



IOWA CHAPTER

Iowa's Energy Future: Renewable Energy

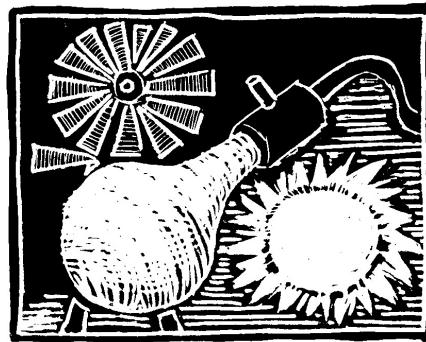
The Iowa Chapter supports renewable energy projects that range from the large-scale utility projects to the consumer-owned facility. The large-scale, industrial model has become the main focus of renewable energy in the state. Great potential remains for distributed generation (owned by an individual consumer) and community-owned power (owned by several families or businesses that collectively purchase a renewable energy generator and operate the unit for their collective benefit). Likewise, the Chapter supports renewable energy installations at schools and other government buildings in the state.

The installation of distributed, renewable energy sources removes the pressure on the transmission lines because it allows the owner of the energy to use the energy, rather than drawing electricity off the grid.

Renewable Energy Standard

The Iowa Chapter supports a renewable energy standard (RES) that requires each utility to supply 100 percent from renewable resources of the electricity consumed in Iowa by 2030.

- The Chapter supports a requirement that all electricity bills be required to report the percentage of the electricity produced or purchased by the utility that is produced by renewable sources, coal, nuclear, natural gas, hydroelectric and other enumerated sources.
- All electricity bills should also list the amount of electricity purchased from the utility's customers who have locally owned renewable energy devices and are selling the energy to the utility.
- All utilities – municipals, rural electric cooperatives and investor-owned – should be required to meet the renewable electricity standard.
- Renewable energy sources include solar, wind and geothermal.
- Nuclear energy is not a renewable energy source and should not be included in the renewable energy standard.
- The utility can own the renewable energy source or can purchase the energy from a generation company.
- Renewable energy transmitted out of state cannot be counted toward the renewable energy standard, including power provided on transmission lines that have no off-ramps in Iowa and renewable energy that is provided to other states via power purchase agreements.



Graphic by Sharon Williams

In 1983, Iowa law required investor-owned utilities to purchase 105 megawatts of electricity from renewable energy sources. The investor-owned utilities have surpassed that number.

Iowa gets a significant amount of electricity from coal-fired power plants. Based on information provided by the Iowa Utilities Board website, coal supplied 43.79 percent of the electricity generated in Iowa in 2017 while wind was used to generate 36.91 percent of the electricity.¹

¹ See the Iowa Utilities Board website: <https://iub.iowa.gov/iowas-electric-profile>

Iowans continue to suffer from the side-affects of burning coal and greenhouse gases rather than benefiting from the next-generation technologies of energy production. A renewable energy standard would encourage the utility companies to move into producing electricity by wind and solar.

Support Consumer-owned Renewable Energy Sources by Breaking Down Barriers

Most electricity currently is generated by large, centralized power plants. Alternatively, distributed generation is produced by smaller energy sources. Typically, distributed generation electricity is generated at the place it is consumed and is owned by the individual consumer.

The Iowa Chapter of the Sierra Club supports policies that promote consumer-owned distributed generation.

- The Iowa Chapter supports policies that would enable community-owned power arrangements allowing several families or businesses to collectively purchase a renewable energy generator and to operate the unit for their collective benefit. At the same time, the utilities would be required to provide backup power and would require utilities to purchase excess energy. This policy would cover all Iowans, regardless of whether their electricity is provided by an investor-owned utility, by a rural electric cooperative or by a municipal utility.
- The Chapter supports policies that allow the home-owner or business liability insurance policies to cover small-scale renewable energy generation facilities.
- The Chapter supports interconnection standards that are consistent for customers of all utilities in Iowa, including investor-owned, municipal and rural electric cooperatives.
- The Chapter supports paying a producer a fair price for the electricity that is delivered to the grid and does not support paying the producer less than avoided cost. The Iowa Utilities Board needs to develop an easy way for consumers and utilities to determine avoided costs. This method needs to cover investor-owned utilities, rural electric cooperatives and municipal utilities. This is significant because the avoided cost is the amount that the owner of the renewable-energy generator is currently paid when the excess energy produced is sold to the utility company.
- The Iowa Chapter supports policies to allow feed-in tariffs (also referred to as renewable energy payments, clean contracts or energy independence payments). A feed-in tariff is a rate schedule that lays out how much money per kilowatt hour the utility pays to the renewable energy generator for a set period of time (years) for the purchase of the renewable energy. This tariff is a long-term contract that can be used in gaining financing for renewable energy projects. Another feature is that the renewable energy generator is paid a fairer price for the energy produced. This price is closer to the price that a utility would pay another traditional utility for electricity.
- The Iowa Chapter opposes any effort to add a renewable-energy surcharge to the bills of customers who own solar panels or wind turbines. Further the chapter opposes utility companies creating tariffs (pricing tables) that would penalize those customers for their use of wind and solar power for electric generation. Electric companies do not penalize a customer who initiates energy efficiency and conservation measures that reduce the amount of electricity the customer uses; a similar approach should be used for wind and solar energy.
- The Iowa Utilities Board needs to set up a department to address barriers consumers face when attempting to install distributed generation and to assist the consumer in resolving issues with utilities. Some of these issues include utilities' refusing to allow customers who have installed distributed generation to continue to have access to the grid, threatening to shut off power to the customer if a renewable energy unit is installed, charging



excessively high standby rates or back-up power rates, requiring high amounts of insurance to be purchased and denying customers the right to use their own power first. Investigation and resolution of an issue can be prohibitively expensive for an individual while the issues affect all customers of that utility. Some of the issues could even affect customers across the state. A single department could cover all types of utilities whether they're investor-owned utilities, rural electric cooperatives or municipal utilities. The department would investigate a customer who is dealing with a utility refusing to pay for excess energy at a fair and legal price.

- The Iowa Chapter supports lending programs, such as PACE, that allow property owners to borrow money to install renewable energy generation or energy efficiency projects such as solar panels. The Property Assessed Clean Energy (PACE) program involves a city or county raising money from the bond market, loaning the money to property owners for the project, adding the amount of the bond payment to the property tax bill and then paying off the bond as property taxes are paid each year.
- The Chapter supports policies that allow cities who are customers of investor-owned utilities or rural electric cooperatives to install renewable energy projects for the benefit of all residents and businesses in those cities.
- The Chapter supports requirements that each utility annually reports its generation mix (the percentage of power that is sold by fuel source, such as gas, coal, nuclear, wind, solar, hydroelectric, etc.) to the Iowa Utilities Board. This can be accomplished in a consolidated report similar to the method currently used by the municipals and the rural electric cooperatives in reporting their energy efficiency programs.



Support for Proper Siting to Avoid Natural Areas and Bird and Bat Habitat

Adequate surveys need to be conducted prior to the siting of wind turbines and transmission lines in order to avoid natural areas and to protect bird and bat habitat and migration pathways.

Support of Pilot Projects

As the country moves into the next generation of power generation, the rate structures, oversight and processes of electricity generation will be changing. The Iowa Utilities Board (IUB), utilities and consumers will need to adapt with innovative ideas. Given that the Iowa Office of Energy Independence was shuttered, the Chapter supports re-establishing a state energy office in the IUB to serve as a research incubator on innovative energy policy.



The Iowa Chapter encourages the Iowa Utilities Board to develop pilot projects to test technology that could be used in future distributed generation and renewable energy projects. The Chapter supports projects that think out-of-the-box.

Utility companies have been pursuing large-scale, solar projects using concentrating solar power technology on large areas of land. A pilot project should evaluate putting solar panels on power poles. The land where the power poles already stand is covered by an easement. The power poles are close to customers so there would be no need for additional power lines.

Yet, another project could link the installation of solar panels with demand response programs. Demand response programs allow a utility to cycle power off and on when peak load is being reached.