# Clean Energy Fact Check

## Rhetoric: Clean Energy Isn’t Cheap

*The real reason why activists demand “clean energy policy” is simple: the “clean energy” sources they favor--especially solar and wind--are at present too expensive and unreliable to replace carbon-based fuels on a large scale. The only way activists can hope to have them adopted is to shove them down our throats.*

### Reality: Renewable Energy Is Becoming More Competitive

**Renewable Energy Should Be Competitive With Fossil Fuels By 2020.** According to Forbes, “The cost of renewable energy is now falling so fast that it should be a consistently cheaper source of electricity generation than traditional fossil fuels within just a few years, according to a new report from the International Renewable Energy Agency (IRENA). The organisation – which has more than 150 member countries – says the cost of generating power from onshore wind has fallen by around 23% since 2010 while the cost of solar photovoltaic (PV) electricity has fallen by 73% in that time. With further price falls expected for these and other green energy options, IRENA says all renewable energy technologies should be competitive on price with fossil fuels by 2020.” [Forbes, [1/13/18](https://www.forbes.com/sites/dominicdudley/2018/01/13/renewable-energy-cost-effective-fossil-fuels-2020/#35c272d74ff2)]

**Forbes: “If Renewable Energy Is Indeed Able To Undercut The Cost Of Legacy Fuels, Then Governments And Large Corporations Building New Power Plants Will Almost Certainly Turn To Green Energy.”** According to Forbes, “If renewable energy is indeed able to undercut the cost of legacy fuels, then governments and large corporations building new power plants will almost certainly turn to green energy for any new capacity, which will reduce demand for oil, natural gas and coal.” [Forbes, [1/13/18](https://www.forbes.com/sites/dominicdudley/2018/01/13/renewable-energy-cost-effective-fossil-fuels-2020/#35c272d74ff2)]

Reality: Renewable Energy Is Cheaper Than Coal

**Report: Existing Coal Is Increasingly More Expensive Than Cleaner Alternatives**. According to Energy Innovation, “America has officially entered the ‘coal cost crossover’ –where existing coal is increasingly more expensive than cleaner alternatives. Today, local wind and solar could replace approximately 74 percent of the U.S. coal fleet at an immediate savings to customers. By 2025, this number grows to 86 percent of the coal fleet.” [Energy Innovation, March [2019](https://energyinnovation.org/wp-content/uploads/2019/03/Coal-Cost-Crossover_Energy-Innovation_VCE_FINAL.pdf)]

**New Wind And Solar Power Is Cheaper Than Existing Coal In Much Of The U.S**. According to Inside Climate News, “Not a single coal-fired power plant along the Ohio River will be able to compete on price with new wind and solar power by 2025, according to a new report by energy analysts. The same is true for every coal plant in a swath of the South that includes the Carolinas, Georgia, Alabama and Mississippi. They’re part of the 86 percent of coal plants nationwide that are projected to be on the losing end of this cost comparison, the analysis found.” [Inside Climate News, [3/25/19](https://insideclimatenews.org/news/25032019/coal-energy-costs-analysis-wind-solar-power-cheaper-ohio-valley-southeast-colorado)]

**“Building New Wind And Solar Power Capacity Locally, Defined As Within 35 Miles For The Report, Is Often Less Expensive Than People In Those Markets Realize.”** According to Inside Climate News, “The key point is a simpler one: Building new wind and solar power capacity locally, defined as within 35 miles for the report, is often less expensive than people in those markets realize, and this is indicative of a price trend that is making coal less competitive. This shift shows how market forces are helping the country move away from fossil fuels. At the same time, coal interests have been trying to obscure or cast doubt on this trend, while seeking more government subsidies to slow their industry’s decline.”

[Inside Climate News, [3/25/19](https://insideclimatenews.org/news/25032019/coal-energy-costs-analysis-wind-solar-power-cheaper-ohio-valley-southeast-colorado)]

**Report: Shutting Down Almost Every Coal Plant And Swapping For Renewables Would Save Money**. According to Gizmodo, “Coal is dying in the U.S. Perhaps you’ve heard the reports. But even those reports don’t seem to capture how much of a dead man walking the dirtiest fossil fuel is. An analysis released Monday from Energy Innovation, a energy policy shop focused on developing policies for a clean energy transition, finds that right now, its cheaper to tear down three-quarters of American coal plants and replace them with renewables than to let them continue operating. That number will only continue to rise into the future as renewables continue on their way to becoming among the cheapest sources of energy.” [Gizmodo, [3/25/19](https://earther.gizmodo.com/shutting-down-almost-every-coal-plant-and-swapping-for-1833540557)]

Reality: Renewable Energy Provides Americans With Millions of Jobs

**Renewable Energy Employed 677,544 In The United States**. According to the Environmental and Energy Study Institute, “According to USEER, the U.S. renewable energy industry provided 677,544 jobs in Q1 2016. The International Renewable Energy Agency (IRENA), meanwhile, recorded that renewable energy employment in the United States reached 769,000 direct and indirect jobs in 2015 (not including large-scale hydropower employment), a 6 percent increase from the previous year. The discrepancy is partly explained by IRENA’s inclusion of both direct and indirect jobs, while DOE included only direct jobs in its calculations. For instance, IRENA's value of 152,000 jobs for U.S. electricity generation from biomass only includes 15,500 direct jobs. IRENA also has significantly higher job estimates for the U.S. liquid biofuels and geothermal industries.” [EESI, [2/15/17](http://www.eesi.org/papers/view/fact-sheet-jobs-in-renewable-energy-and-energy-efficiency-2017)]

## Rhetoric: Solar And Wind are given unfair subsidies

*But aren’t subsidies needed to correct some unfair advantage possessed by coal, oil, and natural gas? No. Solar and wind are the ones given an unfair advantage; per unit of energy produced, they already receive 90X more subsidies than oil and gas. And they have been subsidized for decades*. [Fox News, [5/7/15](https://www.foxnews.com/opinion/four-dirty-secrets-about-clean-energy)]

### Reality: United States Spends Billions On Oil And Gas

**United States Spent $27 Billion On Fossil Fuel Subsidies Since 2009**. According to Clean Technica, “New research has shown that the United States continues to subsidize the production and consumption of fossil fuels to the tune of $27 billion, despite repeated pledges since 2009 to phase out fossil fuel subsidies.” [Clean Technica, [6/6/18](https://cleantechnica.com/2018/06/06/us-still-subsidizing-fossil-fuels-to-tune-of-27-billion/)]

**Fossil Fuel’s Receive More Than $5 Trillion In Subsidies World-Wide.** According to Vox, “The International Monetary Fund periodically assesses global subsidies for fossil fuels as part of its work on climate, and it found in a recent working paper that the fossil fuel industry got a whopping $5.2 trillion in subsidies in 2017. This amounts to 6.4 percent of the global gross domestic product.” [Vox, [5/17/19](https://www.vox.com/2019/5/17/18624740/fossil-fuel-subsidies-climate-imf)]

## rhetoric: liberals want to force us to use solar, wind, and biofuels, even though there is no evidence these can power modern civilization.

**17% Of US Energy Already Comes From Renewable Sources**. According to the United States Energy Information Administration, renewable energy accounted for 17.1% of US electricity generation in 2018. Hydropower had the largest share with 7%, wind was 6.6% and solar was 1.6%. [EIA, accessed [5/30/19](https://www.eia.gov/tools/faqs/faq.php?id=427&t=3)]

## Grid Reliability

*This means that the wind turbines are hardly doing anything constructive; the natural gas “backup” is doing all the work. Some studies say that the wind turbines only add to CO2 emissions, since natural gas plants are far less efficient and use more fuel when they must cycle to compensate for erratic wind power.* [Fox News, [5/7/15](https://www.foxnews.com/opinion/four-dirty-secrets-about-clean-energy)]

### Reality: Renewable Energy Doesn’t Destabilize the Grid

**EE News: “Series Of Recent Studies Have Found That The U.S. Grid Could Operate Reliably With Large Amounts Of Renewable Generation.”** According to EE News, “A series of recent studies have found that the U.S. grid could operate reliably with large amounts of renewable generation. A National Renewable Energy Laboratory study from last year concluded that the Eastern Interconnection could operate with 30 percent penetrations of wind and renewable generation. A 2016 National Oceanic and Atmospheric Administration study found that the U.S. power sector could cut carbon emissions by 80 percent without increasing costs.” [EE News, [6/2/17](https://www.eenews.net/stories/1060055454)]

**Existing Safeguards Could Prevent Power Supply Disruptions**. According to EE News, “Additionally, when federal electricity regulators examined the potential impacts of the Obama administration’s power-sector climate standards, they found that existing safeguards could prevent power supply disruptions.” [EE News, [6/2/17](https://www.eenews.net/stories/1060055454)]

**Research Director Of The Harvard Electricity Policy Group: “The Blackouts And Brownouts Is Not Consistent With How We Operate The System.”** According to EE News, “Trump cast doubt on renewable energy’s ability to power the country in a high-economic-growth scenario. The president is technically correct that the United States will need all forms of energy, said William Hogan, research director of the Harvard Electricity Policy Group. But that’s because even the most optimistic scenarios don’t envision a grid powered entirely by renewables until far into the future. The question with renewables is less one of reliability and more one of cost, he said. ‘The blackouts and brownouts is not consistent with how we operate the system,’ he added.” [EE News, [6/2/17](https://www.eenews.net/stories/1060055454)]

**Vox: “Grid Operators Have Long Been Focused On Reliability And Have Strong Legal Obligations To Keep Power Reliable.”** According to Vox, “Here the president seems to fear that the country will be forced to move quickly to all wind and solar power and that will make electricity unreliable. There are no credible mainstream assessments that predict that outcome, and the government’s own Energy Information Agency envisions many possible futures for power generation — all with a balance of sources, not just renewables. Grid operators have long been focused on reliability and have strong legal obligations to keep power reliable.” [Vox, [6/2/17](https://www.vox.com/a/annotation-trump-paris-climate-agreement-speech-victor)]

## Rhetoric: Battery Storage Is Obstacle To Renewable Energy Development

### Reality: US Renewable Energy Market Is Growing

**Lithium Ion Battery Storage Could Compete Within The Next Five Years**. According to MIT Technology Review, “Today’s battery storage technology works best in a limited role, as a substitute for ‘peaking’ power plants, according to a 2016 analysis by researchers at MIT and Argonne National Lab. These are smaller facilities, frequently fueled by natural gas today, that can afford to operate infrequently, firing up quickly when prices and demand are high. Lithium-ion batteries could compete economically with these natural-gas peakers within the next five years, says Marco Ferrara, a cofounder of Form Energy, an MIT spinout developing grid storage batteries.” [MIT Technology Review, [7/27/18](https://www.technologyreview.com/s/611683/the-25-trillion-reason-we-cant-rely-on-batteries-to-clean-up-the-grid/)]

**US Storage Capacity Is Equal To 38 Coal Plants**. According to UCSUSA, “The U.S. has about 23 gigawatts (GW) of storage capacity, approximately equal to the capacity of 38 typical coal plants.” [Union of Concerned Scientists, accessed [5/31/19](https://www.ucsusa.org/clean-energy/how-energy-storage-works)]

**Studies Show The Current Electric Grid Could Accommodate Sizeable Increase In Renewable Storage**. According to UCSUSA, “While the U.S. electric grid does not necessarily need more storage now, storage capacity will become more important as wind, solar, and other variable renewable energy resources expand in the power mix. Studies have shown that the existing grid can accommodate a sizeable increase in variable generation [3], but there are many exciting technologies in development that could help us store energy in the future and support an even greater amount of renewable energy on the grid.” [Union of Concerned Scientists, accessed [5/31/19](https://www.ucsusa.org/clean-energy/how-energy-storage-works)]

**Electric Vehicle Industry Has Spurred Advancements In Battery Storage Technology**. “Advancements in battery technologies have been made largely due to the expanding electric vehicle (EV) industry. As more developments are made with EVs, battery cost should continue to decline [18]. Electric vehicles could also have an impact on energy storage through vehicle-to-grid technologies, in which their batteries can be connected to the grid and discharge power for others to use.” [Union of Concerned Scientists, accessed [5/31/19](https://www.ucsusa.org/clean-energy/how-energy-storage-works)]

**Renewable Energy Standard Would Boost Deployment Of Storage Technologies**. “The deployment of storage technologies can also be advanced through renewable electricity standards (RES). Some states recognize storage technologies as acceptable renewable generation in their RES, and other states award Renewable Energy Credits (REC) to energy generation from storage devices that were charged by renewables.” [Union of Concerned Scientists, accessed [5/31/19](https://www.ucsusa.org/clean-energy/how-energy-storage-works)]

### US Grid Storage Doubled In 2018; Expected To Double In 2019

**US Grid Energy Storage Doubled In 2018**. According to PV Magazine, “According to IHS Markit, the U.S. grid-tied energy storage market is poised to nearly double this year, to 712 MW from 376 MW last year (note: This forecast does not include behind-the-meter storage). The market research company says that will see the United States overtake South Korea, the world’s largest grid-tied energy storage market in 2017 and 2018.” [PV Magazine, [5/22/19](https://www.pv-magazine.com/2019/05/22/us-energy-storage-market-set-to-almost-double-this-year/)]

**IHS Expects Almost 5 GW Of Energy Storage – 90% Of It Lithium-Ion Batteries – To Be Deployed In The United States Up To 2023**. According to PV Magazine, “And that is just the beginning. IHS expects almost 5 GW of energy storage – 90% of it lithium-ion batteries – to be deployed in the United States up to 2023.” [PV Magazine, [5/22/19](https://www.pv-magazine.com/2019/05/22/us-energy-storage-market-set-to-almost-double-this-year/)]

**US Energy Storage Market Expected To Double In 2019.** According to Wind Power Engineering, “The U.S. energy storage market nearly doubled in 2018 and is expected to double again in 2019. This is according to Wood Mackenzie Power & Renewables and the Energy Storage Association’s (ESA), ‘U.S. Energy Storage Monitor 2018 Year-in-Review.’” [Wind Power Engineering, [4/4/19](https://www.windpowerengineering.com/electrical/power-storage/u-s-energy-storage-market-to-double-two-years-running/)]

## Rhetoric: India and China Won’t Adhere to paris agreement

### Reality: China And India Have Committed To Cutting Emissions Under Paris Agreement

**China And India Have Committed To Cutting Emissions Under Paris Agreement**. According to the Guardian, “Both China and India have committed to emissions targets under the Paris agreement. China has committed to lower the carbon intensity of its economy by 60 to 65% below 2005 levels by 2030. India committed to reduce the emissions intensity of its economy by 33-35% below 2005 level over the same period.” [Guardian, [8/15/18](https://www.theguardian.com/commentisfree/2018/aug/15/enough-with-the-fairy-tales-about-the-paris-agreement-its-time-for-facts)]

**India And China On Track To Meet Paris Targets Before 2030**. According to the Guardian, “Backed by government policies such as renewable energy support, plans to retire old coal generators, carbon pricing and energy efficiency standards, both countries are on track to achieve these targets well in advance of 2030. For example, India is projected to meet its 2030 target to get 40% of its electricity generation from non-fossil fuel sources eight years early.” [Guardian, [8/15/18](https://www.theguardian.com/commentisfree/2018/aug/15/enough-with-the-fairy-tales-about-the-paris-agreement-its-time-for-facts)]

**Chinese Government Investing Heavily In Renewables Due To The Reduced Demand For Coal**. According to the New York Times, “The country appears to be on track to hit that target. Analysts now expect China’s once-insatiable demand for coal to level off by the mid-2020s, and the government is investing heavily in cleaner sources like solar, wind and nuclear. China also now sells more electric cars and buses than the rest of the world combined.” [New York Times, [12/7/18](https://www.nytimes.com/interactive/2018/12/07/climate/world-emissions-paris-goals-not-on-track.html)]

**China Creating Demand For Electric Vehicles Used By Buses And Taxis**. According to the Washington Post, “In the past decade, China has spent huge sums propping up electric-vehicle manufacturers, setting production quotas for plug-ins and doling out incentives for electric-car buyers. But it also has used the state’s clout to generate demand for its domestic electric-vehicle manufacturers in less obvious but important niches that the government could influence easily. Think buses and taxis.” [Washington Post, [6/2/19](https://www.washingtonpost.com/world/asia_pacific/with-state-subsidies-and-a-firm-hand-china-races-ahead-with-electric-transport/2019/06/01/2bec456e-7af1-11e9-a66c-d36e482aa873_story.html?utm_term=.266677c5ae6a)]

## Rhetoric: India and China Won’t Use Renewables

*For every ton of reduced pollution the United States emits, China and India produce almost 10 more tons. This means it doesn’t really matter how much America reduces its greenhouse gases because China and India cancel out any and all progress we make.* [Daily Signal, [8/24/18](https://www.dailysignal.com/2018/08/24/new-report-shows-us-not-countries-promoting-climate-change-activism-reducing-emissions-the-most/)]

### Reality: China And India Among The Largest Markets For Renewable Energy

**China And India Among The Largest Markets For Renewable Energy**. According to the Financial Times, “While developed economies have been leaders in the development of renewable power, much of the recent momentum has come from developing nations — and from China and India in particular, which are now the biggest and the third-biggest renewable electricity markets, respectively.” [Financial Times, [9/24/18](https://www.ft.com/content/a42e23be-8900-11e8-affd-da9960227309)]

**Surge In Renewable Energy Production In China And India “Fuelled By A Dramatic Reduction In The Costs Of Wind And Solar Technology**.” According to the Financial Times, “Fuelled by a dramatic reduction in the costs of wind and solar technology, both China and India have raced ahead with installing renewable power as they look to build on their impressive economic growth. The pace of this new installation of renewable power sources has cheered defenders of the Paris climate agreement even after President Donald Trump withdrew the US from the accord. “The magnitude of the technology cost deflation is way ahead of anything forecast by anyone in the world,” says Tim Buckley, director at the Institute for Energy Economics and Financial Analysis.” [Financial Times, [9/24/18](https://www.ft.com/content/a42e23be-8900-11e8-affd-da9960227309)]

**Drop In Renewable Production From China Was Result Of Government Cutting Incentives**. According to the Financial Times, “Underpinning the growth in solar in particular has been a collapse in the cost of solar panels, both as a result of improving technology and oversupply in China. By 2017, the price of solar modules had fallen more than 80 per cent since 2009, according to the International Renewable Energy Association, while that of wind turbines had fallen by about half over the same period. There are signs, however, that the momentum could be about to slow down. The biggest risk comes from policy in Beijing, which changed in June to cut incentives for solar power. Wood Mackenzie, the energy market research company, said it expected China to add 20GW less than previously predicted as a result.” [Financial Times, [9/24/18](https://www.ft.com/content/a42e23be-8900-11e8-affd-da9960227309)]

**Renewable Energy Growth In China Would Undermine Influence Of Russian And Middle East Oil**. According to Forbes, “The continuing growth in renewable energy around the world is set to boost the power of China while undermining the influence of major oil exporters such as Russia and Middle East states like Saudi Arabia, according to a new report on the geopolitical implications of the changing energy landscape. With a leading position in renewable energy output as well as in related technologies such as electric vehicles, Beijing now finds itself in an influential position which other countries may struggle to counter.” [Forbes, [1/11/19](https://www.forbes.com/sites/dominicdudley/2019/01/11/china-renewable-energy-superpower/#7e65368c745a)]

Rhetoric: We Don't Need Solar And Wind To Save The Climate

*Sunlight and wind are inherently unreliable and energy-dilute. As such, adding solar panels and wind turbines to the grid in large quantities increases the cost of generating electricity, locks in fossil fuels, and increases the environmental footprint of energy production*. [Forbes, [5/8/18](https://www.forbes.com/sites/michaelshellenberger/2018/05/08/we-dont-need-solar-and-wind-to-save-the-climate-and-its-a-good-thing-too/#c9a9997e4de1)]

*Solar and wind aren’t just insufficient, they are also unnecessary for solving climate change*. [Forbes, [5/8/18](https://www.forbes.com/sites/michaelshellenberger/2018/05/08/we-dont-need-solar-and-wind-to-save-the-climate-and-its-a-good-thing-too/#c9a9997e4de1)]

Reality: Renewables Reduce Carbon Emissions

**Wind Power Is Low Carbon Energy**. According to AWEA, “Wind power is a low-carbon energy source—when a wind turbine generates electricity is produces zero carbon emissions. The development of clean wind energy avoids significant carbon dioxide (CO2) pollution.” [AWEA, accessed [6/5/19](https://www.awea.org/wind-101/benefits-of-wind/environmental-benefits)]

**UN: Renewable Energy Sources Cut Carbon Emissions, Efficiently Increase Electricity Output Worldwide**. According to the United Nations, “Renewable energy sources are the least expensive options in boosting electricity access, reducing air pollution and cutting carbon dioxide emissions worldwide, speakers stressed as the Second Committee (Economic and Financial) concluded sustainable development today. Togo’s delegate noted that more than 1 billion people around the world live without electricity, exposing them to unsafe cooking methods and indoor pollution. Stressing that one of the best options in bridging the electricity gap is renewable energies, she said her country aims to become 100 per cent reliant on them by 2030 through public‑private partnerships and individual solar kits.” [United Nations, [10/16/18](https://www.un.org/press/en/2018/gaef3501.doc.htm)]

Reality: Wind Power Has Some Of The Lowest Environmental Impacts Of Any Source Of Electricity Generation

**Wind Power Has Some Of The Lowest Environmental Impacts Of Any Source Of Electricity Generation**. According to AWEA, “Wind power has some of the lowest environmental impacts of any source of electricity generation. Unlike conventional sources, wind power significantly reduces carbon emissions, saves billions of gallons of water a year, and cuts pollution that creates smog and triggers asthma attacks. Wind farms also leave the overwhelming majority of land they’re built on undisturbed.” [AWEA, accessed [6/5/19](https://www.awea.org/wind-101/benefits-of-wind/environmental-benefits)]

Reality: Renewables Like Wind And Solar Produce Little To No Global Warming Emissions

**Renewables Like Wind And Solar Produce Little To No Global Warming Emissions**. According to the Union of Concerned Scientists, “Human activity is overloading our atmosphere with carbon dioxide and other global warming emissions. These gases act like a blanket, trapping heat. The result is a web of significant and harmful impacts, from stronger, more frequent storms, to drought, sea level rise, and extinction. In the United States, about 29 percent of global warming emissions come from our electricity sector. Most of those emissions come from fossil fuels like coal and natural gas. In contrast, most renewable energy sources produce little to no global warming emissions. Even when including ‘life cycle’ emissions of clean energy (ie, the emissions from each stage of a technology’s life—manufacturing, installation, operation, decommissioning), the global warming emissions associated with renewable energy are minimal.” [Union of Concerned Scientists, accessed [6/5/19](https://www.ucsusa.org/clean-energy/renewable-energy/public-benefits-of-renewable-power#bf-toc-0)]

**Burning Natural Gas For Electricity Releases As Much As 2 Pounds Of Carbon Dioxide; Coal 3.6 Pounds; Wind Releases .004 Pounds; Solar, 0.2**. According to the Union of Concerned Scientists, “The comparison becomes clear when you look at the numbers. Burning natural gas for electricity releases between 0.6 and 2 pounds of carbon dioxide equivalent per kilowatt-hour (CO2E/kWh); coal emits between 1.4 and 3.6 pounds of CO2E/kWh. Wind, on the other hand, is responsible for only 0.02 to 0.04 pounds of CO2E/kWh on a life-cycle basis; solar 0.07 to 0.2; geothermal 0.1 to 0.2; and hydroelectric between 0.1 and 0.5.” [Union of Concerned Scientists, accessed [6/5/19](https://www.ucsusa.org/clean-energy/renewable-energy/public-benefits-of-renewable-power#bf-toc-0)]

Rhetoric: Electric Cars Increase Pollution

*Electric cars won’t save the planet without a clean energy overhaul – they could increase pollution*. [Conversation, [6/3/19](https://theconversation.com/electric-cars-wont-save-the-planet-without-a-clean-energy-overhaul-they-could-increase-pollution-118012)]

Reality: EVs Lifecycles Have Lower Emissions That Gasoline Or Diesel Vehicles

**DOE: EVs Typically Produce Fewer Life Cycle Emissions Than Conventional Vehicles**. According to the Department of Energy, “Life cycle emissions include all emissions related to fuel and vehicle production, processing, distribution, use, and recycling/disposal. For example, for a conventional gasoline vehicle, emissions are produced when petroleum is extracted from the ground, refined to gasoline, distributed to stations, and burned in vehicles. Like direct emissions, life cycle emissions include a variety of harmful pollutants and GHGs. All vehicles produce substantial life cycle emissions, and calculating them is complex. However, EVs typically produce fewer life cycle emissions than conventional vehicles because most emissions are lower for electricity generation than burning gasoline or diesel.” [Department of Energy, Reducing Pollution with Electric Vehicles, accessed [6/5/19](https://www.energy.gov/eere/electricvehicles/reducing-pollution-electric-vehicles)]