

BACKGROUND

In 2018, approximately 49.5% of Wisconsin’s net electric generation was fueled by coal. According to U.S. Energy Information Administration (EIA) [estimates](#), that number dropped to 42% in 2019. The state, [lacking](#) fossil fuel resources of its own, imports most of its coal from Wyoming. The [2020 U.S. Energy and Employment Report](#) found that [Wisconsin](#) has 39,389 traditional energy workers (1.3% of total state employment) and an additional 63,569 workers employed in energy efficiency. A separate report [found](#) that more than 75,000 jobs in the state are provided by clean energy industries.

The Badger State has ample biomass resources, supplied in large part, by the state’s forests and agricultural sector. The state is one of the [top 10](#) ethanol producing states in the nation. Wisconsin’s hydroelectric and on- and offshore wind resources are also notable. Nearly [two-thirds](#) of the state’s solar generation is from customer-sited systems. By the end of 2019, the number of [utility-scale solar](#) facilities in operation climbed to 22.

The [Public Service Commission of Wisconsin](#) (PSC) [regulates](#) investor- and municipally-owned electric and gas utilities in the state. It does not regulate most of the activities of cooperative utilities. The PSC has three appointed commissioners; Rebecca Cameron Valcq is Chair. Republican majorities control both chambers of the [state legislature](#); Democratic Governor Tony Evers was elected in 2018.

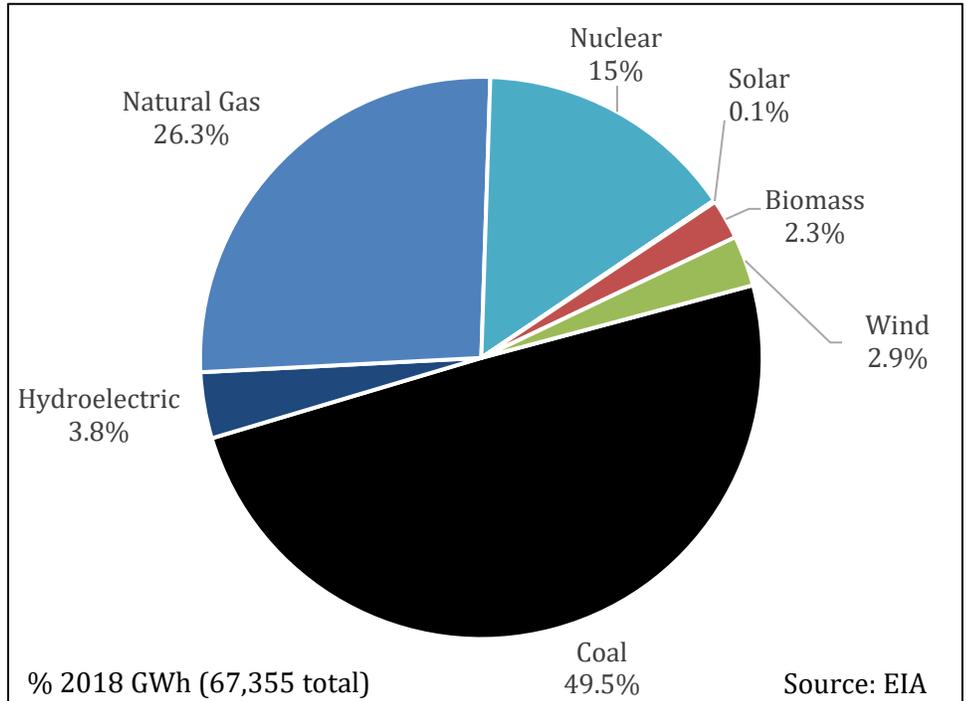
POLICY STRENGTHS AND OPPORTUNITIES

The National Renewable Energy Laboratory (NREL) developed the notion of “policy stacking,”¹ an important framework for policymakers to consider. The basic idea behind policy stacking is that there is an interdependency and sequencing of state policy that, when done effectively, can yield greater market certainty, private sector investment, and likelihood of achieving stated public policy objectives.

In theory, but not always in practice, clean energy policies can be categorized into one of three tiers of the policy stack. Tier 1, market preparation policies, remove technical, legal, regulatory, and infrastructure-related barriers to clean energy technology adoption. Tier 2, market creation policies, create a market and/or signal state support for clean energy technologies. Tier 3, market expansion policies, create incentives and other programs in order to expand an existing clean energy market by encouraging or facilitating technology uptake by additional market participants.

For example, before financial incentives for combined heat and power (CHP) will be successful, two key considerations for deployment are having clear interconnection standards and favorable stand-by rates for

Wisconsin's Net Annual Electric Generation, 2018



¹ V.A. Krasko and E. Doris, *National Renewable Energy Laboratory*, 2012. Strategic Sequencing for State Distributed PV Policies: A Quantitative Analysis of Policy Impacts and Interactions. <http://www.nrel.gov/docs/fy13osti/56428.pdf>.

customers who opt to add CHP. In this example, states should adopt policies to address interconnection and stand-by rates before adopting financial incentive programs.

GRID MODERNIZATION

New digital technologies have enabled utilities to better manage the grid and provide opportunities for consumers to customize their services to fit their priorities. These technologies allow a two-way flow of information between the electric grid and grid operators and between utilities and their customers.

Emerging technologies improve system reliability and resiliency by enabling better tracking and management of resources. These technologies allow grid operators to incorporate central and distributed energy resources, energy storage technologies, electric vehicles, and assist in addressing the challenges associated with planning, congestion, asset utilization, and energy and system efficiency.

Grid modernization will require a suite of state and federal policy changes to support advancements in grid technologies, grid management, and utility regulation.

In the most recent (2018) [Grid Modernization Index](#), ranks Wisconsin 39th overall for grid modernization efforts. The state is in a good position to act. The state's utilities have taken the lead in installing advanced metering infrastructure (AMI). In 2018 the Wisconsin PSC [partnered](#) with [Landis+Gyr](#) to provide a platform for AMI development and grid modernization. The project will include 450,000 electric meters with new mesh technology, 326,000 two-way gas modules and assistance in integrating the new technology into their data stream and daily operations.

There are policies that Wisconsin's policymakers could adopt to support in-state modernization efforts.

1. Working with the PSC, develop a grid modernization strategy through a stakeholder process. Alternatively, states might decide to require that utilities develop and propose a ten-year grid modernization plan to the utilities commission within a specified timeframe. Utilities would then be required to implement that plan within another specified timeframe. Strategies and/or plans should outline a clear set of grid modernization goals and describe methods to measure, report, verify, and enforce progress towards those goals. Utility goals might include such things as enhancing cybersecurity, integrating distributed energy resources (including electric vehicles and energy storage), and increasing demand response and/or demand-side management (DSM) programs.
2. States might also provide incentives or cost recovery mechanisms for utilities that meet grid modernization goals. Policymakers could consider directing the PSC to evaluate alternative ratemaking mechanisms, [performance-based regulation](#), and/or new utility business models that support grid modernization.
3. Wisconsin does not have clear state policies governing [customer data access](#) and privacy protections. To address this, policymakers could develop legislation or rules that, at minimum, do the following: clarify who owns the energy data associated with consumer energy usage; protect customer privacy; outline the process for allowing direct access to data by third parties; and promote access to the highest resolution of data possible. The state could establish customer access to energy data through a program like [Green Button](#).

ENERGY STORAGE

Energy storage offers a unique opportunity to manage supply and demand dynamically while also maximizing the value of grid resources. By deploying storage to strategic locations, utilities can more effectively manage their energy portfolios. First, storage allows utilities to manage intermittent demand – helping to flatten peak demand requirements. Second, the responsiveness of energy storage can allow utilities to implement voltage regulation and other ancillary services, which are useful for improving system efficiency. Third, storage can dispatch power to better integrate intermittent power generation resources like renewable energy to the grid. Finally, energy storage can help the commercial sector avoid costly [demand charges](#). As utilities around the country consider implementing or extending demand charges to other sectors, energy storage will become more relevant as a customer cost-saving investment.

The flexibility of battery storage, combined with advanced metering infrastructure, allows customers to control, for instance, how and when they use energy from the grid or from solar panels installed on their home or business. In most cases, this can provide greater cost savings than standalone solar systems. Combined with [time-varying rates or real-time pricing programs](#), state policy can further support customer choice and open a new market for energy services. Prices that better reflect the time-varying and location-dependent costs of producing and delivering electricity can lead to a number of economic and environmental gains.

Storage provides multiple benefits to both the customer and the utility. State planning and regulatory policies can help maximize these benefits by 1) establishing a framework for easy integration of energy storage into the grid and 2) establishing a marketplace that monetizes the benefits of energy storage for cost effective investment.

Wisconsin [does not](#) currently have an energy storage procurement target or goal. However, Wisconsin is positioned to grow its energy storage capacity. The University of Wisconsin-Madison [researches and develops](#) energy storage technologies. Invenergy is [developing](#) a 200 megawatt (MW) solar farm that might include a [50 MW battery storage system](#). Several more solar farms and battery storage systems are [being planned](#) by firms in Wisconsin. A handful of firms in the state manufacture storage technologies.

There are several opportunities for developing supportive state policies:

1. Amend [existing interconnection policy](#) to ensure that storage can connect to the grid through a transparent and simple process. The Interstate Renewable Energy Council ([IREC](#)) has produced a series of interconnection protocols that states can easily adopt. The state could establish best practices for interconnecting storage in statute, or legislation could provide an instruction to the PSC to adopt new rules. [Wisconsin Public Service](#) is currently partnering with [Focus on Energy](#) to connect customers with renewable energy system experts.
2. Instruct utilities to evaluate the value of energy storage in multiple strategic locations across the utility system and consider a requirement to deploy storage where it will be cost effective, or identify the price point at which it will become cost effective.
3. Require the inclusion of energy storage as a critical piece of the energy system as both a demand and supply management resource. Some states have required that utilities evaluate the cost effectiveness of [non-wires alternatives](#) (NWAs) to large transmission and generation investments. Alternatively, states might want to require utilities to develop a distribution investment plan that identifies the locations on the distribution system where energy storage or other distributed resources would offer the greatest value.
4. Consider adding a mandatory energy storage procurement target or requirement for energy storage with a documented process for periodic review of progress towards that goal. Procurement targets can jump-start market creation, spur fast learning, and guide the development of a regulatory framework.
5. Finance and incentivize energy storage for customers and utilities. Incentives could enable customers to use storage to manage their electric load and store locally produced renewable energy. Incentives in the form of rebates, grants, and tax credits can provide a bridge to scalable deployment for storage. These incentives can also be designed to decline as the value of storage becomes more readily monetized, and/or as the cost of storage decreases. Policymakers could allow utilities that provide storage incentives to customers to also recover the costs of installing smart meters. This would enable dynamic and time-varying energy management from multiple distributed battery systems. This should signal to customers the value of leveraging storage while better aligning customer costs with system costs. Financing energy storage installations for commercial customers could help reduce their demand charges. Policymakers might start first with a policy that provides grants to pilot projects, and/or that targets existing solar system owners. Financial incentives should be designed to ensure that the state meets other goals including emissions and peak demand reductions, and equitable access to clean energy.
6. Clear data access policies that allow third parties to provide energy management services based on signals from the utility can greatly increase the value of efforts to monetize the value stream offered by energy storage. (See discussion above, under Grid Modernization.)



MAINSTREAMING RENEWABLES

As the renewable energy industry matured, technology improved, and global production of generating equipment increased. Renewable energy is increasingly seen as the least cost, and lowest risk form of energy (excluding energy efficiency). A 2019 Bloomberg New Energy Finance [report](#) predicts that renewable resources will generate at least 60% of total global electricity and 43% of U.S. electricity by 2050. With increased deployment, utilities are learning more about how to integrate renewables effectively, investors are becoming more comfortable with the technologies, and building code officials are recognizing common standards and best practices. For these reasons, it is in the interest of policymakers to ensure that their states are well positioned to benefit from the transition to clean energy resources.

To reduce barriers to customer and utility participation in the renewable energy market, policymakers in Wisconsin might consider several options.

Customer-Oriented Policies

1. Interconnection, Net Metering, and Streamlined Permitting – In general, customers want a clear, streamlined, affordable, and predictable system for connecting renewable energy systems to the grid. To ensure this, Wisconsin’s policymakers could consider adopting [IREC’s model interconnection procedures](#), removing net metering system size limitations, and crediting net excess generation at the customer’s retail rate. Allowing [aggregated net metering](#) would be especially beneficial to the state’s agricultural operations. Other applications for aggregated net metering include commercial properties and public entities like state and local governments, universities, and schools. The state might also consider establishing either statewide standards for streamlined permitting processes, or resources to support local governments that voluntarily implement a streamlined program, as [Wisconsin Rapids](#) has done. State incentives, such as tax credits, financial incentives, or loans can be tied to systems that are established within a designated streamlined permitting jurisdiction.
2. Shared Renewables – Due to building and property attributes and ownership issues, many customers are unable to install renewable energy technologies where they live or work. Allowing shared, or community, renewable energy projects addresses these barriers. These projects have multiple owners or subscribers who pay for a portion of the project or the generation provided by the system. Wisconsin might consider adopting a virtual net metering policy. Virtual net metering allows a customer to receive credits from a shared system as if the generation were on site. Virtual net metering is different from a power purchase agreement (PPA), which pays the customer for the proportion of power they produce. Because it is treated as a credit on the customer’s bill, the customer can avoid the tax implications of a PPA payment - which can adversely affect the economics of the system (and may come as a surprise to the participant).

Several Utilities in Wisconsin offer community solar programs. In 2015, the PSC [approved](#) programs for Northern States Power Company – Wisconsin (NSPW), New Richmond Municipal Utility, and River Falls Municipal Utility. A year later, the Commission [approved](#) Madison Gas and Electric’s (MGE) program. MGE’s and River Falls’ programs are fully [subscribed](#), as of 2018, NSPW was at an 88% subscription rate. In June 2019, the PSC [approved](#) new shared solar programs for MGE and Alliant Energy.

Low credit ratings often deter participation in renewable energy markets; this can affect low- and moderate-income (LMI) households’ adoption of renewable energy solutions. Supportive policies for shared renewables can be designed to encourage participation by LMI households; this can increase adoption of renewable technologies and reduce energy costs. Low-income participation can be ensured either through a percentage mandate for the overall annual contracted capacity, or by offering a higher rate of payment for the portion of shared solar capacity attributed to LMI customers. States that have a shared renewable program may want to coordinate this program with implementation of the federal [Weatherization Assistance Program](#) to provide recipients of assistance with participation in a shared renewable system.

A [number](#) of financial incentives and financing options are available to Wisconsin’s citizens, businesses, and public entities. There are [additional policy options](#) that policymakers might consider to promote renewable energy uptake by LMI consumers. Generally, successful state policies should be tailored to these customers, be cost-effective and financially sustainable, have measurable performance indicators, and be flexible enough to allow later changes in design.

3. Corporate Procurement – Many Fortune 100 and 500 companies have established either climate goals or commitments to purchase renewable energy. Over the last five years, [over 20 gigawatts \(GW\) of renewable contracts](#) have been announced by corporate entities. In 2019, Ashley Furniture [announced](#) a \$29 million investment in renewable energy to offset 35% of their energy use. Organic Valley, Dr. Bronner’s, and Clif Bar are [joining](#) other companies and the city of Madison to purchase the energy credits associated with the Butter Solar Project. [Over 60](#) other companies with operations in Wisconsin have also made commitments to purchase renewable energy. [Wisconsin’s policy](#) allows companies to purchase renewable energy credits (RECs), purchase renewable energy through the wholesale market, and develop or lease onsite renewable energy projects. MGE, [NSPW](#), and We Energies provide [green power pricing programs](#), and Alliant Energy is seeking approval for a similar program. The products available in [Wisconsin](#) meet all six of the [Corporate Renewable Energy Buyers’ Principles](#). In addition, it is prudent to incorporate corporate renewable purchase commitments into utilities’ long-term plans for resource needs over multiple decades. By integrating these renewable purchase commitments into the planning process, utilities can avoid over-building resources and stranding generation assets.

Utility-Oriented Policies

Some states have created programs that aim to reduce greenhouse gas (GHG) emissions and increase utility investments in clean energy resources. Wisconsin’s [renewable portfolio standard](#) (RPS) set a target of 10% renewable energy by 2015. Utilities [met the target](#) early, in 2013. Governor Evers [joined](#) the U.S. Climate Alliance in February 2019. As part of his 2019 budget proposal, Governor Evers [proposed](#) a plan to require the state’s utilities to be carbon-free by 2050. After the proposal failed, the Governor issued an executive order in August [creating](#) the Office of Sustainability and Clean Energy. The Office is tasked with developing a plan to meet the 100% carbon-free by 2050 goal.

To support utility adoption of clean energy technologies, Wisconsin’s policymakers might consider the following:

1. Accelerating and Amending Renewable Portfolio Standards – One of the oldest and most successful advanced energy policy tools, renewable portfolio standards (RPSs) usually set a target for a specific percentage of renewable electric generation to be achieved by a specific date. While these policies have various target dates and percentages (for example 10% by 2015), states can revisit existing policies to increase targets and extend target dates to spur the development of renewable resources and save ratepayers money. States might also add one or more carve-outs to further incentivize the development of distributed generation.
2. Clean Peak Standards (CPS) – [Clean Peak Standards](#) aim to increase the share of clean energy resources used to meet peak demand and decrease energy bills over the long-term by reducing peak demand in the hours when energy costs are highest. These objectives can be met through different policy options, including: planning and procurement that focuses on peak demand; a moratorium on the construction of new peaking units or a phase out of existing units; incentives – including carve-outs in states with RPSs – for clean energy resources delivered during peak times; and/or adopting a new clean peak standard that sets a target for clean energy deliveries during peak times.



PATHWAYS TO A LOW CARBON FUTURE

The international scientific community has determined that steep and rapid reductions in global greenhouse gas (GHG) emissions are needed to avoid the worst impacts of global warming and climate change. Federal and state policy interventions are necessary to transform our energy systems and rapidly reduce GHG emissions in the U.S. In general, effective policies will:

- 1) Establish performance standards and place enforceable limits on carbon pollution;
- 2) Provide financial incentives for individuals, businesses, and industry to choose clean energy and greatly improve energy efficiency;
- 3) Spur public and private investment in clean energy infrastructure, including investment in advanced transportation systems for the movement of people and goods; and
- 4) Provide funding for research, development, and demonstration of technologies that will underpin the decarbonization of the U.S. economy.

Wisconsin's utilities have taken the lead in setting GHG emissions reduction goals. MGE is [targeting](#) zero-carbon electricity by 2050, as is Xcel Energy. WEC Energy Group has set a [goal](#) to reduce total CO₂ emissions by 40% below 2005 levels by 2030 and 80% below 2005 levels by 2050. Alliant Energy has a [target](#) to reduce CO₂ emissions from fossil-fueled generation by 80% by 2050. The utility says that renewable resources will supply over 30% of its portfolio by 2030. Cities have also announced climate goals. In June 2019, Milwaukee officials [announced](#) the creation of a task force to develop a plan to reduce GHG emissions 45% by 2030 and to be GHG-free by 2050. The [cities](#) of Eau Claire, La Crosse, Madison, Green Bay, Monona, and Middleton have adopted similar goals.

To compliment this, Wisconsin's policymakers might consider the following:

1. GHG Emissions Monitoring and Reporting – To effectively implement policies that reduce emissions, a mandatory system for monitoring, reporting, and verifying GHG emissions must be put in place. While the U.S. EPA has GHG reporting requirements, the federal reporting requirements focus on major industrial sources, leaving significant gaps in the information states need to fully understand their emissions profile. Policymakers might consider legislation similar to Colorado's [SB19-096](#), which requires annual GHG reporting and establishes emissions baselines from which to measure progress.
1. Emissions Targets – Emissions targets can take a technology neutral approach that looks at the total emissions of the utility portfolio and drive emissions down with a combination of renewables, traditional fuels, efficiency, and technological advances. Emissions reductions can be achieved through a carbon portfolio standard approach, under which a state sets an emissions reduction target to be achieved over time, for example, 40% below 1990 levels by 2040. This can be implemented through the long-term utility planning process or by establishing a maximum allowable rate of emissions per unit. Such a standard can also be designed to address other concerns such as pollution, asthma risk, environmental justice, and water use.
2. Cap-and-Trade / Cap-and-Invest – These policies place enforceable limits on carbon emissions that cannot be exceeded by regulated entities without penalty. Emissions allowances are allocated or sold to companies by the state and sources must hold an allowance for each ton of carbon they emit in a given year. Emissions caps and available allowances are reduced every year, requiring that industries reduce their emissions or pay higher market prices for available allowances. States might choose to invest the revenue associated with emissions allowances in renewable energy, public transportation, zero-emission vehicles, environmental restoration, sustainable agriculture, recycling, and other actions.

States might consider joining an existing program like the [Western Climate Initiative \(WCI\)](#) or the [Regional Greenhouse Gas Initiative \(RGGI\)](#), as joining an established network can remove administrative barriers to entry.
3. Carbon Tax – Carbon taxes impose a price on each ton of carbon emitted and are levied on the purchase and use of fossil fuels by business and industry. That cost is subsequently reflected in consumer prices. If carbon taxes are levied at a high rate, they will discourage the use of GHG emitting resources and technologies, encouraging a market switch to new technology. Alternatively, carbon taxes can be set at a lower rate, which will have a limited impact on market behavior, but the revenue can be substantial and that revenue can be invested in energy efficiency and emission reduction technologies which will result in lower emissions. States considering this option might examine [British Columbia's existing tax structure](#) or the federal proposals from the [Citizen's Climate Lobby](#) and the [Climate Leadership Council](#).
4. Emissions Performance Standards – Transportation sources now emit more GHGs than any other sector, and rapid reductions from all types of vehicles, engines, and equipment is critical to achieving carbon reduction goals. The [Low Carbon Fuel Standard \(LCFS\)](#) implemented by both Oregon and California is another example of a flexible, market-based approach to regulating carbon emissions at the state level. LCFSs regulate the carbon intensity of transportation fuel in order to reduce the use of petroleum-based fuels and promote investment in low-carbon options (electrification, biofuels, hydrogen, etc.). The market mechanism LCFSs use is a crediting system where each fuel type is assigned a carbon intensity (CI) score. The allowable CI score is decreased yearly, requiring a switch to lower CI fuels. Entities who provide fuel below the regulated CI score earn credits. These credits can be sold to providers who operate at a deficit (above the mandated CI score), creating a market incentive for investment in cleaner fuels.



ELECTRIFICATION OF THE TRANSPORTATION SECTOR

Bloomberg New Energy Finance [estimates](#) that 58% of all new passenger vehicle sales will be electric by 2040 and that price parity with conventional vehicles will be met for most segments in the mid-2020s. Therefore, a key part of building a modernized grid involves designing infrastructure that will facilitate easy connection of electric vehicles (EVs) to the grid. One of the most important barriers to increased adoption of EVs is the consumer's awareness of the availability of EV charging stations. Ultimately, drivers want to be sure that their car will get them where they need to go. Another important barrier to increased adoption of EVs is their higher up-front cost as compared to similar conventionally fueled vehicles. The good news is that both supportive policies for developing charging infrastructure and technological advancements have eased range anxiety.

A [few incentives for alternatively fueled vehicles](#) are currently available in Wisconsin. MGE offers a handful of [programs](#). Alliant Energy offers a [rebate](#) to commercial and industrial customers that install workplace charging stations. We Energies [proposed](#) offering rebates and time-of-use rates to customers that install EVSE at their homes. The PSC [opened](#) an investigation in January 2019 to consider policies related to EVs and EV supply equipment (EVSE). In June 2020, the PSC [approved](#) an Excel Energy program to expand, simplify and lower costs of residential and commercial EV charging stations. There are opportunities to expand the market for EVs in Wisconsin:

1. Financing and Financial Incentives – Providing financial incentives and innovative financing options can help increase market penetration of EVs. Sales, property, and income tax credits are some of the simplest methods for addressing the up-front costs of EVs and EVSE. While sales tax credits are typically applied at the time of purchase, property and income tax credits may do less to address upfront cost barriers as receipt of the credit is typically removed in time from the purchase.² Some states have adopted other financial incentives including low-interest loans, grants, vouchers, and rebates. A handful of states qualify EVSE under their property assessed clean energy (PACE) programs. A simple solution is to increase and expand existing tax credits to incentivize commercial, publicly available charging stations.
2. Charging Infrastructure Plan – Locating [charging infrastructure](#) is different from locating conventional fueling stations. While some drivers will need to charge more quickly, others will refuel when they are parked for longer periods of time, for example when shopping, eating at a restaurant, or going to work. Charging infrastructure plans should attempt to pair the appropriate level of charging (level 2 or direct current fast charging) with a reasonable amount of time a person will be at that location. Legislation could direct a state agency to develop an infrastructure plan through a stakeholder process. Wisconsin's [EV registration fee](#) could help fund these efforts. For example, in [Washington](#) a portion of each EV registration fee is used to fund charging infrastructure development across the state.
3. Parking Infrastructure Requirements – In tandem with the development of a statewide plan, legislation could set requirements for EV parking infrastructure. Some states have adopted permitting standards for parking lots, requiring, for instance, that for every 100 parking spaces, there must be at least one EV charging space. Legislation could also incentivize utilities to develop [make-ready locations](#). These locations supply power to the point where a utility or third party developer might install an EV charging station. Wisconsin's [building energy code](#) could also be updated to include requirements for EV charging infrastructure.

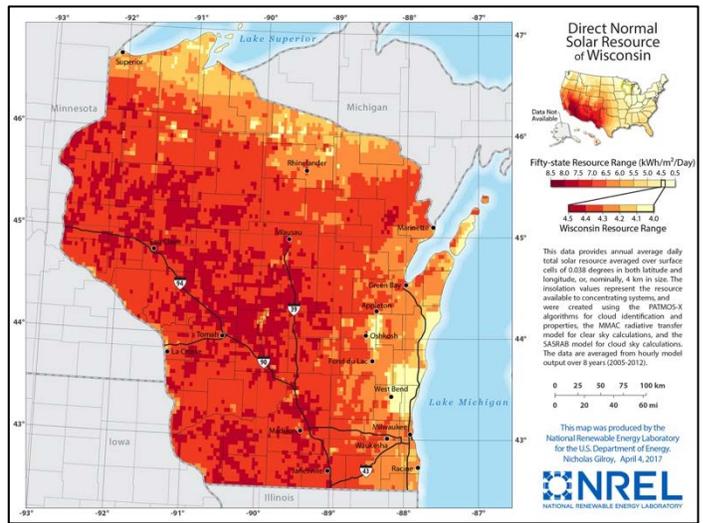
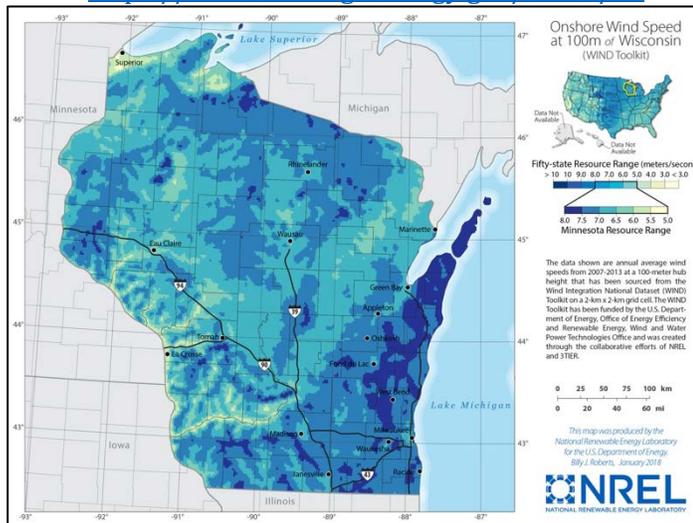
NEWS

- July 6, 2020: [Taking Charge: Wisconsin's Newest Utility Commissioner on the State's Utility-scale Changeover](#)
- June 18, 2020: [Public Service Commission of Wisconsin Approves Excel Energy EV Charging Program](#)
- June 17, 2020: [Wisconsin Utilities on Track to Cut Carbon Emissions by 40% by 2026](#)
- May 26, 2020: [Alliant Energy Proposes \\$900M Solar buy; 6 Farms Would Power 175,000 Homes](#)
- April 28, 2020: [Wisconsin Park Replaces Old Electrical Line with Solar & Storage Microgrid for Half the Cost](#)
- April 21, 2020: [Wisconsin Biogas Producer Sees Potential in Thermal Renewable Credits](#)
- March 4, 2020: [Milwaukee City Officials Announce Largest Solar Energy System](#)
- February 26, 2020: [Wisconsin's Second Largest Solar Farm Planned in Kenosha County](#)

² A [study](#) by the Congressional Budget Office however suggests that tax credits are important tools for ensuring increased adoption of alternative-fueled vehicles.

WISCONSIN'S WIND AND SOLAR RESOURCES

WIND <https://windexchange.energy.gov/states/wi>



OTHER RESOURCES

- Environmental Law and Policy Center: [Wisconsin Clean Energy Business Supply Chain: Good for Manufacturing Jobs, Good for Economic Growth, and Good for Our Environment](#)
- Wisconsin Office of Energy Innovation: <https://psc.wi.gov/Pages/Programs/OEI.aspx>
- RENEW Wisconsin: <https://www.renewwisconsin.org/>
- The American Council for an Energy-Efficient Economy State and Local Policy Database, Wisconsin: <https://database.aceee.org/state/wisconsin>
- The Database of State Incentives for Renewables and Efficiency, Wisconsin: <http://programs.dsireusa.org/system/program?fromSir=0&state=WI>
- U.S. Energy Information Administration, Wisconsin: <https://www.eia.gov/state/?sid=WI>
- U.S. Department of Energy's Alternative Fuels Data Center, Wisconsin: <https://www.afdc.energy.gov/states/wi>
- SPOT for Clean Energy, Wisconsin: <https://spotforcleanenergy.org/state/wisconsin/>
- American Wind Energy Association (AWEA): <https://www.awea.org/resources/fact-sheets/state-facts-sheets>
- National Renewable Energy Laboratory Biomass Maps: <https://www.nrel.gov/gis/biomass.html>
- The Rocky Mountain Institute, From Gas to Grid – Building Charging Infrastructure to Power Electric Vehicle Demand: <https://rmi.org/wp-content/uploads/2017/10/RMI-From-Gas-To-Grid.pdf>
- The GridWise Alliance, EVs - Driving Adoption, Capturing Benefits: <http://gridwise.org/evs-driving-adoption-capturing-benefits/>
- The Regulatory Assistance Project, Performance-Based Regulation: <https://www.raponline.org/event/performance-based-regulation-the-power-of-outcomes-part-1/>
- The Interstate Renewable Energy Council, A Playbook for Modernizing the Distribution Grid, Volume 1: <https://irecusa.org/publications/a-playbook-for-modernizing-the-distribution-grid-volume-1/>

Our Resources

CNEE Homepage: <https://cnee.colostate.edu/>

The SPOT for Clean Energy: <https://spotforcleanenergy.org/>

The Advanced Energy Legislation (AEL) Tracker: <https://www.aeltracker.org/>

CNEE Contact Information

Tom Plant, Senior Policy Advisor
Tom.Plant@colostate.edu

Trina Hoffer, Research Manager
Katherine.Hoffer@colostate.edu