FACT SHEET:

SOLAR INDUSTRY POISED FOR GROWTH IN IOWA

Solar energy production offers untapped potential in Iowa

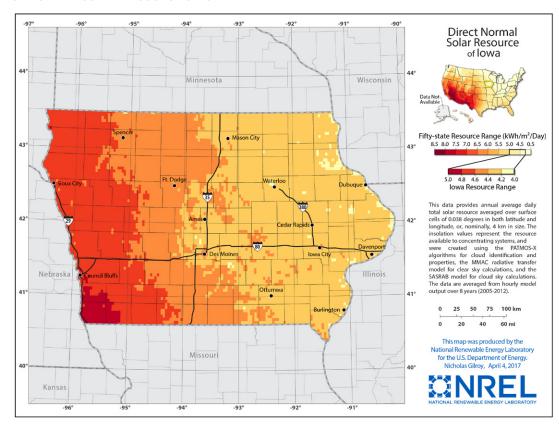
Solar energy installations are more common today than ever before. The industry continues to see steady growth nationwide. Across Iowa, there is considerable potential for residential, community, and utility-scale solar projects.

- Nationally, the solar industry grew by 15.6 percent between October 2018 and October 2019. In Iowa, the industry grew by 27.3 percent during this same time.1
- Today, Iowa ranks 38th among all U.S. states and territories in solar power production. The state receives 0.06 percent of its electricity from solar.2

- The solar power industry has created 844 jobs in Iowa, spread over 72 firms involved in manufacturing, installation, or a related activity.3
- Despite its relatively small population, Iowa is one of the top 5 states in total energy consumption per capita, due to its climate and energy-intensive industries.4



FIGURE 1. DISTRICT NORMAL SOLAR RESOURCE OF IOWA



Solar energy installation is more affordable

- Affordability is a key driver of solar energy growth nationwide. New and efficient technologies have made this an attractive investment for home and business owners alike. Utilities are beginning to take note.
- > The cost to install solar energy has dropped by more than 70 percent over the last decade⁵ while the industry has experienced a 50 percent annual growth rate during the same period of time.⁶
- In Iowa, solar prices have fallen by 36 percent over the past five years.⁷
- Nationally, the average price per watt for solar panels ranges from \$2.57 to \$3.35, and solar panel costs for an average-sized installation in the U.S. usually range from \$11,411 to \$14,874 after solar tax credits.⁸
- Residential and commercial solar energy systems can be placed on existing buildings and do not require major land allocations or infrastructure development.
- Lower costs also make solar more attractive to utilities. Across the U.S., utility-scale installations accounted for 58 percent of total new capacity in 2018.9

lowa would benefit from strengthened policies

A clean energy economy depends on more than ample renewable resources. States must also enact policies that facilitate or encourage renewable energy development. While Iowa leads in wind energy production, adjustments to state policy would help spur growth in the solar market.

- In 2019, Iowa saw attacks on **net metering**, a crucial cost-cutting strategy for many consumers, including farmers. Well-funded groups attempted to enact a misguided "sunshine tax" of hundreds of dollars per year on consumer-generators with solar.
 - Under net metering, distributed generation system owners receive credit from their local utility in exchange for the excess energy they transfer to the grid. This credit can be used to offset energy use at night or on windless days, and a system owner that produces more energy than required is reimbursed at a predetermined rate. This rate most often equals "avoided cost," which is simply the cost the utility avoids by not having to produce that increment of power.
- Iowa's Solar Energy System Tax Credit could be expanded and decoupled from federal incentives.

This credit helps reduce the pay-back period for both residential and utility-scale customers, making solar energy more financially-viable for consumers.

- Under net metering, distributed generation Iowa's Solar Energy System Tax Credit is written to reimburse consumers at 50 percent of the federal solar investment tax credit.¹⁰ Iowa's Solar Energy System Tax Credit should be decoupled from the federal solar investment tax credit to help facilitate growth in the industry.
- In 2020, the federal solar tax credit dropped from 30 percent of total project cost to 26 percent. This drawdown will continue over the next few years, dropping to 22 percent in 2021 and phasing out completely for residential customers in 2022. After 2022, only a permanent 10 percent credit for commercial and utility scale projects will remain at the federal level.¹¹
- Under current state law, total expenditures are capped at \$5 million a year, limiting potential investment from consumers. As the federal solar investment tax credit continues to phase out, Iowa has an opportunity to remove or raise that cap.

Sources

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