FACT SHEET:

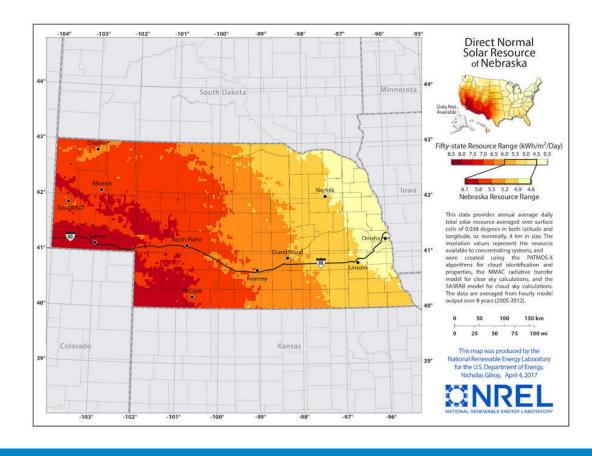
NEBRASKANS HAVE OPPORTUNITY IN UNTAPPED SOLAR POTENTIAL

The growth of the solar industry has brought a wave of new projects. As prices decline, developments are becoming larger and bringing with them new economic opportunity. Nebraska has substantial potential to reap the benefits of solar expansion at the residential, community, or utility scale.

- While nationally the solar industry grew by 15.6 percent between October 2018 and October 2019, in Nebraska, it grew by 21.1 percent.¹
- Nebraska ranks 47th among states and territories in solar power production. About .08 percent of the state's electricity is currently produced from solar, enough to power the equivalent of 5,929 homes.²
- > The solar industry created 1,328 jobs related to solar in the state, either in manufacturing, installation, development, and/or associated services.³
- Nebraska ranks seventh among states for total energy consumed per capita.⁴ Although the state has a relatively low population, many of its major industries are energy-intensive.



FIGURE 1. DISTRICT NORMAL SOLAR RESOURCE OF NEBRASKA⁵



Declining cost of solar

Improvements in technology and manufacturing have made solar energy systems more affordable. As prices have lowered, more consumers and communities have been able to invest in local solar, and many utilities have started planning larger systems.

- > Over the last decade, the cost to install solar across the U.S. has fallen more than 70 percent. By the end of 2019, prices for all levels of solar projects hit an all-time low.
- The price of solar in Nebraska, specifically, has fallen by 36 percent in just the last five years.

- 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 ranges from \$11,411 to \$14,874, after solar tax credits.⁹
- Residential and commercial solar energy systems can be placed on existing buildings and do not require major land allocations or infrastructure development.
- ➤ Lower costs have led to a record-setting 700 megawatts of residential solar capacity installed prior to the end of 2019. Installed solar capacity in the U.S. is also forecasted to more than double in the next five years.¹⁰

Strong policies ensure Nebraskans benefit from solar

While access to natural resources presents opportunity to produce electricity from renewable sources, states must have policies in place that support industry growth.

Net metering

- Nebraska requires utilities to offer net metering to eligible renewable systems, such as solar. Net metering allows customers in the state to place excess electricity generated by these systems onto the electric grid in exchange for a credit on their monthly bill or an annual credit.
- Access to net metering can assist in reducing the payback period on solar or other renewable systems, increasing the long-term benefits to consumers while placing more clean energy onto the electric grid.
- > Utilities are required to offer net metering systems up to the 25 kilowatt capacity limit, and they may cap net metered systems at 1 percent of their average monthly peak demand.
- Currently, the state does not require that utilities allow for the aggregation of systems or meters. Aggregation would allow a customer with multiple meters to combine them as one for the purpose of net metering.¹¹

Nameplate capacity tax

- Nebraska has a nameplate capacity tax equal to \$3,518 per megawatt of the total nameplate capacity of a solar energy facility.
- The nameplate capacity tax is assessed on renewable energy facilities that are not owned by the federal or state government, public power districts, municipalities, electric cooperatives, or customer-generators.
- The tax is collected annually beginning in the first calendar year of operation with the Nebraska Department of Revenue.
- > The department pays the proceeds from the nameplate capacity tax to the county treasurer of the county where facilities are located.
- In the case of a facility spanning more than one county, the revenue from the nameplate capacity tax is apportioned based on the total capacity of a facility based in each county.¹²

Sources

- 1 "Energy Power Monthly, Table 1.17.B. Net Generation from Solar Photovoltaic." Independent Statistics & Analysis, U.S. Energy Information Administration, Jan. 27, 2020, eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_1_17 h_Accessed_February 2020
- _b. Accessed February 2020.

 2 "Nebraska Solar." Solar Energy Industries Association, 2020, seia.org/state-solar-policy/nebraska-solar. Accessed February 2020.
- 4 "U.S. States, State Profiles and Energy Estimates, Rankings: Total Energy Consumed per Capita, 2017 (million Btu)." Independent Statistics & Analysis, U.S. Energy Information Administration, eia.gov/state/rankings/. Accessed February 2020
- 5 "Solar Maps." National Renewable Energy Laboratory, nrel.gov/gis/solar. html. Accessed February 2020.
- 6 "Solar Industry Research Data." Solar Energy Industries Association, 2020, seia.org/solar-industry-research-data. Accessed February 2020.

- 7 Perea, Austin, et al. "Solar Market Insight Report 2019 Q4." Solar Energy Industries Association, 2019, seia.org/research-resources/solar-market-insight-report-2019-q4. Accessed February 2020.
- 8 "Nebraska Solar." Solar Energy Industries Association, 2020, seia.org/state-solar-policy/nebraska-solar. Accessed February 2020.
- 9 "How much do solar panels cost in the U.S. in 2020?" EnergySage, U.S.
 Department of Energy, 2020, news.energysage.com/how-much-does-the-average-solar-panel-installation-cost-in-the-u-s/. Accessed February 2020.
 10 Perea, Austin, et al. "Solar Market Insight Report 2019 Q4." Solar Energy
- Perea, Austin, et al. "Solar Market Insight Report 2019 Q4." Solar Energy Industries Association, 2019, seia.org/research-resources/solar-market-insight-report-2019-q4. Accessed February 2020.
 "Net Metering." DSIRE, NC Clean Technology Center, U.S. Department of
- 11 "Net Metering." DSIRE, NC Clean Technology Center, U.S. Department of Energy, June 25, 2019, programs.dsireusa.org/system/program/detail/3386. Accessed February 2020.
- 12 "Chapter 13 Nameplate Capacity Tax." Nebraska Department of Revenue, June 6, 2011, revenue.nebraska.gov/about/legal-information/regulations/chapter-13-nameplate-capacity-tax. Accessed February 2020.

