

Wind Energy Leases Solar Energy Leases

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NDSU

EXTENSION AGRIBUSINESS

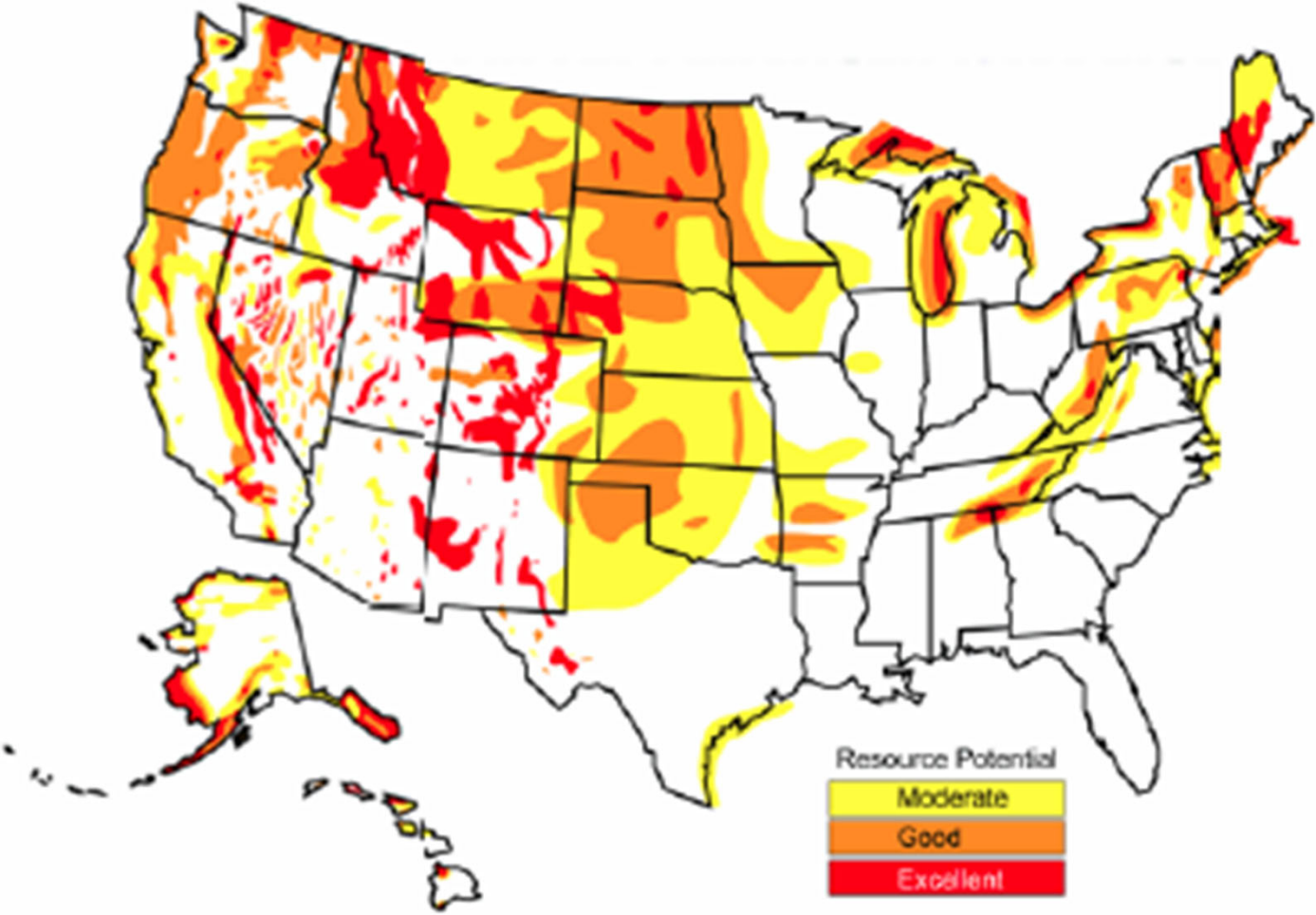
Wind Turbine Lease Considerations



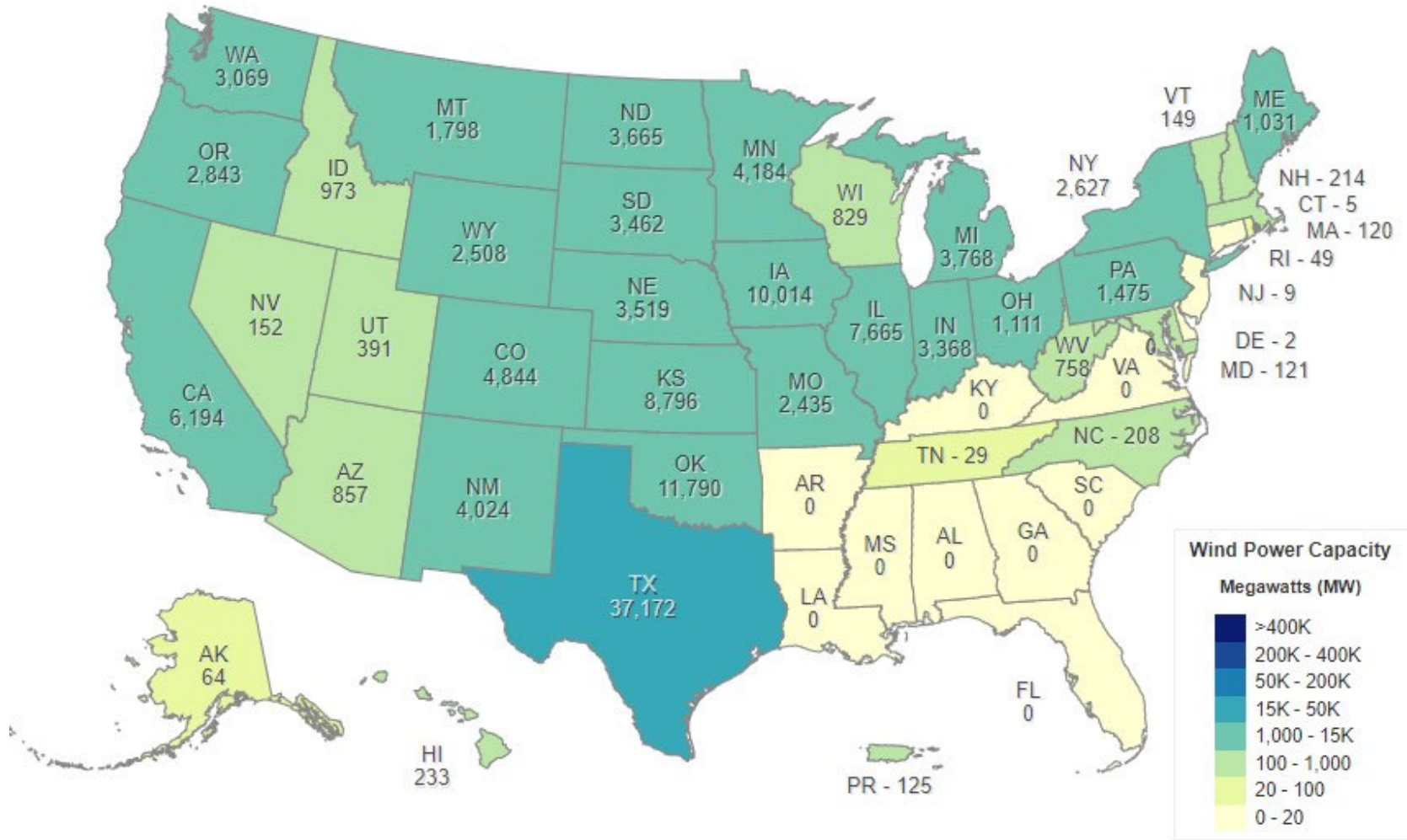
BACKGROUND

- Wind power potential
- Questions about leases
- No standardized contracts
- Are wind companies taking advantage of land owners?

United States Annual Average Wind Power Potential



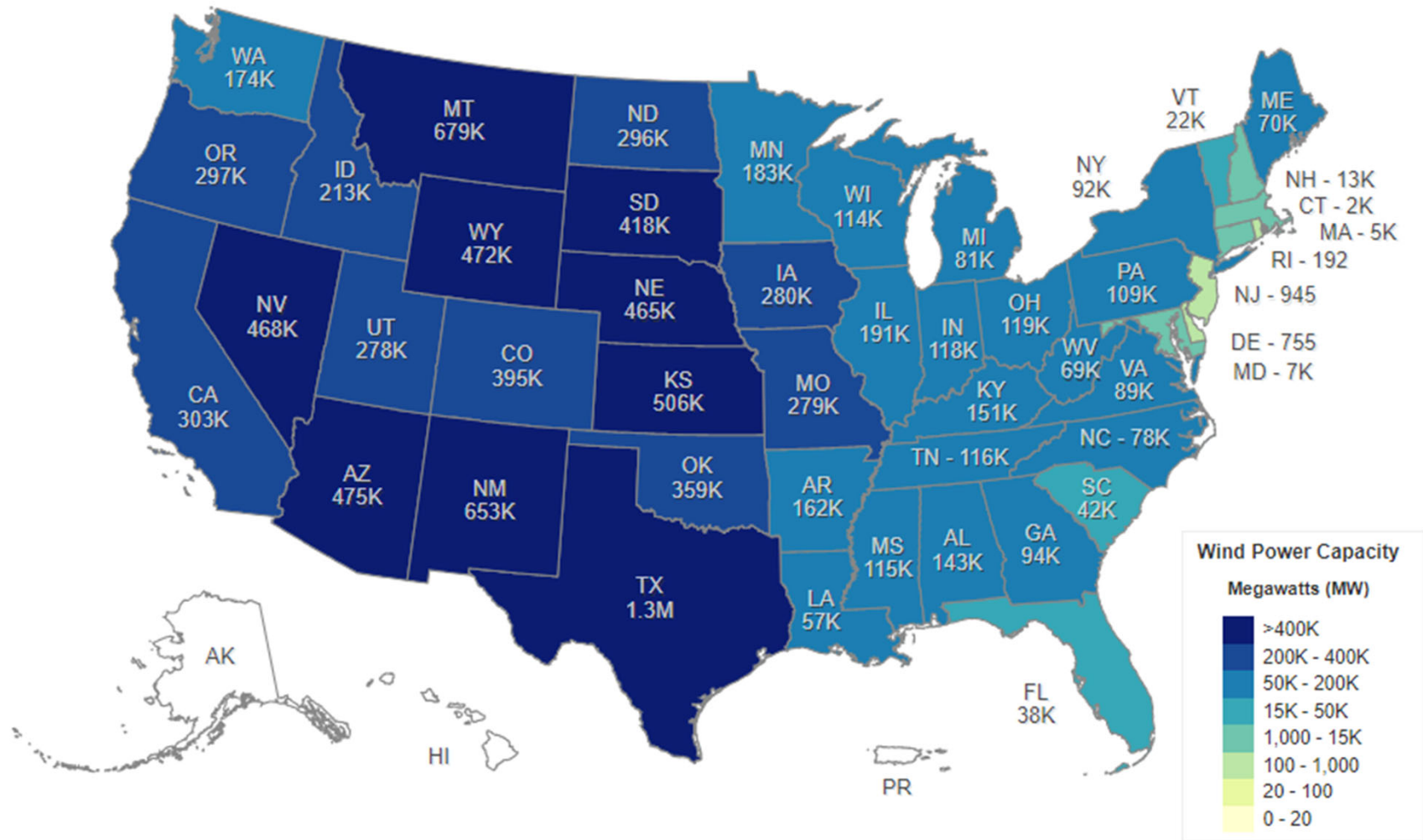
Q1 2024 Installed Capacity by State



Total Installed Wind Capacity: 136,650 MW

Source: American Clean Power Association

U.S Potential Wind Capacity in Megawatts (MW) at 80 Meters



Total Potential Wind Capacity: 10,640,080 MW

Source: AWS Truepower, NREL

WHY GROWTH IN WIND ENERGY?

- Renewable power
- Environmentally friendly
- Helps the local economy
- It can be a very good economic investment

NECESSARY FACTORS FOR TURBINE DEVELOPMENT

1. A good source of wind

- The potential power of wind is influenced by:
 - The speed (velocity) of the wind
 - As the speed increases by 25%, the power increases by 100%
 - 15 mph to 18 mph results in a 73% increase in power
 - Height above the ground
 - The density of the air

NECESSARY FACTORS FOR TURBINE DEVELOPMENT

2. Power purchase agreement

Negotiated with a power company

- Two parts:
 - Fee for electricity
 - Fee of Renewable Energy Credits (RECs); mandated or voluntary

3. Access to a grid sub-station for utility scale turbines

NECESSARY FACTORS FOR TURBINE DEVELOPMENT

4. Adequate transmission lines for moving power to where it is needed

- One of the reasons that remote rural areas with good wind have few wind turbines
- MISO (Midwest Independent Transmission System Operator) controls this access in the Midwest
 - Must submit a service request
 - Long and expensive process
 - Could hold up some projects

NECESSARY FACTORS FOR TURBINE DEVELOPMENT

5. Have a sound financial plan

- Adequate financing available (short-term and long-term)
- Take advantage of renewable energy incentives
- Income tax effects

6. Local approval

- There can be significant local resistance
 - Zoning that address set-backs, noise, removal provisions, etc.
 - **NIMBY** (“**NOT IN MY BACK YARD**”) forces
 - Opposed because of the impact on the view, noise, bird kill, ice shed, safety issues, etc.

THE “INDIVIDUAL” APPROACH

- Company representative contacts individual landowner to sign a contract
- Requires decision to sign within a short time frame
- Expects landowner to commit to a 20 to 50 year agreement
- Contracts may include a confidentiality agreement

THE “ORGANIZED” APPROACH

- Landowners organize into a business entity
- Market their resource as a package
- Landowners are compensated with or without a tower
- Hire an experienced attorney to work for the group

LEASES HAVE TWO COMPONENTS

1. Contract to lease the wind development rights
2. Contract to construct and operate the wind turbine and related development

CONTRACT TO LEASE WIND DEVELOPMENT RIGHTS

- Limited duration, 3 to 5 years is common
- May include an option to renew
- Provides exclusive development rights to that company
- Provides annual payment to landowners
- Payment may be \$2 to \$15 per acre for acreage contracted
- May include a signing bonus

WIND ENERGY CONTRACTS

- Landowner will either get a lease document or an easement agreement
 - Leases usually are 20 to 25 years, and may be renewable
 - If lease, it should be long enough for developer to recoup investment (at least 20 yrs.)
 - Does developer have a right of renewal?
 - Can landowner renegotiate lease terms?
 - **Avoid perpetual leases!** – potential problem with rule against perpetuities

WIND ENERGY AGREEMENTS

- Confidentiality agreements ???
- Have your insurance agent review the agreement
- Will any USDA land use restrictions be violated (FSA mortgage, CRP etc.)?
- Decommissioning Rules

INFLATION OR ESCALATOR CLAUSE

- Contracts will run for 20 or more years
- Inflation will significantly reduce value of future payments
- All fixed payments should be adjusted by an escalator such as the consumer price index

RISKS

- Financial risk
- Legal risk
- Liability

LIABILITY ISSUES

Contract should specify the project developer and any company to which the contract may be assigned in the future are responsible for any financial obligations you may incur as a result of:

noise pollution

visual pollution

vandalism

access roads

construction period

ice shedding

blade drop/throw

shadow flicker

fire

stray voltage

electromagnetic fields

lightening strikes

communications

microwave towers

radar stations

TV and radio signals

emergency radio signals

bird kill

water/air pollution





CONSTRUCTION PERIOD

- Considerable crop may be destroyed
- Contract should provide compensation
- Liability during construction period





PLACEMENT OF ACCESS ROADS

- Roads are necessary for maintenance and repair
- Will impact efficiency of field operations
- Landowner input in location of roads

ROADS, FENCES AND GATES

- Responsibility for maintenance of roads (primarily snow removal)
- On grazing land, who is responsible for:
 - Fences
 - Gates
 - Cattle guards

NORTH DAKOTA RULES FOR DECOMMISSIONING WIND TURBINES

- Owner or operator of the *commercial* wind energy conversion facility is responsible for removing the wind turbines and related facilities when no longer useful
- Must remove within 3 years of no electric generation, unless a new plan is proposed to reuse the turbines
- The Commission may order a bond or other financial assurances, but only after 10th year of operation of the facility

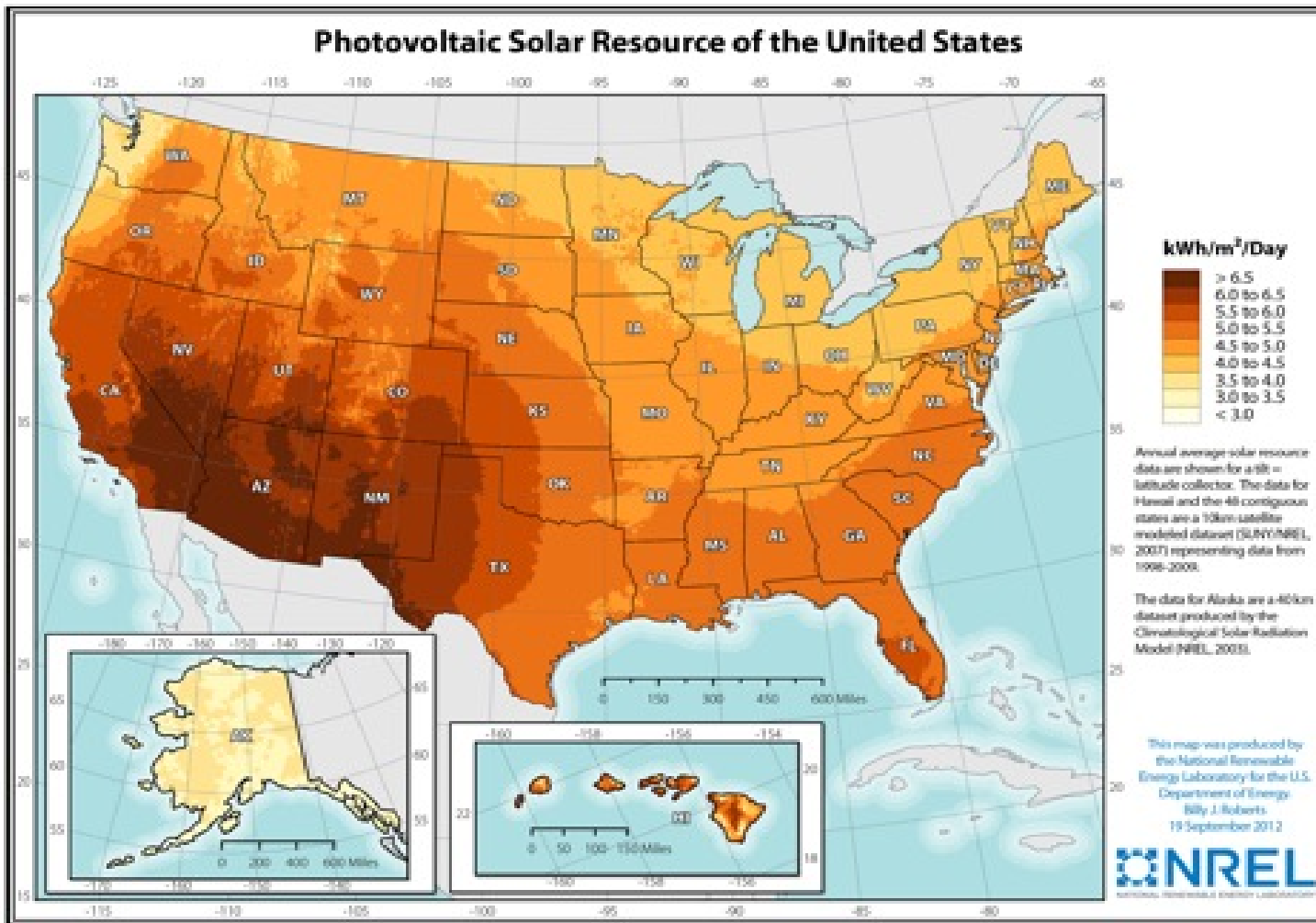
NORTH DAKOTA LAWS

- Code of Conduct for Wind Energy Leases
- Wind Turbine Sales Tax Exemption, Income tax Credits and Property Tax Credits
- Wind Rights Legislation
- Tower Siting Regulations

Solar Lease Considerations

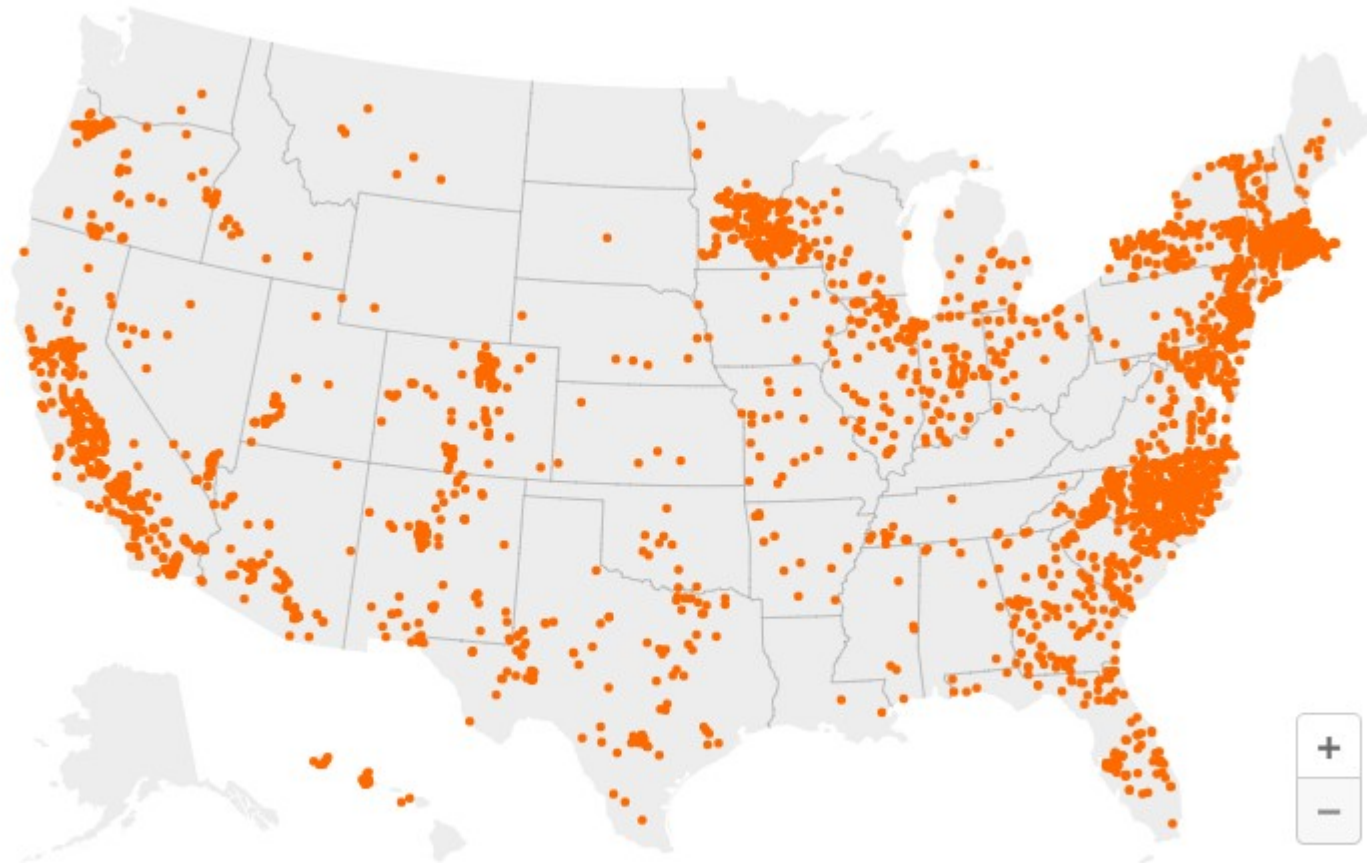




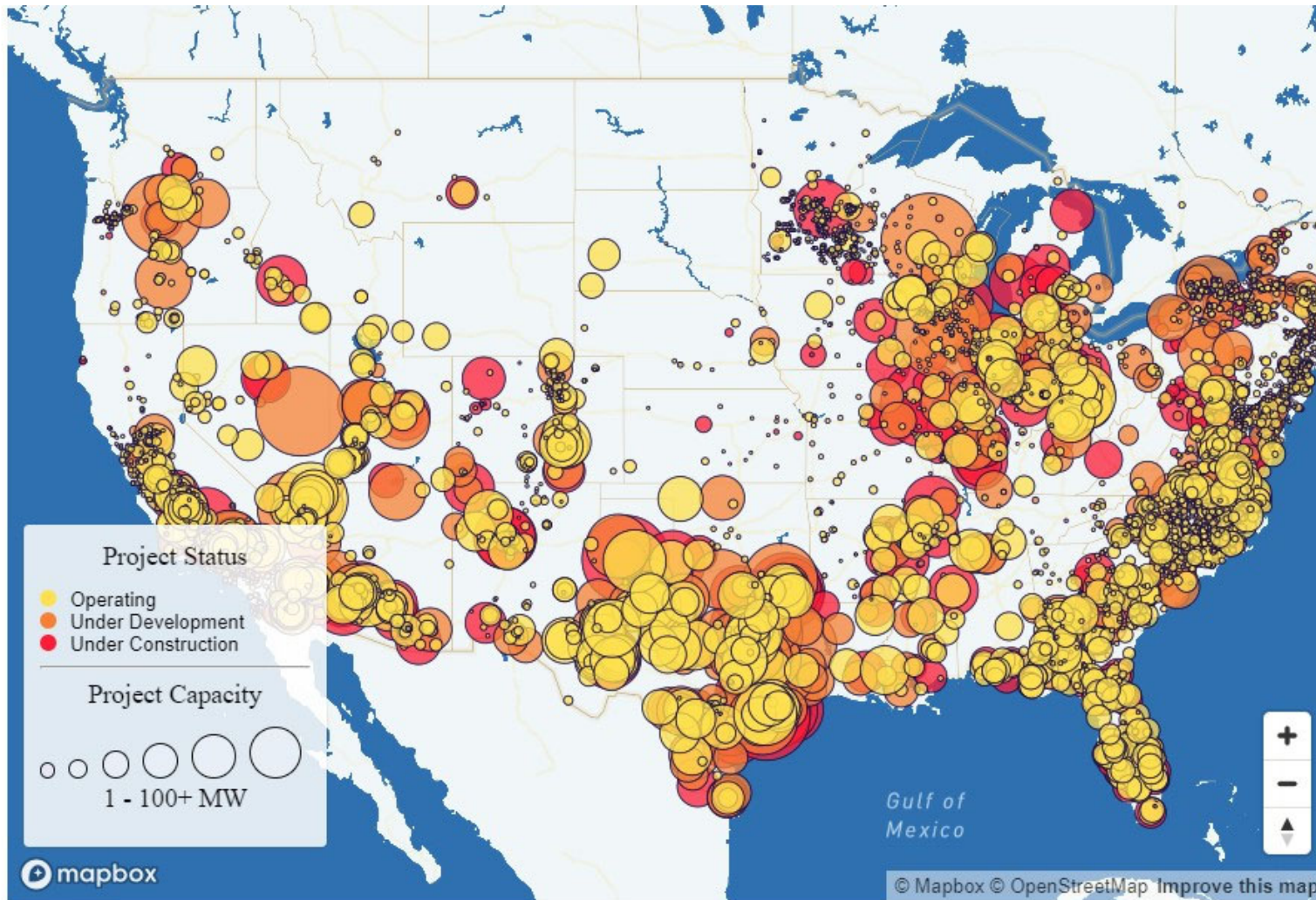


Photovoltaic Solar Resource of the United States

Ground-mounted PV arrays of at least 1 MW as of start of 2022



Map: Canary Media • Source: [U.S. Solar Photovoltaic Database](#) • [Embed](#) • [Download image](#)



Total Monthly Capacity, Operating and Under Construction/Development

The United States is expected to install around **42 gigawatts** (GWdc) of solar capacity in 2024, which is about a quarter more than in 2023. The first half of 2024 was a record-breaking period for the solar industry.



Much more than the 1.21 “jigawatts” needed for the time machine car the movie *Back to the Future*

Some factors that are expected to contribute to the growth of solar installations in the US include:

- The Inflation Reduction Act, which provides tax credits
- Improved supply chain stability
- Lower interest rates

However, some challenges to faster growth include: interconnection challenges, high voltage power equipment, and labor availability.

Solar Lease Issues

1. How will a solar lease agreement influence my property taxes?
2. Are there pre-existing deed restrictions on my farm?
3. Will a solar project impact my agricultural use?
4. How does a solar land lease impact my property rights?
5. How will a solar project impact the surface water on my farm?
6. How is the project decommissioned after the lease expires?
7. Who is responsible for insurance and liability for the solar project located on my property?
8. What are the per acre lease rates for utility scale solar projects?
9. Who will maintain the land?
10. Is a utility scale solar project subject to tax?

Solar Energy on Your Land: Initial Considerations

Dedicating land to solar energy development is a long-term commitment that can have both positive and negative impacts on a farm and its owners.

Length of the commitment? As many as 20 years or more, with automatic extension periods of five to ten years.

Who has legal interests in the land? It seems obvious that a landowner must have the legal right to grant a solar lease, but many legal rights held by others could interfere with a landowner's right to lease the land.

- Mortgages
- Mineral rights
- Other easements
- Other entities

Impacts on the farm and land? A solar energy development can have physical impacts on the land, both during the solar project's construction, operational lifetime and afterwards.

Solar Energy on Your Land: Initial Considerations

Property taxes? It will have an affect on the property value positive or negative.

Government programs? Consider is how leasing farmland for solar energy development will affect eligibility for government programs such as the USDA's Conservation Reserve Program, Conservation Reserve Enhancement Program, and Environmental Quality Incentives Program. Placing a solar facility on lands that are under these types of USDA program contracts could violate the terms of the contracts and trigger penalties or loss of future payments. Always check with FSA.

Liability and insurance? Does having a solar energy development on the farm pose additional liability risks for a farmland owner.

What if someone visiting the farm suffers an injury at the solar facility?

What if a curious neighbor child breaks into the site and is harmed?

What if a hunter's stray shot breaks a solar panel?

Solar Energy on Your Land: Initial Considerations

Neighbor and community relations?

Changing land from farmland to a solar energy project can affect neighbors and the surrounding community.

Neighbors and others who do not like solar energy or don't want to see solar modules in the landscape.

Neighbors may fear that the development will lower their property values.

Neighbors will be subject to noise, dust, and truck traffic during project's construction period.

NORTH DAKOTA LAWS AND POLICES RELATED TO SOLAR FARMS

- Solar easements

- *Property owners can grant a solar easement to another property owner to ensure their solar energy system has enough sunlight. The easement must be in writing and include details like the angles it extends over the property, any conditions, and compensation for either party.

- Siting, zoning, and setback standards.

- *Solar facilities must be at least **50 feet** from the nearest property line.

- Renewable Energy Program

- *The North Dakota Industrial Commission manages the Renewable Energy Program (REP), which provides financial assistance to develop renewable energy technologies.

- Solar facility decommissioning.

- *Facility owners must file a certificate of operation with the commission by April 1st each year. A facility is considered at the end of its useful life if its annual capacity factor is less than **5%** for two years in a row.

CONTRACTS

LEGAL ISSUES FOR LANDOWNERS

- Primary Issues
 - Landowner must stay abreast of liability issues
 - Trespassers
 - Third party usage
 - Environmental/aesthetic issues
 - Nuisance
 - Lawsuits and claims related to developer's actions

LEGAL ISSUES FOR LANDOWNERS

- How much of the land is subject to the agreement?
- Am I compensated fairly for the property rights I have given up?
- Tax consequences of wind energy payments

LEGAL ISSUES FOR LANDOWNERS

- What events allow the developer to terminate the agreement?
 - Anytime without cause?
 - Can I go to court? Binding arbitration?
 - Do I have any termination rights? If so, how do I exercise those rights?
 - What happens to the structures upon termination?
 - Who pays for removal?
 - How soon do they have to be removed?

HAVE I CONSIDERED OTHER CONTRACT SPECIFICATIONS?

- Confidentiality clauses
- Settling contract disputes
- Negligence
- Safety and maintenance issues
- Limiting agricultural land use
- Limiting hunting and recreational use of land
- Aerial crop spraying ***WIND TOWERS***

BEFORE YOU SIGN ON THE DOTTED LINE...

- How much of my land will be tied up and for how long?
- How much will I be paid and how will I receive payments?
- Are the proposed payments adequate now and will they be adequate in the future?
- Have all the liability issues been considered?
- How will a wind project impact my other land uses?
- Have I considered all contract specifications?
- Have I considered all of my other options and is this the best one for me?

First Rule of Contracts

CONTRACTS REFLECT THE INTERESTS
OF THE PARTY THAT WRITES THE
CONTRACT

Second Rule of Contracts

SEEK COMPETENT LEGAL ADVICE
BEFORE SIGNING

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Questions?