FACT SHEET:
SOLAR ENERGY PRESENTS OPPORTUNITY FOR SOUTH DAKOTA

Solar energy production offers untapped potential in South Dakota

Solar energy installations are more common today than ever before. The industry continues to see steady growth nationwide. Despite considerable potential, South Dakota has been slower to adopt this technology.

> Nationally, the solar industry grew by 23.5 percent between 2019 and 2020. In South Dakota, the industry grew by only 14.3 percent during this same time.[1]

> Today, South Dakota ranks 50th among all U.S. states and territories in solar power production. The state receives 0.02 percent of its electricity from solar.[2]

> The solar power industry has created 448 jobs in South Dakota, spread over 18 companies that specialize in manufacturing, installation, or a related activity.[3]

> Most existing solar generation in South Dakota is customer-sited, small-scale generation. No utility-scale solar energy was generated in the state in 2019.[4]

> Despite its small population, South Dakota is one of the top 10 states in total energy consumption per capita, due to its climate and energy-intensive industries.[5]

Developers are beginning to take note of the solar potential in the state. South Dakota is projected to add 136 megawatts over the next five years, and ranks 5th in growth projection by the Solar Energy Industries Association (SEIA).[7]

FIGURE 1. DISTRICT NORMAL SOLAR RESOURCE OF SOUTH DAKOTA[6]
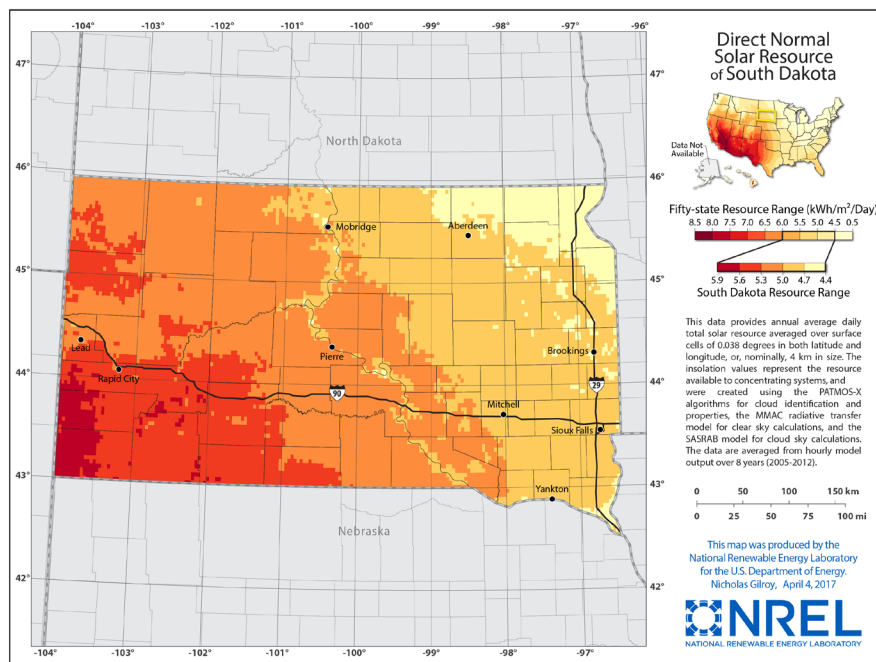
Solar energy installation is more affordable

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 decade. As a result, a new solar project is installed in the U.S. every 100 seconds.[8]

❯ In South Dakota, solar prices have fallen by 38 percent over the past five years.[9]

❯ 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.[10]

❯ 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. Utility-scale installations accounted for 63 percent of total new capacity in 2019.[11]

South Dakota can benefit from improved policies

A clean energy economy depends on more than ample renewable resources. States must also enact policies that facilitate or encourage renewable energy development. By this measure, South Dakota lags far behind neighboring states.

❯ South Dakota is one of only three states without statewide net metering, eliminating a key incentive for residents to invest in systems for their home or business.[12]

> Under net metering, distributed generation system owners receive retail 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.

❯ South Dakota is one of only 14 states without a Property Assessed Clean Energy (PACE) program, eliminating flexible financing options that would enable investment in clean energy.[13]

> PACE programs allow a property owner to finance the up-front cost of energy or other eligible improvements on a property and then pay the costs back over time through a voluntary assessment. This assessment is attached to the property rather than an individual.[14]

❯ There are currently no statewide community solar policies or programs in South Dakota, diminishing the ability of community members to invest in solar energy.[15]
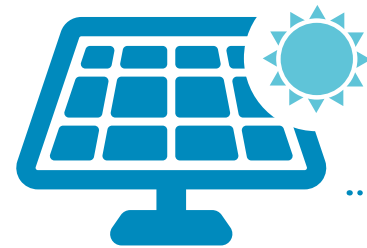
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