even if America were to completely eliminate its CO₂ emissions, Environmental

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³ “Windfarms kill 10-20 times more than previously thought,” Save the Eagles International, accessed May 27, 2019, <http://savetheeaglesinternational.org/new/us-windfarms-kill-10-20-times-more-than-previously-thought.html>

⁴ “Are We Headed for a Solar Waste Crisis?” *Environmental Progress News*, June 21, 2017, <http://www.environmentalprogress.org/big-news/2017/6/21/are-we-headed-for-a-solar-waste-crisis>

⁵ “Trends in Global CO₂ and Total Greenhouse Gas Emissions: 2018 Report,” PBL Netherlands

Protection Agency models estimate this would avert less than 0.2 degrees Celsius of global temperature rise by the end of the century, too little to accurately measure.⁶

3. Scientific Evidence Debunks the Asserted Global Warming Crisis

In 1990, the United Nations predicted global temperature would rise by 0.3 degrees C per decade, but the measured rise has been only 0.13 degrees C per decade, less than half the pace predicted.⁷ Global temperature throughout human history has, due to natural cycles, been much higher than it is now.

4. The Green New Deal Would Devastate the U.S. Economy

Among other radical provisions, the Green New Deal would effectively ban air travel, mandate the use of costly renewable energy sources, and eliminate efficient agricultural practices for producing food. Converting the electric power grid and all gasoline-powered

vehicles to green energy would cost at least \$13 trillion, or more than \$100,000 per household. The guaranteed jobs and universal health care programs and requiring every building in the country to make “green” upgrades could cost an additional \$86 trillion. In total, the Green New Deal could cost nearly \$100 trillion in its first 10 years alone—perhaps the most expensive proposal in U.S. history. By comparison, the current federal budget is about \$4.4 trillion, and America’s entire annual gross domestic product is a little more than \$20 trillion.^{8,9}

5. The Green New Deal Would Impose a Dangerous Socialist System

The Green New Deal aims to create “a massive transformation of our society” by mobilizing “every aspect of American society at a scale not seen since World War 2.”¹⁰ This would require a strong, centralized, authoritarian government and an abandonment of democratic checks and balances, similar to what occurred in the Soviet Union in the early twentieth century and in Venezuela today.

Environmental Assessment Agency, December 2018, p. 38, https://www.pbl.nl/sites/default/files/cms/publicaties/pbl-2018-trends-in-global-co2-and-total-greenhouse-gas-emissions-2018-report_3125.pdf

⁶ Patrick Michaels and Paul Knappenberger, “We Calculate, You Decide: A Handy-Dandy Carbon Tax Temperature-Savings Calculator,” *Cato at Liberty*, Cato Institute, July 23, 2013, <https://www.cato.org/blog/current-wisdom-we-calculate-you-decide-handy-dandy-carbon-tax-temperature-savings-calculator>

⁷ Roy Spencer, “Global Warming,” [drroyspencer.com](http://www.drroyspencer.com/2019/01/uah-global-temperature-update-for-december-2018-0-25-deg-c/), January 2, 2019, <http://www.drroyspencer.com/2019/01/uah-global-temperature-update-for-december-2018-0-25-deg-c/>

⁸ “Budget,” Congressional Budget Office, accessed May 27, 2019, <https://www.cbo.gov/topics/budget>

⁹ “Gross Domestic Product, Fourth Quarter and Annual 2018 (Initial Estimate),” U.S. Bureau of Economic Analysis, February 28, 2019, <https://www.bea.gov/news/2019/initial-gross-domestic-product-4th-quarter-and-annual-2018>

¹⁰ Office of U.S. Rep. Alexandria Ocasio-Cortez, *supra* note 2.

1. The Green New Deal Would Harm the Environment, Not Help It

One of the principal selling points of the Green New Deal is it would allegedly improve the environment. The provisions of the Green New Deal would focus primarily on improving air quality and limiting climate change. In particular, it seeks to eliminate all human activities that produce CO₂. The environmental policy mandates aim to replace fossil-fuel- and nuclear-generated energy with energy produced by so-called “sustainable” sources, principally wind and solar, which are believed by GND proponents to be less harmful.

Despite the Green New Deal’s many promises to improve the environment, the available evidence overwhelmingly shows air quality is improving without the policies of the Green New Deal and that the GND’s anti-fossil-fuel provisions would not halt climate change. (For a discussion about the Green New Deal’s effect on global warming, see Section 2 on page 7.) In fact, the Green New Deal’s green-energy mandates would likely cause substantially more harm to the environment than the limited harm created by fossil fuels.

“IN FACT, THE GREEN NEW DEAL’S GREEN-ENERGY MANDATES WOULD LIKELY CAUSE SUBSTANTIALLY MORE HARM TO THE ENVIRONMENT THAN THE LIMITED HARM CREATED BY FOSSIL FUELS.”

Air Quality

Improved air quality is one of America’s most remarkable environmental success stories. Since 1990, the U.S. population has increased by 30 percent, electricity generation has increased by 38 percent, and GDP has doubled in inflation-adjusted dollars (quadrupled in nominal dollars).^{11,12} Yet the environment has not suffered. Quite the contrary. During those three decades:

- Ozone concentrations decreased 22 percent.
- Particulate matter concentrations decreased 40 percent.
- Nitrogen dioxide concentrations decreased 50 percent.
- Carbon monoxide concentrations decreased 77 percent.
- Lead concentrations decreased 80 percent.
- Sulfur dioxide concentrations decreased 88 percent.¹³

Even in 1990—the baseline upon which this remarkable progress in air quality has been measured—the United States had relatively clean air.¹⁴

¹¹ “Total Energy,” U.S. Energy Information Administration, September 27, 2012, <https://www.eia.gov/totalenergy/data/annual/showtext.php?t=ptb0802a>

¹² “U.S. GDP by Year Compared to Recessions and Events,” *The Balance*, April 27, 2019, <https://www.thebalance.com/us-gdp-by-year-3305543>

¹³ “Our Nation’s Air,” U.S. Environmental Protection Agency, accessed March 24, 2019, <https://gispub.epa.gov/air/trendsreport/2018/#highlights>

¹⁴ “Air Quality – National Summary,” U.S. Environmental Protection Agency, accessed May 27, 2019,

The excellent state of U.S. air quality is even more striking when compared to the air quality measurements produced throughout the rest of the world. According to the World Health Organization (WHO), the United States has the 10th cleanest air among the world's 194 nations.¹⁵

The Health Effects Institute (HEI), in collaboration with the Institute for Health Metrics and Evaluation and the University of British Columbia, regularly collects and analyzes air quality data. HEI's *2018 State of Global Air Report* shows only 8 percent of the world's population lives in nations with airborne particulate matter levels low enough to meet or exceed WHO's most desirable levels.¹⁶ The United States, with 4.4 percent of the world's population, is one of the few countries that meet that standard. The other nations that meet those levels, including Canada, Australia, New Zealand, and the Scandinavian countries, are far less populated than the United States.

Similarly, relying on satellite measurements, scientists at Berkeley Earth keep track in real-time of global air pollution.¹⁷ These data show U.S. air quality is consistently and substantially cleaner than any country with a com-

parable population size and economic development. The only countries with air quality ratings rivaling the United States are sparsely populated nations such as Canada. This accomplishment is accentuated by the fact the United States has approximately nine times as many people and produces approximately 12 times as many goods and services as Canada.

To the extent that a Green New Deal would reduce concentrations of atmospheric pollutants, it would do so only slightly more

quickly than what is already occurring. It makes absolutely no sense to chase down the last molecule of remaining emissions at great economic and societal cost.

GND Would Be an Environmental Catastrophe

Not only would the Green New Deal provide few, if any, environmental benefits, it would also cause considerable environmental harm.

Under the Green New Deal's provisions, the federal government would ban coal and natural gas power by 2030. Further, it would ban new nuclear power plant construction and

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https://19january2017snapshot.epa.gov/air-trends/air-quality-national-summary_.html

¹⁵ “Concentrations of fine particulate matter (PM2.5),” World Health Organization, accessed May 6, 2019, <http://apps.who.int/gho/data/node.main.152?lang=en>

¹⁶ “How clean is the air you breathe,” *State of Global Air: 2018*, Health Effects Institute, accessed May 27, 2019, <https://www.stateofglobalair.org/air>

¹⁷ “Air Quality Real-time Map,” Berkeley Earth, accessed May 27, 2019, <http://berkeleyearth.org/air-quality-real-time-map/>

would aim to close all existing nuclear power plants.¹⁸

Instead of relying on affordable fossil fuels and nuclear energy, the GND would require most Americans to depend on wind and solar power, despite the fact wind power is one of the most environmentally destructive energy sources used today.

In 2013, a study published by the *Wildlife Society Bulletin* documented that wind turbines, while producing just 1 percent of U.S. electricity, kill at least 1.4 million birds and bats each year, including many endangered and protected species.¹⁹ Subsequent analyses found the death toll is likely 10–20 times greater than the 1.4 million estimate.²⁰ If accurate, those estimates indicate dramatically increasing wind power could result in the slaughter of more than 100 million birds and bats each year.

Further, replacing a single conventional power plant with wind energy would, on average, require building wind farms consuming approximately 300 square miles of land.²¹ That means replacing just four conventional power plants

would necessitate a wind farm the size of the State of Rhode Island. Replacing all existing conventional power plants with wind and solar power would require consuming an amount of land larger than the size than California.²²

As these figures indicate, replacing huge amounts of undeveloped or minimally developed lands with wind turbines to meet Green New Deal requirements would be an unprecedented assault on land conservation and the world's greatest threat to biodiversity. Building the wind turbines and solar facilities needed to power the United States under the provisions of the Green New Deal would result in the destruction of tens of millions of acres of habitat for countless species across the country, including some endangered species.

Further, wind turbines require rare earth minerals for their key components, and rare earth mining is one of the most toxic, disruptive, and environmentally destructive activities on the planet.^{23,24}

Solar energy has significant environmental problems associated with its use as well. Not only does some solar power equipment require

¹⁸ Office of U.S. Rep. Alexandria Ocasio-Cortez, *supra* note 2.

¹⁹ K. Shawn Smallwood, "Comparing bird and bat fatality-rate estimates among North American wind-energy projects," *Wildlife Society Bulletin*, March 26, 2013, <https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/wsb.260>

²⁰ Save the Eagles International, *supra* note 3.

²¹ "Land Needs for Wind, Solar Dwarf Nuclear Plant's Footprint," Nuclear Energy Institute, July 9, 2015, <https://www.nei.org/news/2015/land-needs-for-wind-solar-dwarf-nuclear-plants>; H. Hayden, "Huge Wind Turbines," *The Energy Advocate*, accessed May 27, 2019, http://www.energyadvocate.com/big_trbn.htm

²² Benjamin Zycher, *The Green New Deal: Economics and Policy Analytics*, American Enterprise Institute, April 2019, pg. 48, <https://www.aei.org/spotlight/green-new-deal/>

²³ Liu Hongqiao, "The dark side of renewable energy," Earth Journalism Network, August 25, 2016, <https://earthjournalism.net/stories/the-dark-side-of-renewable-energy>

²⁴ "Rare earth mining in China: the bleak social and environmental costs," *The Guardian*, March 20, 2014, <https://www.theguardian.com/sustainable-business/rare-earth-mining-china-social-environmental-costs>.

the use of rare earth mining, solar also produces a substantial amount of toxic waste. An organization called Environmental Progress found solar panels create 300 times more toxic waste per unit of energy produced than nuclear power plants.²⁵

Although wind and solar power might reduce the amount of CO₂ emissions produced in the U.S. economy, emissions are only a small component of environmental stewardship. The wildlife deaths, land development, and rare earth mining resulting from the additional use of wind and solar power would negate the minimal environmental benefits provided by relying on these renewable energy sources.

2. The Green New Deal Would Have Minimal Impact on Global Temperature

Perhaps the Green New Deal's most important goal is to avert a climate change catastrophe, which the supporters of the GND say is being caused by increased carbon dioxide emissions from the use of fossil fuels. However, what many GND advocates refuse to tell the public is despite producing one-quarter of the world's goods and services, America's CO₂ emissions have declined in recent decades, both in real

terms and as a percentage of the global level, a trend that will likely continue.

In 2000, America emitted 5.94 gigatons of CO₂, which was then 23 percent of total global emissions (25.7 gigatons). Since then, thanks in large part to the rise of hydraulic fracturing, America has reduced its emissions by about 14 percent, to 5.11 gigatons. The United States has reduced its total CO₂ emissions by more than any other country in the world since 2000.²⁶

Over the same period,

emissions from other nations rose by a whopping 56 percent, from 19.76 gigatons to 31.96 gigatons. In fact, the increase in Chinese CO₂ emissions from 2000 to 2017 (7.21 gigatons) is greater than current annual U.S. CO₂ emissions.²⁷

Even if one accepts the dubious and alarming U.N. estimates regarding the temperature impact of CO₂ emissions, it's clear the Green New Deal would not accomplish the goal of reducing global emissions from rising any further. Stopping the rise in global emissions would require reducing emissions in rapidly developing economies like China and India, something the Green New Deal does nothing to achieve.

Further, America's impact on global temperature rise is remarkably small, even if one ac-

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²⁵ *Environmental Progress News*, *supra* note 4.

²⁶ PBL Netherlands Environmental Assessment Agency, *supra* note 5.

²⁷ *Ibid.*

cepts the theory humans' CO2 emissions are responsible for most of Earth's recent warming. According to U.S. Environmental Protection Agency models, even if America were to immediately and completely eliminate all of its CO2 emissions, it would only mitigate less than two-tenths of a degree C of global temperature increase by the end of the century, an amount that's too small to be measured accurately.²⁸

3. Scientific Evidence Debunks the Asserted Global Warming Crisis

As the previous section notes, there is no reason to believe reducing CO2 emissions would result in lower global CO2 emissions over the next decade. But even if there were, there is no sound evidence documenting a human-caused global warming crisis that would justify the passage of the Green New Deal. In fact, scientific evidence shows CO2 emissions have caused much less warming than what has been asserted by climate alarmists over the past several decades.

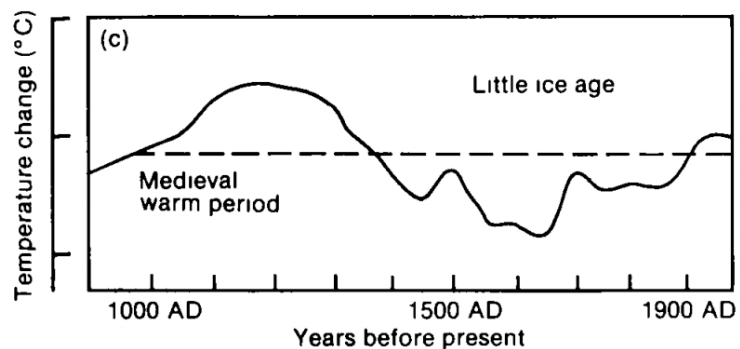
In 1990, the U.N. Intergovernmental Panel on Climate Change (IPCC) predicted global temperature would rise by 0.3 degrees C per decade.²⁹ However, empirical temperature

data covering the three decades following 1990 show the average global temperature rise has been only about 0.13 degrees C per decade, less than half the pace IPCC predicted.³⁰

Further, global temperature remains lower than it has been throughout most of human history.³¹ Natural change is a constant feature of Earth's dynamic climate. Even before the invention of coal power plants and SUVs, temperature changes within a range of several degrees C have occurred.³²

Global temperature has been rising over the past 150 years in the aftermath of the Little Ice Age, the coldest period of the past 10,000 years. (See Figures 1 and 2.)

Figure 1: Global Temperature During Past 1,000 Years



Source: "First Assessment Report," U.N. Intergovernmental Panel on Climate Change, 1990, p. 202, https://www.ipcc.ch/site/assets/uploads/2018/03/ipcc_far_wg_i_full_report.pdf.

²⁸ Patrick Michaels and Paul Knappenberger, *supra* note 6.

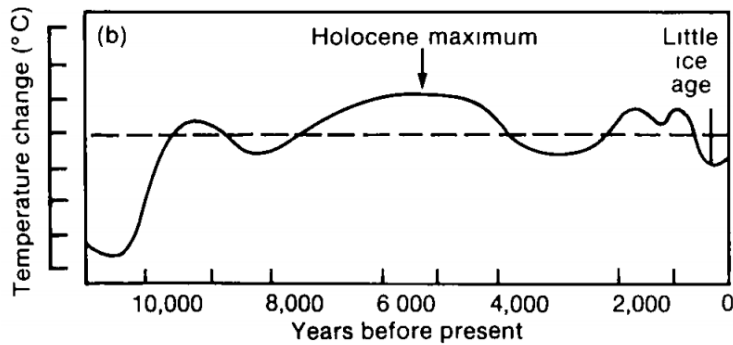
²⁹ "First Assessment Report," U.N. Intergovernmental Panel on Climate Change, 1990, p. xxii, https://www.ipcc.ch/site/assets/uploads/2018/03/ipcc_far_wg_i_full_report.pdf.

³⁰ Roy Spencer, *supra* note 7.

³¹ U.N. Intergovernmental Panel on Climate Change, *supra* note 29, p. 202.

³² Roger Bezdek, Craig D. Idso, David Legates, and S. Fred Singer, *Climate Change Reconsidered II: Fossil Fuels*, Nongovernmental International Panel on Climate Change, January 2019, pg. 137, <http://climatechangereconsidered.org/wp-content/uploads/2019/01/Full-Book.pdf>

Figure 2: Global Temperature During Past 10,000 Years



Source: "First Assessment Report," U.N. Intergovernmental Panel on Climate Change, 1990, p. 202, https://www.ipcc.ch/site/assets/uploads/2018/03/ipcc_far_wg_i_full_report.pdf.

Today, global temperature remains within the lower end of interglacial temperatures and lower than temperatures during the Medieval Warm Period, which occurred just before the onset of the Little Ice Age.³³

Perhaps most importantly, the historical record reveals lower temperatures are substantially more harmful to human health and welfare than higher temperatures. The 300-year warming period that began around A.D. 1,000

and brought temperatures warmer than our current temperature levels was the primary catalyst for the increasing crop production, global population, and prosperity enjoyed during that period.³⁴ However, the dawn of the Little Ice Age, around A.D. 1,300, was an era marred by crop failures, famine, plague, and intense political and social conflicts.³⁵

During the past 150 years, as Earth has emerged from the Little Ice Age, the warming climate has brought immeasurable benefits that continue

today, including crop yields that have set records in the United States and globally nearly every year.³⁶ Higher temperatures have also spurred a significant increase in global plant life, as measured by NASA satellites.³⁷ (See Figure 3.) Additionally, recent warming has led to a reduction in persistently lower temperatures, which researchers estimate kill 20 times more people than higher temperatures, and objective data show extreme weather and climate events have actually become slightly *less* frequent and se-

³³ U.N. Intergovernmental Panel on Climate Change, *supra* note 29, p. 202.

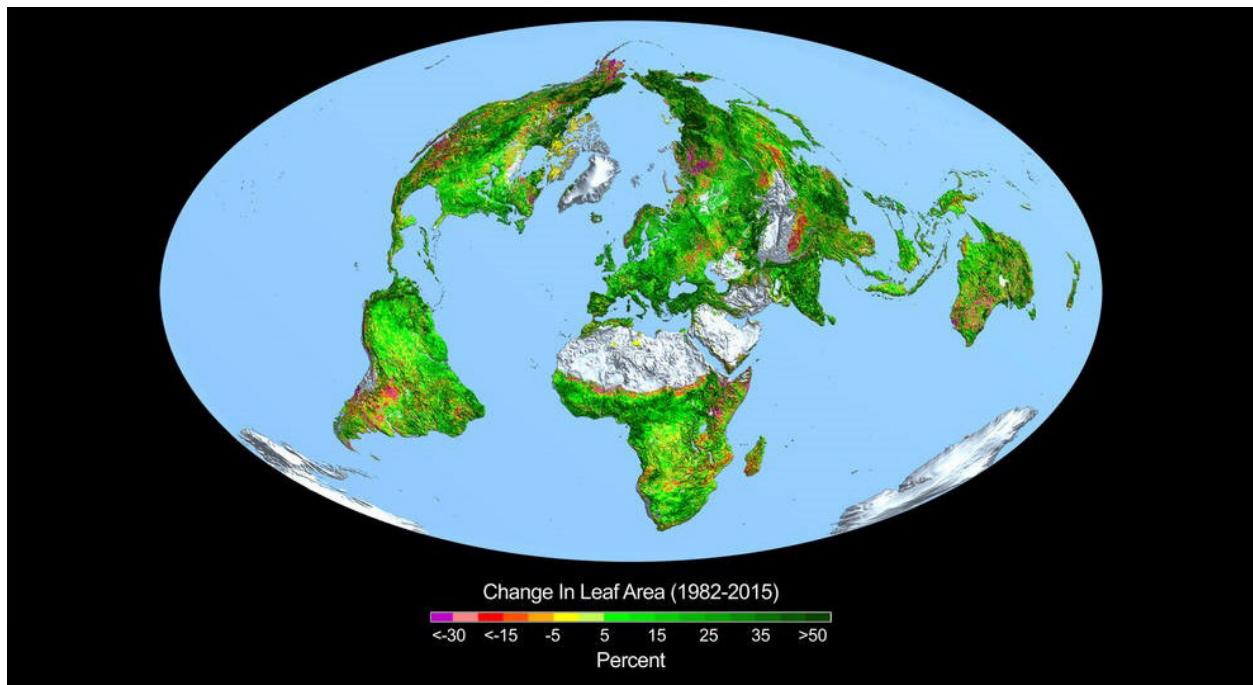
³⁴ Don Easterbrook, "Geological Evidence of Recurring Climate Cycles and Their Implications for the Cause of Global Climate Changes-The Past Is the Key to the Future," *Evidence-Based Climate Science*, 2011, <https://www.sciencedirect.com/topics/earth-and-planetary-sciences/medieval-warm-period>

³⁵ Judith Curry, "Climate crises: half a millennium ago," *Climate Etc.*, October 4, 2011, <https://judithcurry.com/2011/10/04/climate-crises-half-a-millennium-ago/>

³⁶ "World Food Situation," Food and Agriculture Organization, United Nations, April 10, 2018, <http://www.fao.org/worldfoodsituation/csdb/en/>

³⁷ "Carbon Dioxide Fertilization Greening Earth, Study Finds," NASA, April 26, 2016, <https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth>

Figure 3: Changes in Global Plant and Leaf Volume



Source: “Carbon Dioxide Fertilization Greening Earth, Study Finds,” NASA, April 26, 2016, <https://www.nasa.gov/feature/goddard/2016/carbon-dioxide-fertilization-greening-earth>.

vere in recent decades, despite numerous false or misleading media reports to the contrary.^{38,39}

The net benefits of the modest global warming that has occurred during recent centuries will likely persist for decades to come. Global temperature would have to continue warming at the present pace for several centuries before reaching the levels that have occurred naturally since the last glaciation ended.

4. The Green New Deal Would Devastate the U.S. Economy

The Green New Deal would destroy much of the U.S. economy and degrade Americans’ living standards. Further, the GND would, at minimum, increase the U.S. national debt by tens of trillions of dollars over the next decade.

GND supporters say that rather than cause economic destruction, the Green New Deal’s

³⁸ Antonio Gasparrini, “Mortality risk attributable to high and low ambient temperature: a multicountry observational study,” *The Lancet*, July 25, 2015, <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2814%2962114-0>

³⁹ Michael Bastach, “UN’s New Report Shows There’s ‘Little Basis’ for a Favorite Claim of Climate Activists,” *The Daily Caller*, October 8, 2018, <https://www.thegwpf.com/ipcc-report-extreme-weather-events-not-getting-worse>; James Taylor, “Sorry Global Warming Alarmists, But Extreme Weather Events Are Becoming Less Extreme,” *Forbes.com*, May 8, 2013, <https://www.forbes.com/sites/jamestaylor/2013/05/08/sorry-global-warmists-but-extreme-weather-events-are-becoming-less-extreme/#7fd1651a55a4>

massive spending programs would help the economy. However, these claims are nothing more than wishful thinking and serve as another example of the left's zealous embrace of the "broken window fallacy."

The broken window fallacy is a parable first illustrated by French economist Frederic Bastiat. It illustrates how destruction of existing property, jobs, and industries does not lead to the creation of real economic growth.

Bastiat asked readers to imagine a situation in which vandals break countless windows. Some might think this vandalism would provide a benefit to the economy. After all, think of all the workers that would need to be employed to repair those windows. Imagine all the manufacturers that would be needed to produce the replacement windows.

If breaking glass windows can lead to new jobs, and thus economic growth, then perhaps government should create action squads to deliberately break windows every month to spur demand and economic growth.

As Bastiat rightly notes, this "economic growth" is illusory. Property destruction must be paid for somehow, and however it's paid for, it means there will be less wealth available to make other purchases. If government is the payer, it simply means that taxpayers have less money in their pockets. If government prints the money needed to pay for the new windows, then it inevitably means the money already in the economy

will become less valuable. No matter how Bastiat's broken windows are paid for, there will be less economic growth, not more.

This is precisely the sort of distorted economic thinking that plagues most of the Green New Deal. Ocasio-Cortez, Markey, and other proponents of the proposal

say the Green New Deal would create economic opportunities, but in reality, it would only take huge resources away from the economy by unnecessarily destroying well-functioning parts of society, such as the fossil-fuel industry. Under the Green New Deal, trillions of dollars

would be wasted on energy that would otherwise be used to develop new technologies, medical cures, and goods and services that improve people's lives.

For example, the Green New Deal would get rid of nearly all gasoline-powered cars. Your car, the cars of your neighbors, and every car in the country would be junked, crushed in a scrapyard. To replace these cars, trillions of dollars would be needed that could otherwise be spent on growing the economy and spurring innovation—innovation that would make the United States more competitive around the world. The economic "growth" promised by Green New Deal supporters is nothing more than a fallacy.

It is in this context that Green New Deal spending must be judged. We turn now to those costs.

"THE GREEN NEW DEAL WOULD DESTROY MUCH OF THE U.S. ECONOMY AND DEGRADE AMERICANS' LIVING STANDARDS. FURTHER, THE GND WOULD, AT MINIMUM, INCREASE THE U.S. NATIONAL DEBT BY TENS OF TRILLIONS OF DOLLARS OVER THE NEXT DECADE. "

Electric Power Grid Costs

An economic analysis conducted by the non-partisan American Action Forum (AAF) estimates it would cost at least \$5.4 trillion, about \$42,000 per household, to replace current electricity generation with net-zero renewable energy sources under the provisions in the Green New Deal.⁴⁰

It's worth noting AAF acknowledged its estimate is "conservative." Indeed, the estimate unrealistically assumes there will be few additional batteries needed for storage of wind- and solar-produced power. It also assumes no additional transmission lines would be necessary to transport power from new wind and solar facilities to electricity consumers, which is a complete impossibility, because wind turbines and solar collecting facilities would need to be located in parts of the country where the wind frequently blows and the sun is usually shining. This means many facilities would be located far away from large urban areas, requiring more transmission infrastructure.

Building transmission infrastructure is extremely expensive. For example, in Texas

alone, taxpayers recently doled out \$7 billion in subsidies to build just one wind power transmission line.⁴¹ Assuming that the single newly built Texas transmission line would equate to transmitting a full 1 percent of all the nation's electricity—a very generous assumption

that favors advocates of the Green New Deal—building out enough new transmission lines to transport new wind and solar power to customers would likely add at least another \$700 billion to total U.S. electricity costs.

By comparison, coal and nuclear plants are often located much closer to the areas most in need of the power they produce, in part because they require

land areas that are considerably smaller than those needed for wind and solar facilities.

Further, AAF underestimates Green New Deal electricity generation costs in another very important way: It assumes 50 percent of new zero-CO2 power generation in states without nuclear power moratoriums would be produced by relatively low-cost baseload nuclear power. However, Ocasio-Cortez's frequently asked questions (FAQ) guide for the Green New Deal states her plan would not include

“AN ECONOMIC ANALYSIS
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ACTION FORUM (AAF)
ESTIMATED IT WOULD COST AT
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\$42,000 PER HOUSEHOLD, TO
REPLACE CURRENT ELECTRICITY
GENERATION WITH NET-ZERO
RENEWABLE ENERGY SOURCES
UNDER THE PROVISIONS IN THE
GREEN NEW DEAL.”

⁴⁰ Douglas Holtz-Eakin *et al.*, “The Green New Deal: Scope, Scale, and Implications,” American Action Forum, February 25, 2019, <https://www.americanactionforum.org/research/the-green-new-deal-scope-scale-and-implications/>

⁴¹ Robert Bradley, “Texas’s CREZ Transmission Line: Wind Power’s \$7 Billion Subsidy (ratebase socialism as ‘infrastructure improvement’),” *Master Resource*, February 16, 2018, <https://www.masterresource.org/cre/texas-crez-transmission-line-wind-powers-7-billion-subsidy/>

the construction of new nuclear power plants. Moreover, the Green New Deal FAQ mandates the eventual decommissioning of all 60 existing nuclear power plants and 98 existing nuclear reactors.⁴²

Even if we assume replacing nuclear power plants can be achieved at a cost of \$10 billion per reactor, a very modest estimate, it would cost approximately \$1 trillion, about \$7,800 per household, to replace all 98 of America's existing reactors.⁴³

Adding AAF's \$5.4 trillion estimate for replacing existing electricity sources with wind and solar power to the \$700 billion estimate for new transmission infrastructure and the \$1 trillion estimate to replace nuclear facilities brings the total cost of the energy component of the Green New Deal to at least \$7.1 trillion, or about \$55,000 per household.

Transportation and Vehicle Replacement Costs

The Green New Deal FAQ calls for the elimination of airplane transportation.⁴⁴ Instead of flying, Americans would be forced to make long-distance travel by rail. The tremendous inconvenience and lost productivity caused by forcing

Americans to take much slower transportation for long-distance travel would be staggering. Families would find visiting distant relatives or going on vacation immensely time-consuming luxuries. A nonstop five-hour flight from the East Coast to the West Coast could become a three-day ordeal (each way), and it would likely cost significantly more as well.

Ocasio-Cortez says some air travel would be replaced with high-speed rail, but the cost of building a nationwide high-speed rail system would be staggering. The AAF assessment estimates the cost of nationwide high-speed rail is \$1.1 trillion to \$2.5 trillion. However, this estimate likely falls woefully short of the true costs.

The AAF study used the State of California's 2018 reported cost-per-mile of its high-speed rail system to estimate the cost of a nationwide high-speed rail network. While only servicing limited portions of the state, California's last official budget estimate for its high-speed rail system was \$77 billion. The state later scaled back the project because of cost overruns. (California's original 2008 budget estimate for the project was only \$33 billion.⁴⁵) The \$77 billion estimate was meant to cover costs for 800 miles of high-speed rail, which works out to about \$100 million per mile.⁴⁶

⁴² Office of U.S. Rep. Alexandria Ocasio-Cortez, *supra* note 2.

⁴³ "Nuclear Power Cost," Union of Concerned Scientists, accessed May 7, 2019, <https://www.ucsusa.org/nuclear-power/cost-nuclear-power>

⁴⁴ Office of U.S. Rep. Alexandria Ocasio-Cortez, *supra* note 2.

⁴⁵ "Train to nowhere? Here's how high-speed rail project went off the rails," *San Francisco Chronicle*, February 17, 2019, <https://www.sfchronicle.com/politics/article/Train-to-nowhere-Here-s-how-high-speed-project-13621347.php>

⁴⁶ "Connecting and Transforming California: Draft 2016 Business Plan," California High-Speed Rail Authority, February 18, 2016, p. 3, http://www.hsr.ca.gov/docs/about/business_plans/DRAFT_2016_Business_Plan_0201816.pdf

Had the high-speed rail project continued in California, it's likely the costs would have continued ballooning. Moreover, extending the California rail system to service all cities with airports in the state would dramatically increase costs. Thus, the AAF study, by using the \$77 billion figure and not accounting for likely future budget increases, is too conservative.

The Green New Deal also favors high-speed rail over automobiles. The country's Interstate Highway System consists of 46,876 miles of road.⁴⁷ If we assume the Green New Deal's high-speed rail system would have to be as extensive as the current Interstate Highway System to replace all air travel and some automobile travel, the cost of the nearly 49,000 miles of rail required to fulfill the Green New Deal's proposal would be around \$4.5 trillion—if we use the California cost-per-mile figure of around \$100 million. That's nearly double the high end of AAF's high-speed rail cost estimate.

Another flaw in the AAF assessment is that it did not assign any costs related to taking all 272 million gasoline-powered vehicles off the road and replacing them with electric vehicles and electric vehicle charging facilities.⁴⁸ Using a conservative estimate of \$20,000 per vehicle, it would cost about \$540 billion to replace all gasoline-powered cars, trucks, buses, and other vehicles with electric vehicles.

The required infrastructure needed for nationwide electric vehicle charging stations would further drive up costs. Goldman Sachs estimates the global cost of such infrastructure at \$6 trillion.⁴⁹ Since 13 percent of all motor vehicles are in the United States, a reasonable estimate for the cost of adding electric vehicle infrastructure is 13 percent of \$6 trillion, about \$780 billion.⁵⁰

Adding the \$4.5 trillion estimate for replacing air travel with high-speed rail, \$540 billion estimate needed to replace all gasoline-powered automobiles with electric vehicles, and the \$780 billion needed for charging stations brings the Green New Deal transportation cost total to \$5.8 trillion, or about \$45,000 per household.

Agriculture, Social Programs, and 'Green' Housing

The programs mentioned thus far represent only a small component of the Green New Deal. AAF estimates the Green New Deal's provisions for guaranteed government jobs, single-payer health care, guaranteed "green" housing, free college tuition, and various other programs would amount to as much as \$86 trillion in additional costs over the plan's first 10 years.⁵¹

⁴⁷ "Interstate Frequently Asked Questions," U.S. Federal Highway Administration, accessed May 27, 2019, <https://www.fhwa.dot.gov/interstate/faq.cfm#question3>

⁴⁸ "Number of motor vehicles registered in the United States from 1990 to 2017," *Statista*, <https://www.statista.com/statistics/183505/number-of-vehicles-in-the-united-states-since-1990/>

⁴⁹ "The \$6 Trillion Barrier Holding Electric Cars Back," *Bloomberg News*, November 4, 2018, <https://www.bloomberg.com/opinion/articles/2018-11-04/electric-cars-face-a-6-trillion-barrier-to-widespread-adoption>

⁵⁰ "PC World Vehicles in Use," International Organization of Motor Vehicle Manufacturers, accessed May 5, 2019, http://www.oica.net/wp-content/uploads//PC_Vehicles-in-use.pdf

⁵¹ Douglas Holtz-Eakin, *supra* note 41.

Although these cost estimates are immense, it's likely AAF has underestimated these Green New Deal expenses in several ways. For example, the AAF assessment assigned no costs related to the low-carbon requirements that would be imposed on U.S. agriculture.

The Green New Deal would require “farmers and ranchers to create a sustainable, pollution and greenhouse gas free, food system.”⁵² This would mandate, at the very least, the elimination of internal combustion combines and tractors, costing farmers or the government untold millions to replace these machinery.

The AAF cost calculations also failed to account for increased food prices that would occur as a result of higher energy costs and “sustainable farming” mandates.

Further, the AAF assessment failed to provide a cost estimate for the plan’s call for a new

system of government-owned banks, which would be used to help finance the Green New Deal. And no attention was paid to potential reductions in worker productivity that would likely result from increased rates of government employment.

With these considerations in mind, it’s clear AAF’s top estimate of \$86 trillion for the non-energy-related, “green” housing, and agricultural components of the Green New Deal is potentially very conservative.

Total Green New Deal Costs

After adding together the Green New Deal’s electric power generation provisions and transportation vehicle restrictions, a conservative estimate of the energy-related components of the Green New Deal is \$13 trillion, or \$110,000 per U.S. household. Adding the

Figure 4: Total Costs for the Green New Deal

AAF estimate for zero-carbon energy	\$5.4 trillion
New transmission lines for wind and solar	\$700 billion
Replacing nuclear power with wind and solar	\$1 trillion
High-speed rail	\$4.50 trillion
Replace gasoline-powered vehicles	\$540 billion
Electric vehicle charging infrastructure	\$780 billion
Energy Programs Total	\$12.92 trillion
Agriculture, social programs, and “green” housing	\$86 trillion
Total Green New Deal Cost	\$98.92 trillion

⁵² Office of U.S. Rep. Alexandria Ocasio-Cortez, *supra* note 2.

\$86 trillion estimate for non-energy-related social programs to the energy-related costs would bring the total to as high as \$99 trillion, or approximately \$838,000 per U.S. household. (See Figure 4.)

Calculating the costs over a decade, the Green New Deal would require at least \$10 trillion in new spending per year. By comparison, the cost of the fiscal year 2018 federal budget was \$4.1 trillion. The Green New Deal would therefore require at least a doubling, and likely a tripling, of current levels of government spending and taxation.

5. The Green New Deal Would Impose a Dangerous Socialist System

The Green New Deal is not just an immensely costly energy proposal that would have no positive impact on the environment. It would also dismantle what's left of the American free-market economy and hinder individual liberty.

Ocasio-Cortez's website makes clear that her plan "is a massive transformation of our society with clear goals and a timeline." It is "a 10-year plan to mobilize every aspect of American society at a scale not seen since World War 2."⁵³ This statement is quite revealing,

since the mobilization that occurred during World War II involved significant rationing and shortages of products and services, from food to gasoline.

In our current, relatively free-market economy, billions of economic decisions concerning

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the production of raw materials, steel, plastic, petroleum, machinery, autos, and thousands of other products are made by millions of consumers, entrepreneurs, and businesses every single day. Under the Green New Deal, the government would need to make many of these choices, especially in the agricultural, educa-

tion, energy, health care, housing, and transportation sectors. This would require a massive, authoritarian system situated in Washington, DC, where a seemingly endless army of bureaucrats would need to operate, likely without being held accountable to the American people.

Starting in the 1930s, the Soviet Union embarked on a similar effort to transform its mostly agrarian economy into an industrial system. Even if we assume the Soviet central planners meant well and simply wanted to bring prosperity to the proletarian masses—a questionable assumption in any case—this huge economic and societal transformation required a massive dictatorial state in which the desires and needs of individuals were placed

⁵³ *Ibid.*

behind the perceived good of the “collective.” The resulting repression and misery led to the death of millions of innocent people, incalculable property losses, and a severe reduction in freedom.

To transition the U.S. economy in 10, 20, or even 30 years to the unworkable Green New Deal model would necessitate an abandonment of what is left of Americans’ constitutional protections guarding against abuses of power and the centralization of authority. It would also make it virtually impossible for businesses to operate efficiently.

Consider, for example, the Green New Deal’s promise of high-paying jobs for all. Most of these jobs would certainly be government jobs that would pay higher wages than what would be available in the private sector for entry-level, non-skilled, or moderately skilled work. With the government pulling away labor by paying above-market rates, it would be difficult—and in some cases, impossible—for private companies to find employees and to compete with government agencies. Untold numbers of small, medium, and large businesses would shut down as a result.

With the economy in free fall and fewer prosperous businesses and individuals to tax at double or triple the current rates to pay for the GND’s gargantuan socialist programs, the government would have to resort to printing money, which would inevitably cause, at best,

inflation similar to what occurred in America in the 1970s. It’s even possible, given the extreme nature of the Green New Deal, it could cause hyperinflation.

One thing is beyond any doubt: With the Green New Deal in place, there would be few remaining free-market elements in the U.S. economy.

“DESPITE ITS EARLY POLITICAL FAILURES, THE GREEN NEW DEAL REMAINS A POLICY CENTERPIECE FOR RADICAL ‘DEMOCRATIC SOCIALISTS,’ WHO ARE INCREASINGLY TAKING OVER THE DEMOCRATIC PARTY.”

Conclusion

Despite its early political failures, the Green New Deal remains a policy centerpiece for

radical “democratic socialists,” who are increasingly taking over the Democratic Party. The GND would require massive and unprecedented increases in government spending, taxation, and power, bankrupting the United States and putting the national government in charge of much of the economy.

The Green New Deal’s mandates to force all Americans to rely on wind turbines and solar facilities would greatly harm the environment while providing absolutely no possibility of significantly limiting climate change.

Ocasio-Cortez and Markey’s Green New Deal lost test votes in the Republican-controlled Senate and Democratic-controlled House, but Democrats in the House and Senate continue to express support for the Green New Deal, especially those Democrats running for president. Unfortunately, the Green New Deal is not yet dead.

Republican-crafted, watered-down versions of the Green New Deal—sometimes described as a “Green Real Deal” or a “Manhattan Project” for renewable energy—aim to avoid some of the worst impacts of the Green New Deal.^{54,55} However, these proposals would still create much more harm than good. Like the Green New Deal, they would devastate the U.S. economy by replacing affordable conventional power with expensive renewable energy sources, require massive new taxing and spending programs, and deliver minimal emissions benefits while creating unique envi-

ronmental harms, including increased bird and bat deaths, enormous land development, and destructive mining conducted in the pursuit of rare earth minerals.

The best path forward for America remains one that fully utilizes the United States’ vast, affordable coal, oil, and natural gas resources, not embracing socialist government takeovers that would drive up America’s already massive public debt and steal power away from individuals and states.

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⁵⁴ “One Republican’s Response to Climate Change: A New Manhattan Project for Clean Energy: 10 Grand Challenges for the Next Five Years,” Press Release, Office of U.S. Sen. Lamar Alexander, March 25, 2019, <https://www.alexander.senate.gov/public/index.cfm/2019/3/one-republican-s-response-to-climate-change-a-new-manhattan-project-for-clean-energy-10-grand-challenges-for-the-next-five-years>

⁵⁵ “Congressman Matt Gaetz Unveils the ‘Green Real Deal,’” Press Release, Office of U.S. Rep. Matt Gaetz, April 3, 2019, <https://gaetz.house.gov/media/press-releases/congressman-matt-gaetz-unveils-green-real-deal>

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